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Conflict Over Odugblase Limestone Revenue: Causes, Consequences and the Way Forward



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Abstract

This study investigated the conflict between Manya and Yilo traditional councils which has prevented them to have access to their over 1 billion Cedis mineral revenue to advance socio-economic development of the *Krobos*. Adopting a qualitative approach, this study used purposive sampling to select 17 research participants for in-depth interviews. The study further adopted inductive content analysis to process and make meaning from the interviews. It was found that narrow-based (rational and incremental) planning, and a discord between Traditional Chieftaincy and modern democratic systems of governance contributed to Manya-Yilo conflict. This study also revealed that lack of clearly defined regulations for natural resource revenue sharing and powerless Municipal Assemblies (weak institutions) contributed to the conflict between Manya and Yilo Traditional Councils (Manya-Yilo conflict). It was also found that deteriorating social relationship between the two Traditional Councils and retarded economic development were the main socio-economic consequences of the Manya-Yilo conflict. Unfortunately, attempts to resolve the Manya-Yilo conflict through arbitration and mediation did not yield the desired results because the opponents were not adequately involved in the conflict resolution process. It seems that adjudication, which is conflict resolution in the court of law, could resolve the Manya-Yilo conflict. This thesis contributes to literature by showing that narrow-based (rational and incremental) planning and the political structure contribute to micro-scale non-violent conflict over mineral revenue sharing in Ghana. It also contributes to literature by conceptualising a framework of the onset of non-violent natural resource conflict. This thesis warns that failing to use broad-based planning for natural resource management is not just planning to fail, it is also a likely recipe for natural resource conflict. As such, there is the need to adopt participatory natural resource management to reduce natural resource conflict in the future.

Declaration

I, John Narh, hereby declare that this thesis is an original academic work supervised by Professor Päivi Lujala, that all materials used are duly cited and that not part or whole of the thesis has ever been submitted for the award of any degree at other university here in Norway or abroad.

John Narh

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Endorsed by:

Professor Päivi Lujala

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Dedication

To Elizabeth Narh, Comfort Imbraimah and Alice Mensah

Acknowledgement

Praise the Lord, O my soul, and all that is within me, Praise His Holy Name [Psalm 103:1]

This thesis would not have materialised without the selfless contribution of many people. First, my sincere gratitude goes to the Norwegian Government for sponsoring my master's programme. Master's degree from NTNU might have remained an illusion without the financial support from the Norwegian Government through *Lanekassen*. For this, I say **Tusen Takk** to the good people of Norway.

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I also extend my heartfelt gratitude to my research participants: landowners at Odugblase, Many and Yilo Traditional Councils, Yilo municipal Assembly and GHACEM. I say thank you for producing data for my thesis.

Last but no means least, I acknowledge the contribution of my research group especially Dr. Sarah Khasalamwa-Mwandha and Emma-Liina Marjakangas for the comments during my presentations. Moreso, I thank members of the faculty of Natural Science and Technology for their comments during my presentation at the Mini Conference.

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Abbreviations

CSR	Corporate Social Responsibility
GHACEM	Ghana Cement Limited
GoG	Government of Ghana
MMDAs	Metropolitan, Municipal and District assemblies
MOU	Memorandum of Understanding
OASL	Office of the Administrator of Stool Lands
OECD	Organisation for Economic Co-operation and Development
WAQL	West African Quarries Limited

CHAPTER 1

INTRODUCTION

1.1 Introduction to the Study

There is over 1 billion Ghana Cedis¹ (approximately 250 million US Dollars) mineral revenue for the *Krobos*, two related ethnic groups in Ghana. This is a mineral revenue provided by Ghana Cement Limited as a Corporate Social Responsibility for mining cement producing limestone at Odugblase, a community in the Eastern Region of Ghana. The money is sitting idle in a bank account while the *Krobos* suffer the consequences of limestone mining at Odugblase. Why is that so?

The limestone is the only known mineral deposit currently that can generate regular and reliable income to boost the economy of Odugblase. Hopes were thus high when the Minerals Commission² of Ghana gave licence to Ghana Cement Limited (GHACEM) to mine limestone in large quantities at Odugblase in 2004. This is because mineral resources, if managed well, could generate the needed revenue to stimulate social and economic (socio-economic) development of a country (Lujala and Rustad, 2011). Limestone mining at Odugblase was expected to boost the local economy through employment opportunities and transfer of mineral revenue to the local people. The mineral revenue for mining-affected communities is should be used to provide social amenities like health and educational facilities and improve infrastructure in such communities (Standing, 2014). These social amenities and infrastructural development could create enabling environment for alternative livelihood opportunities at Odugblase.

Unfortunately, the expected socio-economic development is becoming difficult to achieve at Odugblase due to conflict over the limestone revenue between Manya and Yilo Traditional Councils. The Manya and Yilo Traditional Councils are the traditional authorities responsible for effective use of the limestone revenue to develop Odugblase. Even though this conflict could be detrimental to the development of Odugblase, little or no research has been conducted on it.

This thesis makes several contributions. First, it examines conflict related to limestone. Generally, despite the many studies on natural resource conflict, literature on limestone conflict

¹ Source: <http://edition.myjoyonline.com/pages/news/201009/52433.php>

² A statutory body established to regulate mining activities in Ghana

is rare. For instance, there are many studies on diamond related conflict (Bellows and Miguel, 2009; Le Billon and Nicholls, 2007; Lujala et al., 2005; Ross, 2006). Other studies also focus on oil and natural gas (de Soysa and Neumayer, 2007; Kaur, 2013; Oyefusi, 2007; Switzer, 2001; Torvik, 2009). Limestone has not been the focus of any natural resource conflict study yet as far as my research on the subject is concerned.

Perhaps, limestone is generally not considered as a *high-value* resource. To classify a natural resource as high-value or low-value depends on the amount of money the resource can generate and its importance to the local economy (Lujala and Rustad, 2011). Therefore, what is considered high-value resource is relative over space and time (Douglas and Alie, 2014). This thesis therefore, seeks to investigate why the *Krobos* could not have access to their limestone revenue to improve their standard of living.

Second, this thesis unravels the causes of Manya-Yilo conflict. It is an established fact that natural resource conflict occurs from many factors (Abuya, 2013). Nonetheless, the causes and nature of the conflict between Manya and Yilo Traditional Councils (henceforth, referred to as Manya-Yilo conflict) over the limestone revenue are important to know so that we do not to repeat the mistakes and occurrences of the so-called high-value resource in the future. Hitherto, the causes of Manya-Yilo conflict were poorly understood.

Furthermore, while delving into the nature and causes, it is equally necessary to know the consequences of Manya-Yilo conflict. This could caution us against innate dangers of natural resource conflict. Very often, studies have focused more on the causes and paid less attention to the consequences of natural resource conflict (Hotte, 2013; Oduro-Ofori et al., 2015). This study deviates from the usual pattern of most studies on natural resource conflict that focus more on the causes than the consequences.

The final contribution of this thesis is to investigate how the Manya-Yilo conflict is being resolved. Conflict is inevitable in human society (Souleimanov, 2013). Since conflict is generally not pleasant, there are mechanisms in place to resolve conflict when it occurs. The suitability of a conflict resolution mechanism depends on the nature of the conflict. This means that not every conflict resolution mechanism is suitable to resolve any conflict. It is therefore proper that this study identifies the effectiveness of existing conflict resolution mechanism in resolving Manya-Yilo conflict.

In view of the concerns stated in the above paragraphs, the specific objectives of this study are to:

- i. describe the Manya-Yilo conflict.
- ii. examine the causes of the Manya-Yilo conflict.
- iii. examine the socio-economic consequences of the Manya-Yilo conflict.
- iv. assess the effectiveness of existing conflict resolution mechanisms in resolving the Manya-Yilo conflict.

The basic question that this thesis wants to shed light on is, what are the causes and consequences of micro-scale conflict over natural resource revenue in Ghana? In answering this fundamental question to meet the objectives, this thesis, seeks to provide detail answers to the following research questions:

- a. what is the nature of Manya-Yilo conflict?
- b. to what extent do the planning strategies used prior to the mining and the political structure help to explain the Manya-Yilo conflict?
- c. how efficient has the limestone revenue been used?
- d. what is being done to resolve the Manya-Yilo conflict?

These questions are necessitated by the fact that there is the need to know the actors (opponents) involve in the Manya-Yilo conflict and the level of violence thereof. Also, this study investigates the level of stakeholder participation in the planning strategy that was used to establish limestone mining at Odugblase. This is important because different people value natural resource differently (Matiru, 2000; Stevens and Dietsche, 2008) and involving people to make decisions on natural resources management could prevent conflict (Jones, 2007; Zachrisson, 2004). In addition, this study investigates if the political structure plays a role in the Manya-Yilo conflict since both the Traditional Chieftaincy and the modern democratic systems of governance exist in Ghana. It is equally important to know what is being done to enable the *Krobos* have access to their limestone revenue.

1.2 Organisation of the Thesis

This thesis consists of seven chapters. Chapter 1, the current chapter introduces the study. It presents the empirical problem that the present study seeks to investigate. It also presents the intellectual gaps this study seeks to fill. Chapter 1 also covers the objectives and research questions of the study.

Chapter 2 provides the background information of the study area. It presents the political structure of the study area, the demographic information and economic activities of Odugblase (the mining-affected community). Further, chapter 2 presents the systems of land ownership of the study area, concept of royalty payment and a description of the nature of Manya-Yilo conflict based on the story I heard prior to the study this study.

Chapter 3 covers the relevant literature for the study by reviewing concepts, theories and practices of natural resource conflict. Specifically, the chapter reviews the concept of conflict, the linkage between ethnicity and conflict onset and the types of natural resource conflict. Chapter 3 further reviews the causes of natural resource conflict and the distribution of mineral revenue as well as conflict resolution mechanisms. The last sections of chapter 3 present planning theories and the analytical framework of the study.

Chapter 4 covers the methodology I adopted for the study. The chapter gives the justification for conducting a qualitative research. It also presents methods of data collection and data analysis. In addition, the chapter presents the various ways this study is credible. The chapter ends with the limitations of the study.

Chapter 5 presents the first part of the results. The chapter presents findings on the first two objectives of the study. In so doing, the chapter answers the first two research questions of the study. It describes the Manya-Yilo conflict and presents the factors that caused this conflict. The results are discussed immediately they are presented. In other words, each finding is discussed before another finding is presented.

Chapter 6 presents the last part of the findings. It covers the socio-economic effects of the Manya-Yilo conflict. It also presents the effectiveness of existing conflict resolution mechanisms that are being used to resolve the conflict. The final section of the chapter presents the factors that have prevented the Manya-Yilo conflict from escalating over the years. Just as it is written in chapter 5, the results are discussed immediately they are presented.

Chapter 7 concludes this thesis. It gives a summary of the findings and shows how the study contributes to the natural resource conflict literature. The chapter also recommends possible ways by which the Manya and Yilo Krobos could resolve their conflict.

CHAPTER 2

THE STUDY AREA

2.1 Introduction

This chapter presents the political structure of Ghana. It also covers the relevant physical characteristics (location and geology), population, ethnic composition and economic activities of the study area. It also presents land ownership, royalty payment and the nature of the Manya-Yilo conflict. Thus, this chapter gives the background information that could enhance the understanding of this thesis.

2.2 The Political Structure of Ghana

This section briefly presents the political arrangement of Ghana. The subsections present the structure of Chieftaincy system focusing on the concept of Traditional Areas and ethnic composition of the study areas as well as leadership and the functions of Traditional Councils. The subsections that follow presents the structure of the modern democratic system.

The political structure of Ghana comprises of the Traditional Chieftaincy and modern democracy systems of governance. Before colonial rule, what has become present day Ghana was structured into ethnic states ruled by traditional leaders (Owusu-Mensah, 2014). The Traditional leaders were Chiefs, Overlords and sub-chiefs. Colonisation brought these ethnic groups together to form Ghana with its current geographical boundaries. But the colonial system could not terminate the indigenous governance structure, and hence operated concurrently. Even after colonial rule, the modern political system in Ghana still recognises the Traditional Chieftaincy system of governance (Asamoah, 2012). The colonial governance system has developed into our modern democratic system. Elected and appointed representatives govern the modern democratic system.

2.2.1 Traditional Area and Ethnic Composition

There were many Kingdoms and Chiefdoms in Ghana before colonisation. The Chiefdoms are now called Traditional Areas. As such, people with the same language, culture (way of life), origin and history usually dominated a Traditional Area (Owusu-Mensah, 2014). Traditional Areas are still ruled by traditional authorities.

There are several ethnic groups in Ghana but the relevant one for this thesis are the Manya Krobo and Yilo Krobo which forms part of the main Ga-Adangme ethnic group (Agyei-Mensah

and Owusu, 2010; Teye, 2008). Manya Krobo (Manya) and Yilo Krobo (Yilo) ethnic groups have similar culture but each of them is ruled by a separate traditional authority at their respective Manya and Yilo Traditional Areas. Since the two ethnic groups speak a common language called *Krobo*, the two ethnic groups are referred to as *Krobos*.

2.2.1.1 Leadership of Traditional Areas

Chiefs are the traditional authorities who rule Traditional Areas. According to the Chieftaincy Act (759), 2008, a chief is “a person, who, hailing from the appropriate family and lineage, has been validly nominated, elected or selected and enstooled, enskinned or installed as a chief or queen mother in accordance with the relevant customary law and usage”. Chieftaincy evolved from priest theocracy, a system of governance where the ruler is believed to be a deity (Wilson, 1987). Thus, people believe that chiefs are the mouthpiece of their ancestors since chiefs are the mediators of the living and the dead. Chiefs are the embodiment of identity and culture of their ethnic groups (Abotchie et al., 2006). Based on these qualities ascribed to chiefs, people revere chiefs in Ghana.

In the Manya and Yilo Traditional Areas, chiefs perform varied functions depending on their position on the traditional hierarchy. In each Traditional Area, the Paramount Chief, who is at the top of the hierarchy is the traditional leader and ruler of the entire ethnic group. He is the custodian of the land of the Traditional Area (Kleist, 2011). Next to the top hierarchy are Divisional Chiefs, who are leaders of clans (group of families linked mainly by blood) within the ethnic group. There are seven Divisional Chiefs in Yilo and six Divisional Chiefs in Manya Traditional Areas. Last on the hierarchy are Sub-Chiefs found in every community within the Traditional Area who organise communal labour and settle disputes. There is a sub-chief at Odugblase, the community of interest in this thesis.

2.2.1.2 Traditional Councils

Like many Traditional Areas in Ghana, Manya and Yilo have Traditional Councils. The Traditional Council is a group of chiefs that forms the core of the traditional authorities in the Traditional Areas. The Paramount Chief, Divisional Chiefs and selected sub chiefs form the Traditional Councils in each of the two Traditional Areas. Each Traditional Area selects a Divisional Chief to inform the people about the decisions of the Traditional Council. He is also responsible to report the demands of the people to the Traditional Council. He is the Public

Relation Officer (PRO) for the Traditional Council. Thus, the Traditional Councils are the administrative offices of the two Traditional Areas.

Within the context of development, Arhin (1985) indicates that, chiefs perform functions derived from both tradition and the national constitution. They organise annual festivals and lobby the local government for social and economic development of their Traditional Areas. The Traditional Councils also write customary laws to ensure peaceful coexistence in the Traditional Areas (Boafo-Arthur, 2003; Kleist, 2011). It is the responsibility of Manya and Yilo Traditional Councils to organise annual festivals for their respective Traditional Areas to celebrate their histories.

2.2.2 Modern System of Governance

Ghana is divided into 10 administrative regions. The President appoints regional ministers to represent him in each administrative region but Parliament has to approve the presidential nominees (Sakyi, 2010). Each administrative region has a Regional Coordinating Council made up of the Regional Ministers, Metropolitan, Municipal and District heads, civil servants (government workers), and two Chiefs elected from the region (Owusu-Mensah, 2014; Sakyi, 2010). The primary responsibility of the Regional Coordinating Council is to coordinate the development of the region in accordance with developmental projects specified in the annual budget.

Each administrative region is made up of several Metropolitan, Municipal and District Assemblies (MMDAs). Again, the President appoints people to represent him at the MMDAs. They are called Chief Executives. If the assembly is a municipality for example, the person is called Municipal Chief Executive (MCE). The Chief Executive, Civil servants and a representative from the Traditional Council form a Coordinating Council for the MMDAs. The Coordinating Council for the MMDAs make sure budgetary allocation to the assembly are used for the intended purposes.

Population plays an important role in delineating MMDAs in Ghana. Within the modern local government system in Ghana, an area is created and defined as a District Assembly if the population is up to 75,000. The District is upgraded to Municipal Assembly when the population is between 75,000 and 95,000. And then to a Metropolitan Assembly when the population is over 250,000 (Bening, 2012).

2.2.3 Homogenisation of Traditional Areas and MMDAs

The Electoral Commission of Ghana³ tries to create Metropolitan, Municipal and District Assemblies (MMDAs) to conform with the boundaries of Traditional Areas to achieve some level of ethnic homogeneity (Bening, 2012). Within the modern democratic system, Manya and Yilo Traditional Areas are recognised as Manya Municipal Assembly⁴ and Yilo Municipal Assembly respectively. The Traditional Council in each Traditional Area is recognised as partner for development in their respective Municipal Assembly.

2.3 Location of the Study Area

The study areas are located in the Eastern Region, one of the 10 administrative regions of Ghana (fig. 1). The study areas are Manya and Yilo Traditional Areas. The study community is called Odugblase. Within the modern democratic system, Odugblase is located in the Yilo Municipal Assembly so the community is part of the Yilo Traditional Area. However, the Odugblase is dominated by people from Manya Traditional Area.

³ The Electoral Commission is a statutory body responsible for organising national elections in Ghana.

⁴ Manya Traditional Area is divided into two Assemblies

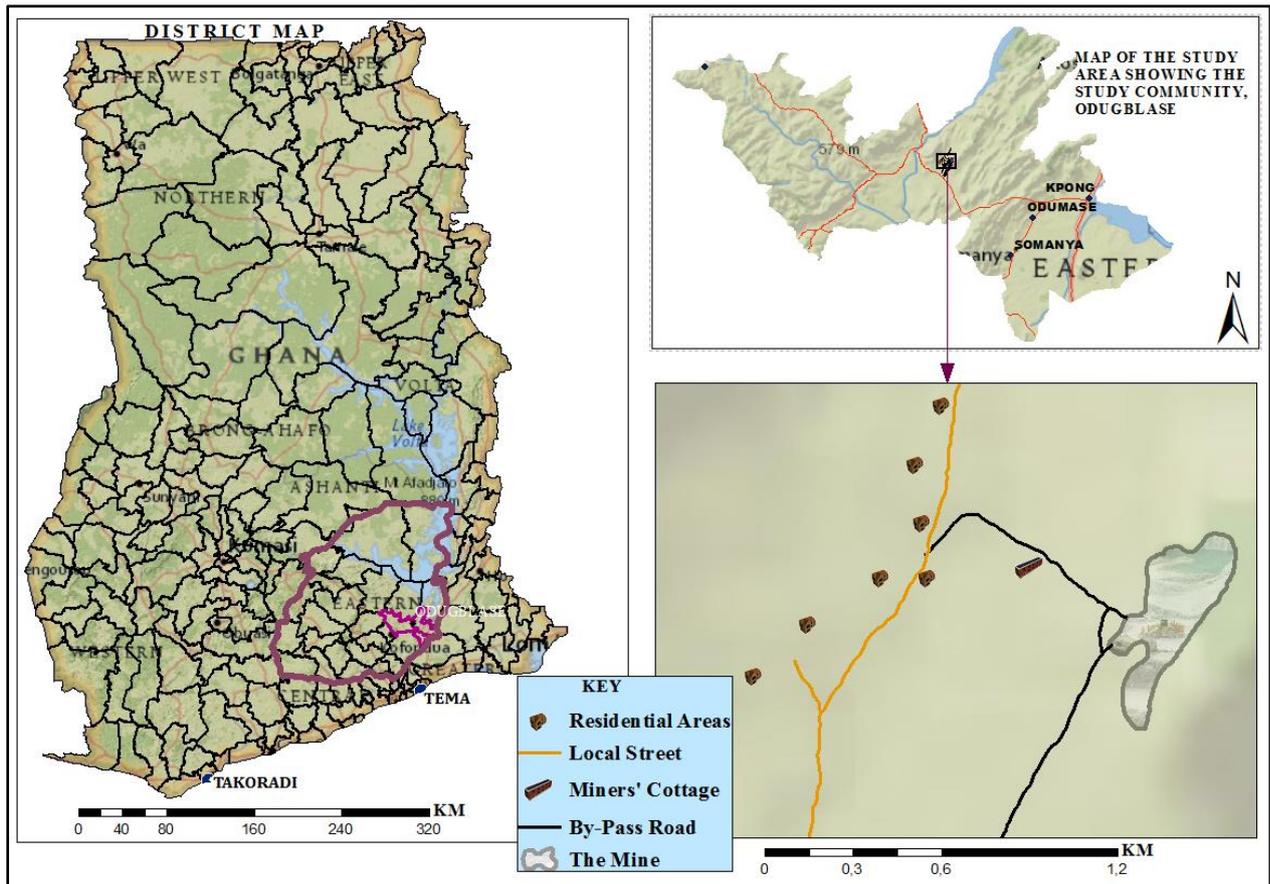


Figure 1. The map on the left shows the district map of Ghana. The boundary of Eastern Region is in brown colour. The boundary of the study areas is shown in violet with Eastern Region. The map on the top-right shows the study area and the location of Odugblase. The remaining map represents Odugblase, the study community.

Source: Author's Construct using ArcMap from NTNU and Google Earth

2.4 Population

The total population of Manya Traditional Area⁵ was 161,338 in 2012. The population of Lower and Upper Manya were 89,246 and 72,092 respectively. The population of Yilo was 87,847 in 2012. At Odugblase, there was 137 males and 147 females putting the total population at 284.

⁵ Within the modern democratic system, Manya Traditional Area is divided into two Assemblies-Lower Manya Municipal Assemblies and Upper District. The relevant Assembly for the present study is Lower Manya Municipal Assembly because the portion of the limestone that belongs to members of Manya at Odugblase is located in Lower Manya Municipal Assembly. To make things simple, the present study refers to Lower Manya Municipal Assembly as Manya Municipal Assembly.

Table 1 Population of the Study Areas

Assembly	Total Population
Yilo Municipal	87,847
Lower Manya	89,246
Upper Manya	72,092

Source: Ghana Statistical Service (GSS, 2012)

2.5 Economic Activities

The major economic activities in the study area are farming, trading and quarrying. Mixed cropping and mixed farming are the common farming practices at the study area. Mixed cropping is cultivating two or more crops on the same piece of land at the same time while mixed farming is cultivation of crops and rearing of animals at the same time. Cultivation of food crop is widespread with small scale holdings producing crops like maize, cassava, yam, cocoyam and plantain. Maize is the mainstay of Odugblase community. The main vegetables cultivated at Odugblase are tomatoes, pepper, cabbage and beans. Livestock rearing is also done alongside food crop farming. Mango and oil palm are the main cash crops produce at the study areas.

Petty trading is carried out mostly by women. Some women buy farm produce at Odugblase and transport it to nearby cities like Somanya, Odumase and Koforidua, the Eastern regional capital to sell. On their return, they buy goods like kerosene, canned fish and candies to sell at Odugblase.

Stone mining is also carried out at Odugblase. Until September 2004 when the Mineral Commission of Ghana licensed the limestone deposit to Ghana Cement Limited (GHACEM)⁶, people of Odugblase used to quarry limestone and sell it to building engineers. Even now, individual landowners whose lands are outside GHACEM's concession quarry limestone for sale. This small-scale limestone mining generates regular income to supplement farming activities of the local people. Today, GHACEM mine limestone in large quantity and transport

⁶ GHACEM is the largest cement manufacturing company in Ghana. It was established by the government of Ghana and Norcem AS of Norway in 1967. From 1999, Scancem (formerly Norcem, and now a subsidiary of Heidelberg Cement holds 93.1% shares, government of Ghana has 5% shares and a Ghanaian investor has 1.9%. source: http://www.ghacem.com/en/our_background

it several kilometres to its processing plants at Tema and Takoradi (see fig.1). GHACEM has employed a few people as security guards and cleaners at the mine.

2.6 Land Ownership

Land tenure in Ghana resides in the public, customary and private ownerships (Agidee, 2011). Public lands are lands that were taken with legislative instrument (law) from communities from 1962 after independence when ethnic groups were being consolidated to form Ghana. (Bentsi-Enchill, 1964). Public lands are managed by government on behalf of Ghanaians. Customary ownerships are lands held and controlled by traditional authorities such as chiefs and family heads. Private lands are owned by individuals

In general Paramount Chiefs are regarded as custodians of lands in Traditional Areas in Ghana. There are however, only a few customary lands known as Stool Lands in Manya and Yilo Traditional Areas. Stool lands is a type of customary lands that belong to the entire ethnic group and mostly entrusted to the Paramount Chiefs. Stool Lands are used in the interest of the people of the Traditional Areas. For example, portions of stool lands are made available to the central government to construct educational and healthcare facilities in the two Traditional Areas.

The land at Odugblase is entirely owned by individuals. Individuals acquire lands through outright purchase or inherit from their fathers. Children inherit properties including land from their fathers because the two Traditional Areas practise patrilineal system of inheritance. Even though traditional authorities, families and individuals can own land, management right resides in the government (Kasanga and Kotey, 2001).

2.7 Payment of Royalty

According to the Minerals and Mining Act, (703) of 2006, all minerals are vested in the President on behalf of the people of Ghana. This means that individual may own the land but any mineral found in the land is entrusted to the president for the benefit of all Ghanaians. As such, mining companies pay 5% of total mining revenue as mineral royalty to the Government of Ghana (Standing, 2014).

The Government of Ghana (GoG) retains 80% of the total royalty and transfers 10% each is to the Mineral Commission of Ghana and the Office of the Administrator of Stool Lands⁷. The

⁷ Office of the Administrator of Stool Lands is a department created mainly to disburse mineral royalties to Traditional Authorities and individual landowners.

Mineral Commission of Ghana uses 10% royalty on research and development and to maintain the Commission (Standing, 2014).

The Office of the Administrator of Stool Lands (OASL) retains 10% of what it receives to run the day-to-day activities of the administration. The OASL pays 55% of what remains to the responsible District Assemble to develop mining-affected community in particular, 20% to the Traditional authority in the area and 25% to ‘maintain the Stool’ (Adimazoya, 2013; Standing, 2014; Standing and Hilson, 2013). The 20% usually goes to the Paramount Chief as the custodian of that land. The 25% could be used to organise festivals. The reason is that if a percentage of mineral revenue is paid directly to the Traditional Council, local people may not feel deprived of their resources. This may prevent conflicts arising from local agitation.

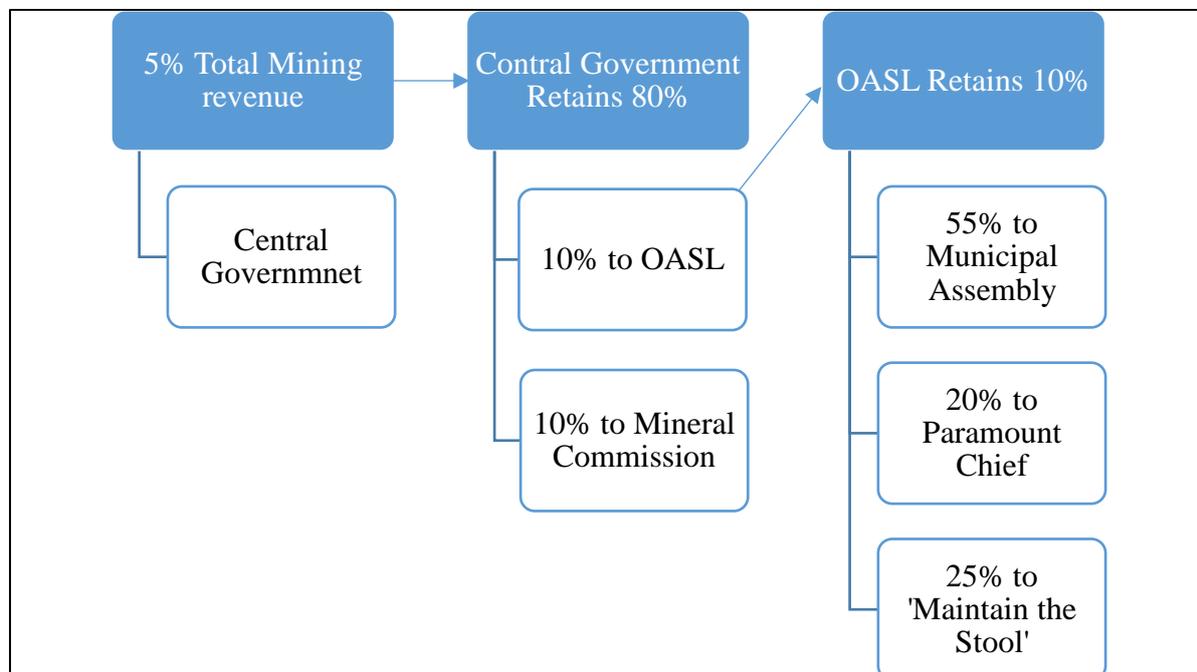


Figure 2 Disbursement of Mineral Royalty

Source: Author’s Construct.

In the case of my study, the land at Odugblase is not a Stool Land. Individuals own the land at Odugblase so the mineral royalty should be paid to individual landowners but not to the two Traditional Councils. Some of these landowners are members Manya Traditional Area and some are members from Yilo Traditional Area even though Odugblase is located in Yilo Municipal Assembly.

2.8 The Nature of the Conflict

According to an aspiring Member of Parliament for Yilo, the Manya-Yilo conflict has its roots in a limestone deposit that is located both in Manya and Yilo Traditional Areas⁸. A large part of the limestone deposit is located in Manya Traditional Area but GHACEM has started the mining from the side of Yilo Traditional Area. As such, the Yilo Traditional Council is demanding for an equal share of the mineral ‘royalty’ paid through OASL even though Manya Traditional Area has the larger part of the limestone deposit at Odugblase. Manya Traditional Council on the other hand, wants greater part of the mineral ‘royalty’ since larger part of the limestone deposit falls within Manya Traditional Area.

But should the two Traditional Councils be fighting over mineral royalty when the land at Odugblase is owned by individuals and is not Stool Land? This question has been one of the puzzles that inspired this thesis. The research conducted for this thesis has revealed something different from the common narrative of Manya-Yilo conflict.

⁸ At the time, I was an undergraduate student at the University of Ghana. The Krobo students on campus formed Krobo Students Association as a source of solidarity and to think about the welfare of Kroboland. The Association invited the sitting Member of Parliament (MP), an aspiring MP and other leaders from both Yilo and Manya Krobo ethnic groups to a meeting in 2012 to discuss the challenges facing Kroboland. The aspiring MP narrated the story of the Manya-Yilo conflict during the meeting as a major challenge that confronted the Krobo at the time.

CHAPTER 3

CONCEPTS, THEORIES AND EVIDENCES OF NATURAL RESOURCE CONFLICT

3.1 Introduction

Natural resources conflict is the dispute (and in some cases bloodshed) that arises over the control and utilisation of a natural resource (Le Billon, 2008). This chapter reviews the types and causes of natural resource conflict and how natural resources conflict is resolved. Further, this chapter reviews the main planning traditions. It is necessary to understand the literature of natural resource conflict to know the relevant theories and to conceptualise an analytical framework for this study that could help in discussing my findings. To understand natural resources conflict, this chapter starts with a discussion on the concept of conflict.

3.2 Concept of Natural Resource Conflict

Conflict is a competition between actors over resources or ideas (Souleimanov, 2013). That is to say, conflict occurs when two or more people or groups of people have different opinions about how something should be done or used (Galtung, 1965). Therefore, natural resource conflict could be defined as a competition over the management or use of natural resource. Natural resource conflict is one of the reasons why some resource-rich countries are not able to achieve economic development as expected (Collier and Hoeffler, 2004; 2005; Rosser, 2006; Skaperdas, 2008; Torvik, 2009). Consequently, natural resource conflict is one of the causes of resource curse⁹ in resource endowed countries.

Natural resource conflict could occur over renewable resources like water and forest or non-renewable resources such as oil and minerals. This study however, focuses on conflict over non-renewable natural resources. As such, this literature review focuses on conflict over revenue from extractive activities since the problem here is a conflict over limestone revenue. The next subsection reviews how conflict in general evolve.

3.2.1 Stages of Ethnic Conflict

According to Souleimanov (2013), conflict evolves in three phases based on the level of violence. The initial phase is latent conflict. Latent conflict is characterised by ‘no peace, no

⁹ Resource curse is a situation whereby the abundance of natural resource in a country is detrimental to peace and development. The abundance of natural resource in some country paradoxically lead to poor economic development and civil war (Karl, 1997; Ross, 2006; Rosser, 2006; Sachs and Warner, 1995).

war'. At this phase, actors competing over a resource or idea are aware of their differences but they are not attacking each other physically. Rather, actors (opponents) express their grievances verbally. The second phase is sporadic conflict. At this phase, actors violently attack each other occasionally. These attacks are usually irregular. If the sporadic conflict is not resolved, it develops into the third phase. The third phase is called civil war. It is characterised by constant violent attack, loss of properties and death. The phases of conflict do not always have to occur sequentially (Souleimanov, 2013). The next section reviews the types of natural resource conflict.

3.3 Types of Natural Resource Conflicts

The concept of natural resource conflict is both complex and diverse. It could involve a mere disregard to unfavourable resource laws or act of sabotage over resource use (Matiru, 2000). Brown and Keating (2015) categorise natural resources conflict into 4 main types: *conflict over geographically distinct resources; natural resource conflict as the focus of social and political change; conflicts over isolated projects and cumulated individual grievances*. The next subsections review these types of natural resource conflict.

3.3.1 Conflict over Geographically Distinct Resources

Conflict over geographically distinct resource is a competition over natural resource that is concentrated at a particular geographical location (Brown and Keating, 2015). The main motive for conflict over geographically distinct resource is to create an independent state at where the natural resource is concentrated to control the revenue from the resource (Brown and Keating, 2015; Lujala, 2010; Ross, 2006).

An example of conflict over geographically distinct resources is the conflict between the central government and the people of Aceh (Acehnese) in Indonesia from 1976 to 2005 (Brown and Keating, 2015). It was reported that natural gas is distinct to the Aceh Region and its production has contributed revenue to the central government. Yet, the central government did not transfer part of the gas revenue to Acehnese. The Acehnese became aggrieved that they were not having direct access to revenue from the gas resource that is distinct to their area. The Acehnese wanted an independent state to control their gas revenue. This contributed to a conflict between the Acehnese and the central government for almost three decades until the opponents signed a memorandum of understanding in 2005. The agreement was that Acehnese would take 70% of gas revenue for 8 years and then share equally with the Central government (Brown and Keating, 2015; Wennman and Krause, 2009).

3.3.2 Natural Resources Conflict as the Focus for Social and Political Reformation

Another type of natural resource conflict is the conflict over resources for social and political reformation. This type of conflict is akin to conflict over geographically concentrated resources but the motive is to change existing social and political structure (Brown and Keating, 2015). Oil conflict in Iraq is an example of conflict over resource as the focus for social and political reformation. In Iraq, much of the oil reserves are located in the Kurdish and Shia regions. There is relatively less oil reserve at the Sunnis area who are the majority which made the Sunnis have access to more oil revenue under a centralised system of governance. This contributed to a conflict among the Kurdish, Sunni and Shia which led to the abolishment of centralised governance to the establishment of federal government in Iraq (Brown and Keating, 2015).

3.3.3 Conflict over Isolated Project

This type of natural resource conflict may occur over isolated projects such as mines. It is generally a fight between members of communities in which the project is located and private investors or central government (Brown and Keating, 2015). This kind of natural resource conflict may start when local people are exposed to the bad effects (cost) of those projects but they are not duly compensated (Brown and Keating, 2015). For example, conflict over a mine may occur when mining activity poses threat to local livelihoods but there is no compensation package to lessen local economic hardship.

An empirical example of resource conflict over isolated project is the conflict between the Bougainvilleans and the central government in Papua New Guinea (Brown and Keating, 2015; Le Billon and Nicholls, 2007). The Bougainvilleans are geographically closer to Solomon Island where copper is mine and were faced with environmental degradation from the mining activity. Yet, the Bougainvilleans were not employed in the mines and were also not compensated for the pollution caused by the mining activities. This contributed to a conflict over the copper mine in Papua New Guinea from 1988 to 1997.

3.3.4 Cumulated Individual Grievances

This type of natural resources conflict is the cumulative impact of individual grievances such as non-payment of compensation for the bad effects of mining activity. Individual grievances might not cause any disturbance on national security but when these grievances converge, a significant natural resource conflict may occur (Brown and Keating, 2015; Homer-Dixon, 1999; Howard, 1998).

The type of natural resource conflict reviewed implicitly mention some of the causes of conflict over natural resources. It is still important to review the possible underlying factors that contribute to natural resources conflict. The following sections review causes of natural resource conflict relevant for the present study.

3.4 Causes of Natural Resources Conflict.

Many factors contribute to natural resources conflict. Natural resource conflict may occur when people do not have access to the resource due to scarcity (Derkyi et al., 2014; Homer-Dixon, 1994; 1999; Koubi et al., 2014; Peluso and Watts, 2001; Theisen, 2008) or when there is greed for, or grievance over abundant natural resource (Bellows and Miguel, 2009; Berdal and Malone, 2000; Collier and Hoeffler, 2004; 2005; Le Billon and Nicholls, 2007; Ross, 2006). However, the most important factors for this study are inadequate involvement of stakeholders, inefficient resource administration and weak institutions.

3.4.1 Inadequate involvement of Stakeholders

Natural resource conflict may occur when stakeholders are not adequately involved in planning the extraction of non-renewable natural resources and distribution of revenues (Grzybowski, 2012; Lachapelle et al., 2003). When stakeholders are inadequately involved, they may not get the opportunity to state how they could be affected by prospective extractive activity to plan for that in advance. This may contribute to grievances in the future since the “traditional planning processes that emphasize technical analysis and limit citizen involvement often create tensions between citizens and agencies in the form of inaction, distrust, litigation, and occasionally even threats and violence” (Lachapelle and McCool, 2005: 279).

Empirically, excluding local people in making decisions on how to distribute natural gas revenue contributed to conflict in Bolivia (Perreault, 2006; 2008). There were “contests over the right to participate both in the management of resources, and in the benefits deriving from them” (Perreault, 2006: 168). Local people felt that natural gas revenue was not equitably distributed since they were not involved in the decision-making process. This contributed to natural resource conflict in Bolivia.

Even when there are attempts to involve local people but the process is not adequate, it could contribute to natural resource conflict. For example, inadequate involvement of stakeholders contributed to natural resource conflict at Ipati-Aquio in Bolivia (Schilling-Vacaflor, 2012). It was reported that only representatives of the local people were consulted prior to extractive

activities which contributed to public grievances over decisions that were made. The public claimed that their leaders were bribed to accept decisions that favour mining companies. This contributed to natural resource conflict.

Similarly, Rovillos et al. (2005) reported that there were natural resource conflict in mining affected communities in the Philippines partly because local people were not adequately involved before mining companies started to extract the minerals. Rovillos and his colleagues explain further that when communities were involved, local people were either coerced or bribed to accept decision that they would have otherwise rejected. This later contributed to conflict as stakeholders were not happy with the decisions taken.

Involving people to take decisions that affect them could prevent conflict as it enhances the legitimacy of the process (Jones, 2007; Zachrisson, 2004). It also encourages deliberative democracy where the general public enjoy their right to take part in making public decisions (Mouffe, 2000). In some cases, people willingly compromise on their demands when they are involved in making decisions. For example, in Bolivia, the *Asamblea del Pueblo Guaraní*, a local group that initially demanded 580,000 US Dollars compensation finally accepted 100,000 US Dollars after the group was involved in the decision making process (Schilling-Vacaflor, 2012).

3.4.2 Disregard for Formal Regulations

Natural resources conflict may occurs when formal laws are not in harmony with customary laws (Acquah and Acquah, 2016; Odhiambo, 1996). In most countries in East Africa, both formal and customary laws concerning natural resource use continue to exist. Some of the formal laws concerning access to natural resource conflict with customary laws (Odhiambo, 1996). People associate themselves more with customary laws to access natural resources which sometimes contributes to conflict in East Africa.

3.4.3 Weak Institutions

Institutions, in the words of North (1990: 3), are “the rules of the game in a society, or more formally, are the humanly devised constraints that shape human interaction’, which ‘reduce uncertainty by providing a structure to everyday life’”. Institutions are practices and procedures that remove doubts and guide our daily activities. The quality of institution is a key determinant of whether a natural resource conflict may occur or not (Bulte et al., 2005; Koubi et al., 2014; Mehlum et al., 2006; Stevens and Dietsche, 2008). Weak institution is the lack of relevant laws or inadequate laws or the lack of capacity to enforce laws (Aron, 2000; Taydas et al., 2010).

Natural resources conflict may occur when institutions are weak to enact and enforce rules on natural resource use (Cabrales and Hauk, 2011; Hotte, 2005; Koubi et al., 2014; Skaperdas, 2008). Empirically, lack of rules on how to distribute mineral revenue contributes to natural resource conflict (Cuba et al., 2014; OECD, 2016; Opiyo et al., 2012; Patel et al., 2016). Specifically, lack of institutional capacity to ensure equitable distribution of copper revenue contributed to natural resource conflict in Papua New Guinea from 1988 to 1997 (Brown and Keating, 2015; Le Billon and Nicholls, 2007). There was no institutional arrangement to compel the central government to transfer part of the copper revenue directly to the people living near the Solomon Island where copper was mined, who were affected by pollution from the mining activities.

Why do some countries have strong (good) institutions and others have weak (bad) ones? The underlying reason is the lack of political will¹⁰ to adjust institutions to keep up with changing situations to enhance institutional capacity (Acemoglu and Robinson, 2006). Acemoglu and Robinson (2006) argued that political leaders might prevent institutional development for fear of losing their *incumbency advantage*. Incumbency advantage is the benefits politicians enjoy when they are in power. Also, fear of *political replacement effect*¹¹ contributes to lack of political will to reform institutions (Acemoglu and Robinson, 2006). When people feel oppressed, they may fight for liberation (Le Billon, 2006; Lujala, 2010). It is argued that generally, democratic states have the political will to reform institutions than non-democratic ones (Gizelis and Wooden, 2010).

Natural resources conflict can slow down economic development (Duruigbo, 2008; Hoeffler, 2008; Karl, 1997; Skaperdas, 2008). It is therefore important to avoid natural resource conflict. The next section reviews how natural resource conflict could be managed.

3.5 Managing Natural Resource Conflict

There are three ways by which natural resources conflict could be managed: through military intervention, economic sanctions and resource benefit sharing (Le Billon, 2009). The present study focuses only on resources benefit sharing and specifically, revenue sharing since the problem under investigation is conflict over limestone revenue sharing.

¹⁰ The cost and benefit that come when laws are enacted or modified. Some political elites fear that changes may threaten their positions.

¹¹ Political replacement effect is situation where institutional change erodes the power and advantages enjoyed by incumbent politicians

Resource revenue sharing is “an arrangement through which revenue from extractive activities is shared with subnational authorities” (Bauer et al., 2016: 17). Access to direct mineral revenue may prevent natural resource conflict (Brown and Keating, 2015; Le Billon, 2009). Resource revenue sharing can help mineral producing areas to manage bad effect like pollution from mineral extraction (Bauer et al., 2016). This is not to say that without resource revenue sharing, areas that have natural resources will not benefit from their resources. Rather, it makes resource-rich areas have access to direct, and probably more revenue from their natural resources (Dupuy, 2017; Standing, 2014).

3.5.1 Approaches to Natural Resource Revenue Sharing

There are two main ways for sharing natural resources revenue (Bauer et al., 2016). One way is through direct tax whereby local authorities collect taxes¹² from resource extracting companies. The other way is through transfers whereby the central government collects taxes from resource extracting companies and send part of the revenue back to resource producing areas (Bauer et al., 2016). Natural resource extraction companies can also transfer part of natural resource revenue (profit) to local authorities. This means that natural resources benefit sharing is not the same across countries. The present study focuses on resource revenue transfer.

3.5.2 Utilisation of Natural Resource Revenue.

Natural resource revenue can be distributed to individuals or put in a pool (common-pool revenue) for a common good. The present study is concerned with common-pool natural resource revenue. Stabilisation fund¹³ and saving fund are the two main types of natural resource common-pool revenues (Ouoba, 2016). Here, only saving fund is relevant for the present study because the natural resource revenue in contention is for the development of the study area but not to stabilise the Ghanaian economy.

Saving fund is way of converting non-renewable resources into other forms of assets which could either be an investment fund or a development fund (Ouoba, 2016; Söderholm and Svahn, 2015). Investment fund, as the name implies, is natural resource revenue invested so that only the dividend is used at least in the short run to enhance the standard of living in mining communities. Investment fund is sustainable because if it is managed well, it could continue to

¹² Taxes may include income tax of the extractive companies and royalties.

¹³ Stabilisation fund is used to keep national economy stable when prices of non-renewable resources fall on the international market (Samset, 2009). The current study is about resource benefit sharing with the local people and as such, stabilisation fund is irrelevant for further discussion.

provide income to beneficiaries even when the non-renewable resources are depleted (Ouoba, 2016). The Nabarlek uranium mine in Australia, the Raglan nickel mine in Northern Saskatchewan, Canada and the Escondida copper mine in Chile are have established investment funds with mineral revenue (Söderholm and Svahn, 2015).

Development fund is usually used, but not limited to do physical development like the provision of social amenities such as health and educational facilities (Tsani, 2013). An example is the Social Development Fund in Yemen, established with oil revenue. This is used to provide aid to areas with harsh climatic conditions in the country (Al-Iryani et al., 2015; Tsani, 2013)

3.6 Challenges Associated with Common-Pool Natural Resource Revenue

The main challenges for effective and equitable local use of natural resource revenue are corruption and elite capture¹⁴ (Adimazoya, 2013; Dupuy, 2017; OECD, 2016; Standing, 2014). For instance, revenue allocated to improve the livelihood and energy crisis of the people of Palavan, Philippine was used to build roads, bridges and classroom blocks because it was through those infrastructural projects that local authorities could award contracts to themselves or to relatives (Mayo-Anda, 2013; 2017).

Furthermore, elite capture deprives mining affected communities of their due development. Traditional rulers and government appointees in Ghana and Serra Leon seize mineral revenue for selfish personal use (Adimazoya, 2013; Dupuy, 2017; Standing, 2014). In Ghana, the Chiefs are so powerful and largely not accountable that they could spend natural resource revenue on anything they want (Kassibo, 2002; Sakyi, 2003; Thiaw and Ribot, 2005; Valsecchi, 2008). Adimazoya (2013) reported that Chiefs and Municipal Chief Executives arrogated mineral revenue to themselves to the detriment of socio-economic development at resource producing communities. Thus, elite capture contributes to the underdevelopment of mining affected communities.

Equitable resource revenue sharing is one of the ways to manage natural resource conflict. Natural resource conflict however, is inevitable in human society because people have competing use for natural resources (Matiru, 2000; Stevens and Dietsche, 2008). Besides, when mineral revenues are captured by chiefs and political appointees, natural resources conflicts might occur since mining-affected communities will not benefit from their endowed resources

¹⁴ The situation where leaders use communal resources to their personal advantage.

(Standing, 2014). How do we resolve natural resource conflict when it occurs? The next section reviews natural resource conflict resolution mechanisms.

3.7 Natural Resources Conflict Resolution Mechanisms

Conflict resolution may be defined as the process by which dispute between people is settled. According to Wallensteen (2015: 8), “conflict resolution is a situation where the conflicting parties enter into agreement to solve their central incompatibilities, accept each other's continued existence as parties and cease all violent against each other”. Based on this definition, natural resource conflict resolution mechanisms could be understood as ways by which disputes over natural resources are settled (MacDonnell, 1988).

3.7.1 Approaches to Conflict Resolution

Conflict resolution mechanisms could be classified into *consensual* and *non-consensual* methods (Herrera and Da Passano, 2006). The consensual and non-consensual mechanisms are referred to as informal and formal mechanisms respectively (Herrera and Da Passano, 2006; MacDonnell, 1988). Consensual method are approaches that require the agreement of opponents to use a third party¹⁵ to resolve the conflict. There are several consensual conflict resolution mechanisms¹⁶ (see for example Matiru, 2000). This review, however, focuses only on mediation and arbitration as the most relevant for this study.

Non-consensual methods, on the other hand, “require the intervention of a well-recognised, formal or informal third party, in charge of taking a final decision [in which] the validity and enforcement of the decision depend on the third party’s authority, power and legitimacy” (Herrera and Da Passano, 2006: 10). This means that unlike the consensual mechanism that require mutual understanding between opponents to settle a conflict, decision in non-consensual mechanisms is enforced based on the authority of the third party. The non-consensual mechanism considered relevant here is adjudication. Adjudication is resolving conflict using established laws in the court of law. The adjudicator is often a judge of competent jurisdiction.

¹⁵ A third party is a person or organisation who is not involved in the conflict.

¹⁶ Negotiation, avoidance, mediation, arbitration are some consensual conflict resolution mechanisms. Negotiation is a mutual understanding between opponents to settle their differences (conflict) without involving a third party. Negotiation seems irrelevant for this study because the two Traditional Councils would have used it over the past 16 years since the conflict ensued. In addition, avoidance is when opponents pretend there is no conflict, making the public unaware of it. Here again, it is irrelevant for this study because the two Traditional Council acknowledge that there is conflict between them and public is aware of it.

3.7.1.1 Mediation

Mediation is where a neutral person or an organisation is used to facilitate agreement between opponents (Matiru, 2000). Mediation could also be seen as a ‘process whereby a third party assists two or more parties, with their consent, to prevent, manage or resolve a conflict by helping them to develop mutually acceptable agreements’ (Jensen and Halle, 2015: 11). This means that the third party, who is usually referred to, as a mediator, guides opponents to reach agreement (Galtung, 1965; Matiru, 2000). Successful mediation usually brings lasting peace since the mediator assists opponents to find mutual agreement by themselves (Jensen and Halle, 2015).

3.7.1.2 Arbitration

Arbitration is when opponents agree to let a third party help settle a conflict (Abdile, 2012). It “involves the referral of a dispute or disputes to an ad hoc tribunal” (Zartman, 2007: 119). The third party or ad hoc tribunal is called arbitrator (Herrera and Da Passano, 2006). The arbitrator helps to resolve conflict by “first allowing time to address informational and emotional needs, followed by a discussion of losses and the possibility of developing a mutually agreeable restitution obligation” (Umbreit, 1988: 87). The arbitrator can suggest a point on which opponents could reach agreement (Goltsman et al., 2009; Hoffman, 2003; Lewicki et al., 1992).

The *Xeer* system is a well-known arbitration mechanism for resolving conflict in Somalia (Abdile, 2012). According to Fox (1998: 13) the *Xeer* system is “a socially constructed set of norms established to safeguard security and social justice for Somalis in Somalia and in the diaspora”. The arbitrators consist of representatives of opponents and a neutral third party. The *Xeer* system is used to resolve both political and natural resource conflicts (Abdile, 2012).

3.7.1.3 Adjudication

Adjudication is a right¹⁷ approach which requires a judge or administrator to give a final and binding decision after hearing arguments from opponents (Hoffman, 2003; MacDonnell, 1988; Matiru, 2000). “Adjudication depends on the existence of a rationally knowable principle, the application of which to the situation at hand determines the outcome” (MacDonnell, 1988: 12). This means that the decision of the judge or administrator is based on established laws. In adjudication, opponents cannot choose judges to hear their case (MacDonnell, 1988). The decision of adjudication is binding but an opponent has the right to appeal in a higher court of

¹⁷ The right approach is the use of fair system to determine the loser and winner of a conflict (Hoffman, 2003)

law if the opponent is not satisfied with the decision. This makes adjudication relatively time consuming and expensive (Herrera and Da Passano, 2006).

Despite its challenges, adjudication is used to resolve natural resources conflict in Africa. For example, the Environment and Land Court and the Land Disputes Tribunal are the adjudication systems used to resolve land-related conflict in Kenya (Maina, 2015). In Tanzania also, the judicial courts are mostly used to resolve land-related conflict (Sackey, 2010).

3.8 The Concept of Planning

Planning is any choice we make today to achieve our future wants. “Planning is a process of identifying a desired future and selecting appropriate actions to achieve it” (Lachapelle and McCool, 2005: 279). Planning could also be the ‘foresight in formulating and implementing programs and policies’ (Hudson et al., 1979: 387). These definitions suggest that we cannot get what we want without planning for them. This section reviews the concept of major planning models. This is done in the light of, but not limited to level of public participation in each model.

3.8.1 Public Participation

If conflict occurs because people have competing values (Galtung, 1965; Souleimanov, 2013), and planning is done to ensure that the conflicting values of resource users are reconciled (Lyytimäki and Peltonen, 2016), then, involving people in planning natural resource use could bring some level of mutual understanding among resource beneficiaries to avoid natural resource conflict (Healey, 1992; Lachapelle and McCool, 2005; Lane, 2005). This is because “when people are listened to, paid attention to, treated politely and with respect, the legitimacy for the final decisions is increased” (Zachrisson, 2004: 24). Besides, participation helps to reduce conflict as it offers different participants the opportunity to know the values and perspectives of others, thereby, encouraging compromise (Jones, 2007). To know the level of public participation in each planning model, it is crucial to review the levels of participation in decision-making. This study adopts on Arnstein’s (1969) *Ladder of Participation* in this regard.

Arnstein (1969) likened levels of participation to a ladder with 8 rungs where public involvement in decision-making increases with a corresponding increase in the rungs of the ladder. At the bottom of the ladder is *manipulation* where the public is ‘educated’ to shape their perspectives on issues. The next level is *therapy* with the main objective to influence people’s values to achieve common interest in society. Above therapy is *informing* the public through a one-way communication using the mass media about decisions that have been taken. Further

on the ladder is *consultation*. At this level, leaders seek ideas from the public but those ideas are not necessarily considered in the final decision. *Placation* is the next higher level of participation where some of public concerns are considered in the final decision. The next level is *partnership* where the public and leaders take decisions together. Above partnership is *delegated power*. At this level, the public is given the power to take decisions on some issues. At the top of the ladder is *citizens' control*. This is the highest form of participation where the public decide on all issues of public concern (Arnstein, 1969). Partnership and citizen control seem to be relevant for extractive projects such as mining which affects many people.

3.8.2 Models of Planning

There are several planning models and it is important to know the assumptions, advantages and disadvantages of each to identify the suitable one for a given situation. This is necessary because no single planning model is suitable for everything (Hudson et al., 1979). The following subsections discuss rational, incremental, communicative and agonistic planning models since they are the major planning traditions (Lane, 2005; Mäntysalo et al., 2011).

3.8.2.1 Rational Planning

Rational planning is a decision-making process based on *reason*¹⁸, detail analysis and extensive use of quantitative methods (Hudson et al., 1979; Luzzi, 2001; Simon, 1995). Rational planning is a goal-oriented strategy by defining the means to attain ends (Bennett, 2000). The rational planning model, also known as synoptic planning is the predominant planning tradition because other planning models either build on it or criticise it to form their assumptions (Hudson et al., 1979). Rational planning is based on the notion of rationality. Rationality could be defined as the “act of knowledge, or knowing that we know something is true” (Luzzi, 2001: 2).

Rational planning assume that it is possible to identify and make the ‘best’ management decision through scientific study (Fainstein and Fainstein, 1996; Friedmann, 1987; Hudson et al., 1979; Luzzi, 2001). It is also assumed that the public share common values so the ‘planner’ can make generally acceptable decision since he (planner) also shares same values (Fainstein and Fainstein, 1996; Kiernan, 1983).

The process of rational planning is characterised by extensive data collection and decision based on rationality (Friedmann, 1987; Hudson et al., 1979). Rational planning involves

¹⁸ Reason is logic backed by scientific proof (Healey, 1992)

collection of all the necessary data required for a detail analysis of a situation. Analysing the situation is about determining what we want to achieve in the future (*end*). To make a rational decision, it is necessary to identify *all* the possible alternatives (*means*) to attain an *end* (Banfield, 1959). In relation to establishing a mine, this means that the planner may conduct a study to ascertain the availability of the mineral, examine possible ways that the mineral could be extracted and to minimise environmental degradation, to discover landowners, and compensation packages for people who are likely to be affected by the mining activity.

Every *means* to attain an *end* has consequences with several advantages and disadvantages. The planner may for instance, investigate the advantages and disadvantages to engage in underground or surface mining. These consequences are compared to find the ‘best’ *means* to attain an *end* (Banfield, 1959; Leoveanu, 2013). Though these elements are not always followed sequentially, they are all characterised by extensive quantitative analysis such as cost and benefit analysis (Hudson et al., 1979). It is against this procedural background of rational planning that Edward Banfield define planning as the ‘process by which the planner chooses *means* to arrive at his *ends* (Banfield, 1959).

Rational planning is usually done by planning experts with little engagement with the public (Sandercock, 1998). This is because, in rational planning, scientific knowledge is seen as superior to other forms of knowledge (Luzzi, 2001). The public might produce data for analysis but the actual planning is done by planning experts (Banfield, 1959). Sandercock (1998) sees rational planning as *technocratic* because it focuses more on the expertise of the ‘planner’. The level of public participation in rational planning is merely informing or at best, consultation (Lane, 2005; Mäntysalo, 2004). Thus, communication between the ‘planner’ and the public is very low.

The advantage of rational planning lies in its simplicity and the presence of its basic elements in any planning model (Hudson et al., 1979). Rational planning states the processes of planning in a simple way and its basic elements of *end* and *means* are found in other planning theories that even seek to criticise it (Hudson et al., 1979). In theory, the process can enable us to identify the best planning alternative (Hostovsky, 2006).

Despite its comprehensiveness, some of the central arguments of the rational theory are unrealistic (Luzzi, 2001). There are different values in society contrary to the assumption that the public share common values (Healey, 1992; Mitchell, 2002). For instance, some people may see the establishment of a mine as a source of revenue stream for socio-economic development

but others may see the mine as a source of environmental degradation. Bandyopadhyay and Shiva (1985) reported economic-amenity values conflict in which local people saw the limestone deposit as soil stabilizer and source of water but mining companies were interested in its economic benefit. Also, Eser and Luloff (2003) reported a conflict between local people and mining authorities over limestone in Haines Township, Pennsylvania because local people were concerned about environmental hazards that will emerge through the extraction of the limestone. These examples suggest that the public may not share common values.

Also, it is difficult to collect all the necessary data, analyse all the alternative *means* and compare the consequences of *means* to make a rational decision (Luzzi, 2001; Simon, 1995). An attempt to do rational planning thus become time consuming, expensive and even affected by *bounded rationality* (Hostovsky, 2006; Luzzi, 2001). Bounded rationality is the impossibility to know everything, which causes us to make decisions based on partial knowledge (Simon, 1995: , orig. 1945). Besides, rational planning focuses more on the process (*means*) to arrive at *ends* with limited guideline on how to formulate *ends* (Allmendinger, 2002; Taylor, 1998). Rational planning is a narrow-based strategy because the public is not involved in the process (Healey, 1992).

3.8.2.2 Incremental Planning

Incremental planning emerged as a reaction against the unrealistic nature of rational planning model (Hudson et al., 1979; Lane, 2005). It was pioneered by Charles Lindblom in his paper, *the science of muddling through* in 1959. Lindblom sees rational planning to be impractical but he did not reject it (Cates, 1979). Incremental planning is based on perceptions and experiences where decision are made by *limited successive comparison* (Lindblom, 1959). Limited successive comparison is making decisions by comparing a situation at hand with what we know in the past (Lindblom, 1959). Thus, incremental planning is building on what we know “step-by-step and by smaller degrees” (Lindblom, 1959: 81).

To establish a mine using incremental planning, decisions may be made based on the experiences of previous mines. Decision makers may first concentrate on whether to use opencast or underground mining. Decision makers may decide on how to pay compensation to beneficiaries based on compensation packages for previous mines when the mining activity start to generate revenues. Also, decision makers may start thinking about how to minimise environmental degradation based on experiences on similar problem in the past, when environmental problems emerge.

One assumption of the incremental planning is that we have limited cognitive capacity, time and data to make *rational decision* so planning should be done as when problem arises (Hudson et al., 1979; Lindblom, 1959). Besides, *means-ends* analysis is not necessary because they are not separate entities (Lindblom, 1959). Another assumption of incremental planning is that there is no common public interest (Lane, 2005; Mitchell, 2002).

The process of incremental planning is characterised by negotiations and compromise to reach consensus over conflicting interests (Bäcklund and Mäntysalo, 2010; Lindblom, 1959). Decision makers¹⁹ focus on limited alternatives that are important to the groups they represent (Bäcklund and Mäntysalo, 2010; Mäntysalo et al., 2011). Lindblom (1965) calls this process of decision as *partisan mutual agreement*. With the conviction that we have limited cognitive capacity, time is not spent to anticipate and analyse future problems. Rather, planning is done to solve problems as and when they arise (Lindblom, 1959; Quinn, 1978). Though this model acknowledges that there are different interest in society and recognises actors aside planning experts as partners for planning, public participation is limited to consultation and placation (Lane, 2005; Mäntysalo et al., 2011).

Even though incremental planning is relatively faster and less expensive because time is not spent to collect extensive data (Lindblom, 1959), it has some weaknesses. First, power is not evenly distributed so the views of less-organised people will not be considered as they might not have representative at the planning table (Cates, 1979; Friedmann, 1987). Also, it may reflect the interest of powerful people and reinforce existing power relations as it is just a marginal increment to existing plans (Bäcklund and Mäntysalo, 2010; Cates, 1979).

3.8.2.3 Communicative Planning

Communicative planning is a planning model which includes the public in the planning process (Bäcklund and Mäntysalo, 2010; Healey, 1992). Communicative planning involves many people unlike centralised planning process of rational planning and limited democracy in incremental planning (Mäntysalo, 2004; Mäntysalo et al., 2011). Communicative planning is based on Habermas' (1984) *theory of communicative rationality*²⁰. It is argued that the best plan

¹⁹ Decision makers may be elected to represent groups of people. Decision makers are assumed to represent the interest of the people they represent because they were voted for (Bäcklund and Mäntysalo, 2010)

²⁰ The idea that reason, *per se* is not bad but one-man reasoning is harmful to societal growth. There should be *inter-subjective communication* where people debate and discuss their values and interests to arrive at a universal rationality. This rationality is not only based on logic and scientific evidence, but also on morality and culture (Habermas, 1984).

comes through argument in a society where we “live together but differently” (Healey, 1992: 148 and 154). Planning a mine communicatively, may be like holding a public forum for people to take decisions based on the arguments that many people deem plausible.

It is assumed in communicative planning that there exist different interests within society which must be considered in planning processes (Healey, 1992; 2003; Mitchell, 2002). It is also assumed that communication provides the platform for us to understand one another better (Healey, 1992). Also, people are experts of their lives and things that affect them regardless of their social status and educational background (Friedmann, 1987; Healey, 1992).

Based on these assumptions, the public is involved in communicative planning (Friedmann, 1987; Healey, 1992). Communicative planning is characterised by debate and respect for others’ opinions even when there is disagreement (Healey, 1992). The debate is guided by the *ideal speech situation* where validity of argument is based on consensus of equal participants with no influence of power (Flyvbjerg and Richardson, 2002). At the end, decisions are made on the *power of the better argument*²¹ (Healey, 1992; Mäntysalo, 2004).

The level of public participation in communicative planning is partnership (Lane, 2005). Communicative planning gives opportunity to the public to provide knowledge and encourages democracy (Bäcklund and Mäntysalo, 2010; Healey, 1992). It therefore reduces ambiguity and uncertainty that often characterise rational and incremental models (Mäntysalo, 2004).

Communicative planning has some weaknesses. Who determines what a better argument is? To be able to identify the better argument requires that participants share the same reality and problem which is generally difficult (Mäntysalo, 2004; Mäntysalo et al., 2011). Mouffe (2000) opines that to argue is to persuade and persuasion is often influenced by power. Unfortunately, “in open confrontation, rationality yields to power” (Flyvbjerg, 1998: 323). Moreover, the values and interests of those who cannot argue are subdued (Mäntysalo, 2004).

3.8.2.4 Agonistic Planning

Agonistic planning came into being as a reaction against the limitations of communicative planning (Mouffe, 2000). “Agonistic means contested, polemic and even combative” (Gunder, 2003: 237). Agonistic means bold argument among people. Agonistic planning provides a political space where interested people express their opinions without fear, and not being seen

²¹ Based on communicative rationality, better argument is an argument with higher level of scientific-based logic which most the people present at the debate or planning table accept.

as enemies but as *adversaries*²² (Bäcklund and Mäntysalo, 2010; Mouffe, 2000). The heated argument which characterise agonistic planning is seen as *strife*²³ not conflict, where antagonism is transformed to *agonism* (Mouffe, 2000; Pløger, 2004). Agonistic planning provides the platform for the public to express different values people ascribe to natural resources (Hillier, 2003).

Communicative rationality disregards alternative ideas that were not seen as reasonable (Mouat et al., 2013; Mouffe, 2000). Agonistic planning assumes that there is the need to consider different ideas to make decisions which could satisfy many people (Mouat et al., 2013; Mouffe, 2000). Also, conflict among adversaries encourages social learning (Mouffe, 2000). Different interests and values could be known when people are allowed to express them individually (Bäcklund and Mäntysalo, 2010; Mouffe, 2000). This means that, in planning a mine using agonistic strategy, the public should be involved to make decisions on every aspect of the project, from how to extract the mineral to how mineral revenue should be distributed.

The process of agonistic planning involves the public at the highest level of participation. The level of participation is partnership and citizen control as the public is fully involved in the planning process (Lane, 2005). Agonistic planning is characterised by aggressive debate between adversaries where individuals argue for their interests to be included in the final planning decision (Mouffe, 2000). In the end, participants agree on some issues and respectively agree to disagree on others (Bäcklund and Mäntysalo, 2010; Mäntysalo, 2004; Mouffe, 2000).

It pre-empts and resolves conflicts which might have occurred if adequate planning was not done (Flyvbjerg and Richardson, 2002). It also offers the public the chance to exercise their democratic right by taking part in deciding the things the affect them. Agonistic planning, however, requires a lot of time which many people do not have (Mouat et al., 2013). Nothing good comes easily so it is worthy to spend time today to achieve conflict-free future.

The objectivity and comprehensive nature of rational planning represent both its strength and weakness as it is appealing theoretically but unrealistic practically (Hostovsky, 2006). Incremental planning emerged as an attempt to make planning more realistic but its representative democracy is seen to be too narrow. Unlike the communicative planning which is merely on consensus building and the *power of better argument* (Mäntysalo et al., 2011), agonistic planning is a political space which welcomes public contestation over resources

²² People whose opinions we challenge but we do not disregard or disrespect (Mouffe, 2000)

²³ Disagreement between adversaries (Pløger, 2004)

(Hillier, 2003). The level of public participation increases from informing in rational planning to partnership and citizen control in agonistic planning.

The optimal strategy to establishing a new mine may be agonistic planning since mining affects many people in different ways. In addition, people ascribe different values to natural resources (Eser and Luloff, 2003; Matiru, 2000; Stevens and Dietsche, 2008). To make decisions which could meet the aspirations of many people to minimise natural resource conflict, individuals should be involved to enhance the legitimacy of decisions (Jones, 2007; Zachrisson, 2004).

3.9 Conceptualising the Onset of Natural Resource Conflict

Many arguments have been advanced in literature about the causes of natural resource conflict. Generally, scarcity of renewable resources and the abundance of non-renewable resources have been found to be sources of natural resource conflict (Collier and Hoeffler, 2004; Homer-Dixon, 1999; Le Billon, 2008; Østby et al., 2009). Yet, these findings are inconclusive because some countries have achieved economic growth with abundant non-renewable resources and others could manage scarce renewable resources very well (Gizelis and Wooden, 2010; Humphreys, 2005). Even though there are many factors that cause natural resource conflict (see Abuya, 2013), the present study focuses on weak institutions and narrow-based natural resource planning strategy. I presume that the distinguishing feature between natural resource abundant countries that have achieved economic growth and development and those experiencing resource curse could be the quality of existing institutions. Besides, conflict over mineral revenue is not an issue of scarcity.

It has been found that whether a country experiences war or peace with abundant or scarce natural resources depend on its institutions²⁴ (Besley and Persson, 2011; Bulte et al., 2005; Humphreys, 2005; Koubi et al., 2014; Le Billon, 2006; Mehlum et al., 2006; Stevens and Dietsche, 2008). Natural resource conflict “is dramatically increased in situations where the state lacks the institutional capacity to manage the resource in an effective, transparent and accountable manner” (Jensen and Halle, 2015: 28).

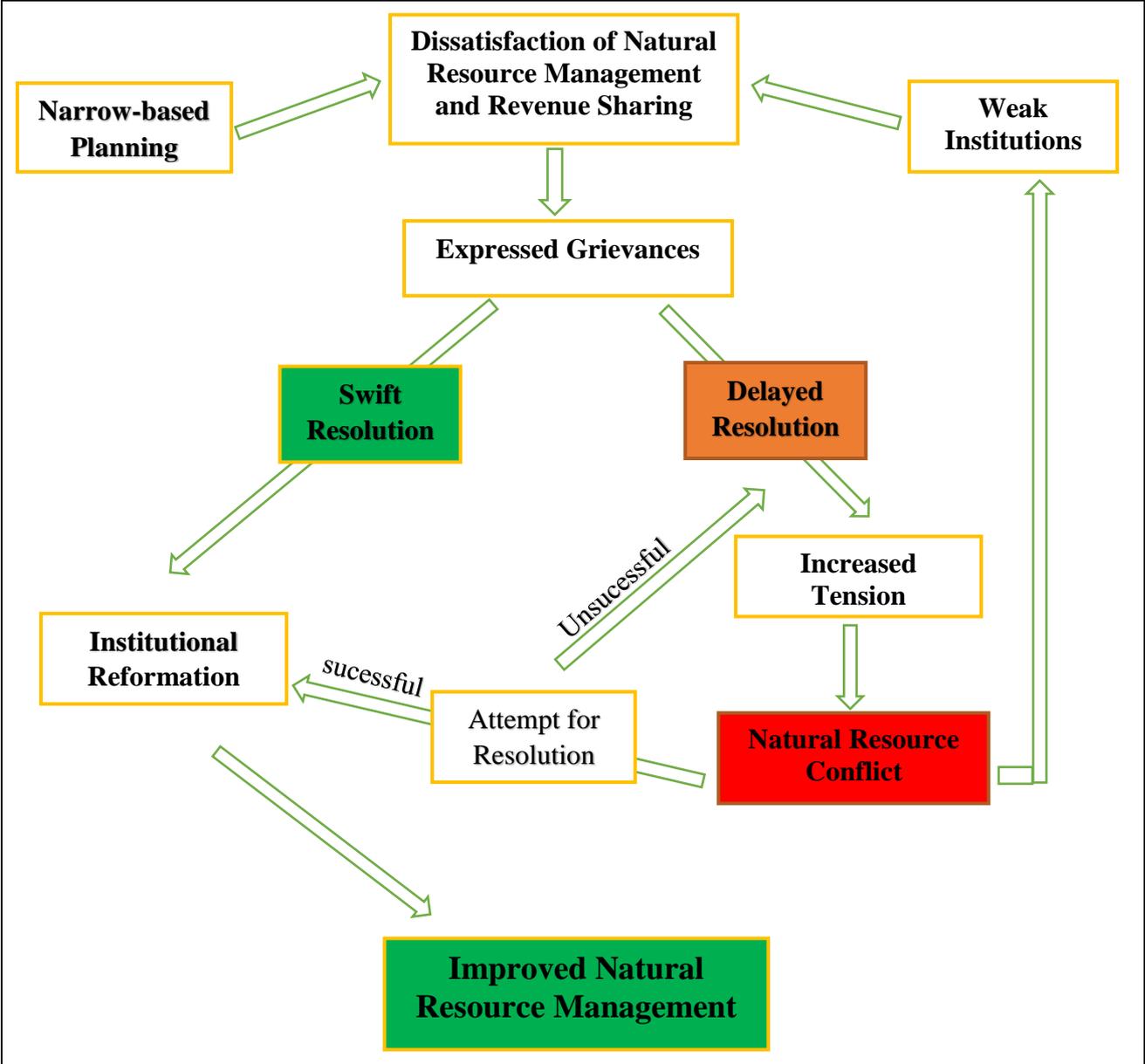


Figure 3 Conceptual Framework²⁵.

Source: Author’s Construct.

²⁴ Institutions are routines and procedures that remove doubts and guide our daily activities.
²⁵ The green boxes indicate conditions that could enhance natural resource management while the red and brown boxes indicate conditions that could lead to resource curse.

I conceptualise that conflict over natural resource revenue is a sign of general dissatisfaction of natural resource management and revenue sharing (Brown and Keating, 2015; Le Billon and Nicholls, 2007). Weak institutions could cause general dissatisfaction of mineral revenue use, leading to natural resource conflict. Weak institutions could be lack of clearly defined rules and regulation for sharing natural resource revenue and how to resolve natural resource conflict (Cabrales and Hauk, 2011; OECD, 2016).

In addition, narrow-based planning²⁶ could create grievances because local people and other stakeholders may feel neglected and cheated. For example, stakeholders may feel neglected when they are not involved in planning mining activities. This is because, “traditional planning processes that emphasize technical analysis and limit citizen involvement often create tensions between citizens and agencies in the form of inaction, distrust, litigation, and occasionally even threats and violence” (Lachapelle and McCool, 2005: 279). On the other hand, involving the public in planning process reduces conflict as participation enhances the legitimacy of decisions (Jones, 2007; Zachrisson, 2004). Broad-base planning model such as agonistic planning, creates a platform for people to express their values and concerns about mining activities, thereby preempting conflict before decisions are taken (Flyvbjerg and Richardson, 2002; Lyytimäki and Peltonen, 2016; Schilling-Vacaflor, 2012)

When institutions are weak and narrow-based planning is adopted, people may start making demands for their access to mineral revenue and complain about any bad effect that comes with mineral resource extraction. Even if mineral revenue is paid, dispute could arise among beneficiaries due to lack of clearly defined rules for sharing the revenue (I call it expressed grievances) (OECD, 2016). The initial stage of conflict in which opponents are aware that there is a problem but they are not attacking each other violently is called latent conflict (Souleimanov, 2013). This stage of conflict is characterised by ‘no peace, no war’ as opponents only express their grievances verbally.

If latent conflict is left unresolved for a long time, it could intensify and lead to sporadic conflict (Souleimanov, 2013). This is an intensified dispute in which opponents engage in ‘hit-and-run’ by attacking each other periodically. If sporadic conflict is further left unresolved, it could break into violent conflict (civil war). This is because “conflicts have a tendency to snowball both in space and time: they bring in more people and broaden in scope as time goes on” (Galtung, 1965: 349). This means that conflict usually start with a few people at a micro-level and

²⁶ Planning done by planning experts with little or no involvement of the public or key stakeholders.

gradually involve many people and covering wider area. At this stage, the conflict may be classified as a civil war (Souleimanov, 2013).

There may be attempts to resolve the conflict (Le Billon, 2009). Consensual conflict resolution mechanisms such as mediation and arbitration may be used to resolve the conflict. When these attempts are unsuccessful, conflict resolution may further delay. Delayed conflict resolution may further weaken existing institutions since law and order are usually absent when conflict ensue.

On the other hand, when efforts are made in a fast manner to resolve expressed grievances (latent conflict) or when conflict resolution attempts are successful, there may be the need to define rules or modify existing ones or use appropriate mechanism (institutional reformation) to resolve the conflict. Institutional reformation could lead to creation of improved natural resource management and fair distribution of mineral revenue (Cabrales and Hauk, 2011). This could then ensure more equitable distribution and appropriate use of mineral revenue to ensure socio-economic development in mining-affected communities. This conceptual framework seems relevant here since the present study investigates the reasons why the *Krobos* could not share the Odugblase limestone revenue.

3.10 Chapter Summary

The chapter reviewed the concept of conflict and the influence of ethnicity on conflict onset. It also covered the types and causes of natural resource conflict. This chapter further discussed that resources benefit sharing, and particularly mineral revenue distribution is a way of managing natural resource conflict but since natural resource conflict occurs sometime, mediation, arbitration and adjudication are some of the ways that natural resource conflict could be resolved. Furthermore, this chapter reviewed the main planning traditions and the level of public participation in each. The chapter ended with a conceptualisation of natural resource conflict onset. It became evident that none of the studies reviewed reported limestone related conflict. This is a major gap that this thesis sought to fill. The next chapter presents the methodology adopted for this study.

CHAPTER 4

METHODOLOGY

4.1 Introduction

The research questions of the present study were: what is the nature of Manya-Yilo conflict; to what extent do the planning strategies used prior to the mining and the political structure help to explain the Manya-Yilo conflict; has the limestone revenue been used efficiently; and what is being done to resolve the Manya-Yilo conflict? To answer these research questions, I used the following methods. These methods could be understood by giving the reasoning behind the choice of the research methods. Thus, this chapter starts with the philosophical background of the methodology I used.

4.2 Philosophical Background of the Study

Every research methodology has a philosophical foundation²⁷. It is usually the ontology²⁸ and the epistemology²⁹ within which the research is situated. Ontology and epistemology are very necessary for the choice of methodology. “This is based on a principle that unless we first get [the] ontological and epistemological issues right, no amount of methodology can get us very far: ontology comes before epistemology, and epistemology before methodology” (Tang, 2011: 215). The ontological and epistemological foundations of this study are presented below.

4.2.1 Ontology

Ontology deals with the study of existence and meaning of things (Crotty, 2003). Ontology is concerned with questions like “what is there that can be known” or “what is the nature of reality” (Guba and Lincoln, 1989: 83). This study is concerned with the causes and consequences of the Manya-Yilo conflict. The ontological assumption underlying this study is that Odugblase is populated by people who have their thoughts, subjective interpretations of the meanings of the Manya-Yilo conflict over the sharing of the limestone revenue. Thus, the ‘reality’ of the Manya-Yilo conflict can best be understood from the perspective of the stakeholders of the Odugblase limestone deal.

²⁷ Ideas and arguments on which a methodology is formulated.

²⁸ Ontology is study of the existence and meaning of things.

²⁹ Epistemology is the way through which we understand things

4.2.2 Epistemology

Epistemology is how the existence and structure of reality is known. Crotty (2003: 3) states that epistemology is “a way of understanding and explaining how we know what we know”. To understand the Many-Yilo conflict and its consequences adequately, meaning should not be sought independent of local people. Rather, meaning should be constructed with the people affected by the case (Becker, 1970). Thus, this study is situated within constructionism. Constructionism is the view that what we know and the meaning we attach to things are based on our experiences and interaction with other people (Crotty, 2003). It is therefore important that a methodology that will help in understanding this case is chosen. The following section presents the methodology for this study.

4.3 Methodology

Methodology is the process by which a phenomenon is abstracted and studied. According to Crotty (2003: 3) methodology is “the strategy, plan of action, process or design lying behind the choice and use of particular methods and linking the choice and use of the methods to the desired outcomes”. Thus methodology is how the aspects of the society are understood by following *rules* and *procedures* (Saks and Allsop, 2012). It is therefore important to clearly define the methodology for every academic research.

In social science research, qualitative and quantitative are two main methodologies (Bryman, 2012; Creswell, 2013). These methodologies are sometimes combined in a single research as a mixed method study. The choice of methodology for a study is generally informed by the ontological and epistemological assumptions (Creswell, 2013). Based on the ontological and epistemological assumptions presented above, I employed qualitative methodology to investigate the causes and consequences of the conflict over limestone revenue sharing. There are several justifications for choosing qualitative methods.

I chose qualitative method because it is suitable for explaining and understanding human experiences (Winchester and Rofe, 2010). It is important to understand the conflict within the social context and from the perspective of research participants (Savage, 2006; Silverman, 2013). Qualitative method of collecting data like in-depth interview allows research participants to share their life experiences in detail. It gave research participants sufficient time to present their perspectives on the causes and consequences of the conflict over the limestone revenue. Indeed, it is through qualitative methods that the world is “understood, experimented or produced” (Mason, 1996: 4). To make sure I understand the Many-Yilo conflict from the

perspective of research participants, I tried to repeat and interpret most of their crucial responses during interviews for them to confirm or reject.

Also, I chose qualitative study because of the uniqueness of this topic in literature. According to Winchester and Rofe (2010), qualitative method is suitable for understanding unique problems. A unique problem is a problem that is not common in literature. It is often a new problem of its kind which has not been studied before or only a little study has been conducted into it. This topic is unique because though there are many studies on natural resource conflict (see for example Koubi et al., 2014; Lujala, 2009; 2010; Lujala et al., 2005; Lujala and Rustad, 2011), non-violent, local conflict is less frequently mentioned in the literature. Thus, there are no relevant empirical studies that I could rely to formulate close-ended questions with exhaustive options for respondents to choose from if I considered survey.

Furthermore, I chose qualitative study for its flexibility. Unlike quantitative study that is rigid, qualitative method is more flexible and sensitive to the problem being studied (Forman et al., 2008). Flexibility enables a researcher to adjust to changing situations on the field. This is helpful because fieldwork is generally characterised by uncertainties (Darling, 2014). Sensitivity to the problem means that though theory is used in qualitative study, more attention is paid to collected data to understand the problem. The nature of this topic required a flexible method to overcome the uncertainties on the field. For instance, it was originally planned that landowners, traditional authorities and management of Ghana Cement Limited (GHACEM) would be the research participants. It emerged on the field that the two Municipal Assemblies had relevant information that would make the finding more rigorous. The flexible nature of qualitative study enabled me to include the two Municipal Assemblies to the research.

Qualitative research involves different methods. Purposive sampling, in-depth interviews and qualitative data coding were the respective methods I used to select research participants, produce data and analyse the data. These methods are discussed below.

4.3.1 Research Participants

The research participants for the present study included people who own land (landowners) at the mining site in Odugblase. Landowners are people who bought the land or acquired it through inheritance. According to the Mineral and Mining Act, if a mineral is found at a place that is not Public Land and the Mineral Commission of Ghana grants mining license, the mining

company and the responsible local government³⁰ should inform landowners about the forthcoming mineral extracting activity. Landowners shared their views on the nature of the conflict, the level at which they (landowners) were involved in the planning process, the causes and consequences of the Manya-Yilo conflict³¹.

Another group of research participant for this study were members of Manya and Yilo Traditional Councils. The Manya-Yilo conflict is between these Traditional Councils so it was necessary that I included them in the study. The two Traditional Councils could provide information about the nature³² of the Manya-Yilo conflict, how they were involved and the consequences of the conflict.

Also, I selected West African Quarries Limited (WAQL), a subsidiary of GHACEM as a key research participant for this study. WAQL is the mining department of GHACEM which deals with the other stakeholders and responsible for Corporate Social Responsibility in mining-affected communities. WAQL is required by law to contact the local government, landowners, and the two Traditional Councils to inform them about the mining activity. WAQL provided information on how the company involved other stakeholder to explain the planning process involved. It was appropriate to include WAQL (henceforth referred to as GHACEM) as key research participant.

In addition, Manya and Yilo Municipal Assemblies were part of the research participants. The Municipal Assemblies are responsible for local government. Besides, mining companies are required by law to inform the assemblies in which they operate (Adimazoya, 2013). The two Municipal Assemblies could provide information on the planning process and the political structure of the study area.

It is generally difficult and sometimes unnecessary to use everyone who has information on the problem we want to study (Creswell, 2013). It was important to sample my research participants. In the following sub-sections, I explain the criteria I used and the sampling procedure.

³⁰ Being it District, Municipal and Metropolitan Assemble at that area.

³¹ The interview guide is attached at the end (Appendix I)

³² Actors involved, level of violence and the object of contention.

4.3.2 Sampling

Sampling is the selection of research participants (Bryman, 2012; Creswell, 2013). Since it is difficult to use the entire research participants in a study, it is necessary that the sample size (number of people selected) is representative of the potential research participants. The sampled population should also have knowledge of the problem being investigated. When these conditions are met, it is assumed that information produced will reflect the general opinion of the entire potential research participants (Bryman, 2012; Creswell, 2013).

4.3.2.1 Sampling Procedure

I used purposive sampling to select research participants. Purposive sampling is a non-probability sampling technique in which participants are selected based on a reason (*purpose*) (Bryman, 2012). The purpose was that participants were either affected by the problem or could provide relevant information on the research problem. To understand the causes of this conflict and its consequences, it was important that research participants who have some knowledge of the problem were selected (Bryman, 2012; Minichiello et al., 1995). Purposive sampling was therefore, a suitable technique to get relevant research participants.

According to the Representative of the Landowners' Association³³, there were 54 landowners at Odugblase. With the help of the fieldwork assistant and the Representative of the Landowners Association, I identified 24 landowners residing at Odugblase. I assumed that landowners who were not owning lands before mining started and are not residing at Odugblase (absentee landowners) may not have in-depth knowledge of the conflict. Those who were not landowners before the mining started might not be contacted by the representatives of GHACEM and local government to give accounts on how they were involved in the planning procedure. Absentee landowners would not have first-hand information of the causes and consequences of the conflict because they were not living at the study area. Of the 24 landowners residing at Odugblase, 13 met my sampling criteria- they reside at Odugblase and have been landowners before mining started³⁴. They were also active farmers who were cultivating their lands. I selected all those 13 landowners for this study.

³³ I got to know on the field that landowners at Odugblase formed association to have a united front to request their benefit from the mining company.

³⁴ Some people became landowners through inheritance after mining started at Odugblase. It is likely that new landowners know about the Manya-Yilo conflict but they may not have in-depth knowledge of how planning of the mine was done.

Also, I selected one key research participant from each of the two Traditional Councils. I visited the two Traditional Councils and informed them about the purpose of this study. At the Manya Krobo Traditional Council, I selected a Divisional Chief of the Traditional Council who has in-depth knowledge of affairs of the Traditional Area. The Yilo Krobo Traditional Councils was less organised because there was a conflict over who would succeed the Paramount Chief who died in 2009. I selected a Divisional Chief who is a high-ranking member of the Traditional Council and very close to the late Paramount Chief. Besides, other chief I contacted confirmed him to be the most appropriate chief who has much information about the Traditional Council.

In addition, I sent request letters to both Chief Executives of Manya and Yilo Municipal Assemblies. The Municipal Chief Executives (MCEs) represent the President of Ghana at the local level. Unfortunately, the MCE for Manya Municipal Assembly said he was newly appointed to the Municipal Assembly so he did not have much information on the Manya-Yilo conflict. He could not get any officer with valuable information on the conflict for me to interview. Meanwhile, within the modern democratic system, the Municipal Coordinating Council is made up of the MCE, civil servants and representatives of the Traditional Council (Owusu-Mensah, 2014; Sakyi, 2010). So, if the Manya Traditional Council was involved in mineral related conflict, it is expected that Manya Municipal Assembly should be aware of it since the Assembly is supposed to facilitate the planning process of the mine. But the Municipal Assembly could not get any officer from the Municipal Coordinating Council to provide information on the Manya-Yilo conflict which might be a lack of coordination between Manya Traditional Council and the Manya Municipal Assembly

At the Yilo Krobo Municipal Assembly, the MCE directed me to a senior officer who has in-depth knowledge of the conflict because of his long service at the assembly. This officer was part of the Yilo Municipal Coordinating Council before 2004 when limestone mining started at Odugblase. I selected this officer because he could provide information on the nature of the Manya-Yilo conflict, how stakeholders were involved and the political structure of the study areas.

More so, at GHACEM, I was directed to WAQL, the department responsible for mining and paying royalties. I requested to interview a senior officer of that department. The officer chose to respond to the interview guide in writing. Table 4.1 is a summary of research participants selected for this study.

Table 2 Basic Characteristics of Research Participants

Respondents' Affiliation	Male	Female	Total
Landowners	11	2	13
Traditional Authorities	2	-	2
Yilo Krobo Municipal	1	-	1
GHACEM	1	-	1
Total	15	2	17

Source: Author, Field Data

4.3.3 Data Production Procedure

I used both primary and secondary data in this study. I used semi-structured interviews to produce primary data with my research participants. With the exception of my research participant from the Yilo Traditional Council who did not want to be recorded, I taped all the interviews. I used interviews because it is mostly used in qualitative research as it enhances our understanding of social phenomena (Winchester and Rofe, 2010). People usually give detail account of issues during interview, which helps in understanding phenomena from their perspectives. Moreover semi-structured interview was suitable for me to produce data with research participants since it is flexible (Dunn, 2010; Robson, 2011). This saved me from over-concentrating on the interview guide, which might have been the case for structured interview. Unstructured interview is best handled by very experienced researchers (Winchester and Rofe, 2010).

Despite its usefulness in producing qualitative data, interviews in general have been criticised. For instance, relates that “the result from interview can be comprehended as product of the contingencies of the interview situation, and not, as is usually assumed, the unmediated expressions of respondents’ real opinions” (Houtkoop-Steenstra, 2000: , 212). Houtkoop-Steenstra’s assertion served as a precaution so I avoided asking leading questions during interviews.

4.3.4 The Interview Process

All the interview started with exchange of pleasantries. I explained the purpose of the study to participants and asked for their consent. I requested research participants to state their convenient place and time for the interview. I did that to ensure a congenial atmosphere for research participants to produce detailed data. This is because when research participants are

interviewed at their comfortable places and time, they feel free and have more time to answer questions in detail (Crang and Cook, 2007). Generally, landowners chose to be interviewed in their houses and in the afternoon when they had returned from their farms. Research participants from the Traditional Councils also chose to be interviewed in their homes. My research participant from the Yilo Municipal Assembly granted the interview in his office as he wished.

4.3.4.1 Interview with Landowners

Before an interview session with a landowner, I restated the purpose of the study and pleaded with them that they should help me to produce a quality data for my thesis. I also assured them anonymity and asked them not to mention their names. The Representative of the Landowners' Association said he knew that whatever he would say was the truth so he would not mind even if I mention his full name in my thesis. It is therefore not a breach of research ethics that I use the position of that landowner.

Prospective mining communities in Ghana are usually not informed before mining starts (Adimazoya, 2013). So, major questions for landowners included: who contacted you, and how were you contacted before the mining started at Odugblase? These questions were necessary to know the level at which landowners were involved in the planning process. It is important to know if landowners were involved in the planning process because involving people in taking decisions on projects that will affect them reduces future conflicts (Jones, 2007). I also asked landowners about the causes and consequences of the conflict between Manya and Yilo Traditional Councils over the limestone 'royalty'. These questions were very central to understanding the problem of the present study. Furthermore, I asked about how the conflict was being resolved. Conflict intensifies and extends to wider areas when it is left unresolved for a long time (Souleimanov, 2013). It was necessary to know the efforts responsible authorities were making to resolve the Manya-Yilo conflict. These were the major questions. (Refer to [Appendix I](#) for the detailed interview guide used for landowners).

Generally, landowners were not much interested in the Manya-Yilo conflict but they provided valuable information for this study. There was another dispute between landowners and GHACEM over non-payment of compensation so landowners were more interested in their conflict. All the landowners I interviewed at a point in time digressed to talk about their plight due to non-payment of their compensation. Landowners were not expecting that my study will help resolve the Manya-Yilo conflict because they were less interested in that. They were also not hoping that my study would help resolve their conflict with GHACEM because they had

engaged a lawyer to send a legal request to GHACEM to pay their compensation. I did not offer any material gift to landowners after the interview.

4.3.4.2 Interview with Traditional Authorities

Like landowners, I interviewed traditional authorities in their homes at a time convenient to them. I asked traditional authorities the same questions I used for landowners. They told me the process and who contacted them before the mining started. They also gave me practical information on what they have done and what they were doing to resolve the conflict. They graded the interview with a high level of enthusiasm hoping that my study will help resolve the conflict. I had to reiterate to them that my study is purely for academic purpose so I would not assure them that the conflict would be resolved through the study.

I gave two bottles of schnapps to each traditional authority after the interview. Tradition demands that everyone presents a drink to a chief after engaging him in his house. I offered them the drink to fulfil that tradition, and to show my appreciation for their time.

4.3.4.3 Interview with Municipal Assembly

I interviewed my key research participant in his office. He demonstrated in-depth knowledge on Manya-Yilo conflict by giving detail answers to my questions. He was very relaxed throughout the interview. I asked him how the municipal assembly contacted the traditional authorities and landowners before the mining began. The Municipal Assembly is the modern form of governance at the local level which is responsible for government business in area. The assembly is supposed to contact traditional authorities and local people and inform them about the mining activities that was about to take place at the area (Adimazoya, 2013). Aside asking him about the causes and consequences of the conflict, I also asked him the role the Municipal Assembly was playing to resolve the problem. He also told me the political structure of the study areas and the problems associated with the governing systems.

4.3.4.4 Data from GHACEM

GHACEM did not grant interview. Rather, the officer in charge demanded for my interview guide and responded to it in writing. Being the mining company at the area, I asked him how they discovered the limestone deposit at Odugblase. I also asked him about the procedure the company used after the discovery of the limestone to the time mining started. This questions brought to light the extent at which traditional authorities and landowners were involved in the planning process. After asking for the causes and consequences of the Manya-Yilo conflict, I

asked if the conflict affected the operations of the company. This was necessary because if the Many-Yilo conflict was not affecting the operations of the company badly, GHACEM could ignore it. That could be one of the reasons why the Many-Yilo conflict has prolonged. I continued to ask about efforts that GHACEM was making to help the two Traditional Councils resolve the conflict.

I also used observation at a minimal level. Most landowners I interviewed indicated that blasting of the limestone by GHACEM causes their houses and even the newly built school block to develop cracks. So, I did a little observation to ascertain the validity of this claim. Also, most research participants said the main road at the study area is dangerous as it meanders between valleys and along hills. I did a little observation on that claim as well.

I had a quality and rich information from my research participants. With the exception of my research participant from GHACEM who answered my interview in writing, all the research participants provided their candid perspectives on the Many-Yilo conflict since they all spoke freely and in detail. The following section explains how I made meaning from the interviews I conducted.

In addition, I acquired general knowledge on the topic through secondary data. The secondary data were published academic articles and non-academic reports. I had general idea on causes and forms of natural resource conflict from secondary data. I also constructed my analytical framework with secondary data ([see Fig.1](#)).

4.3.5 Data Analysis

Data analysis is a complex and challenging process of research in which one makes meaning from data (Crang and Cook, 2007). The meaning of research data is made through deductive and inductive approaches (Cho and Lee, 2014; Elo and Kyngäs, 2008). This study adopted the inductive approach. Deductive approach is where we analyse and understand research data based on existing theory or what we already know in literature. Deductive approach is therefore more suitable when there is enough relevant literature on the study being carried out (Elo and Kyngäs, 2008; Graneheim and Lundman, 2004). On the other hand, inductive approach is where we rely directly on the research data for analysis (Elo and Kyngäs, 2008). Inductive approach is appropriate when there is limited knowledge on the problem we are investigating. Knowledge on conflict of micro-level revenue sharing is very limited. Hence, the choice of inductive approach in this study.

To understand the causes and consequences of the conflict over limestone revenue sharing through inductive approach, I used content analysis to analyse the data. Content analysis is a method of making meaning from texts through a systematic process to identify concepts, themes and patterns (Hsieh and Shannon, 2005). Critics say content analysis is a simplistic quantitative method which produces shallow results (Elo and Kyngäs, 2008). What counts as simple or sophisticated method, however, depends on the skill of the researcher. A researcher with limited knowledge of a “sophisticated” approach cannot produce detail analysis with it. I considered content analysis in this study because it is flexible and sensitive to the content of research data (Elo and Kyngäs, 2008; Harwood and Garry, 2003). It is good for this study because of the need to understand the problem inductively due to the limited knowledge on conflict over limestone revenue sharing.

I used content analysis to understand the causes and consequences of Many-Yilo conflict. The process of content analysis involves preparing data, organising data and reporting findings (Elo et al., 2014). The preparation stage of content analysis involves data collection and getting familiar with the data (Elo and Kyngäs, 2008). After producing data with research participants, I transcribed the interviews. I played the audio recordings ones more “to recapture some of the emotional flavour and the interpersonal situations that produced the material” (Crang and Cook, 2007: 137). In other words, playing back the audio recordings refreshed the memories of the experiences I had during fieldwork. I read the transcribed data many times to be familiar with it to organise the data.

The organisation stage of content analysis involves open coding, making categories and abstraction (Elo and Kyngäs, 2008). Coding is the process by which concepts are identified and labelled in a text (Cho and Lee, 2014; Graneheim and Lundman, 2004). Every content area that will answer any of my research question was highlighted and labelled with a key word (code). A content area is any part of the text that covers a specific issue. Open coding in particular is making note in a text while reading it (Elo and Kyngäs, 2008). Some of my key codes were *nature causes* and *consequences*. In addition, I created sub codes to get detailed understanding of concepts. At the end, I had 15 codes: 4 key codes and 11 sub codes ([Appendix III](#)).

I continued with the process of making categories. Open coding helped me to make categories and abstraction. Categories are groups of content with the same ideas (Elo and Kyngäs, 2008). Categories included *causes of the Many-Yilo conflict*, *consequences*, and *conflict resolution*

mechanisms. Abstraction is describing content of the texts based on the categories (Elo et al., 2014; Elo and Kyngäs, 2008).

The process of making categories could be done manually by printing out the coded texts, cut out highlighted parts and join content areas with similar codes on flat surfaces like tables, floor and boards (Elo and Kyngäs, 2008). In this study, however, I worked with the softcopy of the coded texts. It is relatively easier to search for concepts in a softcopy than in a hardcopy. I copied and pasted content areas with similar code on new Microsoft Word Sheets. This enabled me to read responses to similar questions from different research participants continuously. This enabled me to have better idea of responses to each category for condensation. Condensation³⁵ is shortening text and maintaining its central idea (Graneheim and Lundman, 2004). Similar responses were summarised to ease the difficulty of working with long and repeated paragraphs.

I did abstraction by describing themes and patterns based on the condensed categories. To describe themes through effective abstraction, the researcher must query categories with *how* question (Graneheim and Lundman, 2004). *How* question is one of the basic questions³⁶ asked in geography to know the relationships among phenomena at a place and time. This is where the latent content analysis comes in. For example, I asked myself, *how did stakeholders plan for the mining at Odugblase?* This helped to explain the relationship between planning and the onset of conflict between the Krobos. It is important to mention that data analysis was not a linear process as it might sound. It involved several backward and forward movement through the whole process.

I did data organisation alongside writing of the results because they are hardly separated in research (Crang and Cook, 2007). I presented themes and patterns that emerged from the responses of the various categories as findings. Then I discussed the findings with literature. I lifted and presented revealing responses as quotations in this study. Presenting finding with quotations brings the readers of this study closer to research participants and makes the findings more authentic (Elo et al., 2014; Sandelowski, 1995)

³⁵ Others refer to this process as reduction. I prefer condensation because reduction does not show the quality of reduced text (Graneheim and Lundman, 2004)

³⁶ The basic geographic questions are questions that geographers ask to explain the similarities and differences of things at places and spaces over time. These questions usually start with where, what, why, when and how

I interviewed several research participants and processed the information to make meaning. At every stage of this study, I have followed due process. The next section discusses the trustworthiness of the analysis and the results.

4.4 Trustworthiness

There are no rules and procedures to check whether a qualitative research is technically valid or not (Sandelowski, 1993). Even “a scientifically valid work may be neither true nor valuable” (Sandelowski, 1993: 2). Research must be based on the ideas (philosophy) underlying qualitative research and readers should be able to decide whether the research is trustworthy or not (Rolfe, 2006; Sandelowski, 1995). It is against this background that I evaluate the methodology of this study. The trustworthiness of a qualitative research could be judged through its credibility, confirmability and authenticity (Elo et al., 2014; Graneheim and Lundman, 2004; Lincoln and Guba, 1985). I discuss these in turn in the following paragraphs.

Credibility is the focus of the research which deals with how well the study covers the topic (Elo et al., 2014; Graneheim and Lundman, 2004). Credibility is related to internal validity which is “meaningfulness of research components” (Drost, 2011: 114). It is the logical presentation of facts. The conflict is unique and must be understood inductively from the view point of people with in-depth knowledge. Purposive sampling helped me to identify research participants with the most credible information. I covered all the questions on my interview guide with all my research participant thereby producing relevant and comprehensive information for the study. Moreover, content analysis is more suitable for textual data like interview transcription (Elo et al., 2014; Elo and Kyngäs, 2008; Hsieh and Shannon, 2005). Therefore, the credibility of this study is enhanced by the fact that I used credible methods and research participants.

Confirmability is where two or more researchers get the same finding from the same data (Elo et al., 2014; Graneheim and Lundman, 2004). This can be achieved when different researchers code and interpret data the same way (Graneheim and Lundman, 2004; Lincoln and Guba, 1985). This is however, an attempt to say that there is only one objective truth (Sandelowski, 1993). Achieving objectivity is not a focus of this study since one of the basic argument underlying qualitative research is that reality can be explained in many ways based on individual subjective interpretation of things. Besides, different researchers investigating the same problem qualitatively but separately will not produce the same result (Sandelowski, 1993). I resorted to *member check* to enhance the confirmability of this study

Member check is asking research participants to confirm findings of the study (Elo et al., 2014; Graneheim and Lundman, 2004). I knew I might not get the chance to ask research participants later so I did member checking during interviews by asking questions like, does that mean..., am I right to say... for clarity. At the end of each interview, I summarised participants' main points for them to confirm or reject it. Thus, the confirmability of this study was enhanced through member checking.

Authenticity is the extent at which researchers report the reality in the data (Elo et al., 2014; Graneheim and Lundman, 2004; Lincoln and Guba, 1985). The authenticity of the present study was enhanced by the fact that I interviewed research participants myself. Although I interviewed landowners and traditional authorities with the *Krobo* language, I can read and write *Krobo* very well so the interview transcriptions were not distorted. Moreover, since authenticity can be enhanced by using quotations when reporting finding (Sandelowski, 1995), I have quoted some research participants in the present study to bring the voices of my research participants close to my readers.

4.5 Ethical Considerations³⁷

One of the ethical issues considered was informed consent. Informed consent³⁸ is asking prospective participants' agreement to take part in a study (Bryman, 2012; Dowling, 2010). Darling (2014) relates that informed consent is a prerequisite for all research. I explained the purpose of this study to every participant and asked for informed consent verbally. All the participants for this study willingly agreed to take part in data production.

Another ethical issue I considered was respect for privacy. Privacy is required to protect the identity of participants (Dowling, 2010). Even though I did not ask personal questions, I assumed that the case of conflict over revenue sharing is a political one so I asked research participants not to mention their names during interviews. A reader may be able to know which category of research participants that I quoted based on their affiliations but the identity of who said what is kept anonymous throughout this study. The Representative of the Landowners Association and my key research participant from Many Traditional Council said they would not even mind if I used their full names in my thesis because what they told me was the truth

³⁷ This study, with Project Number 48464, was approved by the Norwegian Social Science Data Services

³⁸ Please go to [Appendix IV](#) for the content of the informed consent

Finally, I was careful not to expose research participants to harm. In social science research, participants are usually not exposed to physical harm but they could be hurt psychologically (Dowling, 2010). During interviews, I avoided offending questions that could hurt research participants.

I have used people's time to produce data for my master thesis so I should pay back my research participants somehow. I will send the abstract of my thesis to GHACEM and the Yilo Municipal Assembly for them to know some of the possible factors that caused the Manya-Yilo conflict. This could serve as a guide to avoid mining-related conflict in the future. I will also inform the two Traditional Councils that the mineral revenue they are fighting over is mineral Development Fund and not mineral royalty. If the two Traditional Councils are unable to resolve the conflict by the time I get to Ghana, I will try and facilitate a meeting with stakeholders to reach agreement on how we could use the mineral development fund to enhance the living standards of the *Krobos*.

4.6 Retrospective Account of this Thesis

I was constantly reflecting on my position so that it does not influence the interviews. I am more educated than landowners. Even, equally educated officials respected me for doing my masters outside Ghana. During interview, some respondents tried to tell me that I am more educated than them so I should guess answers for my questions. I always told them that if I had credible and reliable information on the Manya-Yilo conflict, I would not have travelled to Ghana and ask them questions. I would have stayed in Norway and write my thesis. This always encouraged research participants to feel knowledgeable enough to answer my questions.

Also, constant reflection on the field helped me to focus on my original topic. There was a conflict between landowners and GHACEM over non-payment of farmers' compensation. Though all minerals are vested into the President on behalf of the people of Ghana, the surface of the land belongs to landowners (Adimazoya, 2013). Mining companies are required to compensate landowners for occupying their land. Landowners claimed GHACEM has not paid the compensation in full. As such, there was a dispute between landowners and GHACEM. Each time I asked a landowner about the causes of the Manya-Yilo conflict, the research participant digresses to talk about the dispute surrounding the non-payment of their compensation by GHACEM. I listened to them and recorded their frustration but I always went back to ask the original question again.

Another thing I was critical about was my ethnic background. I am a Yilo and that makes me an insider researcher. Making known my ethnic affiliation to research participants could have influenced the data. The Yilos might have expected me to sympathise with them while research participants from Manya might have seen me as a private investigator for the Yilos. Research participants might have given me partial information or chose not to grant interview at all. Some research participants asked if I am Yilo or Manya but I pleaded with them that exposing my ethnic identity could violate research ethics. I told them that what matters is that I am a Krobo and I am not there to find faults. Throughout fieldwork, I told research participants that my motivation for conducting this study was to find out why *Krobos* could not make use of the limestone revenue to develop *Kroboland*³⁹ (both Yilo and Manya Traditional Areas). Research participants realised I am neutral and that made them to tell their stories freely and in detail.

4.6.1 Challenges

Getting GHACEM to interview was a very challenging task. I sent a formal request for interview to GHACEM. Despite many follow-up calls, visits and numerous e-mails to the company, GHACEM could not grant interview. The officer responsible to grant the interview was on his annual leave at that time. I requested for a telephone interview or to visit him at a place and time convenient to him but he declined. Instead, he asked me to send my interview guide to him which he responded to in writing.

Another challenge was getting the initial cooperation of two landowners. These landowners said they were not going to grant interview unless their leaders asked them to do so. I told them that their Representative directed me to them but they insisted. I had to call their Representative on phone for them to ask his permission before I could book appointment with them for interview.

4.6.2 Limitations

One of the reasons for conducting interviews is to produce rich and detailed data by asking follow-up questions. The written response from GHACEM has contributed to the data but would have been better if the company had granted an interview. Thus, the essence of interview was partly compromised.

³⁹ Geographical area settled by the members of the Krobo ethnic groups

Another limitation of the study was lack of interview from the Manya Municipal Assembly. Data from an interview would have been compared with data from Yilo Municipal Assembly to see the degree of commonality or difference between the municipalities on the causes and consequences of the conflict.

Also, if I had more time or chance to travel back to Ghana, I could have interviewed the Office of the Administrator of Stool Lands (OASL) to know if the remaining mineral royal is transferred to the other recipients ([see 2.7](#))⁴⁰. If that is the case, I could have found out the Municipal Assembly that it is transferred to. If the remaining mineral royalty is not transferred to the Municipal Assemblies, I could have asked for the reasons.

The introductory chapter specified the problems that this thesis seeks to investigate. The background information of the study area has been presented. Literature on natural resource conflict was also reviewed and the methodology adopted has just been presented. The next two chapters present the results and discussion of this study.

⁴⁰ For how mineral royalty is disbursed in Ghana. At the time of fieldwork, only landowners indicated that they receive their share of mineral royalty.

CHAPTER 5

NATURE AND CAUSES OF THE MANYA-YILO CONFLICT

5.1 Introduction

This chapter presents the findings on the first two research questions of this study. These questions are; what is the nature of Manya-Yilo conflict and to what extent do the political structure and the planning strategies used prior to the mining help to explain the conflict? Accordingly, this chapter describes the nature of the Manya-Yilo conflict over the Odugblase limestone revenue. The nature of the conflict covers the actors involved, what the actors are contesting over and the factors responsible for Manya-Yilo conflict. This chapter also presents findings on how planning and the political structure contributed to the conflict.

5.2 The Nature of the Conflict

The nature of the conflict is a micro-scale, non-violent conflict about which Traditional Councils owns Odugblase and the actors involved are the Manya and Yilo Traditional Councils. Another crucial finding is that the opponents involved do not know the actual mineral revenue they are fighting over. The details are presented in the following subsections.

5.2.1 Conflict over Mineral Development Fund.

The Manya-Yilo conflict is a dispute between the Manya and Yilo Traditional Councils over a mineral development fund, not a royalty. This is a mineral development fund created by Ghana Cement Limited (GHACEM) for mining limestone at Odugblase. As at 2010⁴¹, six years after the establishment of the mineral development fund, the money accrued to 1 billion Ghana Cedis (approximately 250 million United States Dollars). The Manya and Yilo Traditional Councils are the main local authorities to use the mineral development fund to develop Odugblase in particular, and the traditional Areas as whole. The two Traditional Councils are unable to access the fund deposited in a bank account due to a disagreement on how to share the money.

The interviews revealed that on September 24, 2004, the President of Ghana at the time John Agyekum Kufuor commissioned the limestone deposit at Odugblase to GHACEM. As part of its Corporate Social Responsibility (CSR), GHACEM set up a mineral development fund to ameliorate the environmental problems usually associated with mining. GHACEM and the central government of Ghana are withholding the fund because of the dispute between the two

⁴¹ GHACEM did not disclose the current amount.

Traditional Councils on how to share the mineral revenue. As such, the mineral development fund is idling in a bank account.

5.2.2 A struggle Over Who Owns the Odugblase.

There is no agreement on which Traditional Area Odugblase belong to. A Traditional Area is a geographical area dominated by an ethnic group ruled by chiefs. The two Traditional Councils are recognised by the modern democratic system of governance as partners for development at the local level. The Traditional Council of the Traditional Area within which Odugblase is located will have access to the mineral development fund to develop the mining-affected community in particular, and the Traditional Area as a whole.

The problem is that Odugblase is made up of people from the related Manya and Yilo ethnic groups. In Fig. 3, the map shows the mine to be on the Manya side. But Yilo Municipal Assembly, like most assemblies in Ghana, was demarcated to follow the boundaries of the Traditional Area to ensure ethnic homogeneity of the Assembly. People of *Kroboland* however, do not pay much attention to modern political boundaries. They adhere more to which members of ethnic group are found in a community. Even if a community is located in Yilo Municipal Assembly but the inhabitants are mostly of Manya, the members of Manya recognises that community as part of Manya Traditional Area.

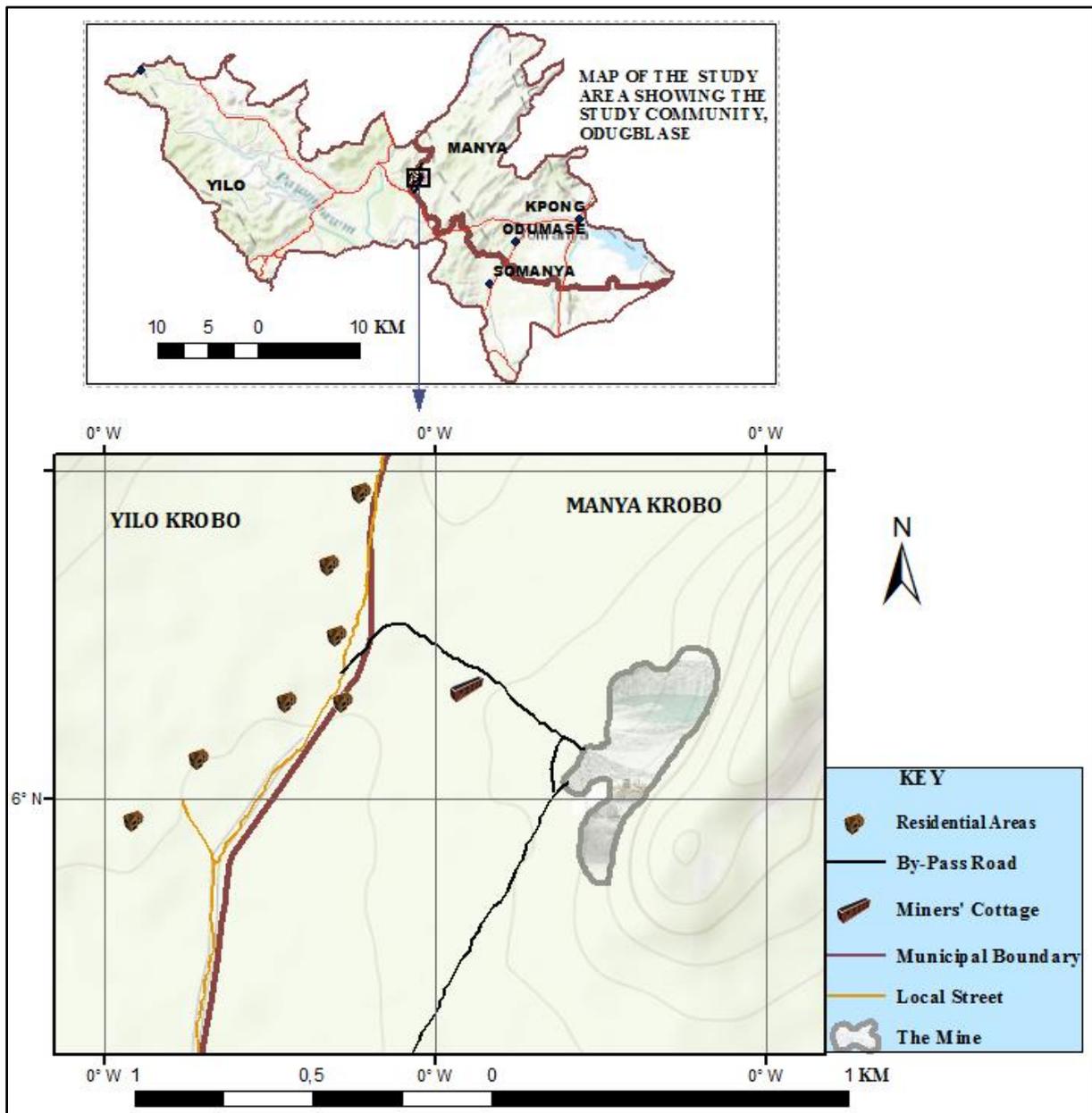


Figure 4 Odugblase with the Municipal Boundary

Source: Author's Construct using ArcMap from NTNU and Google Earth

The interview revealed diverse views on which Traditional Council owns the Odugblase. A Traditional Council is made up of the Paramount chief and the cabinet Divisional and selected sub-chiefs of an ethnic group that governs their Traditional Area. The Yilo Traditional Council indicated that Odugblase and its entirety belongs to Yilo Traditional Area because it was the members of Yilo who first settled at the community. As such, my research participant from the Yilo Traditional Council was of the view that there is no point in sharing the mineral revenue with the Manya Traditional Council.

Manya Traditional Council on the other hand, holds a compromising position. My research participant from the Manya Traditional Council indicated that the Odugblase belongs to the two Traditional Councils. He explained that Manya Traditional Council is demanding for a greater share of the mineral revenue than Yilo Traditional Council because Manyas own a greater part of the land at Odugblase. The interview revealed that out of the 54 landowners at Odugblase, 40 are members of Manya. Only 14 landowners are members of Yilo.

Landowners from Yilo share the view of their Traditional Council. The general view of landowners from Yilo was that Odugblase was originally part of Yilo Traditional Area. They indicated that though members of Manya dominate in terms of population, they just bought the land from the members of Yilo.

Landowners from Manya hold an unbending position that Odugblase belongs to only Manya Traditional Area even though their Traditional Council holds a compromising position. All Manya landowners said that Odugblase belongs solely to Manya Traditional Area. A landowner from Manya gave the following reason why Odugblase belongs to the Manya Traditional Area.

It is not true that part of Odugblase belongs to Yilo Traditional Area because it is the Manya Paramount Chief who enstooled the sub-chiefs at Odugblase.

The fact that all sub-chiefs at Odugblase are members of Manya and are accountable to the Manya Traditional Council makes the community to be part of that Traditional Area. It has been stated in chapter two that within the African Chieftaincy system of governance, sub-chiefs are the traditional leaders that rule over communities in a Traditional Area. These sub-chiefs are accountable to the Paramount Chief of their respective Traditional Area. In this regard, Odugblase could be said to be part of the Manya Traditional Area, although it is formally party of Yilo Municipal Assembly.

5.2.3 Traditional Councils were oblivious of what they were Fighting over

The interviews revealed that the two Traditional Councils did not know the kind of mineral revenue they were contesting over. The two Traditional Councils indicated that they were fighting over a mineral royalty (see 2.7). However, the interviews revealed that the land at the Odugblase is not a Stool Land. It is owned by individuals so the mineral royalty is paid to individual landowners and not the two Traditional Councils. I investigated further to be sure if research participants were actually referring to mineral royalty or they were referring to any money accruing from the mining activity as royalty.

My research participants from the two Traditional Councils admitted that the land at Odugblase community is not a Stool Land but they claimed they have a share in the mineral royalty because they are the traditional rulers of the Traditional Areas. My key research participant from Yilo gave a reason why Yilo Traditional Council has a share in the mineral royalty.

The Traditional Council is the custodian of lands and all natural resources in the Traditional Area. The people in the Traditional Area are our subjects and by extension, we have a share in their properties. The Traditional Council organises festivals every year. Where do you think, we get money to organise annual festivals and maintain the Paramountcy?

This means that the traditional authority sees itself as the customary owner of everything within the Traditional Area. The quote also indicates that mineral royalty is one of the major sources of funds used to organise annual festivals. This could be one of the major reasons why chiefs usually arrogate mineral royalty to themselves and deprive mining-affected communities of development (Adimazoya, 2013; Dupuy, 2017; Standing, 2014; Standing and Hilson, 2013).

In the same way, almost all landowners interviewed indicated that the land is not a Stool Land but the traditional authorities are entitled to a share of the mineral ‘royalty’. The general position of most landowners was that whether the land is Stool Land or not, the traditional authorities should receive some of the mineral ‘royalty’. To a landowner, “...*small amount should be given to the traditional authorities*”. Most of the landowners deemed it fair and an act of respect to share the mineral royalty with their respective Traditional Councils. Landowners thought that the central government has taken part of their mineral royalty and saved it for the two Traditional Councils.

It was only the representative of landowners and GHACEM who knew that the two Traditional Councils are not fighting over mineral royalty. The Representative of landowners said that mineral royalty is being paid to individual landowners and so the two Traditional Councils are fighting over something else. GHACEM revealed that as part of the company’s Corporate Social Responsibility for mining limestone at the Odugblase, a development fund was established for the two Traditional Councils.

It was quite worrying that majority of my research participants and by extension, many *Krobos* did not know the kind of money the two Traditional Councils are fighting over. It was even more disturbing that the two Traditional Councils did not know what they are fighting over. The two Traditional Councils are not entitled to the mineral ‘royalty’ since the land at Odugblase is not a Stool Land. The traditional authorities and stakeholders are acting with

hearsay. This unintentional spread of misinformation was largely due to a centralised planning strategy (discussed shortly) used to establish the mine at Odugblase.

Contrary to this common narrative⁴² of the Manya-Yilo conflict, the interviews with GHACEM has shown that the Manya-Yilo conflict is a dispute over mineral development fund. Also, the main reason why Yilo Traditional Council does not want to share the mineral development fund proportionally is that members of Yilo claimed that Odugblase belongs solely to Yilo Traditional Area.

5.2.3.1 Describing Manya-Yilo Conflict

This section discusses the stage of the conflict between Manya and Yilo Traditional Councils. It also discusses the type of natural resource conflict that the two Traditional Councils are engaged in and the possible reasons why this conflict occurred. These are covered in turn in the following sub-sections.

Souleimanov (2013) theorised that conflict evolves through three major phases: latent, sporadic and civil war. Comparing the Manya-Yilo conflict to these phases, the conflict is at the latent stage. This is because the two Traditional Councils know that they are competing over limestone revenue but they are not attacking each other violently. Rather, they are expressing their grievances verbally. This is the situation of ‘no peace, no war’. These are the characteristics of latent conflict. This may develop into sporadic conflict and eventually into civil war if it is not resolved (Souleimanov, 2013). This is because even though not every conflict escalates, generally conflict intensifies and covers wider space when it is left unresolved for a longer time (Beardsley, 2011; Berman et al., 2015; Galtung, 1965).

Following Brown and Keating (2015), the Manya-Yilo conflict could be described as conflict over a geographically distinct resource since the limestone is unique to the study area. The Manya-Yilo conflict could also be a type of conflict over isolated project. Conflict over isolated projects like mines usually occur between local people and the central government or the mining company (Brown and Keating, 2015). Even though the Manya-Yilo conflict is between two Traditional Councils, it is a conflict over isolated project because it involves one mine. Each Traditional Council somehow, claims that the mine is within its jurisdiction and as such, has the right to the mineral development fund.

⁴² See [section 2.8](#)

In addition, this conflict could lead to political transformation of the study area. This may occur if a drastic decision is taken to re-demarcation Odugblase by dividing the community between the two Traditional Councils. This could lead to a split of the community between Manya and Yilo Municipal Assemblies. Manya-Yilo conflict could let members of Yilo select people from their ethnic group and enstool them as their local chiefs in Odugblase to reassert their claim that the community belongs to the Yilo Traditional Area. Odugblase would probably be a community ruled by two ethnic groups. This could be like how oil related conflict led to a change from a centralised system of governance to federal states in Iraq (Brown and Keating, 2015).

One of the possible reasons why the two Traditional Councils are fighting is the fear that the mineral revenue will benefit one Traditional Council more than the other. The main reason for transferring part of mineral revenue to mining-affected communities is to reduce the bad effects of mining in order to improve the livelihood of the local people (Dupuy, 2017; Standing, 2014). Ideally, the development fund should be used to develop Odugblase and the nearby communities. In this case, whoever is found in Odugblase, whether a Manya or Yilo, could benefit from the development fund. There will be win-win situation as the affected people will directly benefit from the fund. The Manya-Yilo conflict could be as a result of fear that if one Traditional Council gets a greater percentage or all the mineral revenue, that Traditional Council may spend it in a way that will benefit only the members of that Traditional Council. Indeed, if the Yilo Traditional Council gets all the mineral revenue, it is less likely that part will be used to sponsor the annual festival of the Manya Traditional Council.

Could it also be, that the Traditional Councils are positioning themselves to capture or grab the development fund? The two Traditional Councils seem to be seeking the rent of the limestone revenue to maintain the Paramountcy and to organise festivals. This is usually what happens in Ghana where chiefs use mineral revenue to do other things and neglect the development of mining-affected communities (Adimazoya, 2013; Dupuy, 2017; Standing, 2014; Standing and Hilson, 2013). People revere traditional authorities as they see them to be the mouthpiece of the gods and their ancestors, making chiefs more powerful and less accountable to their subjects (Kassibo, 2002; Sakyi, 2003; Thiaw and Ribot, 2005; Valsecchi, 2008). Studies have shown that countries with rent-seeking institutions may not achieve their expected level of development with natural resource revenue (Mehlum et al., 2006; Ross, 2001; Tornell and Lane, 1999). Since a Traditional Council is planning to use part of the mineral development fund to organise festivals, then the needed development at the Odugblase might not be achieved.

5.2.4 Summing Up

The analysis so far indicates that the Manya-Yilo conflict is a dispute over limestone development fund established to advance socio-economic development of Odugblase. The reason for the conflict is that it is unclear which Traditional Area Odugblase originally belongs. Whereas Yilo Traditional Council is claiming full ownership of Odugblase, Manya tradition council holds a compromising position that Odugblase belongs to the two Traditional Areas.

It is difficult to determine the rightful overlord of Odugblase. A historical study could unravel the group of people who first settled at Odugblase. This is unfortunately, beyond the scope and purpose of this study. What is pertinent to know in this study, is to find out why the *Krobos* are unable to use limestone revenue to develop the Odugblase.

5.3 The Causes of the Manya-Yilo Conflict

Natural resources conflict arises from many factors mainly as a result of dissatisfaction of how resources are managed and used (Abuya, 2013; Brown and Keating, 2015). This section reveals that narrow-based planning, weak institutions and the political structure of the study area contributed to Manya-Yilo conflict. These factors are presented in the following subsections.

5.3.1 Inadequate Involvement of Stakeholders

One of the major points of departure of this study is to investigate the extent to which planning explains the Manya-Yilo conflict since “failing to plan is planning to fail” (Earle, 2006: 5112). One of the likely causes of the Manya-Yilo conflict was the hasty and narrow-based (centralised) planning used to establish the mine at Odugblase. This is demonstrated in the following subsections.

5.3.1.1 Inadequate Involvement of Municipal Assemblies

One of the factors that contributed to Manya-Yilo conflict was inadequate involvement of Manya and Yilo Municipal Assemblies. The Municipal Assemblies are the representatives of the central government at the local level and are responsible to liaise between mining companies and other stakeholder including the Traditional Councils to plan for mining activities. Unfortunately, the two Municipal Assemblies were not adequately involved at the planning stage of establishing the limestone mine at the Odugblase. Consequently, the Municipal Assemblies were unable to coordinate effectively between GHACEM and other stakeholders.

The interviews revealed that in 2002 GHACEM conducted a search at the Minerals Commission of Ghana and found that limestone is available at Odugblase. GHACEM indicated that by then, the Mineral Commission had not given mining license to any company to mine the limestone at Odugblase. So, GHACEM applied for mineral right to undertake feasibility studies to ascertain the commercial quantity and quality standard of the limestone deposit.

GHACEM stated further that the company sent the approval letters it received from the Mineral Commission of Ghana to Municipal Chief Executives of Manya and Yilo Municipal Assemblies as required. GHACEM explained that the limestone deposit is in these municipalities, and being heads of government representatives, Municipal Chief Executives must know about any exploration that GHACEM undertakes in their municipalities.

According to GHACEM, the company contracted Ghana Geological Survey⁴³ to undertake the exploration work on its behalf between 2002 and 2003. The exploration report concluded that, the limestone deposit at Odugblase is of commercial quantity, feasible and meets all the qualities that Ghana Standards Authority⁴⁴ requires to produce cement.

The interview further revealed that GHACEM had the license from the Mineral Commission to mine the limestone at Odugblase but there was a disagreement between GHACEM and the Yilo Municipal Assembly on the level of involvement. Whereas GHACEM thinks it has fully involved the Municipal Assemblies, the Yilo Municipal Assembly said that GHACEM did not involve them adequately. My key research participant at the Yilo Municipal Assembly stated that:

GHACEM did not come back to the assembly after the prospecting exercise as required. GHACEM went to Odugblase and started mining after the Mineral Commission gave the company the mining license.

It is not spontaneous that if the Mineral Commission of Ghana grants permission for mineral prospecting that a mining company will get the license to extract the mineral. The Yilo Municipal Assembly was probably waiting for GHACEM to inform Assembly that the Mineral Commission gave the company the license to mine. This would have placed the Municipal Assembly in a better position to facilitate planning between GHACEM and other stakeholders. Unfortunately, GHACEM neglected the Municipal Assemble in that regard.

⁴³ It is a national institution that is mandated to do surveys and geological research in Ghana.

⁴⁴ It is a statutory body responsible to ensure raw material that are used to produce goods and services are of good quality and pose no harm to people.

5.3.1.2 Limited Involvement of the two Traditional Councils

Another factor that contributed to the Manya-Yilo conflict was the limited involvement of the two Traditional Councils. The Manya-Yilo conflict could have been avoided if the two Traditional Councils had the opportunity to express their concerns before mining started. Besides, if the two Traditional Councils were adequately involved, they would have known that the mineral revenue that they can receive is mineral development fund and not mineral royalty. This could have changed the perspectives of the two Traditional Councils about the mineral revenue at hand.

Interview with GHACEM revealed that the company contacted the two Traditional Councils in advance and informed them about the pending mining activity in their Traditional Areas. Several landowners however said that GHACEM contacted only Yilo Traditional Council in the beginning. They stated further that a few days to commissioning the limestone to GHACEM, the Paramount Chief of Manya heard of it and attempted to prevent GHACEM from organising the commissioning ceremony. But GHACEM and other politicians pleaded with the Paramount Chief to allow the commissioning to take place. GHACEM promised that they would contact the Manya Traditional Council immediately after the limestone commissioning ceremony. My key research participant from the Manya Traditional Council narrated what happened as follows:

There was pressure on the Nene⁴⁵ to allow the limestone commissioning to take place. GHACEM promised to sign a Memorandum of Understanding [MOU] with the Manya Traditional Council after the limestone commissioning ceremony. Nene granted the permission hoping that his people will get jobs and GHACEM will keep the promise to sign an MOU. After the commissioning of the limestone, GHACEM did not honour the numerous invitation by Nene to sign the agreement.

Limestone is not a perishable good so why was the Manya Traditional Council under pressure to allow the limestone to be commissioned? Why was it that GHACEM could not exercise patience and do the right thing before requesting the President of Ghana to commission the limestone? The narration of the research participant from Manya Traditional Council shows that GHACEM rushed the limestone commissioning ceremony.

Furthermore, contrary to the views of some landowners that GHACEM contacted Yilo Traditional Council in the beginning, other interviews revealed that the Yilo Traditional

⁴⁵ Nene is an appellation given to chiefs

Council was also not adequately involved. My research participant from the Yilo Traditional Council revealed that the Late Paramount Chief of Yilo was only invited by the government to the limestone commissioning ceremony and was surprised the inaugural banner indicated that Odugblase is part of Manya Traditional Area because he [the Paramount Chief of Yilo] knew that Odugblase belongs to his Traditional Area. My research participant argued that if GHACEM had contacted Yilo Traditional Council properly, that would not have occurred. The Late Paramount Chief was annoyed and wanted to leave the ceremony but the President⁴⁶ pleaded with him to stay. The President assured the Paramount Chief that he [the President] will make sure the conflict is resolved after the commissioning ceremony.

But was it really true that GHACEM adequately involved the two Traditional Councils well ahead in time? The Municipal Assemblies, as the local government institutions are required to inform the people of Odugblase about the mining activity and to involve stakeholders in planning the mine (Adimazoya, 2013). If GHACEM indeed contacted both Municipal Assemblies and Traditional Councils at the same time, then the Manya Municipal Assembly was not proactive in informing and involving Manya landowners as required. It is however, less likely that GHACEM contacted both municipalities at the same time. This is because, Odugblase is listed under Yilo Municipal Assembly on the district map of Ghana and that probably guided GHACEM to contact only Yilo from the beginning.

5.3.1.3 Inadequate involvement of Landowners

Another factor that contributed to the Manya-Yilo conflict was the inadequate involvement of landowners at Odugblase. If landowners were adequately involved, they would have known that the mineral development fund was created to ensure the development of Odugblase. Landowners could have also requested the two Traditional Councils to unite and use the mineral development fund to the benefit of Odugblase.

At the community level, GHACEM said they met with landowners and compensated them financially for their crops that the mining activity would be destroying but landowners said GHACEM met with them after mining started. Landowners indicated further that they allowed GHACEM to operate since the company had secured a mining license from the responsible agency, the Mineral Commission. Also, landowners were hopeful that GHACEM would provide jobs for the local people.

⁴⁶ The President of Ghana at the time, His Excellency John Agyekum Kufour

Furthermore, landowner revealed that commencement of limestone mining at the Odugblase by GHACEM was carried out in a hasty manner. Landowners indicated that GHACEM mined large amount of limestone, but was yet to crush it before the mine was commissioned.

It is evident from the interviews that GHACEM only informed stakeholders about the forthcoming limestone mining activity at Odugblase. As, such, stakeholders were not adequately involved in planning the mine at Odugblase. Also, GHACEM started actual mining at the community before commissioning the limestone. This could be the reason why GHACEM put pressure on the Manya Traditional Council to allow the commissioning ceremony to take place as planned by the company.

Hasty and Narrow-based Planning Contributed to Manya-Yilo Conflict

This subsection discusses the planning strategies adopted and relates it to the major planning traditions reviewed in chapter three ([see 3.8.2](#)). It shows how the rational planning used by GHACEM to identify the Traditional Area to which Odugblase belongs contributed to Manya-Yilo conflict. It also demonstrates how incremental planning strategy adopted by the central government and GHACEM played significant role in contributing to Manya-Yilo conflict.

Rational Planning

In involving stakeholders, planning evolved from rational planning to incremental planning. This is because only expert knowledge was probably used to identify and contact Yilo Municipal Assembly. GHACEM probably employed rational planning based on the expert knowledge that Odugblase is listed under Yilo Municipal Assembly. Clearly, the rational planning was affected by bounded rationality, the inability to know everything, which causes decisions to be made based on partial knowledge (Simon, 1995: , orig. 1945). GHACEM probably did not know of the complex political structure that exist at Odugblase. Moreover, the level of public participation was only *informing* based on the ladder of participation and is a characteristic of rational planning (Arnstein, 1969; Lane, 2005). Consequently, rational planning contributed to Manya-Yilo conflict.

But rational planning is not always bad. GHACEM adopted rational planning to ascertain the quantity and quality of the limestone deposit. GHACEM contracting the Ghana Geological Survey as experts to ascertain the economic viability was a rational strategy. As discussed in chapter three, one of the main argument of rational planning is that good planning is done through extensive research and analysis by planning experts (Banfield, 1959; Hudson et al., 1979). The expert conducted a comprehensive study to know that the limestone is economically

viable. Since the limestone is indeed economically viable as found by the experts, rational planning could be suitable for natural science phenomena.

Incremental Planning

Incremental planning was another centralised planning strategy that contributed to Manya-Yilo conflict. The interviews revealed that GHACEM adopted incremental strategy to involve stakeholders in planning the limestone mine at Odugblase. From the interviews of Landowners and the two Traditional Councils it became clear that when GHACEM realised that some land owners identified themselves with Manya Traditional Area, the company consulted the Manya Traditional Council. Then, GHACEM sought the approval of the Manya Traditional Council to allow the limestone deposit to be commissioned. Furthermore, when the Yilo Paramount Chief threatened to abandon the ceremony, the President of Ghana promised the Paramount Chief that he would resolve the dispute later. All these are step-by-step planning strategies which are characteristics of incremental planning (Lane, 2005; Lindblom, 1959; 1965).

These resemble incremental planning strategy since one of the arguments of incremental planning is that planning should be done gradually (Lane, 2005). This argument is based on the conviction that we cannot have all the knowledge required from the beginning to do a comprehensive planning (Lindblom, 1959; 1965). Thus, attempts were being made to resolve the Manya-Yilo as and when they occur.

Besides, the level of Traditional Councils' participation was only consultation. According to Arnstein (1969), when leaders seek ideas from the public but those ideas are not necessarily considered in the final decision, the level of public participation is consultation. GHACEM consulted the Manya Traditional Council and sought its consent to commission the limestone at Odugblase but the concern of the Manya Traditional Council to sign an MOU has not been considered by GHACEM.

Proponents of incremental planning argue that bounded rationality prevents us from knowing everything from the beginning (Healey, 2003). Mouat et al. (2013: 154) also argue that “good planning is not the permanent resolution of conflict or ‘bad problems’ but the persistence of fair and judicious action over terrain that is unevenly and continuously contested, reinvented, and reimaged”. This implies that Mouat et al. (2013) support incremental planning for natural resource management but they have recognised that for incremental planning to be effective, there is the need for continuously resolving a problem in a comprehensive and fair manner whenever it (problem) occurs. Unfortunately, it seems that GHACEM and the Yilo Municipal

Assembly did not persist enough to resolve the Manya-Yilo conflict when it started and the President at the time might have also taken things for granted.

If stakeholders were adequately involved when the Manya-Yilo conflict started, the two Traditional Councils could have had the opportunity to express their dissatisfaction of issues concerning the mineral revenue. Broad-based planning like agonistic planning which involves many people as possible could have revealed the dispute between Manya and Yilo Traditional Councils for resolution. GHACEM could have even established separate development funds for the two Traditional Councils. Flyvbjerg and Richardson (2002) are therefore precise for arguing that agonistic planning pre-empts and resolves future conflicts.

Limited involvement of stakeholders contributed to the Manya-Yilo conflict. Indeed, “traditional planning processes that emphasize technical analysis and limit citizen involvement often create tensions between citizens and agencies in the form of inaction, distrust, litigation, and occasionally even threats and violence” (Lachapelle and McCool, 2005: 279). The *Krobos* are not able to access their limestone development fund partly because they were not adequately involved in the planning process. The two Traditional Councils could have done better by making sure that they were adequately involved in planning the mine than fighting a latent conflict for 12 years.

The limited involvement of stakeholders is similar to empirical cases in Bolivia and Philippines where inadequate involvement of local people in planning natural resource extraction and use contributed to conflict. It is consistent with the case of Bolivia where limited involvement of the general public in mining affected communities resulted in protests and conflict over natural gas revenue (Perreault, 2008; Schilling-Vacaflor, 2012). In the same way, inadequate engagement of local people in planning mining activities caused natural resource conflict in the Philippines (Rovillos et al., 2005).

To conclude this section, it is evident that rational planning could be affected by bounded rationality (Hostovsky, 2006; Luzzi, 2001). It may be difficult to know everything from the beginning let alone the consequences of those possibilities. The argument of incremental planning that problem should be solved as and when they arise has also not been effective in solving the Manya-Yilo conflict. In natural resource management, failing to engage in broad-based planning is not just planning to fail, it is also a likely recipe for natural resource conflict.

Aside the narrow-based planning strategies adopted, other factors contributed to Manya-Yilo conflict. This study underscored the capacity of the regulation for mineral revenue sharing and

the Municipal Assemblies as possible factors that might explain the Many-Yilo conflict. I present and discuss these findings in the next section.

5.3.2 Weak Institution

Another factor that contributed to Many-Yilo conflict is weak institutions. Institutions are not just structures and offices. They include rules and regulations that guide our daily activities (North, 1990; Opiyo et al., 2012). In this study, weak institution, among other things, is the lack of clearly defined regulation on how mineral revenue should be shared between two Traditional Councils if a mineral is mined in a ‘boundary’ community.

5.3.2.1 Deficient Mineral Regulation

The conflict occurred partly because of lack of clearly specified regulations regarding mineral revenue sharing between the two Traditional Councils. Lack of clearly defined regulation might have led GHACEM to establish the development fund based on the company’s discretion. Besides, it prevented the two Traditional Councils from knowing how to share the mineral revenue.

With the exception of the Representative of the Landowners’ Association, all landowners interviewed did not know how mineral revenue is shared among stakeholders. They did not even know how the mineral royalty they have been receiving is calculated. The Representative of the Landowners Association knew how the mineral royalty is distributed but he did not know how the mineral revenue that the two Traditional Councils were fighting over should be shared. The research participant from the Yilo Municipal Assembly said that there is no regulation that guide the sharing of the mineral revenue between the two Traditional Councils. I could not get the opportunity to inquire from GHACEM if the company knew of any regulation that guide the distribution of the development fund between two Traditional Councils because the company chose to answer my interview in writing.

Furthermore, the part of the Minerals and Mining Act of 2006 (Act 703) that covers the distribution of mineral revenue unfortunately does not make provision for how mineral development fund should be shared between Traditional Councils if the mining affected community straddles two or more Traditional Areas. Consequently, stakeholder did not know how to share the development fund between the two Traditional Councils.

5.3.2.2 Powerless Municipal Assemblies

The Manya-Yilo conflict occurred partly because of a seeming powerless Municipal Assemblies in the study area. Municipal Assemblies represent the central government at the local level and are supposed to coordinate and facilitate the involvement of stakeholders in planning natural resource extraction and use (Adimazoya, 2013). If there is a natural resource conflict in an area, then it could be that the responsible Municipal Assemblies did not perform their mandate of ensuring participatory natural resource planning well.

The Manya Municipal Assembly could not grant an interview for this study with the reason that both the Municipal Chief Executive and the Coordinating Director were new comers in office. My research participant from the Yilo Municipal Assembly expressed worry that the Assembly could not ensure that landowners and Yilo Traditional Council were adequately involved in planning the limestone mining because GHACEM did not return to the assembly after the prospecting exercise, as required. He said further that GHACEM went to Odugblase and started mining after the Mineral Commission gave the company the mining license but anytime GHACEM faces problems with the local people, then the company runs to the Assembly for help. To him, *GHACEM is practising management by crisis*.

The Yilo Municipal Assembly seemed to be powerless in handling the planning process because it was the President of Ghana at the time who commissioned the limestone deposit to GHACEM. The Municipal Assembly has observed that GHACEM is practising management by crisis yet the Assemble could not insist that GHACEM did the right thing.

Weak Institution is a recipe for Natural Resources Conflict

This subsection discusses how weak institutions contributed to Manya-Yilo conflict. It is evident that lack of clearly specified regulation on how to share mineral revenue between two Traditional Councils contributed to Manya-Yilo conflict. It is also clear from the foregone that the Municipal Assembly could not execute its mandate of involving all stakeholders in planning limestone extraction, and use of mineral revenue satisfactorily. Also, the Yilo Municipal Assembly was unable to obtain and disseminate information about the kind of mineral revenue that the two Traditional Councils were fighting over. This study shares resemblance with many studies which report that natural resource conflict could occur when there is lack of rules on how to distribute mineral revenue (Cuba et al., 2014; OECD, 2016; Opiyo et al., 2012; Patel et al., 2016). It also confirms Matiru (2000) assertion that weak institutions could lead to uncoordinated planning and poor information sharing.

This finding is consistent with what happens in other parts of Ghana. Lack of rules that clearly defines owners and users of mining concessions (Cuba et al., 2014; Patel et al., 2016) and how to distribute natural resource revenue (OECD, 2016) contributed to conflict in Ghana. This finding is also similar to cases in North-Eastern Kenya where weak local institutions are incapable of regulating resource use (Opiyo et al., 2012). The finding however contradicts Gizelis and Wooden (2010) assertion that democratic states have strong institutions to prevent natural resource conflict. Ghana has a matured democratic system but the country is faced with natural resource conflict partly due to ineffective institutions.

I have discussed that hasty and narrow-based planning and weak institutions contributed the the Manya-Yilo conflict. In addition to hasty and narrow-based planning and weak institutions, the study reveals something interesting about the political structure in relation to the causes of Manya-Yilo conflict. To some extent, the political structure of the study area explains the conflict. This finding is presented in the next section.

5.3.3 Incongruous Political Structure of the Study Area

This study revealed that the political structure of the study area played a role in causing the Manya-Yilo conflict. In Ghana, the Traditional Chieftaincy is recognised alongside the modern democratic system of governance. Chiefs are the rulers of the African Chieftaincy system while political appointees and elected officials govern the modern democratic system. The next subsection shows how a discord between the Traditional Chieftaincy and the modern democratic system of governance contributed to Manya-Yilo Conflict.

5.3.3.1 Unsuccessful Homogenisation Attempt

The attempt of the Electoral Commission of Ghana to create Metropolitan, Municipal and District Assemblies (MMDAs) follow the boundaries of Traditional Areas to achieve some level of ethnic homogeneity, is unsuccessful at the study areas. Members of Manya in Odugblase, a community under Yilo Municipal Assembly, see themselves to be part of the Manya Traditional Area. Thus, a seeming discord between the traditional and modern system also explains the Manya-Yilo conflict.

It emerged from the interviews that the inhabitants of Odugblase are members of both Manya and Yilo ethnic groups. My research participant from the Yilo Municipal Assembly said that the Legislative Instrument (law) that constitute the Assemblies recognises Odugblase to be part

of Yilo Municipal Assembly but due to intermarriages and the fact that some members of Manya bought lands from members of Yilo, Odugblase has become a swing community. He also stated that wherever members of Manya settle in Yilo Municipal Assembly, they want that community to be part of the Manya Traditional Area.

Manya and Yilo landowners disagreed on the Traditional Area to which Odugblase belongs. Yilo landowners and their Traditional Council claimed that Odugblase belongs to the Yilo Traditional Area because it was the members of Yilo who first settled in the community. On the other hand, members of Manya claimed that Odugblase is part of Manya Traditional Area notwithstanding the submission of the Manya Traditional Council that the community belongs to the two Traditional Areas. The quotation below revealed other reasons why landowners from Manya claimed ownership of the Odugblase.

We vote under Manya Constituency. It is also the Manya Paramount Chief who enstools our chiefs so we know we are within the Manya Traditional Area
[Landowner from Manya]

This quotation revealed the discord between the African Chieftaincy system and the modern democratic governance. The Electoral Commission of Ghana⁴⁷ tries to create Municipal Assemblies to conform with the boundaries of Traditional Areas to achieve some level of ethnic homogeneity (Bening, 2012). A constituency is an electoral area created with Municipal Assemblies by the Electoral Commission where the people elect their representative in parliament. Thus, the quotation revealed that members of Manya in Odugblase (which is a community under Yilo Municipal Assembly) vote in the Manya Municipal Assembly because they see themselves as members of Manya Traditional Area.

Possible Challenges to the Homogenisation Attempt

This section discusses how the unsuccessful homogenisation attempt contributed to Manya-Yilo conflict. It is argued here that the use of population size to determine the level (status) of District, Municipal and Metropolitan Assemblies (MMDAs) in Ghana and disregard for modern democratic institution could be some of the root causes for unsuccessful homogenisation of the Traditional Areas and Municipal Assemblies at the study area. The details are presented in the following paragraphs.

First, population plays very significant role in upgrading Districts to the level of Municipal and Metropolitan Assemblies in Ghana ([see 2.2.2](#)). Also, the number of people in District Assembly

⁴⁷ The Electoral Commission is a statutory body responsibly for organising national elections in Ghana

determines the number of constituencies that will be created within that Assembly. Since population Census is carried out in Ghana in every 10 years but national elections are organised in every 4 years, people are encouraged to vote in the constituency that they come from even if they are not staying in that constituency. The reason is that between the period of 10 years that population census is organised, politicians rely on the number of people who have registered and voted in constituencies to estimate the population of the electoral areas. People seem to have many representatives in parliament to lobby for socio-economic development of their constituencies in their respective Traditional Areas.

Second, the population size of MMDAs is an important factor that determines economic development of local governments in Ghana. Aside mineral royalty, the central government transfers money every quarter of the year to all MMDAs in Ghana. This money is called District Assembly Common Fund and it is used for specific developmental projects that each assembly needs most. Among other factors, the amount of money transferred to each MMDA depends on the number of people in the assembly (Bening, 2012; Mogues and Benin, 2012). This is a major reason why some people register and vote in their preferred constituencies for that area to receive more money from the central government.

Further, this finding indicates that people adhere more to customary boundary than that of the modern political system of governance because members of Manya in communities under Yilo Municipal Assembly cast their vote in Manya constituency. It is also likely that members of Yilo in communities under Manya Municipal Assembly vote in Yilo constituency. Besides, the assertion of my research participant from Manya Traditional Council that Odugblase belongs to the two Traditional Areas was based on the fact that the community is made up of people from Manya and Yilo but not on the political boundary created for the modern democratic system of governance.

The homogenisation attempt is unsuccessful partly because people pay more allegiance to the Traditional Chieftaincy than the modern democratic system of governance. People seem to be easily influenced to vote in their constituency because they want their Traditional Areas to develop. As such, people want their traditional authorities to benefit from the resources that they control. Similar cases have been reported in Denu in Volta region of Ghana and East Africa where land-related conflict occurred because local people neglected modern political institutions (Acquah and Acquah; Odhiambo, 1996).

The finding so far is consistent with the first component of the analytical framework formulated for this study. The analytical framework depicts that conflict over natural resource could occur because of general dissatisfaction resources management and revenue sharing. This dissatisfaction is partly caused by narrow-based planning and weak institutions. Though a third factor, which is unsuccessful attempt at homogenising Traditional Areas and Municipal Assemblies also contributed to Manya-Yilo conflict, it could be attributed to weak institution. For example, if there were clear regulations on how to share mineral revenue between two Traditional Councils, voting in another constituency and traditional rulers being members of other Traditional Area might have not caused the Manya-Yilo conflict.

5.4 Chapter Summary

This chapter presented and discussed the nature and causes of the Manya-Yilo conflict over the Odugblase limestone revenue. It emerged that Manya-Yilo conflict is about how to share a development fund that GHACEM has established for the two Traditional Councils for the development of Odugblase. I argued that as mining is an enclave activity and the development fund is supposed to be used to develop Odugblase, the mining-affected community, then there was no need even to share the money. Members from the two Traditional Areas will benefit if Odugblase is developed. The two Traditional Councils are fighting probably for two main reasons. There is probably a fear that if one of the Traditional Councils gets more or all the mineral revenue, it will be used in a way that the other Traditional Council may not benefit. It could also be that the two Traditional Councils were just positioning themselves to capture the development fund for other purposes than to develop Odugblase. It also emerged that narrow-base planning (rational and incremental), weak institutions and incongruous political structure contributed to the conflict. I argue that rational planning is good for issues concerning science but not society. The next chapter covers the socio-economic consequences of the conflict and the attempts that have been made to resolve the conflict.

CHAPTER 6

CONSEQUENCES AND CONFLICT RESOLUTION MECHANISMS

6.1 Introduction

The Manya-Yilo conflict, which resulted from hasty and narrow-based planning, ineffective institutions and incongruous political structure, as discussed previously, has some consequences. This study investigated the socio-economic consequences to answer the third research question: how efficient has the limestone revenue been used? Also, how is the Manya-Yilo being resolved so that the two Traditional Councils could have access to the mineral development fund? This chapter presents the findings for these research questions.

6.2 Consequences of Manya-Yilo Conflict

There are economic and social consequences of Manya-Yilo conflict. Mining in general contributes to environmental degradation which could endanger sources of livelihood in affected communities. Lack of access to the fund has dire economic and social consequences for *Krobo*land. These consequences are presented in detail shortly.

6.2.1 Economic Consequences

This study found one main economic consequence of Manya-Yilo conflict: retarded development. Odugblase has not seen any major economic development. Even the access road through the community is still untarred. Yet, over 1 billion⁴⁸ Ghana Cedis is idling in a bank account. The next subsection presents the detail of retarded development.

⁴⁸ The money in the development fund accrued to 1 billion Ghana Cedis (approximately 250 million US Dollars) in 2010. That was 6 years after the fund was established by GHACEM. GHACEM refused to disclose the current amount of money in the fund. Holding all other things constant, the amount will double now since it has been 12 years that GHACEM the established fund.



Plate 1. A Section of the Local Street

According to the interviews retarded development is the main economic consequence of the Manya-Yilo conflict. Limestone mining in Odugblase has affected the source of livelihood of the local people and caused loss of lives and properties, yet the Traditional Councils could not access the mineral development fund to ameliorate these problems. Whereas landowners were interested in the economic retardation at the local level, the two Traditional Councils, Yilo Municipal Assembly and GHACEM were more concerned about the economic consequences of the Manya-Yilo conflict on the two Traditional Areas.

Landowners and the Many Traditional Council accused the central government for using the mineral revenue while they bear the cost (bad effect) of limestone mining in the community. Landowners indicated that limestone mining at the community has affected their farming activities but the mineral revenue could not be accessed to provide alternative livelihood activities. Landowners explained that GHACEM uses dynamites to blast the limestone for quarrying which produces a lot of dust. The dust settle on their nearby food crops and cause stunted growth and poor yield. Landowners also indicated that excavated soil from the mine is washed onto nearby farms when it rains. The eroded soil is deposited on these farms and bury the top fertile soil making it less productive for shallow-rooted crops like maize tomato and pepper. Meanwhile, these crops are the mainstay of the economy of Odugblase ([see 2.5](#)). Landowners indicated that their major source of livelihood is threatened.



Plate 2 Heaps of excavated soil from the mine

Landowners were quick to add that although they receive crop compensation from GHACEM and mineral royalty from the Office of the Administrator of Stool Land, these payments come irregularly and are inadequate. Landowners said that since GHACEM does not process the limestone into cement at the community, there is a limited number of employment opportunity at the mining site. Unfortunately, they do not have the requisite skills to apply for the few skilled jobs that GHACEM could offer at the community. The general expectation of landowners therefore was that the development fund (which they know to be royalty) could have been used to establish a factory to provide supplementary jobs for the people of Odugblase.

Furthermore, the interviews revealed that before GHACEM started mining the limestone in large quantities, there was no major mining or lumbering activity in the two Traditional Areas. The roads in the area were constructed to accommodate only light vehicles. As soon as mining started, the road leading to the mine developed several pot-holes because of the heavy-duty trucks that ply it. This has caused vehicles to move at speeds far below their limits.

From a little observation, the study area is generally mountainous so the road meanders through valleys and along hills which makes driving difficult and dangerous. The Yilo Municipal Assembly indicated that the road leading to the mining site is very dangerous and accidents involving mining trucks are very fatal. Whenever a loaded truck is involved in accident, the number of people killed and amount of property destroyed are high. Though light vehicles are also involved in accident, their impact is not as costly as that of the heavy-duty trucks transporting limestone from the Odugblase mine to Tema and Takoradi for cement production. The money could have been used to construct tunnels through the mountain to reduce the number of road accident.



Plate 3 Meandering nature of the main road from Odumase⁴⁹ to the mine

The photo on the left (a) shows a section of the road the slopes steeply and bends acutely as shown in the middle photo (b). The photo on the right (c) shows the continuous steepness of the road from photo b.

The two Traditional Councils also expressed worry about the deplorable state of the road network in the Traditional Areas. My research participants from the two Traditional Councils were however not explicit if they would have used the mineral revenue to upgrade the road network in the two Traditional Areas. One of them said that:

As we do not have access to the limestone money, we asked GHACEM to construct a special road without passing through Odumase and Somanya⁵⁰ to reduce the number of accident but the company does not care. GHACEM is on records for saying that government should use the tax the company pays to reconstruct the roads [Research participant from Yilo Traditional Council].

Even though the Yilo Traditional Council wanted to use the mineral revenue to maintain the Paramountcy and organise annual festivals, my research participant has not lost sight of the poor nature of road network in the Traditional Areas⁵¹. The Yilo Traditional Council seemed to be angry with GHACEM for not considering the plea to improve the road network in the Traditional Area. Probably, it would have been too costly for GHACEM to take another responsibility of constructing roads in the two Traditional Areas after establishing a mineral development fund for them.

GHACEM also expressed disappointment in the two Traditional Councils for their inability to reach an agreement on how to share the development fund. My research participant from GHACEM felt that the company's major contribution to the two Traditional Areas for mining limestone at Odugblase has been undermined by the Manya-Yilo conflict. The economic

⁴⁹ Odumase is the seat of Manya Traditional Council and the Manya Municipal Assembly.

⁵⁰ Somanya is the seat of Yilo Traditional Council and the Yilo Municipal Assembly.

⁵¹ The road was being reconstructed at the time of data collection.

consequence of the conflict was succinctly summarised by my research participant from GHACEM:

If there is an amount of money that is supposed to be used to develop Kroboland yet this conflict is preventing that then, the effect of the conflict is retarded development.

The hope of the people of Odugblase that limestone mining in the community would provide jobs and mineral revenue to boost the local economy has been undermined by the Manya-Yilo conflict. The livelihood of the local people at Odugblase, and the lives and properties in the two Traditional Areas are in jeopardy while mineral revenue intended to solve these problems is idling in a bank account. The Manya-Yilo conflict has some social consequences.

6.2.2 Social Consequences

This study found three main social consequences of the Manya-Yilo conflict. These included increased social vices, deteriorating social relationship between the two Traditional Council and lack of a united front to request the socio-economic needs of Odugblase. These social consequences are presented in turn in the following subsections.

6.2.2.1 Increased Social Vices

The retarded economic development of the Odugblase in particular has increase school drop-outs and teenage pregnancy in the community. The Manya-Yilo conflict has prevented the two traditional authorities from providing alternative livelihood activities whilst farming is being threatened by limestone mining. Lack of alternative livelihood activities has made it nearly impossible for many landowners to pay for their children's education.

Some landowners were very sad that they could no longer pay fees for their children in Senior High Schools⁵². This has caused a lot of school drop-outs in the community. These landowners revealed that before the limestone site was transferred to GHACEM, they could do small scale limestone quarrying on their individual land and sell it to building engineers. Also, they had enough of farmland to practice shifting cultivation and had no problem of dust settling on their food crops to cause stunted growth. To these landowners, unlike the seasonal nature of rain-fed agriculture that they practise, limestone quarrying guaranteed a regular flow of money to supplement farming income. They were therefore able to pay the fees of their children in Senior

⁵² Senior High School is a 3-years pre-tertiary (secondary) education in Ghana.

High School and tertiary level. My research participant from the Yilo Municipal Assembly shared the concerns of landowners and their children's education and stated that:

Part of the money could have been used to offer scholarship to brilliant but needy students. We would not have so many school drop-outs and teenage pregnancy in the community and the two Traditional Areas in general. It could have reduced social vices in general.

If previously, landowners could pay the school fees for their children, one would expect that many school-going children would have tertiary education when mining started at the area. An increase in the number of people with higher education would have been made possible with the compensation that landowners will receive from GHACEM and with the alternative livelihood opportunities that could have been created with the development fund. Unfortunately, there are many school drop-outs because their parents cannot pay their fees. School girls who try to provide their educational needs by taking boyfriends end up pregnant.

6.2.2.2 Deteriorating Social Relationship between the Two Traditional Councils

Another social consequence of the Manya-Yilo conflict is waning of the cordial social relationship that used to exist between the two Traditional Councils. The two Traditional Councils are not as friendly as they used to be. The two Traditional Councils are accusing each other for the causes of the conflict.

Each of the two Traditional Councils expressed displeasure of how the other has handled the dispute over the mineral revenue. My research participant from Manya Traditional Council accused the late Paramount chief of Yilo of creating a confusion for rejecting the recommendation of the committee of enquiry⁵³ that was set to resolve the difference between the two Traditional Councils. On the other hand, my research participant from Yilo Traditional Council accused the Manya Traditional Council for causing the dispute between the two Traditional Councils. He said the Manya Traditional Council knew that Odugblase does not belong to them, yet they want greater share of the mineral revenue.

Landowners also indicated that the Manya-Yilo conflict has not influenced the social relation among the people at Odugblase but the two Traditional Councils are not as friendly as they used to be. My research participant from Yilo Municipal Assembly observed that:

⁵³ This was a committee established by the Present in 2004 to investigate and make recommendation for resolving the Manya-Yilo conflict. This is discussed in detail in the next chapter under conflict resolution mechanisms.

The cordial relation that used to exist between the Traditional Councils is being affected badly. Delegates have not been sent to each other's annual festival celebration as it used to be. They are bitter at each other.

Previously, each Traditional Council sent delegates to honour each other's festival celebration. This is no longer the case. Though people from each Traditional Area attend festivals of the other, this is an individual choice but not an official traditional decree. Thus, the social relationship between the two Traditional Councils has been affected badly by the Manya-Yilo conflict.

6.2.2.3 Less Important Social Intervention by GHACEM

Another social consequence of the Manya-Yilo conflict was lack of relevant corporate social responsibility in the Odugblase. Although GHACEM has been socially responsible, Odugblase does not need those social interventions provided by the company. Being the traditional authorities in the two Traditional Areas, the two Traditional Councils could have compelled GHACEM to provide relevant social intervention at the Odugblase. Since the two Traditional Councils were not happy with each other, they failed to unite to compel GHACEM to provide the mining-affected community (Odugblase) with their needs.

Some landowners indicated that GHACEM has taken advantage of the conflict between the two Traditional Councils and has not been performing its CSR as expected. They mentioned that GHACEM claims that they do not know which Traditional Council to support. But other landowners, the research participants from Yilo Municipal Assembly and the two Traditional Councils acknowledged that GHACEM has been providing some social assistance to *Krobos*. My research participant from GHACEM enumerated the company's social intervention in relation to limestone mining at the Odugblase. He said GHACEM has built:

a 6-unit classroom block (Primary School), library, Head teacher's bungalow (2 bedrooms self-contain), 4-unit classroom block (Junior High School) and cash contributions to the two Traditional Councils for the celebration of their annual festivals.

Some landowners however expressed their worry that the blasting of limestone by GHACEM causes the ground to shake mildly which has caused their houses and the school built by GHACEM to develop cracks. To these category of landowners, the school building was unnecessary. They wanted a relocation of the entire Odugblase to a place that the blasting will not affect their houses.



Plate 4 Cracked wall

The photo on the left shows the newly built 6-unit classroom block by GHACEM. The photo on the right shows a crack in the wall of the school building.

Misplaced Assertion and Unsustainable Social Interventions

The claim that GHACEM does not know which of the two Traditional Councils to support is misplaced because mining is an enclave activity, in that, its environmental consequences are felt more at the mining site and its immediate localities. It is Odugblase community that is facing mining-related challenges. Besides, the community inhabits people from both Traditional Areas so any social intervention will benefit everybody irrespective of their ethnic affiliations. It is therefore highly possible that GHACEM made the pronouncement that the company did not know which Traditional Council to support in relation to a social intervention to the traditional authorities but not at the Odugblase.

The CSR were very good but not sustainable because if GHACEM continues to blast, building at Odugblase will continue to develop cracks. What the local people need is relocation. Unfortunately, due to the conflict, there is no united force from the Traditional Councils to compel GHACEM to do what the community needs. GHACEM does what the company wants but not what the people of Odugblase need.

It is clear from the foregone that economic hardship has rendered some parents financially irresponsible as they cannot pay fees for their children in Senior High School. The results are increase in number of school drop-outs and teenage pregnancy. The conflict is also affecting the once cordial relationship between the two Traditional Councils and lack of a united force from the two Traditional Councils has given a leverage to GHACEM to do what the company wants but not what Odugblase needs.

6.3 Has the Limestone Revenue been put to Efficient Use?

The mineral development fund has not been put to efficient use because limestone mining is threatening the source of livelihood of the local people yet the mineral revenue was not accessible to lessen the economic hardship. Also, the mineral development fund is not accruing any interest to offset its depreciation caused by inflation. These are discussed in the following sub-sections.

6.3.1 Development Fund is Inaccessible to Ease Economic Hardship

It is clear from the foregoing that the development fund has not been put to efficient use. According to the literature, development fund is a type of saving fund in which non-renewable resources are converted into other forms of assets (Ouoba, 2016). The main purpose for establishing development fund is to compensate for the environmental problems created by resource extraction and to improve the livelihood of people at where natural resources are extracted. Development fund is used for infrastructural development (Söderholm and Svahn, 2015; Tsani, 2013). So, although there are other pressing economic needs like potable water, research participants were not wrong to say that the limestone revenue could have been used to upgrade the road and establish factories to provide alternative livelihood activities. The development fund could have been used to ease the economic burden of people of Odugblase just as the Social Development Fund in Yemen established with oil revenue is being used to support the people (Al-Iryani et al., 2015; Tsani, 2013).

6.3.2 Depreciating Development Fund

Furthermore, the actual value of the development fund has reduced because of inflation since development funds may not yield interests. What the 1 billion Ghana Cedis could have been used for in 2010, the same amount cannot cover the cost of the same thing now. The limestone revenue would have appreciated if the money was put into an investment fund since it would have yielded interest and increase the total amount in the account. Usually, only the interest on investment fund is used to improve the livelihood of people at where the resource is extracted in the short run (Ouoba, 2016).

Indeed, the limestone revenue has not been used efficiently. The conflict has prevented local authorities from using the limestone revenue to enhance socio-economic development of Odugblase. Also, as the limestone revenue is not put in an investment fund, the real value of

the money is depreciating. Consequently, the Maya-Yilo conflict has so far rendered the mineral development fund useless.

6.4 Conflict Resolution Mechanisms

Even though not every conflict is bad, conflict in general is unpleasant. Unfortunately, conflict is inevitable in human society (Souleimanov, 2013). Conflict resolution mechanisms are needed to resolve conflicts when they occur. So, to what extent have the existing conflict resolution mechanisms been effective in resolving the Manya-Yilo conflict? In other words, what is being done to resolve the Manya-Yilo conflict?

To prevent this latent conflict from developing into sporadic conflict and more importantly to access the mineral development fund, there were attempts to resolve the conflict through arbitration and mediation. The section discusses the effectiveness of these mechanisms in resolving the Many-Yilo conflict. It also presents an intention of using adjudication to resolve this conflict completely.

6.4.1 Arbitration Attempt

There was an attempt to use arbitration to resolve the Manya-Yilo conflict but it failed. The arbitration attempt was unsuccessful to resolve the Manya-Yilo conflict because of lack of political will to enforce the recommendation of the arbitrator and a suspicion of nepotism.

The interviews revealed that after the limestone deposit was commissioned, the President of Ghana at the time, John Agyekum Kufour⁵⁴, set up a Committee of Enquiry⁵⁵ in 2004 to investigate the Traditional Area to which Odugblase originally belong. The Committee of Enquiry did its work and reported that 67% of Odugblase falls under Manya Traditional Area

⁵⁴ In the first place, the President showed interest in the development of the mine because it is a major economic activity that could bring development to areas. The President did that probably for the respect he has for the two Traditional Councils and his wish for a continued peaceful coexistence of Manya and Yilo since it is only true peace that the mineral revenue would be useful. Another possible reason the President tried to resolve the Manya-Yilo conflict was a fear that violence between the two Traditional Councils could lead to loss of lives and prevent GHACEM from mining the limestone.

⁵⁵ The committee members were chosen from the Eastern Regional Coordinating Council. Eastern Region is one of the ten administrative regions for the modern democratic system of governance to foster political decentralization. The President appoints Ministers and their Deputies who are vetted and approved by Parliament to oversee the development of the administrative regions. The ministers and some selected civil servants form the Regional Coordinating Council. The Regional Coordinating Councils coordinate the development of the District, Municipal and Metropolitan Assemblies (MMDAs) in their respective Regions. Manya and Yilo Municipal Assemblies are two of the twenty-one MMDAs in the Eastern Region.

and the remaining 33% forms part of Yilo Traditional Area. The Committee of Enquiry arrived at these figures by counting the households of members of Manya and Yilo in the Odugblase. The Committee of Enquiry therefore recommended that the limestone revenue should be shared in that proportion; two-thirds should be given to Manya Traditional Council while the Yilo Traditional Council takes one-third⁵⁶.

The Manya Traditional Council seemed to have accepted the recommendation of the committee of enquiry. Even the Manya landowners who claimed that the Odugblase belongs solely to the Manya Traditional Area seemed to be happy with the recommendation of the Committee of Enquiry but the Yilo Traditional Council rejected it totally.

My research participant from Yilo Traditional Council said that there was a sort of sabotage because the Committee of Enquiry did not work in accordance with the term of reference specified by the President. He explained that the Committee of Enquiry was supposed to do a historical investigation of the jurisdiction under which Odugblase falls but went to Odugblase to do household survey. He reiterated that Odugblase was only settled by members of Manya ethnic group but it is not part of Manya Traditional Area. He stated further that the Yilo Traditional Council suspected that the Committee of Enquiry did not work in accordance with its term of reference because at the time, the Deputy Eastern Regional Minister was a member of Manya who had power to influence the work of the committee.

This conflict resolution mechanism was a form of arbitration. Arbitration is a consensual conflict resolution mechanism where opponents accept a third party to resolve their dispute (Herrera and Da Passano, 2006). The Committee of Enquiry is the arbitrator for resolving this conflict at the time. The Manya Traditional Council accepted the recommendation of the Committee of Enquiry probably because it was favourable to them while the Yilo Traditional Council rejected on a suspicion of nepotism.

6.4.1.1 Why was the Arbitration Attempt Unsuccessful?

Lack of political will to enforce the recommendation of the Committee of Enquiry and limited involvement of the two Traditional Council were the possible factors that made the arbitration

⁵⁶ I requested for a copy of the term of reference, the findings and the recommendations of the Committee of Enquiry but neither the Yilo Municipal Assembly nor the Eastern Regional Coordinating Council could produce the document due to poor record keeping. This notwithstanding, the present study is confident to refer to this information because all the research participants gave the same story about the work and recommendation of the Committee of Enquiry.

attempt unsuccessful to resolve the Maya-Yilo conflict. These factors are discussed in the following subsections.

Lack of Political Will

The President failed to enforce the recommendation of the Committee of Enquiry for three possible reasons. The President did not enforce the recommendation of Committee of Enquiry possibly because of poor work of the Committee, fear of *political replacement effect* and the fact that the Manya-Yilo conflict has not escalated. These are discussed shortly.

First, it could be that indeed the Committee of Enquiry violated its terms of reference so the President deemed it unfair to enforce its recommendation. The Committee of Enquiry was supposed to conduct a historical study to find out the ethnic group that first settled at Odugblase so that the President would know which Traditional Area Odugblase belongs to. The recommendation of the Committee of Enquiry that Odugblase was made up 67% of members of Manya so the limestone revenue should be shared proportionally indicated that the Committee indeed did household survey as claimed by Yilo Traditional Council and Municipal Assembly and some landowners. This could be the reason why the President of Ghana at the time failed to enforce the Committee's recommendation.

Second, lack of political will might have stemmed from a possible unsatisfactory work of the Committee of Enquiry and a fear of *political replacement effect*. According to Acemoglu and Robinson (2006), political replacement effect is the situation whereby institutional change erodes the power and advantages enjoyed by incumbent politicians. It was obvious that the Yilo Traditional Council was not happy with the recommendation of the Committee of Enquiry. Perhaps, the President of Ghana did not want enforce the recommendation or do anything that may offend *Krobos* in general for fear that the *Krobos* may not vote for him and his political party in the next election.

The last possible reason why the central government failed to enforce the recommendation of the Committee of Enquiry could be the fact that the Manya-Yilo conflict has not escalated. The central government does not see it as a serious problem that needs immediate attention. If the Traditional Councils were at war with each other or if the local people are attacking the mine that GHACEM could not mine the limestone, the central government might have enforced the committee's recommendation or made other attempts to resolve the conflict.

Limited Involvement of the two Traditional Councils

Inadequate involvement of the two Traditional Councils contributed to the unsuccessful attempt to use arbitration to resolve the conflict. The distinguishing feature that has made the *Xeer* arbitration system in Somalia, a country that is relatively less democratic, very successful in resolving conflict is the level at which opponents are involved in the arbitration process. Abdile (2012) observes that the success of the Somali *Xeer* arbitration system is contingent on the involvement of opponents in the process. Since arbitration is a consensus approach (Herrera and Da Passano, 2006; Hoffman, 2003), it might have been successful in resolving the Manyayilo conflict if the two Traditional Councils were allowed to choose their arbitrators. The Yilo Traditional Council could not have easily rejected the decision of arbitrators if the council was involved in choosing.

To conclude this subsection, lack of political will to enforce the recommendation of the Committee of Enquiry made the arbitration attempt ineffective to resolve the conflict. Also, the arbitration attempt was ineffective because the two Traditional Councils were not adequately involved in the conflict resolution process.

6.4.2 Mediation Attempt

The study also found out that there was another failed attempt to resolve the conflict through mediation. The interviews revealed that Yilo Municipal Assembly and GHACEM organised a stakeholders meeting in 2013 to discuss how best landowners would be compensated⁵⁷ and the conflict between the Traditional Councils resolved. Landowners and representatives from the two Traditional Councils were invited. The Yilo Municipal Assembly and GHACEM (seen here as mediators) persuaded the two Traditional Councils to reach a consensus on how to share the limestone revenue.

The Manyayilo Traditional Council rejected the proposition of the mediators to share the mineral revenue equally with the Yilo Traditional Council. In other words, the Manyayilo Traditional Council was bent on accepting two-thirds of the mineral revenue as recommended by the

⁵⁷ The interviews revealed that there was a conflict between landowners and GHACEM because the company failed to pay deprivation of land use⁵⁷ compensation to farmers. Deprivation of land use is a compensation that mining companies are required by law to pay landowners for depriving them of the surface of their land. All minerals are vested in the President of Ghana on behalf of Ghanaian but individual landowners have the user right of the surface of their land. The idea is that landowners can cultivate the land and do other economic activities with it so mining companies should compensate landowners for depriving them of the surface of their lands.

Committee of Enquiry. The Yilo Traditional Council on the other hand would not accept any amount less than half of the mineral revenue.

From the perspective of conflict resolution, this meeting could be a mediation attempt. The mediation attempt was ineffective partly due to the fact that the two Traditional Councils did not adhere to the propositions of the mediators as decision of mediation is not binding (Jensen and Halle, 2015). Also, the mediation attempt was not effective because there were two things to discuss in a day—conflict between landowners and GHACEM and conflict between the two Traditional Councils. It is unlikely to be able to resolve two complex natural resource conflicts, each involving many people, in a day. Another factor that rendered the mediation attempt unsuccessful could be the fact that Yilo Municipal Assembly was a mediator. The Manya Traditional Council might have seen the mediation as a conspiracy to make Yilo Traditional Council have undue advantage to the development fund since the Manya Municipal Assembly was not part of the mediators.

The Integrity of the Mediation Attempt

Mediation is a consensual conflict resolution mechanism in which opponents agree that a third party guides them (opponents) to resolve a dispute (Herrera and Da Passano, 2006; Hoffman, 2003). More explicit, mediation is a ‘process whereby a third party assists two or more parties, with their consent, to prevent, manage or resolve a conflict by helping them to develop mutually acceptable agreements’ (Jensen and Halle, 2015: 11). Mediation seems to bring lasting solution since opponents give their consent to a third party to resolve a conflict. In the case of Manya-Yilo conflict, the two Traditional Councils did not ask Yilo Municipal Assembly and GHACEM to resolve their dispute over the limestone revenue. Rather Yilo Municipal Assembly and GHACEM opted to mediate the Manya-Yilo conflict. This could be a reason why the mediation attempt failed. Why did the Yilo Municipal Assembly and GHACEM opt to mediate Manya-Yilo conflict? Could it be that the mediators had ulterior motive?

The mediation attempt could be a smokescreen strategy to portray that GHACEM cares about the dispute between the two Traditional Councils. Why did GHACEM suddenly become interested in the Manya-Yilo conflict in 2013, 9 years after the conflict started in 2004? GHACEM did not even inform the Yilo Municipal Assembly that the company had acquired a mining license before the limestone deposit was commissioned to enable the Assembly to coordinate participatory planning for limestone mining at Odugblase. If the mediators were

poised to resolve the conflict between the two Traditional Councils, they would not have added the conflict between landowners and GHACEM to the agenda.

Moreover, my research participant from the Yilo Municipal Assembly accused GHACEM for *practising management by crisis*. The stakeholder meeting in 2013 was probably a strategy of GHACEM aided by the Yilo Municipal Assemblies to manage the crisis between landowners and GHACEM at the time. The main purpose of that stakeholder meeting could be to resolve the conflict between landowners and GHACEM so that landowners would not disrupt the mining activities at Odugblase.

There were attempts at arbitration and mediation to resolve the conflict but both failed. The conflict must also be resolved for the two Traditional Councils to have access to the mineral development fund and use it for its intended purpose. The next section presents the way forward for a complete resolution of the Manya-Yilo Conflict.

6.4.3 Adjudication

On the way forward, adjudication is being considered to resolve the Manya-Yilo conflict. The Yilo Traditional Council was less organised because there was no substantive Paramount Chief at the time of data collection and has no clear plan on how to resolve the Manya-Yilo conflict. The Manya Traditional Council on the other hand, is organised and considering adjudication to resolve the Manya-Yilo conflict. Adjudication is likely to be effective because its decision is binding (Hoffman, 2003; MacDonnell, 1988; Sackey, 2010). Unfortunately, the Manya-Yilo conflict has lasted for over 12 years because the Yilo Traditional Council rejected the recommendation of the Committee of Enquiry and sadly for the fact that the Manya Traditional Council was afraid to seek redress in the court of law in 2004.

The interview revealed that the Paramount Chief of Yilo died about 5 years ago so the Traditional Council has not decided on how to resolve the Manya-Yilo conflict. My research participant from Yilo Traditional Council indicated that they were planning to enstool a Paramount Chief before the Traditional Council will decide on how to resolve the conflict.

The Manya Traditional Council on the other hand, is considering seeking redress from the court of law. My research participant from Manya tradition Council disclosed that their Paramount Chief has narrated the Manya-Yilo conflict to his team of lawyers for a legal advice. He disclosed further that the Manya Traditional Council would have sent the Manya-Yilo Conflict to the law court long before now but when the conflict started in 2004, there was an intra-

Manya chieftaincy dispute about the legitimacy of the incumbent Manya Paramount Chief. Coincidentally, the Late Yilo Paramount Chief was one of the adjudicators of that chieftaincy dispute so the Manya Paramount Chief could not have summoned the Yilo Traditional Council headed by their Late Paramount Chief. This research participant was optimistic that the two Traditional Councils will respect the decision of the court of law because unlike the Committee of Enquiry established by the President of Ghana in 2004, the judges at the court are not political appointees.

The Manya-Yilo conflict delayed in part because the Manya Traditional Council was afraid to summon the Yilo Traditional Council in the court of law in 2004. The Manya Traditional Council was aware that the decision of the court of law is binding but the Manya Paramount chief was afraid that if the court of law rule in favour of the Manya Traditional Council, the Late Yilo Paramount Chief could influence the decision on the intra-Manya chieftaincy dispute. Thus, the Manya Traditional Council is considering adjudication after the intra-Manya chieftaincy dispute conflict had been resolved.

The Effectiveness of Adjudication in Resolving Natural Resource Conflict

This discussion section looks at how effective adjudication is in resolving natural resource conflicts. Can the Manya-Yilo conflict be resolved completely through adjudication? What does Ghana have in common with countries that are able to resolve natural resource conflict through adjudication? What is the possibility that adjudication can cause institutional reformation on natural resource revenue sharing in Ghana? The following sub-sections discuss these questions.

A suitable conflict resolution for Manya-Yilo conflict could be one with a binding decision. As it stands now, adjudication is more suitable to resolve the conflict because its decision will be binding. Also, Yilo Traditional Council may not be able to accuse the court of nepotism as it did to the Committee of Enquiry established by the President of Ghana in 2004. The law court is an independent judicial body that cannot be influenced easily by individuals. The initial court decision on the Manya-Yilo conflict can be appealed in a higher court of law if one of the Traditional Councils happens to be unsatisfied but at the end of it all, the two Traditional Councils will respect the decision of the court of law. It is therefore, highly possible that the Manya-Yilo conflict can be resolved completely through adjudication.

Furthermore, Ghana has a common political structure with Tanzania and Kenya, two of Eastern African countries that have been successful in resolving natural resource conflict through adjudication. In Tanzania, land conflicts are successfully resolved in the court of law (Sackey, 2010). Similarly, the Environment and Land Court and the Land Disputes Tribunal are used to resolve natural resource conflict in Kenya (Maina, 2015). Ghana practises democratic governance just as Tanzania and Kenya do. Ghana also has special judicial courts that adjudicate land related cases. All other things being equal, the law courts in Ghana can also resolve the Manya-Yilo conflict through adjudication.

6.4.4 Adjudication as a Possible Institutional Reformation

The decision of the court proceedings on the Manya-Yilo conflict can serve as a precedent for resolving similar conflict in the future. Currently, there is no clear law on how to share mineral revenue between two Traditional Councils if the mineral is mined in a community that is made of people from a related ethnic group. The decision will become a form of institutional reformation because it will add to the existing rules and regulations concerning the management of mineral revenue. It is through this institutional reformation that the Manya-Yilo conflict could be resolved and traditional authorities have access to the development fund to develop the Odugblase.

The analytical framework for this study indicates that swift conflict resolution is necessary to prevent expressed grievances (latent conflict) from developing into natural resource conflict. When the Manya-Yilo conflict occurred, the two Traditional Councils could not resolve it immediately. The conflict delayed until the President at the time established the Committee of Enquiry to help resolve the conflict. The resolution attempts were unsuccessful and have further delayed the resolution of the conflict. Adjudication could bring some institutional reformation to enable the *Krobos* to have access to their mineral development fund to improve their standard of living to migrate from the seeming resource curse to an improved resource management.

6.5 Chapter Summary

It is evident in this chapter, that the Manya-Yilo conflict has dire economic consequences particularly for landowners at Odugblase since the development fund could not be accessed to provide alternative livelihood opportunities. The Manya-Yilo conflict is also deteriorating the friendly relationship that used to exist between the two Traditional Councils. The need to surmount these socio-economic consequences and to have access to the mineral development

fund necessitated attempts to resolve to the Manya-Yilo conflict through arbitration and mediation. Unfortunately, these conflict resolution mechanisms were not effective in resolving the Manya-Yilo conflict because of lack of political will to enforce the recommendation of the Committee of Enquiry and the fact that the proposition of the mediators were also not binding. Moving forward, Many Traditional Council is considering to use adjudication to resolve the conflict. Adjudication is likely to be an effective conflict resolution mechanism because its decision will be binding.

CHAPTER 7

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

This study sought to investigate the causes and consequences of Manya-Yilo conflict. This study deviated from the usual *high-value* resource conflict and concentrated on a less-frequently mentioned natural resource-limestone. I argued though, that limestone can be classified as a high-value natural resource at Odugblase. In addition, this study investigated the extent at which the political structure of the study area and planning contributed to Manya-Yilo conflict. In this chapter, I present the summary of the findings as well as the conclusions drawn from the analysis. I end the chapter with recommendations on how the limestone revenue could be used efficiently.

7.2 Summary

This section presents the summary of the findings on the nature, causes and consequences of the Manya-Yilo conflict. It also presents the summary of the key finding on the effectiveness of existing conflict resolution mechanism in resolving the Manya-Yilo conflict.

7.2.1 The Nature of Manya-Yilo Conflict

To describe the Manya-Yilo conflict, this study posed the question; *what is the nature of Manya-Yilo conflict?* This study revealed that Manya-Yilo conflict is a non-violent, micro-scale conflict (dispute) over a limestone revenue. Contrary to the common narrative that the two Traditional Councils are fighting over a mineral royalty, the study has shown that the conflict is over a development fund established by GHACEM. Only one landowner and GHACEM knew that the Manya-Yilo conflict is not over mineral royalty. Thus, the Manya-Yilo conflict is a latent conflict over limestone development fund established to ameliorate the unintended but unavoidable environmental and economic consequences of limestone mining at Odugblase.

7.2.2 Causes of the Manya-Yilo Conflict

To understand the causes of the Manya-Yilo conflict, this study asked; *to what extent do the planning strategies used prior to the mining and the political structure help to explain the conflict?* This study revealed that the Manya-Yilo conflict occurred in part due to dispute of

which Traditional Council 'owns' Odugblase. Each of the two Traditional Council claimed ownership of the Odugblase community and by extension, the limestone mine and its associated mineral development fund. This dispute resulted partly due to a discord between the Traditional Chieftaincy system of governance and the modern democratic system in Ghana. I called it unsuccessful homogenisation attempt.

Another factor that contributed to Manya-Yilo conflict is the inadequate involvement of stakeholders at the early stages of establishing the limestone mine at Odugblase. GHACEM adopted narrow-based planning strategies of the rational and incremental planning for commissioning and mining of limestone at Odugblase. The effect was that, stakeholders like the two Traditional Councils did not get the opportunity to express their concerns before mining of the limestone started. The two Traditional Councils do not even know that the money they are fighting over is a development fund and not a mineral royalty due to their limited involvement. It was argued, based on the tenets of agonistic planning that the Manya-Yilo conflict could have been avoided if stakeholders were adequately involved to take decisions before mining the limestone.

In addition, weak institution played a role in causing the Manya-Yilo conflict. In this study, I operationalised the definition of weak institution, among other things, as the lack of clearly defined regulations on how to share mineral revenue between two Traditional Councils. The Mineral and Mining Act of Ghana is not explicit on how to share mineral revenue between Traditional Councils if the mineral is in a community inhabited by people from two related ethnic groups. As such, lack of regulation on how to share the mineral development fund between the two Traditional councils contributed to Manya-Yilo conflict. Besides, the Yilo Municipal Assembly seemed powerless to facilitate a participatory planning (agonistic planning) to plan the establishment of the mine at Odugblase.

7.2.3 The consequences of Manya-Yilo conflict

This study aimed also to know the consequences of natural resource conflict. This could caution us against innate dangers of natural resource conflict. *What are the socio-economic consequences of the Manya-Yilo conflict?* This study found that limestone mining has affected the source of livelihood of people at Odugblase but the traditional authorities could not access the mineral development fund to create alternative livelihood opportunities. Besides, the mineral development fund could not be accessed to upgrade the main road destroyed by the heavy-duty trucks of the mining company with the needed urgency. This has caused fatal road

accidents leading to loss of property and lives. There is retarded development due to the Manya-Yilo conflict. Thus, the purpose for which the development fund was established has so far been defeated.

In addition, the Manya-Yilo conflict has some social consequences. First, this study found that the Manya-Yilo conflict is deteriorating the once cordial social relationship that existed between the two Traditional Councils. The Traditional Councils are no longer friendly as they used to be. It is important to state that the Manya-Yilo conflict has not affected the social relations among the people of Odugblase. Second, it has been found that the Manya-Yilo conflict is a contributing factor to the increasing rate of school drop-outs and teenage pregnancy at Odugblase. The reason being that parents can no longer afford the cost of their children's education. This is due to economic hardship resulting from the inability of the two traditional authorities to access the development fund to create alternative livelihood activities. Third, there is no united force to compel GHACEM to do corporate social responsibilities that the people of Odugblase need.

Based on the socio-economic consequences of the Manya-Yilo conflict, it is obvious, as found by this study, that the limestone revenue has not been used efficiently. Mining of limestone has brought economic hardship and is disintegrating social ties yet, the authorities could not have access to the mineral development fund to develop Odugblase. Worst of it all, the limestone revenue is sitting idle in the bank account without accruing any interest. Since the fund is not an investment fund but a development fund, the money is not put in investment portfolios to generate appreciable interest. It is therefore natural that responsible authorities make effort to resolve Manya-Yilo conflict.

7.2.4 Conflict Resolution Mechanisms

This study has crucial findings to the research question; *what is being done to resolve the Manya-Yilo conflict?* It has been found that the central government set up a Committee of Enquiry to investigate the Manya-Yilo conflict. The committee of enquiry recommended that Manya Traditional Council should take 67% of the limestone revenue since members of Manya made up 67% of the population of Odugblase but the Yilo Traditional Council rejected the recommendation. This arbitration attempt was unable to resolve the Manya-Yilo conflict because of lack of political will to enforce the recommendations of the Committee of Enquiry.

Also, this study found that the Yilo Municipal Assembly in collaboration with GHACEM tried to resolve the Manya-Yilo conflict through mediation but it was unsuccessful. Yilo Traditional

Council rejected the recommendation of the Committee of Enquiry again. On the other hand, Manya Traditional Council did not agree to share the limestone revenue equally with Yilo Traditional Council. Thus, arbitration and mediation have not been effective to resolve the Manya-Yilo conflict.

On the way forward, it seems adjudication will be more effective in resolving the conflict. Manya Traditional Council is planning to go to the law court to seek redress. Since the decision of adjudication is legally binding, there is a higher probability that the two Traditional Councils will obey the judgement of the court.

The theories and conceptual framework used are appropriate in this study. The planning theories facilitated the identification and discussion of the type of planning strategies that were used to develop the mine at Odugblase. Also, the *ladder of participation* formulated by Arnstein (1969) enhanced the discussion and understanding of level of participation in each planning model and their implication for natural resource management. Furthermore, narrow-based planning and weak institutions contributed to a dissatisfaction of natural resource management and revenue sharing as depicted in the conceptual framework. Also, unsuccessful attempts to resolve the conflict have further delayed the Manya-Yilo conflict. Adjudication could bring some institutional reformation to improve the management and sharing of the limestone revenue to enhance the wellbeing of the people of Odugblase in particular and *Krobos* in general. Thus, the choice of theories and conceptualisation of resource conflict onset fits well with this study.

7.3 Conclusion

Perhaps, the Traditional Councils are fighting because they are ignorant that the revenue in question is not a mineral royalty. Chiefs have greater power over mineral royalty since they have a share in it. There are reported cases that chiefs grab the total mineral royalty and use it on personal wants at the detriment of mining-affected communities. It is likely that Manya-Yilo conflict would not have ensued if the Traditional Councils knew that the mineral revenue in question was earmarked solely to develop Odugblase.

It is also clear from the study that mediation and arbitration cannot effectively resolve a conflict if they are imposed on opponents. The Committee of Enquiry was imposed on the two Traditional Councils so it was easy for Yilo Traditional Council to reject its recommendation. Also, Yilo Municipal Assemble and GHACEM tried to resolve the Manya-Yilo conflict on their own accord and they were not successful. The arbitration and mediation mechanisms

could have resolved the Manya-Yilo conflict if the two Traditional Councils were encouraged to choose the arbitrators and mediators. It could have been difficult for the Traditional Councils to reject the decision of the arbitrators and mediators that they have chosen.

This study made several contributions to literature. First, this study has demonstrated that centralised planning strategies and political structure contributed to micro-scale natural resource conflict in Ghana. Second, economic hardship and disintegration of social ties are some of the main consequences of natural resource conflict. Another key contribution of this study is the conceptualisation of resource conflict onset. Even though the analytical framework is used for this micro-scale natural resource conflict, other researchers can use it to investigate natural resource conflict onset at the national level. Future researchers can investigate natural resource conflict by looking at the planning strategies, the existing political structure and the comprehensiveness of existing institutions.

7.4 Recommendations

To resolve this conflict comprehensively all stakeholders should be involved. The starting point to resolve the Manya-Yilo conflict is to make the two Traditional Councils aware of what they are fighting over. The two Municipal Assemblies, as representatives of the central government at the local level should organise stakeholder meeting to educate the two Traditional Councils on the development fund. The two Traditional Councils should be made aware of the purpose for establishing the development fund. The consequences of the Manya-Yilo conflict on the local people at Odugblase should also be made known to the two Traditional Councils.

There is no need to share the development fund between the Traditional Councils. The money is meant for the development of Odugblase which fortunately inhabits members from the two Traditional Areas. A committee should be set up to use the money to develop Odugblase. This committee should comprise equal number of representative from the two Traditional Councils and Municipal Assemblies. The members from the Municipal Assemblies are already on Government of Ghana Payroll so there will be no need to pay them salary. They could however, be given allowances.

It must be made clear that the committee should not spend more than a certain percentage of the development fund on allowances and workshops. In Ghana, some committees organise workshops in high rated hotels and eat in expensive restaurants, places participants will not spend their own money at. In the end, the amount of money spent on workshops is more than the amount left to do the actual development. In some cases, there is no money left for project

on which the workshop was organised after the exercise (Adimazoya, 2013; Standing, 2014). Thus, there is the need to make sure that the committee must not spend more than a certain percentage of the fund on allowances and workshops.

In general, there is the need to adopt participatory natural resource management in the future. All stakeholders should be identified and adequately involved in taking decision on matters that affect them. The general public should equally be involved because the effects of resource extraction affect everyone in resource endowed areas. Agonistic strategy could enhance decisions on resource extraction and utilisation.

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Appendix I

Interview Guide for Landowners

Themes	Main Question(s)	Content	Follow-up questions
1. How and when was the research participant involved in the process	Kindly narrate the process from when you were contacted to the start of mining of the limestone.	Type of planning theory that was used	Please has there been a meeting organised for the two traditional council? Do you think that the process should have involved you and the other landowners better/in different way?
2. Has the process been acceptable by Traditional Leaders	Kindly evaluate the planning process through which you were involved	Process evaluation	Please do you think there should have been a better way for contacting you?
3. What, in the participants' view are the causes of the dispute?	Could you please educate me on the conflict?	What went wrong	Who are the people involved? What happened? What are the driving forces?
4. Participants' perception of the effects of the conflict	Could you please tell me the effects of the conflict?	The effects of the conflict	What is the benefit supposed to be used for? What are the economic effects of the conflict? Has there been any social rift between the two traditional councils?
5. Why has the conflict not escalated so far?	Could you tell me, in your opinion, why are Yilo and Manya not in armed conflict so far?	What is peculiar about this case	Do you think it is because there are strong and trusted institutions? Is it because both Yilo and Manya are Krobos?
6. What actions are being taken to resolve the conflict?	Please tell me how you are solving this problem? Please why have you chosen this mechanism and not any other?	Type of, and reasons for the chosen conflict resolution mechanism	Who has initiated the resolution mechanism? How has the other party responded to it?

7. Lessons learnt from the point of view of participants	Please tell me any good lesson learnt from the conflict?	The good side of the conflict	How will you apply the lessons learnt to similar issues in the future?
Summary/thanksgiving	A recap of the conversation by the interviewer	Summary	Am I correct to say that

Appendix II

Interview Guide for the Municipal Assemblies

Themes	Main Question(s)	Content	Follow-up questions
1. How and when was the research participant involved in the process	Kindly narrate the process from when you were contacted to the start of mining of the limestone. Kindly narrate your role in planning the mine at Odugblase	Type of planning theory that was used	How did you facilitate participatory planning? Do you think that the process should have involved you and the other stakeholders better/in different way?
2. Has the process been acceptable by Traditional Leaders	Kindly evaluate the planning process	Process evaluation	Please do you think there should have been a better way for contacting you?
3. What, in the participants' view are the causes of the dispute?	Could you please educate me on the conflict?	What went wrong	Who are the people involved? What happened? What are the driving forces?
4. Participants' perception of the effects of the conflict	Could you please tell me the effects of the conflict?	The effects of the conflict	What is the benefit supposed to be used for? What are the economic effects of the conflict? Has there been any social rift between the two traditional councils?
5. Why has the conflict not escalated so far?	Could you tell me, in your opinion, why are Yilo and Manya not in armed conflict so far?	What is peculiar about this case	Do institutions play a role? Is it because both Yilo and Manya are Krobos?
6. What actions are being taken to resolve the conflict?	Please tell me how you are solving this problem? Please why have you chosen this mechanism and not any other?	Type of, and reasons for the chosen conflict resolution mechanism	Who has initiated the resolution mechanism? How has the other party responded to it?

7. Lessons learnt from the point of view of participants	Please tell me any good lesson learnt from the conflict?	The good side of the conflict	How will you apply the lessons learnt to similar issues in the future?
Summary/thanksgiving	A recap of the conversation by the interviewer	Summary	Am I correct to say that

Appendix III

Coding

Key Codes	Condensed Content Areas	Sub codes	Abstraction	Emerging Themes
Nature	The conflict is between Yilo and Manya Traditional Councils over limestone revenue. Odugblase inhabits people from the two Traditional Councils. The conflict is about which Traditional Council has the judicial right over Odugblase. Members of Manya are more than the Yilo sans. All the sub-chiefs at Odugblase are from Manya but members of Yilo claimed that members of Manya are settlers. The two Traditional councils thought they are fighting over mineral royalty but GHACEM said the revenue in contention is a Mineral Development Fund.	Actors	Yilo and Manya Traditional Councils.	The Manya-Yilo conflict is a micro-scale, non-violent (latent) conflict over mineral development fund
		Ownership	A struggle over who has judicial right over Odugblase.	
		Ignorance	The two traditional councils are oblivious of the mineral revenue they are fighting over.	
Causes	GHACEM used technocratic planning strategy to ascertain the viability and authenticity of the limestone deposit at Odugblase. The development of limestone mine at Odugblase was done in a hasty manner. GHACEM did not inform the Yilo Municipal Assembly that the company acquired mining license for the Assembly to facilitate participatory planning whereby landowners and the two Traditional Councils would be involved. There were signs of the Manya-Yilo conflict at the beginning but they were taken for granted	Planning	Rational Planning.	Narrow-based planning, unsuccessful homogenisation of Traditional Areas and Municipal Assemblies and weak institutions contributed to the conflict.
			Incremental Planning	
		Political Structure	Unsuccessful homogenisation attempt.	
		Weak Institutions	Inadequate mineral regulations.	
Powerless Municipal Assembly.				
Consequences	The two Traditional Councils cannot access the Mineral Development Fund to advance socio-economic development of Odugblase and the Traditional Areas as whole. Meanwhile,	Economic	Economic retardation	Economic hardship leading to school dropout and teenage
		Social	Social vices.	

Consequences Cont.	limestone mining is affecting the livelihood of the local people adversely. The two Traditional councils are not as friendly as they used to be.	Social Cont.	Deteriorating social ties. Unsustainable social interventions.	pregnancy. Lack of united front to request what the local people need
Conflict Resolution	A Committee of Enquiry was set up to investigate the rightful overlord of Odugblase but the committee only did household survey. A stakeholder meeting was also held in 2013 to resolve Landowner-GHACEM and Many-Yilo conflicts but both attempts were unsuccessful. In both attempts, the two Traditional Councils were not adequately involved in the conflict resolution process. Many Traditional Council is planning seek redress from the court of law.	Arbitration	Yilo Traditional council rejected the recommendation	The consensual conflict resolution mechanisms failed probably due to the limited involvement of the two Traditional Councils. Adjudication could resolve the Many-Yilo conflict since its decision is binding
		Mediation	The two Traditional Councils did not accept the propositions of the mediators.	
		Adjudication	On the way forward, adjudication is being considered to resolve the conflict	

Appendix IV
Consent Seeking Statement

Dear Participant,

John Narh is my name and I am a graduate student at the Norwegian University of Science and Technology. I am reading MSc. Natural Resource Management, Geography. As part of the requirements for the award of the Master, a research must be conducted. In the light of this, I am conducting a research titled; Conflict over the Odugblase Limestone Benefit: Causes, Effects and the Way Forward. The aim of the project is to assess causes and effects of resource-related conflicts at the micro level as well as to understand how such conflicts are resolved.

The purpose of this project, as mention earlier, is purely academic. Please you are one of the key informants for the study by virtue of your in-depth knowledge of the Odugblase case. I humbly request you to provide data for this study through an interview that will last up to 30 minutes. You are informed that the interview will be recorded on tape. It is my wish that all my questions are responded to but it is not compulsory to answer those that may sound sensitive to you. Please you can, at any time, decide to withdraw from the interview. You are assured that you will not be subjected to any psychological harm and your identity will be kept anonymously throughout the study. Also, the data you will provide will be kept confidentially. Please if you agree to take part in this interview, confirm your informed consent by saying “I am informed about the aim and purpose of this study and I agree to provide data for the research” into the tape.

Thank you very much.