UNIVERSITY OF CAPE COAST

TRADITIONAL INSTITUTIONS AND ENVIRONMENTAL GOVERNANCE IN

GOLD MINING AREAS: THE CASE OF ASUTIFI DISTRICT, GHANA

BY

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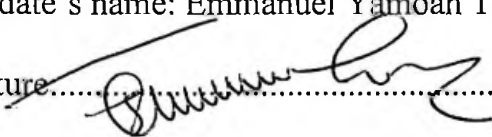
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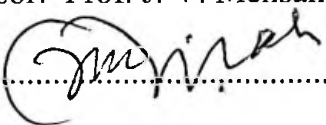
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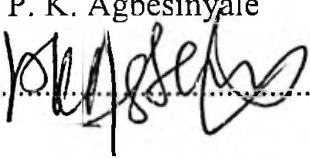Signature:..Date:16/01/2016

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ABSTRACT

Mining has effects on the life of local communities. The negative effects have often lead to tensions over issues undermining traditional livelihoods. This study examined the role of traditional institutions involved in environmental governance in mining communities within the Asutifi District.

Institutions matter for development and a study of the relationships between governmental technologies and traditional institutional norms and practices offers a productive inquiry of implementation of development activities. A qualitative case study was designed and quota sampling used to select 59 respondents from communities, traditional institutions, mining business and state institutions in the Asutifi District and beyond. Interviews and documentary review were the main data collection methods used.

The study reveals that the traditional authorities played the role of development agents as well as custodians of those natural resources not vested in the state. The informal interactions of traditional institutions with modern organisations also enhanced their contribution to the general development of their jurisdictions. The limitations imposed on the authority of chiefs only to advisory roles in governance had weakened their participation in decisions on how natural resources were exploited.

It is recommended that the government recognises traditional institutions as key stakeholders in mining governance and therefore be involved in the processes of licensing of mining beginning at the reconnaissance license stage.

AKNOWLEDGEMENTS

"We are like dwarfs sitting on the shoulders of giants. We see more, and things that are more distant, than they did, not because our sight is superior or because we are taller than they, but because they raise us up, and by their great stature add to ours." John of Salisbury, *Metalogicon,* 1159.

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To the Kosovars, BOLA!

DEDICATION

To the memory of my late father, Mr Emmanuel Ofori Tenkorang and my mother, Margaret Ansomah Debrah.

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LIST OF ABBREVIATIONS

AMG	African Manganese Group
ARPS	Aborigines Rights Protection Society
CBO	Community Based Organisation
CPP	Convention People's Party
CPR	Common Pool Resources
EAP	Environmental Action Plan
ECA	Economic Commission for Africa
EIA	Environmental Impact Assessment
EITI	Extractive Industries Transparency Initiative
EPA	Environmental Protection Agency
ERP	Economic Recovery Programme
FC	Forestry Commission
FDI	Foreign Direct Investment
FGD	Focus Group Discussion
FPIC	Free Prior Informed Consent
GAGL	Ghana Australian Goldfields Limited
GCP	Ghana Congress Party
GDP	Gross Domestic Product
GNA	Ghana News Agency
GNMMC	Ghana National Manganese Marketing Corporation
IMF	International Monetary Fund
ISSER	Institute of Statistical, Social and Economic Research

LI	Legislative Instrument
LS&CD	Local Suppliers and Contractors Development
MDAs	Ministries, Departments and Agencies
MINCOM	Minerals Commission
MSMEs	Micro, Small and Medium Enterprises
NADeF	Newmont Ahafo Development Foundation
NGGL	Newmont Gold Ghana Limited
NGO	Non Governmental Organisation
NLCD	National Liberation Council Decree
NLM	National Liberation Movement
NRCD	National Redemption Council Decree
OECD	Organisation for Economic Cooperation and Development
PAMSCAD	Programme of Action to Mitigate the Social Cost of Adjustment
PMMC	Precious Minerals Marketing Corporation
PNDC	Provisional National Defence Council
PNDCL	Provisional National Defence Council Law
R&D	Research and Development
SAP	Structural Adjustment Programme
SDCs	Sustainable Development Committees
SDSA	Social Dimensions of Structural Adjustment
SGMC	State Gold Mining Corporation
SOEs	State Owned Enterprises

SSM	Small-scale Mining
UGCC	United Gold Coast Convention
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
WHO	World Health Organisation

CHAPTER ONE

INTRODUCTION

Background to the Study

The natural environment, especially the earth, hosts most of the materials which humans need to generate the needed goods and services for sustenance and development. In order to meet the demands of societies for continued production of these goods and services, people have been extracting raw materials from the environment to feed production. UNDP (2014) defines the physical extraction of oil, gas and minerals from the earth for sale as the Extractive Industry (EI). This industry is estimated to have a global market capitalisation in excess of € 6.1 trillion (Schrifrin & Rodriguez, 2013).

By virtue of their physical size, high capitalisation, high revenues generated and their long length of operation, EIs have a profound impact on the economies of both local communities and countries. EIs account for substantial parts of the government revenues of resource rich countries through payments of taxes, royalties and rents. Iraq, the Republic of Congo, Saudi Arabia, Mauritania, Kuwait, and Gabon each have the EIs contributing more than half of their government revenue (Schrifrin & Rodriguez, 2013). The EIs also create jobs by creating companies to extract the resource itself and creating both forward and backward linkages with other service providers to the industry. These services include security, supplies and catering. The technology, capital investments and

infrastructure accompanying the setting up of these extraction operations present opportunities for growth and development of both the local and national economies (Eftimie, Heller, & Strongman, 2009).

IFC (2012) has classified general activities within the EI into seven phases. These are: Exploration; Development, Feasibility and Financing; Construction; Production; Refining, Transport and Retail; Closure and Decommissioning. These phases span the exploration for the resource reserve through developing the operation to the decommissioning of the exhausted operation. The industry, according to Sigam and Garcia (2012), is generally classified into oil and gas and mining. The oil and gas sub-sector usually deals with extracting hydrocarborns while the mining sub-sector extracts minerals. The minerals include precious metals as well as rocks and composites.

Mining is usually confined to locations which possess known and commercially viable deposits of minerals. Since minerals are non renewable resources, there is the need to develop new mines and quarries to replace exhausted deposits. This brings mining into conflict with other land uses as the production increasingly takes place in geologically, ecologically and politically challenging regions, as opportunities for more accessible reserves dwindle (Stevens, Kooroshy, Lahn & Lee, 2013).

There are major environmental problems resulting from mining and three main types have been classified by Aswathanaryana (2003; cited in Nilsson & Randhem, 2008). These include: changes to the natural topography restricting the uses to which the land can be put; hydrogeological impacts on both groundwater

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and surface water and geotechnical modifications of rocks. The ramifications of these environmental problems include pollution of water sources by sediments, chemicals and heavy metal oxides formed from mining. Armah, Obiri, Yawson, Pappoe and Akoto (2010) and Obiri (2009) found levels of both turbidity and concentrations of trace metals in water sources in selected mining areas above the WHO approved levels and a positive correlation between these levels and the distance of the source of water from the mining activity.

On the other hand, mining royalties and taxes are revenues that can potentially be invested in infrastructure and social services. Mining projects also create jobs in the local area and sometimes transfer technology. All these can contribute to economic growth, domestic security, and social well-being. Inspite of these positive potentials of mining revenue, in many countries, they are wasted or lost to corruption and financial mismanagement (Schiffrin & Rodrigues, 2013). Issues of fairness in sharing the benefits from the mining are therefore critical. Stevens et al. (2013) note that public expectations of the revenues and economic dependence on mining can raise political stakes and lead to conflicts. According to Schiffrin and Rodrigues (2013), mineral resources can increase tensions between ethnic groups or classes and lead to an increase in economic and social inequality and to societies marked by poverty and underdevelopment.

Knorr-Certina (1981) reiterates that the social system develops specific rules to govern and coordinate the interactions between the social actors and the environment in order to manage or eliminate the risks of social and economic upheaval and environmental harm associated with mining (Eftimie, Heller, &

Strongman, 2009). These social, economic, political, judicial and religious arrangements are what writers like North (1991) has termed institutions.

It is within institutions that power is prescribed, legitimated and controlled and Olsen (2007) argues that it is that which integrates the community. The ability of institutions to integrate society largely depends on the development of the institution itself. Olsen (2009) for instance notes that when an institution is developed, there is improved clarity and formalisation of rules regarding who should control what and how the control should be organised. This enhances certainty in interactions among people and between people and the institutions regarding how environmental resources are used.

An institution that plays a very important role in the moderation of the interactions among mining concerns, the society and environmental resources is the state. The state signs contracts with the mining companies that spell out the conditions under which the mining is allowed, including the environmental regulations governing the activities and the revenues to be paid the state. Another function of the state is to use the revenues obtained to provide such services as would improve development of the state and its citizens.

Within the geographical jurisdiction of the state, there exist other institutions that are at different levels of formalisation and of various origins which often perform roles the state is unwilling or unable to do for the society. Of these institutions, those that pre-date the modern state are referred to as traditional institutions. They include chieftaincy, norms, taboos, practices and informal local organisations (Knierzinger, 2011; Crook, 2005). Traditional institutions embody

cultural values because they are a creation of the collective aspirations of a group of people who are organised as a society. The binding force between the traditional institutions and the society is what Otumfuor Osei Tutu II (2004) has referred to as social contract. This contract includes the control of access to and conditions of use of resources.

Koetchen and Young (2006) consider the system that mediates the interaction between human actions and biophysical processes as governance. The Institute of Governance (2002) explains that not only the institutions, processes and conventions in a community are important indicators of governance, but how power is exercised, critical decisions made and varied interest parties included are also key. When the exercise of this power in the governance system affects environmental resources, then this type of governance is environmental governance. Environmental governance is key to peace and development in countries where mining is a major economic activity because it has the potential of controlling upheavals as a result of environmental harm and financial mismanagement. Fairness in the distribution of revenues from mining would ensure more equitable distribution of development which minimises social conflicts.

By the very nature of environmental governance striving to embrace all existing forms of collective regulation of societal environmental matters (Mayntz, 2004, cited in Draube, 2007), the effective integration of traditional institutions cannot be overemphasised. State attempts to build good environmental governance systems would not be successful because as Rodrik (2000) argues, in

order to give legitimacy to the system, the participation of institutions that can assess and use local knowledge cannot be ignored. Efforts at improving environmental governance in any nation therefore cannot ignore traditional institutions if they are to succeed.

Post independent African countries saw the mining sector as a potential contributor to national development. State control of this sector however meant that its true potential was not being realised by the economy of these countries. To derive the most benefits from the mining sector, the role of the state needed to be redefined. Redefinition in this context meant liberalising and deregulating the sector to attract investment and private sector participation (Campbell, Hatcher, Lafortune & Sarrasin, 2003; Loxley, 1990).

Legislations were passed which defined the state's new role to promulgate investor-friendly mining codes, adopt micro- and macro-economic measures which allowed generally unimpeded repatriation of profits and to liberalise the foreign exchange regimes (Akabzaa, 2004). These reforms were informed by neo liberal economic thought. Neo liberalism requires the removal of various controls deemed as barriers to free trade, such as: tariffs; regulations; standards, laws, legislation and regulatory measures and restrictions on capital flows and investment. The removal of the barriers was to allow the free market to respond to market forces (Anup, 2007).

The Government of Ghana adapted to the changing development paradigm of economic liberalisation and launched the Economic Recovery Programme (ERP) in 1983 to recover economic productivity. This was to be achieved by

lowering inflation; increasing Foreign Direct Investment (FDI) into priority sectors of the economy; restructure the country's economic institutions; restoring production incentives; rehabilitating infrastructure to enhance production and export of goods; and, finally, increasing access to essential consumer goods (La Verle, 1994).

However, critics of economic liberalisation have argued that it hollows out previous generations of social contracts between labour and management and catalyses contradictory results that require new forms of activism and humanitarian engagement. The promise that neo liberalism would lead to economic growth and significantly decrease levels of hunger and poverty has not been achieved after a quarter century of implementation in much of the world. By 2007, more than a billion people lived in extreme poverty, on an income of under $1/day and nearly 40 percent of the world's population lived on under $2/day (Sniegocki, 2008; Lemke, 2000). Excluding China, where poverty decreased, global poverty did not change between 1981 and 2008 (The Economist, 3rd March, 2012). In effect neo liberalism adopted by most developing countries is anti-human (Sniegocki, 2008).

The priority sectors of the economy targeted by the Ghanaian state under the ERP to attract FDI included the mining sub-sector. The World Bank and International Monetary Fund (IMF), the main sponsors of this programme, were informed by the view within contemporary development policy and practice that the extractive sector could enhance the economies of developing countries by attracting FDI and creating jobs directly and indirectly through forging linkages

with other sectors of the national economy, particularly the services sector (McMahon, 2011; Ross, 2001).

Radical changes in policy aimed at encouraging and regulating both large and small-scale mining for export in Ghana began in 1983 as a component of the Economic Recovery Programme (Tsikata, 1997). At that time Ghana's mining regulations were part of the general investment code. However, in 1986, the Minerals and Mining Law 1986 (PNDCL 153) was passed to solely deal with mining (Akabzaa, 2004). This law was repealed and replaced with the current Minerals and Mining Law 2006 (Act 703).

As a result of the incentive packages in the reforms, most FDIs that come into Ghana go into mining and the nation attracted 7 percent of all FDIs coming into Africa (Mining Journal, 2005 cited in UNCTAD, 2005). Ghana was ranked as the second largest producer of gold in Africa after South Africa and the ninth producer in the world in 2008 (Ghana Chamber of Mines, 2009).

Ghana's Mining and Environmental Guidelines, 1994 and Environmental Assessment Regulations, 1999 are some of the legislations passed to regulate mining and to mitigate its environmental impact. Some of the requirements of the regulations were that all new mining companies had to conduct an Environmental Impact Assessment (EIA) and already established ones had to design an Environmental Action Plan (EAP). The EIA and EAP processes require companies to conduct social impact assessment and address the concerns of communities affected by the mining addressed in the EAP. All these regulations and laws needed to have institutions set up to regulate, monitor and enforce them.

The Minerals Commission was set up by the Minerals Commission Law of 1986, PNDCL 154 to formulate recommendations for national policy on the exploration for and exploitation of mineral resources (PNDCL 154 Part 1, section 2:a.b.). The Environmental Protection Agency (EPA) was set up by the Environmental Protection Agency Act of 1994, (Act 490) to regulate all activities and operations with possible harmful consequences for the environment. These are some of the conscious and rational attempts by the state to design new bureaucratic institutions to solve complex environmental problems. In so doing however, traditional institutions, which are socially embedded, were neglected, leading to the reallocation of natural resource access and withdrawal rights. Given that mining activities are often governed by traditional property laws, the reorganisation of both property and allodial rights to mineral rich lands has culminated in the displacement of economic activities, communities and generally livelihood systems. Resettlement schemes have been implemented to pave way for access to mineral rich tracts of land.

Article 257 clause 6 of the 1992 Constitution of the Republic of Ghana and the Mineral and Mining Act of 2006 section 1 give the state the ownership rights and control over land in which minerals are established to exist. The state in exercising its right to have access to the minerals has further been given the right of compulsory acquisition of these lands by section 2 of the Minerals and Mining Act of 2006.

This power of compulsory acquisition of land for mineral exploitation purposes has been exercised by the state often, over a long period of time.

However, the current situation is different from the earlier times in that until the mining reforms that began in 1983, most of the mines operated underground mines, which provided less interference in surface land use. Community subsistence activities went on alongside the mining. But with the introduction of the heap leach method of gold extraction, which makes it possible and economical to extract relatively smaller concentrations of gold in ores using cyanide compounds, open cast or open pit mines are now the mining procedure in vogue in most mines in Ghana.

In fact, the Anglogold Ashanti Obuasi mine is the only company in Ghana operating an active underground mine as at the moment (Ghana News Agency, 2009). Surface mining constitutes a considerable disturbance of land use activities. In areas where there was land use activities undertaken before the granting of a mining lease, the original users of the land invariably are required to relinguish their access to the land for the mining activity and compensation and resettlement packages paid to the affected people.

The reforms and modernisation notwithstanding, questions have been raised about the real benefits that the state and local economies have derived from the liberalisation of the mining sub-sector. Campbell et al (2003) cite the mining sub-sector's limited capacity to generate additional local employment and add value to the mineral. Inspite of all the incentives given to the mining sub-sector in the reforms, minerals made up 37 percent of total exports, of which gold contributed over 90 percent; Ghana produced 10 percent of the world's gold but

gold's contribution to Ghana's GDP stood at 5 percent in 2008 (Firman, 2008, cited in Boon and Ababio, 2009).

One of the districts in Ghana where large scale mining has been extended to, as a result of the liberalisation of the mining sub-sector, is the Asutifi district. The district has 117 settlements and a total land surface area of 1500 sq.km. (Ghana Districts, 2011). The district hosts Newmont Gold Ghana Limited's Ahafo mining project. This project has developed gold reserves located along a mineralised zone that extends approximately 70 kilometres. This gold mining and milling operation with an expected mine life of 15 years was initiated during the first quarter of 2005. The first gold poured on the 18th of July, 2006 and commercial mining commenced in August 2006 (Newmont, 2006). This mine is a surface mine. Its development involved the resettling of individuals and communities impacted by the mining-related activities.

In terms of the traditional institutional set up of the Ahafo areas, including the Asutifi district, Arhin (1977), cited in Kwarteng (2012) observes that the area has a distinct most bizarre political constitution of an Akan state. In 1958, the government passed the Ashanti Stool Lands Act (No.28 of 58) which transferred the trusteeship and management of all lands in the Ahafo areas vested in the Golden Stool and its occupant, the Asantehene, to the Governor–General and in 1959 Brong Ahafo Region Act carved out two thirds of the Ashanti territory to create the new region.This was followed by the establishment of the Regional House of Chiefs for the Brong Ahafo region. The paramount chiefs in the Ahafo areas qualified as members of the Regional House of Chiefs.

However, in 1966 the National Liberation Council government passed Decree 112 which restored the allegiance of the Ahafo chiefs to the Golden Stool (Kwarteng, 2012). Traditional authorities in the Ahafo area are placed in a unique situation: they belong to the Brong Ahafo Regional House of Chiefs, the Asanteman Council in the Ashanti Region and preside over lands vested in the state. The sources of authority and accountability of institutions with the locus to participate in decisions on environmental resource extraction and management, in this case traditional institutions, shapes the emergent environmental governance structure.

Statement of the Problem

Nine thousand five hundred and seventy five (9,575) individuals were directly affected by the Newmont project (Newmont, 2005). Of this number, 5,185 lost both their residential and cropped fields while 4,390 people were to be economically displaced through loss of cropped fields (Newmont, 2005). With over 95% of the displaced households found by Newmont (2005) to be practising subsistence and cash crop farming on small holder farms as their primary livelihood activity, this large scale displacement had the potential to impoverish most of these people.

At a public hearing organised by the EPA at Kenyasi on May 10, 2012, the Divisional Chief of Ntotroso and President of the Ahafo North Traditional Council appealed to NGGL to employ most of the unskilled labour from the communities within the concession area (Ghana News Agency, 2012). The chief

attributed the spate of high joblessness in the area to the displacement of people from their farmlands to the mine. He further said that the situation where the company refused to employ people from the area was creating problems for the chiefs as the people saw the chiefs as being ineffective.

The context within which this appeal was made and the content of the appeal raises several issues for discussion. Mining has economic, environmental and social consequences for communities and these have often led to tensions with the communities over issues as compensation, employment of locals, environmental and health impacts, thereby undermining traditional livelihoods. Stevens et al. (2013) argue that tensions are more likely to escalate in areas with low institutional capacity, which fail to protect the rights and interests of affected communities. This is a result of weak environmental protection frameworks, the lack of a political voice for local residents or insecure land tenure, in sum, weak environmental governance structure. Literature on mining suggests environmental governance as the solution to these effects of mining (Schrifrin & Rodriguez, 2013).

The role of state institutions in environmental governance of mining is well researched and documented, however a major gap in the literature is the role of traditional institutions in the environmental governance structure. Mengisteab (2008) sees traditional institutions as being indispensible to the people as they provide services to their communities. The use of traditional arrangements to sustainably manage irrigation water supply in Bolivia as an example is well discussed by Zimmerer (2011) and Boelens (2008).

Many African societies, including that in Asutifi District, historically have been organised on the basis of a social contract where people come together to form a community in the belief that it is the best way of achieving development. Pursuant to this objective, the people agree collectively to surrender to a leader, including chiefs, the power to control and regulate the general direction of living in the community (Otumfuor Osei Tutu II, 2004). Chieftaincy, an embodiment of the traditions, norms and beliefs of the culturally identified group is a creation of the same group to perform certain prescribed functions, including the achievement of development.

The authority of this institution therefore derives directly from the legitimacy it has from within its society. Gyekye (1997: 110) quotes the Ndebele of Zimbabwe: "The king is the people; to respect the king is to respect oneself; he who despises our king despises us; he who praises our king, also praises us". The assessment of chiefs in the area as being ineffective implies that chiefs were seen by the people as being legitimate leaders who were to help in the attainment of development for the people.

Mining companies in Ghana operate with licenses granted and regulated by the state through its appropriate institutions. For the chief to have made this appeal in a public forum shows that the chief felt he had no appropriate channel to voice out his sentiments. This is indicative of a weak environmental governance structure which does not allow appropriate fora for very important stakeholders to submit propositions for discussion and decision making.

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Another issue is that it is possible that there were communication channels linking the traditional institutions with the mining company but the final decision was made by the company, neglecting the position of the traditional authorities. This therefore illustrated the power asymmetry among the company, state and the traditional institutions regarding decision making on such an important aspect of mining environmental governance. This situation of neglect of traditional institution in governance is what writers like Davidson (1992) and Bergdall (1988, cited in Kendie & Guri, 2007) have explained as being responsible for the in-effectiveness of the state in bringing about development.

These raise questions about the environmental governance structure overseeing the mining and especially of the role of traditional institutions in this structure and their interaction with the other institutions within the structure. What is the current relevance of traditional institutions in the district in environmental governance regarding mining?

Objectives of the Study

The general objective of the study was to explore traditional institutional engagement with environmental governance in mining communities within the Asutifi District.

The specific objectives of the study were to:

1. Assess the state of development of traditional institutions in the selected mining communities in Asutifi District;

2. analyse the various roles played by traditional institutions   in environmental governance in the mining communities;

3. examine the support needed by the traditional institutions to enhance the effectiveness of their environmental governance roles at the local levels;

4. assess the interaction between traditional and state institutions regarding environmental governance in mining;

5. explore the potential for enhanced collaboration of the traditional and modern institutions to facilitate environmental governance at the community level.

Research Questions

The study was guided by the following research questions:

1. What is the state of development of the traditional institutions identified?

2. What is the contemporary role of the traditional institutions in environmental governance?

3. What support would enhance the environmental governance roles of traditional institutions at the local level?

4. How do state and traditional institutions interact in governing the mining environmental resource in the district?

5. What is the potential for enhanced collaboration of the traditional and modern institutions to facilitate environmental governance?

Scope of Study

The study was limited to the Asutifi district of the Brong Ahafo Region and it covered issues of environmental governance related to the Ahafo South Concession of Newmont Gold Ghana Limited. Issues covered include resettlement, relocations, access to employment, access to lands for economic activities, illegal small-scale mining and development of traditional institutions.

Significance of the Study

When gold mining in Ghana was solely managed by traditional institutions, Ghana produced 35.5 percent of the world production. The efforts of the colonial authorities to weaken the authority of traditional institutions which began with the passage of the Land Bill in 1897 and the Mercury Ordinance of 1932 ensured that Ghana lost its production level of 35.5 percent of world production of gold to 3.4 percent currently (Terray, (1974) cited in Ofosu-Mensah, 2011; USGB, 2011).

However, traditional authorities are invited to attend public meetings organised by modern mining institutions in various capacities. This means that the traditional institutions are still relevant even in this modern mining framework, long after the modern state begun efforts to isolate them from mining governance. This notwithstanding, how traditional institutions are able to shape outcomes of decisions and the decision making processes have not been discussed.

The attempt by this study to address the questions of what specific roles traditional authorities played in mining governance in Ghana and whether if they

are fully and more effectively engaged in environmental governance, it is going to result in development in especially the local communities is significant.

Organisation of the Study

The study is organised into nine chapters. Chapter One introduces the study. Chapter Two discusses the dynamics of the mining sub-sector development in Ghana. The chapter reviews the history of mining in Ghana, the reforms that have taken place and the Neoliberal reform of 1983 especially, as it is generally responsible for the current state of mining in Ghana.

Chapter Three discusses the structure of mining and environmental governance in Ghana while Chapter Four reviews theories relevant to this study. These include theory of the state, institutional theory and the theory of collective action. The conceptual framework is then presented. Chapter Five presents the methodology adopted for the study. It discusses the study area, research design, sampling and methods of data collection and analyses.

Chapter Six discusses the current state of development of traditional institutions involved in environmental governance in the Asutifi District. Chapter Seven analyses the contemporary roles of traditional institutions, the conditions enhancing these roles and implications for environmental governance in the district. Chapter Eight discusses the interactions between traditional institutions and modern institutions and the potential for enhanced collaboration of their activities. Chapter Nine summarises the study, concludes and presents recommendations emanating from the study.

CHAPTER TWO

DYNAMICS OF THE MINING SUB-SECTOR DEVELOPMENT IN GHANA

Introduction

This chapter discusses the historical development of the mining sub-sector in Ghana in general and the mining sector reforms in particular under the Neo-liberal structural adjustment policy. In discussing the Neo-liberal reforms of the mining sector, attention was drawn to the shifting of the management and regulating authority from purely traditional institutions to colonial government ratification to fully state regulation and management and; the positive and negative consequences of the Structural Adjustment Policy (SAP) to the mining sub-sector.

The chapter argues that the state of degraded environment and poverty in mineral rich areas are directly due to the sole state regulation of mining. The indigenous people and their knowledge are not made to feature actively in the processes and this leads to the degradation and poverty. The inclusion of traditional authorities at all levels of decision making in mining regulation would have averted most of these negative effects of the mines on the livelihoods of the local people.

History of Gold Mining in Ghana before the Structural Adjustment Programme of 1983

Gold from West Africa was traded to Europe at least as early as the 10th century A. D. Most of this gold came to Europe by trans-Sahara caravans, the original sources being the kingdoms of Ghana, Mali, and Songhai. Allen (1958) traces the source of recorded history of gold mining in the general area now called Ghana to the tenth century A.D., when the Saracens penetrated the Sahara desert and established overland trade between the territories bordering the Gulf of Guinea (covering the area of modern day Ghana) and Mediterranean countries. Gold then became the currency of commerce in this trade.

However, it was not until 1471 that the first authentic record of gold being obtained directly from the Gold Coast was made, when the Portuguese started trading in gold dust at the mouth of the Pra River. In 1471, Portuguese traders under the leadership of Fernao Gomes, arrived in the seaport town now called Elmina and found a thriving gold trade between the local people and the Arab Berber (Saracenes) tribes. He named the place 'A Mina' meaning the mine which later became Elmina. Later in 1482, the Portuguese built their fortress in Elmina, 20 miles east of the mouth of the River Pra. It is not known whether the gold reserves in the Elmina area was exhausted or that the reserves had become not viable but there has not been much recorded history of gold mining in this area after the period surrounding 1482 until traces of gold was rediscovered in the sands of the Elmina beach in November of 2011(Okyere & Syme, 2011).

Mining activities in Ghana have had periods of ups and downs and each period is preceded by major events in history. The history of mining in Ghana shows that there have been three mining booms (Owusu-Koranteng, 2008). The first boom, known as the Jungle boom, occurred between 1892 through 1900 when it was disrupted by the Yaa Asantewaa War of 1901.

The second boom took place in the period 1925 through 1939. This boom was disrupted by the Second World War. The third boom spanned the period 1985 to 1999. This was as a result of the mining sector reform project of the SAP implemented in Ghana in 1983 after the decline in the 1970s.

The development path of mining in the Gold Coast and Ghana has traversed six phases and these are discussed in turn in the sections that follow:

1.   Purely traditional mining phase (Pre 1880);

2.   Advent of European miners phase (1880 to 1901);

3.   Introduction and expansion of rail transport phase (1901 to1931);

4.   Criminalisation of traditional mining phase (1931 to1958);

5.   Independent state's intervention phase (1958 to 1983);

6.   Neoliberal reform phase (1983 to date).

Purely traditional mining phase (Pre 1880)

This phase is characterised by the predominant participation of African miners using traditional and simple mining technologies to mine alluvial free gold. Sand, soil and gravels from the floors and flood plains of rivers were usually enriched with free gold deposited by soil and silt carried by floods from

weathered gold bearing rocks upstream. Later, in the 18th Century, Africans attempted mining soft rocks containing gold deposits (Allen, 1958).

In the attempts by the Africans to mine the auriferous hard rocks, there were small cylindrical shafts with small hand and toe holes dug into the sides to allow descent and ascent of the shaft to the gold bearing rocks. Ofosu-Mensah (2011) describes an innovation by the African miners to mine hard rock, fire was set on the rock for several days and when the temperature had reached as high as it possibly could, water was poured on it forcing the hard rocks to break or crack due to rapid contraction. In other situations, when the shaft encountered water, it was abandoned until the dry season when the shaft depth could be extended further till it encountered the water table (Laffoley & Laidler, 1997).

Dumett (1998) notes that, in this period, traditional authorities managed mining within a traditional mining regime of rites, norms, benefits sharing and technology. The production during this time that reached the European markets through the Saharan trade route was that which Allen (1958) argues attracted the Europeans, especially the Spanish and Portuguese to embark on their expeditions to find sea routes to the source of the gold.

Advent of European miners phase (1880 to 1901)

This was the pioneering period of the 'modernisation' of mining in the Gold Coast. Ayensu (1997) notes the efforts to introduce heavier machines like excavators, crushers and drills to allow for mining hard rock formations and advanced extractive technology to extract gold from compounds, during this

period. There were no roads or railway networks and the machinery had to be disassembled into lighter pieces to be carried on the heads of porters from the nearest river or seaports to the mines. The costs of transport were high and there were delays due sometimes to the weight of the parts or the effort needed to carry, pull or roll the part over to the final destination. Other times too, the parts either fell off and sank in the sea or rivers or got broken during the transportation over land (Allen, 1958). Notwithstanding, in this era there was an unprecedented expansion in acquisitions of concessions and establishment of mines.

Between 1881 and 1888, eleven mining companies belonging to both local and expatriate concessionaires sprang up in the Tarkwa district in the Wassa area (Dumett, 1998). These included the first concessions of the Bibiani mine granted in 1891and the Prestea concessions given in 1885. Between 1897 and 1900, more than nine concessions were leased in the Akyem Abuakwa area in the eastern parts of the Gold Coast (Ofosu-Mensah, 2011). The Gold Coast Concession Ordinance of 1900 was the first legal attempt to bring the grant of concessions under the ambit of the state. It defined a concession as a document evidencing a grant from a native with proprietary right to a parcel of land and that had obtained approval of a mining license from the Governor's court (Stone, 1920).

The Gold Coast gold industry was so vibrant that the British government created a separate section on the London Stock Exchange called the 'jungle department" in 1900 to trade in shares of Gold Coast mining companies (The Economist, 1900 cited in Tsamenyi, Maltby, & Poku, not dated). This period was marked by the predominance of traditional mining and extraction of gold in the

industry. The situation where even the European mines hired Africans to use these methods to extract the gold from the crushed ore from their mines has been reported by Silver (1981). This affirms the point that the traditional mining methods were not something primitive to be discarded for more advanced ways of extracting the gold but something to be developed.

The Ashanti Goldfields Corporation (now AngloGold Ashanti) started working at Obuasi in 1897. Because the ownership of the lands given for this concession resided with the two paramount chiefs, Ayensu (1997) reported that in July of 1895, E. A. Cade, J. E. Ellis and J. E. Biney travelled to Obuasi to obtain approval for their proposed transaction from the Chiefs of Bekwai and Adansi. The concession of the Ashanti Goldfields Corporation was made up of areas of land lying within these two paramount areas in the Ashanti Kingdom. On the 16th of August the same year, the transfer of the concession to E. A. Cade from J. E. Ellis, J. P. Brown and J. E. Biney, was signed and sealed in the presence of the Chiefs and Elders of both Bekwai and Adansi at Bekwai (AngloGold Ashanti, 2005). These transactions were undertaken by the paramount chiefs acting for and on behalf of the Asantehene.

It is noteworthy that in the case of the grant of concessions for mining in those times, in both the Tarkwa and Obuasi areas, the chiefs were the grantors and not the state or colonial administration. Representatives of the chiefs acted on behalf of these traditional African authorities to regulate mining activities. The colonial state was only allowed to take a more active part in the regulation of concessions and mining when in 1896, the Asante king Nana Sir Agyemang

Prempeh I, was destooled and deported from the Gold Coast. This brought the Asante Protectorate more directly under British rule and Cade requested a ratification of the gold mining rights to Ashanti Goldfields Corporation. In April 1896, approval was given for mining, trading and agricultural rights over the 259 sq km of concession to Cade (AngloGold Ashanti, 2005). The direct involvement of the colonial and post-colonial state in mining had begun.

Introduction and expansion of rail transport phase (1901 to 1931)

This period saw the infusion of an unprecedented amount of capital equipment into the gold mining industry. Allen (1958) attributes this surge in investment to three main factors: the construction of the Western rail line from Sekondi to Kumasi; the end of the Ashanti-British war in the Gold Coast and the Anglo-Boer war in South Africa (now called the South African War).

The completion of the 168 mile Sekondi-Kumasi railway line in 1904 and the Tarkwa -Prestea line in 1910 allowed heavy equipment to be transported cheaply, safely and quickly to mining sites. The end of the Anglo-Ashanti War in 1901 (or the defeat of the Ashantis in 1901) also allowed efforts associated with military activities to be shifted to business (Tsey & Short, 1995; Jedwab & Moradi, 2011).

The British used the war to secure control of the gold fields of the Ashantis before the French, who were advancing on these areas, could claim them (Jones, 2010). Indeed it became safer to do business in the areas around the rich gold bearing formations around Obuasi, which is part of the Ashanti Kingdom.

The third factor that contributed to the expansion of foreign involvement in the mining industry in the Gold Coast was the end of the South African War in 1902 as this allowed for the diversion of capital from the South African mining industry into mines in Gold Coast because businesses then had breathing space to invest in other areas. Over 400 mining companies, both transnational and local, were formed to explore and mine gold though not all of them reached actual mining.

In 1913, the Gold Coast Geological Survey Department (GSD) was formed to undertake a mineral and geological survey of the colony (Allen, 1958). By 1915, seven gold mining companies had also sprung up in the Adansi area alone (Gold Coast Annual Report, 1936-37, cited in Ofosu-Mensah, 2011). The GSD had, by 1922 made the discovery of manganese, bauxite and diamond deposits and in 1925 begun mapping of the principal goldfields of the country. These discoveries marketed the mining potential of the Gold Coast which attracted more investors to the colony. Traditional authorities were still generally the grantors of concessions to the European miners and the sole managers of artisanal mining in the Gold Coast.

Criminalisation of traditional mining phase (1931 to 1958)

This period marked the beginning of the criminalisation of indigenous, small-scale gold mining and the edging out of Ghanaian gold miners from the industry. In 1932, the colonial office passed the Mercury Ordinance, banning the use of mercury in the extraction of gold in the mining process. Mercury was the

main agent used by the indigenous miners to extract gold from the ore and banning its use, according to Tsuma (2010), invariably meant that indigenous gold mining was effectively banned. This action has been seen from two perspectives by historians of mining in the Gold Coast: Akabzaa and Darimani (2001) saw this as an action to force indigenous people of Gold Coast to work in the European owned mines instead of their own individual mines. Terray (1974) on the other hand saw it as a policy of the colonialists in the Gold Coast to wrest control over these mineral-rich areas from the traditional institutions and authorities thereby weakening the control of chiefs and other local structures that described the strength of the African society at that time.

The take-over of the regulation and production of gold by the colonial state and European business combined with the improvement in the railway network led to the second great expansion of industrial gold mining in the Gold Coast. By 1941, there were fifteen gold mining companies in the Gold Coast producing 885,712 ounces per annum. But the Second World War (1939-1945) made it highly risky for merchant ships to cross the ocean. Attacks by enemy ships and aircraft became common and this slowed international trade. In addition, almost all human and production resources were redirected to the war effort, denying other sectors of the world economy resources for development. The result was a slump in the global economy and a subsequent decline in gold production. By 1955 for instance, there were only ten gold mining companies in the Gold Coast. Annual output was less than 800,000 ounces. By 1958, only seven companies were in operation (Allen, 1958).

Independent state's intervention phase (1958 to 1983)

The period 1958 to 1983 was marked by the euphoria of independence but also serious challenges to the mining sector. The mines had threatened to close down because of uncertainty and the socialist tendencies of the new government. To ensure that mines, which had considerable labour force, were not closed the government intervened by nationalising ownership of mineral resources and the sub-sector. This marked the beginning of state control of the mining sub-sector. The State Gold Mining Corporation (SGMC) was established in 1961 to acquire five gold mines (Bibiani, Tarkwa, Prestea, Konongo and Dunkwa mines) from British companies. The Ghana National Manganese Marketing Corporation (GNMMC) was established in 1961 to take over manganese operations from the African Manganese Group (AMG), a subsidiary of Union Carbide mining the manganese reserves found in Nsuta, around Tarkwa (Akabzaa & Darimani, 2001).

The government gave the reason for acquiring these mines as the protection of mine-related employment (Tsikata, 1997, cited in Akabzaa and Darimani, 2001). These actions were taken without much time given to the government to think through them and to adopt the best approach. In addition, because the management staff of the large mining companies was almost exclusively made of expatriates, there was not much local expertise to manage the mines.

Subsequently, the Government of Ghana on the 6th of December 1972, published a White Paper outlining the state's participation in the mining industry, issued a directive requesting that all mining companies operating in Ghana be

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reorganised as Ghanaian companies, and have head offices in the country (Hilson, 2002). The stipulations in the White Paper were legislated in 1972 by the Mining Operations Decree (NRCD 132) to take retrospective effect from 1st October, 1972. The white paper and NRCD 132 both required that fifty five percent of equity capital of each mining company be held by the Government and that dividend commensurate with this percentage be paid to the Government (Antwi, 1991, cited in Hilson, 2002). Akabzaa and Darimani (2001) argued that this was part of the reason why mining became unprofitable for the companies and that it signified the beginning of the decline in mining in Ghana. However, government explained that its objective was to create access to foreign currency generated by the mines (Tsikata, 1997).

The government interventions were often unrelated to efficiency or economic probity and this constrained investment and exploration (Akabzaa & Darimani, 2001). Production at the AGC for instance was 533,000 ounces in the early 1970s but output rapidly declined in the rest of that decade to 232,000 ounces by 1980 due to several reasons given by AngloGold Ashanti (2005). The reasons included exhaustion of known ore reserves, high taxes, inadequate foreign exchange, a tightly controlled economy and an overvalued currency making it difficult for AGC to buy spare parts or to invest in new plant or exploration (AngloGold Ashanti, 2005).

However, Balasa (1982) attributes the general decline in the Ghanaian economy between 1970 and 1980 not only to internal weaknesses alone. It was due also to external shocks like the quadrupling of world oil prices in 1973-1974,

the world recession of 1974-1975 and approximately 160 percent increase in world oil prices from 1978.

The above conditions compelled the Ghanaian Government to go to multilateral institutions such as the World Bank and IMF for support to the economy. This move necessitated the reorientation of the Ghanaian economy to the neoliberal economic model and its attendant Structural Adjustment Programmes (SAPs) in 1983.

Neoliberal reform phase (1983 to date)

The period 1983-1999 marked the beginning of the renaissance in the mining sub-sector of the Ghanaian economy, with the adoption of a liberal policy to the economy allowing the economy to recover from decline. The section discusses the Liberal Theory that informed the Neoliberal reforms embarked upon in Ghana during this period.

Liberal theory is premised on the philosophy that human freedom is best guaranteed through the operation of the market (Dean, 2008). Liberal theory's main characteristic is the doctrine of the jurisdiction of the state. The state is advocated to limit the intrusion of its power and authority into other areas of societal activities both at the individual and group level. That is, the state has to delimit its power and authority to its proper sphere so that it does not trespass. The state should stay out of the market because, as the theory postulates, there is economic efficiency when the market is left to operate on its own (Cooray, 2011).

Liberal theory however, also recognises the possibility and the risk of anarchy because humans cannot be guaranteed to be virtuous. That is why this theory does not advocate for stateless societies but rather societies with the state having rather limited reach for its power and a decentralisation of this power (Cooray, 2011). The presence of the state is to help limit the imperfections of the market and externalities because the market does not always function perfectly and there are negative externalities on other people who may not necessarily be related to the market.

It is with the neoliberal philosophy that the World Bank and the IMF prescribed conditions to developing countries, including Ghana that went to them for loans and financial support. These countries had to undertake Structural Adjustment Programmes (SAPs) during the early 1980s as a panacea for their ailing economies.

Structural Adjustment Programme in Ghana, 1983-1998

Structural adjustment programmes may be defined as policy responses to shocks to economies, carried out with the objective of regaining the pre-shock growth path of these economies (Balassa, 1982). These shocks can be of external or internal origins. The external shocks include increases in prices of essential commodities to the economy of a nation at the world market, especially crude oil. The internal shocks include inappropriate economic policies or political turmoil like revolutions. All these shocks affect the economic growth rates, balance of payment and inflation. These adjustments entail discrete, as compared to

marginal, changes in policies and efforts in response to discrete shocks to make the economies regain growth and to use resources more efficiently (Weissman, 1990; Balassa, 1982).

The objective of regaining growth implies that policies to alleviate poverty should emphasise improvement in productivity of the poor rather than to increase consumption through the provision of public services or subsidies. In general terms, investment is required to be prioritised over consumption in the adjustment (Balassa, 1982). Ghana went through a SAP beginning in 1983 because the economy had generally stagnated (Akabzaa & Darimani, 2001). This situation can be partly accounted for by both internal and external shocks experienced by the state as part of its development path.

This development path can be traced to policies adopted by the state after independence. The newly independent state expanded public services and established import-substitution state industries which still depended on imports of raw materials and capital goods. In addition, there were attempts at establishing mechanized state farms through the taxation of the narrow colonial era export base (gold, cocoa, timber). A combination of intermittent collapses of international commodity prices of exports (1964-66, 1970-73, 1979-83), hikes in the world price of crude oil (1974-1975) and the world recession (1975-1976) led to serious contraction of the Ghanaian economy (Kraus, 1991; Balassa, 1982).

The effects of the deteriorating economy on the society was widespread and massive (Kraus, 1991). From 1977 to 1983 the real wages of a government clerical worker and a senior manager fell 74 and 90 percent respectively. In

addition to all the challenges the economy was facing, in 1983 in the midst of drought and bush-fires, nearly a million Ghanaians were repatriated from Nigeria (Sowa, 2002).

The foreign debt arrears of over $400 million made new foreign aid unavailable without going to the IMF and the World Bank (Krause, 1991). The provision of support from these institutions and other Western Bilateral donors was conditioned upon the implementation of neoliberal economic reforms in Ghana. These recommendations, which were SAPs, were termed the Economic Recovery Programme (ERP). The Government of Ghana began the implementation of the ERP/SAP in 1983. Figure 1 shows selected indicators of the Ghanaian economy between 1975 and 1987.

From Figure 1, real GDP in Ghana had reduced from 100 per cent in 1975 to 89 per cent in 1983, the lowest in the period 1975 to 1987. However, four years into the implementation of the SAP/ERP, it had increased to 113. The production of cocoa decreased from 396,000 tons in 1975 to 159,000 tons in 1983, but had recovered to 219,000 tons in 1985, 230,000 tons in 1986 and 188,000 tons in 1987.

Figure 1 shows that most of the indicators which had deteriorated from 1975 to their lowest values in 1983 improved after the implementation of the ERP/SAP. From 1983 to 1991 growth in real GDP recovered by an average of 5.7 percent per year. Balance of payments switched from deficits to surpluses, facilitating external payments and a build-up of exchange reserves. The volume of imports expanded, by an average of 10 per cent per year during this period.

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Inflows of official grants and concessionary loans rose from the equivalent of less than 1 per cent of GDP in 1983 to about 10 per cent of GDP by 1990 (Barwa, 1995).
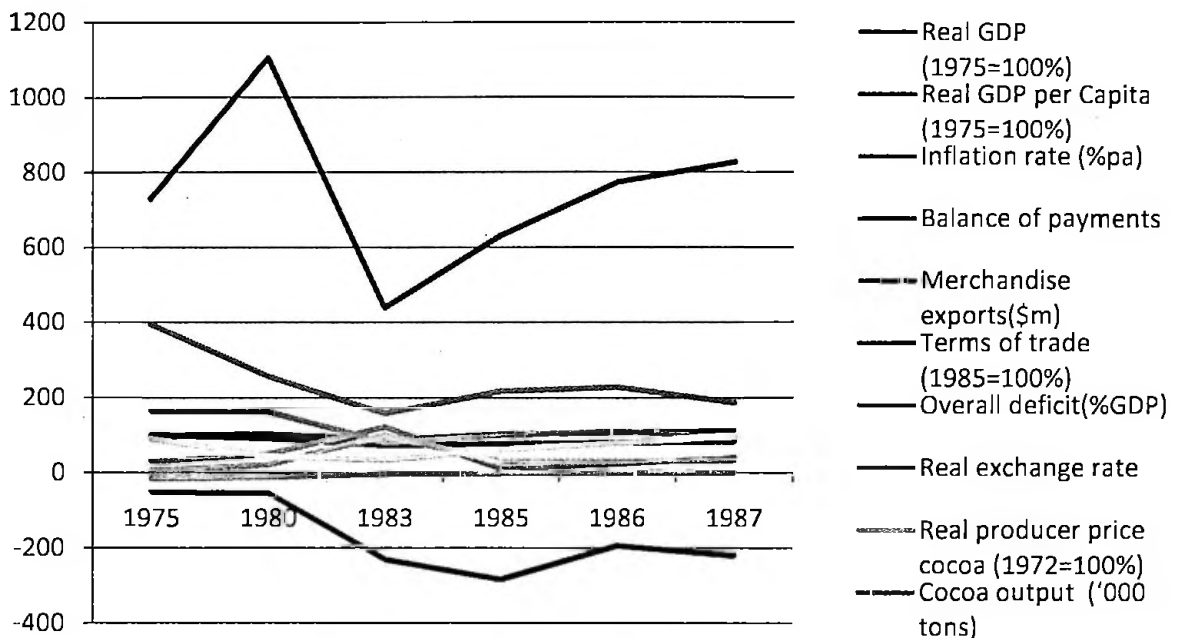
Figure 1: Selected economic indicators for Ghana, 1975 - 1987

Source: Loxley, 1990.

The apparent improvement in the Ghanaian economy after the ERP notwithstanding, the ERP was not without social problems. The fiscal austerity measures adopted under the ERP for instance, resulted in considerable difficulties for the people in general and the poor in particular, on whom the costs of adjustment fell rather disproportionately (UNDP, 1990, cited in Barwa, 1995). In response to the worsening poverty that accompanied the ERP, the government launched the Social Dimensions of Structural Adjustment (SDSA) programme. The objective was to assess the impact of the SAP over time on various population groups and to strengthen the institutional capacity of government to develop and maintain adequate statistical data bases on the social dimensions of

structural adjustments (Stewart & van der Geest, 1995; UNDP, 1990, cited in Barwa, 1995).

Findings from the SDSA led to the implementation of the Programme of Action to Mitigate the Social Cost of Adjustment (PAMSCAD). PAMSCAD sought to generate and accelerate employment in both rural and urban areas and to provide credit lines to small-scale enterprises through a revolving fund (Barwa, 1995; Government of Ghana, 1987).

Another consequence of the SAP has been argued to be its impact on land tenure systems in Ghana. The liberalisation of the mining sector resulted in a market-driven pressure on land in mineral rich areas which translated into higher values for land. Also, the neoliberal ideology of private ownership of productive forces including land as against public and communal property which it argues are not productive also put a lot of pressure on land tenure especially in mineral endowed areas (Manji, 2003, cited in Yankson, Asiedu & Yaro, 2009).

Structural Adjustment Programme and Mining Sub-Sector Development

The mining sub-sector of the Ghanaian economy, according to Stewart and van der Geest (1995), had a myriad of problems and it was one of the key areas targeted for the SAP in 1983. For instance, the sector had no clearly defined legal and fiscal regimes. Regulations governing mining were generally scattered in the Investment Code of Ghana (Government of Ghana, 1987). Government's intervention in the industry without recourse to economic efficiency had resulted in declining profits, investments and maintenance of the industry (UNDP, 1990,

cited in Barwa, 1995). The deterioration of basic supporting infrastructure such as roads, railways, ports, telecommunications and electricity also affected output and productivity in the sub-sector (Barning, 2005).

The mining sub-sector received priority attention unrivalled by any other sector in the country under the SAP of 1983 (Awudi, 2002). In the short term, the policy objective for the mining sector was to halt the decline in production, assist existing mines to obtain international funding for rehabilitating equipment and machinery, up-grade mine infrastructure, and improve management practices in the state-owned mines. The long term goal however, was to develop macro-economic and legislative measures to attract investments into exploration for new mining ventures and encourage expansion in existing mines. These reforms were to be private sector led (Barning, 2005).

In 1986, a new Minerals and Mining Law (PNDCL 153) solely for managing mining and related activities was promulgated. This law consolidated all the scattered regulations on mining into a single law. This law made a profound shift in ownership of minerals in the country, as for the first time ownership was vested in the President of the Republic on behalf of the people of Ghana. There were two addenda: Additional Profit Tax Law (PNDCL 122) of 1985 and Minerals (Royalties) Regulations (LI 1349) of 1987. In addition to these, minerals export duty was abolished with the Minerals Export Duty (Abolition) Act of 1987.

The Minerals Commission was also instituted by the Minerals Commission Law of 1986 (Act 450 of 1986) and the 1992 constitution of the

Republic of Ghana to regulate and manage mineral resources and co-ordinate policies in relation to minerals. There were several incentives in the reforms to attract FDI into the mining sector. For instance, corporate income tax, which stood at 50 – 55 per cent in 1975, was reduced to 45 per cent in 1986 and to 35 per cent in 1994. Royalty rate, which stood at six per cent of total value of minerals won in 1975, was reduced to three per cent in 1987.

Other duties such as mineral duty, import duty and foreign exchange tax were scrapped. Mining companies were exempted from payment of customs import duties on plant, machinery, equipment and accessories imported for use in mining. Mining company staff were also exempted from payment of income tax related to furnished accommodation at the mine site. Personal remittance quota for expatriate personnel was freed from any tax imposed for the transfer of external currency out of the country.

Apart from these, a holder of a mining lease could be permitted by the Bank of Ghana to retain a minimum of 25 percent of the operators' foreign exchange earnings in an external account for the purpose of acquiring equipment, spare parts, and raw materials and for dividend payment and remittance in respect of goods for expatriate personnel (Awudi, 2002). All these incentives were given to attract more FDI which would bring new and more advanced technology to boost productivity and production in the mines.

One of the new methods brought into Ghana for mining was the cyanide heap leach extraction method. This method is able to extract gold or silver in low grade ore and the efficiency of the extraction is up to 90 percent (Bleiwas, 2012).

This method involves the extraction of a soluble metal or salt from crushed ore with a weak cyanide solution sprinkled on a heap of the ore piled on an impervious sheet. The cyanide solution impregnated with the gold or silver is recycled through the pile until it is saturated and then directed to other facilities for the gold to be extracted.

After extraction of the gold from the cyanide solution, the solution is treated and recycled for the extraction of another set of heap (Bleiwas, 2012). The cyanide solution however, has to be discarded after some time and it is pumped into retaining dams to let the action of the environment decompose it into less harmful compounds. It is these retaining dams that sometimes fissure and release the harmful cyanide into streams polluting them and killing water life (Miller & Spoolman, 2008).

Consequences of Mining Sub-Sector Reforms

The reforms of the mining sub-sector resulted in improvement in the production levels of most of the minerals mined in Ghana, after a dip in production between 1983 and 1985 as shown in Figure 2.

The production levels of almost all the minerals shown in Table 2 started improving after some time lag between 1983 and 1984. The total value of minerals exported as a percentage of total national exports increased from 20.3 percent in 1983 to 45.48 percent in 1995 (Awudi, 2002).
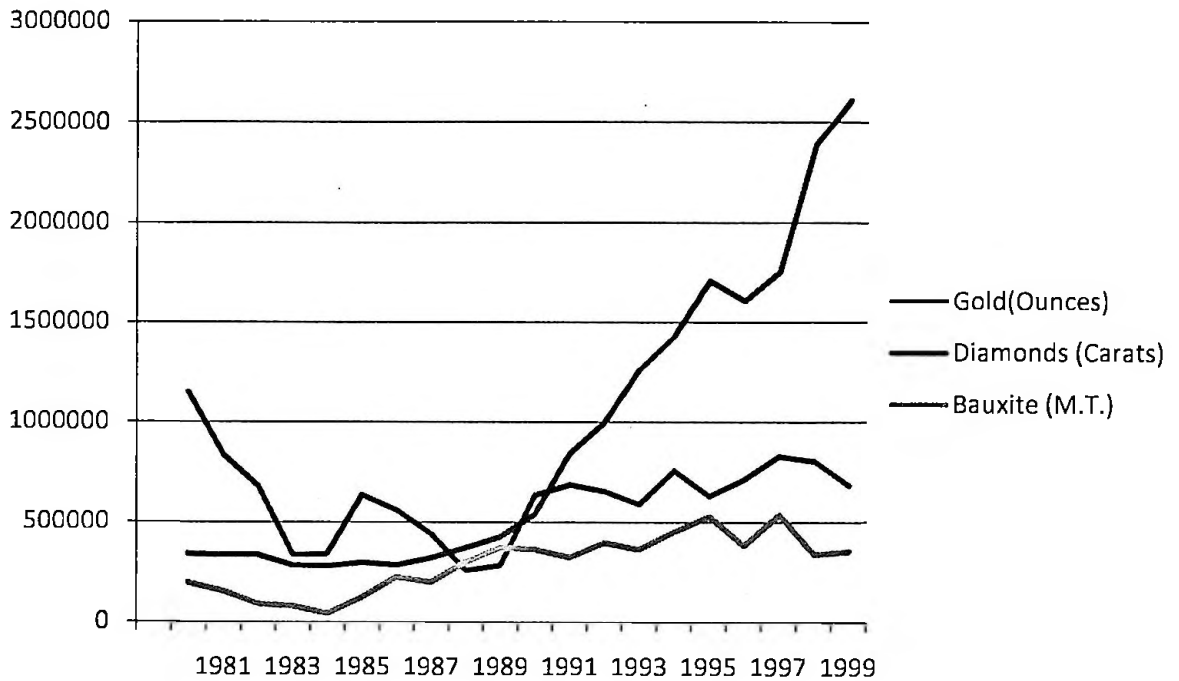
Figure 2: Production of selected minerals in Ghana, 1980-1999

Source: Barning (2005)

The reform effort in the mining sub-sector did not only affect large scale corporate mining, but also the small-scale sub-sector because the Small-scale Mining Law (PNDCL 218) was passed in 1987 to repeal the Mercury Ordinance of 1932 and regulate the small-scale mining sub-sector. The sub-sector has been improving production ever since as Figure 3 shows.

In addition to the contribution of the small-scale mining sector through its production levels, Amankwah and Anim-Sackey (2003) estimated that the registered small-scale gold and diamond mines employed 100,000 people with almost an equal number working illegally. The mining sub-sector has attracted nearly US$ 6 billion of direct foreign investment (FDI) as at the end of 2005 accounting for nearly 60 percent of FDI flows to Ghana (Akabzaa, 2009).
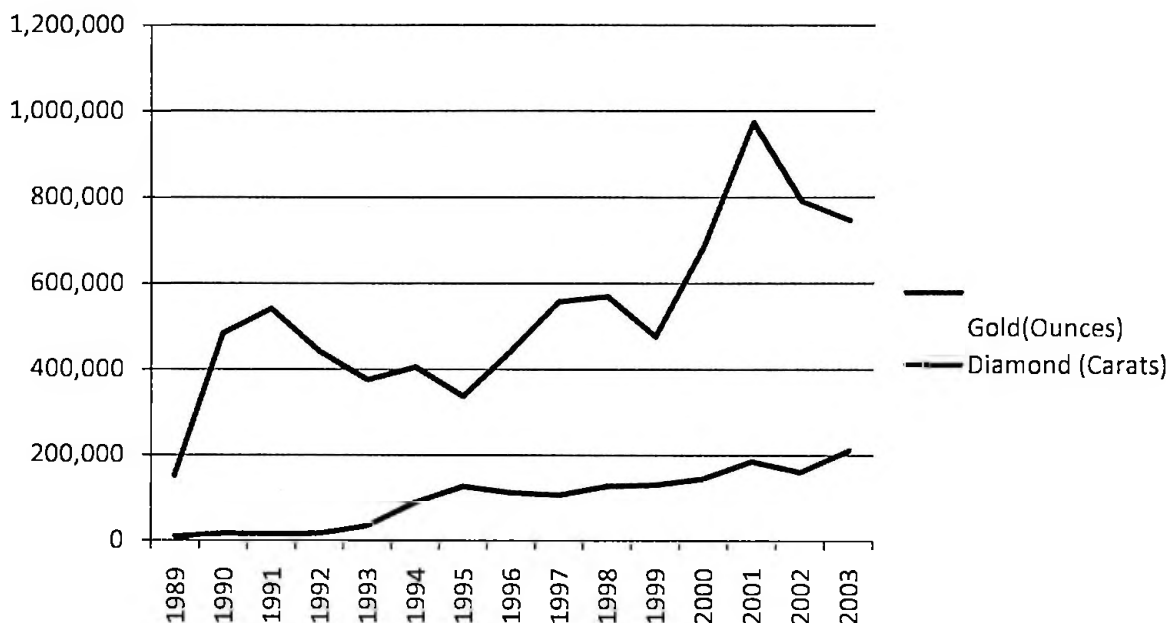
Figure 3: Small-Scale Mining Output in Ghana, 1989-1999

Source: Barning (2005); Tschakert & Singha (2007)

Gold production increased by 500 percent between 1983 and 2002 with earnings of over U$600 million. Gold was the most important mineral accounting for over 90 percent of total value of mineral exports, as much as 95 percent in 2007, largely due to gold price booms. Gold once again regained its position as the major foreign earner for Ghana replacing cocoa exports. Total annual mineral exports increased from US$115.3 million in 1984 to US$1.79 billion in 2007 (Akabzaa, 2009; Awudi, 2002).

Inspite of the huge investments and turnaround of production in mining, the contribution of mining to national development has either been below expectation or resulted in negative effects on particular segments of the national economy (Akabzaa, 2009; Awudi, 2002; Akabzaa & Darimani, 2001). The mining sector's share of corporate taxes in the country has been less than 2

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percent of total corporate taxes, compared to 29 percent for the financial sector, 10 percent for commerce and 16 percent for manufacturing (ISSER, 2004, cited in Akabzaa, 2009). World Bank (2003) notes that the various tax allowances given to mining means that corporate income tax payments by mining companies are minimal, despite their combined turnover in excess of US$600 million in 2002 (Akabzaa, 2009). The contribution of mining to the country's GDP was 6.44 percent in 2009 (Boon & Ababio, 2009).

The inadequate linkage between the mining sub-sector and the rest of the internal economy of Ghana has been discussed (Awudi, 2002). The labour-intensive underground gold mines have mostly been replaced by surface mining such as the Newmont Gold Ghana Limited's mine in the Asutifi district which is capital intensive and employs relatively few people.

State-owned mines that were privatised retrenched more than half their workforce, many of whom had to move into the informal sector, especially small-scale mining. The large-scale mining companies employed about 17,500 workers (Boon & Ababio, 2009). The mining sub-sector's share of total employment of the working age population was 0.7 per cent, compared to agriculture's 55 per cent, trade 18 per cent, manufacturing 12 per cent in 2000 (Ghana Statistical Service, 2000). While the employment of Ghanaians in the industry depreciated, the percentage of expatriate staff to Ghanaian senior staff increased from 8.8 per cent in 1994 to 13.3 per cent in 2007 (Akabzaa, 2009). This increasing trend has been described by the Member of Parliament for Obuasi as a 're colonialisation of the mining sector' through the recruitment of expatriates to replace Ghanaian

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workers (Daily Graphic, 2006:14). The gold mined is exported outside the country without refining or any secondary processing in Ghana to create value addition and employment opportunities locally (Awudi, 2002).

The environmental consequences of the expansion in mining as a result of the SAP in Ghana have been much discussed (Armah et al, 2010; Obiri, 2009; Awudi, 2002; Akabzaa & Darimani, 2001). National legislation in mining making Environmental Impact Assessment and Environmental Management Plans obligatory were only introduced in 1994 by the Environmental Protection Agency Act, 1994 (Act 490) followed by the Environmental Assessment Regulations, 1999 (LI 1652). The attempt at dealing with the environmental consequences of the mining reforms only began after 11 years of mining reforms.

Atmospheric dust particles are the major air quality issue in mining areas and studies have shown elevated dust particulate matter exceeding WHO and EPA (Ghana) standards (Awudi, 2002). This is believed to be the cause of high levels of upper respiratory tract infections and skin ailments in the area.

Water sources in these areas are polluted by sediments, chemicals and heavy metal oxides formed from mining. Vegetation clearance, removal of over burden rocks and mining of terraced areas exposed large surface areas of unconsolidated soils and waste rock dumps to wind gusts, rainfall based erosion and scour creating acidic and turbid runoffs into receiving waters and streams. Armah et al (2010) and Obiri (2009) found levels of both turbidity and concentrations of trace metals in water sources in the Tarkwa area for example to be above the WHO and EPA approved levels. They also found a positive

correlation between these levels and the distance of the source of water from the mining activity.

Spillages and leakages of poisonous cyanide solution and mineral processing waste waters into nearby water bodies, usually the only sources of drinking water for many communities have been documented (Awudi, 2002). These include Teberebe Goldfields Tarkwa cyanide spill in June 1996 into the Angonaben stream; Ghana Goldfield Ltd. Tarkwa cyanide spill in October 2001 into River Asuman and Huni River which are the only sources of drinking water for many villages and the Satellite Goldfields Limited, Tarkwa cyanide spill in November, 2001 into a wetland at Kubekro. In all these spillages, the companies were not sanctioned nor compensation paid to the communities who lost access to water and those who inadvertently drank the poisoned water and had to be hospitalised. However, an overflow of cyanide occurred within Newmont Ghana Gold Limited's Ahafo mine on October 8, 2009, resulting in the imposition of a fine of US$4.9 million on Newmont (Environment News Service, 2010).

Aubynn (1997) notes that surface mining activities requires vast areas of land and these have resulted in the alienation of large tracts of land from communities, depriving them of their access to land for livelihood activities. This results in increasing poverty among these people.

Another social effect of the development of the mining sub-sector in Ghana has been the relocation of communities to make way for mining. Akabzaa (2000) notes that, between 1990 and 1998, 14 communities (with a total population of 30,000) were displaced. The people who were displaced were

usually housed in housing units that were smaller in size as compared to their former houses, even though the building materials in the new housing units were better than the former ones. In addition, the resettled people usually lost access to fertile lands to farm.

The compensation packages also given to people whose residence or livelihood activities were relocated was also fraught with problems (FIAN, 2005). These included the under valuation of crops, inadequate survey of all crops and the neglect of the right of tenant farmers to compensation.

Summary

The mining sub-sector in Ghana has gone through changes in both the technology adapted and the key institutions in control of its governance over time. It moved from the pre colonial era where purely traditional authority regulated and controlled mining with indigenous people engaged in labour intensive mining activities. During the colonial era, there was a dichotomous traditional authority/colonial state regulated and controlled mining sub-sector with indigenous/foreign labour and capital employed in mining. In the newly independent state era, the state controlled and regulated mining, and indigenous labour and capital were applied in mining activities. In the current dispensation, the state regulates the mining sub-sector with private indigenous and foreign labour and capital controlling the developments in the sub-sector.

The current form of the mining sub-sector is largely as a result of the Structural Adjustment Programme as applied in Ghana from 1983. The reform

attracted high volumes of foreign direct investment. This notwithstanding, the net benefits of restructure continues to be debated because of the high social and environmental costs that have been observed. If the economic gain made is discounted for the social and environmental costs and tax exemptions, the net gain is not appreciable (World Bank, 2003; Awudi, 2002) and in some cases, negative.

CHAPTER THREE

MINING AND ENVIRONMENTAL GOVERNANCE IN GHANA

Introduction

This chapter discusses how Ghana's contemporary mining environmental governance structure has affected traditional land use, transfer and governing practises. It also examines the relationships among traditional practices, livelihoods, living conditions and the environment in local mining communities.

Customary Land Management

Land is an asset that has very broad economic, cultural, social and individual significance. DFID (2004) argues that land is the basis on which every structure can be erected and from which resources are exploited to sustain life. In view of this, societies have through various mechanisms managed the land and its resources to provide all services in a sustainable manner.

Customary lands are lands owned by stools, skins, families or clans usually held in trust by the chief, head of family, clan, or fetish priests for the benefit of members of that group (Sittie, 2006). All lands in the Gold Coast were managed under customary law regimes and access to lands and resources for all economic and social activities were managed accordingly.

Much as it would be desireable to classify customary land tenure with a single characterisation, Agbosu, Awumbila, Dowuona-Hammond and Tsikata

(2007) write that several factors, including the political arrangement of the ethnic group and the environment, shape the tenure system. It is not uncommon to find the same ethnic group, spread across several ecological zones having slight differences in tenure arrangements as one moves from one ecological zone to the other. It is therefore difficult to be able to classify the customary land tenure of the indigenous people in Ghana due to the differences in political organisations and ecological zones. However, it is possible to delineate generalities for various ethnic groupings.

The customary land tenure system of the Gold Coast was based on a communal system constituted by a set of rights of more than a single type (Quisumbing, Otsuka, Suyanto, Aidoo, & Payongayong, 2001). In this tenure system, the uncultivated land is owned by a commune, be it a community, a clan or a family, and managed by an authority like the chief, clan leader or family head. These people generally have a common descent or owe allegiance to a symbol of collective authority, like the 'stool' among the Akan of southern Ghana or the 'skin' among the Gonja of northern Ghana (Bentsi-Enchill, 1964; Ollenu, 1962; cited in Gyasi, 1994). However, the right to exclusively use a particular portion for any business activity is usually given to a household belonging to the group that owns the land. This is what is called usufruct rights to the land.

Strangers can access these communal lands through the transfer of rights of use by the land-owning community, usually through the leader, chief or occupant of the stool (Gyasi, 1994) and under specific conditions. There can either be monetary or other forms of payments either for the transfer of rights or

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as a reminder of the rights transferred. The right to access some products like firewood, mushrooms and other non-commercial resources on the land is usually available to every member of the community not necessarily part of the land owning group. There are two main kinds of arrangements under which the use of land for economic activities are found in the customary tenure system (Alhassan, 2006). The first is when the land is used freely without any money or kind paid for the use. The second arrangement is when there is payment either in cash or kind for rights to the land or ownership.

When members of the land owning commune, clan or family use the land there are no payments made. In other situations, land can be given as gifts to individuals for any kind of reason the land owning group agrees to as a basis for the transfer. These reasons can be an act of courage or benevolence or sometimes marriage (Runger, 2006).

In the use of land for payment, there are generally three forms: sharecropping, lease/rent and purchase. The sharecropping form is where the returns from the farm or the farm itself are shared equally between the land owner and the tenant. In other cases, the tenant clears the land and only plants annual crops and is entitled to all the products of the crops while the owner inter crops with perennial crops. The lease/rent arrangement involves the payment for the use of the land for a specified period of time. The lease arrangement usually covers longer periods of time, sometimes running into decades while rents are usually for a year or two. All these can be extended at the end of the period based on a new agreement. Purchase, involves the absolute transfer of ownership for a money

consideration (Gyasi, 1994). This ownership is usually referred to in statute as freehold.

Customary land rights systems have been criticised for its lack of incentive for making long-term investment in land improvements. This is because the land belongs to a group and no individual has the motivation to invest in its improvement. This would potentially promote land degradation (Migot-Adholla et al, 1991). This argument appears based on an ignorance of the philosophy of membership of a group in Africa and the customary tenure system. Being a member of a group imposes kinship relations among each other and investing in the land, even if not for oneself is at least for a kin. This is motivation for the people to invest. In addition, usufruct right is inherent and investment in land most likely translates to an heir. Therefore there are reasons for the usufructs to invest in long term improvement in land under the customary tenure system.

Another criticism is that customary tenure systems are not dynamic and resistant to change but this has been historically shown to be false as there is evidence to suggest that even in pre-colonial times, there were adaptation of new technology in farming (Bates 1986, cited in Migot-Adholla et al, 1991; Morgan 1969). These systems are usually able to prevail when the population size is relatively small and when the economic activities that the land is used for are mostly on subsistence basis, but in the face of increasing population and commercialisation of land use, there is scarcity of land in relation to labour and this forces an evolution in the communal ownership to individualised ownership.

In addition, in-migration also plays a significant role in the evolution of customary tenure. Quisumbing et al. (2001) note that it accelerates population growth rate; the introduction of different knowledge of resource management and property rights which engenders the need by local institutions either to facilitate or restrict these new practices accordingly.

Gyasi (1994) found communal ownership as the predominant tenure arrangement in Africa. The sale of land in most traditional societies are influenced by the African belief of land belonging to the dead, the living and the yet unborn, therefore living leaders should exercise the greatest caution not to sell the lands off as it will limit its availability to the unborn. It also implies that the living leaders are behaving irresponsibly because they have not been able to preserve what their responsible elders acquired for them and their descendants.

Whoever owns the land- family, clan, individual- the tenure of the land is managed within the framework of chieftaincy which signifies the identity of the community held either in a stool, skin or Tindaana. This means that though different groups of people might have owned the land, the actual use to which these lands could be used were within a framework organised and maintained by traditional institutions. Traditional authorities represented their societies in terms of political organisation, security, development and religious activities. Because minerals found in the land were seen as blessings from the gods and ancestors, the discovery of gold in a piece of land in the traditional area, notwithstanding the ownership of the land, had to be reported to the chief who either performed rituals to permit mining or asked an appropriate priest to do so.

The stool, skin or Tindaana therefore held residual rights in minerals found in lineage-owned land. Generally with regards to traditional mining, the land owning group's leadership organised how and the conditions under which people, whether family members or strangers, had access to land to prospect or mine. Mining was usually done by people in the off farm season as farming was the primary occupation in these societies and mining was a secondary activity. Also, lands that were not used for farming were the only lands allowed to be mined (Tsuma, 2010).

According to Dumett (1980, cited in Clark, 1999), the mode of production in areas around the Tarkwa area were predominantly family or kin labour as against that found in the Asante areas where slave labour was predominantly used (Terray, 1975, cited in Clark, 1999). In all these modes of customary production, an amount either in gold or cash was sent to the chieftaincy institution under whose jurisdiction the mining was occurring partly to keep the institution in a respectable status and the residual rights chieftaincy had in mineral resources found in the land.

This is how land was generally managed in the Gold Coast until 1878 when the first gold concession was given to a group of Europeans by the traditional authority in Tarkwa (Allen, 1958). When the gold mining business was regulated and organised by traditional authority, the Gold Coast accounted for about 35.5 % of total world gold output between 1493 and 1600 (World Bank, 1992, cited in Akabzaa & Darimani, 2001).

The performance of the gold mining business in the Gold Coast, the granting of concessions to European companies in the Gold Coast and the success stories of mining in South Africa encouraged a stream of prospectors and businessmen into the Gold Coast to negotiate grants of concessions. The rush and the confusion were such as to prompt the Legislative Council of the colonial state to draft the Crown Lands Ordinance in 1894 and the Land Bill of 1897 to control it (Ofosu-Mensah, 2011; Ubink & Amanor, 2009). These marked the beginning of the attempt by the modern state to exert control over the land tenure in the Gold Coast to align it to the demands of the modern and national economy.

The Crown Lands Ordinance was passed to bring all lands in the colony classified as waste land, forests and minerals under the Crown's authority in 1894. This was seen by the Aborigines Rights Protection Society (ARPS) as interference in traditional matters. However, in arguing their case, they stated that the action was unconstitutional since the Gold Coast Colony was established by a treaty not by conquest by the British (Ubink & Amanor, 2009). The British Mercantile in the Gold Coast also resisted it on the grounds that it was seen as interference of the state in business and that private interests should be allowed to determine the conditions of the market. This ordinance was then withdrawn and in 1897, the Land Bill was introduced to bring all lands classified as waste lands under the colonial government and which sought to recognise the rights of occupants on those lands as against that of chiefs (Bourret, 1960). This attempt was resisted by the Aborigines Rights Protection Society (ARPS) by arguing that there were no waste lands in the Gold Coast and all lands were owned by

someone. The ARPS sent a delegation to England in 1898 to petition against its passage after the Governor of the colony had refused to suspend the Bill. The delegation succeeded in getting the Lands Bill disallowed (Ofosu-Appiah, 1977).

In 1900, the colonial legislature passed the Concessions Ordinance which only required that all concessions granted by the chiefs should be validated by the Supreme Court of the Gold Coast (Bourret, 1960). Botchway (1998) notes that the Ordinance now recognised the ownership of the land of the colony as that of the indigenous people and that they were free to contract the lands out to concessionaires for mining. The conditions upon which the Supreme Court was to ascertain the validity of the contract, according to Botchway (1998), were: the grants had to be between two authorised parties who understood its terms; the grants must not have been fraudulent and the grants must reasonably protect the customary rights of the people with respect to agricultural cultivation, firewood collection, hunting and snaring of game.

The Ordinance had two main weaknesses. First, it had no provisions requiring that the mining had to be done with minimal negative effects on the environment. This implied that indigenous people could not seek redress for environmental impacts. Second, the term "authorised persons to the agreement" as used in the legislation referred mainly to the proper native vested with authority to grant land, which was usually considered to be the chief. However, under customary law, even though the chief exercised political jurisdiction over all the land under him, the ownership of the lands were not so. Under the customary law,

landowners were usually the chief and his elders or family or clan heads or the person holding the usufructuary interest over specific areas of land.

The combined effect of these two weaknesses was that in some cases, people lost their access to lands because the chief, who might not have owned the land, had given it off as a concession. The narrow definition of land ownership was due to limited understanding of customary law by the colonial administrators. In other instances, when the mining activities resulted in the degradation of neighbouring lands, there were no provisions under the law for owners whose land had been negatively affected to seek relief.

The Concessions Ordinance of 1939 was passed to repeal that of 1900. Botchway (1998) surmises that there was not much difference between the two ordinances except that the ordinance of 1939 excluded any lease, concession or assignment of rights or title or interest in minerals within a town or village (Concessions Ordinance of 1939, Cap. 136, § 2). These conditions of poor environmental mining and social disruptions continued from the ordinance of 1900 through that of 1939 until the Concessions Act of 1962 of the parliament of the newly independent Ghana was passed to repeal the 1939 Ordinance.

The Concessions Act of 1962 though did not affect the then existing concessions, it however empowered the variation of the agreement of the concessions by the parties with the consent of the Minister responsible for mines. In addition, the Minister could cancel any existing concession on the grounds that: there had been a breach of a term of the concession; the holder of a concession unreasonably withheld consent to a variation of the concession's terms which had

become oppressive due to a change in economic conditions; the land specified in the concession had not been developed or used in accordance with the grant's objective; the legally enforceable limits for the area of the concession had been exceeded. In spite of the Minister's discretionary power to exercise in correcting any contract to be fair to everyone affected by the contract and activities emanating there from and the fact that there were public manifestations of dissatisfaction with the conditions of concession grants, Botchway (1998) could not find any record that the Minister ever exercised this power.

In order for the government of Ghana to get around the problems inherent in traditional authority giving out lands for mining concessions and to bring the control of this access under government, the Administration of Lands Act, Act 123 of 1962 and State Lands Act, Act 125 of 1962 were passed to authorise the state to grant lands for any activity deemed to be in the public interest, including mining. These Acts authorised the President of Ghana to declare any land owned by stools, families or individuals as state lands once its use was deemed to be in the public interest. In this situation, the previous owners of the land lost all their rights to the land except that which was given by the state. The only right guaranteed in the law for the original owners was to be paid adequate and prompt compensation for losing their right to the land.

In an attempt to streamline the granting of concessions, the social effects, the actual mining and its impact on the environment and also to consolidate all the regulations on mining into one law, the Minerals and Mining law of 1986 was passed. One of the major departures of this law from the earlier ordinances on

concessions was that concessions for mines were to be applied for and given out by the government, not the chiefs. Twenty years after the passage of the Minerals and Mining Law of 1986, a new Minerals and Mining Law was passed in 2006 to replace that of 1986 with no modifications in the conditions under which lands are released for mining. These lands acquired by the state are owned by the state only for as long as there is a public interest in the use of the land, as soon as this use is outmoded, the state either has to declare another public interest use or take steps to divest its interest in the land through a public process to the original owners or in the event that they cannot buy it, to any member of the Ghanaian public.

In Ghana, there are several forms of land ownership. There are generally four types of ownership regimes. These are: stool lands vested in chiefs; family lands belonging to clans; private lands belonging to individuals; and public lands. Private ownership of land can be acquired by way of a grant, sale, gift or marriage (Sittie, 2006). In theory, the state of Ghana has no land; it only expropriates the lands for specific purposes. Owing to the inability of the state to expropriate lands every time there is a need for land for any development activity, government often pleads with chiefs to release lands for development (Sennah, 2011).

The land market, land rights and processes for accessing land for any activity in Ghana, have been influenced by the political, environmental and economic condition of the country and from being part of the global village. However, these influences have not resulted in an entirely perfect system devoid of complexity, corruption and abuse of human rights.

Land makes up nearly three quarters of the wealth of developing countries (De Soto, 2000, cited in Blocher, 2006) and Ghana is not an exception. However, land management in Ghana is complex as the tenure system is shaped by both customary land laws and the British conveyance system. This complexity is also a reflection of the legal pluralistic society (Larbi, 1995 cited in Yankson, et al, 2009) and the government of Ghana noting land as the single most valuable asset and the foundation of the national resource base (Ministry of Lands and Forestry, 1999). In order to make land even more relevant for the development of the nation, Government introduced the National Land Policy (NLP).

The NLP sought to ensure that every socio-economic activity is consistent with sound land use through sustainable land use planning in the long-term national interest; Facilitate equitable access to and security of tenure of land; Instil order and discipline into the land market to curb the incidence of land encroachment, unapproved development schemes, multiple or illegal land sales, land speculation and other forms of land racketeering. In 2003, to make the NLP operational, the Land Administration Project (LAP) was introduced. This project was motivated by problems encountered in land administration in Ghana including:

'the general indiscipline in the land market; indeterminate boundaries of customarily owned land; compulsory acquisition by government of large tracts of land which were not being utilized; inadequate security of tenure due to conflicts of interest; difficult accessibility of land; a weak land administration system; lack of consultation with land owners and chiefs in decision-making for land allocation; lack of

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consultation, coordination and cooperation among land development agencies; and inadequate consultation with neighbouring countries in the management of international borders' (Yankson et al, 2009: 9).

The LAP reform attempts to reorganise the land tenure system for an integrated property system that combines custom and statute to ensure efficiency in land delivery (Blocher, 2006). Land use decisions should be arrived at through a process that respects the principle of prior informed consent arrived at through democratic decision making processes that account for the rights and interests of communities and other stakeholders, while still allowing for the negotiated use of renewable and non-renewable resources. This should equally apply to negotiations for access to land used by people whose rights to that land are not formally recognized by the state and who do not have the capacity to defend those rights. These are some of the benchmarks that the current LAP is trying to achieve. These reforms are part of the attempt by stakeholders involved and affected by environmental resource use to shift the decision making and action on the resource from the predominantly government perspective to a governance regime.

Access to land in Ghana and its problems

Where land is required to secure the development or utilization of a mineral resource, the President may acquire the land or authorize its occupation and use under an applicable enactment for the time being in force (Minerals and Mining Act, 2006 section 2).

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Act 703 of 2006 vests ownership of minerals in the President when they are found. This means that before a mineral is found in someone's land the state has no direct control over the land. Who then has the authority to license exploration for minerals in someone's property? The parts of the law that treat the issue of prospecting include the following subsections:

Act 703 sections 102 (1-3):

authorises an authorized officer of the Division to enter at a reasonable time a reconnaissance, prospecting, or mining area to:

(a) break up the surface of land in the area for the purpose of ascertaining the rocks or minerals in or under the land,

(b) take samples or specimen of rocks, ore or concentrates, tailings or minerals situated in an area under a mineral right for inspection or assay,

(f) enter into or upon land through which it may be necessary to pass for the purpose of a survey,

Subsections (a) and *(b)* talk about areas where there is a reconnaissance, exploration or mining license in place. Usually, the land is acquired by the state before mining license is issued. For *subsection (f)*, the authority of the state is to pass through the said land not to engage in any other activity. But for the reconnaissance and prospecting licenses, these are given without acquisition of the land and, therefore, technically the state and agents acting on its behalf trespass on people's property.

The subsequent issue is: can the owner of any land refuse to allow anyone to prospect for minerals on his/her land? There has been little discussion or action in this direction. The usual practice is people suddenly find notices of an exploration in the area or they just go to their farms and encounter people digging geological trenches. When the local people confront the diggers, the diggers usually tell the farmers they have a licence from government to do prospecting. This is an affront to the concept of Free Prior Informed Consent (FPIC) forming part of the basis of environmental governance. If by chance a mineral is discovered in a land owned by a private person without his/her consent, can it be argued that because the explorer had no permission to explore, the minerals were found in error and therefore technically, not found and therefore government cannot claim ownership?

Another complication in the practise of holding and exercising property rights is that, in practice, property rights are often held collectively or communally. This therefore requires that enforcing some of the rights that one has, has to be exercised with a consensus of the community achieved sometime after an elaborate and difficult process or processes have been employed. The process of achieving consensus is often times very expensive and may not be affordable. If the right thing has to be done regarding making decisions as broad based as is required, then resources have to be found to ensure that it is done.

However, if these resources cannot be found, there are two options left: the first is to do nothing at all as arriving at the decision to change a situation cannot be funded. The second option is to allow the state, in its wisdom and

within the constraints of its resources, to adopt a process of arriving at the decision on behalf of the society. The risk involved here is that if there is agency capture of the implementing institution, then the final decision would be to serve the interest of the powerful person or persons.

Field (1997) gives three conditions under which property rights are likely to work:

(a)   Property rights must be well defined, enforceable and transferrable;

(b)   There must be a reasonably efficient and competitive system for interested parties to come together to negotiate how the rights will be used;

(c)   There must be a set of markets to allow private owners to capture all the social values associated with the use of the asset.

It is usually required that there is an authority to ensure that these conditions are prevailing in any society to allow the rights that people have to be enjoyed by them and dispensed off as they so wish. Swallow and Bromley (1995), (cited in Swallow, 1997), noted that it was difficult to implement rights and there must be a central authority system that represents the broader society and able to interpret its aims, judge between different rights and duties of competing groups and interests, and enforce sanctions on the system.

In Ghana, this centralising authority is generally the state, often times represented by its agencies such as the EPA and Mines department of the MINCOM. The influence of the power and authority of the state in rural areas is weak and it is generally in these areas that most of the natural resources are. There

is complexity of authority in local governance. There are various kinds of authority working within the local governance arena and when it comes to the environment, various forms of authority shape people's actions in relation to the environment. Traditional institutions, because of their organisation and pervasiveness, then become more prominent in coordinating the resource access rules and contracts-especially for the local people. They regulate virtually all public life and access to and the tenure of property rights and they become the most important institution as far as environmental governance is concerned. Therefore, their recognition by the state in both law and practise is exceptionally important in allowing them to organise more resources, improve their legitimacy and their authority to govern or assist in governing property rights especially in rural areas where the state agencies are particularly weak.

Legal Pluralism in Gold Mining and Land Resource Use

Bavinck (2005: 811) notes that in the "post-colonial societies, who have witnessed an imposition of colonial law on earlier law forms, legal pluralism is particularly rich in contrast". Laws are one of the three essential components of institutions and when law is replaced with institutions in the above quotation, in the post-colonial and post-independence societies, they witnessed an imposition of colonial and modern institutions on earlier forms and this led to institutional duality. This results in a tense situation where different institutions manage identical situations. The ability of the institutional structure in the society to

manage and adapt to the conditions of tension will determine whether development, open conflict or fragile calmness will result.

The beginning of colonialism was also the beginning of dual systems of legal order in Ghana, then Gold Coast Colony. The British intended to exert sole legal authority in the colony, but they realised there were not enough British judges to maintain law and order; therefore they allowed the chief to continue with this one main original function (Gocking, 2005).

In 1883, the Governor of Gold Coast, Governor Rowe enacted the Supreme Court Ordinance that created native tribunals chaired by chiefs and empowered British courts to hear appeals filed against decisions made by the native tribunals. There was a first attempt to bring the traditional court into and under the jurisdiction of British law in 1878 but this was never implemented for fear of protests from chiefs because they were not going to be remunerated. It was this legislation that was modified into the 1883 law. The 1883 law was motivated by the boom of the gold trade in the Tarkwa traditional area under the tutelage of traditional authorities which made it impossible for the colonial administration not to recognise traditional authority. The provision in the legislation that people could appeal to the British court against the decisions of the native courts sought to and succeeded in creating the impression that British law was superior to native law until in 1887 when the Supreme Court ruled that the Supreme Court ordinance had "in no way impaired the judicial powers of native kings and chiefs, and that...[no] other ordinance had taken them away" restored chiefly power (Gocking, 2005).

The creation of a Secretariat of Native Affairs in 1902 was another attempt by the colonial administration to bring the authority of traditional institutions under the crown. This action was an attempt to shift the source of authority of chiefs from an inherent jurisdiction to the crown. This was a contradiction because the institutions were existing and authoritative even before the first European set foot on the coast of the Gold Coast. The Sikadwa (Golden Stool) of the Asantes was the source of authority of the King, not the crown.

The passage of a new native jurisdiction bill in 1910 extended chiefly courts to the entire colony, defined their jurisdiction, and placed these native tribunals under the supervision of the district commissioners. Appeals from them went first to the district commissioner's court or to the provincial commissioner's court if land was in dispute (Gocking, 2005).

The attempt at assimilating chiefs into the colonial system prompted a response from the educated elite, who argued that this action was a divide and rule policy. In 1916 three chiefs were appointed to the Legislative Council and this further inflamed passions.

In 1925, three Provincial Councils of head chiefs were established and given the right to elect six of their members to sit on the expanded Legislative Council and in 1927 a new Native Administration Ordinance was passed to strengthen the powers of head chiefs by giving their courts more civil and criminal jurisdiction and which gave the responsibility of hearing stool disputes to them. There was opposition from the educated Gold Coast elite because they felt

these actions were an assimilation of traditional authorities by the state. This opposition was led by the Gold Coast Aborigines' Rights Protection Society.

Due to the growing momentum of the opposition to the assimilation of traditional authority, the Native Courts Ordinance of 1944 decreased the number of native tribunals and more than 50 percent were no longer presided over by chiefs (Gocking, 2005). Then in the early 1950s, the British government had to make the decision to abandon the policy of indirect rule for local elected government. Local authorities were to have chiefs as presidents, but the post was merely ceremonial and this marked the beginning of yet another period of plurality of governance institutions.

In the area of environmental governance and in the specific area of mining governance, efforts were also made to address emerging issues. The study now attempts to analyse the two systems of governance in the mining management and the dynamics within the sub-sector driving its change.

Statutory Roles of the Modern Institutions of Mining

The modern institutional framework of mining management in Ghana is now premised largely on two sources of law. The major source of law underlying the modern framework is the 1992 Constitution of the Republic of Ghana. The second source is the Mineral and Mining Law, 2006, Act 703 of 2006.

The State has as a result of these authorities conferred on it, built or permitted the creation and development of both organisations and authorities with legal instruments to be able to exploit the mineral resources of the country. The

Parliament of the Republic of Ghana enacts all laws and legislative instruments in Ghana concerning any issue of national importance including regulations in the mining sub-sector.

In the President is vested the right of access and extraction of any mineral in Ghana. However, this power is usually delegated to the sector Minister responsible for Mines in Ghana to exercise, within defined limits, powers relating to the transfer, amendment, renewal, cancellation and surrender of mineral rights. These rights are expressed in the form of a license, granted after an application.

The powers conferred upon the Minister is contingent upon the advice of the Minerals Commission, set up under the Ministry of Lands and Natural Resources, by the Minerals Commission Law of 1993, Act 450, to regulate and manage the utilization of mineral resources and co-ordinate policies in relation to minerals. The types of licenses granted under Act 703 of 2006 include: Reconnaissance; Prospecting; Restricted reconnaissance; Restricted prospecting; Mining lease and restricted mining lease.

With regard to the reconnaissance, restricted reconnaissance, prospecting and restricted prospection licenses, the law does not give the Commission and the license holder the right to enter any land without the explicit consent of the owner but the rights of these owners are often abused in these circumstances. This is so because the law gives the state eminent domain to acquire any piece of land in the public interest. There is a laid down procedure for this acquisition and in all these cases, the land is not acquired before the licenses are approved. In general, the land is acquired when the mining license is to be approved.

The Ministry of Lands and Natural Resources is organised into three sub-sectors: Lands; Forestry; and Mining. Each of these sub-sectors is represented by a commission. The mining sub-sector is represented by the Minerals Commission (MINCOM). MINCOM has five departments (Planning and policy analysis; Legal; Small-scale mining; Finance and administration; and Monitoring and Evaluation) and one division (Inspectorate Division).

The Inspectorate Division is responsible for instituting and enforcing health, safety and environmental standards in mines. It also ensures that mining companies and all mining related activities comply with Ghana's mining and mineral laws through effective monitoring.

The Small-scale Mining Department of the MINCOM was set up by the Small-Scale Gold Mining Law 1989 (PNDCL 218) to regularise the activities of all small-scale miners in Ghana and to provide support to the sub-sector. The department was set up to improve sustainability and reduce smuggling within the small-scale mining operations (Hilson, 2002). The subsector was estimated to directly employ 500,000 people in 2009 and from a production level of 2.2 percent of total gold in Ghana in 1989, it had risen to 18 percent in 2009. In 2009, 100 percent of all diamond produced in Ghana also came from SSM.

The Lands Commission of the Ministry maintains a registry of exploration licences and mining leases and participates in the examination of new licence applications. The Valuation Board of the Lands Commission provides rates for valuation of property affected by mining and any other operations.

The Geological Survey Department of the Ministry was established by the Survey Act, Act 127 of 1962 to, among other things, conduct geological mapping, research and investigations to provide reliable and up-to-date geological information for economic activities like mining, quarrying and general national development and also keeps records of the country's geo-scientific data.

Act 703: 18; 1, 2 requires that approvals and permits are obtained from the Forestry Commission (FC) and the Environmental Protection Agency (EPA) for the protection of natural resources, public health, and the environment before any mining license is granted. The Forestry Commission of the Ministry of Lands and Natural Resources, established by the Forestry Commission Act of 1999(Act 571 of 1999), is responsible for the management of the country's forest. The department is supposed to work with the Minerals Commission in granting exploration licences and mining leases to ensure a balance between mineral extraction and sustainable forest resources. When there is any mining project that is deemed to have an effect on the forest resource of the country, the proponent would have to obtain a license from the Commission before the final mining lease is approved by the MINCOM.

The EPA was set up by the Environmental Protection Agency Law of 1993, (Act 490) with the mandate to conduct and promote studies, investigations, surveys, research and analysis relating to the improvement of the country's environment and to maintain sound ecological system. The EPA moderates the interaction between the demands of economic growth and the need to protect the country's environment, ensuring environmentally sound resource extraction. This

Agency has regional offices in all ten regions of the country and in two districts. It conducts periodic checks on mining activities in Ghana to ensure that they are consistent with standards on environmental quality. They investigate complaints concerning environmental quality from the citizenry and have the power to enter any mining company's premises to conduct investigations concerning environmental quality and to close down any mine on environmental grounds.

An applicable requirement from the EPA before mining operations is the Environmental Assessment Regulations of 1999, LI 1652 which regulates an environmental permit process. The environmental permit process goes through a systematic evaluation of the objectives and alternatives of the mining activities and their impact on the environment. LI 1652 enjoins the EPA to receive a full environmental impact statement for the approval of a mining license. The issues taken into consideration by the EPA in determining the process include:

> *the location, size and likely output of the undertaking; the technology intended to be used; the concerns of the general public, if any, and in particular concerns of immediate residents if any; land use; and any other factors of relevance to the particular undertaking to which the application relates* (LI 1652 section 5 subsection 1(a) to (e).

An environmental permit is granted for a period of 18 months and once the operations start, an annual environmental report is required to be submitted to the EPA 12 months after commencement and every subsequent 12 months. The annual environmental report is in a form and contains such information as the EPA directs. After the prospective miner has satisfied all the preliminary

requirements, the Minerals Commission then recommends to the Minister responsible for mining for a mining lease to be issued. An additional incentive in the Mineral and Mining Law 2006, including all the incentives in the previous Mineral and Mining Law, 1986, is the Stability Agreements (SA) entered into between the State and the mining concerns to protect the holder of a mineral right for a period of up to 15 years, from any adverse effects of future changes in law that are capable of imposing a huge financial burden on the holder, however, the agreement is subject to parliamentary approval.

After the approval of a mineral license, the holder is also required to comply with applicable regulation made under any other enactment for the protection of the environment that relates to exploitation of minerals. Some of the applicable laws and regulations include: Constitution, 1992; Additional Profits Tax Law 1985 (PNDCL 122); Diamonds Decree 1972 (NRCD 32); Diamonds [Amendment] Law 1989 (PNDCL 159); Gold Mining Products Protection Ordinance (Cap 149) of 1905; Mercury Law 1989 (PNDCL 217); Minerals and Mining Amendment Act 1994 (Act 475); Precious Minerals Marketing Corporation Law 1989 (PNDCL 219); Rivers Ordinance (Cap 226); Small-Scale Gold Mining Law 1989 (PNDCL 218); and State Gold Mining Corporation [Acquisition of Assets Amendment] Decree 1968 (NLCD 218)(Subsidiary).

One other very important institution concerned with mining in Ghana is the Ghana Chamber of Mines. It is an association of operating mines which promotes mining interests and communicates and exchanges information on mining matters with government and other public and private bodies. It also

lobbies for improvements in mining legislation and negotiates miners' compensation and benefits with the Ghana National Mine Workers Union of the Ghana Trades Union Congress.

The Precious Minerals Marketing Company Limited was established in 1963 as Ghana Diamond Marketing Board charged with the responsibility for the purchase and marketing of diamonds mined in Ghana. The Precious Minerals Marketing Company Limited (PMMC) in its current form was set up in 2000 by Act 461(Statutory Corporations Conversion to Companies Act, 2000). Its mission is to buy from small-scale miners and sell precious minerals such as diamond and gold profitably, so as to enhance Ghana's foreign exchange earnings from this sector as well as promote the development of such minerals and the jewellery industry in the country (PMMC, 2006). The company operates in all the small-scale gold and diamond producing areas in Ghana and has offices or agencies in Accra, Kumasi, Tarkwa, Bolgatanga and Wa. For its jewellery operations, the company operates two shops in Accra and one in Kumasi (PMMC, 2006).

Analysis of the institutional interactions

With all these institutions set up to manage specific aspects of mining in the country, they are bound to link with each other somehow to ensure improved governance in the sector. The statutorily defined roles of these various institutions notwithstanding, Akabzaa and Darimani (2001), note that there are both

challenges and opportunities with the functioning of these individual institutions and cross-sectoral linkages among these institutions.

One challenge is that thematic responsibilities often fall under several different Ministries, Departments and Agencies (MDAs) and implementing these functions can lead to wastage or sometimes, competition. For instance, while the Minerals Commission (MINCOM), the major coordinating agency for mining in Ghana, is also responsible for enforcing mining technologies that are environmentally sound, the EPA's role is to ensure that all economic activities, including mining comply with environmental standards. This creates overlap and duplication, which in turn affects the effective monitoring and implementation of standards in the mines. From a governance perspective, the fragmentation easily results in governance dis-junctures (Galaz, Olsson, Hahn, Folke & Svedin, 2008).

Another problem with the environmental governance structure has to do with the effectiveness of the EPA. This agency has been constantly moved from one ministry to another. This affects the line of control and resources of the agency and its outlook of the environment. In 1974 the then Council was placed under the Ministry of Finance and Economic Planning. In 1981 it was transferred to the Ministry of Health and to Ministry of Local Government and Rural Development in 1982. When the new Ministry of Environment, Science and Technology was created, the EPA was sent there and then to Ministry of Local Government, Rural Development and Environment in 2004 and then back to the Ministry of Environment, Science and Technology in 2009 (EPA, 2011).

The EPA has weaknesses that affect its effectiveness. They are limited in, for instance, their capacity to set standards to regulate mining activities. They do not have adequate human resources and technology to do all they need to. Sometimes they are not able to enforce compliance because they do not even have standards in place etc. For instance, the Agency has stated that they do not have a standard on cyanide, a very toxic chemical used in the extraction of gold in the Heap Leach Method, used by most mining companies in Ghana (Kumi, 2005).

Another key issue is the ability of the EPA to protect the forestry sector as part of the environment. However, because there is a commission responsible for and with the technical expertise to manage forests sustainably, when there is a perceived impact of mining on forests, the proponent is referred to the Forestry Commission to obtain a permit before the environmental permit is granted. The Forestry Commission also has to endorse the application for the mining activity noting that it will not lead to damage to any forest reserve. MWH (2006) acknowledges that the livelihood of Ghanaians is highly dependent on natural resources, like forests. These resources are being overexploited by non-sustainable exploitation including mining activities and its cumulative effect endangers Ghana's economic development and social well-being. The degradation of Ghana's renewable natural resources amounts to six percent of GDP, if considering only five natural resources such as agriculture, fresh water, forestry, wildlife and marine fisheries (MWH, 2006). One would have thought that protection and expansion of the reserves of these resources and for that

matter, forests, which are renewable, would be pursued with all the seriousness and dispatch it deserves.

In Ghana, mining companies are moving into protected areas including the Subri River Forest Reserve, a globally significant bio-diversity area and a watershed for major rivers such as the Bonsa and Pra (Asad, 2003). Other forest reserves under threat are: the Supuma Shelterbelt, Opon Mansi, Tano Suraw, Cape Three Points' Reserve, and the Suraw Extension in the Western Region as well as the Ajenjua Bepo and the Atewa Range Forest Reserve near Kibi in the Eastern Region (FIAN, 2005; Anane, 2003; National Coalition of Civil Society Groups against Mining in Forest Reserves, 2003).

About five out of 17 companies permitted to conduct mineral exploration in forest reserves in the country applied for mining leases and received government approval to proceed with mining as at 2003. The extent of disturbance of the forest resource is not only in the areas where active mining occurs. It has been estimated that at the close of active mining, 40-60 percent of the total concession space will be used for activities such as siting of mines, heap leach facilities, tailings dump and open pits, mine camps, roads, and resettlement for displaced communities (Akabzaa & Darimani, 2001).

Despite its extensive impact on forest reserves, there have been instances where the forestry authorities were not even aware of the grant of licences to companies to operate within forest reserves until these companies commenced exploration activities in such areas. What makes this worrying is that statutorily, the Forestry Commission is supposed to be part of the licensing process.

Another issue has to do with the power arrogated unto the State regarding the compulsory acquisition of land (Act 703:2 of 2006) for mining activities with the original landowners having no say in land use plans or how the mining activities are undertaken. The growing conflicts between communities affected by mining activities and mining companies over payment of compensations is another reflection of lack of harmony among mining sector institutions.

The analysis of the modern environmental governance structure in Ghana shows that it has several inadequacies. In Ghana, another institution that complements the modern institutions are traditional institutions and it is instructive to discuss these institutions next.

Traditional Institutions

Acton (1953) defines tradition as belief or practises handed down through generations which are unquestionably accepted or deferred to as authoritative. Values and activities undertaken by society to endorse these beliefs and practices also constitute tradition (Fleischaker, 1994). According to Gyekye (1997:217), a society is traditional "inasmuch as it maintains and cherishes values, practices, outlooks and institutions bequeathed to it by previous generations and much of which on normative grounds it takes pride in, boasts of, and builds on". The institutions based on these traditions are referred to as traditional institutions and they include instruments of political organisation and socialisation like chieftaincy, judicial systems, norms, beliefs, taboos and value systems inherent in the way of life of a society.

A traditional institution therefore is any organised form of societal regulation, with its origin predating a major institutional reorganisation imposed by a foreign entity. The chieftaincy institution is the most important coordinating body for all the other traditional institutions because it is believed that they sit on the stools or skins of the ancestors. They represent the ancestors in their communities and then represent the community and all the other traditional institutions before the ancestors (Ofosu-Mensah, 2010). Otumfuor Osei Tutu II (2004) characterises traditional community leaders or authorities as embodying a historical and lineage alliance with their territory that empowers them with important rights and obligations. Their primary function is to ensure peace and harmony in the communities within their territory. These functions have been given to the institutions on the basis of a social contract where the people came together to form a state in the belief that combining their efforts and collectively surrendering to a traditional institution, the power to regulate activities within their society would engender progress and peace (Otumfuor Osei Tutu II, 2004).

These functions involve regulating access to land, as well as mediating disputes over land, thefts of crops, divorce, witchcraft and misconduct (e.g. drunkenness, wife abuse). They mobilise people to participate in community activities. Traditional authorities have this capacity to mobilize their people because of the authority and respect they derive from their people and history.

In some villages, traditional authorities are the local administrative power, whereas in other villages there is also local government. Customary courts are a prominent means of executing law enforcement and dispute resolution and are

popular as they are easily accessible, cheap, fast and comprehensible (Boafo-Arthur, 2003, cited in Ubink, 2007). Sharma (1997, cited in Ubink, 2007) notes that in 1997, the prominence of customary courts in Botswana was manifested with about 75 or 80 percent of all criminal and civil cases in the country tried in customary courts.

Traditional institutions may be formal or informal: where formal traditional institutions stipulate rules such as constitutions, laws and property rights, informal traditional institutions are generally agreed upon arrangements or rules of behaviour such as sanctions, taboos, customs, traditions, and codes of conduct (North, 1991). Succession in formal traditional institutions is based on clear cut rules or principles or structures which make them predictable while in informal traditional institutions, succession is often not predictable as there are no clear cut rules or structures of succession. Local organisations and associations or groups, such as women's groups, farmer associations, and savings and credit arrangements are at different stages of "institutionalisation" (Marsh, 2003). However, the survival of traditional institutions to the modern day affirmed the resiliency, legitimacy and relevance of these institutions in the socio-cultural, economic and political lives of Africans, particularly in the rural areas (ECA, 2007).

These institutions have played and continue to play very important roles in the process of good governance. These roles have been categorised into three: their advisory role to government at various levels; their developmental role in mobilising the population for the implementation of development projects like

health issues, promoting education, encouraging economic enterprises, inspiring respect for the law and urging participation in the electoral process; and their role in conflict resolution, an area where they have already demonstrated success (ECA, 2007).

By the fact that traditional institutions are local in their orientation, many of them face various limitations, especially in the areas of accountability and gender sensitivity. The absence of voting rights is seen as an insurmountable flaw of traditional institutions which does not augur well for accountability of these institutions (Mamdani, 1996). However, this position is not a true reflection of the accountability situation of these institutions. The Colonial Reports Annual (Gold Coast) (1916: 6) states this of the traditional institutions of the Gold Coast: *these native institutions are strikingly democratic......*This is because, as Kendie and Guri (2005) discusses, there are different types of traditional institutions which organise elections or have an elaborate democratic system of appointing leaders. Some of these institutions, like the Asafo of southern Ghana, the chief elects the leader of the group for manifest behaviour like bravery or social standing (Kendie & Guri, 2005).

Chieftaincy, which is the most organised traditional institution, may not have a system of electing any member of the society to leadership positions. However, there are elective procedures for selecting eligible members from the royal family to ascend the stool or skin or throne. Therefore, before one becomes a chief, there is an election process one has to go through among the kingmakers that borders on coordination and conflict avoidance. In addition, the chief sits in

council with elders, who advise him as appropriate and hold him accountable to the traditions, culture and aspirations of the people.

There is a social contract between the chief and his people and the conditions of the contract are spelt to the chief as part of the initiation rites. The Chief is the principal official at all ritual ceremonies, because he/she sits on the stool of the ancestors. He/She is therefore the one who represents his/her people before their ancestors, and derives his/her authority from this fact (Ofosu-Mensah, 2010). This therefore makes chieftaincy the most important traditional institution as they represent all the other institutions before the ancestors, the living and the unborn.

Also, the chief as part of the enstoolment or enskinment procedure swears to uphold the conditions of the social contract before the people and this is used to hold the chief accountable. Therefore, the chief can be reprimanded for behaviour unbecoming of a leader and in some cases, can be destooled for breach of protocol (Otumfuor Osei Tutu II, 2004).

Traditional institutions have been characterised by some authors as being typically patriarchal, thereby silencing the voices of women (Beall, 2006; Bowen, 1994). This position assumes that traditional authority is equal to chieftaincy. There are several other traditional institutions apart from chieftaincy, like trade associations and para-military groups like the Asafo companies of Ghana and some of these institutions have positions reserved only for women (Knierzinger, 2011). Membership and ascension to positions in these groupings are often gender neutral. There are several criteria for qualification to positions and gender is often

one of several criteria. The Asafo of Ghana have their leaders appointed by the chief based on bravery or good standing in society and this is not often influenced by the gender of the appointee (Kendie & Guri, 2005).

In the case of chieftaincy, it is true that most chiefs are males but among the Akan of Ghana, a female chief is not rare. In addition, most chieftaincy has the position of the queen or queen mother, reserved for only females. This position, obviously weaker than that of the chief, is a very powerful one as among the Akan, it is the queen or queen mother that nominates a candidate to ascend a vacant stool. Traditional institutions are relatively more enduring than modern institutions but they are not immune to change. Odotei (1999) notes a blurring of the differentiation in gender roles and responsibilities in traditional authority. Obsolete cultural values and customs that subjugate women like marriage by abduction, early marriage, and denial of inheritance rights are things that are not impossible to change. But the changes that are needed would be made only that they would persist for some time to come.

Another weakness in traditional institutions is their inability to define and secure property rights which raises the transaction costs of resource allocation to their constituencies (ECA, 2007). This situation has been due to the attempts by both the colonial as well as the newly independent state to weaken the power of these authorities on especially land to make it easier for the state to appropriate it for modern economic activities. In addition, the growing economic diversity and complex division of labour, characterising the era of globalization, are largely beyond the scope of traditional institutions. These institutions are, therefore,

unlikely to be able to cope with poverty alleviation among their constituencies without the stewardship of the State.

If it appears the traditional and modern institutions are competing with each other, then it will not be conducive for the smooth development of people, especially in the rural areas. The integration of the two systems would better serve citizens in terms of representation and participation, service delivery, social and health standards and access to justice (ECA, 2007).

The formal institutions of the State cannot be effective if they disregard or contradict the customary rules of the traditional institutions, which govern the lives and livelihood of large segments of the population. This is because traditional authorities are a link between rural citizens and the state. On the one hand they can help in implementing state law and policy and to facilitate, explain and organise support for development projects in their traditional area. They also channel and articulate the needs of the local people to the state because they are part of the local (Hagan, 2003 cited in Ubink (2007); Bako-Arifari, 1999).

Colonial influence on African traditional institutions

The colonial state governance structure was centralised and since they wanted to exert control on all within the colonies, they restructured traditional institutions not taking into account whether they were political or socio-economic in nature. This restructuring however had differential impacts on the decentralised and centralised traditional institutions.

In the decentralised traditional systems, the colonial State usually created chieftaincies and imposed hierarchical rule in its colonies. The imposed chiefs sometimes used their power to enrich themselves and subverted traditional political values (Tosh, 1973). In some instances, the imposed chiefs who came from other tribes alien to the area tried to wrestle ownership of lands from the indigenous tribes. This action often led to conflicts, some of which have persisted until today. In many other cases, however, the imposed chieftaincies were unsuccessful in annihilating the decentralised governance structures (Gartrell, 1983).

The impact of colonialism on the centralised institutions has been said to be much greater, as it generally transformed the relationships between chiefs and their communities (Coplan & Quintan, 1997). African traditional leaders or institutions that opposed colonisation or who rebelled against it were demoted by the colonisers (Busia, 1968). Leaders that submitted to or were sympathetic to colonial rule were incorporated into the colonial governance structure to maintain order, mobilise labour, and collect taxes (Rathbone, 2000). The incorporation of traditional institutions changed the power relations between the leaders and their communities which led to less accountability of the leaders to their people and weakening of their legitimacy. However, their continued stay in their position was ensured because chiefs could only be de-stooled by the colonial administration and that the chiefs were given control over land thereby not making it possible for people to shift their allegiance to other chiefs.

Traditional institutions in the newly independent Ghana

Owing to the incorporation of traditional institutions into the colonial system of local governance, achievement of independence represented another landmark in the transformation of African traditional institutions of governance. The abolishment of the colonial system of indirect rule meant that a new relation had to be created between traditional institutions, especially chieftaincies, and the political administration. Because of the role chiefs had played under the colonial administration, for instance collecting taxes, many of the early leaders of newly independent African countries saw chiefs as functionaries of the colonial State and therefore as anachronistic of the new Africa.

The institutions of governance were therefore Africanised without the participation of traditional institutions. The new elite, which increasingly grew autocratic, saw the existence of these traditional institutions as contending their power and they tried then to dispossess chiefs of the bureaucratic positions they held within the State. However, due to the persistence of the authority of the traditional institutions even in the face of the attempts of the first generation leaders of the newly independent state, the second generation of African leaders, attempted, with varying degrees of success, to co-opt traditional leaders in an effort to enhance their own legitimacy.

In spite of all these influences from the State and its elites, traditional authorities have and continue to wield a lot of authority especially in rural areas. There is the continued reliance on traditional institutions especially in the rural areas because the transaction costs of arbitration through them are lower than that

of the modern courts. However, the informal setting within which chiefs in particular operate without clear definitions of their authority and adequate support from the State has also been well documented (ECA, 2007; Kabutaulaka, 2002).

Ghana's Efforts to Resolve the Institutional Duality

The efforts by independent Ghana to resolve the issue of duality of governance institutions has had a chequered history influenced by the activities undertaken by the traditional institutions with reference to political and legislative directions of the then Gold Coast and the government in power at any specific time. The educated elite in the Gold Coast, represented by the Aborigines Rights Protection Society, were perceived by most of the chiefs as opposing the creation of native courts and the enrolment of chiefs into local councils because they the educated elite felt left out of access to power. These educated elite were also the group that were very active in fighting for independence for the colony and the chiefs in expectation of their loss of power in the newly independent state, opposed it (Knierzinger, 2011).

Knierzinger (2011) observes that the conflict between chiefs and the educated came to a head in 1949 when the Convention Peoples Party (CPP) broke off from the United Gold Coast Convention (UGCC), which had been constituted mostly by the elite. The CPP finally became the ruling government after independence and it was perceived as being made up of ordinary people. These ordinary people, who the British had used the chiefs indirectly to control, extract

taxes etc were now in power and they saw the chiefs as collaborators, therefore they tried to rid the chiefs of their power.

The chiefs going against their traditional roles but in line with the roles they had played under the colonial administration, pushed for four ministerial posts but the governor resisted. The Territorial Council of the chiefs persisted until the governor agreed to give two ministerial posts to the chiefs. However, chiefs by their nature and their traditions and also the social contract they have with the people they lead should not engage in partisan politics. This is because partisan politics is by nature divisive and chiefs, as leaders of the whole society, not a particular group and as arbiters and as unifiers of the society should not take part in it. When chiefs engage in politics they would not have the moral justification to perform the aforementioned traditional roles and the respect they enjoy as the leaders of their society may be eroded. In addition to other roles, chiefs are expected to lead in fighting for social development of their people (Ray, 2003, cited in Ayee, 2007; Arhin, 1985).

In the generally dual institutional societies that most democratic countries are, national resources are controlled by the modern institutions under the executive leadership of the ruling party. One wonders how the chief can play all these roles when the party they belong to is not in power. This would mean that development to the people in that area would miss out until the party which the chief belongs to comes to power. This would be a great disservice and unfairness to the people. This has however, neither restrained some chiefs from engaging in

actions that show clearly that they are with particular parties nor governments from attempting to co-opt especially powerful chieftains into active politics.

The CPP government led by Dr. Kwame Nkrumah, even though suspicious of chiefs, also realised they still possessed authority, legitimacy and mobilising power and their co-option into the political system might give them some advantages. Nkrumah is quoted as making a famous statement concerning chieftaincy:

> *Those of our chiefs who are with us ... we do honour ... those ...who join forces with the imperialists ... there shall come a time when they will run and leave their sandals behind them; in other words chiefs in league with imperialists who obstruct our path ... will one day run away and leave their stools* (Accra Evening News, 5th January 1950, cited in Knierzinger, 2011:8).

There are several points to note about this statement. The first has to do with the fact that some chiefs had to be with the ruling party, which is to engage in partisan politics. The second deals with the significance of a chief appearing in public without a sandal. This is traditionally taboo and means the chief has been de-stooled. In addition, the stool/skin represents the embodiment of the soul of the society that a chief leads. A chief without a stool or skin, is therefore not legitimate.

The quotation epitomises the attempt by the government to force the chiefs into its party, to de-stool those who resisted these attempts and generally to weaken chieftaincy in Ghana. When the government transformed the state

councils into local councils, they reserved a third of the membership to chiefs but they were to be financed entirely by the chiefs. In addition, selling stool land was not to be allowed without the permission of Local Councils (Rathbone, 2000). The rampant sales of stool lands, though not a good thing for chiefs to do as they are a heritage from generations dead to the living to be passed on to the yet unborn, was restricted and this also weakened the ability of the chiefs to accumulate resources to engage in activities.

The British contracted the services of a constitutional advisor to make an inquiry into demands of the National Liberation Movement (NLM), a political party formed in 1954 by disaffected Asante members of the CPP, who were joined by Dr. K. A. Busia, leader of the Ghana Congress Party (GCP) formed to continue the UGCC position of attempting to form alliances with traditional authorities. The GCP leadership were made of dissatisfied CPP members and professional oriented former leaders of UGCC (Encyclopedia of the Nations, 2011).

The NLM was formed by a chief's linguist to oppose the CPP's process of centralisation (socialism) whilst supporting a continuing role for traditional leaders. The NLM was demanding the creation of a National legislative Assembly for chiefs for the colony on its way to become fully independent. The constitutional advisor recommended rather the creation of Regional Houses of Chiefs to only consider matters referred to them by the government and when called upon to advise the government on African social customs and customary

law, thus limiting their influence at the national level (Knierzinger, 2011). This recommendation was endorsed.

The government withdrew official recognition of the Okyehene because he did not accept an Appeals Commissioner's judgements in traditional succession and de-stoolment disputes (Rathbone, 2000). The police was used to forcibly eject him from his palace and he was excluded from the whole Akyem Abuakwa traditional area. Because the paramount chief usually commissions enstoolment of sub chiefs, his destoolment, though not traditional, meant the automatic destoolment of over a hundred minor chiefs in Akyem Abuakwa (Rathbone, 2000).

The Okyehene took this position because the state appeared to meddle in matters that were clearly traditional and which traditional systems were to be allowed to deal with. The judgement of the appeals commissioner was therefore deemed as interference in a purely traditional matter. The forcible destoolment and exiling of the Okyehene also established that the state was really bent on interfering in traditional matters and to send a signal to all the chiefs who were not seen to be aligned with the ruling party that they either joined or risked being destooled.

The government continued with its efforts to undermine the powers of the traditional authority with the establishment of Regional Houses of Chiefs by officially abolishing the difference between 'paramount' and 'divisional' chiefs and then arrogating unto itself the power to ordain the hierarchy. In addition, all minor councils of chiefs were ordered to confirm their affiliation to a particular

Regional House of Chiefs and defying this order meant loss of recognition from the government and subsequent destoolment. A number of other chiefs who were not recognised in this process (foremost because they were NLM sympathisers) left their palaces and surrendered their stool regalia (Rathbone, 2000).

Sennah (2011) discusses the creation of the Bono Ahafo region out of the Asante region as an attempt to curtail the power of the Asantehene (the King of the Asante). Although Dr Nkrumah argued that this new region was created only for administrative convenience, this was an attempt to weaken the power base of the Asantehene, who was the most powerful chief ahead of the Okyehene, who constituted a threat to Dr Nkrumah's power.

The Chiefs (Recognition) Bill of 1959 formalised government's actions against chiefs and then gave government the sole power of sanctioning either destoolment or enstoolment; a chief could lose his position without being formally destooled if the government wanted to do so and chiefs could be ordered into internal exile (Knierzinger, 2011). The process of enstoolment or destoolment of chiefs is a traditional matter which goes through time tested and accepted traditional methods often including rituals and the participation of various actors for specific purposes. The interference of the government into these traditional matters cannot mean well for these institutions.

Subsequently, in September of 1959, the government 'recognised' the enstoolment of 84 chiefs who were sympathetic to the CPP and the destoolment of 32 chiefs, unsympathetic to the CPP (Rathbone, 2000). The government had maintained that they were genuine in their concern to intervene in traditional

matters. Mr. Asafu-Adjaye, Ghana's High Commissioner to the United Kingdom in a speech to the joint meeting of the Royal African Society and the Royal Commonwealth Society in London in 1958 said:

*"In our determination to build a modern state, we are not forgetting the past. **Take the problem of chieftaincy,** for example, which is the subject of much controversy. The institution is fundamental to our traditional way of life and popular government. It is, therefore, the declared intention of the Ghana Government to preserve it in a progressive form within the modern democratic framework. Unfortunately, there has been much criticism in certain quarters about the role of chiefs in the modern state. These critics, in my view, do not sufficiently appreciate the complicated problem which the Ghana Government has inherited from the British administration. Some administrative reforms which, perhaps, proved successful elsewhere, e.g., in Northern Nigeria, were applied rather uncritically to Ghana. The result was that to some people the institution of chieftaincy became unpopular and reactionary. The aim of the Ghana Government, however, is to preserve in this part of our cultural heritage, all that is best and progressive"* (Asafu-Adjaye, 1958:184). (The emphasis is mine).

A cursory look at the quotation from the official representative of the Ghana government to the United Kingdom would seem that the government had no ulterior motive in their interference/intervention in these chiefly matters. However, the government perceived chieftaincy as a problem that needed to be

solved. The second issue is who decided on what was 'best and progressive'? Was there a referendum of Ghanaians on what constituted 'best and progressive' parts of the culture that needed to be maintained. The solution of the 'chieftaincy problem' and the definition of 'best and progressive' were determined discretionarily and implemented. The issue of agency capture can therefore not be ruled out of the situation. In addition, the public utterances of both the President and other ministers of cabinet seemed to corroborate the notion that there was an ulterior motive to interfere in chieftaincy. The president is quoted at a CPP rally in Agona Nyakrom on New Year's Day in 1958:

> *"If you continue to be loyal to me, I will consider extending amenities to you. I will extend electricity and pipe-borne water to all the towns and villages."*

In the run-up to a by-election in Aflao, Krobo Edusei, the Minister of Interior was even more direct:

> *"You think I am a fool to give you water to drink and you vote against me? After the election if you vote CPP, I will give you water to drink."*

The voters of Aflao voted for an independent candidate and as Krobo Edusie had said, the piped water supply was not extended (Rathbone 2000: 148).

With the overthrow of Nkrumah in 1966, the National Liberation Council banned the CPP and with the NLC Decree No. 112, an attempt was made to remove all those chiefs installed by the CPP and most of the chiefs destooled by the CPP were re-enstooled. In addition, sub-chiefs who had been made paramount

chiefs by the CPP government were also degraded. The political functions of the expectant chiefs were however not restored (Knierzinger, 2011). These activities show the influence of political activities on chieftaincy, while the irony was that chiefs were not supposed to engage in politics. The 1969 constitution drafted under the NLC acknowledged the role of chiefs in national and local development and gave them legal status by state recognition through being gazetted.

The Chieftaincy Act of 1971, Act 370 of 1971, then established the National House of Chiefs to advise any authority charged by the Constitution or any other enactment on matters relating to chieftaincy in Ghana. The membership of the National House of Chiefs was legislated to be made of five chiefs from each Region of Ghana elected by the House of Chiefs of the Region. With the Chieftaincy Act of 1971, there was a significant reduction of government intervention in chieftaincy affairs, but chiefly influence formerly exercised at the national level was also banned (Boafo-Arthur, 2006, cited in Knierzinger, 2011).

However, it was not until 1979 that provisions in legislation that allowed government to de-stool chiefs were repealed. Article 176(6) of the 1979 constitution states:

Parliament shall have no power to enact legislation which confers on any person or authority the right to accord or withdraw recognition to or from a chief; and which in any way detracts or derogates from the honour and dignity of the institution of chieftaincy.

In 1987, the Provisional National Defence Council (PNDC) created the position of Secretary of Chieftaincy Affairs and later on in 1992 appointed a

paramount chief of the Agogo traditional area, Nana Akuoko Sarpong to that position. The 1992 Constitution of the Republic of Ghana in article 290 (1p), went further to entrench the institution of chieftaincy. This means that in Ghana, chieftaincy cannot be abolished except through the will of the people exercised in a national referendum. In order to further insulate chieftaincy from engaging in active partisan politics and maintain their dignity, Article 276 (6) of the 1992 Constitution bans chiefs from actively engaging in partisan politics.

In 2006, the Ministry of Chieftaincy and Culture was formed as part of the Public Services of Ghana and in accordance with the Civil Service Law, 1993 (PNDC Law 327) to preserve, sustain and integrate the regal, traditional and cultural values and practices to accelerate wealth creation and harmony for total national development. The Houses of Chiefs are under this Ministry. These activities are undertaken to try and resolve the duality between the traditional and modern institutions in Ghana, more from the daily activities of Ghanaians themselves, the traditional institutions and the on-going global progress. Policy makers in Ghana need to juggle and mix Ghana's two dualities in order to smooth out the development process (Akosa-Sarpong, 2007).

Empirical Review

This section of the thesis discusses empirical literature of the roles of traditional institutions in natural resource governance in other parts of Africa. The purpose is to provide a basis for comparison for this thesis with other jurisdictions.

The uncertain impact of traditional institutions on the control of environmental resources in the current times motivated a case study of the Mzinti community in the former KaNgwane homeland in South Africa. An asset-based livelihood framework was employed by King (2005) to evaluate livelihood production patterns, dependency upon environmental resources, and community views on the scope and impact of the Matsamo Tribal Authority on these resources.

The study stated that there were attempts within the province to distinguish between 'political functions' and 'traditional functions' and that there was a belief that tribal authorities should only commit to traditional functions because political functions were better undertaken by elected officials. However, development issues are not apolitical and to expect traditional authorities not to play a role in political functioning raised significant challenges to land allocation processes.

Households accessed environmental resources for a variety of purposes, including the use of wood for construction and fuel, land for grazing of cattle and goats and farming, thatch grass for construction, medicinal plants and fishing. The tribal authority issued permits for wood collected for construction, granted plots of land to new residents and decided which community members benefitted from agricultural projects, introduced into the communities by both state and non state development agents. There was generally mistrust of the traditional institutions by the populace because the allocation of access to these resource were not transparent (King, 2005).

Traditional herbal practise is generally governed within a framework organised by traditional institutions. Owing to several factors in Africa, including the imbalance ratio between rural populations and the number of medical doctors, their affordable prices, relative accessibility, local availability, trust in the efficacy of medicinal plants, and emergence of new and incurable diseases such as HIV/AIDS, cancer and diabetes, access to medicinal plants in rural areas of Africa has become imperative. The threat to the survival of medicinal plants therefore called for the revival and promotion of traditional management practices. These practices are mostly based on cultural norms and religious beliefs. Msuya and Kideghesho (2009) conducted a study on how traditional management practices could enhance sustainability of the plants. It was hypothesised that the social organization that controlled access to resources within the community, the customary norms and procedure for control, acquisition, maintenance and transfer of the resources, and the traditional utilization and conservation practices were the three key features enhancing the conservation of the medicinal plants.

Purposive sampling of six villages in the West Usamabara Mountains in north-eastern Tanzania was done. The selection criterion was the distance of the villages from forest reserves. Three villages were located close to forest reserves and the other three villages were more than 10 kilometres from any reserve. A combination of FGDs, semi-structured interviews, questionnaire administration, botanical survey and identification of sacred plants constituted the data collection techniques.

The study found that a higher number of medicinal plants were found in traditionally protected forests (sacred and cultural forests) than the state reserve. This is because, these places command high respect in many African societies and are protected through taboos and beliefs. Selective harvesting was a tool used regularly to regulate the use of and reduce pressure on resources. The great value that local communities attached to traditional management practices was seen by Msuya and Kideghesho, (2009) as an opportunity for conservation and that policy interventions that consider cultural and spiritual value of resources and habitats are more likely to succeed. However, traditional management systems should not be construed as a panacea for mitigating the existing conservation problems but as a complement to state conservation strategies.

A case study, commissioned by the FAO and conducted by Odhiambo (2012) established the status of traditional institutions and governance systems and analysed how these fostered resilience to risks and shocks for pastoralists in dry land areas in East Africa. The Pokot peoples of Uganda and Kenya, the Matheniko of Uganda, the Turkana, and the Somali in Kenya and the Somali and Dasenech in Ethiopia formed the pastoralist communities studied. The study noted that traditional pastoralist institutions, though not recognised by the modern state, facilitated social interaction to achieve common objectives for the common good, including conservation of pastoral resources. Identifying common ground between these institutions and the modern systems of governance was the key development challenge that motivated the study.

The study found that most influential traditional institutions were those comprised of males and the military types and that these institutions and governance were responsible for social, political and cultural organization as well as controlling access to and use of natural resources that were essential for the livelihoods of the community. However, the emergence of the modern state institutions were rendering traditional institutions redundant because they took over most of the roles of the traditional institutions because they were deemed more effective since they had the backing of national laws.

The study recommended, among other things, that governments need to work with traditional institutions as equal partners in conceiving, planning and implementing development interventions. But there was the need to deepen understanding of the institutions and the challenges to, changes in and capacities of these institutions (Odhiambo, 2012).

Mowo, Adimassu, Catacutan, Tanui, Masuki, and Lyamchai, (2013) conducted a study into the roles of traditional local institutions in three watershed areas in the highlands of Ethiopia and Tanzania to understand their role in natural resource management. The watersheds studied were Gununo in Areka District and Galessa in Ginchi District (in Ethiopia) and Baga in Lushoto District (Tanzania). Focus group discussions, historical trend analysis and interviews were mainly used for data collection.

Mowo et al, (2012) found that traditional rituals were performed in sacred areas at the base of sacred trees and these trees dominated the agricultural

landscape as giant trees. Unauthorised persons were not to approach these trees, let alone to cut them.

In Ethiopia, traditional leaders had high status in the traditional belief system and they served as the ultimate authority in all traditional matters. They were the primary means through which the entire local communities were controlled and governed and disputes were brought before them for settlement. Some of these conflicts were over management and use of natural resources. Civil unrest in the country had however, weakened these institutions as compared to their historic states.

In Tanzania, some of the traditional institutions were no longer in existence. This was due to the abolishment of all chiefdoms after independence. These chiefdoms were already weakened by colonialism and most traditional beliefs and rituals were fading in importance. Modern education, exposure to new religions, and changes in administrative governance, all accounted for the weakening of traditional institutions in both countries. On the contrary, in both countries, traditional healers were becoming more important and these healers depend on plants and animals for their livelihood. This has been part of the motivation of the traditional leaders to conserve the natural environment in addition to their role as custodians of local knowledge.

Traditional institutions played essentially, an indirect role in natural resource management through conflict resolution, governance, and risk reduction. When the current state managed natural resource practices were compared with those of the past when traditional beliefs played the most important role in

preserving common pool resources, noticeable differences were seen. Delineation of sacred forests in critical parts of the landscape (hilltops and catchments) was likely to have had a positive influence on water conservation and watershed functions.

Traditional leaders were considered spiritual leaders, integrating spirituality with natural resource governance. The declining importance of traditional institutions and sacred forests was seen as disadvantageous to the management of natural resources and it was recommended that systematic studies be conducted to decode indigenous knowledge to provide the traditional authorities with information to defend these beliefs in a more scientific way (Mowo, et al., 2013).

In modern states that also have traditional institutions existing, the interaction between the two systems of governance often times can be nebulous. In order to understand the co-management of natural resources, Chitotombe, (2012) conducted a research in the Buhera communal areas in Zimbabwe. Interface analysis was used as the analytical tool for the study (Long, 2001). Social actors were regarded as entities (individuals or groups) having agency and the social actors for the study were traditional leaders and Rural District Councils (RDC).

The life worlds, that is the social knowledge, intentions and evaluative models, and types of discourse and social action, through which actors attempt to order their worlds, of the two institutions overlap in the co-management of natural resources (Schutz and Luckmann, 1973; cited in Chitotombe, (2012)). The life

world of the traditional institutions constitutes the lived-in experience regarding the management of natural resources through consecration of sacred areas and that of the RDC are the wills and whims of the state. Observation, transect walks, FGDs and unstructured interviews were used to solicit data from purposively sampled areas and traditional authorities and RDC staff.

Traditional leaders were accused by RDC respondents for the degradation of the environment by their clandestine allocation of land on ecologically sensitive and fragile land. The traditional leaders on the other hand reported of challenge to their authority and undermining by the RDC under the guise of democratisation and alleged that the RDCs allocated land on sacred sites. The two life worlds were at variance to each other leading to their interface characterised by struggle and contestation because each life world was attempting to dominate the interaction to enhance its stature and therefore, access and control of resources.

Jimoh, Ikyaagba, Alarape, Obioha and Adeyemi, (2012) in an effort to identify local practices and institutions, which may promote wildlife conservation; and also the limitations which may affect the efficacy of such institutions and practices, conducted research in four communities in around Cross River National Park in Nigeria. Informants were purposively selected based on their ecological knowledge and experiences in the culture and tradition of the study area. The study progressed through three phases: a reconnaissance survey to obtain information on the socio-cultural background of the people of the area; key informant interviews and questionnaire administration to gain insights into the

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traditional laws and taboos concerning natural resources use and management as well as the challenges; and a stakeholders meeting. In all, one hundred questionnaires were administered. Park staff, hunters, traditional chiefs, bush meat traders, traditional healers and farmers constituted the respondents.

The study found that there were laws against the use of chemicals for fishing, forbidding women from touching the civet cat, and forbidding pregnant women from eating elephant meat. There were also taboos that forbid hunters from killing leopards or pythons. The laws that forbid women from eating particular meats at particular period or that forbid them from touching particular animals were to discourage hunters, mostly men, from killing such animals or other people buying them as it generally was the duty of women in the area to prepare meals for the household. There was therefore not much of an incentive to bring such meat home if it cannot for instance be prepared by the woman of the house.

The study identified four challenges to effective use of traditions to conserve wildlife. These were: intrusion of other tribes; westernization/religion; improved hunting technique (including the use of sophisticated guns, traps, carbide –powered head lamps and torch lights) and poverty.

A study to describe traditional institutions', involved in natural resource governance, relevance to solving land degradation issues and their integration in formal policy processes was undertaken in Kilimanjaro Region in Tanzania and published by Kangalawe, Noe, Tungaraza, Naimani, and Mlele in 2014. Two hundred and twenty one households questionnaire were administered; 41 in-depth

interviews and 24 focus group discussions were held. The FGDs were held with groups of traditional farmers, pastoralists, water users, bee-keepers, forest and wildlife user groups and village councils.

Owing to the fact that men were the ones who inherited land in the region, more men than women were aware of traditional practises governing land than women. Traditional institutions were rated superior to modern institutions in dealing with land and other natural resource management problems, especially in areas which had more issues with land management (Kangalawe, Noe, Tungaraza, Naimani & Mlele, 2014).

Summary

The discussion shows that traditional land use, transfer and governing practises are substituted by the conditions of the concession. This substitution is enforced by the powers the state cedes to the mining companies and sometimes by the state itself. Attempts to allow the traditional owners access to the land for firewood, animal grazing, medicinal plants, non-timber forest products and wildlife in the law poses challenges to the people. This is because the law gives the discretion to allow the access to the mining company to determine. Invariably, the people are not given as much access as will allow them to stay at the same consumption level, let alone improve it.

The consequence of the imposition of the new tenure arrangements on the traditional tenure is that local people lose access to their land based livelihood and livelihood support activities; leading to increasing poverty in the local

communities and conflicts between the communities and mining companies or state institutions. In addition, the environmental consequences of the mining governance structure include land degradation, water pollution, and siltation.

The limitations placed on traditional institutions in the environmental governance structure at the decision making level has not helped in making sure that the communities' livelihoods and the environment are well protected. These limitations include attempts by the state to control chiefs by bringing them under the public service and the strengthening of the authority of such mineral governing institutions as the EPA and MINCOM. Local knowledge is also not brought to bear on the mining activities and allied services seriously impairing the ability of the land based resources to provide continued resources and services to the communities.

CHAPTER FOUR

THEORETICAL REVIEW AND CONCEPTUAL FRAMEWORK

Introduction

This chapter reviews the theory of the state, institutional theory and the theory of collective action which are the theories that inform this study. These theories explain the legitimacy of the state and describe the relationships among different groups within society, rules that govern their relationships, their differential access to natural resources and the resultant societal effects these engender. A conceptual framework explaining the interactions among the state, modern institutions, traditional institutions and local communities governing access to environmental resources and conditions surrounding this access would finally be discussed.

Theory of the State

Various authors have attempted to conceptualise the state and its relationship with society. The study was conducted in a district in the state called Ghana. The review of the theory of the state will provide a theoretical basis for analysing the organisation, authority and legitimacy of the entity called the state. In this section, an attempt is made to present the theory of the state from various perspectives as discussed in the literature. Marx (1843; cited in Jessop 1982) argues that the state is an instrument used by people who own a monopoly of

capital to dominate civil society and to maintain this domination. Within the state system, people who have positions of power, as also noted by Raico (1992), use the apparatuses of the state to exploit labour to generate surplus, to gain access to this exploitative domination over labour and to maintain it. That is the characteristic of the state until such time as the proletariat can overthrow the elite class and establish a classless society.

Poulantzas (1969) takes a departure from the Marxists' conceptualisation of the state by arguing that the state is autonomous in relation to the economy and dominant class. Poulantzas further argues that class structure and relations were more complex than a simple analysis of a dominant class controlling the working class, with the working class being powerless until such time as they can overthrow the elite class. There were both structural and agency limitations on the extent of state control on society. Frankel (1979) supports this position by noting that the state and its institutions are separate from capitalist enterprises therefore, the view that the state and its institutions were directly under the control of the capitalist was not a given. The interactions between the state and capitalist enterprises went beyond a controller and a controlled relationship.

The class structure was more complex than Marxists perceive because in each of these classes, there are various groupings of people along several characteristics and vocations like economic, political, academic elites who interact with each other and with other groupings in the other classes differently. These interactions among and between these groupings are not always that of exploitation. Some of the interactions are complementary, parasitic or symbiotic

in nature (Miliband, 1970). Therefore, the conceptualization of a dominant class exploiting a working class was too simplistic and ignores the roles of other institutions like school and family to production (Frankel, 1979).

Gramsci and the neo-Gramscians attempted to modify the Marxist theory of the state to address the weaknesses identified by Poulantzas (1969) and his other works. The neo-Gramscians now define an intermediary between the state and the relations of production known as civil society (Clarke, 1977). The civil society is made up of institutional relations that add on to relations of production creating a sphere of interacting social groups which capital dominates and not the state apparatus. This dominance consists in the imposition of a normative order on society in the management of a consensus, which forms the basis of the relative autonomy and legitimacy of the state (Negri, 1976, cited in Clarke, 1977). The dominance of capital is the domination of the social interaction by the group endowed with the disproportionate share of material resources and it is founded at the level of social interaction and not at the level of production relations (Frankel, 1979).

In all these perspectives on the theory of the state, one major theme running through is the ability of either the state or other groupings to exert some level of control on society. This ability is what has been termed power. Power can be exerted in various ways but the most overt exertion of power is through force which led Weber (1946) to define the state as the entity which claims a monopoly on the legitimate use of violence. The state can however, decide to delegate this monopoly as it deems fit. The distribution of the right to use violence

characterises the distribution and access to resources in the environment within territory the state has influence over.

Weber (1964) further notes that how well the state administrative staff successfully uphold a claim on the monopoly of the legitimate use of violence in the enforcement of its order determines the success or failure of the state. The police and the military are the main instruments of enforcement. The state functions on the basis of a strict division between public and private spheres, but private force can be used as long as it derives its legitimacy from the state.

The major objective of the state is to distribute and re-distribute resources. States fulfil these objectives using an extensive rule of law, citizenship rights, and economic and social responsibility to its constituents. The role of government then is in creating property rights, producing a functioning tax system, and developing the infrastructure necessary for business (Derber, 2002). However, governance confers a new phenomenon in the modern state, which was supposed to be solely responsible for governing (Mayntz, 2001, cited in Draude, 2007).

Governance requires the state to move from regulating all aspects of public life to collaboration with civil society. The emergence of regional blocks and groupings of nations seems to vindicate the position taken by writers, including Polanyi (Carlson, 2006), who predicted the collapse of the state as free markets could not survive in states because of regulation.

Much as the exigencies of the post second world war (Seger, 2007) period encourage the state to relinquish its hold on power to larger regional bodies and to civil society, at international levels for example, agreements are negotiated on the

basis of states, representing their people. There is also the issue of institutional memory to consider when one talks about efficient representation of societies. State institutions have been representing societies as their main duty; there is therefore institutional memory resource which makes the transaction cost of employing a different system of representation more expensive. It is only the kinds of responsibilities, power and activities states are usually known to have that would change.

Even though globalisation and regional integration have been cited as examples that challenge the continued dominance, relevance and power of the state, the state is still the dominant arena for domestic politics as well as the primary actor in international relations (Global Policy Forum, 2012). However, the form, functions or strategies of the state is what has been in constant flux.

The review of the various literature on the theory of the state have all agreed that there is an entity called the state which has power to control certain aspects of social life. The differences in the perspectives have been on the form of the state; economic entity (Marx, 1843; Clarke, 1977) or multi faceted (Poulantzas, 1969; Milliband, 1970) and how the internal structures of the state are used to control capital (Lenin, 1917; Frankel, 1979).

Engels (1894: 177-178, cited in Lenin, 1917: 1, 2) states that:

"The state is, therefore, by no means a power forced on society from without; just as little is it 'the reality of the ethical idea', 'the image and reality of reason', as Hegel maintains. Rather, it is a product of society at a certain stage of development; it is the admission that this

society has become entangled in an insoluble contradiction with itself, that it has split into irreconcilable antagonisms which it is powerless to dispel. But in order that these antagonisms, these classes with conflicting economic interests, might not consume themselves and society in fruitless struggle, it became necessary to have a power, seemingly standing above society, that would alleviate the conflict and keep it within the bounds of 'order'; and this power, arisen out of society but placing itself above it, and alienating itself more and more from it, is the state."

There are issues raised in this quotation of Engels of the state. The first is that the state is a creation of the society. In the society, there are classes of people engaged in struggles to achieve group ends, which are antagonistic to other groups' aspirations. In addition, the state is imbued with power to control the very society that created it. How the state uses these resources to achieve set targets appears to be influenced by several factors including which group is in control of the state, the state of the state itself and the end to be achieved. These dynamics are what Global Policy Forum (2012) states to be in flux and which result in various writers having varied positions on the analysis of the state.

For other writers like Foucault (2000), government is a conduct or more precisely, the 'conduct of conduct', which varies from governing ones' own self to governing others. Government then is a discipline that starts from regulating one's own conduct to that of communities, areas, regions and to the national levels. Owing to the differing spaces and conditions at all the levels that governing has to be done, necessarily, the skills, instruments and modes of

regulation have to vary from situation to situation. This art, government, involves an ensemble of institutions, processes, analyses, calculations and tactics that allow and enhance the exercise of this very complex form of power, which has the population as its target and its main forms knowledge and political economy by using apparatuses of security as its technical means (Foucault, 2004).

The state is then seen "as a specific way in which the problem of government is discursively codified, by dividing a 'political sphere', with its characteristics of rule, from other 'non-political spheres' to which it must relate. The relationship is in a way that certain technologies of government are given a temporary institutional durability and brought into particular kinds of relations with one another" (Rose & Miller, 1992; cited in Lemke, 2007: 6). The state is then a governmental apparatus constantly constructing the conditions of its self-rule in laws formed out of self-designations of continually reconstructed rules (Luke, 1996). The action of the state reconstructing itself Foucault (2000) termed governmentality.

Governmentality is made up of an assortment of knowledges and techniques dealing with the systematic and pragmatic regulation of behaviour disciplining space, populations and individuals in order to create new systems of production and consumption (Luke, 1996). This reflects variations in the objects, subjects, purposes, and technologies of power; selection of some technologies and practices over others; and retention of some of these in turn as they are integrated into broader and more stable strategies of state power (Foucault, 2000). Governmentality is the concept that can be used to rationalise governmental

practice in the exercise of political sovereignty (Foucault, 2004) and therefore a guideline for understanding the modern state (Lemke, 2007).

Most of the perspectives on the theory of the state had seen power as being the main tool legitimated in and concentrated in the state and used by the state in regulating societal behaviour. Power resided at the macro level above the communities making up the state. Foucault (1979) however, argued that the study of power should not begin at the macro level, but in the heterogeneous and dispersed micro level and how its forms are exercised in different institutional sites. The study of power at the individual and local levels where it is exercised should be the focus of the study of power not how it is legitimated at the centre. In addition, the actual practices of subjugation and domination should be of more interest to study than the intentions that guide attempts at domination. This is so because power circulates through networks rather than being applied at particular points.

The extent to which capitalism had penetrated the societies' very existence, meant that power had to be distributed along all levels of the social strata. This was especially so as it required diverse techniques of power to allow capital to exploit people, who are rational beings, to transform them into labour power to create profit (Foucault, 1977).

Foucault (2004:92-93) notes that:

Power is everywhere; not because it embraces everything, but because it comes from everywhere.

For Foucalt, power permeates everywhere and it is power that actually shapes the conduct of conduct. If the macro level power residing in the state should be considered, how the micro level power was linked to produce this broader and more persistent societal configuration should be its motivation (Foucault, 2004).

Though the importance of studying power at the micro level is stressed, it should be recognised that diverse power relations came to be colonised and articulated into more general mechanisms. These mechanisms sustained more encompassing forms of domination and linked to specific forms and means of producing knowledge showing that the study of power at the macro level was also pertinent (Jessop, 2007). Power is inherent in all social relations, articulated with discourses and institutions, and necessarily polyvalent. This is because power's impact and significance depends on how social relations, discourses and institutions are integrated into different strategies (Jessop, 2007).

Governmentality attempts to extend the scope of this political analysis beyond the domain of the state institutions and to stress that power is fluid and extends over networks of interaction to several sites sometimes even beyond the scope of the state (Walters, 2004). In comparison with Marxist theory of the state that seeks to explain *why* state power is used in capital accumulation, Foucault's analysis of governmentality tries to explain *how* capital and state power are used for economic exploitation and political domination of the people (Jessop, 2007).

In the interactions between the state and society, institutions are the structures that mediate. This therefore means that institutions are very important in an analysis of the interactions and the governance outcomes of these

interactions. The following section undertakes a theoretical analysis of institutions.

Institutional Theory

Institutional theory is the next theory to be reviewed for the study. The review of this theory is to provide the basis to analyse the dual institutions involved with social regulation in the the communities in general and mining governance in particular. The definitions of institutions, their forms and relevance will be reviewed in this section.

Institutions are "the concrete isolates of organised behaviour" (Malinowski, 1944). An institution in this sense is therefore a social system, which is a subsystem of society. An institution as a segmentary cross-section of culture (Firth 1957:59) has as a central feature "the system of values for the pursuit of which human beings organise, or enter organisations already existing" (Malinowski 1944:52). Institutions are defined by Ostrom, (1990: 51) as "the set of working rules that are used to determine who is eligible to make decisions in some arena, what actions are allowed or constrained, what aggregation rules will be used, what procedures must be followed, what information must or must not be provided, and what payoffs will be assigned to individuals dependent on their actions".

Jepperson (1991) however, defines institutions to be any social pattern characterised by standard sequences of interactions. At the societal level, because institutions are embedded with values, social institutions are social structures

which have come to be sanctioned by norms and values of society. Institutions create checks and balances, facilitate cooperation, and reduce transactional costs and political uncertainties (Garson, 2008).

Peters (2000) notes the varying ways of defining the concept of institutions also means the study of this concept has been done from various approaches. Hall and Taylor (1996) differentiated three traditions within institutionalism: sociological, historical and rational choice.

Sociological institutionalism

This tradition emphasizes the socio-politico-cultural embeddedness of institutional decisions. Sociological institutionalism emphasises the sociocultural construction of values which guide individual behaviour within institutions. Sociological institutionalists do not view social patterns as striving towards equilibrium, nor do they view institutional change as being as difficult to achieve. Sociological institutionalism believes in the symbolic functions of institutional forms, which are not necessarily optimized in functional terms. Change is viewed as a requisite institutional process that enhances legitimacy (Levi, 1990).

For example, Chieftaincy in Ghana is a socially embedded institution which has been the custodian of customs and values of the people. The traditional leader, even though not regulated by a written law, is constrained by the social contract between the society and the institution, to behave in ways compatible with what the society sanctioned (Otumfuor Osei Tutu II, 2004).

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The embodiment of values regarding customs governing the exploitation by local people of mineral resources by the informal mining sub-sector is in the chiefs and their representatives. In most rural areas of Ghana, when one comes across gold nuggets they have to be sent to the chief for rituals to be performed before they can be used.

Historical institutionalism

The main theme of this approach is that structural choices made at the inception of institutions persist over their entire existence (Steinmo, Thelen & Longstreth, 1992). The central idea of this approach is the "path dependency" of the institution, though they are also interested in the ideas that help to shape and sustain the direction of policy (Hall, 1986). The power of this approach is in explaining the persistence of institutions but not in explaining changes in institutions or policies.

An example of how the structural choices that informed the creation of an institution persisted into the institution's future is the Inspectorate Division of the Minerals Commission of Ghana. This division was initially set up as the Mines Department of the Gold Coast in 1902 at Tarkwa to supervise all activities related to mining. In its current state, it is the division of the Commission that supervises the actual mining process and technologies in Ghana. This mandate has persisted with them for more than a century emphasising the persistence of the structural choices of the institution.

Rational choice institutionalism

The rational choice approach to the study of institutions believes that rules that set up institutions offer incentives and individuals joining these institutions react to both their constraints and opportunities. Individual members of institutions have their own set of preferences which are not modified by the institutional structure (Balasan & Maha, 2013). Pollack (2006) states that actors in an institution setting will act pragmatically to maximize their utility and that social phenomena are interpreted in terms of preference-maximizing strategies pursued by individuals.

Peters (2000) defines two more approaches to the study of institutions. These are normative and empirical approaches. Normative institutionalism was advocated by March and Olsen (1996; 1989; 1984). According to this approach, individuals' behaviour within any institution is shaped by the values embedded in the structures of the institutions and not the individuals trying to maximise their utility in the systems. This means that the function assigned to the individual within the structure constrains him/her and determines the kind of behaviour he/she can portray. The preferences of individuals in institutions are modified by the values embedded in the institutions.

Empirical institutionalism attempts to address the question of whether institutions are important for the stability of societies (Peters, 2000). This approach places emphasis on the formal structures of government and particularly analyses the difference between presidential and parliamentary systems of government. Huntington's (1968; 1965) writings were concerned with the

creation of structures (institutions) that intermediated between the generation of demands in society and the government structure.

Unification of the approaches

There are two main factors that unify all the approaches to the study of institutions: structures matter and individuals come and go while the structure persists. In every societal endeavour, structures are either established or evolve to satisfy needs expressed by the society. These structures regulate societal behaviour and also help in predicting this behaviour. The society will be chaotic without these structures to moderate and coordinate the interactions among the needs, resources and aspirations of its inhabitants. It is the structures that ensure the stability of the society.

The next factor unifying the different approaches is the fact that though the structure persists over time, individuals occupying various positions on the structure change. Members of institutions either grow old and die or lose interest in the institution and leave; the institution however recruits other members and perpetuates itself and this process is cyclic.

Measurement of the State of Development of Institutions

The relevance and efficiency of institutions for society is, to a large extent, shaped by the level of development of the institution vis-à-vis the demand placed on it from the society and resources available from the environment. Peters (2000) contends that there are two major change attributes of the institution that indicates

the change. The first has to deal with the internal development or institutionalisation of the institution. This is related to the development of internal structures of institutions.

The second change attribute has to do with whether the original values that established the institution have changed and the extent to which they have changed. This aspect of the institution deals with the issue of agency exhibited by its members. These are largely external to the institution. Abrutyn (2009) cites various writers to explain the factors that affect the adaptive capacity of institutions and therefore their level of development. These include 'resource scarcity, population pressures, or crises that produce problems of meaning —or exogenous—such as climatic change or intersocietal conflict' (Boserup 1965; Malthus [1798] 1926; Weber 1922; Fagan 2004; Gat 2006: all cited in Abrutyn, 2009: 451).

Huntington (1968, cited in Peters, 2000) notes that in assessing the internal development of institutions, four factors have to be considered. These are: adaptability, autonomy, coherence and complexity. Adaptability is concerned with the extent to which the institution adapts to changes in its environment, that is, the extent of interaction between the institution and its environment and how the institution has been able to modify either itself or the environment to ensure its survival.

Autonomy deals with the capacity of the institution to make and implement decisions on its own. Abrutyn (2009: 450) sees autonomy as " a function of the degree to which sets of specialised corporate actors are structurally

and symbolically independent of other sets of corporate actors".This explains the level at which the institution is independent of other institutions for its survival and whether it has its own sources of revenue to implement its decisions and policies. The modern institutions of governance in mining in Ghana all derive most of their resources from the state and cannot therefore be autonomous of the state. However, for traditional institutions, they have more independent sources of revenue from the state, albeit inadequate and the potential for this to influence their autonomy is pertinent.

Coherence of the institution is the ability to manage its own core functions and to develop procedures for carrying out these duties without necessarily looking to another institution for direction. March (2010) sees coherence in institutions as defining and defending the values, norms, interests, ideals, and beliefs underlying the institution. Complexity refers to the situation where internal structures are developed by the institution to implement various tasks the institution has to undertake. It discusses the structural differentiation in the institution.

Peters and Goetz (1999, cited in Goetz and Philip, 2000) also add congruence and exclusivity to the four factors determining the state of institutionalisation of institutions. Congruence deals with the extent to which institutional norms correspond with the social relations it is supposed to coordinate. Exclusivity refers to the level of competition faced by the institution from other institutions in its functions. In the modern state of Ghana, owing to the duality of institutions, the issue of exclusivity is crucial as it appears there is

duplication in activities of traditional institutions. Therefore, the niches that traditional institutions have created to be relevant become particularly interesting.

Theory of Collective Action

The sustainable management of common resources by the collective action of people has presented both success and failure stories. In order for this study to be able to analyse the role of traditional institutions in mining governance, the theory explaining collective action in managing common resources becomes imperative. Hardin (1968) famously illustrated the tragedy that befalls common resources which are not managed by anyone in particular which leads to its depletion, even though individual users do not necessarily misuse it. In this illustration, each user of the resource rationalises that exacting a little extra utility from the resource leads to everyone extracting a little more from the resource than is sustainable. The combined effect is that the common resource is invariably over consumed. Smith (1981), cited in Wade, (1987) noted that once a resource was treated as common, this leads to its inexorable depletion. To protect the resource from depletion, privatization of its ownership is the only guarantee. Other writers have suggested the allocation of the authority to regulate common resource to an external agency, usually the state to ensure its survival (Ophuls, 1973, cited in Wade, 1987).

However, other studies done on different societies have found common resources that were managed by local institutions without any privatisation or external regulation being managed sustainably (Ostrom, 2000). The theory of

collective action was propounded to address the questions surrounding the situation where a group of people depend on a resource that everybody uses but nobody owns, and where one person's use affects the ability of another person to use the resource (Ostrom, 1990). These resources are termed Common Pool Resources (CPR) and include fishery, pastures, the air, scientific knowledge, among others. The main reason why there is high likelihood of the common resource being depleted is that it is very difficult even designing rules to govern the resource use, more so to enforce them and to sanction default. To guarantee the flourish of the CPR, the collectives have defined institutions to govern the use of the resource.

The institutions have either been of traditional or modern origin. The traditional institutions usually take the form of a body of informal norms that are disseminated by word of mouth, enforced by gossip or religious stricture, and passed from one generation to another (Gyekye, 1997). The modern institutions have been of a body of formally written laws that are enforced by the state or its agencies. A major problem with the collective management of a common resource is the issue of free riding. This is the phenomenon where people want to benefit from a system but do not want to contribute to the maintenance of that system. This problem is usually addressed by the constitution of institutions which give people the assurance that if they do comply with the rules they will not find themselves losing out as those others who do not comply are punished. The effective enforcement of rules and punitive action against offenders and the introduction of incentives for compliance increase the chances of voluntary

compliance. Voluntary compliance is important because the cost of enforcement when large numbers of people comply involuntarily is prohibitive (Wade, 1987).

The arguments surrounding whether local institutions (traditional in nature) or modern institutions are the better options for sustainably managing the CPR goes on. However, Ostrom (1990)'s study of enduring local (traditional) institutions which were successful in sustainably managing CPRs uncovered eight design principles underlying them. The first principle was that group boundaries and the CPR boundary itself had to be clearly defined. The definition of who has what right to the CPR necessarily also defines who has to be excluded from accessing the resource. This is the first step in building a framework for managing how the resource is exploited and the conditions of exploitation.

The next principle was that the rules governing the use had to be well matched to local needs and conditions. This is because how well a resource is valued by the local people depends on the use to which the resource is put. Also, the rate of regeneration of the resource is a function of the local environmental condition and every rule of use that does not account for these may lead to depletion or in extreme cases, the extinction of the resource.

Participation of individuals and groups affected by these rules in the modification of the rules is another necessary design principle. Because conditions change with time the people who are confronted regularly with the resource should have a say in modifying the rules to satisfy the conditions of the time.

When external authorities, mostly the state and its institutions, respect the rights of local community members to devise their own rules to govern the CPR, it allows and motivates the community members to set appropriate rules to manage the resource. In this case, the rules have a lot of local content and are influenced by local conditions and indigenous knowledge, often times a necessary condition for sustainable governance of the resource. In addition, the situation where other people attempt to overturn local rules governing the sustainable use of the resource by going to the state does not occur.

A community based system for monitoring members' behaviour exists and this system is accountable to the direct stakeholders in the resource. In this system, the condition of the CPR is audited at regular intervals and the audited results communicated to the community so that the necessary action needed to rectify or enhance a situation can be discussed and implemented. One other design principle for successful locally managed CPR is the implementation of a graduated system of sanctions. In these situations, there exist a system of monitoring which allows defaulters to be identified and appropriate sanctions imposed. People who default are given sanctions in consonance with how grave the infraction is or how often the defaulter defaults. In this system, the stakeholders in the resource are used as voluntary monitors whose major motivation is to protect the resource because they directly benefit from it. The transaction cost to the management system is therefore low.

In the management of CPRs, misinterpretations and conflicts are bound to occur. Sometimes people would intentionally or genuinely misinterpret rules in

trying to address their own need. In order for these conflictual situations to be dealt with quickly and effectively, the management system must provide access to low cost conflict resolution to give confidence to all stakeholders in the effectiveness of the rules governing the resource.

The last design principle, which was found in more complex resource systems, is the nestedness of enterprises at different levels. This principle deals with the governance structure of the CPR being nested at different levels to address issues at all these levels. Because issues pertinent to different levels are different from the other levels or areas, the rules governing the resource at these levels should be designed to address the peculiar circumstances. For instance in managing a forest with parts of it serving as a water shed for a major river depended upon by the people in the area for fisheries and navigation, the rules for managing the watershed forest would have to consider not only the forest survival but that of the river volume and quality as well.

All of the eight design principles given by Ostrom (1990) are affected by the type of state system in which the CPR governance is embedded. If the state recognises the legitimacy of traditional systems, and facilitates the institutionalisation and local organisation of these traditional institutions, the communal management of CPRs by local institutions and organisations would flourish and sustain the resources (Ostrom, 2000). However in the Ghanaian context where the colonial government and subsequently, the independent state governments have conducted both overt and covert activities to undermine the

legitimacy of traditional institutions, this has been the major inadequacy of implementing these design principles fully.

These inadequacies, notwithstanding, conscious efforts can be made to address the challenges. Paavola (2007) notes that institutional re-organisation to resolve conflict over environmental resources is feasible. This reorganisation was conceptualised as environmental governance.

Environmental Governance

The consumption of environmental resources coupled with the generation of waste, in volumes and kinds difficult for the environment to absorb naturally have ensured that the development-environment interaction has had detrimental effects on environmental integrity. Such a situation undermines future provision of resources in the quality and quantity demanded sustainably. Environmental governance, made up of institutional frameworks and arrangements to moderate the society and environment interface, has evolved in response to environmental changes and has been put forth as a solution to problems emanating from environmental resource extraction (Schrifrin & Rodriguez, 2013).

Environmental governance is a concept that discusses decisions that have an impact on the environment and how these decisions are made; the exercise of authority in making decisions affecting the environment; and with who is responsible, how they wield power, and how they are held accountable in issues that directly influence the environment (World Resources Institute, 2003).

Human activities and environmental changes are interlinked through complex cause-and-effect relationships embedded in both biophysical and social processes. These processes are complex and often nested as sets of linkages that persist in the activities of the people in developing. Natural capital, made up of all the bio- physical resources, is usually transformed into other forms of capital, such as infrastructure, machines and a network of friends so that they can exercise freedoms of choice and to satisfy needs (DFID, 1999).

In Ghana, the predominant economic sectors are agriculture, forestry, and fisheries. These sectors are also highly dependent on ecosystem services to contribute to gains in human well-being, including clean environments, especially through provisioning services (Millennium Ecosystem Assessment, 2005). With the advent of mining, especially open pit mines, access to the ecosystem provisioning services is reduced for a large population of people working in the agriculture sector. This results in increased poverty as open pit mining utilises large areas of land for the actual mining, processing and disposal of waste. In most traditional societies, like in most of the rural areas in Ghana, usage rights of natural resources for subsistence has resided in the local people, held in trust by the chief or traditional authority.

Any re-allocation of the usage rights to another entity for large scale exploitation therefore requires a systematic process of negotiations and compensation for livelihood lost or relocated. This process can be achieved through environmental governance. Environmental governance requires society to focus both on the technical details of how to manage and on the social dimensions

of natural resource use and ecosystem management (World Resources Institute, 2003).

Management of common resources, when they are complex systems, requires a broad set of multi-scaled governance tools which should be approached in an adaptive manner (Dietz et al, 2003). The trade-offs and synergies that can arise between and among ecosystem services and human well-being need to be considered when different access regimes are implemented to expand or diversify the economy. Environmental governance involves bringing together many institutional regimes critical for adaptation to and mitigation of environmental changes and the improvement of human well-being.

These institutions should include both formal and informal regimes of organising social order in the communities that existed before the decision to explore and exploit the environmental resource was made. This is because the persistence of these institutions and the relative peace they engender legitimates them. Local people, in several instances, access these traditional institutions more than modern ones because they see them as more relevant and also the transaction cost in dealing with them are lower than when dealing with the modern institutions.

The magnitude of the interconnectedness of environmental changes notwithstanding, policy-makers are not only faced with the choice of doing everything at once in an integrated approach or being powerless in the face of complexity (OECD, 1995), they have the option of satisfying everybody a little at a time or satisfying some people initially and then progressively adding on others

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as time moves on and conditions allow. The effort of selecting an option requires that policy makers have information on costs and benefits associated with several options. The general trend has been to select the best option given the whole set of information on the cost and benefits under the circumstances. The decision finally taken should reflect the best option and therefore should come with the least conflict as it considers as many stakeholders as the transaction costs would allow.

However, the spate of conflicts and community agitation against mining in Ghana suggests that environmental governance did not fully address the concerns of all the stakeholders (Singh, Koku & Balfors, 2007; Obara & Jenkins, 2006). This is because if the environmental governance structure were that responsive, most of the underlying causes of these conflicts would have been resolved earlier. This brings to the fore questions about the way the costs and benefits of the mining projects were determined. Most of the appraisal procedures adopted to inform decisions on mining approvals and conditions are influenced by economic and financial considerations generally for the mining companies and government revenue with minimal attention paid to people whose livelihoods and health are directly affected by the extraction.

Owing to conflicts in mining communities and agitations from both academic and political circles and in order to get around this problem, there has been a trend to now require that the environmental and social costs of some of these projects are determined and assessed in Environmental Impact Assessments (EIA). However, these assessments also use cost and benefits as the bedrock of the assessment and one wonders how well the environmental cost attached to

destroying, for instance, pristine forests, cultural sites or farmlands of communities inherited from generations and to be bequeathed to generations yet unborn can be quantified accurately and compensated for adequately.

Acknowledging the value of resources to traditional owners and the owners' survival depending on the resources, one would expect that in both the assessment of the resources and the decision to either mine or not should be made with the full participation of these people. But EIAs are written in highly technical language beyond the grasp of an average community member or leader and the public fora on EIAs organised in a day to consider this voluminous technical document and to obtain communal consent cannot reflect a consensus of the traditional owners of the land. In all these, the biggest losers are rural communities in the vicinity of mining projects, where rapid social and environmental change tears at the fabric of tradition and daily life (Miranda, Burris, Bingcang, Shearman, Briones, La Viña, et al, 2003).

In order for local communities to be better protected from the onslaught of capital and for environmental sustainability in mineral rich areas, World Resources Institute (2003) has suggested seven important elements of environmental governance to be maintained. These elements are: Institutions and law; Participation and representation; Authority level over resources; Accountability and transparency; Property rights and tenure; Markets and financial flows; and Information and knowledge on the resource. These elements are discussed in turn below:

The institutions and law element talks about the fact that there should be legitimate institutions which are transparent in their dealings and have the resources to carry out their mandate. They should implement policies objectively and should be fair to all people they have to work with or for. This institutional framework should include formal and informal as well as traditional and modern institutions. Duplication of activities, when avoided in this situation ensures there is efficient utilisation of resources and minimal confusion in the populace as to which institution to approach for a particular service. It also reduces transaction cost in doing business in the society because processes do not have to be repeated unnecessarily. In addition, there should be the rule of law, which governs the way institutions and people conduct their activities, improving transparency.

Institutions, including land laws that govern the distribution of land and its attached resources and the recognition of rights to them, do matter (Borras, & Franco, 2010).When there is no rule of law, then the fittest or the one with access to most relevant information or access to authority survives. But when there is the rule of law, there is predictable governance and people behave according to the rewards and sanctions provided in the governance framework. The institution responsible for making and enforcing the rules for using natural resources when clearly delineated ensures that responsibility for omissions and commissions can properly be laid. Moreover, the rules and the penalties governing the use of the natural resource should be made known so that it engenders confidence in the system of laws for enforcement and resolution of conflicts.

In Ghana, there are institutions built and laws passed to govern mining. These institutions include: Minerals Commission, Environmental Protection Agency, Customs, Excise and Preventive Services, District Assemblies, Geological Survey Department, the Police among others. The laws include the Minerals and Mining Law of 2006, Environmental Impact Assessment Regulation among others.

Public goods are owned by the public and the use of and conditions of access are activities that the public naturally have a stake in. When the public is allowed to participate in decisions they can influence the rules governing the natural resource. Two main issues have to be addressed when participation of stakeholders in a natural resource is considered. Active participation is a process in which initiatives and actions are under the control of all participants. Passive participation is when the public is only involved in actions thought out or designed predominantly by others (Nikkhah & Redzuan, 2009).

When participation is active, the final decisions to a large extent reflect the aspirations of all stakeholders with minimal dissent therefore minimal conflict when the decisions are implemented. Active participation leads to people utilising the resources efficiently, viewing policies as more legitimate and therefore enhancing support from the citizenry leading to higher numbers of successful policies.

In Ghana, the mineral laws are not explicit on the issue of public participation in the processes leading to the granting of a mineral right. The National Mining Policy of Ghana section 4(7) states:

Procedures for effective participation of communities in the licensing process include notification to the communities by methods such as publication of the application at the District Assembly, among others as well as the conduct of public hearings in prescribed circumstances.

Mining companies have acted arbitrarily in this regard because the process for ensuring public participation is not strictly defined. The state institutions have expressed satisfaction with the process of consultation adopted by the companies as reflecting public participation. They usually conduct research at the local level as part of their EIA procedures where questionnaires or interviews are administered to selected people at the local level.

At public fora, highly technical documents are presented to the people in a day followed by some comments and questions from the gathering. A report on the consultations and these one day fora attached to the application for a mining license constitutes the community participation required by law and the license is usually given.

However, the representativeness of the samples selected for the studies are usually unknown and at the public fora, it is highly questionable how the people gathered can comprehend a highly technical and voluminous document with parts translated to them. These documents typically require days of review by experts before they can understand it, so for the lay public to give consent after a day does not suggest active participation (University of Texas School of Law, 2010).

The level at which authority over the use of the resource resides is the third important element of environmental governance. The legitimacy of the

authority to exercise control over the resource is influenced by the scale at which this authority resides. For example, is it at local, regional, national or international level that this authority over the resources resides? People question the legitimacy of a distant institution controlling access to locally owned resources. This usually leads either to direct confrontation between the people and state institutions or businesses authorised by the state to exploit a resource or to a situation where the people covertly undermine the implementation of any policy on the extraction of the resource.

The Minerals and Mining Law of 2006 (Act 703 of 2006), vests ownership of all minerals discovered in Ghana in the President in trust for the people. The President holds the authority to extract and usually delegates it to the minister responsible for mines. As soon as a mineral is discovered in any land, resource ownership suddenly changes from the local level to the national level. The law attempts to make up for this deficiency by requiring that mining project EIAs are participatory.

This provision in the legislation is not clear on how active participation should be practiced and therefore does not address the problems presented by exercising authority over a resource originally owned at the local level which suddenly becomes owned at the national level.

There are two main issues involved in dealing with accountability and transparency in environmental governance: the conditions surrounding the extraction rights given to a company and the usage of the public benefits derived from the extraction. Contracts signed between governments and mining

companies define the conditions permitting mining, how the environment can be treated, the benefits derived by the state and all who it represents and the sanctions applied in cases of default. However, in most mineral rich developing countries, contracts between governments and mining companies are often signed with confidentiality clauses that prevent the public (the owners of mineral wealth) from knowing the revenues given to the State and what rights and privileges have been awarded to the mining companies (UNECA, 2008). It therefore, becomes very difficult to keep track of the revenue streams and to hold governments accountable for acts of commission or omission with regard to the disbursement of these revenues. When there are infractions committed by the companies on the environment, it is difficult for the public to call for an enforcement of the sanctions for breach of contract.

This situation prevails when there are inadequate democratic governance structures and institutional capacities in the country to manage natural resources and their extraction. The Extractive Industries Transparency Initiative (EITI) is one of several initiatives that seek to improve transparency and accountability in the extractive sub-sectors of countries and Ghana is a member of this initiative. The implementation of recommendations of the EITI audits is voluntary and it does not fully ensure accountability from people who hold public office in the sub-sector to the people who originally owned the resource.

Property rights can be defined as a group of decision rights involving an asset which provide rights of access and rights of exclusion, including the right to make profit from the asset (Segal & Whinston, 2010). Property rights are that

which give people the incentive to take care of any asset including the parts of the environment owned by the right holder. Even though property rights are a bundle, the constituent rights differ from one holder to the other, for similar resources. Also, sometimes for the same resource, different people hold different rights to it and the condition that maintains this balance is what is termed as the tenure.

In most Ghanaian areas, ownership of land and the forest found on it does not exclude the right of local people to non-timber forest products found on or within the property. Therefore, every community member has the right to fetch firewood, herbs, mushrooms etc from the forest owned by another for as long as it is not a timber product and that the exploitation is not for commercial use. If the exploitation is for commercial usage, then the owner of the said land has to give approval. The complexity in the tenure in most societies that are allowed to maintain property rights through the traditional institutions attain some level of stability as these rules pervade the system and people imbibe them because it has become the norm. Problems start to arise when the state with its modern posture interrupts the quasi stable norms with different philosophies and tenure regimes which necessarily introduce contradictions in the status quo.

With regard to mineral resources in the land, in pre-colonial times, the owners of the land also owned the mineral. If the land was owned by a family, the family also owned the mineral found in it and when the whole community owned the land, the chief acting on behalf of the whole community managed the resource. In the case of a family owned resource, the family leadership governed

the exploitation, extraction and sale of the mined mineral. They however paid a token to the traditional authority to help maintain it.

In the mining sub-sector of Ghana, the minerals and mining laws vest the ownership of any mineral found in the country in the President on behalf of the country. It does not discriminate among private, family or communal original ownership. The law also gives grazing rights, among other subsistence rights, to local people for as long as it does not affect the mining activities. It is left to the private company who has been granted the access rights to the mineral to decide if the exercise of grazing rights by the local people does not affect their mining activities. The people have limited, even if available, options to challenge that decision.

Environmental resources are valued for several reasons. These include cultural value, aesthetics and market value. For those who own property for its market value, there has to be an open market where the property can be exchanged for other valuables like finance or capital goods. When the market is full of uncertainties, like in the areas that have the potential of mineral resources and where governments can use eminent domain to dispossess original owners of the resource, then people have not much incentive to even protect their rights to own that property, let alone to invest in it. People in these cases would rather exploit, rather unsustainably, everything there is to exploit and degrade the resource.

In order to make decisions on how best an environmental resource should be used, information on all aspects of it have to be available to allow rational

decisions to be made. Knowledge about the science and risk associated with each type of usage of the resource should be systematically determined and made available to all participants in the decision making process. It does appear that investors and regulators are convicted that mining can be done in a manner that is environmentally sustainable, produces more benefits to the country than costs and leads to development. On the other hand, local people affected by mining and NGOs involved with these communities also argue that mining degrades the environment and leads to underdevelopment of local communities and mineral rich countries. The question arising is: how are ecological and social sciences incorporated into decisions on natural resources use to reduce risks to people and ecosystems and identify new opportunities?

There is also the question of information asymmetry among the stakeholders. Mining companies are able to pay for most current and accurate information of the resource while governments have less accurate and current data. When there has to be negotiations, the companies then have a position of advantage as compared with the state and its institutions.

In real life, it is not possible for any one country to achieve excellence in all the seven elements of environmental governance. Countries differ on the levels of achievement with regard to each element and seriousness they attach to achieving these goals. When there is a general improvement in all of the elements and there is a genuine concern and effort to achieve improvements in these elements, there is general improvement in environmental governance which translates into development of the society (Kaufmann, 2003). Considerations on

the overall normative basis for environmental governance help to identify more effective institutional structures for achieving improvements. One very important normative factor to be considered in environmental governance considerations is the entitlements different stakeholders have to the resource.

Conceptual Framework

The conceptual framework developed for the study was based mainly on the theory of the state and institutional theory and to a lesser extent, the theory of collective action. The classic functions of the state is to define and collect taxes; conscribe its citizens; and prevent rebellion, and by implication to defend its sovereignty (Scott, 1998). In order to be able to do all these, the state needs to have mechanisms to shape individual behaviour making it possible to get people to act in certain predefined ways. This instrument to ensure conformity is the legitimate monopoly on the use of force (Weber, 1946). The ways through which this monopoly is used is what Foucault (2004) has described as governmentality. The variation in the function of the state coupled with the fact that there is spatial distribution of citizens and resources motivates the state to develop its own institutions to perform specific functions. The creation of modern institutions to perform these functions in the public sphere does not happen in a vacuum. There are already traditional institutions actively engaged in the provision of public services in this sphere.

The traditional and modern institutions work in public spheres at all levels of national endeavour -international, national, regional, district and local. The

state institution's effort to administer its mandate has not been undertaken in vacuum. Traditional institutions predate modern institutions and failure of the modern state to make traditional institutions legible (Scott, 1998) led to attempts at undermining the traditional institutions (Terray, 1974). The traditional institutions endured and shaped interactions between the society and public goods alongside the modern institutions, which people relate to. This therefore enhances their legitimacy ensuring their continued survival. Some of these activities have been to resist the expansion of and to provide alternatives to the state's influence in the sphere. The modern institutions, also being public institutions also work in this same public sphere to mediate the society and environment interface. Figure 4 shows the conceptual framework of the study linking the state, modern institutions, traditional institutions and local communities that try to navigate the opportunities and constraints presented by the interactions among them.

These two institutions interact and the fallout affects local people's access to environmental resources. The two institutions interact at different levels but the frontier of their interaction is what Belden (2010) has termed the 'Action arena'. There are three variables shaping the interaction: Resources available; Rules in use and Incentives. The environmental resources available determine whether the dual institutions should interact to govern its use or protection or whether one of the institutions should be allowed to mostly manage or protect it. Olsen (2007) argues that resources structures either enhance or diminish agency of people to exploit. These resources are usually defined by rules and worldviews and these either empower or constrain agents according to behavioral codes.

STATE
-Legitimate use of force, -taxation, -international relations and negotiations
-defense,   -conscription

Modern institutions
-represent the state
-legal backing
-formal
-High transaction cost
-technocrats
-peace& security

Interface
Action arena
-Rules in use
-Resources available
-Incentives

Traditional institutions
-represent traditions
-socially embedded
-largely informal
-low transaction costs
-peace

Collaboration
Collusion
Conflict
Non interaction
Environmental governance structure

Local Community
-Livelihoods   -Security
-Health   -Education
-Culture and traditions
-Development

Figure 4: Interactions among Modern Institutions, Traditional Institutions and Local Communities for Environmental Governance

Source: Author's construct, 2012

The rules underlying the management and the forms of the institutions managing the resources is termed the rules in use. The perception of the form of the resource is influenced by the rules in use. Whether the resource is perceived as

a common, open access, private or state property prescribes how it is managed, the conditions under which it can be exploited and who should be allowed to extract. The resources available and the rules in use to a large extent determine the kinds of incentives motivating this interaction. These incentives include mutual threat, moral ethics, political reward, and resource gain.

The dynamics in the action arena in turn influences whether the two institutions would or would not interact. When there is enough motivation to interact, there are three kinds of possible interaction. These include collaboration, collusion or conflict. Collaboration is the positive form of interaction as both institutions perceive their interaction as an opportunity to contribute to the development of both the country and the communities. They also see their efforts as part of either their moral or statutory responsibilities.

Collusion occurs when the modern and traditional institutions interact only or largely to pursue either individual or institutional parochial interest to the detriment of the state or citizenry. Conflict occurs when the values or the objectives of the two institutions are at variance with each other and the parties engage in direct competition for control of the resource.

The result of the interaction is that it defines the environmental governance structure governing the environmental resource. The environmental governance structure in turn conditions how community members interact with these institutions to conserve or preserve the environmental resource or access it or the returns made on the extraction of these resources for their development.

Williamson (2000) contends that institutions matter. This statement does not differentiate between modern or traditional institutions. In this legal pluralistic situation, people will assess both institutions with regards to which of the two would provide the best possible solution to a resource tenure challenge and the transaction cost associated with this action. A focus on the relationships between governmental technologies and traditional institutional norms and practices may offer a productive inquiry of implementation and to illuminate the internal workings of governmental technologies (MacKinnon, 2000).

CHAPTER FIVE

METHODOLOGY

Introduction

The research methodology for the study discusses the overall perspective adopted for this research process (Neville, 2007). Methodology is a way of systematically solving the research problem (Kothari, 2004). This chapter discusses the whole research approach including the underlying philosophy. It presents the study area, research design, study design, study population, sampling procedure, sources of data, data collection methods and tools, ethical considerations, field work, field challenges, and data analyses.

Study Area

This study focuses on the Asutifi District of the Brong Ahafo Region of Ghana. The Asutifi District was selected for this study because it has a long history of artisanal mining as against large-scale mining. Large-scale mining only began in 2007 with the first pouring of gold by the Newmont Gold Ghana Limited's Ahafo project in Kenyasi and Ntotroso. The management of gold mining had been solely done by chiefs or their representatives. With the advent of large-scale mining with all the formal regulatory institutions in the district, control of access to gold and conditions changed and the framework that finally emerged

from this flux provided a model situation to study the interactions among traditional institutions, formal institutions and local people.

Two *galamsey* sites were visited in the district. These were the Kenyasi No 1 and Ntotroso sites. All the land areas covered by the Kenyasi and Ntotroso areas fell within the Newmont Ahafo South concession area and therefore, the small-scale mining activities there were not licensed with the Minerals Commission. Ensminger (1992; cited in Firmin-Sellers, 2000) in discussing the reasons for which citizens evade regularisation of their activities with statutory institutions, noted that this is highly likely if people perceive that institution or an action of that institution as illegitimate or if the institution's supporters lack sufficient resources to monitor and sanction deviant behaviour.

Contrary to the general perception that artisanal mining uses rudimentary and crude technology, the Kenyasi No 1 site was a very highly organised business venture with a systematic organisational structure. The area covered about two square kilometres and was managed by a site management committee. The area had been further divided into seven sub-areas the miners called 'divisions' who had representatives forming the site management committee. Within the division, there were operators with their groups that worked on particular shafts or mills, they formed the division committees. Within the particular operation in each division, there were gangs of particular skill within the group who had their leaders. These leaders then formed the shaft or mill group with the operator and sponsor. There were several arrangements for sharing the benefits but generally, the group of workers normally took two-thirds of the products and the

operator/sponsor, a third (World Bank, 1995).

The Asutifi District was carved out of the Ahafo District in 1988 and Figure 5 is a map of the district showing the concession area of Newmont Ghana Gold   Limited.
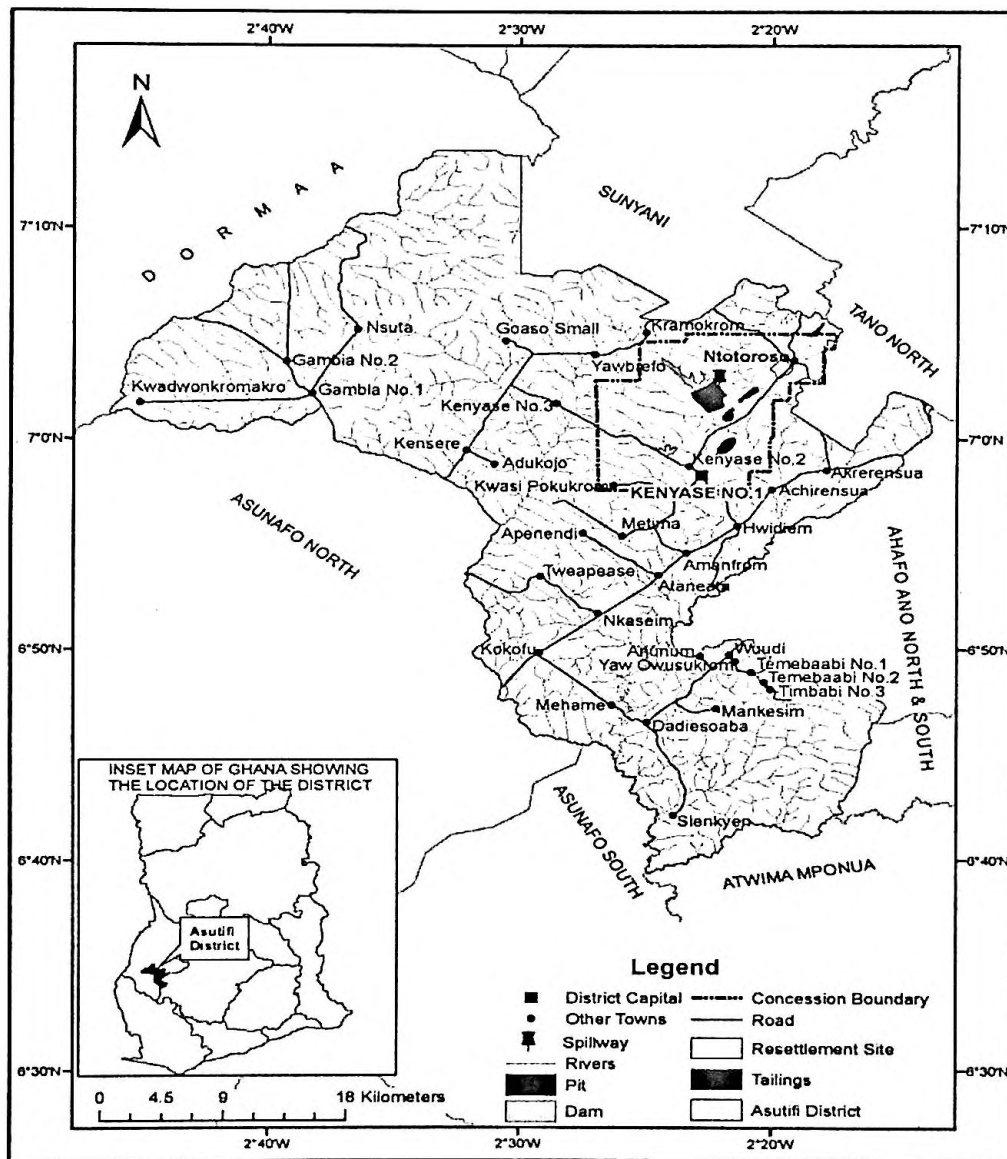
Figure 5: Asutifi District showing Newmont Ghana Gold's concession area

Source: Department of Geography and Resource Development, University of Ghana (2012)

The district is bounded to the North by the Sunyani Municipality, to the North East by the Tano South District, to the North West by the Dormaa Municipality, to the South West by the Asunafo North Municipality and Asunafo South District and to the South East by the Ahafo Ano South and North districts (Ashanti Region). The district capital is Kenyasi, about 50km from the regional capital of Brong Ahafo Region, Sunyani. The total land surface area of the district is 1500 sq.km, which includes 117 settlements and a population of 105,843 in 2010 (Ghana Statistical Service, 2012).

The district is traditionally administered by four paramountcies and six divisional areas. The paramountcies were Acherensua, Hwidiem, Kenyasi No.1 and Kenyasi No. 2. The six divisional areas were Ntotroso, Gyedu, Wamahinso, Nkaseim, Mehame and Dadiesoaba. Each of these paramountcies is headed by a paramount chief. Akans constitute the majority of the population, along with other ethnic groups from Ghana. Seventy-four percent of people in the district are Christians, 23.8 percent are Moslems and 2.9 percent are traditional worshipers (Ghana Districts, 2011).

The Asutifi District is underlain by precambrain rocks of Birimanian and Dahomeyan formations with the Birimian formations known to be gold bearing rocks. Diamond has been discovered at Wamahinso, which is about 11 kilometres north of Kenyasi (Ghana Districts, 2011; World Places, 2011). The district also has a high potential for manganese, iron and bauxite. Other exploration activities are on-going in other communities within the district. In view of the discovery of

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economically viable quantities of gold in the district, Newmont Gold Ghana Limited developed its first project in Ghana, its only operation in Africa, in 2006.

By the end of 2007, the company estimated that it had over 17 million ounces of gold reserves, representing nearly 20 percent of its global gold reserves. This project entails the development of four mining areas and the construction and operation of related mine facilities. This project produced approximately 446,000 equity ounces of gold and reported approximately 9.7 million ounces of gold in reserves, enough to be actively mined for approximately 20 years as at 2007 (World Business Council for Sustainable Development, 2009). Newmont Gold Ghana Limited's mining concession covers an area of approximately 270 km^2 (Newmont, 2005).

The rural-urban split is 79.5 percent to 20.5 percent. Subsistence agriculture engages 66.7 per cent of the economically active labour force. About 91 percent of those engaged in other occupations outside agriculture practise agriculture as a minor activity (Ghana Districts, 2011). However, large-scale mining has only recently been introduced in the district. This large-scale mine uses the surface mining approach which uses large areas of land for the actual mining, infrastructure and waste disposal (World Coal Association, 2012) denying agriculture access to these lands.

In the Asutifi District, farming is the main livelihood activity that contributes to household needs (Safo-Kantanka, Attah, Ofosu, Nagel, Akuto, van Beurden et al, 2006). Major food crops cultivated include: maize, beans, groundnuts, plantain, yam, cocoyam, vegetables and cassava. In addition, cash

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crops like cocoa and oil palm are also cultivated in the district. People in the district largely practise subsistence farming which means that agriculture growth depends on expanding the acreage of fields under cultivation but with the advent of large scale mining accompanied by concessions granted, arable lands have become increasingly scarce and expensive (Newmont, 2006).

The scarcity of arable land is attributed to the mining project's acquisition of lands for concessions which has made some farmer households landless and lowered overall agricultural production (Newmont, 2006). Farm sizes have been reduced and other farmers now have to travel long distances to get to their farms because they have had to relocate farmlands to areas beyond the concession. Before the large scale mine started in the district, the area was self-sufficient in food (Safo-Kantanka et al, 2006). In view of this, Newmont launched a programme known as the Agricultural Improvement and Land Access Programme (AILAP) in 2008 to improve access to lands for agriculture and also to modernise agriculture for improved productivity. The project has so far spent ten million United States dollars and has had some success. Plantain production has increased from 216,713 metric tons (mt) in 2006 to 363,928mt in 2010 while maize production increased from 12,165mt in 2006 to 13,103 in 2010 (Mensah, 2011).

With the mining taking over productive farmlands, people are compelled to change their livelihood sources. The number of people who engaged in agriculture as their primary source of income has been decreasing while employment in other sectors like commerce, industry and services is increasing with the commerce sector having the highest employment (Safo-Kantanka et al.,

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2006). Trading is the predominant commercial activity while mining and timber logging constitute the industrial activities people engage in.

The youth whose employment options in agriculture have diminished now seek non-existent jobs from the mining company but since most of them do not have the required training and skills to work in the mine, they are not employed. Also, there has been an increase in in-migration to the district because of the expectation of getting employed in the mine and its allied services. This exacerbates the reduced agricultural employment situation in the district and creates a pool of unemployed youth which leads to increases in social vices and crime. This dynamics between increasing human population, the high proportion of lands given for mining or mining concessions and increasing unemployment has resulted in a social crisis situation in this district.

There is poor access to infrastructural and social services like potable water, sanitation and health facilities. Sanitation, for instance, is a major problem in the urban centres and about 15 percent of the population have no access to potable water and therefore rely on streams. There is therefore, a high incidence of malaria and gastro-intestinal diseases (57%) in the district (Ghana Districts, 2011). This situation is exacerbated in part by the inadequacy of the provision of these services; rural-urban migration within the district as well as the increasing pressure put on these facilities due to in-migration in the district for perceived job openings in the mine and allied services.

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Research Design

The research was designed as a qualitative study. The study adopted the intepretivist philosophy which maintains that research is to interprete human actions within the context of culturally specific meaningful arrangements (Audi, 1995).

Within the variants of the interpretivist philosophies, the constructivist philosophy that humans are reliant upon a cultural "matrix" in order that they can reduce the mass of possible events to manageable amounts at any given time and space (Foucault, 1991; Luhmann, 1998) informs this study. This "matrix" is what gives order to the world and is dependent on history. The elements of a cultural "matrix" emerge in a given context, and they could have denoted something else in a different time or place. People experience reality in very different ways – according to the historical and regional context in which they exist. Therefore, reality is never objective and it is observed through a socially constructed perspective that has been handed down to people and that gives order to their world. These cultural perspectives can never be taken off because without them people do not have the ability to see (Draude, 2007).

The methodology acknowledges the possibility of multiple interpretations of similar phenomena. The qualitative research design is amenable to this philosophy. Yin (2011) discusses the greater flexibility offered by qualitative research in selecting topics of interest because it is not constrained by such issues as the inability of the researcher to establish an ideal research condition or the inadequacy of data series.

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The qualitative research design allows the kind of close interaction between the researcher and the researched so that the realities constructed by the researched and the meanings attached to these can be extracted. The reality, from the perspective of the respondent is most important and given the subjective nature of this approach and the importance of language (Eriksson & Kovalainen, 2008), the qualitative data definition, gathering and analyses was found most appropriate.

Study Design

The study adopted a case study research design. Given the complexity and multifaceted nature of the issues that were to be investigated in this study, the case study approach was considered most appropriate. According to Yin (1992), the case study method is utilised to investigate a contemporary phenomenon within its natural context. Leonard-Barton (1990) recommends this method when multiple sources of data are accessible.

The advent of large-scale mining in the district actively began in 2006 and this has had an impact on the environmental governance structure in the district, especially with regards to the roles of traditional institutions in mediating the society and environmental resource interface. The traditional institutions would naturally undergo reorientation and this dynamic was one of the main contexts that influenced the selection of the district. Even though large scale mining is done in other parts of Ghana, the formation of NADeF in 2008 by an agreement between NGGL and the Ahafo Social Responsibility Forum, a platform initiated by chiefs in the district and made up of several social stakeholders is the first of

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its kind in the country. NADeF is the main organisation that links the mining company to the communities with regards to how the benefits from the mining could directly result in development projects.

The case study method was selected for this study because individuals in the district were usually confronted by multiple institutions in their daily activities. In local gold mining sites, many interested parties participated at different levels of power and access and these interactions created complex dynamics. The case study method is best for understanding this amalgam of activities and clarifies environmental governance in gold mining and its interaction with traditional authorities from the perspective of the people living in the area.

Study Population

The population for the study comprised two categories of respondents. The first category consisted of institutions related to mining at the district, regional and national levels in Ghana. The institutions include both traditional and modern institutions that were identified to have a direct stake in gold mining governance in the Asutifi District. The modern institutions included: MINCOM, EPA, Asutifi District Assembly, Office of the Administrator of Stool Lands, NGGL, NADEF, and Forest Services Division. The traditional institutions included four paramount chiefs, six divisional chiefs and their sub-chiefs in the 117 settlements.

The second category of respondents was made up of households living within the Asutifi District. Within the household, the breadwinner or the spouse were targeted as a representative of the household. The total population of the district in 2010 was 105,843 with an average household size of 4.4 people (Ghana Statistical Service, 2012). This translates into an estimated 24,055 households in the district.

Sampling Procedure

Owing to the complexity of environmental governance in an institutionally pluralistic setting, it was very difficult to adopt a single sampling technique. Therefore, the study used quota, purposive and convenience sampling methods to select samples. There were two levels of sampling undertaken for the study. The first level was the selection of organised units including communities, state, traditional and business institutions. Table 1 shows the sampling procedures adopted for the different organised units.

Table 1: Organised units and sampling procedure adopted

Unit	Sampling procedure
Communities	Purposive
State institutions	Purposive
Traditional institutions	Purposive
Business institutions	Purposive

Source: Fieldwork, 2013

The communities that were selected are shown in Table 2. The grouping was done according to communities that were resettled and those that were affected directly by the mining activities. The resettled communities were the OLA resettlement site in Kenyasi I and Ntotroso resettlement sites.

Table 2: Towns where households were sampled for the study

Status of community	Name of town	Sample size
Mining affected	Kenyasi No 1	6
	Kenyasi No 2	6
	Tutuka	7
	Gyedu	1
	Ntotroso	2
Resettled	Ntotroso	5
	OLA	2
Total		29

Source: Field work, 2013

The Ntotroso and OLA resettlement were purposively selected and from the other communities which were not resettled but were affected by the mine, Kenyasi Numbers One and Two, Ntotroso, Tutuka and Gyedu were purposively selected. The total household sample size of twenty nine (29) was arrived at because responses to the questions posed in the interviews at that point were not contributing new ideas to the study. In other words, the interviews had reached saturation of issues (Strauss & Corbin, 1998).

Institutional respondents were sampled purposively and conveniently. There were generally three institutions selected purposively for the study: traditional, state and business institutions. The traditional institutions were selected because they were the core institution the study discussed. The state

institutions sampled were those that the Ghanaian legal framework assigned specific responsibilities over the management of specific aspects of mining in Ghana. The business institutions were sampled because they were the entities that were doing the actual mining.

The convenience sampling was used when in the situation where a targeted respondent was not met during the data collection, another officer deputising for the targeted respondent was interviewed instead. Table 3 shows the distribution.

Table 3: Institutional samples selected for the study

Institution	Description	Designation of respondent
Chief	Ntotroso division	Divisional Chief
Sub chief	Kenyasi I paramountcy	Krontihene (Defence)
Sub chief	Kenyasi I paramountcy	Sanaahene (Treasurer)
Sub chief	Kenyasi I paramountcy	Akyeamehene (Chief linguist)
Sub chief	Tutuka village	Linguist
Minerals Commission	Northern Ghana zone office, Kumasi	Senior Principal Inspector of Mines
	Small-scale mining department, Bibiani,	District Officer
Environmental Protection Agency	Sunyani, BA regional office	Senior Programme Officer
Administrator of Stool Lands	Sunyani, BA regional office	Stool Land Officer (Deputy Regional director)
Asutifi District Assembly	Kenyasi,	Development Planning Officer

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Table 3(Continued)

Forest Services Division	Goaso, District office	District Manager
Newmont Gold Ghana Limited	Kenyasi mine	Various officers (3)
NADEF	Ntotroso	Acting Executive Secretary
Ghana Chamber of Mines	Accra	Director of Research Senior Administrative Officer
Small-scale miners	Kenyase No 1, Ntotroso	Pit owners (2) Machine owners (2) Machine owners (2) Workers (1 FGD)

Source: Fieldwork, 2013

Purposive sampling was used to select traditional leaders and a combination of purposive and convenience sampling was used to select respondents from the state and business institutions for the study. These institutions were deemed to be relevant for the study because of the position they occupied in environmental governance in the district.

Four categories of respondents were sampled for the study. Table 4 shows the categories of respondents, sampling methods and sample sizes.

Table 4: Categories of respondents and sampling method used

Type of respondent	Sampling method	Sample size
Households	Purposive	29
Traditional leaders	Purposive	5
State institutions	Purposive and convenience	7
Business institutions	Purposive and convenience	11
Total		52

Source: Fieldwork, 2013

Sources of Data

The study relied on both primary and secondary sources of data. The primary data collected included issues of the development level of traditional institutions, their roles in environmental governance in the district, their interactions with modern institutions, and opportunities for enhanced interactions between the two institutions, effects of the mining on the environment and communities and mitigation measures put in place to deal with the negative effects.

The secondary data were gathered from documents obtained from the state and business institutions with relevance to environmental governance in the district. Other secondary sources of data included documents and articles related to the research topic obtained from books, journals and the internet. Issues covered include processes that took place before the granting of the mining lease, activities undertaken as part of the engagement of the mining company with the

regulation agencies and the communities and the interactions among the major stakeholders in environmental governance in the Asutifi District.

Methods of Data Collection

Qualitative data collection methods were employed to gather information about the modern and traditional institutional framework regulating mining, community and household livelihood, and their interactions. Information was also gathered on less formal institutions like rites, arrangements and practices that were often overlooked in field research (Marsh, 2003).

Data sources and collection techniques were triangulated in capturing the interactions among people, institutions and development in these mining areas. This is in view of the observation made by Dietz et al (2003) that highly aggregated information often times ignores or averages out local information important in understanding development issues for the purpose of prescribing solutions.

Interviews and documentary review were the main data collection methods used. The interviews were used to allow for probing of issues contributed by respondents and also to capture relevant quotations for analyses. Observation was done on the conditions of the some of the social amenities in the communities, the small scale mining site and also of the tailings dam of the company. This was done to give the researcher a background of the situation for interpretation of the data obtained.

Research Instruments

Interview guides were developed and administered to households to solicit their responses to questions regarding specific conceptual themes regarding environmental governance, mining and sustainable development. Appendix A is the interview guide for households. The data collected were on the livelihood strategies and outcomes of households, including income sources and levels, access to natural resources and the conditions surrounding this access and their views on the traditional institutions and their interactions with them.

Interview guides were designed and used for the key informant interviews and attached as appendix B. The key informants provided their assessment of their institutions as well as the other institutions they had to collaborate with and their interaction with other segments of the society. The interview guides were made up of sections on the mandates of the institutions, the development level of traditional institutions, roles of traditional institutions in environmental governance, interactions between the traditional institutions and modern institutions and potentials for improved interaction among the institutions. Key informants included some NGGL senior staff, Ghana Chamber of Mines, officials of the District Assembly, Minerals Commission staff, Forestry Department staff, Environmental Protection Agency staff, some chiefs, opinion leaders, artisanal miners and village elders. These key informants were selected because of the information they possessed as a result of their positions or their experience. Appendices C and D are the interview guides for traditional authorities and mining company respondents respectively. One Focus Group Discussion (FGD)

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with artisanal miners was also done and attached (Appendix E). The participants were made up of eight (8) mine hands who were over 18 years old and who indicated that mining was their main occupation. They also had to have engaged in the mining for at least a year.

Ethical Considerations

Several ethical issues were addressed by the study. The first ethical issue had to do with institutional and community entry because that was the first point of interaction between the researcher and the respondents. In view of this, a letter of introduction was obtained from the Institute for Development Studies introducing the researcher and the research. This letter was submitted by the researcher to the head offices of the modern instutions and permission sought to sample staff in offices responsible for the Asutifi District. For the traditional institutions, audiences were sought either with the secretary of the traditional council or the chief directly. The introductions were made and appointments made for the research interaction.

In entering the communities, the Asutifi District Assembly was the first point of call. Audience was sought with the District Chief Executive and the introductions made. Permission was then sought which was given and the next activity included meeting the administrator of the traditional council. The research was then introduced and permission sought to conduct data collection. In other situations, the Assembly member for the area or the unit committee member was the contact person at the community level.

Respondents were approached and the researcher and research introduced to them. Their participation in the research was sought by being assured of anonymity, confidentiality of their response and that the responses were only going to be used for academic purposes. Their free prior informed consent was obtained before the data collection session began. During the data collection interaction, their privacy was respected in the sense that anytime they were not comfortable about giving information about a particular issue, that issue was skipped.

All the data gathered were coded and analysed only for the study. The data was stored by the researcher and none has been used for any other activity apart from the thesis and publications emanating from the study.

Field Work

The field work started in January, 2013 with contact made with the national offices of the modern institutions. After the permission had been granted by most of the institutions, with the exception of the Ghana Chamber of Mines and NGGL, the data collection in the district started on the 10th to 23rd February, 2013. Between 18th and 31st of August, 2013, the second round of field work was done. This became necessary as it was then that NGGL agreed to grant audience with the researcher. This period was also used to mop up other respondents who could not be reached in the February field work.

Field Challenges

The major challenge faced by the field work was getting permission especially from the Ghana Chamber of Mines and NGGL. It took eight months for NGGL to finally get the permission from their headquarters in Denver, United States of America to grant the data collection. The next challenge had to do with the availability of the requisite key informants for the interviews that also meant a lot of call backs had to be made, thereby delaying the work and imposing quite some financial burden on the researcher. The researcher for example had to travel to Accra on three occasions to be able to interview the Director of Research at the Ghana Chamber of Mines.

Research fatigue appeared to have set in with regards to most of the respondents, both household and institutional. Most prospective respondents felt they were spending too much time responding to researchers and were therefore, unwilling to consent to participation in the research.

Data Analyses

Responses from interviews, focus group discussions and content analysis were transcribed, reduced and discussed to draw out the qualitative information in them. NVivo version 8 was used to code and analyse the data. Discourse analysis was the main tool used for the analysis of the narratives because as Gee (2010) asserts language and practices reinforce each other in a reciprocal process and one cannot exist without the other. The study analysed the social contexts in which narratives were given to bring out the meanings behind the language given.

CHAPTER SIX

THE STATE OF DEVELOPMENT OF TRADITIONAL

INSTITUTIONS IN ENVIRONMENTAL GOVERNANCE

Introduction

The state of development of institutions in societies is a determinant of the capacities with which these institutions can contribute to the governing of available resources for the well-being of these societies. The chapter begins with a discussion of the background characteristics of respondents. Issues surrounding the first objective of this study, which assesses the state of development of traditional institutions involved in the environmental governance in mining in the district, are then discussed.

Background Characteristics of Respondents

In order to address the complexity of the study and the depth of data collection (Yin, 2011), four categories of respondents were selected. These were households, traditional authorities, state and business institutions. The background characteristics of each of these categories of respondents are discussed separately.

Respondents from households were sampled purposively. The mean household size was 5.2 people. The household size ranged from one to eleven persons.

Twenty heads of households, three spouses of heads of households and six members of households constituted the household respondents. These respondents

were conveniently selected. Household respondents were engaged in various occupations as shown in Table 5.

Table 5: Occupation of household respondents

Occupation	Frequency	Percent
Farming	13	44.8
Teaching	7	24.0
Mine support service	5	17.3
Trading	2	6.9
Carpentery	1	3.5
Military	1	3.5
Total	29	100.0

Source: Fieldwork, 2013

From Table 5, the most frequent occupation was farming with 44.8 percent of the household respondents undertaking it. This is consistent with the occupational activity of Ghanaians with 41.6 percent engaged in agriculture (GSS, 2012). In the Brong Ahafo Region, Ghana Statistical Service (2010) notes that the proportion of the population engaged in agriculture was 61 percent. It appears that more of the farmers had changed their occupation into mining and allied services. This is because in Ghana the percentage of workers engaged in mining and quarrying is 1.1 percent and in Brong Ahafo region it is 0.7 percent (GSS, 2012). However, about 17 percent of the respondents were working in mining support services.

The households earned a mean income of 650 cedis per month and compared with the mean monthly income of Ghana of 101.4 cedis (GSS, 2008), the respondents generally earned higher than an average Ghanaian. The minimum income was 50 cedis and the maximum 2300 cedis. However, the determination of the household's income was fraught with issues of people not wanting to disclose their real incomes, or it was difficult for them to determine or that they did not appreciate what their total income was. Most of the respondents were farmers who hardly kept records of their incomes and also because of the seasonality of crop harvests, found it very difficult to keep records of their incomes. There were 20 males and nine females in the household sample.

The concession area of Newmont Ahafo South project, where active mining was going on, falls within the Ahafo traditional area. The traditional authorities within the Ahafo area are subjects of the Golden Stool and therefore belong to the court of the Asantehene. The authorities had served in their positions for a number of years ranging between eight and 20 years and they were all males.

The state institutions sampled were made up of institutions that were given specific roles by various legislations in mining governance and who were either directly present in the district or which had direct responsibility for the district. In total six state officials were interviewed for the study. These officials had worked with their respective institutions between six and 23 years. The mean number of years worked with the institution was ten years with a standard deviation of seven years. This means that these respondents had been in their institutional system

long enough to be able to provide information that reflects the informal position of their institutions on their interaction with traditional authorities and the mining governance structure.

Different personalities in three main business entities were interviewed for the study. These business entities were small-scale miners, the Ghana Chamber of Mines and Newmont Gold Ghana Limited as shown in Table 6.

Table 6: Business institutions sampled

Institution	Location	Designation
Small-scale miners (*Galamsey* operators)	Kenyasi No 1	Ghetto owners (2)
	Ntotroso	Machine owners (2)
		Machine owners (2)
Ghana Chamber of Mines	Accra	Director of Research
		Senior Administrative Officer
Newmont Ghana Gold Limited	Kenyasi	Development Specialist
		Senior Communications Officer
		Public Affairs Coordinator

Source: Fieldwork, 2013

Six small-scale miners were purposively selected and interviewed in Kenyasi No 1 and Ntotroso. One Focus Group Discussion (FGD) constituting mine hands was also conducted in the Kenyasi No 1 *Galamsey* site. The interviews with *galamsey* operators recorded some justifications for illegally mining in the concession of NGGL Ahafo mine. One operator said this:

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Government should ensure that if mining goes to an area, all the people who are going to be affected are adequately catered for to avoid people going into vices. Had it not been for these galamsey activities, people were stealing and going on demonstrations against the mining company. This is why even though the chiefs do not agree with galamsey, they still allow us to do it as it occupies people and gives them income.

An analysis of the statement shows that the operator recognises the state as the institution with the responsibility and authority to license mining in Ghana. However, the state is also expected by the people to consider the well being of the citizenry, especially those in the immediate environs of the mine before the final decision is taken on the permit. The state had failed to consider the welfare of the local communities, therefore the people had engaged in illegal small-scale mining as a means of livelihood to avert the negative practices usually associated with an idle and hungry population. The authority of chiefs, an alternative institutional structure to the state, in sanctioning or supporting the activity was also noted.

Another operator said this in justifying why they engaged in illegal mining on Newmont Gold's concession:

Giving one mining company this large concession, basically the whole of the Ahafo area, for this long period is very bad. At least the area could have been given to different companies with their different attitudes and also to create more jobs.

The background to the narrative is that NGGL's concession in Ahafo

spanned 500 square kilometres for a period of 30 years renewable (Newmont, 2005). The respondent's view was that if this concession had been given to multiple companies, there would have been more opportunities for people to be employed in the short to medium term and the concession duration would be shorter. NGGL was perceived as a monopoly and it exhibited the characteristic capital driven attitude towards the communities. Competition brought about by the particitipation of other mining companies was expected to result in differing attitudes of the companies to community needs.

Traditional Practices and the State of Development of Traditional Institutions in Environmental Governance in Mining

This section addresses the first specific objective of this study which was to assess the state of development of traditional institutions involved in environmental governance in mining by using six factors suggested by Peters and Goetz (1999), cited in Goetz & Philip (2000) and Huntington (1968), cited in Peters (2000). This is because it is argued that the quality of institutions in an area would influence the area's development process (Casson, Giusta & Kambhampati, 2010). The core argument of this position is that, it is institutions (or people occupying positions within it) that act as the vehicle to implement policies governing public goods. The quality of the institutions would either constrain or enhance the ability of either people in official positions or private citizens in providing or extracting the public good for development. In the Asutifi District, two main traditional institutions were observed to be directly involved in

environmental governance in mining. These two institutions were rituals and chieftaincy with its subsidiary organisations. The first part of this section discusses the forms and usages of rituals and the second part discusses the state of development of chieftaincy.

Rituals in Mining Governance

Rituals, according to McKay and McKay (2013), are activities that convey values and behaviours across time from the inception of a social organisation. The link provided by rituals to the past gives the ritual power and authority and provides the participant with a sense of continuity. One of the chiefs explained a basis for the performance of rituals:

Tradition demands that were perform rites in every community that minerals are to be mined. We normally, as part of the rites, sacrifice rams and pour libation to the ancestors to inform them of the endeavour we are about to take.

The linkage of the present with the past is shown in the narration. The ancestors, who lived in the past, are informed of the activities of the present regarding mining the minerals. This in the first instance is to secure the blessings and guidance of the ancestors to ensure productive and safe mining. The other issue is to legitimice the activity and also to entrench the authority of the traditional institution over these matters as it confirms their role as intermediaries between the present and the past.

Rituals were also performed as part of mining governance in Asutifi District stemming from the traditional belief of most Ghanaian cultures that the earth is a living being with a soul (Bartle, 1982). In addition, other natural features like rivers, specific lands, some particular trees, particular animals, specific trees, and specific rock formations were believed to possess spirit beings or deities. Natural resources, like gold and fertile lands, were therefore gifts bestowed on the society from these beings, therefore one always had to perform rituals to appease the gods for extracting these gifts. These rituals were performed both for small-scale and large-scale mines.

Small-scale mine rituals

The usage of rituals in mining was more prevalent in the small-scale mines because that activity was predominantly Ghanaian. In addition, the usage of indigenous technology and knowledge and the rudimentary application of technology implied that beliefs played a very important role in all the activities (Bebbington, 2001).

Traditional rituals, constituted a major activity undertaken at the mining sites. These rituals were either performed at the individual miner or the land owner or the site management committee level. The galamsey operators and mine hands explained that when the mining was done either close to a river or within the bed of a dry river, rituals were performed necessarily to appease the god of the river. According to the operators and mine hands, this appeasement had to be done for two reasons. The first reason was that the mineral in and close to the

river was put there by the god and therefore, any attempt to mine it had to be done with the proper engagement with the god. The second was that the spate of mining activities was a disturbance to the god and therefore, it had to be appeased.

Explaining the process, the operators said that this was usually done by the linguist (Okyeame) or a fetish priest on behalf of the land owner or the site management committee. Libation was poured and animal sacrifices made. These rituals include slaughtering sheep, goats, cats, fowls, dogs; giving the parts the god wants to the god, and consuming the rest at the site without sending a piece home. When the rituals were performed for the area, individuals were then given permission to mine their pieces of land. Some individuals then either performed their private rituals or prayed, depending on their beliefs, for fruitful and hazard free mining.

Because some of the miners were from the area and they knew the customs and traditions, they ensured that their actions were traditionally acceptable. When they realised that there had been some transgressions of any deity, they then went to the chief's linguist to perform customary pacifications for them. In earlier situations when they failed to perform these pacifications, sanctions were imposed on them. Some of the sanctions included paying fines, providing ram and assorted drinks and in severe cases, banishment from the traditional area.

Large- scale mine rituals

Large-scale mining, on the other hand, is more capital intensive compared with the small-scale mines and therefore issues of beliefs regarding mining appear to be non-existent. However, the practice of rituals was found in the large-scale mine. It was explained by a traditional leader that:

Large-scale mines had to perform rituals because there were ancestors, gods and rivers and therefore the chiefs had to be consulted to show what to do and what not to do before the activities could be done. Any time a major mining activity had to be done, like opening up a new pit for example; at least libation had to be poured to the gods of the land.

In the Ahafo traditional area encompassing the mining concession, Tuesday was a taboo day. No work was supposed to be done on the land and no one was allowed to go into the bush or forest for any activity. One traditional authority submitted during the interview that the mining company recognising the cost of not working for a whole day every week approached the traditional authorities so that they could be given a special dispensation to be able to work on Tuesdays. The traditional authorities demanded that the company supplied some items after which rituals were performed to allow the company to mine on Tuesdays.

One chief said there was the need for the large-scale mine to perform rituals as part of their activities because:

There are situations when people have attempted to work without rituals performed and they find out that their machines keep breaking

down too frequently and they then would rush to the traditional authorities for rituals and libation to be performed and then the machines stop breaking down.

The performance of rituals then was an important aspect of the mining process as it paved the way for smooth operations. The gods to which these rituals appease were believed to have the ability of reprimanding the miners for non performance. Frequent machine breakdown was an example given.

The same chief went further to explain that it had then become the usual practice that every year, the traditional councils in whose jurisdiction the active concession were, would demand a certain amount of money to buy cattle, rams, schnapps and other items they deemed necessary to perform the rituals. When the money was paid, they organised the necessary items and went to the land to perform the rituals. The amount usually emanated from the traditional council but negotiated with the company before a final amount was paid based on what the council would accept. Most of the the mining company respondents saw the amount usually accepted by the council to be higher than it should be but because the bargaining power regarding the performance of a traditional rite resided in the council, the council took advantage of the situation to keep it higher than it should be.

Chieftaincy and Allied Organisations in Mining Governance

Chieftaincy and other subsidiary organisations were the main physical manifestation of traditional institutions in the district. The chieftaincy institution

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was led by the chief and his elders who sometimes were sub chiefs as well. The subsidiary organisations regarding mining governance in the district were fetish priests and priestesses, land owners and youth associations (volunteers).

All these institutions notwithstanding, chieftaincy was the most organised, prominent and central to the functioning of the communities. The traditional areas in the Asutifi District were part of the Ahafo area of the Brong Ahafo Region. Traditionally, these areas owed allegiance to the Asantehene, even though they were part of the Brong Ahafo Regional House of Chiefs. The situation has historical and political explanation, which lies beyond the scope of this study.

State of Development of Traditional Institutions

The state of development exhibited by institutions can be determined by the following six factors: adaptability, autonomy, coherence, complexity, congruence and exclusivity (Peters & Goetz, 1999, cited in Goetz & Philip, 2000; Huntington, 1968, cited in Peters, 2000). Chieftaincy was the most prominent and visible traditional institution in the study area and the sub-section discusses each of these factors as it pertained in the Asutifi District.

Adaptability

Institutions being part of the social milieu interacts with its environment both in the forward and backward directions. The ability of an institution either to adapt to its environment or adapt its environment to suit it largely influences whether the institution is sustainable or not. The extent to which traditional

institutions had adapted to the environment or had the environment adapted to their needs was discussed.

The traditional leaders had two positions on their level of adaptation and adaptability. The first position conceded that there is always change. Therefore, traditions were modified by both the people and leaders and their interaction with the environment but the principles underlying them were still maintained. The principles were generally seen to reflect the societies' fundamental aspirations and the physical manifestation of these principles were the traditions. The traditions were changing because of the interaction of modernity (technology, globalisation, Christianity) with the customs and traditional religion of the people. One chief said:

We used to perform a lot of sacrifices with large animals, even in some cases human sacrifice, but now though the principle of sacrificing is still adhered to; we for instance use sheep and chicken.

This shows that chieftaincy had not remained static but adapted to the changing conditions within the environment when people embraced modernity and started questioning the religious basis of some of these practices. It was not unusual to find the town cryer using a megaphone to give announcement instead of beating the gong gong and shouting at the top of his voice to give the announcements.

The second position was that there had been changes in the level of authority chiefs used to have. Chiefs used to be more powerful than they now were. This was explained to be due to the development of the state, the political

system and modernisation. The effort by both the colonial and modern states to consciously undermine the legitimacy and authority of traditional institutions was the single most important factor responsible for the reduction in the power of traditional institutions.

Another factor responsible for the change in the activities of traditional authorities as noted by other respondents from households and state institutions was the influence of Christianity; there had been a lot of changes in the myths and superstitions that accompanied traditional activities. It was now not out of place to see a Christian prayer ushered even in the palace. The traditional institutions, while deeply rooted in traditions and resistant to change, were not immutable. The leaders had been inventive in their adaptability to changing circumstance which had ensured their survival (Vail 1989; cited in Beall & Ngonyama, 2009).

Autonomy

The autonomy of traditional institutions was a complex concept to investigate. This is because the Constitution of the Republic of Ghana generally prescribes the framework within which all individual, group and institutional actions are allowed. For instance, it is only the state of Ghana that can maintain an army within the territorial jurisdiction of Ghana. Therefore, the autonomy of the traditional institutions had to be considered within the limits set by the constitution. This in itself reduced the possibilities of the traditional institutions to be autonomous. The Chieftaincy Act of 2008 Article 71 authorises the Minister responsible for chieftaincy to by Legislative Instruments, make regulations as

may appear expedient to the Minister to give full effect to the Act. This therefore means that the Houses of Chiefs from the national to the traditional council level were not totally autonomous of the state in its activities.

There were two important issues considered in discussing the autonomy of traditional institutions. These are the capacity to make independent decisions and financial independence. Regarding the independence to make decisions, most respondents saw the traditional institutions as highly independent. This independence was however exercised within two constraints: the issue at stake and the general acceptance by the people. One traditional leader explained the constraint of issue at stake as:

The decisions depend on the issue as stake. Generally, criminal matters are either handled directly by state authorities or we take recourse to the modern institutions to handle. For example, we would only report murder cases to the police and let them handle them. If they need our help we would provide, but it is not for us to deal with it. But regarding access to land for economic and development activities and settlement of disputes, we deal with them here.

The narrative shows that the traditional authorities recognised their limit as regarding the extent of their authority. They also accepted the legitimacy of the state structure and the laws legitimising the state. The effort by the traditional authorities not to handle cases that were proscribed to them by law and even referring such cases to the state to handle explained their acceptance of the fact. Apart from the legitimacy of the state to handle those specific matters, the

traditional institutions did not have the required resources to handle some of the postcribed issues. These include the human, material and logistical resources to investigate these issues.

The willingness of the traditional authorities to provide help to the state institutions was to help address problems caused by the duality of institutions and also to improve complementarity. Even though they were an autonomous institution, the traditional authorities recognised the confines of their authority and the necessary complementarity with the state institutions.

All the respondents intimated that traditional institutions were autonomous of state institutions when it came to decision making regarding traditional issues and community development issues. It was only when these decisions were in contravention of the Constitution or the sensibilities of the citizenry that state institutions came in to exercise some level of authority. One of the traditional authorities interviewed noted that, for as long as the issue for discussion or decision making was to benefit the community at large, traditional institutions were highly independent in taking the decisions. Even though the traditional institutions were that autonomous in arriving at decisions, they more often than not, applied democratic principles in decision making. The Divisional Chief of Ntotroso said:

> *The chief has to have a vision. The elders in the palace deliberate on the vision and come to an agreement. Because the vision is to benefit the whole community, the vision is then introduced to the community at a durbar and there is further deliberation. If it is accepted or the people also*

have modifications to make to it, this is done and then the final decision is taken. Sometimes, the chiefs come to a decision without necessarily consulting the people. They would then consult or lobby the relevant people and later on inform the people of their decision.

Even though the chief and the elders generally were the leaders and therefore they took decisions, they adopted a deliberative and consultative approach. This allowed for the achievement of consensus decisions with the active participation of the citizenry. This therefore made the institution democratic, albeit without the exercise of voting.

Apart from the situation where the State acquired a piece of land for the public good, which then became state property, traditional authorities had a lot of control over lands in their jurisdiction. These lands could be private, family or stool land. For the private or family lands, traditional authorities would allow the land to be put to any use for as long as it did not result in the utter destruction of the land or to that of other people's land or used for an illegal activity or an activity that offends the sensibilities or traditions of the society. In addition, when the land owning group or individual decided to perpetually divest their interest in the said land, the traditional authorities would have to be at least informed or better still consulted before the transaction is finally agreed.

The traditional authorities exercised this control over land because traditionally, they are custodians of the communities they preside over. The communities include both the people and the lands that host the communities and their livelihoods. Combining this with the responsibilities that traditional

authorities have regarding they representing generations dead, alive and unborn, they saw this control over the land as a responsibility to all these three categories of constituents, especially the unborn, because their survival would depend on the quantity and quality of resources they inherit from their forebears.

The second autonomy issue discussed was financial independence. There were several sources traditional institutions got their funding from. These include: the state, stool farms, sponsorship packages, donations from philanthropists and philanthropic organisations, royalties from environmental resource extractions, community levying and the sale of building plots in communities.

The interviews with the traditional authorities showed that of all the sources of funding to chiefs, two of them were the most prominent. These were mining and stumpage royalties and farms on stool lands. Mineral and Mining Act of 2006 (Act 703 of 2006) Section 25 directs that between three and six percent of total revenue obtained by a mineral rights holder be paid to the State of Ghana as royalties. Eighty percent of the royalties paid to government is paid into the Consolidated Fund while 20 percent is paid to the Administrator of Stool Lands for further disbursements according to Article 267 Section 6 of the Constitution of Ghana. Four point five percent (4.5%) of this amount is disbursed by the Administrator of Stool Lands to the stool and traditional council for the maintenance of traditional authority (Article 267 Sub-section 6 of the Constitution of Ghana). This constituted the major source of funding for the traditional authorities.

The Ghana Chamber of Mines has had cause to complain about the inadequacy of the royalties that finally gets to the traditional authority. They argued for an upward adjustment in the percentage of royalties that get to the traditional authorities. Government has countered this argument by saying that it is not the quantum that creates a problem; it was rather how effectively the royalties were used that determined its relevance to local development (Daily Graphic, 28th August 2012). The chiefs' position on the usage of the royalties was that Article 267 Sub-section 6 (a) of the Constitution of Ghana justifies the receipt of the royalties to be used by the traditional authorities in keeping with its status. The source of funding to the Houses of chiefs and traditional councils was regulated by Articles 67 and 71 of Act 759 of 2008. These Articles authorise that the funding of these institutions should be provided by the Parliament of the Rebublic of Ghana and also by fees approved by the Minister in charge of Chieftaincy.

Revenue from farming on stool lands constituted the second most important source of funding for the traditional authorities. These were of two forms; those farms that the chiefs and their elders farmed as their own and those farms farmed by tenant farmers on the stool land. There were different arrangements used to manage the revenue the stool obtained from the tenant farmers.

There was the 'Abunu' system where all the products from the farms were shared equally between the tenant farmer and the land owner. The 'Abusa' system was the situation where the products of the farm were divided into three equal

parts; the land owner takes a third and the rest going to the tenant farmer. However, this system was dying out as the land owners felt that they lost out to the tenants if the actual value of investments in the lands were accounted for. The last system was a situation where the tenant farmer clears the land and plants food crops while the landowner intersperses them with tree or perennial crops. The tenant is entitled to all the food crop products and can farm the land for as long as the tree or perennial crop would allow. When the tree or perennial crop develops its canopy which makes it impossible to intersperse food crops, the tenant farmers leave the land to the owners who then manage their tree or perennial crop farms.

In earlier times, traditional authorities used to impose a certain tax on cocoa production in the area, but this practice had stopped. This practice stopped because of several reasons. One of the reasons was that the advent of mining in the area had led to a drastic reduction in cocoa production in the area and the logistics that had to be expended to collect this revenue made it inefficient whiles the tax became burdensome on the farmers. Another reason was that the royalties received from mining was substantial and this made the cocoa production taxing unattractive.

However, it was not unusual to find situations in which a levy had been levied on households for specific community projects to be undertaken. For instance, it emerged from interviewing a respondent in Ntotroso that a levy of 20 cedis was collected from every household per month in the town to fund the volunteer patrol group formed by the youth of the town to provide security.

Coherence

The major core function of traditional institutions was to provide traditional leadership for their people. To be able to do this, chieftaincy, the most visible, organised and central traditional institution, had developed councils of elders at all levels to act as legislative, judicial and executive body. This council is usually made up of sub chiefs with the main chief as the head. All the sub chiefs occupy specific ministerial positions within the council and they have specified responsibilities within the setup of the area of jurisdiction of the council. The council, at the division or paramountcy level, usually has a secretariat with an administrator and administrative staff to receive complaints, organise council meetings, take minutes at meetings, keep records of the council and perform all other administrative duties. At lower levels, the Okyeame, the linguist, generally performs these functions.

In view of the fact that the state is the leading implementer of development for communities in Ghana, there has not been the need for traditional institutions to develop very elaborate procedures to undertake these activities. However, when the situation demands that the traditional institutions took the lead or support the state in undertaking an activity, the sub chief responsible for the particular activity organised the relevant human resource to perform the task.

The linguist of the Tutuka Chief described the coherence of traditional authorities thus:

There is a traditional structure in place that implements all actions in

as far as it pertains to traditional matters. When the matter is too sensitive or big for us, we forward it to the Omanhene who then takes over.

The existence of specific structures for specified functional activities within the general domain of traditional matters is noted in this quotation. There is also hierarchy in both the structure and authority within this structure also expressed by the statement. These offices at various levels were empowered to render specific services to both their people and their superiors.

For example, when it was realised that the influx of illegal miners to the Ntotroso area resulted in increases in social vices like stealing, robbery and rape, the chiefs organised a volunteer group to patrol the town in the night to maintain law and order. This resulted in the decrease in the incidence of these vices.

When a situation arose that required that the females in the community organised themselves to deal with, it was the queen mother that had the responsibility to do that. The sub chiefs would normally take their directives from their superior chief and their communities. A household respondent from Kenyasi Number One noted of the coherence of traditional institutions:

Chieftaincy has a hierarchical structure, including all sub chiefs. The chief will delegate sub chiefs to perform specific activities. In worse cases where the sub chief is not pulling the weight, then the chief has to take over and act.

Traditional authority relied on the existing traditional structures, customs, traditions, communities and their informal institutions mostly to organise their activities. The coherence within the traditional institutional set up is strengthened by their common history, culture and traditions. These principles reinforce each other and ensure the strength of the institutional organisation (Olsen, 2007). The traditional institutions are able to command dignity, respect and honour because they are the custodian of the land and they conduct themselves and their activities in such manner as to elicit these virtues.

Complexity

In view of the reality of the efforts of both the colonial and post-colonial state structure to undermine traditional institutions, their overt responsibility has been to provide traditional leadership. This means even though the relevance of traditional institutions were pervasive in the study area, their constitutionally mandated role was limited to providing traditional leadership. Therefore, their institutional make up was generally organised more along the lines of what the constitution allowed them to.

Traditionally, the Asutifi District was part of the Ahafo area of the Ashanti Kingdom while politically the traditional councils were members of the Brong Ahafo Regional House of Chiefs. There were four paramount chiefs and six divisional chiefs in the district. The paramount chiefs were in Acherensua, Hwidiem, Kenyasi No.1 and Kenyasi No. 2. The six divisional chiefs were at Ntotroso, Gyedu, Wamahinso, Nkaseim, Mehame and Dadiesoaba. All the

paramountcies and divisions were one step below the Asantehene, even though the paramountcies were a little elevated above the division.

Within the paramountcy or division, all the chiefs of the smaller towns below the paramount or divisional chiefs were members of the traditional council. The sub chiefs were given specific positions with specific responsibilities in the paramountcy or division. These positions included chief of the treasury, defence, interior, etc. At the town level, this hierarchy was repeated. In this case, the elders of the chief were made up of clan heads.

One of the traditional leaders described the traditional institutional structure as:

We have the chief and his sub chiefs, each performing specific functions. We meet on Tuesdays to discuss matters concerning the community. We also used to use communal labour to do a lot of things but now it is dying out.

The chiefs and the people mostly organised their developmental projects independently of the state. When they needed resources from somewhere, they made the necessary contacts. These efforts included contacting Government officials at local, regional and national levels and benevolent organisations like NGOs for both financial and technical support to undertake projects.

Congruence

Traditional institutions were seen by respondents as being derived from the history and experience of their forebears to perform often specific, but

sometimes unspecified, functions for the society. The social relation often embodied in the culture of the people was what mainly defined the norms of traditional institutions. Respondents mostly saw the traditional institutions as being the embodiment of culture and therefore of the social relations within the communities. One of the chiefs interviewed opined that the actions of the traditional authorities were discussed on the basis of its relevance to the society and the sustainability of the project. They would normally discuss how the project would affect the society in a time span of 25 to 30 years. These deliberations usually took place among the chiefs and the traditional council. They also listened to the people through their private and public interactions.

Some households however, also noticed an unhealthy trend where some of the leaders represented the communities mostly to extract benefits from the mining company. These benefits included money, donation of items for funerals and festivals, fuel for vehicles etc. The comments from two resettlement community members at Ntotroso show the different ways they saw this trend. The first comment reads:

> *At the outset of the mining in the town, the company decided to use the chiefs to recruit community people to work for the company. Community forms were developed to be filled by the local job applicants and then endorsed by the traditional authorities before the people were recruited. People who did not come from this area paid bribes to traditional authorities and had their application forms endorsed for them to get recruited. The company could not differentiate between who was a proper*

local person or an imposter, it was the validation that was the only thing authenticating origin and therefore the local people lost out to the migrants. The local people did not get employed and the youth demonstrated against this. The chief brought a combined team of military and police personnel to brutalise the youth and most of these youth decided not to engage in any community activity but to rather concentrate on their individual activities.

From the comment, there was an arrangement for facilitating the recruitment of local people into the mining company and the chiefs played the important role of validating the recruitment forms of the local people. The household respondents however had issues with the perceived corruption of the chiefs in validating the forms for people who came from other areas. One chief explained that the problem did not emanate from them. He said the citizens usually introduced people to the traditional council as their spouses which made them citizens of the area. When the forms were validated and they secured the employment, they usually severed relations with the 'spouse' and then the 'spouses' became aggrieved. The chief explained that it was with the connivance of the local people themselves that the non locals gained employment, not by the chiefs taking any bribes.

The other respondent had questions about the contractual relationship between the company and most of the chiefs:

The chiefs would not approach the company to negotiate services and facilities for the local area as much as they would approach the company

for things that benefit them. For example, they take contracts from the company which compromises their ability to negotiate on behalf of their people. Manual jobs that the people of this area can do in the company and allied services are not pursued by the traditional authorities, but when there is a contract to provide some services to the company, the traditional authorities would be rushing to secure these jobs.

The statement depicts the chiefs as only approaching the mining company for services they the chiefs could render the mining company for a fee. This also compromised the ability of the chiefs to criticise the company when the company's activities became inimical to the well being of the citizenry. However, respondents from the company reiterated that the fact that the chiefs were given contracts did not compromise their ability to negotiate on behalf of their people and to criticise the company. One mining company respondent submitted that it was the chiefs who were contractors to the company who were most critical of the activities of the company.

There were suggestions on what to be done to ensure that the traditional authorities represented their constituents better than they were regarding the relationship between the communities and the mining company. The households expressed the wish that community needs and who can satisfy them should be deliberated at public fora before the traditional authorities are then mandated to pursue those needs from the relevant and agreed institutions or quarters.

Exclusivity

Competition from other institutions to activities of a given institution affects the relevance of the given institution to the people influenced by this institution. Competition faced by the traditional institutions in their activities were determined and discussed.

The existence, legitimacy and the roles of the state was the most cited source of competition traditional institutions faced. Respondents noted that the constitution, the bedrock of the legitimacy of the state, imposes restrictions on the traditional institutions and these posed the main competition faced by traditional authorities. There were two motivations for the competition perceived from the state to traditional authority. One chief explained that the first was that the state institutions were providing services that traditional authority also provided. With regards to ensuring peace and order for example, the police was the state institution tasked to do this by the Constitution of Ghana. They are also permitted to do this with the use of legitimate force (Weber, 1946). In the matter of adjudication of cases for instance, the courts competed with the traditional authorities in providing this service to the people. The unit committees of the District Assembly, the lowest structure of state local development, also adjudicated on matters that bordered on development and which were perceived as not too important to merit either a decision in a judicial court or the chief's court. Organisation of local development activities like communal labour for projects which used to be the preserve of traditional authorities were then also done by the unit committees of the District Assembly.

The second motivation for the competition was that both of these institutions were fighting for relevance to the people. The main resource which the two institutions were using as a tool was land. Traditionally, stools and skins, families and individuals own land in Ghana. Most of the lands in Ghana are owned by stools and for those that are not, they always are in the jurisdiction of either a stool or a skin. This therefore gives the traditional authorities oversight influence on these lands.

However, the Constitution and other enactments emanating from the constitution, for example Article 2 of the Minerals and Mining Law, 2006, have given power to the state to compulsorily acquire lands originally owned by anyone for any use defined by the state as in the public interest. Article 1 of the Minerals and Mining Law, 2006 makes the ownership of any land that is found to contain a mineral automatically vested in the President on behalf of all Ghanaians. The competing claims to the different rights to the lands are a major source of competition between the state and traditional institutions. While the right to mine the resource in the land is vested in the state and usually given to a mining company to mine, the right to farm the surface, graze animals and to fuel wood is given to the local people. The surface rights are guaranteed to the locals in as far as their use does not affect the mineral rights of the mining company. The right to decide whether the surface rights disturbs mining is reserved in the company and this was seen as another major forum for conflict between the people, represented by their traditional authorities and the state, represented by regulatory institutions and the company.

A slightly different perception of the competition faced by traditional institutions discussed by most of the modern institutional and household respondents was that from other religious institutions. These institutions included largely Christian and, to a lesser extent, Islamic institutions especially as regards the legitimacy of traditional authority and rites and practices. Traditional institutions were perceived by the religious institutions as being paganistic which therefore had to either be ignored or undermined.

The exclusivity of traditional authority was explained by an assertion that traditional institutions were responsible for traditional leadership and matters in their areas and in this wise, there was no competition from any institution. They were unique in this endeavour.

Another reason given for the exclusivity of traditional institutions was that the state provided most of the needs of citizens, leaving very little for traditional institutions to provide. However this explanation equates traditional institutions to chieftaincy and ignores practices, norms, beliefs and rites which deal with people's morality and philosophy and in these, the traditional institutions were still very relevant and active.

Summary

The traditional institutions at the local level were highly developed in terms of all the six variables suggested by Peters (2000) and Peters and Goetz (1999) cited in Goetz and Philip (2000). They were able to generally organise most of their leadership activities effectively. Their relevance to the lives of their

subjects was inversely related to the size of the community. The traditional authorities in smaller communities played a more active role in the day to day lives of the people than those in relatively larger communities. This was because the effectiveness of state institutions in larger communities was higher than in the smaller communities where the presence of the state was virtually zero. Therefore, the margins of public policy were much wider than in the bigger towns and communities (Neubert, 2007).

The situation in the smaller communities is exemplified by this narrative from a respondent:

This is a local community where even when we have issues and present to modern institutions, they do nothing about them. Therefore, the traditional authorities have to do everything for us.

There were two main constraints limiting the effectiveness of traditional institutions in the Asutifi District. The first has to do with the development of the state itself. The constitution and other enactments have ascribed a restrictive framework to the activities of traditional institutions. The most profound limitation is the barring of chiefs from engaging in active politics. Politics is about access to and the use of the resources of the state.

This leads to the second constraint of limited resources. The resources to back the decisions made by traditional institutions was seriously constrained. This therefore forced the traditional institutions to depend mostly on either government or the mining company. This situation limited the ability of the traditional institutions to implement projects that would benefit their people directly.

Traditional institutions, according to Olsen (2009), are institutionalised if they have a developed organisational identity and their legitimacy is built in their culture. The chapter has shown that they had a developed organisational identity and their legitimacy was derived from the culture in the area. They were therefore a highly developed institution in the Asutifi District.

CHAPTER SEVEN

CONTEMPORARY ROLES OF TRADITIONAL INSTITUTIONS AND ENVIRONMENTAL GOVERNANCE

Introduction

Traditional institutions are socially embedded in the lives and culture of people. These people still engage with these institutions in their day to day social life. Even in urban areas of Ghana, where the influence of modern institutions are the strongest, there is resurgence in the number of people who consider traditional institutions as relevant to society (Logan, 2009). The traditional institutions are able to play roles in the governance structure because of the legitimacy and power they possess.

Power is inherent in all social relations, manifesting through discourses and institutions, and necessarily polyvalent. The significance of this power depends on how the social relations and institutions are integrated into different strategies (Jessop, 2007) for managing the mineral resources and its costs and benefits. The traditional authorities are therefore also able to exert an amount of control over how the environmental resources are used in their jurisdictions. This chapter addresses the second and third objectives of the study: analysing the roles of traditional institutions regarding environmental governance in mining and the support needed by the traditional institutions to enhance their effectiveness in local development.

Roles of Traditional Institutions in Environmental Governance

The roles of traditional authorities in their societies from the pre-colonial through colonial to the post independent state have been discussed by many writers. These have included being the political, social, economic, legal and military head of the traditional state (Adjaye & Misawa, 2006); mediating the interaction between local communities and the post-colonial state (Lentz, 2000); mobilising grassroot support for development and democratic projects (Ray & van Rouveroy van Nieuwaal, 1996) and looking after the areas in which they were considered sovereign, including their security (Ray, 1996). The contemporary roles of chiefs were discussed with respondents.

The Constitution of Ghana in Article 270 (1) guarantees the institution of chieftaincy, together with its traditional councils as established by customary law and usage. Article 270 (2) further states:

> *(2) Parliament shall have no power to enact any law which-*
>
> > *(a) confers on any person or authority the right to accord or withdraw recognition to or from a chief for any purpose whatsoever; or*
> >
> > *(b) in any way detracts or derogates from the honour and dignity of the institution of chieftaincy.*

In addition to these provisions, customary law which are particularly of traditional institutional origins are also recognised as common law in Article 11(2). These provisions constitute some of the provisions provided by the constitution to integrate traditional authority in the general governance of the

state. Further to these, the constitution also established the National and Regional Houses of Chiefs to deliberate on issues of traditional matter in Ghana. Members of these houses are by law appointed to the Council of State, which counsels the President in the performance of his function, and other statutory bodies in Ghana. These are at the national and regional levels of governance in Ghana.

At the local level, Article 242 provides that there should be other members in addition to the elected members of the District Assembly, comprising not more than 30 percent, appointed by the president in consultation with traditional authorities and other groups. Although this particular provision does not mention chiefs directly for appointment, this provision has been used to nominate them to membership (Kludze, 2000). The implementation of this constitutional provision balances adherence to democratic electoral principles and recognising the customary role of chiefs in local affairs and their cohesive attributes (Beall & Nganyoma, 2009). All these avenues for participation of chiefs in governance at both the national and local level notwithstanding, chiefs played other roles in especially governance of environmental resources in the sampled area.

The main functions of chiefs were discussed with all the respondents. A sub chief of the Kenyasi Number One division submitted that the role of traditional authorities as:

From time immemorial, chiefs are there to bring development, hygienic environments, adjudication and arbitration leading to peace.

The quotation presents an encompassing role of traditional authorities in the societies they lead. The role of bringing development, a concept which generally

includes all the ideals of any society meant that the survival of the communities hinged on the existence and effectiveness of the traditional leadership. However since development was a very broad concept, specific aspects of this role were also mentioned by different respondents in response to the enquiry.

The most prevalent function of chiefs from the discussions was their leadership role. The Divisional chief of Ntotroso described the leadership roles of chiefs as:

> *The chief is placed in a leadership position of a traditional area, to ensure the progress of the area and the welfare of the people within the state. You are to be informed of the needs of the people and to bring it to the attention of the government for the needs to be provided.*

The chief is usually selected from the royal family and made the leader of the whole community under the jurisdiction of the particular stool. This position imposes on the chief the responsibility of leading all activities and endeavours of the community in as far as traditional matters are concerned and the well being of the area is concerned. In most cases, apart from when the issue has to do with a core political function, chiefs or their representatives represented communities in most development programmes affecting those communities.

Chieftaincy was the institution that represented their communities in giving the social permit for mining companies to start mining, to resettle people and to compensate people for the loss of access to land. In their social permitting of the mining, they coordinated with the EPA to organize public hearings as part of the EIA permit process.

Part of their leadership role required them to mediate the interaction between the communities and the state or the community-mining company interaction. A household respondent from Ntotroso noted that:

In the advent of the company, people had to be compensated for the use of the land. The chiefs therefore usually met with the modern institutions to value and negotiate compensation for the use of the land.

The mediating role of the chiefs is noted in the narration; however the same respondent had issues with the way the compensation process was done. He states again:

When only a few people get money from a system, several people will depend on those few. However, if more people become rich, only a few people will depend on them. In the interactions for compensation, not only the landlord should be compensated, the tenants too so that the money spreads more evenly.

The issue the respondent raised borders on the usual practice where only land owners were compensated for the loss of access to the lands. The tenant farmers were only compensated for the loss of crops counted on the land. The fact that they had lost access to future livelihood from the land was not taken into consideration for these tenant farmers. Land owners were the only category of people compensated for the loss of future livelihood.

In the provision of jobs by the mining company to local people, anytime the company advertised for a vacancy, local applicants were to present a job card endorsed by the chief of their respective towns to be employed preferentially.

This had two justifications: the first was to ensure preferential employment of qualified applicants from the local areas and the second was that it was a way through which the veracity of the claim by applicants to be from the local area was established.

This arrangement worked well until abuses were reported on the part of the traditional authorities. It was claimed by most of the household respondents that the chiefs were taking bribes from non indigenes and endorsing application forms for them to be employed in the mining and allied companies. The traditional authority respondents explained that they were not taking any bribes but the young ladies in the area were presenting their husbands, who were non locals originally but locals by marriage, for the endorsement. When these supposed husbands secured the jobs, they would usually divorce the women. That was how come non locals could get the endorsement from them, the chiefs.

The next major function of chieftaincy was that of development agents. They usually initiated development projects because they understood the needs of their subjects and organised all possible resources to provide for the needs of their people. These facilities included sanitation, school, health and library facilities.

A household participant said this of the initiation of development roles of chiefs:

> *They are also responsible for ensuring that all facilities and services needed by the town are provided even if it means they have to go to different offices in this area or outside of this area.*

It is inferred from the narrative that chiefs were expected by their people to take responsibility for the provision of facilities and services that their citizens required to have meaningful lives. The communities looked up to the chiefs to ensure these were available. It was therefore incumbent on the chiefs to either provide them or facilitate the provision of these facilities and services. The different offices referred to in the quotation meant both state and non-state actors including the mining company itself, NGOs or other benevolent organisations or individuals.

Chiefs were also seen by the District Assembly, mining company and Ghana Chamber of Mines respondents as a partner with the District Assembly to plan and implement development programmes for communities under their jurisdiction. These projects were usually funded with proceeds from the mining company. The Sustainable Development Committees (SDCs) were the lowest level of decision making level of the NADeF. The SDCs were formed in each of the ten towns within the NGGL Ahafo concession. These committees made the decisions on what development projects the money realised from NADeF were to be used for each planning year.

In these committees, chiefs or their representatives were very active in their organisation and deliberations. They usually organised the community for deliberations on community development projects. The technical staff of the District Assembly, including civil engineers, quantity surveyors and budget officers, provided all the technical support needed by the SDCs in implementing projects like libraries, schools and clinics. Chiefs were also appointed to the

District Assembly as government appointees by virtue of Article 247 of the Constitution of Ghana.

Another situation in which chiefs partnered the District Assembly was when upon deliberations at unit committee levels, some issues were referred to chiefs for their attention and action. Sometimes, the Assembly men and women sent issues of local development to the unit committees which after discussions would then send the matter for redress to the traditional authority. In other instances, the chief and elders would brief the Assembly man or woman who then referred the matter to the unit committee for attention by the DA. This was possible because of the more informalised interaction between the traditional authorities and the DA regarding local development.

The provision of peace and security within the traditional areas was the next function of chiefs. Household and traditional authority respondents noted that chiefs were responsible for peace and security in their jurisdictions. This was possible because chiefs had the tendency and responsibility to provide social cohesion and maintain traditional values, which have issues of socialising the youth and prevention of crime embedded in them (Ray & van Rouveroy van Nieuwaal, 1996).

One respondent went as far as to suggest that they were responsible for maintaining the survival of their communities. This was because when calamities or bad omens befell their towns, it was their responsibility to pacify the gods to lift the bad omen off the town.

Settlement of disputes and also coordination in resolving disputes in their areas were some of the functions chiefs performed. This function was consistent with what traditional institutions performed in Botswana, where Beall and Nganyoma (2009) found that over 70 percent of cases were reported to the traditional institutions for arbitration because they were less expensive compared to the judiciary, they used customary law and the local language in the interactions.

In these activities, the chiefs were said to protect their communities from any form of incursion that had the tendency to negatively affect the peace in their communities. This is because they are perceived as the guardians of their communities' culture, playing important roles in cultural events and rituals (Logan, 2009). One of such incursions was the expansion of the mining company.

One head of household said that some functions of traditional authorities were:

> *They ensure that the rights of the local people are respected at all times by both the foreigners and other Ghanaians who do not come from here. In addition, they ensure that the company, in its activities, respects the rights of the local people, for instance, if there is going to be blasting in the pit, the company has to inform the people of the time of the blast ahead of time and the chiefs ensure that this is done. Some times in the social interaction of the workers with the local people, the chiefs ensure that there is fairness and peace and they settle disputes arising from these interactions.*

The role played by chiefs in moderating the interactions between communities and external agents is noted in the quotation. Chiefs are called upon by both community members and modern institutions to play this role because of the institutional structure they have which allows for the counsel of elders and the legitimacy they possess in the communities. Their major duty is to their constituents and the ancestors and less to themselves. They therefore are respected by both sides to be fair and equitable in their dealings.

The last function of chiefs was that they were the custodians of the lands, customs, the natural resources and the people on the land. Chiefs were the representatives of the community to the ancestors and the ancestors to the community. However, the power that the state had in vesting any land for prescribed purposes, including those with minerals determined in them, and also to declare any land as public land was a source of conflict between the state and chieftaincy. In 1958, the newly elected CPP government passed the Ashanti Stool Lands Act (No.28 of 58) which transferred the trusteeship and management of all lands vested in the Golden Stool and its occupant, the Asantehene, to the Governor–General (Kwarteng, 2012). The Ahafo area, part of the Asante Kingdom was affected by this Act. In view of this situation, one of the sub chiefs of the Kenyasi No. 1 traditional area commented:

The issue of vested lands and the rights of traditional authorities should be amended to allow us more say in what happens on the land instead of just being informed of decisions taken by government.

This had created confusion among the chiefs about the extent of their power over allocation of lands for different economic activities and the responsibilities they bore from the consequences of the allocation of the land by the state. These also led to other conflicts within the societies and enhanced consultation between chiefs and the state about the allocation of land and its use has been advocated for (Ray & van Rouveroy van Nieuwaal, 1996).

The community includes the humans, their resources, their traditions and customs. In this wise, the chief with support from the elders, other traditional institutions and the people had to deal with everything that happened in their communities with the potential to cause harm. Respondents acknowledged this very important role that traditional institutions, especially chieftaincy, played in the district.

Educational Roles played by Chiefs

The actual roles played by chiefs in the specific human endeavour of provision of educational service to their constituents were discussed with respondents. Table 7 shows the distribution of activities within the educational sub-sector that respondents reported chiefs to be engaged in.

From Table 7, the most prevalent activity that traditional authorities did in education at the community level was provision of land for building schools. The traditional institutions generally possessed most lands on behalf of the community, therefore when they were interested in providing educational facilities, land was one of the resources they were able to give relatively easily.

Table 7: Roles performed by traditional institutions in education provision

Activity	Frequency	Percent
Provision of land for schools	9	31.0
Laws banning traditions and behaviour harmful to educational attainment (truancy)	7	24.1
Incentives to teachers and pupils	5	17.3
Provision of school blocks and other facilities	5	17.3
Provide supervision of teachers	3	10.3
Total	29	100.0

Source: Fieldwork, 2013

One other service provided by the chiefs to the education sector in the district was in passing rules banning certain behaviour on the part of both parents and pupils that had the potential to jeopardise educational attainment of pupils. A household respondent from Ntotroso said:

> *They have banned children from below 18 years from patronising computer and video gaming spots etc. And they discourage teenage pregnancy in the area. They also organise quiz competitions for pupils.*

In order to stem the tide of truancy in some communities, chiefs had passed rules that made it the responsibility of parents to ensure their ward attended schools regularly. In addition, pupils were banned from loitering around the town after 9 pm.

The traditional authorities also gave incentives to both teachers and pupils in the form of reward packages for good performance. These incentives included

scholarships, books and other materials and the provision of further training opportunities for students who graduated from schools in the district. The chiefs in collaboration with the mining company had established a technical training programme in trades that mining companies used. Graduates from Junior High School were recruited into this training programme. This training lasts for four years and the graduates hope to be recruited into NGGL or any other mining company.

Provision of Social Amenities

Traditional authorities also provided social services to their people and the study discussed this with the respondents. A respondent from the Ghana Chamber of Mines summarised the position of the chief regarding provision of social amenities:

Provision of social amenities is generally taken over by state institutions. Sometimes traditional institutions support and collaborate with state institutions. It is a matter of the chiefs asking themselves why they are in the positions they occupy. Is it for their self-welfare or that of the communities? They then would decide whether to mobilise their people, lobby for funds for development projects or provide lands freely for the project etc.

Since the traditional institutions exist within the state and it is the state that is mandated by the Constitution and other enactments to collect and manage public resources, it is the responsibility of the state to provide social services to

the people. However, the support from and collaboration with the traditional authorities is shown by the narrative as being normal. The decision to support or collaborate by the traditional authority is shown here to be influenced by the incentive to be drawn to take action; whether it would lead to a personal gratification or societal good. A host of issues were raised concerning the social services provided by traditional authorities and these are shown in Table 8.

Table 8: Social services provided by traditional authorities

Service	Frequency	Percentage
Leadership	9	20.0
Justice (adjudication)	9	20.0
Security	8	17.8
Custodians of tradition	7	15.6
Land for health institutions	6	13.3
Markets	3	6.7
Environmental quality	2	4.4
Livelihoods	1	2.2
Total	45*	100.0

*The total exceeds 29 because of multiple responses.

Source: Fieldwork, 2013

From Table 8, leadership, justice and security provision, appeared to be the three most important social services provided by traditional leaders. The leadership provided by chiefs to their communities in terms of representing the

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communities at several fora and also showing leadership in all facets of community life was a service community members appreciated. Chiefs were usually looked up to when a situation arose where rites and rituals had to be performed to either avert a calamity or appease the gods or ancestors for good tidings to befall the town.

In addition to traditional leadership, chiefs were one of the conduits through which development projects were transferred from both State and non-state agencies for community development. Chiefs would usually lobby both central and local government officials for facilities like health posts, schools, streets etc for their communities. In the same light, non-state actors like businesses and NGOs were also contacted by chiefs for similar projects for communities. One household respondent from Kenyasi Number One said this of why chiefs were able to bring development projects into their communities:

> *The chiefs, because they represent the communities, sometimes receive resources from well wishers, philanthropists and business entities. Therefore they use some of these resources to develop the communities.*

These sources of revenue and resources were therefore seen by the communities as enabling the chiefs to develop their areas.

Security provision as given in Table 8 included chiefs, like in Kenyasi Number One, providing land for police stations to be built so that the police provide security to the people. Other activities of chiefs including forming volunteer squads to patrol communities in the night to control robbery and other vices were seen as contributions chiefs made in providing security.

Chieftaincy and allied institutions continued to be very important platforms where disputes were adjudicated upon in most of the communities in the district. In the Asutifi District, Tuesdays were Taboo days for going into the bush or farms. People were banned from going into the bush for any reason. It was on Tuesdays that the traditional councils sat and adjudicated matters in communities. The paramount or divisional chief usually presided over these assemblies. Issues discussed ranged from traditional to development matters and from private to family to community matters. The adjudication of especially traditional matters, which were not of criminal nature, and provision of justice ensured that there was mutual respect among citizens and peace to allow people to pursue their familial and personal development activities. Traditional leaders have been noted to be able when it comes to overseeing the settlement of local disputes and adjudication of custom (Beall & Nganyoma, 2009).

The ECA (2007) further argues that traditional institutions of governance can play a more active role in development in the modern state because of their ability to contribute to local administration, popular mobilisation, service delivery and conflict resolution.

Legitimacy of Development Roles of Chiefs

The state develops its own institutions to implement its policies. One of the most important objectives of the State is to bring development to the people in all communities especially within its geographic jurisdiction. The constitution also mandates the State to be responsible for development. Therefore, the

legitimacy of traditional institutions in providing development for the society was questioned.

Most of the respondents said it was legitimate for traditional authorities to play development roles in society. From the perspective of the traditional authorities, development activities of a chief were a social responsibility. They intimated that if chiefs were up to the task, communities would not even need government to come to their aid. The efforts of the state to help develop communities were seen as an addition to what the chiefs had to do. The over reliance of communities on government was seen as a recipe for failure. One chief said it was legitimate for chiefs to engage in development activities because:

> *The traditional authorities cannot just sit back and expect the state to bring every development. Even if the state decides to provide development projects and the chief is not proactive, nothing may get to you. Of late, the state would mostly come to the aid of people who have begun something; therefore traditional authorities have to initiate development activities to increase the chance that the state will come in. It is the chief who should show the leadership.*

An issue emerging from the narrative is that the state was more eager to support projects communities have initiated. This enhances its completion, active participation of the people and its sustainability. However, these projects can be initiated with the activism of a community actor and the chiefs are required to play this leadership role. Chiefs should be up and doing to attract the attention of the state to come to the aid of the community in providing development services.

Another justification was that traditional authorities predated all the modern institutions and therefore they had to contribute to development. This suggestion was derived from the fact that development did not originate with the colonisers or state. It was the basis upon which the traditional institutions were even formed; therefore the emergence of the state should not be seen as invalidating the development relevance of traditional institutions. It was rather to complement it.

The relationship between chiefs and subjects is a highly interdependent one in which the chief's welfare depends upon his/her subjects' well-being (Firman-Sellers, 2000). The traditional authorities extract revenue from subjects, which is used to enhance the authorities own wealth and status. It is recognised that subjects would engage in revenue generating behaviour (and remain in the traditional area) only if they, too, are allowed to enjoy the fruits of their labour, which includes their personal, familial and community development.

Development therefore had to be pursued with the active involvement of and the blessing of traditional authorities. One respondent in the FGD asked:

> *If the mandated institutions will not bring development, what then will the chief do? Chiefs just have to do their bit and if the state comes in to help, fine, if not the people still deserve to develop.*

The comment places the responsibility of providing development at the doorstep of chiefs and even suggests that the essence of traditional institutions is to provide development. Because the traditional institutions are an enduring indigenous institution, they would exist in the communities even after the mining

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company leaves. The traditional institutions would still manage the affairs of the communities therefore they had to contribute to development.

The case of the continued involvement of chiefs in the development of their areas was made the more justified because of perceived competition between Members of Parliament and their Metropolitan, Municipal and District Chief Executives for political authority and recognition in local government. Some respondents saw the bickering among political elites at the local level as drawing the attention of these people from development of the local areas and it was for chiefs to step in and fill this gap so that the people were not denied the right to development.

A few household respondents felt it was not legitimate for traditional institutions to be involved in development activities. Their main justification for this position was that traditional institutions were corrupt and would keep most of the resources meant for the people for themselves. They therefore intimated that the state institutions should be allowed to lead development, however since traditional authorities are leaders in their communities they could be involved to a minimal extent. One respondent stated:

> *Sometimes when resources had been given to traditional authorities by the company to implement particular policies, there was poor accountability resulting in unsuccessful projects, but they cannot also be left out entirely. There should be people who are appointed by the system to monitor the use of resources by the traditional authorities.*

There were two major sources of funding that chiefs used in paying for

development activities. These were mining and stumpage royalties and farms on stool lands. The mining and stumpage royalties usually went to the paramount or divisional chief who was then expected to redistribute between the Asantehene and among all the chiefs in the paramountcy or division. The chief of Ntotroso explained that there were traditional mechanisms used to achieve this redistribution which was time tested and fair. But in the interview with a village chief in the Kenyasi No 2 paramount area, he said he did not receive any such money from the paramount chief.

However, there were other sources available to the chiefs, albeit lesser in amount and frequency of availability. These include the chiefs lobbying NGOs, philanthropists and sometimes, government to either initiate projects or complete an already initiated project. Sometimes too, they received sponsorship packages or donations from various people and organisations. Locally, the use of communal labour and revenue from the sale of land to individuals and organisations constituted another source of funding for development projects initiated by traditional authorities.

Support for Traditional Institutions

Every institution that provides development programmes for any society has to have support from their constituents to ensure that the projects become relevant. This support can generally be in two forms: either hard or soft support. The hard support is usually in the form of money or of capital assets to ensure the infrastructural development. The soft support deals with the support in kind that

relevant stakeholders show for the programme which ensures its social acceptance. This usually contributes to the sustainability of the programme.

The hard support given to traditional authorities include donations of cash and equipment. State institutions, NGOs, philanthropists, businesses and ordinary members of the society were admonished to provide these facilities to the traditional authorities to allow them put up infrastructure or projects that contribute to the general welfare of their communities. Communal labour provided by community members was also acknowledged as being critical for the success of these development activities.

The soft support include the technical support like consultancy, monitoring and evaluation and training that state institutions could provide for development activities of traditional institutions. In addition, training of traditional authorities to improve their capacities to better perceive social issues was a soft support respondents suggested traditional authorities should be given.

In order for traditional institutions to provide their legitimate support to development in the communities, they had to be given the necessary support by the citizens, state, businesses, NGOs and other philanthropists. The study discussed the support that traditional institutions would need to be effective in this venture. There were generally three main forms of support which when given traditional institutions would make them more effective. These were regular provision of communal labour by people; money and recognition of their authority and legitimacy.

Traditional authorities' responsibility generally extends only as far as their

areas of jurisdiction. The lowest complete unit of any chieftaincy system is the village or town level where the chief presides. In the Asutifi district, the village or town chiefs were subjects of either a paramount or divisional chief who were in turn subjects of the Asantehene. The most suggested support needed by chiefs was if community people participated effectively in communal labour, chiefs would be able to provide the facilities and infrastructure the communities needed. These communal activities could be organised regularly to allow for proper planning of projects and their timely completion.

Every development project needs some financial investment to survive. Contribution to traditional institutions in cash or kind was also reported to aid the development roles played by chiefs. These donations would enable the chiefs either to purchase or organise the needed materials to be used in putting up structures. These contributions could be in the form of community people paying a fixed amount of money on a regulated basis or contributing a particular quantity of cash crop at the local produce buying company or of any other product produced on a commercial basis in the district towards a fund set up by the traditional institution for development projects.

The third support to traditional institutions was the recognition of their authority and legitimacy by especially the state, business entities and the entire citizens of the state. It appeared to some respondents that traditional authorities were not accorded the proper respect which would allow them to perform their necessary duties to ensure development in the area. One respondent's view is captured in the following quote:

Government and other institutions permitted by government to work on the land should realise that the land belongs to some traditional institution and their people, therefore there should be more recognition of the rights of the customary owners to decide on what should be done on the land and how it should be done.

Customary ownership of land as residing in the traditional institutions as a communal resource is a theme arising out of the narration. According to Botchway (1998), all lands in Ghana are owned by indigenous people under the leadership of the traditional institution. Even though the Minerals and Mining Act of 2006 vests the ownership of minerals, once discovered, in the President on behalf of the state, the exercise of the authority to permit mining be done with adequate attention given to the traditional authorities.

A household respondent even suggested that the laws of Ghana should be amended to give more power to the chiefs. This was because for chiefs, if they mis-conducted themselves they could be destooled and this would make them more accountable to the people for the power reposed in them by the law.

The disempowerment of traditional institutions in deciding whether mining should be allowed or not on the lands they traditionally owned was seen as one serious barrier limiting the ability of traditional institutions to contribute to development. It was argued that if chiefs or their representatives were actively engaged in the decision to mine or not, then they would also be in a position to decide on the management regime regarding how the mining is done and benefits and costs are shared. They would ensure that their subjects would not be

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disadvantaged by the effects of the mining. Negative environmental effects would be controlled to safeguard the chiefs themselves and their subjects.

Benefits of Mining to Traditional Authorities

In view of the fact that the lands in which mining was done either belonged to or was in the jurisdiction of a chief, some benefits from mining would naturally be extended to these chiefs or stools. Royalties from the mining, enforced by Act 703 of 2006 was the main benefits stools and traditional councils derived from the mining. Four point five percent of all minerals royalties paid to government came to the traditional councils and stools on whose land mining was taking place. The stools usually coincided with the paramount or divisional chieftaincy therefore chiefs of smaller towns and villages did not directly receive the royalty. The divisional chief of Ntotroso explained the receipt and further distribution of the royalties in his division thus:

Royalties go to the independent chief of the area, be it a paramount or divisional chief. The chief then redistributes it to the sub chiefs on an agreed process. In our area for example, there is a history when we litigated on an issue, two smaller towns on our land came to offer their financial help to us and we won. Since that time we decided that if there is any revenue accruing to the stool, we take half and give the other half to be shared equally between them. This arrangement for example cannot be changed on the whims of a chief. It is historically established and cannot be easily changed. Otumfuor also has a percentage of 33% of the royalties

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but he rather takes 20% and says the rest should be used to develop the town.

That the independent chiefs received the royalties is established by the chief's response. In addition, there was a formula used to redistribute the royalty within the stool and this formula was influenced by both the structure of chieftaincy and history. These therefore restricted the ability of any independent chief to arbritrarily apply the proceeds.

In the use of the royalties, most of the respondents did not see its use directly affecting the people in the communities. They were of the view that the chiefs neither used it in community development projects nor accounted for them to their people. Most of the respondents apart from traditional authority respondents were of the view that royalties should be used for the development of the communities and duly accounted for by the chiefs. A look at the legislation on royalties showed that royalties are treated by the state as revenue from stool lands. Article 267 subsection 6 of the Constitution of Ghana reads in part:

> *Ten percent of the revenue accruing from stool lands shall be paid to the office of the Administrator of Stool Lands ………………and the remaining revenue shall be disbursed in the following proportions-*
> *(a) twenty-five percent to the stool through the traditional authority for the maintenance of the stool in keeping with its status.*

The statement that the money paid to the stool is for the maintenance of the stool in keeping with its status was the main justification the traditional authorities had for holding on to the royalties and not accounting for it to their

people. One chief explained himself as:

The royalties are for the maintenance of the stool, however, we usually use them in development projects and the people see it. In addition, money meant for the community is usually managed by committees who render accounts to the communities.

The concept of the stool representing the broader area of jurisdiction of the traditional authority was not alien to the traditional authorities, from the statement of the chief. However, it can be noted that the use of royalties for the whole community was a discretionary practice, exercised by the chiefs. This is because the second statement alludes to the fact that community money was usually managed by committees who decide and render accounts to the community. The use of the royalties for community purposes, if it happened, was decided solely by the traditional authority. Berry (2013) found a similar justification for the use of royalties by traditional authorities and that it was usually the chief who governed the use to which the money is put.

A respondent from the Chamber of Mines had this opinion of the royalties paid to the chiefs:

People have made calls to ensure that these royalties are tied to public projects so the people benefit more from these royalties. However, the royalties are supposed to be used in maintenance of the status of the stool. But how are the stools conceptualised? Is the stool the chair the chiefs sit on or it represents the people. Most of the chiefs will conceptualise it narrowly to mean the chair on which the chief sits and the

sandals and cloth etc that go with it. If it is the people and the status of people who have gold in their land, traditionally the chiefs should be responsible for the welfare of their people and they should take care of these people. The spirit of the constitution was guided by the fact that the traditional authorities are responsible for their people and the royalties would not be used by the chiefs and their immediate families to the neglect of the communities.

Even then, the Chamber and some chiefs have been advocating for the percentage of royalties paid to traditional authorities to be increased from four point five percent to at least 50 percent (Daily Graphic, 28th August 2012). This presents a contradiction: was the Chamber of Mines advocating for more resources to be given to the traditional authorities to enrich them or to enable the traditional authorities to extend development to their communities?

It does appear from the response from the respondent from the Chamber of Mines that the broader conception of the stool to encompass the communities under the jurisdiction of the stool was the preferred one and that they were indeed advocating for more resources for the development of the communities. This position is consistent with that of Mahama and Baffour (2009), who argue that the stool is an immortal entity representing the spiritual and physical embodiment of the people, therefore stool occupants hold land on behalf of and in trust for the entire subjects of the stool and not for themselves alone.

The next couple of benefits that traditional institutions derived from mining were a reflection of a broader conceptualisation of stools as suggested in

the previous discussions. In this case the stool was seen as encompassing the whole area covered by the stool and the people within it. The first of the benefits was that it brought a lot of projects to the area. These projects were generally implemented by the Newmont Ahafo Development Project (NADeF), a collaboration of the chiefs and people of the district and the mining company. Some of the projects undertaken include scholarship schemes, infrastructure development, livelihood programmes etc. These benefits did not go directly to the narrow sense of the stool but to a much broader spectrum of people within the jurisdictions of the stools. A respondent from OLA resettlement site explained it this way:

> *Chiefs benefit from the goldmining in the area. Schools and other facilities have been built and employment created for youth from the towns, which ensures that people can take care of their families.*

Employment creation for people in both the mine itself and allied services constituted the third benefit the traditional authorities had from the mining. Even though Akabzaa and Darimani (2001) have criticised mining as an enclave economy creating inadequate jobs for local people, some amount of employment was created for community people during the mine construction and actual mining phase. During the mine construction phase, most of the activities are labour intensive; therefore local unskilled labour is usually employed. When it gets to the actual mining phase, the need for skilled labour becomes more prominent than manual labour and most of the local people without the requisite skills are then discharged. In addition, mine support firms also recruited some of

their workers from the local area and this benefitted a lot of people.

The Local Suppliers and Contractors Development (LS&CD) project of the Ahafo Linkages Programme was another source of benefits traditional authorities had from the mining. The LS&CD project aims among others to: Establish customised procedures for the company to buy locally; make it easier to obtain internal "buy-in" from end-users for local content; actively promote the business opportunities the company can offer local Medium, Small and Micro Enterprises (MSMEs), either directly or indirectly and foster the competitiveness of local MSMEs.

As an important part of this project, most of the chiefs in the catchment area of NGGL Ahafo mine were encouraged by NGGL to set up companies to bid for contracts to supply various services to the company. Most of the chiefs within the concession area were therefore contractors to the company. This relationship between the company and the chiefs was one issue that most household respondents saw as an opportunity for the company to corrupt the chiefs into being ineffective in actively pursuing the welfare of the people from the company's activities. Interviews with officials of NGGL showed that the particular emphasis on companies owned by chiefs was to ensure that more jobs were created for the local people. It was argued that if chiefs set up companies, they would mostly recruit youth from their own jurisdiction and this would create jobs for the locals.

However, in Tutuka, a small village under the Kenyasi Number 1 stool and very close to the tailings dam of NGGL, household respondents did not see

any benefit coming to the traditional authorities. They rather felt that for them, it was only negative effects of the mining that they received. Their proximity to the tailings dump and the effect of the blastings on both the air they breathed and their water sources were lamented. A household respondent in Tutuka said this:

> *Traditional authorities in this town do not receive any benefit from the mining. He had to complain to Newmont about the fact that the tailings dump had polluted the river we fetched. When they came to dig a borehole for us, the water turned red anytime they blasted at their site. The chief has been going to the company to complain about this but the company does not even send staff to come and take a look, much more to do anything about it.*

Another household respondent who was an elder of the Tutuka chief also said this of the benefits of the mining to the Tutuka traditional authorities:

> *Nothing comes to us. Everything goes to the paramountcy.*

The village is about two kilometres from the tailings dump. Their former source of river was very close to the dump and because of pollution from the dump, they had to abandon it. In addition to this, the citizenry complained about incessant stench emanating from the dump which had led to several of them either developing problems breathing or rashes on their bodies. Because the village was under a paramountcy, royalty payments were not given to the chief as it went to his paramount chief. All these were the background information influencing the narrative.

Traditional Institutional Roles in Environmental Governance and Household Development

Rural households usually depend to a large extent, on the environmental resources in their area for their occupations and livelihoods. These resources provide either direct products or employment to these people. They provide direct products when people use the resources they extract and use it directly in their households. When people extract the resource and exchange it for other goods or services which are consumed directly by their households, this is a direct source of employment for the household. In other situations where people are hired to extract the resource for their employer and get paid for their labour, then it is an indirect source of employment for the household.

The mining company came to the Asutifi district because of the environmental resource gold, therefore every positive or negative effect their presence had on households in the district was as a result of the environmental resource. The roles that the traditional authorities played in ensuring that positive effects went to their subjects constituted a very important environmental governance issue and these were investigated in the field.

All the households surveyed agreed that the roles of their traditional institutions in the mineral governance had effects on their households. The positive responses were generally of three issues: issues of the benefits of the resettlement; access to employment and provision of social amenities.

When some of the people were to be affected by the mining, people who

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chose the option of being resettled were resettled at either the Kenyasi number two or Ntotroso resettlement sites. These sites afforded some of the local people access to block houses, pipe borne water, electricity and household toilets for the first time. The second aspect of the resettlement some of the residents talked about was the fact that in their respective villages, the number of social networks they had was minimal because the population was not that large, but in their new congregated community they had much more neighbours and that enhanced their interactions and social networks.

The second benefit people had derived from the mineral resource is direct employment in either the mine or allied services. For the community members who had been employed in the mine or allied services, the demand made by the traditional institutions on the mining company and its allied services to give priority employment to the local people was the major role the traditional institutions had played that was responsible for this. In fact, most of these applicants had their application forms endorsed by their chiefs before they were employed.

Most of these workers appreciated the role the chiefs played because they argued that the recruiters in the mining company had friends and relatives who could equally have been employed. It was the collaboration between the chiefs, state institutions and the company that ensured the preferential employment of the local people. The third positive effect was the provision of social amenities like boreholes, clinics and schools. These facilities were as a direct result of the chief lobbying the company, government or other philanthropic entities.

The effect of traditional institutions' role in the mining governance in the area on households was not always perceived to be positive. Some of the farmers who mostly had either no or low formal education complained that they could not get jobs with the mining company or any of the allied companies. In addition, where they were resettled was now very far from where their farmlands were so it took a lot more effort and time to get to their farms and therefore they were worse off. They intimated that the companies had other job classifications that did not require educational qualifications. Therefore the traditional authorities had failed them in not being able to secure them these jobs. What they failed to realise by their analyses is that mining is a capital intensive activity; therefore job openings that required no educational attainment were very few.

The environmental hazards of mining on the households were also noted as effects of the roles of traditional institutions in the mining governance. One household respondent from Kenyasi Number 2 captured the situation in this narration:

> *We are now having problems getting food: there is no land for farming, all our waters have been polluted. We cannot even harvest rainwater because the blastings from the surface mine has polluted the rain water.*

The narrative is influenced by the perception and experience of households in the area that the reallocation of access to lands and the pollution of the lands by the chemical effects of the mining had made it more difficult for people who were engaged in a land based livelihood activity. The mine in the Asutifi district mines

the gold in open pits. Explosives are usually used to break up the ore and overburden before excavators are used to mine the ore. The blastings of the ore and overburden produces both dust and fumes from the explosions. These gas pollutants rise to the atmosphere and usually are ingested by the clouds and pollute rainwater in the area. This polluted rainwater pollutes areas of land and vegetation making them unwholesome for human consumption.

Pollution of rivers leading to shortage of potable sources of water for households was also noted by this respondent. It was suggested by the household respondents that if the chiefs had insisted on proper mining processes that led to minimal harmful effects on the environment, then households would not have to deal with those. The reality is that mining is a highly technical enterprise and for the citizenry to demand that chiefs should have insisted on less environmentally harmful mining processes shows the people assessing the situation too simplistically. The technicalities were above the comprehension of an average chief and chiefs have not portrayed the ability to engage the services of qualified consultants to enlighten them on these technical issues. They therefore would not be able to take the decisions demanded by the citizenry, even if they were in the position to influence the course of the licensing process.

The perceived ownership of any mineral resource determines who the stakeholders in its conservation or extraction are. Therefore, the expectations of each of the stakeholders to a large extent are also influenced by the perceived ownership system. The next section discusses the perceived ownership of gold from the perspective of the respondents.

Perceived Ownership of Gold

The perceived ownership of a resource determines the expected roles to be played by various stakeholders with regard to who has a say in what has to be done to the resource and how it should be done. The owner of the resource would be expected to play a very active role in decisions affecting the exploitation of the resource and how it is governed. In discussing the role of traditional authorities in environmental governance in mining in the district, the actual and expected role of chiefs from the perspectives of various respondents would be largely influenced by who they perceive to own the mineral resource and in this case, gold. There were three main entities reported by respondents to be owners of the gold resource. These were the state, Newmont Ghana Gold Limited and the communities.

Explanations given for the state being the most reported owner of the gold resource was that by law, all minerals were vested in the state, led by the President, on behalf of all Ghanaians. In fact the Constitution of Ghana in article 257 subsection 6, states that every mineral in its natural state within the territorial land, air or water of Ghana is vested in the President. This response was mostly given by both the institutional and mining company respondents.

The mining company was the next owner of gold respondents stated. Most household respondents believed the company owned the gold because the concession had been granted to them by the government to mine. Others also said because they had an agreement with the traditional authorities or the society to

mine, it belonged to them. However others explained that the mining company owned the gold because they benefited more from its exploitation than any other entity. This was because:

There is information that of the gold they mine, only 10 percent comes to the state, the rest is their profit, therefore they own the gold. They are the people who are mining and sending it to their own country.

The respondent's remark can be explained in terms of the expectation that under normal circumstances, the owner of the resource is the one who derives the most benefit from it. The unlikely situation that someone else benefits more from the resource than the owner is the exception, and it happens when the owner is constrained in exercising his or her rights or the beneficial circumstance is with the approval of the owner. According to this respondent, the state earning only ten percent of the profit meant that the entity who earned the 90 percent was the owner. Even though the state has a ten percent carried interest in all mines in Ghana in addition to corporate taxes and royalties, ACET (2014) stated that 14 per cent (US$749 million) of total mining industry revenues went to the state in 2012. The state therefore earned more than the ten percent the respondent reported, albeit still less than how much the mining companies earned.

The third owner of the gold was the communities in whose land the gold was found. They were perceived to be the owners because the lands belonged to them; therefore, naturally they owned the gold. Half of all the illegal small-scale operators responded that the communities, especially the land owners, owned the gold.

All the respondents noted that the right of the owner of the gold was to determine whether to mine or not and the conditions under which the gold would be mined. It was also within the power of the owner to give any entity a contract to mine the gold and to benefit from its exploitation. In Ghana, the state does all these.

Summary

In the Asutifi District as a rural mining district, there was more overlap between location of residence, location of livelihood and of routine social interaction among residents as compared with urban areas; therefore more local material, status and symbolic issues had to be resolved. Issues to be resolved are: access to land from the competing claims of large scale-mining, illegal mining, farming, urban development and interpersonal disputes; collective services to be organised; and status competitions between the state and traditional institutions (Ananth Pur & Moore, 2010).

Though the state was present in the area, its effectiveness has always been constrained by the sheer mass of issues to be addressed and the limited resources and capacity to deal with all the needs of the people. Traditional authorities had complemented the state structures and while they have not been entirely successful in substituting for the state, they played an important role in holding the societies together despite the daunting economic, political, and environmental challenges amidst the constrained resources available to them (Meagher, 2007, Renders, 2007). Traditional actors combined elements of self-organisation,

socially embedded authority and legitimacy, to address the needs of the area when

state functions were either non-existent or deficient (Neubert, 2007).

CHAPTER EIGHT

INSTITUTIONAL INTERACTIONS AND THE POTENTIAL FOR

ENHANCED COLLABORATION

Introduction

The duality of institutions in all areas of the Ghanaian society, each playing relevant roles in the same public space and the sophistication of citizens in terms of their requirements from institutions means that citizens would express more choice in accessing services in different situations. These institutions will as a matter of course interact somehow because of proximity to each other and also to limit overlap of their activities to make them more efficient. Olsen (2007) notes that interactions among several institutions structured according to different principles and rules are bound to be challenging especially when they function in the same area of action.

This chapter addresses the fourth and fifth objectives of the study which seek to assess the interaction between traditional and state institutions regarding environmental governance in mining and to explore the potential for enhanced collaboration of the traditional and modern institutions to facilitate environmental governance.

Rationale for Interaction of the Traditional and Modern Institutions

The relationship between the state and civil society in Africa is often said to be disjointed and traditional leaders have acted as the link between the two; however, the relationships among these three actors is often 'unrecognised, ignored or misunderstood' (Ray & van Rouveroy van Nieuwaal, 1996). A more critical analysis of informal forms of social organisation and public authority (usually coordinated by traditional institution), emphasizing the need to explore the actual practices embedded in these institutions as well as the linkages between the informal and formal is called for (Meagher, 2007).

Several reasons were advanced for explaining the interaction between the traditional and modern institutions. The modern institutional respondents mostly explained that they had to interact with the traditional institution because it was mandatory for them to do so. They referred to the Constitution of Ghana, Mineral and Mining Act of 2006 (Act 703) and Environmental Assessment Regulations, 1999 as some of the regulations requiring state and business institutions to interact with traditional institutions. By this assertion by the state employees, their interaction with the traditional authorities was not likely to be cordial as they saw it as just satisfying the requirements of the law, not of an opportunity to provide better quality service to the citizenry.

Some of the respondents from state institutions were of the opinion that traditional institutions were major stakeholders in development and therefore they had to interact necessarily. This was so because the chiefs were seen as holding lands in trust for government. This position, though commendable, was based on

a flawed justification. The government of Ghana only owns lands that it has acquired legally for the public good. All other lands are owned either by stools, families or individuals. Therefore, the chiefs own stool lands in trust for the people who come from the stool communities not the state.

The influence chiefs had in managing conflicts between companies and communities was another reason business and state institutions had for interacting with chiefs. The state and business institutions had realised that when there was peace in an area, business could thrive very well. Other mining companies interacted with chiefs because based on their stakeholder analyses and mapping, chiefs usually came up as very important stakeholders who had to be engaged for successful mining operations.

For the chiefs, they noted that there had always been interactions between them because several laws gave various rights over land to the State to supervise, but the laws and State also accepted that traditional authorities were the custodians of the land. They therefore interacted to bring development and peace to their people.

The chiefs perceived their interaction as necessitated by a common purpose of developing areas under each other's jurisdiction. Their interaction was based on mutual respect for each other's responsibilities and capacities. Safeguarding the welfare and development of their subjects was the most sacred of the duties of chiefs and that motivated their willingness to interact with the modern institutions.

The household respondents had several justifications for the interaction between traditional and modern institutions. The first was that gold resources belong both to the state and communities; therefore they had to interact to co-manage it. The other reason was that it is good to expand the base of information before one comes to a decision. Therefore by their interaction, the information base for taking decisions on mining was expanded and that was why they had to interact. One respondent from a household in Kenyasi Number 2 submitted that:

> *Both the modern and traditional institutions need help from somewhere. The modern institutions come from outside of this town and need the resources in the land. The traditional institutions which are of the community are also looking for development for their people. So they interact.*

From the quotation, the complementarity of each institution the other is referred to. Even though the gold resource was mined by the local people in small scale mines in the district for decades, the technology and capital needed to mine the deep ore on a massive scale was not available to these local people. The modern business institution with its technology and capital also needed to have the land with the necessary resource to be mined. Therefore, the objectives of the modern and traditional institution were convergent necessitating their interaction.

The moderation of the effects of resource extraction on the communities was one important reason why households justified the interaction between traditional authority and modern institutions. Because traditional institutions were local in nature, usually stayed in the area, had authority and legitimacy to question

processes that had deleterious effects on their communities, they interacted with the mining company, EPA and the DA regularly so as to bring to the attention of especially the regulators and the company the negative effects of the mining on the environment and the people. A respondent in Ntotroso said:

If the chiefs allow the company to pollute all the lands because of the mining, the miners will leave the area after the gold is exhausted and we will starve.

Households saw the traditional authorities' role of engendering development for their people as motivating their interaction with the modern institutions. The rights that the communities had to benefit from the exploitation of the gold in their originally owned land empowered the chiefs and elders to act as the community representatives to demand facilities that contribute to development in the communities. For example, the chiefs sometimes lobbied the state or its institutions or the company or NADeF to provide training programmes for the youth or to put up libraries or schools.

Forum for Interaction

The fora of interaction between the two institutions and the issues for discussion were investigated and hence discussed. There were generally several fora at which the institutions interacted. These included public consultation as part of the EIA process, occasional meetings between relevant State institutions and traditional institutions, representations on boards and committees, District Assembly meetings, the 'Forum' and at the NADeF.

A household respondent from Tutuka responded that the forum of

interaction was:

> *The traditional authorities usually meet with the modern institutions.*
> *Two people from each community with their chief and the chief and some*
> *elders of the Kenyasi chief were selected and they have regular meetings*
> *with the modern institutions to deliberate on issues like value of crops for*
> *compensation purposes.*

A broad based deliberative process was particularly adopted for the discussions on these issues to ensure that agreements reached satisfy a larger number of community members. The meeting the respondent was referring to was the Forum that was usually held at least twice a year in Sunyani.

Issues discussed at these interactions generally covered various aspects of development of the Asutifi District including human development and environmental resource governance. The environmental governance issues discussed included: institutions and law; participation and representation; authority level over resources; accountability and transparency; property rights and tenure; markets and financial flows; and information and knowledge on the resource (World Resources Institute, 2003).

Dynamics of the Interaction

Small-scale miner discussants in the FGD in Kenyasi No. 1 submitted that before any mining activity occurred in any area in Ghana, the companies applied to the government for a permit. Government then consulted with the chiefs to deliberate before the mining company was given the license to operate.

Some of the small-scale miners expressed that traditional authorities had to sign some documents to show that they permitted the mining before the company could even start work. One of them in Kenyasi No 1 illustrated the interaction between traditional and state institutions thus:

An instance is when some time ago there was confusion among the various categories of 'galamsey' workers and how much they were to be paid for their work; the traditional authorities met us in the presence of Minerals Commission and discussed the issues with the Minerals Commission providing technical assistance until peace was restored.

The qoutation illustrates the leadership role chiefs played in the study area. Chiefs organised the meeting to try and bring peace and order and also to ensure fairness in the dealings among the various categories of miners. There is also evidence of the interaction between the modern and traditional institutions. This illustrates what happens in the action arena (conceptual framework) where when there is an incentive for the institutions to interact (peace, order, fairness), the resource under consideration (gold) and interaction (collaboration), the chiefs and MINCOM settled the differences among the various categories of workers.

Other respondents saw traditional institutions as mediating the interaction between modern institutions and the locals, sometimes showing leadership to their communities. They argued that even when the modern institution went to communities to enforce any law, they had to inform the chief before they could carry out their assignment.

However, in reality the mining laws rather require the proponent to do

consultations with relevant institutions at the local level as part of the EIA process. All the traditional authorities interviewed bemoaned the situation where they were not consulted by the State agencies about the decision to allow prospecting in their land before the exploration license was given to companies. They were usually only informed of the grant of permits to prospectors when the prospectors went to the area to begin prospecting. One of the chiefs interviewed said this of their frustration with the situation:

> *In the granting of concessions, the chiefs affected should be involved in the processes from the beginning. The practice now is that people usually come to the chief with a map of the area and tell the chief that they have been given a permit from MINCOM to prospect for minerals. They then go back to the state after the prospecting and then the state alone grants the permit to mine these lands.*

The chief's statement illustrates the position of traditional authorities within the decision making processes of mining licensing. They were mostly only informed of the decision to prospect for minerals that is taken by the state institutions. They were not meaningfully participating in the decision making and could not really object to mining in their areas. The state made use of its coercive powers to keep decision making on mining to itself.

A state employee said that during the public hearing as part of the Environmental Impact Assessment process organised by the EPA, the traditional authorities and state institutions usually took the opportunities to interact regarding the impact that mining will have on the economic, social and other

related aspects of the communities. Article 12: k of the Environmental Assessment Regulation of 1999 (LI 1652) requires that the environmental impact statement on a proposed undertaking consults with members of the public likely to be affected by the operations of the undertaking, and chiefs are critical community leaders.

There were two main arenas of interaction visible in the district on mining. These were the Newmont Ahafo Development Foundation (NADeF) and the 'Forum'. These were platforms that emerged after the initial interaction of the Newmont Ghana Gold limited and stakeholders, especially the chiefs and people of the Asutifi district to manage the benefits of mining for the local communities in the district.

NADeF is a registered limited liability company borne out of the collaboration between the traditional authorities and NGGL, situated at Ntotroso. NADeF receives all the cash that the company gives directly to the communities in the concession area and distributes them to all the 10 towns according to a formula agreed upon. NADeF also had Sustainable Development Committees in each of the ten towns in the Newmont concession area to discuss projects that the NADeF had to run. They developed action plans for projects to be brought to NADeF for approval. NADeF met four times in a year and worked in collaboration with the District Assembly. Technicians of the District Assembly like civil engineers, architects and others worked on these community development projects of NADeF for free as the Assembly's contribution.

The Newmont Ahafo Development Foundation

Newmont Ahafo Development Foundation (NADeF) is a sustainable development foundation which was established in May 2008 through a Foundation Agreement developed and signed between Newmont Ghana Gold Limited and the Ahafo Social Responsibility Forum to share resources granted to the Foundation through an annual contribution from Newmont to support community development programmes in the concession of Ahafo Mine's Operations. The NADeF was an organisation borne out of the interaction of the state, business and traditional authorities and this section discusses it to illustrate its workings. The activities of NADeF are governed by Ghanaian law.

Article 21:1 of the Foundation agreement states:

> *The construction, validity and performance of this Agreement shall be governed in all respects by Ghanaian law.*

The bedrock of Ghanaian law is the Constitution and all other enactments emanating from it. The origins of the NADeF was traced to the visit to the Ahafo areas by the then Board Chairman of Newmont Gold Limited. At his meetings with the chiefs and people of the Ahafo area, he consistently submitted to the gatherings that Newmont Gold Limited was willing to share their profits with the people of the area. These fora were generally chaired by chiefs and included Parliamentarians, Assembly members, MINCOM, EPA and a cross section of the general population in the district. The chiefs and people made appeals for instituting an arrangement that included the direct contribution of a cross section of community members in deciding how community benefits from the mining

would be used. The fora became institutionalised into the Ahafo Social Responsibility Forum (The Forum) which was formalised with the Ahafo Social Responsibility Agreement. The interactions at the Forum then formed the basis for the formation of NADeF. After the formalisation of NADeF, the forum has now become at least a twice yearly gathering of major stakeholders in NADeF to decide the policy direction of NADeF.

An Australian consultant, Mr Fred Murray was then contracted by Newmont to develop a form in which the NADeF was to be realised. There were several public fora organised by the consultant and the community relations department of the company with communities to fashion out a viable form. The report of the Australian consultant was submitted and subsequently, a Ghanaian consultant, Prof. M. Gyimah was also recruited to localise the recommendations of the Australian consultant. The Forum, after two years, instituted three key Agreements: the Local Employment, Relationship and Foundation Agreements; to guide employment, conflict resolution and the development processes in the mine area (NADeF, 2013). The Foundation Agreement formed the basis for the formation of NADeF in 2008.

NADeF is mostly funded by Newmont Gold Ghana Limited's Ahafo mine with an annual contribution from Newmont comprising $1 per ounce of gold produced and 1% of net profit from the Ahafo mine. NADeF supports six key areas of development. These are: Human resource development (scholarships, apprenticeships, trainings for farmers, etc); Provision of infrastructure (maize dryers, silos, schools, clinics, etc); and Social Amenities (community centres,

police posts, libraries); Economic empowerment (micro credit, business start-up); Natural resources (reforestation, environmental awareness programmes) and Cultural heritage (support for festivals, upgrading of palaces). The distribution of the funds to these key areas in terms of percentages is as follows: 24; 23; 18; 17; 12 and six per cent respectively. The organisational structure of NADeF is as shown in Figure 6.
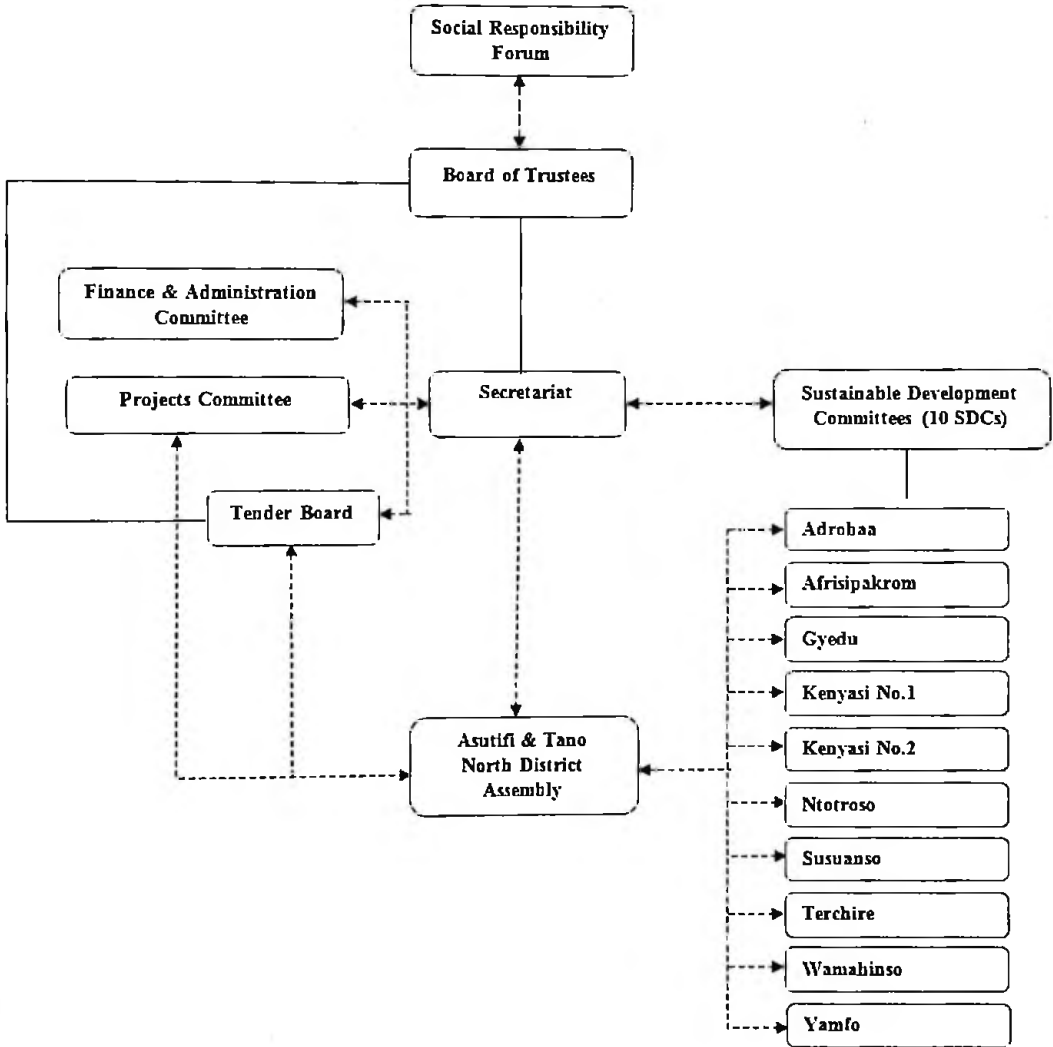
Figure 6: Organisational chart of Newmont Ahafo Development Foundation

Source: NADeF, 2013 (b)

Key:

1. Thick lines = relationship between appointed units;

2. Broken lines = relationship between either appointed and elected units or elected and elected units.

The Forum is a gathering of representatives of the ten towns within the Ahafo concession, Asutifi District Assembly, Tano North District Assembly, Brong Ahafo Regional Administration and Civil Society. The Forum is the highest decision making body of the NADeF and it acts as the general assembly which gives policy direction. The Forum meets at least twice a year.

The Board of Trustees is a nine member board made up of a chairman, nominated by the board upon the recommendation of Newmont, four members nominated by Newmont and four members nominated by the ten communities (two from each district). The Executive Secretary of NADeF also doubles as the secretary to the board (NADeF, 2008). The board of trustees manages and controls the funds of the foundation; is responsible for the accounts and financial investments of the foundation; receives and approves or rejects applications for allocation of project funds and monitor the progress of sustainable development projects funded by NADeF.

The Secretariat is the central coordinating unit of the NADeF. It is headed by the Executive Secretary and it coordinates all the activities of the Finance and Administration, Projects and Sustainable Development Committees (SDCs) and the Tender Board. The Asutifi and Tano North District Assemblies provide technical support to NADeF projects in terms of providing free consultancy

services on projects. The technical staff like works engineers and surveyors of the Assemblies provide design, plan of activities and technical supervision to projects of NADeF for free as their contribution to local level development.

The day to day activities of the Foundation is determined by the demands of SDCs of the 10 communities in the operational area. Each of the 10 communities in the operational area has an SDC made up of seven members of the community representing various groupings in the communities. These include youth, women, traditional authority and the DA. The SDCs basically propose and, with the assistance of the DA, provide cost estimates of projects they need the NADeF to implement in their communities.

The NADef has an agreed formula for sharing its funds. The formula takes into account issues such as: size of the concession contributed by individual community towns; relative population; commitment to sustainability of projects and peace and effects of the mining, among other factors. The total disbursement of funds to the NADeF from Newmont to September, 2013 was GHC 28.9 million ($17m). The contribution of Newmont to NADeF for 2012 was GHC 9,347,247.38 (NADeF, 2013). NADeF had completed and handed over about 43 key infrastructural projects including community libraries, teachers' and nurses' quarters, ICT centres and schools. In addition, scholarships had been awarded to 3,790 deserving students worth GHC 3,659,239.01.

Role of Traditional Authorities in NADeF

Traditional institutions have played four main roles in the activities of the NADeF. These are: initial collaborators on the Ahafo Social Responsibility Forum; Negotiators and signatories to the Ahafo Social Responsibility Agreement and the subsidiary agreements; representation on the organisations implementing these agreements and as monitors of implementation of all these agreements. Some respondents, including the chiefs and mining officials, stated that it was the chiefs that began the campaign for Newmont to make a commitment of setting up a foundation for implementing community development projects and programmes.

At the local level, chiefs worked with the SDCs in each of the 10 communities to write and submit proposals on development projects and programmes to NADeF secretariat for consideration. They also select community representatives to the Board of Directors of NADeF.

Forms of Interaction

The interaction between traditional authorities and State institutions could take one of four possible forms. These forms are (Belden, 2010): No interaction; Collaboration; Collusion or Conflict. The fieldwork showed that in the district, the form of interaction between these two institutions was either collaboration or collusion.

Respondents mostly described the form of interaction they saw as collaboration. Collaboration is the positive form of interaction as the interaction is

seen as an opportunity to contribute to the development of both the country and the communities. Without cooperation (collaboration), the scarce resources available for development are likely to be dissipated in different directions, reducing its effectiveness drastically (Ray, 1997). When the efforts are seen as part of either the moral or statutory responsibilities of the parties and pursued, that also is collaboration (Belden, 2010). One traditional leader said they related collaboratively because both sides exhibited the same interest: to bring development to the people. They had a cordial relationship to ensure things were done well for the people of the communities. Some of the good things that came out of the collaboration included employment of the youth in the area, putting up of infrastructure like schools, clinics and libraries.

Another reason given by all categories of respondents for the collaboration of the two institutions was that collaboration was the best form of interaction to achieve consensus. The achievement of consensus was necessary for ensuring progress of the communities, state and business because they all had their interests which were not necessarily convergent. Therefore, in order for any meaningful change to occur in each other's fortunes, they had to attain a common ground, thus consensus. A small-scale miner explained why he thought the institutions collaborated and a benefit they had derived from this collaboration:

The chief initially did not agree to us mining, but when they met and the discussions showed that without this mining a lot of bad things like stealing and demonstrations against the mining company would go on, they allowed it to go on albeit without their approval but rather their

neglect.

The role played by small-scale mining as a medium to engage the unemployed youth so as to manage conflict is reflected in this quotation. This element becomes pertinent in a situation where a more formal welfare network is either inadequate or non-existent for the unemployed (Harriss-White, 2010; cited in Carson et al, 2010).

Some small-scale miners and household respondents saw the interaction as collusion. This was so because they argued that their meetings had not resulted in progress in the lives of the people. The water sources in the area were said to be polluted and that had not been addressed for them by the mining company or state institutions. In other situations where the communities were part of the meetings, the communities were said to present their views on how development could be brought to the whole area but neither the company nor the state institutions fulfilled any of the issues agreed on.

The use of the royalty payments solely by the traditional authorities was one issue used to assess the interaction as being collusive. Some respondents were of the opinion that royalties came to the chiefs for their use as a result of agreements the chiefs usually strike with the company and state institutions when they have meetings. When the money came to the chiefs, they used them exclusively without giving part to the Town Development committee to benefit the whole society. One respondent captured their frustration as:

The chiefs should donate some of their royalties to the town development committees to implement programmes for the whole

community instead of just using them for themselves. Examples are Gyedu and Wamahinso, where the chiefs donate some of their royalties to the town development committees.

The chiefs were perceived to just be engaged in cars competition among themselves. Royalties payments are covered by legislation passed by the Parliament of the Republic of Ghana, therefore the basis of the forgoing argument that chiefs collude with the state and mining company to extract the royalties is spurious. However, the issue of payment of royalties for the maintenance of the stool and what constitutes the stool, i.e. the chief and immediate family or the whole communities governed by the stool has already been discussed elsewhere in this thesis.

The perceived failure of the traditional authorities to compel the company to fulfil the promises the latter made to the communities especially at public fora and before the social contract was obtained from the people was reported by some household and small-scale mining respondents as a reason for the collusive interaction. These respondents reported that the company promised to employ people from the towns but that did not materialise and the chiefs were not seen to be pursuing these matters with both the state and the company. One small-scale miner saw the interaction as collusion because:

When Newmont came, it was initially thought they would employ us and also allow us to work on the land still. However, they say they were given the concession by both government and the chiefs and they exclude everybody. The chiefs would tell you the same thing and they now deal

with the company and neglect their people. Why was the whole Ahafo area given to only one company? If they were to be given to more than one company, competition would have ensured that more people would be employed.

This respondent argued that the interaction lead to the mining company and the chiefs enriching themselves with the revenue from the gold while the local people suffered the negative consequences like polluted streams and lost access to farmlands, hence the collusion.

Perception of adequacy of interaction

It was enquired from the respondents whether the state of interaction between the traditional authority and state institutions was the best or whether they had some reservations about it. Respondents mostly perceived the state of interaction to be the best. The main reason given for this position was that the interaction had brought development to the area. Jobs were created, infrastructure improved and general peace was pervading in the area. This was because the collaboration afforded parties the opportunity to share their concerns and to reach compromises. Also, this ensures the respect of the views of all parties guaranteeing that outcomes benefitted all.

The minority of the respondents, who were mostly household and small-scale miners, said the state of interaction was not the best and they explained that the benefits of mining to the communities did not come on time, that is, it took too long for the communities to receive benefits from the mining. The inefficient use

of the land in the concession was another reason people felt the interaction had to be strengthened. Land was lying fallow and going to waste on the concession and these respondents argued that they could be put to better use like farming.

This position may be ignorant of the mining process. The mining process, especially open pit mining, usually requires space to allow trucks, other machinery; chemical and water pipe lines; electrical cables and conveyor belts for examples to be laid and maintained. In addition, the generation of dust, smoke and other chemical fumes also require that there are buffers of mostly vegetation created to protect community members from the mining activities. The uncontrolled access of improperly trained and ill apparelled farmers to these buffers would inevitably lead to accidents and unsafe situations that could affect a larger number of people.

A suggestion was made that government had to see that the land belonged to a group of people who lived on it. Chiefs also had to realise that people farmed on the lands, their livelihoods depending on it. These rights to the lands for livelihood were bequeathed to them by their ancestors by which time the current chief was not born, therefore, in exercising his authority over the land, the chief should take this into consideration. When the land was to be given out for mining, policies should be put in place to ensure that the people who were losing access to their lands were catered for adequately. Catering for these people was advised to be based on a life-long basis as the one off compensation packages that were the norm then in the long run made the displaced people worse off than they were before their relocation. Section 73(4) of Act 703 states that after relocation,

people should not be worse off than they were before their relocation, but the current situation contravened this particular provision in the law.

The example of the resettlement at Kenyasi Number 2 was given as an illustration of the deprivation people resettled as a result of mining went into. A number of hamlets falling under the following satellite communities were relocated and resettled at the Kenyasi Number 2 site namely, Amoma, Kwakyekrom, Awonsu, Subika East, Apensu, Kodiwohia, and Gyakakrom. In total, 823 households were resettled here. These people were brought from their villages where they did not have to buy water, food items etc and resettled in this site, where they had to buy everything they needed and had to pay electricity bills. They had to do this at a time when they had also lost the farms they used to derive their livelihoods from. Most of the resettled people who had not gained employment with the mining company, allied services or in other formal organisations had then become poorer.

Community Members Straddling of the Modern and Traditional Institutional Arenas

Members in communities where there is a duality of institutions which provide similar or different services always reassess the institutions and rationalise their choices between the two institutions. When interactions between the dual institutions produce common institutional forms that allow for the provision of public services in all spheres of public life, then people would most likely access these collaborative institutions. However in situations where the

interaction does not yield these collaborative institutional forms, locals choose and pick institutions depending on the issue at hand and the extent to which these institutions met their expectations. In doing so, they straddle the arenas of modern and traditional institutions (Belden, 2010). This rationalisation is even higher when the people are not limited in which one of the dual institutions to contact for a particular service. Issues of transaction costs, effectiveness of institution, opportunity costs associated with a choice and acculturation of the rational person then come into play.

The institutions of choice for particular environmental services provision preferred by the respondents were discussed. Most of the respondents expressed the choice of traditional institutions when they needed access to land for building of a house, farming-large or small-scale and small-scale mining. Others would go to the chiefs because they were leaders in their communities and could give directions to members as to what to do.

When it came to the issues of accessing land for mining, timber extraction on commercial bases and scholarships, the state was the most preferred option. In general, people mostly preferred traditional authorities when they required rudimentary resources while government or its agencies was usually contacted when resources regulated by law were required like mining or commercial extraction of timber.

Cost of transaction

Cost of transaction plays a very important role in the choice that people

make of a set of options available for service provision. This is because in the final analysis, the service has to be paid for and it is mostly the consumer who has to. From the interactions with the respondents, the costs of transactions were discussed from two perspectives. The first one had to do with the actual cost in terms of how much one had to pay to access the service. The other had to do with the effectiveness of the service provision. In this situation, people talked about the fact that the final result was satisfactory. If one actually paid a small fee for a service and at the end of the day, there was no service provided or the result was unsatisfactory, then the transaction cost was seen as expensive by respondents.

Respondents, all categories, were generally of the view that it was cheaper to transact business with the traditional institutions as compared to modern institutions. Traditional institutions were less bureaucratic and involved less documentation of processes which required lesser fees. The traditional authorities also applied local and rudimentary technology which was cheaper than the advanced technology used by the modern institutions. Their approaches and methodologies were also flexible. The simpler processes employed ensured that there was not much opportunity for corrupt practices in their activities, compared with the modern institutions whose transaction costs were high because of general corruption in their ranks.

For example, in the adjudication of cases in the traditional court one does not need to hire the services of a lawyer as the process adopted there is for both the accuser and the accused to be given the public forum to state their case and defend respectively. The council of elders listen, ask questions, seek clarifications

and if need be, call in witnesses. When they satisfy themselves that they have adduced all the evidence, they pronounce a judgement.

The other reason assigned for the lower transaction costs associated with traditional authorities by the traditional respondents was the fact that their positions were not one of appointment. Therefore, they were in their positions not to enrich themselves. Most of their services were public duties they rendered to the society. When the service required was for public use, and then the charges were made minimal and sometimes even provided freely. Another reason was that the chiefs could lobby from different sources for things to be done which meant that they needed not to sometimes even charge for provision of some services.

Those respondents who found the transaction costs associated with the modern institutions to be lower explained that modern institutions were more resourced to execute projects and programmes. The state generally taxed the production of goods and services in the country and used the resources to fund the activities of the modern institutions. Therefore, they were more effective in implementing these projects and assessed as having lower costs associated with them.

Code of conduct of institutions

Institutions are supposed to bring predictability to social life and remove uncertainty. However, the level of predictability differed between the traditional and modern institutions. When one engages any institution for any environmental or developmental service, some level of predictability of the institutions enables the consumer to relax because the final service is fairly known. This factor

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influences the choice people make when there are options available in the community.

The modern institution was noted by respondents as more predictable than the traditional institutions. The high level of formality in the organisation of modern institutions was the main function responsible for the higher predictability. The modern institutions had a clear procedure of deciding on what action to take and were therefore more predictable. These rules and codes were generally clearly defined and their staff were highly trained to implement them. One of the chiefs interviewed depicted the predictability of these institutions this way:

> *There is a difference between modern and traditional institutions regarding their processes. The burden of proof in traditional matters is stricter than the modern institutions which make the modern ones easier to predict.*

Of the respondents who said the traditional authorities were more predictable, their main reason was that because traditional institutions were guided by traditions, their codes of conduct were inherent in the social system. Routines, norms and practices are codified over time. Therefore, anyone familiar with the society was by extension familiar with these codes of conduct and therefore could predict the traditional institutions. People in rural areas find the proceedings of customary courts simpler and more comprehensible (Ray & van Rouveroy van Nieuwaal, 1996).

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Another factor was the relative difficulty in corrupting the traditional institutions as compared to the modern institutions. This is because in the traditional set up, decisions are generally taken by councils, therefore it was more difficult to corrupt the whole group. Therefore decisions were more likely to be what was predicted in the case of traditional institutions than that of the modern institutions.

Enforceability of decisions

Decisions made should ultimately be enforced. One other characteristic of the institutions that was considered to influence the choice that people made regarding where to go for their environmental service was enforceability of the decisions made by the institution. Respondents were mostly of the opinion that there was no point in spending time and money pursuing a service if when the decision is made for the service to be provided, it could not be enforced.

Respondents mostly said the modern institutions enforced their decisions better than the traditional institutions. The backing the state institutions had by law was the main factor accounting for their enforcement power. The Constitution of Ghana and other enactments by both the Parliament of Ghana and other state bodies was seen as that which enabled the state institutions to enforce their decisions. These laws made the decisions legitimate and also provided the authority to enforce decisions by the use of force (Weber, 1946).

Moreover, the laws apart from giving the state the power to enforce decisions also prescribes rules and guidelines under which state business is

conducted. This therefore made it difficult for state officials not to enforce decisions once they were made at the appropriate authority level. In addition, because of the predictable rules guiding the actions of state officials, they had less discretion not to enforce decisions. Apart from the laws, rules and principles guiding action, they also set up organised and well established structures for conducting state business. There is therefore efficiency in enforcement of decisions and this therefore enhances the enforceability of decisions made by state institutions.

Modern institutions were also able to organise more resources to implement their programmes and actions because they were backed by the laws to do that. The regulatory agencies were given the resources, albeit not adequate all the time, to implement decisions. This enhanced their effectiveness in enforcing decisions. One respondent made this observation about the ability of the state to accumulate resources for its activities:

> *Modern institutions have more resources to use compared to traditional authorities in whose case sometimes people have to contribute a little at a time over long periods, sometimes projects never come to fruition because of both human nature and uncertainties. In addition, for the modern institutions, if someone is not true to his or her responsibilities, they can be punished.*

Of the respondents who thought traditional institutions had a higher enforceability of their decisions said it was because they were the custodians of the towns and the people accorded them respect. The social systems at community

levels were largely homogenous and with the traditional institutions presiding over these systems, people respected their decisions and that contributed immensely to their enforceability. The argument has been made that people respect traditional authority in local areas because the people are not educated and unlikely to question the decisions of tradition. However, Logan (2009) notes a higher level of respect for traditional authority among the educated elites in more democratically developed countries in Africa. One of the respondents, capturing the enforceability of traditional institutions said:

They use traditional myths and authority in support of their decisions. Once some of these authorities are invoked, people are afraid to go contrary because of the recourse to spiritual powers for enforcement. In addition, with regards to traditional matters, there are agents who are responsible for ensuring compliance in the local areas and anyone who goes contrary is found out. The modern institutions are not proximate to the local areas and their influence is not felt that much in the local areas.

The use of tradition, spiritual power and coercion to ensure enforceability of decisions by traditional institutions were consistent with a study by Nuebert (2007) in Uganda where the traditional institutions also used them effectively.

In general, most of the respondents would prefer going to the traditional institution for arbitration of cases that were not of criminal nature, like land ownership, boundary and inheritance disputes, because they were less expensive compared to the judiciary and they used customary law and local language in the interactions. This made it easier for people to follow the procedures. In addition,

the claim to ancestral and spiritual authority to back their decisions was seen to enhance the enforceability of their decisions. Beall and Nganyoma (2009) found that over 70 percent of cases were reported to the traditional institutions by residents in the Greater Durban area of South Africa for arbitration for similar reasons.

Enhancing Interactions between the Traditional and Modern Institutions in Environmental Governance

The existence of both modern and traditional institutions to provide environmental service to the same society may be seen as the two institutions engaging in competition. However, far from being in competition for the public's regard, Logan (2009) notes the fact that traditional leaders and elected leaders are seen by the public as two sides of the same coin. In view of this, the respondents generally submitted that the two institutions were required to interact so as to provide goods and services to the people in an efficient, effective and affordable manner. Even though some of the respondent perceived the interaction to be collusion, they were at the same time hoping that the interaction could be modified and generally improved to enhance the sustainability of environmental resources, thereby sustaining benefits derived from them.

People felt that the transaction costs they incurred in dealing especially with the state institutions were too high, therefore they wanted the traditional and state institutions to deliberate and decide between them which services could be provided by the traditional institutions. For example, applications for registration

of small-scale mines and for small-scale concessions could be lodged at the registrar of the traditional council for onward transmission to the MINCOM area offices for further processing. This means then that they would not have to travel to district, regional or sometimes the national capital for every service they needed.

Chiefs being custodians of land was the justification some chiefs referred to in suggesting that chiefs should be involved in the whole mining governance process, beginning from prospecting till mine closure. They were rather just informed of the agreement between the state and companies concerning mining in their areas and their subsequent involvement in EIA and other socially related activities.

Interviews with a key informant from the Chamber of Mines however rebutted the assertion by traditional institutions that they were only informed at a later stage. This meant that they were not part of the decision making at the outset. The informant said it was usually after companies realised economic concentrations of gold in land after prospecting that they informally met with the chiefs and negotiated rewards for the leaders and also issues of resettlement and compensation. It was at these informal meetings that 'drink money' for the authorities were discussed and later paid to chiefs.

Even though the key informant's assertion questions the position of the chiefs on their involvement in the decision making process, the fact that the chiefs were not informed of the prospecting decision is established. Once economic quantities of minerals were found in the land, the chiefs could not effectively stop

the licensing of the mining operations because then, the state and business entity would be so interested in mining that community livelihood considerations would become secondary issues.

Enhancing the role of chiefs in transparency and accountability

When it came to the specific issue that chiefs should be given a more pronounced role in transparency and accountability of mining governance, four out of six respondents who contributed to this discussion did not agree. Their main reason was that the chiefs would abuse the opportunity. The chiefs, mostly the paramount and divisional chiefs, were alleged to be grabbing resources from the mining company for themselves, including working as contractors to the company, taking sponsorship packages and other benefits like fuel. A key informant explained that the company contracts companies registered by the chiefs because they expected workers in these registered contractors to be local people, therefore indirectly creating jobs for the local people.

Another position that opposed enhancing the role of chiefs in transparency and accountability was that there was as much interaction between the company and communities as was possible, therefore there was not much for the chiefs to do. The fora organised by the community relations department of the mining company was one example that allowed the communities to speak up and be provided information.

The rest of the respondents that mooted the idea that chiefs should have an enhancement in their role in transparency and accountability explained that the company should update the chiefs monthly on how much was mined and how

much it was sold for so that better decisions on how much is due who and what that can be used for can be made.

Enhancing the authority of chiefs over mineral resources

The authority exercised by traditional authorities over mineral resources in Ghana, by law is non-existent. This has been used to explain the expansion of the illegal mining menace in Ghana. The study attempted to determine the popularity of the idea that chiefs should be given more authority over mineral resources in their lands.

Most respondents suggested that traditional authorities should not be given authority over mineral resources. This was because Government and other stakeholders should rather be made to exercise their professional mandate very well as that was enough to secure the resources and benefits from them. Of the respondents who supported the idea of traditional authorities having an improvement in their authority over mineral resource, their major justification was that it would improve transparency over the disbursements of benefits derived from the resource.

Summary

In the institutional pluralistic societies in Ghana, both the modern and traditional institutions had collaborated at several fora, both informal and formal. They had collaborated because they both rationalised their relevance to the public as providing services. Moreover they had strengths and weaknesses in different areas and in order to be very effective, they had to interact to combine their

strengths to overcome their weaknesses. In the Asutifi district, a physical manifestation of the collaboration between the modern and traditional institutions was the NADeF. This provided the major formal forum of interaction to put the resources available to the communities from the mining activities to public use.

When it came to services where there were no formal structures for providing commonly between the two institutions, people assessed the relative effectiveness of these institutions separately and made a choice as to which one to approach. The main issues considered in coming to the decision were cost of transaction, predictability of the decision and enforceability of decisions. The modern institutions generally had higher cost of transaction, were more predictable but had less enforceability of their decisions. Respondents generally were more likely to choose the traditional institution for services provided by both institutions separately. This was because their processes were more understandable to the people, they were cheaper and had more enforcement power, especially because of their recourse to invoking ancestral spirits, their proximity to the people and their legitimacy derived from the history of the communities.

Regarding enhanced integration of the modern and traditional institutions for enhanced environmental governance, three different interfaces emerged from the chapter as showing much promise: traditional authorities studying the working of the District Assembly concept, especially the budget cycle, and actively engaging the DA both as appointed members and as lobbyists; appointment of chiefs or their representatives to boards and committees of both regulatory

agencies and business entities especially when decisions and actions are to be taken about environmental resources within their areas and the joint development of organisation forms like the Forum, NADeF and its SDCs to actively and periodically engage stakeholders in routine discussions on the environmental resource, its exploitation and benefits and cost sharing. These activities would ensure that the capacity of informal institutions to shape formal institutions (Meagher, 2007) would be enhanced and the use of political institutions to mobilize resources and international support to marginalize traditional leaders (Renders, 2007 cited in Meagher, 2007) is minimised.

CHAPTER NINE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter presents the summary, conclusions and recommendations emanating from the study. The contributions which the study makes to knowledge and suggestions for further research are presented next.

Summary

Traditional institutions are a resilient and enduring form of social organisation that continues to be relevant to most communities in Ghana. However, their apparent ineffective participation in governing commercial mineral resources characterised by public statements by some traditional leaders and conflicts in several mining areas has not augered well for local development in mining areas. This study sought to research the roles of traditional institutions and their interaction with state institutions in mining governance in the case of the Asutifi District of Ghana.

A case study design with a qualitative approach to research was developed for the study. A combination of purposive and quota sampling techniques were used to select 29 households and 23 institutional respondents. The sample was made up of individuals selected from selected state institutions with mandates within the mining sub-sector; traditional institutions; the Ghana Chamber of

Mines; Newmont Gold Ghana limited; small-scale miners and individuals living in the district. Interviews and a focus group discussion were the main data collection tools used. Discourse analysis was the main tool used to analyse the data.

The key findings of the study are:

1. Chieftaincy and rituals were the two predominant traditional institutions involved in governing mining in the district. Chieftaincy was the most prevalent physical manifestation of traditional organisation identified in the environmental governance structure in the district. Chieftaincy was much developed in terms of its ability to adapt to the changing environment; their institutional norms corresponding with the social relations of their people; institutional structure that responded to all the responsibilities they had towards their subjects and they had developed appropriate procedures for discharging their duties effectively.

2. Traditional institutions played leadership roles in their societies and moderated the interactions between state agencies and the communities in the areas of mining and related activities. They represented their communities in negotiating with the company for projects, endorsed application forms of their people for employment with the company and represented their communities on boards and committees set up by either state agencies or the mining company.

3. Traditional authorities were not represented on decision making structures of the state institutions and they needed to be supported to get

representatives on these structures. The traditional authorities were only informed of grants of mining licenses on their land. The state institutional respondents generally explained that the field of mining was a highly technical one and the chiefs, even if they were represented, would not contribute much to the process.

4. Traditional authorities and state institutions interacted at several fora and levels in an attempt to manage the environmental resource. There were formal and informal meetings, board representations and public fora at community, district and regional levels. While the institutional respondents found these fora to be very important platforms for the engagement with each other, majority of the household and small-scale mining respondents were suspicious of the interactions that were not held in public. The interaction between the dual institutions of governance were generally collaborative because both parties agreed that collaboration was the most effective and efficient way of ensuring development for the district.

5. There was great potential for the two institutions to integrate to facilitate environmental governance in the district. The enhancement of the roles of chiefs in transparency, accountability and authority over mineral resources would facilitate environmental governance in the district. If chiefs were given representation on committees or boards of business and state institutions and the power of voting, this would ensure that the aspirations

of the people would be brought to bear on governance of the environmental resource.

Conclusions

The chieftaincy institution was a highly developed traditional institution involved in environmental governance regarding mining in the Asutifi District. The institution was highly adaptable; cohered; congruent and complex. However, regarding its exclusivity and autonomy, the state was the major competitor to the traditional institutions. The Constitution and other enactments placed a lot of limitations on the authority of the traditional institutions both to regulate the people and to organise resources to fund their activities. It was therefore not totally autonomous of the state as it depended, to a large extent, on the state to be able to fund most of its activities.

Traditional authorities played the role of development agents as well as custodians of those natural resources not vested in the state. Though the state had vested all the lands in the district in itself, traditional authorities were allowed to play their custodian roles in governing the land and natural resources for traditional livelihood and subsistence uses. Even for the commercial utilisation of environmental resources, traditional authorities were involved at an advanced stage of licensing and during the operations. Their informal interactions with these modern organisations also enhanced their contribution to the general development of their jurisdictions. The limitations imposed on the authority of chiefs to defined roles in governance had weakened their participation in

decisions on how natural resources were exploited and the benefits they could derive from these.

If traditional authorities are given more representation on lower level committees and not only at board levels, they would be more engaged in regular activities of state agencies which would enhance their governance roles. Boards of corporations and agencies take broad based decisions whose implementation engages the people with the agents on more regular bases. Committees engaged in closer interaction with the people and if the traditional authorities were represented at these levels, it would enhance their development roles. Moreover, it would enhance the knowledge of the authorities of the workings of the state machinery so that they could extract resources they needed from the state to develop their areas.

In the Asutifi District, both the modern and traditional institutions had collaborated at several fora. Apart from the Forum and NADeF platforms where the collaborations allowed the traditional institutions to deliberate on an equal level with the modern institutions, all the other fora like EIA hearings organised by EPA and community durbars organised by the mining company, the traditional authorities were usually seen as guests of the organising party. Therefore contributions made by the authorities did not necessarily affect decisions taken. These collaborations would be more effective if joint committees with equal representation of relevant stakeholders are regularly formed to address emerging issues. The implementation of the reports of these committees by the organisation

or agency concerned can then be tracked by any membership group of those committees.

The modern and traditional institutions can potentially integrate with each other for enhanced environmental governance. A cross understanding of the systems of each institution by the other would naturally ensure that their interaction would be seamless and improved. The joint development of organisational forms like the Forum, NADeF and its SDCs to actively and periodically engage stakeholders in routine discussions on the environmental resource, its exploitation and benefits and cost sharing has the potential to improve deliberations on the use of and benefits derived from the environmental resource. The state is unlikely to succeed in state-building and socio-economic development without harmonizing its political apparatus with the traditional institutions (ECA, 2007).

Recommendations

Based on the key findings and conclusions of the study, the following recommendations are made:

1. Traditional institutions should be recognised by the Government of Ghana as key stakeholders in mining governance. The Minerals Commision should therefore ensure that chiefs, or their representatives, from areas in which mineral resources are to be exploited and mined are involved in the processes of licensing of mining, beginning at the reconnaissance license stage, not only to be informed of the projects when the mine development

license has been issued and the company needs the social license to begin mining.

2. Chiefs should deal more regularly with the District Assembly and the creation of a liaison position at the Assembly by the Assembly would ensure that there is smooth collaboration between them. Further, the representatives that chiefs have in the Assembly during Assembly sittings and at any other available fora, should question how, for example, royalties are used by the Assembly and to demand that these are used to finance specific capital projects, not to run the recurrent budget of the Assembly.

3. The Ministry responsible for natural resources and mining in Ghana should organise a forum of stakeholders in mining in the Asutifi District, including chiefs, community members, regulatory agencies and district assemblies. At this forum the concept of the stool, for the purposes of royalty payments should be discussed. The issue to be addressed is, whether the stool should be seen as the narrow perspective of the chief and his elders or the broader conception, favoured by most of the local people, as the whole communities governed by the chief and his elders. This would then put to rest the agitations of community members for royalties to be used for community projects.

Contribution to Knowledge

The thesis makes a contribution to knowledge by integrating disparate theories (State, institutional, collective action) and concepts (environmental

governance) within development studies to develop a conceptual framework that explains the reality of people living in communities with dual institutions rendering either complementary or competing services to the populace. The conceptual framework contributes an analytical model for research on the roles of traditional institutions in environmental governance

This was further enhanced during the discussion of findings, where reconnections of the empirical data with literature resulted in further integration and understanding of the theoretical underpinnings of social actions than a single theory based study respecting the neat borders of theoretical disciplines could have.

Though the duality of institutions in Ghana has been noted by earlier writers, the interaction between them regarding mining governance, especially in the Asutifi District had not been investigated before this thesis. Another contribution is the considerations individuals made and the factors they considered as important, before accessing either traditional or modern institutions for any environmental service they required which contributes to literature on institutions.

Limitation of the Study

A major limitation of the study was the inability to speak to an actual land owner who had given out his or her land for illegal small scale mines. This limited this study in the sense of establishing concretely or otherwise, the relationships

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among traditional authorities, other financiers in both large scale mines and state institutions, land owners and illegal miners.

The qualitative approach to research adopted by the study was another limitation of the study. This approach limited the study in the sense that the study could not establish the extent to which the variables studied were prevalent in the Asutifi District and how, strongly or weakly, they were related to each other.

Suggestion for Further Research

It is suggested that a study be conducted, preferably in Asutifi District, which samples land owners who have given out their lands for illegal small-scale mining. This would help to illuminate more, the networks linking land owners, traditional institutions, sponsors of illegal small-scale mining and the illegal mining activities. It would also enlighten scholarship on considerations that land owners make in giving out the lands for the galamsey activities and the conditions of access they proffer.

A study which looks at traditional institutions and environmental governance in Asutifi District, but with the quantitative approach, is suggested to establish prevalence and relationships among the governance variables in the district.

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APPENDICES

APPENDIX A: INTERVIEW GUIDE FOR HOUSEHOLDS

Dear Sir/Madam,

This interview administration forms part of a PhD study being undertaken by myself at the Institute for Development Studies, University of Cape Coast. The research is titled: Traditional institutions and environmental governance in mining areas: A case of Asutifi District, Ghana. You have been selected to be a respondent because it is recognised that the information you can share on the issues are relevant for the achievement of the objectives of the study. Your candid responses would be much welcomed and they would only be used for this academic purpose. Your identity would also be held anonymous and I would be most grateful to you for agreeing to be part of this study.

Section 1: Background information

Name   of

community:..

Date of interview:...........

Gender of respondent: Male ( )   Female ( )

Status of respondent in household:

Head of household	
Spouse of head of household	
Household member	

Age:.............

Household size:...

Monthly income of household:............

Main occupation of head of household...

Main source of income for household........

Percentage contribution of main source to household income..

Section 2: Traditional environmental institutional mapping

1)   With regard to managing environmental resources in this area, particularly

gold, what traditional institutions can you list?..............

2)   What does each of them do?..........

Section 3: State of development of traditional institutions

3)   What are the core functions of traditional institutions?..............

4)   How well do traditional institutions use their own independent procedures

to manage their core functions? ..

5)   In the implementation of both the core and other functions of traditional

institutions, is there competition from other institutions?

6)   Please explain your answer...

7)   How much do you think traditional institutions have adapted to enduring

changes in this community since their inception?........

8)   How well have traditional institutions been able to modify their

environment to ensure their survival?.........

9)   How do you assess the capacity of traditional institutions to make

decisions independently?.....

10) How well are they able to use their own structures to implement these decisions?....

11) Do traditional institutions project the preferences of the societies that they lead?

12) Can you please elaborate your answer?......

13) If they are not, how can they be made to do so?.........

Section 4: Roles played by traditional institutions in environmental governance

Section 4.1: Institutions and law

14) Comparing traditional and modern institutions, which one has a lower transaction cost associated with their environmentally related services?.................

15) Please explain your response...

16) Which one of the two institutions' decisions and codes of conduct are more predictable?.........

17) Please explain your response......

18) Which of these institutions has a higher level of enforceability of their decision?.....

19) Please explain your answer......

20) If you were to require a service regarding an environmental resource, would you go to the traditional or modern institution and for which service?

Institution	Service required

21) Why would you do that?.........

Section 4.2: Authority level over resources

22) Who should have the authority to decide on whether the mineral is mined or not?...........................

23) Is this person justified to have this authority?

24) If yes, why?..............

25) If no, why?....

26) Who should have the authority to determine the conditions under which the mineral is mined?......

27) Is this person justified to have this authority?

28) If yes, why?........

29) If no, why not?........

Section 4.4: Accountability and transparency

30) What are some of the returns that accrue to traditional institutions from the gold mined in this area?............

31) What is the justification for receipt of these returns?............

32) Do traditional institutions render accounts to the community regarding the use to which these returns are put?..........

Section 4.5: Property rights and tenure

33) Who owns the gold resources?.....

34) Why do you think this person owns this resource?........

35) What are the rights that the owners of the resource have?.......

Section 5: Dynamics of the interaction between the traditional and state institution regarding environmental governance

36) Do you know of a forum where traditional institutions interact with modern institutions regarding mining governance in the district?

37) If yes, please elaborate your response...

38) What do you think informed this decision for both the traditional and modern institutions to interact?........

39) What would you say is the general form of their interaction? Is it:

i) Collaboration   ii) Collusion   iii) Conflict

Please explain your answer.........

40) Is this the best form of interaction that they should have?

41) If yes, please explain...

42) If no, what should the interaction be?....................

Section 6: Conditions to enhance traditional institutions' effectiveness at the local level

43) What developmental roles do chiefs play in society in terms of:

a) Education;

Provision of land for schools	
Scholarships	
Incentives to staff and pupils	
School blocks and other facilities	
Laws banning certain traditions and behaviours detrimental to education opportunities and conditions	
Others (please state....)	

b)   Provision of social amenities;

Custodian of traditions	
Environmental quality	
Health	
Justice	
Leadership	
Livelihoods	
Security	
Others (Please state...)	

44)   Is it legitimate for traditional institutions to play any developmental role

given the fact that there are modern institutions that are resourced to play most of

these roles?

45)   Please explain your answer...............

46)   From what sources do traditional institutions obtain the resources to do all

these activities?.......

47)   How should traditional authorities be supported to be able to play these

specific developmental roles effectively? ......

Section 7: Potential for integration of traditional and modern institutions to

facilitate environmental governance

Section 7.1: Institutions and law

48)   How can traditional institutions relate with modern institutions to improve

services for people in terms of:

a)   Transaction costs;............

b)   Predictability;...

c)   Enforceability of decisions;...

Section 7.2: Participation and representation

49) What roles can traditional authorities be given in the modern mining governance structure to enhance participation and representation of local people?...

Section 7.3: Authority level over resources

50) Should traditional institutions be given more authority over mineral resources?

51) If yes, why?..............

52) How can it be done?..........................

53) If no, why not?.............

Section 7.4: Accountability and transparency

54) Should traditional institutions be given a more pronounced role in ensuring accountability and transparency in decisions on gold mining?

55) If yes, why?.............

56) How should it be done?..................

57) If no, why not?......

Section 7.5: Property rights and tenure

58) Should traditional institutions be given more authority in the exercise of property rights and tenure arrangements concerning gold and all environmental resources affected by gold mining?

59) If yes, why?...........

60) How can it be done?.........

61) If no, why?..........

Section 8: Effects of traditional institutions on households' development

62)   Have the roles played by traditional institutions in environmental governance had any effects on your household?

63)   If yes, please enumerate the effects and explain……

64)   What would be your reaction if one argued that modern institutions were set up to ensure people's development and should be doing these things?....

65)   Would you say that traditional institutions should be supported to be able to do more of these activities?

66)   If yes, how should they be supported?........

67)   If no, why not?......

68)   Subsequently, would you then suggest that traditional institutions should be given specific roles in environmental governance so they can affect households positively?

69)   Which roles do you suggest?........................

Section 9: Conclusion

70)   Finally, is there anything else you want to say to ensure that traditional institutions play a meaningful and effective role in environmental governance in gold mining?........

APPENDIX B: INTERVIEW GUIDE FOR KEY INFORMANTS

Dear Sir/Madam,

This interview administration forms part of a PhD study being undertaken by myself at the Institute for Development Studies, University of Cape Coast. The research is titled: Traditional institutions and environmental governance in mining areas: A case of Asutifi District, Ghana. You have been selected to be a respondent because it is recognised that the information you can share on the issues are relevant for the achievement of the objectives of the study. Your candid responses would be much welcomed and they would only be used for this academic purpose. Your identity would also be held anonymous and I would be most grateful to you for agreeing to be part of this study.

Section 1: Background information

Date:

Office location:

Current position in organisation:

Age of respondent:

Number of years worked in the organisation:

Section 2: Institutional function

71) What is your mandate in relation to granting of concessions for mining?

72) Please explain your input in the permitting process:

Section 3: Level of development of traditional institutions

73) What are the core functions of traditional institutions?

74) How well do traditional institutions use their own independent procedures to manage their core functions?

75) In the implementation of both the core and other functions of traditional institutions, is there competition from other institutions?

76) Please explain:

77) Please list the traditional institution(s) you deal with in discharging your mandate?

78) How much do you think this/these traditional institutions have adapted to enduring changes in this community since their inception?

79) How well have traditional institutions been able to modify their environment to ensure their survival?

80) How do you assess the capacity of traditional institutions to make decisions independently?

81) How well are they able to use their own structures to implement these decisions?

Section 3: Roles played by traditional institutions in environmental governance

Section 3.1: Institutions and law

82) Which traditional institutions contribute to managing these various aspects of the different types of mining in the district?

Mining aspect	Institution contributing to:		
	Large scale	Small scale mines	Artisanal mines

	mines		
Prospecting for gold			
Decision to mine			
Licensing mining			
Rites before, during and after mining			
Actual mining			
Mining regime allowed			
Environmental protection			
Reward systems of mining			
Land reclamation after closure of mine			
Others......	—	—	—

83) What traditional practices govern these various aspects of the different type of mining in the area?

Mining aspect	Traditional practice

	Large scale mines	Small scale mines	Artisanal mines
Prospecting for gold			
Decision to mine			
Licensing mining			
Rites before, during and after mining			
Actual mining			
Mining regime allowed			
Environmental protection			
Reward systems of mining			
Land reclamation after closure of mine			

Others......			

84) Comparing your institution with the traditional institutions, which one has a lower transaction cost associated with their environmentally related services?

85) Please explain your response:

86) Which of you's decisions and codes of conduct are more predictable?

    i)   Traditional

    ii)   Modern

87) Please explain your response:

88) Which of these institutions has a higher level of enforceability of their decisions?

    i)   Traditional

    ii)   Modern

89) Please explain your answer :

Section 3.2: Participation and representation

90) How are community people represented in taking decisions on mining?

Type of mining	Representation
Large scale	
Small scale	
Artisanal	

A. Do you think it is representative enough?

91) If yes, why?

92) If   no,   how   can   it   be

improved?...

93) What are the roles of traditional institutions in ensuring participation of

their people in:

a) Decisions to mine (per type of mining);

Type of mining	Role
Large scale	
Small scale	
Artisanal	

b) Actual mining (per type of mining);

Type of mining	Roles
Large scale	
Small scale	
Artisanal	

c) Revenue accruing from the mining activities in this area

Type of mining	Role
Large scale	
Small scale	
Artisanal	

94) How can the role of traditional institutions be enhanced for representativeness and participation of their people?

Section 3.3: Authority level over resources

95) Is the government justified in being the main authority in deciding if a mineral is mined or not?

96) If yes, why?

97) If no, why? ....

A. Is the government justified in being the main authority in deciding on the conditions under which the mineral is mined?

98) If yes, why?

99) If   no,

why?...

Section 3.4: Accountability and transparency

100)   What are some of the returns that accrue to traditional institutions from the gold mined in this area?

Type of mining	Returns
Large scale	
Small scale	
Artisanal	

101)   How are the quantities of these returns determined?

Type of mining	Quantity determination
Large scale	
Small scale	
Artisanal	

102)   What is the justification for receipt of these returns?

Section 3.5: Property rights and tenure

103)   Who owns the gold resources?

104)   Why do you think this person owns this resource?

105)   What are the rights that the owner of the resource have?

Section 3.6: Markets and financial flows

106)   Do you know of the market conditions governing the sale of the

gold?

a) Large scale

b) Small scale

c) Artisanal

107)   If yes, what is it?

a) Large scale mines:

b) Small scale mines:

c) Artisanal mines:

108)   If no to any of the types of mining, why?

Section 4: Dynamics of the interaction between the traditional and state institution regarding environmental governance

109)   Do you have a forum of interaction with traditional institutions regarding these specific mining governance areas in the district? (Please elaborate on your interaction per specific issue for both small and large scale mining).

a) How both traditional and modern law engage each   other:

b) Participation of local communities in decisions and activities of mining:

c) The various levels at which authority over the resource is exercised and how:

d) Accountability for decisions and transparency sharing both benefits and costs associated   with the gold mining:

e) Issues of rights and tenure regarding access to the gold resources between you and traditional institutions:

f) Financial flows associated with the gold mining:

g) Information and knowledge on the state of the resource:

110) What informed your decision to interact with the traditional institutions? Mandatory.

111) What would you say is the general form of your interaction? Is it:

i) Collaboration   ii) Collusion   iii) Conflict

Please explain your answer:

112) Is this the best form of interaction you should have?

113) If yes, please explain:.

114) If   no,   what   should   the   interaction

be?..

115) How can that be achieved?

Section 5: Conditions to enhance traditional institutions' effectiveness at the local level

116) Is it legitimate for traditional institutions to play any developmental role given the fact that there are modern institutions that are resourced to play most of these roles?

117) Please explain your answer:

118) If yes, how should traditional authorities be supported to be able to play these specific developmental roles effectively?

Section 6: Potential for integration of traditional and modern institutions to facilitate environmental governance

Section 6.1: Institutions and law

119) How can traditional institutions relate with modern institutions to improve services for people in terms of:

d) Transaction costs;

e) Predictability;

f) Enforceability of decisions;

Section 6.2: Participation and representation

120) What roles can traditional authorities play in the modern mining governance structure to enhance participation and representation of local people?

Section 6.3: Authority level over resources

121) Should traditional institutions be given more authority over mineral resources?

122) If yes, why?.

123) How can it be done?.

124) If no, why not?...............

Section 6.4: Accountability and transparency

A. Should traditional institutions be given a more pronounced role in ensuring accountability and transparency in decisions on gold mining?

125) If yes, why?.

126) How should it be done? .

127) If no, why not?.....................

Section 6.5: Property rights and tenure

128)   Should traditional institutions be given more authority in the exercise of property rights and tenure arrangements concerning gold and all environmental resources affected by gold mining?

129)   If yes, why?.

130)   How can it be done?.

131)   If no, why?...................

Section 6.6: Information and knowledge of the resource.

132)   Should traditional institutions be given a more pronounced role in seeking and keeping information on the gold?

133)   If yes, why?.

134)   How should it be done?.

135)   If no, why?.........................

Section 7: Conclusion

136)   Finally, is there anything else you want to say to ensure that traditional institutions play a meaningful and effective role in environmental governance in gold mining?.

APPENDIX C: INTERVIEW GUIDE FOR TRADITIONAL AUTHORITIES

Dear Sir/Madam,

This interview administration forms part of a PhD study being undertaken by myself at the Institute for Development Studies, University of Cape Coast. The research is titled: Traditional institutions and environmental governance in mining areas: A case of Asutifi District, Ghana. You have been selected to be a respondent because it is recognised that the information you can share on the issues are relevant for the achievement of the objectives of the study. Your candid responses would be much welcomed and they would only be used for this academic purpose. Your identity would also be held anonymous and I would be most grateful to you for agreeing to be part of this study.

Section 1: Background information

Name of community:......
Date of interview:..............

Sex of respondent: Male ( )   Female ( )

Status of respondent:.....................................

Years served in this position.................

Educational level:......

Section 2: State of development of traditional institutions

1)   What are the core functions of traditional institutions?.............

2)   How well do you use your own independent procedures to manage your

core functions? ...

3)   In the implementation of both your core and other functions, is there competition from other institutions?

4)   Please explain.........

5)   How much do you think traditional institutions have adapted to enduring changes in this community since their inception?........

6)   How well have traditional institutions been able to modify their environment to ensure their survival?...........

7)   How do you assess your capacity to make decisions independently?.....

8)   How well are you able to use your own structures to implement these decisions?...........

9)   Do you project the preferences of the societies that you lead?

10)   If yes, please elaborate?...........

11)   If no, how can you be made to do so?..

Section 3: Roles played by traditional institutions in environmental governance

Section 3.1: Institutions and law

12)   Which traditional institutions contribute to managing these various aspects of the different types of mining in the district?

Mining aspect	Institution contributing		
	Large scale mines	Small-scale mines	Artisanal mines
Prospecting for gold			
Decision to mine			
Licensing mining			

Rites before, during and after mining			
Actual mining			
Mining regime allowed			
Environmental protection			
Reward systems of mining			
Land reclamation after closure of mine			
Others……			

13)   What traditional laws govern these various aspects of the different types of

mining in the area?

Mining aspect	Traditional laws		
	Large scale mines	Small-scale mines	Artisanal mines
Prospecting for gold			
Decision to mine			
Licensing mining			
Actual mining			
Mining regime allowed			
Environmental protection			
Reward systems of mining			
Land reclamation after closure of mine			
Others……			

14) Comparing your institution with modern institutions, which one has a lower transaction cost associated with their mining related services?

i) Traditional institutions

ii) Modern institutions

15) Please explain your response...

16) Which one of the two institution's decisions and codes of conduct are more predictable?

i) Modern

ii) Traditional

17) Why is that?...

18) Which of these institutions has a higher level of enforceability of their decision?

i) Modern

ii) Traditional

19) Please explain your answer...

Section 3.2: Participation and representation

20) Please state the participants who have the right to participate in these types of mining?

Type of mining	Participant	Why?
Large scale		
Small-scale		
Artisanal		

21) Who has a right to participate in decisions on these types of mining?

Type of mining	Participant	Why?
Large scale		

Small-scale		
Artisanal		

22) How are people represented in taking decisions on mining?

Type of mining	Representation
Large scale	
Small-scale	
Artisanal	

23) Do you think it is representative enough?

24) If yes, why?..

25) If no, how can it be improved?.....

26) What are the roles of traditional institutions in participation of their people

in:

d) Decisions on mining

Type of mining	Roles
Large scale	
Small-scale	
Artisanal	

e) Actual mining

Type of mining	Roles
Large scale	
Small-scale	
Artisanal	

27) How can the role of traditional institutions be enhanced for

representativeness and participation of their people?.......

Section 3.3: Authority level over resources

28) Who has the authority to decide on whether the mineral is mined or not?

Type of mining	Authorising person/Agency
Large scale	
Small-scale	
Artisanal	

29) Are these people justified to have this authority?

30) If yes, why?....

31) If no, why?...

32) Who has the authority to determine the conditions under which the mineral is mined?

Type of mining	Authorising person/Agency
Large scale	
Small-scale	
Artisanal	

33) Are these people justified to have this authority?

34) If yes, why?...................

35) If no, why?...........

Section 3.4: Accountability and transparency

36) What are some of the returns that accrue to traditional institutions from the gold mined in this area?...............

37) How are the quantities of these returns determined?........

38) What is the justification for receipt of these returns?............

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39) Who do traditional institutions render accounts to regarding the use to which these returns are put?......

40) How is this accountability process implemented?..........

Section 3.5: Property rights and tenure

41) Who owns the gold resources?..........

42) Why do you think this person owns this resource?...........

43) What rights do the owners have?...........

Section 3.6: Information and knowledge of the resource

44) How did you get to know there was gold in the land?..............

Section 3.7: Markets and financial flows

45) Do you know of the market conditions governing the sale of gold?

46) If yes, what is it?............

47) If no, why?....................

Section 4: Dynamics of the interaction between the traditional and state institutions regarding environmental governance

48) Do you have a forum of interaction with modern institutions regarding these specific mining governance areas in the district? (Please elaborate on your interaction per specific issue).

h) How both traditional and modern law engage each other:...

i) Participation of local communities in decisions and activities of mining:...

j) The various levels at which authority over the resource is exercised and how:......

k)   Accountability for decisions and transparency sharing both benefits and costs associated with the gold mining:....

l)   Issues of rights and tenure regarding access to the gold resources between them:...

m)   Information and knowledge on the state of the resource:...

49)   What informed your decision to interact with the modern institutions?......

50)   What would you say is the general form of your interaction? Is it:

i) Collaboration

ii) Collusion

iii) Conflict

51)   Please explain your answer.........

52)   Is this the best form of interaction you should have?

53)   If yes, please explain...

54)   If no, what should the interaction be?...

Section 5: Conditions to enhance traditional institutions' effectiveness at the local level

55)   What developmental roles do chiefs play in society in terms of:

c)   Education;

Provision of land for schools	
Scholarships	
Incentives to staff and pupils	
School blocks and other facilities	

Laws banning certain traditions and behaviours detrimental to education opportunities and conditions	
Others (please state....)	

d)   Provision of social amenities;

Custodian of traditions	
Environmental quality	
Health	
Justice	
Leadership	
Livelihoods	
Security	
Others (Please state...)	

56)   Is it legitimate for traditional institutions to play any developmental role given the fact that there are modern institutions that are resourced to play most of these roles?

57)   Please explain your answer............................

58)   From what sources do traditional institutions obtain the resources to do all these activities?..........................

59)   How should traditional authorities be supported to be able to play these specific developmental roles effectively? ...

Section 6: Potential for integration of traditional and modern institutions to facilitate environmental governance

Section 6.1: Institutions and law

60)   How can traditional institutions relate with modern institutions to improve services for people in terms of:

g)   Transaction costs;...

h)   Predictability;......

i)   Enforceability of decisions;......

Section 6.2: Participation and representation

61)   What roles can traditional authorities play in the modern mining governance structure to enhance participation and representation of local people?........

Section 6.3: Authority level over resources

62)   Should traditional institutions be given more authority over mineral resources?

63)   If yes, why?..............

64)   If no, why not?......

Section 6.4: Accountability and transparency

65)   Should traditional institutions be given a more pronounced role in ensuring accountability and transparency in decisions on gold mining?

66)   If yes, why?.............

67)   If no, why not?.................

Section 6.5: Property rights and tenure

68) Should traditional institutions be given more authority in the exercise of property rights and tenure arrangements concerning gold and all environmental resources affected by gold mining?

69) If yes, why?....

70) If no, why?..............

Section 6.7: Information and knowledge of the resource.

71) Should traditional institutions be given a more pronounced role in seeking and keeping information on the gold?

72) If yes, why?......................

73) If no, why?........................

Section 7: Conclusion

74) Finally, is there anything else you want to say to ensure that traditional institutions play a meaningful and effective role in environmental governance in gold mining?..........

APPENDIX D: INTERVIEW GUIDE FOR MINING COMPANY

Dear Sir/Madam,

This interview administration forms part of a PhD study being undertaken by myself at the Institute for Development Studies, University of Cape Coast. The research is titled: Traditional institutions and environmental governance in mining areas: A case of Asutifi District, Ghana. You have been selected to be a respondent because it is recognised that the information you can share on the issues are relevant for the achievement of the objectives of the study. Your candid responses would be much welcomed and they would only be used for this academic purpose. Your identity would also be held anonymous and I would be most grateful to you for agreeing to be part of this study.

Section 1: Background information

Date:................

Office location:......................

Current position in Company:.......

Age of respondent:......

Number of years worked in the organisation:...

Section 2: State of development of traditional institutions

1)   Which traditional institution(s) do you deal with in discharging your mandate?..............

2)   What are the core functions of traditional institutions?.......

3)   How well do traditional institutions use their own independent procedures to manage their core functions? ...

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APPENDIX D: INTERVIEW GUIDE FOR MINING COMPANY

Dear Sir/Madam,

This interview administration forms part of a PhD study being undertaken by myself at the Institute for Development Studies, University of Cape Coast. The research is titled: Traditional institutions and environmental governance in mining areas: A case of Asutifi District, Ghana. You have been selected to be a respondent because it is recognised that the information you can share on the issues are relevant for the achievement of the objectives of the study. Your candid responses would be much welcomed and they would only be used for this academic purpose. Your identity would also be held anonymous and I would be most grateful to you for agreeing to be part of this study.

Section 1: Background information

Date:……………..

Office location:…………………….

Current position in Company:…….

Age of respondent:……

Number of years worked in the organisation:…

Section 2: State of development of traditional institutions

1)   Which traditional institution(s) do you deal with in discharging your mandate?…………..

2)   What are the core functions of traditional institutions?…….

3)   How well do traditional institutions use their own independent procedures to manage their core functions? …

4)　　In the implementation of both the core and other functions of traditional institutions, is there competition from other institutions?

5)　　Please explain………

6)　　How much do you think this/these traditional institutions have adapted to enduring changes in this community since their inception?…………………

7)　　How well have traditional institutions been able to modify their environment to ensure their survival?……………………

8)　　How do you assess the capacity of traditional institutions to make decisions independently?…………

9)　　How well are they able to use their own structures to implement these decisions?………

10)　　Do traditional institutions project the preferences of the societies that they lead?

11)　　Can you please elaborate your answer?………

12)　　If they are not, how can they be made to do so?…………

Section 3: Roles played by traditional institutions in environmental governance

Section 3.1: Institutions and law

13)　　Which traditional institutions contribute to managing these various aspects of mining?

Mining aspect	Institution managing	Contribution
Prospecting for gold		
Decision to mine		

Licensing mining		
Rites before, during and after mining		
Actual mining		
Mining regime allowed		
Environmental protection		
Reward systems of mining		
Land reclamation after closure of mine		
Others……		

14)   What traditional laws govern these various aspects of mining in the district?

Mining aspect	Tradition
Prospecting for gold	
Decision to mine	
Licensing mining	
Rites before, during and after mining	
Actual mining	
Mining regime allowed	
Environmental protection	
Reward systems of mining	
Land reclamation after closure of mine	
Others……	

Section 3.2: Participation and representation

15) Do traditional institutions have a right to participate in decisions on mining?

16) Please elaborate your answer

17) How have traditional institutions participated in decisions on mining?.......

18) Do you think it is representative enough of their people?

19) If yes, why?......

20) If no, how can it be improved?.....

21) How can the role of traditional institutions be enhanced for representativeness and participation of their people?............

Section 3.3: Authority level over resources

22) Is the government justified in being the main authority in deciding if a mineral is mined or not?

23) If yes, why?...........

24) If no, why?........

25) Is the government justified in being the main authority in deciding on the conditions under which the mineral is mined?

26) If yes, why?...........

27) If no, why?..................

Section 3.4: Accountability and transparency

28) What are some of the returns that accrue to traditional institutions from the gold mined in this area?..................

29) How are the quantities of these returns determined?.......

30) What is the justification for receipt of these items?..........

31) How do traditional institutions render accounts regarding the use to which these items are put?................

Section 3.5: Property rights and tenure

32) Who owns the gold resources?.........

33) Why do you think this person owns this resource?..........

34) What are the rights that the owners of the resource have?......

Section 4: Dynamics of the interaction between the traditional and state institution regarding environmental governance

35) Do you have a forum of interaction with traditional institutions regarding these specific mining governance areas in the district? (Please elaborate on your interaction per specific issue).

n) How both traditional and modern law engage each other:.........

o) Participation of local communities in decisions and activities of mining:..........

p) The various levels at which authority over the resource is exercised and how:.........

q) Accountability for decisions and transparency sharing both benefits and costs associated with the gold mining:...

r) Issues of rights and tenure regarding access to the gold resources between them:......

s) Conditions of the gold market and financial flows associated with the gold mining:.........

t) Information and knowledge on the state of the resource:....

36) What informed your decision to interact with the traditional authorities?..............

37) What would you say is the general form of your interaction? Is it:

i) Collaboration

ii) Collusion

iii) Conflict

38) Please explain your answer............

39) Is this the best form of interaction that you should have?

40) If yes, please explain.................

41) If no, what should the interaction be?......................

42) How can that be achieved?.......................

Section 5: Conditions to enhance traditional institutions' effectiveness at the local level

43) What developmental roles do chiefs play in society in terms of:

e) Education;

Provision of land for schools	
Scholarships	
Incentives to staff and pupils	
School blocks and other facilities	
Laws banning certain traditions and behaviours detrimental to education	

opportunities and conditions	
Others (please state....)	

f)   Provision of social amenities;

Custodian of traditions	
Environmental quality	
Health	
Justice	
Leadership	
Livelihoods	
Security	
Others (Please state...)	

44)   Is it legitimate for traditional institutions to play any developmental role given the fact that there are modern institutions that are resourced to play most of these roles?

45)   Please explain your answer.....................

46)   From what sources do traditional institutions obtain the resources to do all these activities?...........................

47)   How should traditional authorities be supported to be able to play these specific developmental roles effectively? ....

Section 6: Potential for integration of traditional and modern institutions to facilitate environmental governance

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Section 6.1: Institutions and law

48)   How can traditional institutions relate with modern institutions to improve services for people in terms of:

j)   Transaction costs;...............

k)   Predictability;...........

l)   Enforceability of decisions;......

Section 6.2: Participation and representation

49)   What roles can traditional authorities be given in the modern mining governance structure to enhance participation and representation of local people?..

Section 6.3: Authority level over resources

50)   Should traditional institutions be given more authority over mineral resources?

51)   If yes, why?......................

52)   How can it be done?.............

53)   If no, why not?......................

Section 6.4: Accountability and transparency

54)   Should traditional institutions be given a more pronounced role in ensuring accountability and transparency in decisions on gold mining?

55)   If yes, why?................

56)   How should it be done?.............

57)   If no, why not?...........

Section 6.5: Property rights and tenure

58)   Should traditional institutions be given more authority in the exercise of property rights and tenure arrangements concerning gold and all environmental resources affected by gold mining?

59)   If yes, why?.........

60)   How can it be done?......

61)   If no, why?.................

Section 7: Conclusion

62)   Finally, is there anything else you want to say to ensure that traditional institutions play a more meaningful and effective role in environmental governance in gold mining?........

APPENDIX E: INTERVIEW GUIDE FOR FOCUS GROUP DISCUSSION

Dear Sir/Madam,

This interview administration forms part of a PhD study being undertaken by myself at the Institute for Development Studies, University of Cape Coast. The research is titled: Traditional institutions and environmental governance in mining areas: A case of Asutifi District, Ghana. You have been selected to be a respondent because it is recognised that the information you can share on the issues are relevant for the achievement of the objectives of the study. Your candid responses would be much welcomed and they would only be used for this academic purpose. Your identity would also be held anonymous and I would be most grateful to you for agreeing to be part of this study.

Section 1: Background information

Name of community:

Date of interview:

Section 2: Traditional environmental institutional mapping

1) With regards to managing environmental resources in this area, particularly gold, what traditional institutions can you list?...

2) Can you arrange them in a hierarchy, in terms of their importance for managing gold resources?......................

3) Which institutionsmanage these various aspects of artisanal mining governance?

Mining aspect	Institution managing
Prospecting for gold	
Decision to mine	
Licensing mining	
Rites before, during and after mining	
Actual mining	
Mining regime allowed	
Environmental protection	
Reward systems of mining	
Land reclamation after closure of mine	
Others......	

4) Of all these mining activities, which one do you consider as the most important for governing the gold resource?.........

5) Please explain why?.............

6) How do the other institutions relate with the core institution managing this specific activity?.............

7) Which norms or practises manage these various aspects of artisanal mining governance?

Mining aspect	Norms/practises
Prospecting for gold	
Decision to mine	
Licensing mining	
Rites before, during and after mining	
Actual mining	
Mining regime allowed	
Environmental protection	
Reward systems of mining	
Land reclamation after closure of mine	
Others......	

Section 3: State of development of traditional institutions

8) What are the core functions of traditional institutions?.................

9) How well do traditional institutions use their own independent procedures to manage their core functions? ....

10) In the implementation of both the core and other functions of traditional institutions, is there competition from other institutions?

11) Please explain........................

12) How much do you think this/these traditional institutions have adapted to enduring changes in this community since their inception?..................

13) How well have traditional institutions been able to modify their environment to ensure their survival?.................................

14) How do you assess the capacity of traditional institutions to make decisions independently?..

15) How well are they able to use their own structures to implement these decisions?....................................

16) Do traditional institutions project the preferences of the societies that they lead?

17) Can you please elaborate your answer?...........................

18) If they are not, how can they be made to do so?.......................

Section 4: Roles played by traditional institutions in environmental governance

Section 4.1: Institutions and law

19) If you were to require a service regarding a mining resource, would you go to the traditional institution or modern institution and for which service?.............

20) Why would you do that?..........

Section 3.2: Participation and representation

21) Please state the participants who have the right to participate in these types of mining?.................

22) Please explain your response to the previous question...

23) Who has a right to participate in decisions on artisanal mining?............

24) Please explain your response to the previous question.........

25) How are people represented in taking decisions on mining?..............

26) Do you think it is representative enough?

27) If yes, why?........................

28) If no, how can it be improved?......................

29) What are the roles of traditional institutions in ensuring representativeness and participation of their people in:

f)   Decisions on mining.............

g)   Actual mining............

30) How can the role of traditional institutions be enhanced for representativeness and participation of their people?................

Section 3.3: Authority level over resources

31) Who has the authority to decide on whether the mineral is mined or not?

32) Are these people justified to have this authority?

33) If yes, why?...............

34) If no, why?............

35) Who has the authority to determine the conditions under which the mineral is mined?

36) Are these people justified to have this authority?

37) If yes, why?........................

38) If no, why?................

Section 3.4: Property rights and tenure

39) Who owns the gold resources?........................

40) Why do you think this person owns this resource?.................

41) What are the rights that the owners of the resource have?...........

Section 3.5: Accountability and transparency

42) What are some of the returns that accrue to traditional institutions from the gold mined in this area?...........

43) What is the justification for receipt of these items?........

44) Do traditional institutionsrender accounts to the community regarding the use to which these items are put?

45) If yes, please explain how?..........

Section 3.6: Markets and financial flows

46) Are you aware of the market for the sale of gold mined by artisanal miners?

47) If yes, what is it?...................

48) Who controls this market?.........

Section 4: Dynamics of the interaction between the traditional and state institution regarding environmental governance

49) Are you aware of the interaction between traditional and modern institutions regarding mining governance in the district?

50) Please explain your answer..........

51) What would you say is the general form of their interaction? Is it:

    i) Collaboration ii) Collusion   iii) Conflict

52) Please explain your answer..................

53) Is this the best form of interaction that you should have?

54) If yes, please explain......

55) If no, what should the interaction be?..........

56) How can that be achieved?.............

Section 5: Conditions to enhance traditional institutions' effectiveness atthe local level

57) What developmental roles do chiefs play in society?

g) Education

Provision of land for schools	
Scholarships	
Incentives to staff and pupils	
School blocks and other facilities	
Laws banning certain traditions and behaviours detrimental to education opportunities and conditions	
Others (please state....)	

h) Provision of social amenities

Custodian of traditions	
Environmental quality	
Health	
Justice	
Leadership	
Livelihoods	
Security	
Others (Please state…)	

58) Is it legitimatefor traditional institutions to play any developmental role given the fact that there are modern institutions that are resourced to play most of these roles?

59) Please explain your answer………………

60) From what sources do traditional institutions obtain the resources to do all these activities?………………

61) How should traditional authorities be supported to be able to play these specific developmental roles effectively? …………

Section 6: Potential for integration of traditional and modern institutions to facilitate environmental governance

Section 6.1: Institutions and law

62) How can traditional institutions relate with modern institutions to improve services for people in terms of:

m) Transaction costs

n) Predictability

o) Enforceability of decisions

Section 6.2: Participation and representation

63) What roles can traditional authorities be given in the modern mining governance structure to enhance participation and representation of local people.

Section 6.3: Authority level over resources

64) Should traditional institutions be given more authority over mineral resources?

65) If yes, why?.

66) If no, why not?......

Section 6.4: Accountability and transparency

67) Should traditional institutions be given a more pronounced role in ensuring accountability and transparency in decisions on gold mining?

68) If yes, why?.

69) If no, why not?.

Section 6.5: Property rights and tenure

70) Should traditional institutions be given more authority in the exercise of property rights and tenure arrangements concerning gold and all environmental resources affected by gold mining?

71) If yes, why?....

72) How can it be done?.......

n) Predictability

o) Enforceability of decisions

Section 6.2: Participation and representation

63) What roles can traditional authorities be given in the modern mining governance structure to enhance participation and representation of local people.

Section 6.3: Authority level over resources

64) Should traditional institutions be given more authority over mineral resources?

65) If yes, why?.

66) If no, why not?......

Section 6.4: Accountability and transparency

67) Should traditional institutions be given a more pronounced role in ensuring accountability and transparency in decisions on gold mining?

68) If yes, why?.

69) If no, why not?.

Section 6.5: Property rights and tenure

70) Should traditional institutions be given more authority in the exercise of property rights and tenure arrangements concerning gold and all environmental resources affected by gold mining?

71) If yes, why?....

72) How can it be done?......

73) If no, why?..........

Section 7: Conclusion

74) Finally, is there anything else you want to say to ensure that TIs play a meaningful and effective role in environmental governance in gold mining?