



**CHIEFS MITIGATING ILLEGAL MINING AS CUSTODIANS OF THE LAND IN
GHANA**

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This document represents part of the author's study programme while at the International Institute of Social Studies. The views stated therein are those of the author and not necessarily those of the Institute.

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List of acronyms

| | |
|-------------------------------------|------|
| Double Governance System | DGS |
| Artisanal and Small-Scale Mining | ASM |
| Logic of Consequences | LoC |
| Logic of Enforcement | LoE |
| Logic of Appropriateness | LoA |
| Logic of Deterrent | LoD |
| Structural Adjustment Programmes | SAP |
| Sustainable Development Goals | SDGs |
| Provincial National Defence Council | PNDC |

| | |
|---|------|
| Convention People's Party | CPP |
| Integrated Water Resource Management | IWRM |
| The Organization for Economic Cooperation and Development | OECD |
| Intergovernmental Forum | IGF |
| African Mineral Development Centre | AMDC |
| Environmental Protection Agency | EPA |
| Community Based Approach | CBA |
| Foreign Direct Investment | FDI |

Abstract

Ghana encompasses a hybrid system of formal rules versus customary institutions of chieftaincy as part of promoting local governance. That is the Double Governance System (DGS), which empowers chiefs by their own discretion to face complex societal problems. The system imposes duties and oblige chieftaincy to protect the environment as custodians of the land in accordance with Article 270 of the 1992 constitution and the Chieftaincy Act (2008, Act 759). It outlines how these institutions are established in Ghanaian communities and durable. Contrary, various research has uncovered how Artisanal and Small-Scale Mining (ASM) has impacted Ghana's environment, destroying water bodies and the land under the custody of chiefs, exposing how relevant chieftaincy institutions are to mitigate illegal mining in Ghana's DGS. Exploring these gaps, the research employed a qualitative method to uncover how the chiefs understand environmental sustainability in relation to the factors regulating ASM, and customary chieftaincy tools that seem appropriate to halt illegal mining. Through analytical lenses of Logic of Consequences, Logic of Enforcement incorporating Logic of Deterrent, Logic of Appropriateness and the governance theory analysed findings from secondary and primary data collected from 18 participants. Generally, the research uncovered the dilemma in Ghana's DGS that the Logic of Enforcement and the Logic of Appropriateness are not functioning as expected, there are limited tools as limited statehood enforcing the protection of custody of the land, either social pressure enough to press actors. It also found that maintaining a right balance in the trade-off between conservation and income depends on chieftaincy institutions.

Relevance of the Study to Governance and Development Policy

The world has perceived enough regulations and enactment of laws in protecting the environment and shared responsibilities to achieve SDGs such as #12 and #15 on sustainable forest, reducing all activities that lead to desertification, devastation of the ecosystem and biodiversity (Bardy et al, 2022). There have been a lot of regulations to safeguard the environment but that is not sufficient as we need more beyond that which includes and require other organizations such as but not limited to, the United Nations, Faith Based Organizations, NGOs, Governments, and relevant actors to accomplish the SDGs 17 in achieving all SDGs. However, it is also important to look at these SDGs from different standpoints and context specific of governance, “what and why, who and how” in each country’s context. It is much relevant to know if the existence of chieftaincy institutions can equally contribute to the common goal of protecting the environment. This makes the research a pivotal point in development context of Ghana to understand how chieftaincy institutions shape development towards achieving SDGs by 2030.

Keywords

Chieftaincy, Custodians, Artisanal and Small-Scale Mining, Double Governance System, Land protection, Logic of Consequence, Logic of Enforcement, Logic Appropriateness.

CHAPTER ONE.

1.1 Introduction

About seven years ago, my family was summoned to court over a dispute, upon appearing in court, the judge asked both parties “Do you have chiefs?” we answered in the affirmative and surprisingly he said, “this issue could have been settled by your chiefs and not in the law court”. This made me ask a lot of questions like “does the judge not have enough authority to settle the issue? or what has this got to do with the chiefs? Until I found out that these institutions are embedded in Ghana’s constitution. This shows how Ghanaians give reverence to chieftaincy when it comes to bringing sanity to communities. In what seems appropriate, they can institute norms and taboos by their authority to ban funeral ceremonies, deny people from mourning the dead, and ultimately banish people from their land, putting the safety of their communities under threat. Their authority has gone beyond this and reflected in Ghana’s constitution as “the custodians of the land”.

The increasing devastation of the environment in Ghana may call for the same question, do we have chiefs? Just like any other developing country, Ghana is bedevilled with the ripple effect of Artisanal and Small-Scale Mining (ASM) on land and pollution on water bodies across almost all the 16 regions in Ghana. ASM has damaged pertinent streams and rivers that has been the source of waterborne diseases for livelihoods depending on these rivers in the Assutifi North District. The enriched topsoil for agriculture is destroyed, leaving many pit holes after illegal mining and have effects on agricultural food production as despite the widespread of ASM in the district, agriculture remains the primary occupation of the people (Mensah et al., 2022; Addo et al., 2023). Globally, it is conceded that ASM has increased rapidly in many third world countries as there is high demand for gold annually and the need for income generation opportunities. Emphasized by Lavin in (Mensah et al, 2022) that ASM globally has employed about 100 million people which shows the increasing demand for gold and income generation worldwide.

However, there is a key characteristic that differentiates Ghana from other countries: its Double Governance System (DGS), as a hybrid between modern formal rules and the traditional customary institutions of chieftaincy. The 1992 constitution acknowledges this DGS and establishes specific attributes, among which chiefs have the ultimate authority over the land where gold is mined (Gatune and Besada, 2020). Chiefs in the context of this research are people who maintain royal credentials, symbolized with traditions, customs and been

enstooled to rule a specific society in accordance with customary laws and usage (Antwi-Bediako, 2018; Owusu-Mensah, 2013).

As part of modern formal rules in Ghana, traditional customary institutions of chieftaincy are incorporated in its governance system. Emphasizing on Graham et al in (Asadazzaman and Virtanen, 2016), the definition of governance is conceived as the relationship amid the state and non-state structure, process, norms, where authority and duties are executed, where the ways involved in decision-making are made, and how local communities and traditions act together. To elaborate more on this, Gómez refers to the system as a specific way of steering affairs: “sustaining co-ordination and coherence” amid different actors’ interplay, having variety of goals and purpose in a formal and informal institutions (Gómez, 2012).

As evidence of the role of chiefs as custodians of the land in the DGS, the paramount chief of Dormaa Ahenkro, Nana Osagyefo Oseadeeyo Agyeman Badu II exclaimed his discomfort to the Vice President of Ghana, Dr. Mahamdu Bawumia on gold mining on their land and the environmental challenges it poses on the citizens (Ali, 2023). Demonstrating the authority of chieftaincy, he summoned entirely his Council of Elders at the Abaapredease Palace to sign a “contract of oath” which oblige them to protect the land under his paramountcy. Accentuating on this, the state’s president, Nana Addo Dankwa Akufo-Addo made a humble appeal to chiefs to involve in the evolution and prominence that, chiefs are the rightful and material owners of the land inherited from their lineages (Nartey, 2022). Similarly, Nana Ogyeahoho Yaw Gyabi II, the president of National House of Chiefs has reinforced this authority over the land that without exclusive active collaboration and engagement with chiefs, the common goal to protect the environment would be unattainable (Quaicoe, 2023). Equally, Nana Oheneba Owusu Ansah Nante Ababio II, the Paramount Chief of Awherewam exhibited his authority to ban illegal mining on his land when he assumed his paramountcy (Owusu-Akyaw, 2024).

These events underpin the extent of the environmental destruction and the raising awareness of chiefs as custodian of the land for generations. These were the key triggers for the research, understanding chieftaincy on environmental sustainability, and the factors that regulate ASM in relation to customary land protection. One could wonder if the sentence could be framed again, “this issue could have been settled by your chiefs”. The research expounds on the understanding of the role of chiefs on environmental and land protection from ASM,

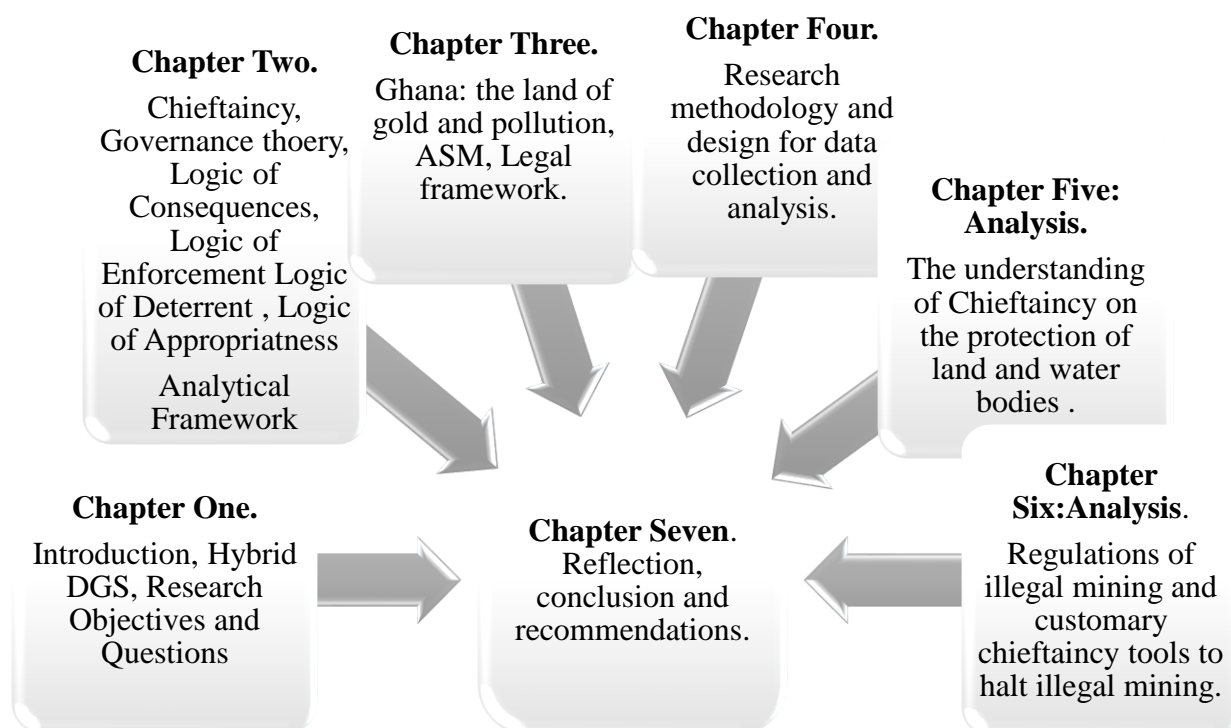
and the role of the unique DGS in Ghana in maintaining environmental sustainability and achieving SDGs.

The study enquires in what ways the role of chiefs and the DGS affects gold mining and land protection in Ghana. The research is grounded on Kenyasi where mining is as salient as environmental degradation and water pollution.

Sub-Research Questions

1. How do the chiefs in Kenyasi understand environmental sustainability as custodians of the land.
2. What are the factors that regulate illegal mining in Ghana at the local level?
3. What are the customary tools available by chieftaincy institutions to appropriately protect the environment?

Figure 1. Structure of the Research



Sources: Authors own elaboration

CHAPTER TWO.

THE LENS OF CHIEFTAINCY INSTITUTIONS IN THE DOUBLE GOVERNANCE SYSTEM

2.1 Introduction

The paradoxes of the DGS have obstructed the safety of the environment, while contradictions in formal versus informal laws leading to both government and chiefs taking advantage of illegal mining in Ghana. However, the major exploitation of this exposure comes into the existence of chieftaincy role in ASM yet, left with many gaps in governance theories examining mining in a specific context of chieftaincy institutions.

2.1 Chieftaincy Institutions in the Double Governance System

In most cases in Africa, chieftaincy institutions are considered as antiquated institutions, but there are few instances where their significance are eroding (Tieleman and Uitermark, 2018). Despite this, these institutions have been one of the strongest among a few institutions which have persevered through all the three stages of pre-colonial, colonial and post-colonial political development in most developing countries. Chieftaincy have not only persisted through the three phases of political development but has also withstood all the three post-independence stages of political development: one party system, junta's regime, and multi-party system regardless of the efforts manifested by national leaders to ruin chieftaincy in Ghana (Owusu-Mensah, 2013).

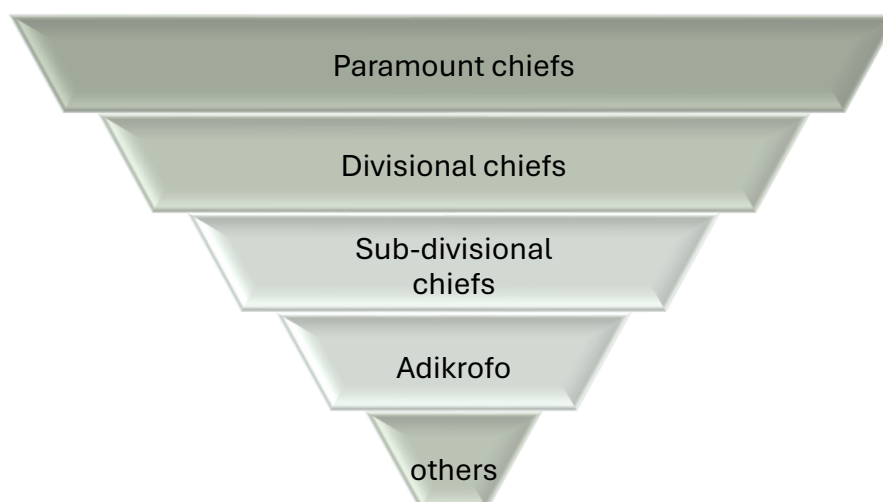
Chieftaincy institutions have suffered from the abuse of power as reflected in enactment of the State Property Act 1960, and the State Lands Act 1962 which empowered and bestowed lands in the president to acquire them dictatorially (Amanor, 2021; Kasanga and Kotey, 2001). But the 1970s envisioned significant improvements of strengthening chieftaincy institutions through the establishment of Regional House of Chiefs and the National House of Chiefs (Owusu-Mensah, 2013).

The DGS as observed in the 1990s and early 2000s till now has seen more grassroots governance, decentralized powers to chieftaincy institutions over land governance which was supported and implemented through the World Bank Sponsored Land Administration Project (LAP) in the year 2003 (Amanor, 2021; BiItir and Nara, 2016). This empowered chieftaincy institutions in most deprived villages to allot land and draw plans with authorization signed by them and lawfully accepted by the State (Amanor, 2021).

Several authors strongly have argued that formal rules collectively with chieftaincy institutions help to administer the State (Tieleman and Uitermark, 2018). Signifying that the institutions are lasting and embedded in institutional frameworks, evidenced from the constitution and the Chieftaincy Act (2008, Act 759), section 58 of the 1992 constitution of Ghana which categorize chieftaincy on a hierarchy; the Paramount Chief who is the highest rank in every traditional council and owes allegiance to no other authority. The limitation to this rank is by swearing of an oath during investiture on assumption of the throne, power of the Queen Mother, and the fear of ancestral wrath of causing calamities such as outbreak of dangerous diseases or death for their actions, omissions, and inactions as well as the existence of taboos. Next to this rank are Divisional and Sub-divisional chiefs who administer a traditional council with or on behalf of the Paramount Chief and owe allegiance to the uppermost rank. This is followed by “Adikrofo” who oversees the administration of villages or small towns (Adum-Kyeremeh, 2018). The last category is other chiefs as recognized by the National House of Chiefs.

Prior to enstoolment as a chief, the prospective is kept in a ‘traditional home’ for days to be taught of customs, traditions, norms, and values of the people to be governed until the mandate is given to him (Adanwomase Kente Cloth & Tourism, 2019). At a point throughout the traditions, the prospective is blindfolded and lead to a ‘secret room’ where all the stools (thrones) of predecessors are kept and made to select one. The prospective automatically inherits the name of the ancestor whose stool is chosen and afterward the incoming chief is expected to reign for life.

Figure2. The hierarchy of chiefs



Historically, chieftaincy institutions performed all administrative functions, judicial and resources management function in the pre-colonial and colonial context, and now it is indispensable for the formal government in the post-colonial era to administer beyond jurisdictions they do not reside in (Tieleman and Uitermark, 2018). As evidence why in most cases the State is unsuccessful to battle the ASM menace in Ghana as it flouts chieftaincy institutions to find governance solutions to this problem.

Constructing the authority of chiefs in modern states has incorporated the expansive of Eliasian framework on “society (1969) and The Civilizing Process (1978)” which highlight the state demands and creation of extensive administrations to join complicated division of labour (Tieleman and Uitermark, 2018). Indicating that the state acknowledged certain categories of people in attempt to accord them the authority to represent such groups (Tieleman and Uitermark, 2018).

In contemporary Ghana, chieftaincy institutions are permitted to carry out their own edicts and apply their discretions to tackle numerous social challenges as they consider appropriate (Tieleman and Uitermark, 2018). This is where the formal government seeks to control growing urbanization by depending on customary chieftaincy institutions (Tieleman and Uitermark, 2018). These institutions established by legislation, specifies the extent of jurisdiction, power and authority assigned to them to face such complex challenges in Ghana’s DGS. Even without proper functioning of these institutions, no one will undermine chieftaincy as it is embedded in formal and informal rules hence, in the lives of many.

They have regulated traditional societies and perform functions such as a link between government and the people, maintaining law and order, honoring deserving citizens, pouring libation to ancestors, performing ceremonial function (receiving important dignitaries into their communities), serving as custodians of the land, settlement of disputes, mobilization of their subjects for communal labour, custodians of cultural heritage and advisory role (Knierzinger, 2011) Further, their attributes are acknowledged by article 270 (1) of the 1992 constitution that, “all chieftaincy institutions are established by customary laws and usage” (The constitution of Ghana, 1992).

In Ghana, customary laws are exceptional from other universal laws, that is the extent of customary laws consists of “rights to succession, marriage rite, land ownership and spousal rights” (Owusu-Mensah, 2013). Article 11 (3) of the 1992 constitution of Ghana states that

customary laws are the “rules of laws which by customs are applicable to a particular community in Ghana” (The constitution of Ghana, 1992). These are made uncodified and accepted by societies as rightful rule (Ako-Adjei, 2011). Therefore, customary laws are worthy to the legal system and in most societies, people turn to respect them as compared to the legal laws. Adding value to the legal system, it also enhances development and land governance in most Ghanaian societies. However, the hybrid system of formal versus informal rules highlights some challenges, and the critique of this is that the integration of these laws has resulted in the problem of regulating power (Slater, 2014). That is, customary rules against state institutions have been subjected to vulnerability in corruption. Nevertheless, the role of chiefs as custodians survives, chiefs are still recognized by formal and informal rules, and that chiefs are the de facto titleholders of the land in the DGS, who allot land for developmental purposes (Crook, 2007).

In recent years many have debated that, questions of landownership are still in an indeterminate state and continue to find resolutions. But research according to Anaafo, (University of Energy and Mineral Resources), Biitir and Nara reveals that 80% of 238,537km² land of Ghana are under customary laws and regulated by chieftaincy institutions, while the remaining 20% being public land, are owned by the state (Anaafo, 2023; Biitir and Nara, 2016). Unlike some western countries where the land is owned by the state, in that wise the state has key responsibilities in protecting the environment, but in the case of Ghana it is otherwise where chiefs own the land. For the avoidance of doubt, the land in the Northern part of Ghana which were entrusted into the hands of the state earlier before coming into existence of the 1992 constitution are not considered to be public lands based on Article 267 (1) and (2) (The Constitution of Ghana, 1992).

Today, while the state remains confident of land administration in Ghana’s DGS, formal rules has enforced that all stool lands shall be vested in the appropriate stool under chieftaincy institutions (Jinapor, 2022). These unique attributes acknowledging the existence of chieftaincy institutions require to examine through the lenses of governance theory to find if indeed, the existence of chieftaincy institutions portray the relevance of the theory.

2.3 Governance lenses

Social norms are just not recognized as an aspect of global governance but as aspect of governance providing a shadow of hierarchy often when state institutions are not strong enough to govern for societal common good. These are informal rules known as “*oughtness*”: thus,

norms which societies are morally bound or committed to. Generally, they are not specified in any constitution but adhered to by societies as their way of living (Opp, 2001). Even though, they may not be in accordance with the global governance system but are a set of traditions, customs, and taboos which keep in order societies (Borzel and Risse, 2010).

In most instances, formal government little care about environmental challenges, traditional societies become concern about devastation of the environment. Thus, the demand for minerals in most developing states such as Latin American and Africa has exhibited how traditional societies request and act to question individuals in power who increasingly engage in these practices (Borzel and Risse, 2010, p. 125).

Constructing governance involves a power relation between formal institutions and non-state institutions on how each interact with other and affect decision-making (Asadazzaman and Virtanen, 2016). Examining literatures on governance theories reveals that the global governance has been understood from two viewpoints: the Global agencies and the European scholars. These two aspects of the theory have a certain characteristic of conceptual framework depending on their own perspectives (Asadazzaman and Virtanen, 2016). The definition of the theory given by the World Bank depends on how power is exerted to control the affairs and resources of a country towards development. In this perspective, the world Bank realizes aspects of administrative governance and reduce public sector control in governance. While the European scholars defined the theory as a public sphere for both private and public sector collaboration where traditions such as societies and local communities are consolidated in governance system (Asadazzaman and Virtanen, 2016), reinforcing “sustaining co-ordination and coherence” given by Gómez.

Other scholars reveal that it is far relevant to reflect the context of which the theory is applied instead of giving descriptions to it. Colebach further elaborated this perspective on Offe’s variation of applying the concept to make contrast between one way of governance from the other “Gegenbegriff” or joining all forms of governance “Oberbegriff” (Colebach, 2009). Colebach highlighted on Rhodes discourse that during the 1990s, the UK shifted from government towards governance where state-actors and non-state actors were brought together for collective good (Colebach, 2009). Though, Colebach understood that it was rare to have empirical evidence, however, it is without doubt that non-state actors play an important role in the new public administration and global politics. That is, years ago, government existed with

a supreme power but today, the manipulation of such power is exercised through a cooperation between state and non-state actors (Colebach, 2009).

Redefinitions of the theory in the new public administration have incorporated a governance structure and a process made up of the state institutions and non-state institutions giving meaning to governance from the traditional administrative systems to a new public governance (Fioretos and Tallberg, 2020). This new contestation of the theory in global politics reveals that the traditional administration of state control became something of the past during the 1990s, which paved a way for the new era of non-state actors to publicly involved in the global politics and governance (Fioretos and Tallberg, 2020). Reflecting on the DGS, decision making in local administration or decentralization involves chieftaincy institutions in steering the affairs of the state.

Hence, some scholars have described how the state witnessed a gradual transition involving non-state actors in the formulation, implementation and evaluation of policies which point out critical challenges of the theory. Signalizing that there is an exaggeration of the theory though, it has encouraged the new thinking of governance beyond the state (Ansell and Torfing, 2022). The critiques consider the challenges in managing global affairs. One unique characteristic of the governance theory is how it is perceived as the process incorporating different level of non-state actors. Public Goods Economics has criticized this as a problem of distributed process by pointing on the pervasiveness of “collective action problem”, where some actors may wish to be a free ride on others which makes governance solutions more suboptimal (Ansell and Torfing, 2022).

Another critique is the notion of decentralization powers and authority to the grassroots, raising the question of how these actors could cooperate and co-produce governance solutions (Ansell and Torfing, 2022). Emerging the thinking of coherent governance interactions that emphasis on effective collaboration of interdependent actors, especially how stakeholders with different interest will co-ordinate to effectively find collective objectives (Ansell and Torfing, 2022). As evidence that, governance is not in harmony with formal regulations and informal rules in some part of the world, particularly in third world countries where actions taken by states and bureaucratic rules foresees other local actors regardless of the growing numbers of non-state actors in contemporary era. These make the application difficult in Ghana’s DGS where both formal rules and chieftaincy manipulate superiority to their advantage. Regardless of this, the idea of governance is evolving in the global mainstream of evolution where

international actors perceive it in a different way, encompassing political, administrative, social, and economic governance (Bevir, 2013; Hyden and Samuel, 2011). Yet, with the complex challenges, there have been suitability of application in social, public management and politics of decision making (Hyden and Samuel, 2011).

Chieftaincy institutions in Ghana's DGS portray the features of new thinking of governance, and that chieftaincy is not only established by social norms but by formal and informal rules as observed in the global governance. Chieftaincy sustains this co-ordination using norms, customs, traditions and taboos deemed to be appropriate in regulating human actions. Regarding such co-ordination and coherence, I argue that it is under the doorsteps of customary chieftaincy institutions to fight against ASM and protect the land and water bodies from pollution. Together with formal rules, customary institutions exhibit the relevance of the governance theory where chiefs are enhancing local governance and traditional statehood, depending on various social systems on the context of "reasonable choice logic of outcome, the logic of suitability or the collective two" (Borzel and Risse, 2010, p. 127). The logics broaden our scope on understanding the regulating factors of ASM and how chieftaincy perceives human actions towards conservation and income. Hence, the next concepts reveal the Logic of Consequences, Logic of Enforcement, Logic of Deterrent and the Logic of Appropriateness to analyse the regulating factors.

2. 4. Logic of Consequences , Logic of Appropriateness and Logic of Enforcement

Actions of humans are perceived in circumstances guided by subjective measurement of outcomes characterized by regulations relevant to the problem and follow by a Logic of Consequences (LoC). According to Schulz, the concept is described as a logic of rational inactions of actors or individuals based on their preferences made between alternatives analysis of what ought to be the consequences for individuals or collective goals (Schulz, 2014). Referring this to "analysis-based actions" where there is " a deliberate consideration of alternatives, outcomes and preference-driven choices", and exist a correlation between the consequences and actors' investment (Schulz, 2014). But in this, self-interested individuals with the LoC potentially can pay their quota to governance when they have the right incentives or binding them into institutions (Borzel and Risse, 2010, p.120)

Also, as proposed in these logics an account of Logic of Enforcement (LoE) and explaining its rationale, governance involves enforcement of rules in regulating human conduct for different purposes and objectives. There is an intersection of these logics, enforcement in a

way that making the laws work today (Logic of Enforcement), prevent individuals from abusing them in the future (Logic of Deterrent). Therefore, this relevant to deter individuals who violate laws, rules, norms and regulate human actions to determine their outcomes (Polinsky and Shavell, 2017).

As Thomas Hobbes argued in the Leviathan, the aim of a man is not limited to be satisfied at once, but his desire for the future perpetuates and results in continual fear. This philosophical statement argued has not only seen man as against a fellow man, but men against nature and the environment today. According to Hobbes, if human live without a government to enforce laws, life would be “solitary, poor nasty, brutish, and short” (Thomas Hobbes, 1914, p. xix). But today, government has moved towards governance and imagining how life would be without governance, especially in Ghana’s DGS regulating formal and informal rules. Hence, the logic is necessary to target individuals who inflict harm on the safety of others or the environment. Also, applies to state actors as when corruption is common among the public (Cooter and Gilbert, 2022). The LoE always has a concept of Logic of Deterrent (LoD) which involves one actor taking actions on the other, using threats to determine the consequence of their actions.

Table 1. The Logics

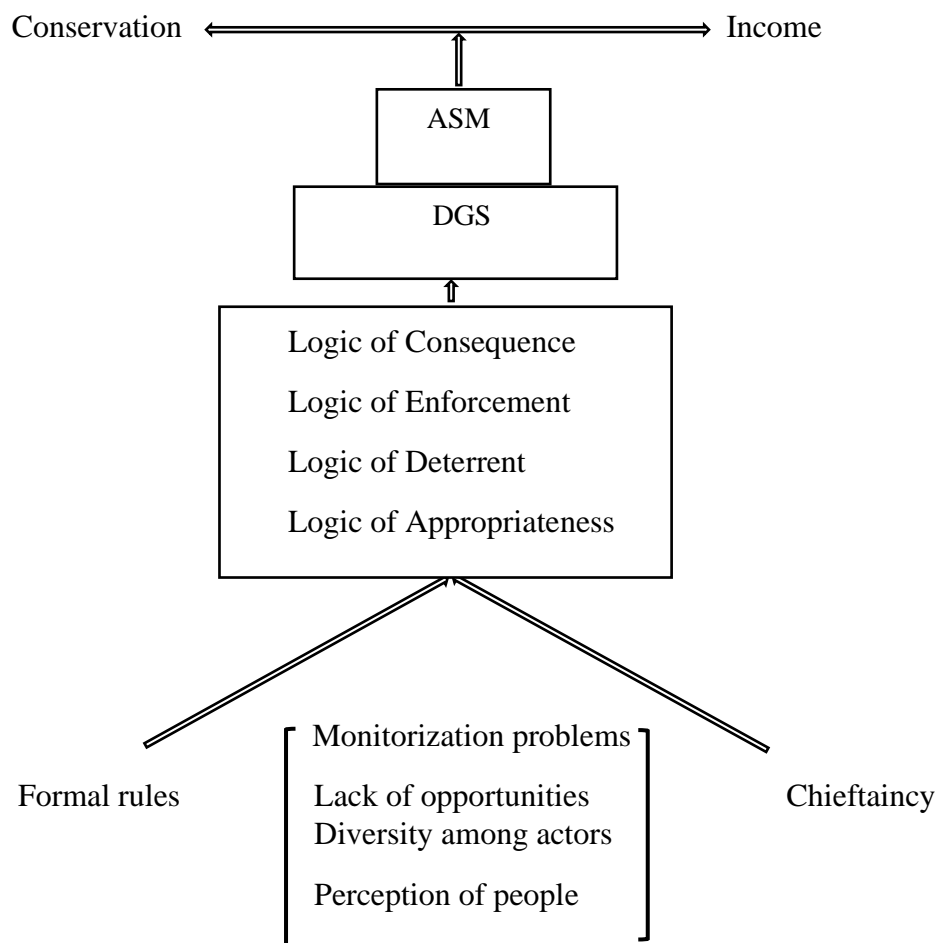
| <i>LOGICS</i> | <i>DESCRIPTION</i> |
|--------------------------|---|
| LOGIC OF CONSEQUENCES | Determining the worth of actions by their consequences. |
| LOGIC OF ENFORCEMENT | Restricting actions against their consequences |
| LOGIC OF DETERRENT | Employing threat to determine the consequences |
| LOGIC OF APPROPRIATENESS | Culturally, what is legitimate and acceptable considering the demands of the society. |

The Logic of Appropriateness (LoA) are regulated laws distinguished as natural, legitimate, or rightful, considered as “rule-based actions” (Schulz, 2014). These are rules of informal norms or accepted beliefs of habits, customs that transcend from ancestors and made fixed to determine a situation. A study by Borzel and Risse shows that the state might exchange for its absence a shadow of hierarchy in areas of “limited statehood” so that social norms may

follow a LoA, giving the relevance of non-state actors in governance (Borzel and Risse, 2010, p.114). Thus, actions are followed by these four logics and without, individual actions are seen to be unreasonable.

The four logics reveal that actors' actions are so complex as the global environment is in transitions due to resources management, the rationale behind mining, land degradation, water pollution and formal rules versus informal customary chieftaincy institutions that regulate resources. The contradictions and complexity of resources management is still not certain in Ghana's DGS of which governance policies suit best for a sustainable mining and how the state and chieftaincy act together for the common good.

Figure3. Analytical Framework



Source: Author's own elaboration

Analyzing figure 3 shows that in Ghana's DGS, regulations of ASM generate a trade-off between conservation and income, people livelihood depends on ASM as they generate income

for survival. Precisely, at the same time, ASM calls for the need to conserve the environment against land degradation and water pollution as most livelihoods depend on the land and water bodies. This trade-off ASM generates, is what I view from three perspectives: 1. Sacrificing conservation for income, 2. income for conservation, 3. blend of the two to keep a trade-off balance between conservation and income. This ASM is exactly regulated by Ghana's DGS, the hybrid of customary practices to protect the land against destruction versus regulations of formal rules in the extraction of Gold. The regulations of ASM by the DGS therefore contain the four logics namely: The LoC, LoE, LoD, and LoA to determine actors' actions in ASM regulations. Whereas these indicators, monitorization, opportunities, diversity and perception of the people are trade-offs to the logics in regulating ASM by Ghana's DGS.

Now, as more these challenges exist, the lesser environmental protection and vice versa. Increasing ASM means more consequences and less monitorization, lack of opportunities perhaps means increase in devastation and decrease in unemployment. Also, based on the perception of these actors further creates diversity among them which hamper the LoE and LoA in determining the situation.

Whereas the shadow of hierarchy that provides governance in Ghana's DGS turns to be what people execute preventing authorities to get them obliged. But there is a LoA which culturally people abide on what is right as social norms. Therefore, I argue in this analytical framework that, the trade-off needs to be kept in balance to ensure that the environment is protected against income generation.

CHAPTER THREE.

GHANA: THE LAND OF GOLD AND POLLUTION

3.1 Introduction

Former British protectorate Ghana, earlier known as the Gold Coast, was the earliest country to gain independence in 1957 from colonial rule in Sub-Saharan Africa (BBC, 2023; Takyi et al, 2021). Ghana's former name was known for its abundance of gold at the coasts and the supply of gold which existed amply before and during colonial rule. The Gold Coast was known for this until it was changed to Ghana, meaning a "warrior king", traced back from the medieval Ghana empire in the northwest contemporary day-state of Sudan-Mali which collapsed around the 13th century (BBC, 2023).

Modern Ghana's landscape is still endowed and blessed with mineral resources extending from diamond, bauxite, manganese and among them all, gold is the most common mined minerals. After independence, Ghana has significantly derived its benefits of gold which hold more than half of the country's exports and half of its Foreign Direct Investment (FDI), accounting for about 95% of the mineral extraction from the earth (Attiogbe and Nkansah, 2017). Regardless of these contributions to Ghana's development, gold mining has caused the destruction of the land and continue to pollute water bodies across the country (Yeboah, 2023).

3.2 Regional description of resources in Ghana

Administratively, Ghana is demarcated into sixteen regions and grouped into three main belts depending on the characteristics of its landscape. These belts consist of the 'Costal Belt' which comprises of the Western region, Greater Accra, Central region, Volta region and Oti which was initially part of Volta. The second belt is known as the 'Forest Belts' comprising of regions in the southern part of Ghana which are, Bono region, Bono East, Ahafo region, Western north, Ashanti and Eastern region. The third classification is the 'Savanna Belt' consisting of the Northern region, Upper East, Upper West, Northeast, and Savanna regions (Bathuure et al, 2020). Remarkably, most mineral reserves are discovered in southern Ghana with sizable amount of gold in the Forest Belt (Bathuure et al, 2020). While most of the minerals are found in southern Ghana, illegal mining predominantly exists in these regions particularly Ashanti and Ahafo region. Also, illegal mining is discovered in the Western region and Central region of Ghana while the Eastern region is mainly known for its diamond mines (Bathuure et al, 2020).

Table 2. Distribution of common minerals in Ghana

| <i>Region</i> | <i>Capital</i> | <i>Land area (Km²)</i> | <i>Common mineral resources</i> |
|----------------------|-------------------------|-----------------------------------|---|
| <i>Savanna</i> | <i>Damongo</i> | <i>35,862</i> | <i>Gold</i> |
| <i>Northern</i> | <i>Tamale</i> | <i>25,448</i> | <i>Gold</i> |
| <i>Northeast</i> | <i>Nalrigu</i> | <i>9,072</i> | <i>Limestone</i> |
| <i>Upper West</i> | <i>Wa</i> | <i>18,476</i> | <i>Gold, granite, graphite</i> |
| <i>Upper East</i> | <i>Bolgatanga</i> | <i>8,842</i> | <i>Gold, Manganese</i> |
| <i>Bono</i> | <i>Sunyani</i> | <i>39,557</i> | <i>Gold, Quartz, sand</i> |
| <i>Bono East</i> | <i>Techiman</i> | <i>22,952</i> | <i>Gold, sand</i> |
| <i>Ahafo</i> | <i>Goaso</i> | <i>5,193</i> | <i>Gold, Quartz, sand</i> |
| <i>Western</i> | <i>Sekondi-Takoradi</i> | <i>13,842</i> | <i>Gold, Diamond, Manganese, limestone, oil, gas, Bauxite</i> |
| <i>Western North</i> | <i>Sefwi-Wiaso</i> | <i>2,341</i> | <i>Gold, Bauxite</i> |
| <i>Central</i> | <i>Cape Coast</i> | <i>9,826</i> | <i>Gold, Bauxite, Manganese, Diamond, limestone, iron</i> |
| <i>Greater Accra</i> | <i>Accra</i> | <i>3,245</i> | <i>Gold, Manganese, limestone, Bauxite, iron</i> |
| <i>Eastern</i> | <i>Koforidau</i> | <i>19,323</i> | <i>Gold, Diamond, Bauxite, Manganese</i> |
| <i>Volta</i> | <i>Ho</i> | <i>9,504</i> | <i>Gold, Iron, Copper</i> |
| <i>Oti</i> | <i>Dambai</i> | <i>8,502</i> | <i>Gold, Iron, Diamond</i> |
| <i>Ashanti</i> | <i>Kumasi</i> | | <i>Gold, Diamond, Bauxite, Mnaganese, Silica, Limestone, sand, clay, stone deposits</i> |

Sources: (Ndetei,2023: Author's own elaboration)

3.3 Mining in Ghana

The 21st century has not underpinned illegal mining in Ghana; however, it has dated back from centuries during the Portuguese, Dutch and British trade with most west African societies. That is ASM existed during the 15th centuries when mercury was maidenly used in extracting gold (Crawford and Botchwey, 2016). During and after the colonial period, struggling for colonial freedom to modern-day, mitigating ASM has not been the sole objective, but has involved the combination of maintaining gold from over thousand years in the Gold Coast to present day. During this period there were no major signs of impact on the environment as we witness toady, a lot of machines invested in ASM.

Until 1989, ASM was absolutely regarded illegal, and people were jailed and punished for involving in extinction of the environment (Crawford and Botchwey, 2016). According to Crawford's distinction between "what legal and illegal mining is", ASM was deemed to be illegal but was extensively drilled among settlements in southern Ghana until it was proscribed by the Provincial National Defense Council (PNDC) institution of Small-Scale Mining Law (PNDC Law 218), underlining the operations of ASM which issues and process license for extraction of gold (Crawford and Botchwey, 2016). The interpretation of the government was that henceforth, anyone could mine the land however, minerals acquired from the land belonged to the state and whoever possesses these minerals go contrary to the law and serve a breach (Appiah, 1998). This clearly specifying the state superiority over mineral resources.

Table 3. Definitions of small-scale mining

| Organization | Definition | Livelihood |
|---|---|---|
| <i>OECD</i> | <i>Person's mining gold with the use of manpower energy and without enough capital (OECD, n.d).</i> | - |
| <i>SGU Geological Survey Of Sweden</i> | <i>Non-formal activities with a least defense, protection of the environment and health concerns (SGU, n.d).</i> | <i>150 million people involved in the global south.</i> |
| <i>INTERGOVERNMENTAL FORUM (IGF) on mineral, metals & Sustainable Development</i> | <i>Extraction by people who earn subsistence livelihood either formally or informally (IGF,2017).</i> | <i>About 40 million people depend on it for their livelihood while 150 million are engaged globally</i> |
| <i>The European Commission</i> | <i>ASM involves both mining legally and illegally of mineral resources depending on the process (Carstens, 2017).</i> | <i>150-170 million people involved globally.</i> |
| <i>Pact</i> | <i>Widely informal extraction that involves local tools to mine gold and other minerals (Pact, n.d).</i> | <i>About 45 million people depend on it for their livelihood.</i> |
| <i>African Minerals Development Center (AMDC)</i> | <i>Activities involving low standards of measures from extraction, processing, and marketing minerals with basic tools and a least capital (AMDC, n.d).</i> | <i>More than 9 million involved in Africa</i> |

Source: Author's own elaboration

Many would have argued that the government's attempt was to surge destruction by legalizing ASM in the pursuit of gold, however, the objective was to prevent smuggling of gold throughout the country. Prior to PNDC Law 218, it was anticipated that about 200,000g of gold were illegally mined and smuggled out of the country every year (Appiah, 1998). Therefore, the PNDC realized that, once they cannot mitigate illegal mining found it necessary to legalize their operations to constrain the associated problems of smuggling (Appiah, 1998: (Banchirigah, 2008). Though, certain measures were put in place after the legalization through enforcement, however, the formal government could not curb illegal mining due to the logics behind ASM (Yeboah, 2023). Now, the PNDC Law 218 which underpins ASM in Ghana is incorporated into the Minerals and Mining Act 2006, (Act 703) and subsequently amended in the Minerals and Mining Amendment Act 2015 and 2019 (Act 995).

In Ghana, before obtaining a mining license, the prospective license holder first acquires land property right in accordance with customary law and usage, where all traditional rights are performed prior to the land is leased for the said purpose (Appiah, 1998). After acquiring the land, the prospective license holder now applies for a license from the Lands Commission to search for minerals and such activities also requires permission from the Ghana Water Company to use rivers and streams for mining in accordance with the Minerals and Mining Act 2006 (Act,703).

Despite the efforts to protect the environment, the Minerals and Mining Act is still challenged in recent years. Section 34 (1) offers a license to anyone who applies for permit for ASM operations for a period not exceeding three years. The license holder is directed to decrease the area of license upon renewal, practically giving a limited year of one or two for the said operations (Kimathi et., 2022). With this, many miners maneuver and manipulate their licenses to operate by frequently demanding extensions instead of applying for a renewal (Kimathi et., 2022).

Therefore, the idea which was to achieve a significant milestone in transition of the country's gold mining sector has only achieved a little success, and today more than 85% of ASM still operate without license(s) due to the challenges of regulating ASM (Kumah, 2021). Successive governments have tried to curb illegal mining in this modernized and revised mining code, but the efforts remain the same since the government was unsuccessful with proper legalization framework (Kumah, 2021). In 2006, the government embarked on a

nationwide enforcement known as “Operation Fight Against Illegal Mining” but due to the government failure to regulate ASM, many illegal miners returned to the sites (Yeboah, 2023).

Sometimes, some efforts give unforgettable memories especially when the LoE is unduly applied in ASM. In 2017 the president Nana Addo Dankwa Akufo-Addo put his presidency on the line to fight illegal mining through “Operation Vanguard”, this led to unfortunate incidents beyond the measure of enforcement (Appiah, 1998; Yeboah 2023). This is why I argue that the government’s poor understanding of the role and relevance of the custodians in Ghana’s DGS always lead to poor measures taken to combat illegal mining.

3.4 Pollution

Ghana has more than 4.5 million miners, consisting of more than 1 million Ghanaians directly involved in gold production while the rest consist of the downstream and upstream employment by mining companies (Kumah,2022). According to Wadei and Appiah, humanity has gone beyond its ecological limit and overshoot the land’s strength by more than 40% through ASM which devastatingly affect the environment and water bodies (Wadei and Appiah, 2018). At the time of Ghana’s independence, population was tightly 6 million people, but today the country has more than 30 million population according to the Population and Housing Census of Ghana 2021. This population struggling for same land size, limited resources and cumulating the demand for survival, especially with the recent unemployment rate in Ghana.

While the global south is feeling the heat of ASM, Latin American states are not left out, struggling with environmental challenges, pollutions and governance challenges from ASM. Just like Ghana, Venezuela has become the uppermost increasing desertification country among all the states around the Amazon basin due to illegal mining (Randon, 2020). Venezuela has lost around 140,000 hectares of forest reserves destroyed by illegal mining between the phases of 2016 and 2020 (Random, 2020). These operations are found around the states of Amazonas and Bolivia which is governed by armament groups and illegal miners such as the “Sindicatos” traditionally controlling illegal mining in Venezuela (Randon, 2020: Unit, 2023).

Hilson and McQuilken expanded this in (Rosales,2019) that by the execution of the Structural Adjustment Programme (SAP), African leaders designed a legal framework for Large-Scale Mining while at the very precise time encouraging ASM through favorable policies, which led to the programming of inadequate institutional frameworks to favour their bias in future towards ASM. This is evidence from Ghana, 1989 when the PNDC government legalized the operations of ASM through the attractive PNDC Law 218.

Despite the legislation, ASM continues to exploit the forest reserves and extremely instigating damage to the environment, land and water bodies. Today, water bodies across the country including River Pra, Ankobra, Tano, Black Volta, Birim, Oda and Offin have all exhibited increased toxic Led mineral, chromium, arsenic, cadmium, yellowish and brownish water bodies very harmful for domestic and farming activities. The past 5 decades after independence were led by major gold extraction on land, but in recent years illegal mining has been indicated nearby the edges of rivers and streams. This had and is still contaminating water bodies with hazardous substances that go straight into the earth and surface water, affecting the environment and making it harmful for human consumption (Duncan, 2020).

The Ghana Water Company has informed that the extreme level of illegal mining has led to the deteriorating nature of water bodies compelling them to reject about 50% of water purification companies, as suppliers do not fall within the national standards. They further communicated that if this continued to persist, there will be a higher increase in taxes for water supply which will detrimentally impact the ordinary consumer (Diplomat, 2022).

Figure 4. Description of ASM Pollution



Galamsay in River Tano

Source: Picture by Nicholas Kelvin Agboni: Edem Srem.

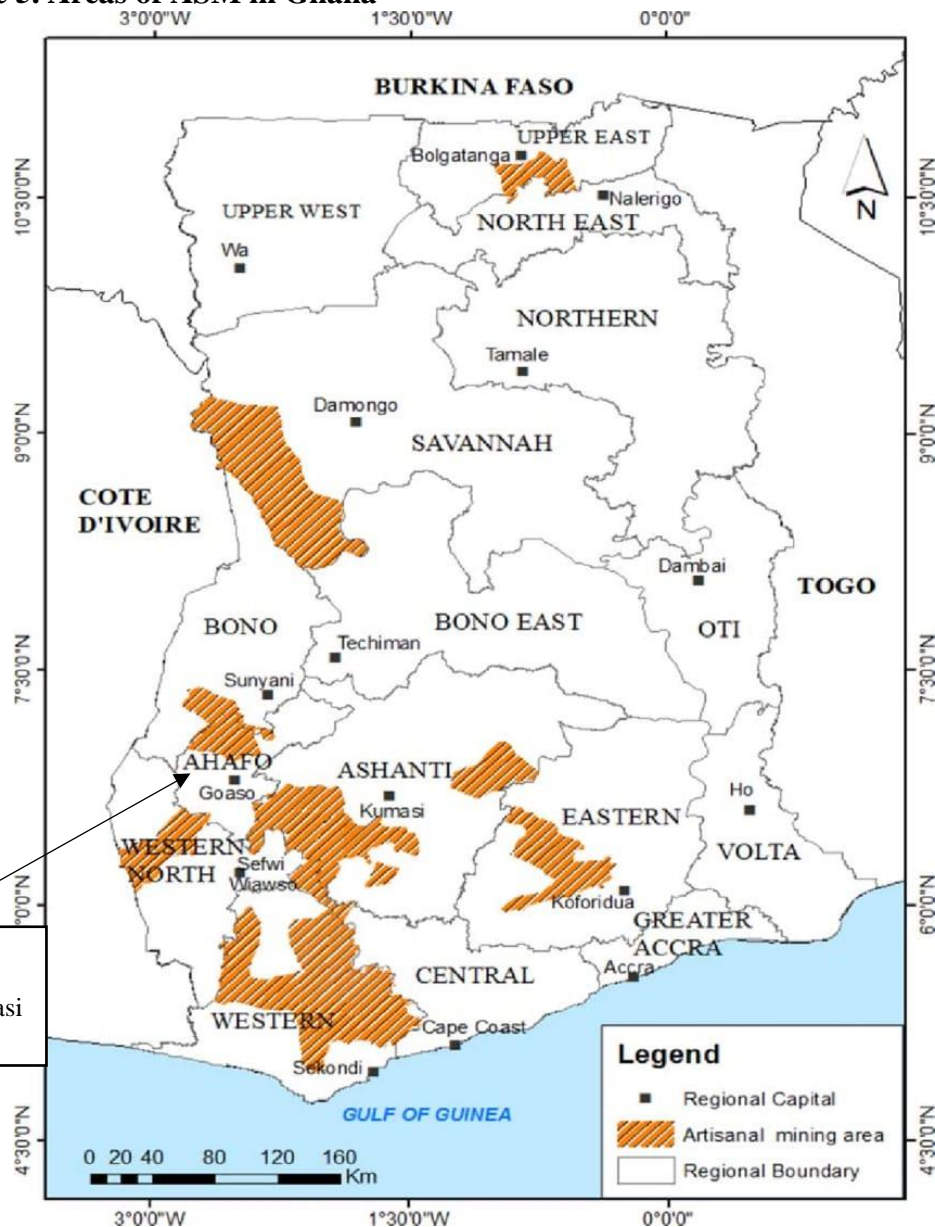
3.5 Water Resource in the Double Governance System

In the DGS, water bodies are governed by formal rules and customary institutions of chieftaincy through the application of customary rules in various communities. These resources are made up of streams, rivers, lakes and the sea which most local people depend on as their livelihood. In protecting water bodies, traditionally, they serve as gods or deities where people worship and shelter them for protection (Eduful, 2023).

However, the introduction of formal institutions and water development plans existing alongside customary institutions have significantly shaped how water resources were managed by chieftaincy institutions in the historic days (Eduful, 2023). There are new establishment of water resource departments by the state to protect water bodies beside customary rules. Thus, the state is making a slow dynamic transition from customary water governance system to statutory governance due to demand of increasing population (Adjakloe, 2021). One of the measures adopted was the establishment of the Integrated Water Resources Management (IWRM) which meant that traditional water governance suffers the loss of its importance (Adjakloe, 2021).

Yet, there is a vast difference between statutory governance and customary governance, chieftaincy still maintains the land with water bodies giving a kind of identity to societies by setting taboos appropriately to regulate them (Adjakloe, 2021). But this may differ in the cities where statutory laws are recognized from customary laws. According to Jimenez et al, water governance has a causal mechanism between a process and the end results which occur through institutions involving traditions (Jemenez et al, 2020). Though, in Ghana the state remains optimistic of a successful transition to statutory water governance, it is also well noted that local communities practically depend on customary water governance system. This is why customary rules cannot be isolated from formal rules as Ghanaians continue to give reverence to them.

Figure 5. Areas of ASM in Ghana



Sources: (Takyi et al, 2021: author's own elaboration)

3.6 Legal Framework

In 2022, the Government of Ghana authorized a Legislative Instrument; Environmental Protection (Mining Forest Reserves) L.I 2462 to detail the legal framework and procedures of mining gold in Ghana's forest reserves. Since the initiative was implemented, L.I 2462 has granted entry to forest reserves, mining gold from the earth and water bodies across the country and highlighting a dangerous threat to Ghana's environment. Without this law, illegal mining was still a general threat to the environment, but such mining governance has further induced environmental destruction. Evidence from the fact that, most alarming problems associated with L.I 2462 is by granting access to "ecological sensitive areas" by ASM (Adam, 2024).

These are areas important for water regulations and biodiversity and such legislation paving a way for unregulated mining risks Ghana's most important natural environment.

The conception is that, passing such law, increasing devastation may still not have effectively functioned if chiefs saw the need to embrace themselves with the role as custodians of the land. It is apparent that, now community forest reserves are under threat since the enactment and the ecological system supporting livelihoods has been adversely affected. According to Akapame of the Taylor Crabbe Initiative, L.I 2462 Environmental Protection undermines the protection of the environment with regulations that lack the purpose of enactment per the 1994 Environmental Protection Agency Act, forbid the government to regulate laws to mine Ghana's forest reserves (Akapame,2023). In the 1994 Environmental Protection Agency Act (Act 490), the Minister in-charge of the environment perhaps may only act on the advice of the Environmental Protection Agency (EPA) to permit such law that allows mining in the country's forest reserves.

Without prejudice, such laws passed must be in accordance with the protection and development of the environment (Environmental Protection Agency Act 490, 1994). In a collective responsibility, Article 257 of the 1992 constitution of Ghana entrust all mineral resources from the earth, streams, and water bodies into the hands of the State while Article 267 entrusts stool lands into the hands of chiefs, and that means gold is mined with legislative instruments and customary laws (The Constitution of Ghana, 1992).

Therefore, it is undoubtedly true to see the land and water bodies in devastation, species are dying, water bodies are destroyed, and Ghana may possibly import potable water by 2030 if no drastic action is taken (Aikins,2024). This has proven that ASM is without doubt the major impact on Ghana's environment through human quest for minerals and income.

3.7 Summary

Ghana still maintains its recognition as the 'land endowed with gold' and several mineral resources yet, associated with pollution of the environment and water bodies. The former Gold Coast has now become a 'Pollution Coast' while the current Ghana, a Warrior King has become a 'Pacifist' in relation to fighting galamsey. Now, ASM is everywhere and according to research by Takyi et al, ASM is universally found in almost the 16 regions, but predominantly in 9 regions of Ghana: "Ashanti, Ahafo, Bono, Savannah, Upper East, Western North, Western, Central and Eastern region" (Takyi et al,2021)

CHAPTER FOUR: RESEARCH METHODOLOGY

4.1 Introduction

The research employs a qualitative design to explore how culturally ASM is profoundly affected in chieftaincy, norms, customs and individual actions. This is to explore in depth, on how the environment is protected by the authority of customary institutions of chieftaincy due to their legitimacy in Ghana's DGS. According to Tenny et al, qualitative research eases the researcher to explore and acquire in-depth understanding of real-world problems (Tenny et al, 2022). Employing qualitative research design gives the opportunity to question "why, what, how" and explore more new areas of development, especially on chieftaincy and ASM.

Chieftaincy institutions and ASM rely on the knowledge of chiefs, the Local Government, EPA, and illegal miners which help to explore how chieftaincy can mitigate illegal mining through customary tools. The objective to use qualitative design is to explore and understand chiefs, ASM and environmental sustainability in Ghana's DGS by distinguishing chieftaincy role as custodians of the land. ASM is classified into legal and illegal mining; those operating with a license and those without a license, but for this research ASM and illegal mining are used interchangeably, locally called "galamsey" literally means gather and sell.

4.1.1 Research Design

The research used both primary and secondary data where secondary data were obtained from journals papers, working papers, books, videos from Facebook and YouTube, articles and several group discussions to triangulate and validate different sources backing up the primary data. Further, primary data were taken from interviews with informants to understand the beliefs and attitudes of chiefs in Ghana's DGS. In-depth interviews were conducted on a purposive and randomly sampling of selected chiefs from Kanyasi Traditional Council, the Local Government, EPA, and further identified key informants from illegal miners. This implies an exploratory and explanatory designs employed to explore unfamiliar ideas and knowledge on the current debate and the relevance of chieftaincy in Ghana's DGS.

4.1.2 Study area

Initially, the research was to be conducted in Ntotroso, Ahafo region, Ghana but due an unforeseen circumstance the study area was switched to Kanyasi. Changing the study area to Kanyasi was a relevant match to ensure the validity and feasibility of the research. Also, Kanyasi is in the same district with Ntotroso in the Ahafo region of Ghana, which share a common geographical area, traditions and language. These two towns are the major gold

mining areas in the Assutifi North District with a common landscape, mineral resources, land and water bodies affected by ASM. The modification of the study area then had no effects on the draft of the research such as the methodology, objectives, and research questions which was much relevant keeping in line the consistency, validity, and integrity of the research.

The Ahafo region is the 3rd highest gold mines in Ghana after Tarkwa, and Akyem mines. Kenyasi as a subset of the region and the district capital of Assutifi North, consist of two major towns: Kenyasi No.1 and Kenyasi No.2. These are typical gold mining areas, and a typical reflection of Ghana's DGS where formal rules work alongside traditional customary chieftaincy institutions. The district is located on a gold plate which produces about 350,000 ounces of gold yearly, and for its abundance of gold minerals has made the district recognized for gold mineral deposits in 2021 as the best unmined gold deposit in West Africa consisting of about 3.8 million ounces of reserves (Newmont Ghana, 2018). However, due to operations of ASM and subsequently exploitation of gold in 2007 by Newmont Ghana further exposed the district to ASM.

4.1.3 Research Population and Data collection.

The targeted population for data collection includes seven (7) chiefs from Kanyasi traditional council interviewed to understand how they perceived environmental sustainability in the district and the customary tools available to halt illegal mining. Five of the chiefs were chosen based on their knowledge and interest in environmental protection, as some also work with legal mining companies, further helps to explore the depth of their knowledge in chieftaincy and ASM. Others were also randomly selected to understand their thoughts about environmental sustainability.

Adding up to the interviews included four (4) officers from EPA and the Local Government to gain understanding on how environmental protection laws are regulated and executed. Four (4) key informants from ASM to understand the regulating factors of illegal mining in Ghana's DGS. These further include interviews with five (5) assembly members as they are the representatives of the local people owning the land, under the trusteeship of chiefs. The assembly members were selected as they participate in various assembly meetings together with the chiefs, and the Local Government to deliberate on the grievances of the people. All total, the data collection targeted twenty-one (21) respondents, but later added one youth representative when the data found that most of the youths are involved in ASM.

Due to my unavailability on the field, a research assistant was employed who played a key role in searching for these participants, visiting the palace, traditional authorities, paying homage to the chiefs on my behalf, and preparing participants for online interviews. Nonetheless, to ensure confidentiality of data collection, interviews were organized online directly with participants at their comfort zone without the influence of the research assistant.

Table 4. Characteristics of Kenyasi Traditional Council

| <i>Title of chief</i> | <i>Description</i> |
|-----------------------|--|
| <i>Omanhene</i> | Paramount Chief |
| <i>Ankobeahene</i> | Caretaker of the palace, Does not involve in wars |
| <i>Obaatan</i> | Omanhene's councilor |
| <i>Tofuhene</i> | 'warrior' and adviser to Omanhene |
| <i>Adontehene</i> | Military flank who leads wars |
| <i>Kyidomhene</i> | Organize soldiers left behind to send them to war |
| <i>Nifahene</i> | Leader of the right flank |
| <i>Benkumhene</i> | Leader of the left flank |
| <i>Akyampimhene</i> | A distributor |
| <i>Mankradohene</i> | Perform purification, keeps salt to make things taste good for the chief |
| <i>Gyasehene</i> | Keeps the well-being of Omanhene |
| <i>Nsumankwahene</i> | Watches the oracle |
| <i>Nkosuohene</i> | Responsible for development |
| <i>Nkwakwahene</i> | Leader of the youth |
| <i>Sanaahene</i> | Financier |

At the end of the interviews, I had 18 out of the total number, this was due to other participants not responding to interviews based on their busy schedules. Also, one of the chiefs declined the interview without giving any specific reason. The 18 interviewees included 6 chiefs, 2 key informants from illegal miners, 1 legal underground miner, 5 assembly members, 3 officers from EPA/ Local Government and 1 district youth representative.

Table 5. Data collection

| <i>Offices</i> | <i>Data collection</i> | <i>Data analysis</i> | <i>Number</i> | <i>Guided Questions</i> |
|---|---------------------------|--------------------------|---------------|-------------------------|
| <i>Assutifi North Traditional Council</i> | <i>In-depth interview</i> | <i>Thematic analysis</i> | <i>7</i> | <i>1,2 &3</i> |
| <i>EPA</i> | <i>//</i> | <i>//</i> | <i>2</i> | <i>1 & 2</i> |
| <i>Assutifi North Local Government</i> | <i>//</i> | <i>//</i> | <i>2</i> | <i>1, & 2</i> |
| <i>Miners</i> | <i>//</i> | <i>//</i> | <i>4</i> | <i>1 &2</i> |
| <i>Presiding member</i> | <i>//</i> | <i>//</i> | <i>1</i> | <i>1, 2 & 3</i> |
| <i>Assembly members</i> | <i>//</i> | <i>//</i> | <i>4</i> | <i>1 & 2</i> |
| <i>Youth leader</i> | <i>//</i> | <i>//</i> | <i>1</i> | <i>2</i> |
| <i>Total</i> | | <i>//</i> | <i>21</i> | |

Sources: Author's own elaboration

4.1.4 Data Analysis

The research applies thematic analysis to recognize themes appropriate to the research questions from the interviews conducted. According to Attride, thematic analysis helps to determine and ascertain the outstanding themes in the data at different levels and angles (Attride-Sterling, 2001). Significantly, it enhances the reading and understanding of the data to compare the salient themes of different respondents from the interviews to make good interpretation of the data. It further guides the researcher to identify the similarities and relationships in the text by thoroughly reading to break them down into texts, then explore data collected to develop themes, and incorporate them for final interpretation of the data. Analysis of this research data involves inductive analysis research codes and themes which were not predetermined but generated from the data collected to ensure flow of the data. All data gathered were transcribed manually into a single document where initial coding and analysis begun.

4.2 Ethics considerations

The research design considered the ethics relating to consents and potential harms in a way that respondents may not be offended, which could possibly influence the data. The researcher determined these common ethical issues in research design by Jenn as follows:

Study design and ethics approval: guaranteeing that the research carried-out is agreed to by all participants and relationships in identifying their roles (Jenn, 2016). Consent was sought from the institutions and traditional authorities by sending a consent form from my

institution to the various participants. Again, pre-phone calls were made to these participants to further explain the research objectives and maintain their trust by clearing out their doubts about my personality. It was interesting to know that most accepted the request when they found that I could speak their local language, despite English as an official language of the country, vice versa they could proficiently speak English. Also, customs, norms, values, culture were duly observed and respected in accordance with customary laws.

Confidentiality and respecting individual's autonomy was assured that participants have the free will to respond to the interviews and avoid undue influence from the researcher or research assistant. This was done by allowing the participants themselves to speak directly to me online to deal with problem of autonomy and undue influence that could arise from the research assistant. Participants were guaranteed that their information was only being written and will be transcribed which will be a reference point for data analysis. Personal contacts were also taken for future contact, should I need extra information. They were also assured of sharing the research findings with them in ensuring that their inputs were correctly interpreted.

Finally, with the involvement of the research assistant, I made sure to specify the rules of what should be done by the research assistant such as running errands, paying homage to the participants and ensuring that they have a stable network to speak to me.

4.3 Limitation of the study

Most constraints attributed to this research were identified as follows: In the context of Ghana, chieftaincy institutions are highly respected, embedded in the lives of people and institutional framework, making it difficult in gaining permission to visit or speak to traditional authorities. Having access to chiefs may require a member(s) of Council of Elders or the chief's linguist to serve as a link to the paramountcy and comes with observing all traditional protocols such as customs, values, norms, and traditions of the community. Since I was new to the community which differs a bit from my traditional council, makes it time consuming to know all the traditional protocols involved. So, I employed a research assistant who was a native of the community to simply navigate through the practices of the people, and for those we did not know, we asked the chiefs on what to do.

Also, there were low level of willingness of some chiefs accepting to speak to me, reflected in my initial research area where consent was turned down. Another limitation was speaking to illegal miners as some thought it is a strategy to stop them from their work, which needed a lot of time to convince them to understand the relevance of the topic. However, they were assured that the research is strictly guided by research ethics of my institution and that it

is not necessary stopping them from their work, but to find a sustainable way we can mine gold without destruction. Also, I assured them that it is an academic work and not research funded by a government institution or private organisation. Financial constraints were another factor, when it comes to observing traditional protocols as well as the cost of online interviews and accessibility to network. In Ghana, it is against tradition to speak to a chief without offering schnapps and other local items depending on the traditions. As customs demand, at least a bottle of Schnapp offered to the chiefs before given a hearing. This means you do not go before a chief empty handed, and this was assisted with a little subsidy from the University.

CHAPTER FIVE

CHIEFS: TRAPPED BETWEEN ENVIRONMENTAL AND INCOME CONCERNS

5.1 Introduction

The chapter grasps understanding of the need in protecting the land, water bodies, and how chiefs understand environmental sustainability despite the trade-off between conservation and income generation in Ghana's DGS. The LoC was used to determine the actions of customary chieftaincy institutions on the understanding of what happens when the environment is not protected by customary law.

5.2 Livelihoods for Generations.

Generally, land is fundamental for all production where farming activities, industrialization, human settlement and existing creatures including water bodies (70% of the land), depend on. This aligns with the Biodiversity Framework as a global common goal, revealing a novel link in Ghana's hybrid system, extending the understanding of chieftaincy institutions in the common goal and contrasting the need to generate income. Imagine a life without enriched soil and water bodies, but a constant income. This significance is revealed in the study on why environmental protection is appropriate for the current and future generations in realizing the SDGs.

Uncovering the relevance of the land and water bodies by exploring depth on chieftaincy understanding shows that, Kenyasi depends on agriculture despite the occurrence of ASM, their livelihoods depend on the land and water bodies used for irrigation mostly during the harmattan season. The essentiality is that they are ecosystems supported by a way of providing habitats for a wide range of people, maintaining biodiversity and ecological balance. This finding suggests that the understanding of chieftaincy on environmental protection is aimed to protect the land and water bodies which aligns with my study of the research, 'chiefs mitigating illegal mining as custodians of the land'.

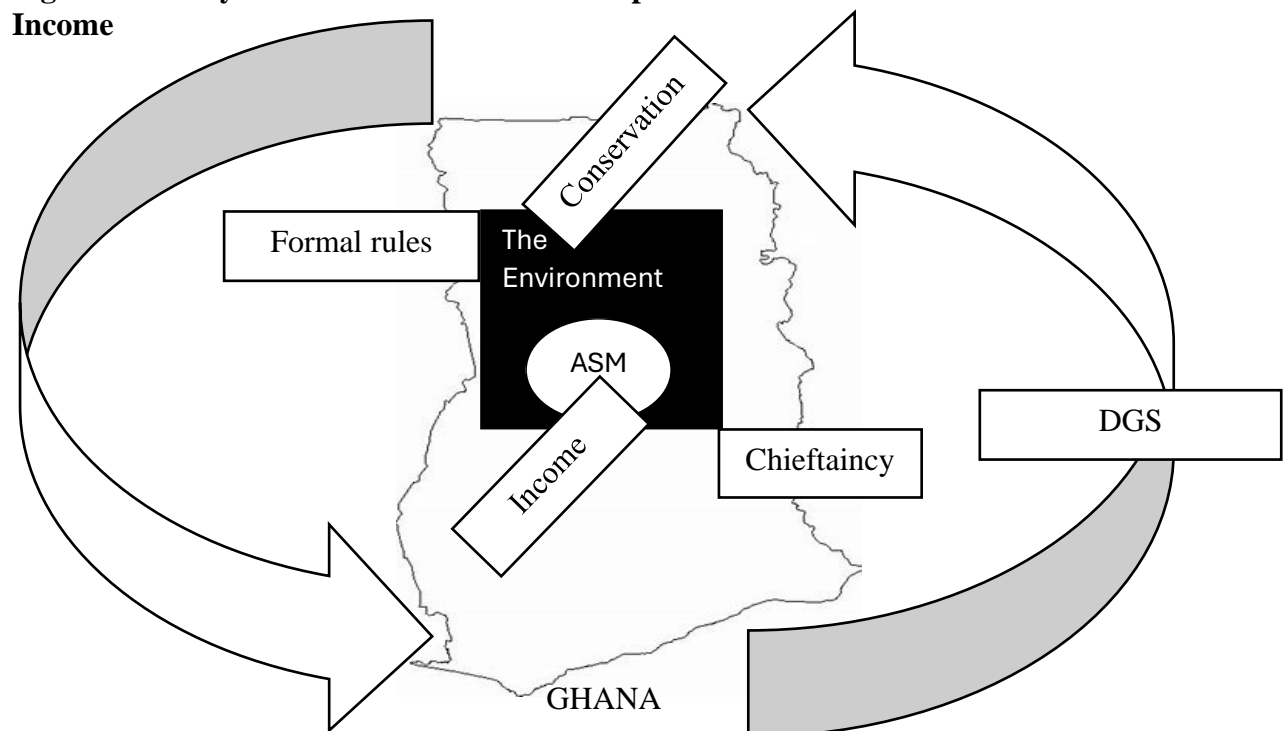
A discourse with 2 illegal miners, a legal underground miner from Newmont Ghana found that among illegal miners, there is the understanding of environmental sustainability, and the relevance why they should protect the environment for the common good. Based on this, one illegal miner said "the Apemsu river runs through Tutuka and other communities and when polluted will affect a wide range of people whose livelihood depend on it". Contrasting this understanding, an informant shared that, "regardless of the impact, we also pump and provide clean water from underground which can be utilized for the said irrigation".

This is where despite vague understanding on environmental sustainability, there is the notion that some actions are beneficial to ASM.

Nevertheless, chieftaincy institutions demonstrate that the land and water bodies are passage of resources from their lineage to generations, similarly they would pass to generations. Likewise, failure to protect water bodies and reclaim the land would be extremely disappointing to future generations, realizing how their lineage protected the land with customary tools. Making the context of chieftaincy institutions relevant for Ghana to contribute its quota to the global common goal. One of the chiefs opined that “we have no additional land and water bodies except the one under our consideration meant for generations”.

In fact, it remains stimulating to understand from chieftaincy and similarly, I complemented with my experience that in the olden days, people were drinking from streams and rainwater without any effects, but today it has become so harmful to drink from rainwater because of ASM. Aligning this, hunters were catching meat from bushes and fishes from streams but due to land destruction in Ghana, we have lost them all including cocoa plantation in Kenyasi which could serve next generations. This, assertion collaborates previous findings from (Amponsah and Takyi, 2020), that land destruction in Ghana is the main threat to cocoa plantation because they are immovable.

Figure 6. Analytical Framework of the Trap between Environmental Protection and Income



Sources: Author's own elaboration.

Figure 6 further displays how customary chieftaincy institutions are trapped in the DGS giving the need for income generation and protection of the land as it was inherited from their ancestors.

Contrast of Ghana's DGS to other systems shows that chieftaincy has exercised through customary practices to ensure the environment is protected against income, aligning with a significant factor opined by one of the chiefs that "the land and water bodies are reserved for spiritual and traditional reasons to be safeguarded for generations". This is where chieftaincy protects the land and conserve the environment based on their own discretions and to ensure safety of societies, some lands are conserved as home to ancestors, specifically for burial of chiefs, known to be "Ahenfo Asieye or Nananom Mpom" literally, burial places for chiefs. Validating Umachandran et al findings, refers to these places as "sacred grove" where different kinds of habitats are protected by chiefs based on their tenets that it is an abode of deities which guard the society (Umachandran et al., 2018).

Further emphasis shows that the interest of chieftaincy in protecting the land and preserving these traditions require to determine whether chieftaincy is up to expectations or not (Umachandran et al., 2018). In most of these cases, chieftaincy makes a distinction between formal and informal rules in addressing social challenges in Ghana's DGS. Contrary, it was fascinating to know from the chiefs that " even the cemetery reserved as a sacred grove in Kenyasi No.1 was encroached by illegal miners years ago despite the traditions". However, the situation was salvaged by the police force who were swift in acting and succeeded in driving such individuals from the land. My argument in this scenario is that, when customs which protect the environment are not well preserved, people take advantage and assume there will be no consequences for their actions or inactions.

Constructing formal rules versus customary institutions of chieftaincy in Ghana's DGS show that the latter adds value to the former per the recognition by the state to determine what is appropriate in addressing societal problems. Remarkably, customary laws are superior and were used by chiefs to protect resources through taboos in the ages when we had genuine chiefs unlike, we see mostly today. And this reminds me of the question "Do you have chiefs?" Also, highlighting on the optimistic of the state institutions transition to manage water resources through formal rules as against customary institutions, making it weird when chieftaincy is called to protect water bodies despite their understanding.

Therefore, considering LoC in Ghana's DGS has been a way of making choices among chieftaincy institutions and what could happen when they perceived regular actions. Like a game of chess, calculating the possible outcomes of any movement that would be, and the expectations from your opponent. Also, it looks like sometimes formal rules and customary chieftaincy institutions run parallel to each other due to the problem of regulating power, resulting Ghana's DGS in the lack of effective checks and balances, making chieftaincy institutions reluctant to figure out what the opponent could do.

This corroborate earlier findings on "Governance without a government" where Börzel argued that a "functional state must be committed to the common good" and be accountable when they aim at manipulating profits to their advantage as a substitute of the common good (Börzel, and Risse, 2010, p. 126). With this I emphasize that it should not always be the case of formal laws versus informal laws, but also informal laws versus informal laws as they are hierarchy of chiefs who could seek to this common good in the absence of the state and be held accountable for their actions taken against the environment.

5.3 Ages to modern days

Despite the understanding of chieftaincy institutions, the LoC exposes both formal and informal rules geared towards conservation and income generation in Ghana's DGS. Chieftaincy institutions have witnessed and shown apparent understanding of the damages done to the environment and the ecosystems. Most expressed that in the olden days there were at least 50m buffer of land that separates mining areas from water bodies or agriculture land which is not guaranteed anymore in modern days. Therefore, the question remains why not today to protect the environment? Following a LoC where chiefs understand the correlation of human action and the merit of the consequence to their actions. The next chapter gives more overview of this dilemma in Ghana's DGS.

CHAPTER SIX

TO MINE OR NOT TO MINE?

6.1 Introduction

This chapter reviews through the logics, the dilemmas associated with customary institutions of chieftaincy in ASM evolution; formal laws versus customary chieftaincy institutions that regulate ASM, and the informal laws that works appropriately in Ghana's DGS. These respond to the sub-question, factors that regulate illegal mining in Ghana and the appropriate customary tools available to fight the menace, revealing through the lenses of LoE, LoD and LoA on whether to mine or not to mine.

6.2 The Youth and Income Generation

Would it not be surprising to see all ASM workers laying down their tools just within a month to save the environment? Yes, how surprising it would be to see what we wish for has been adhered to. Ghana as youthful population, and these populations are the generation to inherit chieftaincy as the current generation inherited from their lineage. But interestingly, the generation we seek land protection for, are the very people operating concessions of illegal mining despite that, they have little or no safety measures to mine. Improper regulations by formal and informal rules in Ghana's DGS indicate that most of the youth's livelihood depends on ASM as their valuable means to survive, and those I had a discourse with indicated "we are dropouts and cannot be hired by legal mining companies". Besides, they cannot be idle at home giving the necessity to support their families, hence, they engage in ASM. A further discourse with an informant from the youth emphasized that "indeed, the unavailability of jobs further escalates the issue and lead to these societal problems".

Contrary to this assertion, the legal underground miner was emphatic that, "the lack of employment is not necessarily the basis, and that Newmont Ghana has hired many local people". He added that though most of the youth lack the pre-requisite skills to be hired by legal mining companies, but they turn to prefer mining more than other alternative jobs, since that would be a choice of "riches and poverty" therefore, they follow their logics which makes them easily think mining is the only successful adventure. However, it is displeased that the leaders claim to have found these gaps but refuse to enroll such people into courses to help them acquire the appropriate skills which could gain them employment. An Honorable Member of the assembly complemented that, years ago the company selected some illegal miners to give them the required skills but due to delayed in employment they made their way back to ASM. Supporting this finding to Börzel's argument that the increasing activities of mining in

most developing states call for how local communities demand for their benefits of the common good, and place their grievances and blame to the mining industries (Börzel, and Risse,2010, p. 125),

In the demand of these benefits, it was fascinating to discover from an illegal miner that “we are not inclined to consider an alternative livelihood because illegal mining generates good income”. This is where they evaluate the potential consequence, applying the LoC in measuring other alternatives and the merit associated to those consequences, if they should pursue it. However, another informant was of the view that they are keen to consider if there are indeed a meaningful alternative livelihood. But the sad reality is that the government and customary chieftaincy institutions are not aiding them with the needed tools and resources to go into other ventures. If they even go into agriculture, there is no ready market for their farm products, and it becomes waste of time and resources to continue live on fake promises in Ghana’s DGS which is unbearable hence, making illegal mining attractive.

COMPLEXITY AND SENSITIVITY OF ILLEGAL MINING, FORMAL RULES VERSUS CUSTOMARY CHIEFTAINCY INSTITUTIONS.

6.3 The dilemma: Formal institutions

Formal rules regulating ASM in Ghana’s DGS are prone to vulnerability, considering the effectiveness of how they function to regulate ASM. Proving that ASM is without doubt a complex and sensitive issue most at time the central government seeks not to be answerable, as politics is concerned. When formal rules turn otherwise, Ghana portrays a “Chameleon nature”; thus, a functional state which becomes a “limited statehood”. Not emphasizing that Ghana is a failed state, but to stress that formal rules lack the capacity to regulate ASM menace hence, preventing the central government from making effective decisions. Also, poorly emphasizing on enforcement which does not work accordingly, given the central government’s failure in the aspect of fighting illegal mining.

Illustrating this in dilemmas, why there is a limited statehood and the need for customary institutions of chieftaincy to act in a “shadow of hierarchy” for the common good. Foremost, the central government acting through formal rules is involved in illegal mining, starting from the apex to the very local assembly. It is asserted that illegal miners must bribe some officials of the central government to conceal their deeds and prevent formal rules from getting them obliged. An Environmental Health officer has emphasized that “this is how far, the role of democracy has played in the country’s DGS”. The indication is that the limited

statehood is relevant to the central government to gain votes and retain power than making decisions that strictly prevent illegal mining. With regards to this, they find it irritating to dialogue about illegal mining especially at the time of elections. This is why formal rules are not appealing anymore in the call and fight against ASM because they seem not to be addressing the issue due to its limited statehood.

Some officers of EPA and the Local Government affirmed that “sometimes we are at a critical point of threat to lose our jobs or demotion for implementing the formal laws”. To them, the laws such as Public Health Act and Local Government Laws exist but ineffectively working due to the challenges from the central government. She further shared that “I have no option than to free ten people being prosecuted because of one illegal miner among them”. This happens when significant figures from the central government mostly issue command through Municipal/ District Chief Executives to make them susceptible to function through formal rules. Most concerns are that some of these illegal miners are relatives of these significant people, and once they are highly recognized and respected in the community, they influence their enforcement of formal rules. This gives the need to find out how in such a limited statehood, enforcement play a key role in Ghana’s DGS.

6.3.1 The dilemma: Logic of Enforcement

The rationale behind enforcement shows how legitimately or constitutionally formal versus informal rules are applied to control the actions of people in a way of maintaining law and order. In Ghana, enforcement is made through the hybrid system giving respect to chieftaincy institutions to equally request security agencies to act on their land when the community falls under threat. Many Ghanaians have called this intervention formal versus informal institutions, but the research presents a dilemma of how enforcement has not been the best option in Ghana’s DGS giving the circumstance ASM.

Ghana seems to be a functional state when it comes to enforcement but lack certain qualities of providing the available resources for chieftaincy to engage in the evolution for the common good. There are dilemmas as to when the central government will be more equipped with the needed incentives, proving to its vulnerability as a limited statehood. There seems to be limited tools to enforce the custody of the land, making most enforcement crew taking advantage of illegal mining as the fastest way to enrich themselves. According to an informant from EPA, “ as we are humans in our logics, if we are limitedly resourced, we in turn do

otherwise of the laws to avoid risking our lives” Thus, the LoE determining ASM rather turns to be otherwise and far from reality in a limited statehood.

Limited tools to protect the custody of the land made three chiefs object the relevance of enforcement and presented a different perspective that the use of enforcement has no significant impact on ASM. A further discourse with the chiefs shows that it is waste of resources because enforcement crew have been seen on several occasions taking bribes from illegal miners. Thorough research on this revealed that an international investigator, Anas Aremeyaw Anas galamsey expose’ in Ghana 2019, captured enforcement crew collecting money from the investigative team, Tiger Eye PI, in giving favor for a sting illegal mining operation (Teiko-Larnyoh, 2019).

This supports that illegal miners are committed to pay enforcement crew at regular intervals to give them information on where, and when to escape, making informal rules through enforcement seems protecting illegal miners, rather than applying the LoE and LoD. The fact has been ascertained by two key informants among illegal miners, gave instances of where enforcement works, and they are arrested for a limited time. Officials easily let them on the loose after giving a bribe, and those who will not request for a bribe will eventually set them free since there is the need for income generation. With this perception, the LoD may not be effective as actors can easily predict that there will be no consequences regarding their actions towards the environment.

Other than that, chiefs, EPA and the Local Government are enthusiastic of applying the LoE followed by the LoD, yet they are handicap. Most of them have toured Peru, Nepal and Mozambique to enlighten themselves on ASM and are willing to accomplish good results, but Ghana’s DGS has made them so incapacitated to enforce the laws and the best practices learned, reinforcing the critique of the governance theory on distributed processing which pointed out on the pervasiveness of collective action problem. Thus, the challenges of incorporating different level of actors in Ghana’s DGS to provide a comprehensive approach as they can become successful.

6.3.2 The dilemma: Diversity amidst customary chieftaincy institution

The ongoing dilemma has denoted customary chieftaincy institutions as one of the challenges but nevertheless, their relevance, power and authority is still maintained in Ghana’s DGS. These institutions are respected and embedded in Ghanaian societies yet, presents an overview of how diversity among customary chieftaincy institutions has made a little effort to fight ASM.

Chieftaincy institutions are to provide a shadow of hierarchy in areas where state institutions are often weak to address societal problems, however, the complexity of ASM is culturally and socially embedded. This non-hierarchical arrangement of chieftaincy aimed at mitigating illegal mining with customary tools as custodians of the land, aligns with Borzel's "Governance without the state"; the non-hierarchical order serve a perfect alternative to governance as well as compensating for a limited statehood (Börzel, and Risse, 2010, pp. 119: 126). And this is what chieftaincy institutions in Ghana's DGS is meant to do.

But the data has uncovered the existence of diversity among chieftaincy, being one of the drivers against customary chieftaincy institutions in the call for action. This is where chieftaincy lacks to portray the relevance of the governance theory as describe by Gómez "sustaining co-ordination and coherence" among different actors in formal and informal institutions. As evidence, some chiefs are actively engaged in galamsey at the blind side of their paramount chief who may be fighting against it. These actors with different interests have rebranded ASM as 'Community Mining' where they claim to involve only the community members in mining yet remains illegal.

Two (2) of the chiefs ascertained this level of diversity that the paramount chief of Kenyasi No.1 has stood against galamsey, but the question remains, will his council of elders equally do same? Evidence that, Nana "Gyasehene" among the chiefs was de-stooled for his involvement in galamsey, while three (3) other sub-chiefs have been suspended awaiting destoolment, if they are found guilty. Indeed, further research on this revealed that, it has been published by Ghana's Multimedia Group satellite television, Adom Tv confirming that the paramount chief, Nana Osei Kofi Abiri on September 6, 2023, de-stooled the Nana Gyasehene for engaging in illegal mining (Adom Tv, 2023). Interestingly, how often this LoA works is still not convincing as it only happens in few communities and instances. Emphasizing on diversity was disclosed that some chiefs issue "Authority Note" authorizing third persons to take bribe from illegal miners. Once this money is taken, those chiefs now overlook most concessions operated by illegal miners.

To buttress this point, Dzakpata in his report, explained that elsewhere in Manse traditional council, a chief was arrested amongst nine illegal miners (Dzakpata, 2023). This has been supported by an interview video on Facebook where Otumfour Ahenenana Hene, Nana Kwame Mensah-Bonsu revealed that none of the chiefs who genuinely reign his people permit ASM on his land. He pointed out on the authority of formal institutions if it only issue license

to mine while chiefs retain the authority as the custodians, and that diversity has spread among chiefs influencing them to support the central government (Karim, 2024).

This is where chieftaincy institutions are losing their relevance to act as a shadow of hierarchy in sustaining coherence for the common goods. Further, reinforcing the critics of the governance theory and its difficulties of applying it in Ghana's DGS, that is difficulties in decentralization and how different actors will co-operate and co-produce governance solutions. That is according one of the chiefs, Ghana's DGS is like "live and let us live", some chiefs are willing while others are not, some will fight given the opportunity, and that even such offenders will be summoned to the palace determining the situation through the LoA.

6.4 The Logic of Appropriateness.

The LoA determines what cultural norms, customs, and taboos are superior to resolve a ASM situation than depending on the merits derived from its consequences. This helps to determine what informal rules follow a LoA to ensure environmental protection in Ghana's DGS. One advantage of customary practices is that chieftaincy institutions are socially embedded in norms, customs and lives of many people in every society. In our daily lives people interact with these institutions and despite increasing urbanization, there is still a good increase in number of people who believe in traditional customary institution of chieftaincy (Tenkorang, 2023). This is what makes culture, and traditions work in our modern societies alongside formal rules.

Generally, every traditional society in Ghana has its own informal rules distinguished from the formal and superior in ways that seem to be appropriate. This is where Kenyasi is not an exemption from this DGS, as customary chieftaincy institutions are adhered to by the subjects. A discourse with the chiefs revealed that, it is appropriate and forbidden that any member of the community or an outsider will visit the farms on Tuesdays, equally Tuesdays are outlawed to celebrate the dead. These days are known to be 'holy days' or in a local language "Nnabone". They serve as days where the gods come out to feed themselves and should anyone visit the farms, will meet an untimely death or punishment from the gods.

In this logic, traditions, norms, customs and taboos follow a LoA of what ought to be applicable given a societal problem. Though some believe that these are myths and superstitious however, whether myth or superstitious, it is a way of protecting the land and water bodies to rest and restore fertility from human activities and keep them clean for consumption. Elsewhere in Ashanti region and among the Akan, Memeneda Dapaa, Fofie and

Akwasidae on the Akan calendar which means ‘place of rest’ are considered as LoA observed to protect the environment. That is despite the difficulties with the logic, it is still adhered to and chieftaincy institutions reserved this to be applicable in Ghana’s DGS.

6.5 Catch-22; Customary Chieftaincy Institution and Land Protection.

This section further presents the dilemma in the widespread of land protection among customary chieftaincy institutions depending on historical and cultural context. Regarding non-state actors, Börzel raised a question of “how legitimate is governance without a government?” (Börzel, and Risse, 2010, p. 127). Aligning this to Ghana, how legitimate is chieftaincy institutions in this situation? That is not necessarily to consider the knowledge of chieftaincy institutions but allowing them to follow a LoA by their own discretions to enhance the protection of the environment, even if it is against their personal interest. The customary laws are under their custody, and they have the ultimate authority to enforce them in protecting the environment based on this historical and cultural context of how their predecessors did.

Indeed, the context gives hope that ASM fight is not yet out of hands, once customary chieftaincy institutions exist to apply customs and taboos appropriate to the menace. However, according to the chiefs, one factor that underpins the commonalities of land protection is that formal rules is challenging the context in modern times. Most at times distancing themselves despite their call in the fight, because formal rules still challenge their context. But why would a limited statehood intersect local actors in the provision of what the state failed? This is why I established that Ghana is a chameleon, trying to find solutions to ASM problems without relying on the appropriate tools. Further provoking and retaliating actors, reinforcing how they have produced a little than healthy, being prone to vulnerability of corruption and the problem of regulating power.

Though, in contemporary societies human right issues are challenging customary chieftaincy institutions by individuals contesting them in court seeking for violations of human rights. But the same individuals who may act at the very local level of governance are problems as they seek redress in their favour but see nothing of why customary rules should govern the environment for posterity. Making social pressure not enough for the chiefs to act as custodians of the land. Emphasizing this by one of the chiefs said, “the local people having daily interaction on the land must report such incidents but often not the case”, this corroborates Börzel’s argument that the very local societies fail to provide a shadow of hierarchy, but they expect non-state actors, in this case chieftaincy institutions to do (Börzel, and Risse, 2010, p.

125). An example shared was that, few years ago, individual landowners were calling illegal miners to operate on their land claiming that whether they give it, or not they still rob the land in their absence. This level of diversity and corruption among actors makes illegal miners maneuver to mine at night while the righteous chiefs are asleep. Indeed, coming into realization of land protection is something people really buy into, but practically it is otherwise. According to one of the chiefs, “It like teaching virtues and practicing vices”. As he further added, “while advising the cat, you also advise the mouse”. Those under which the customary chieftaincy institutions are placed must realize their essence in Ghana’s DGS since there are a lot of potentials in them.

Adding to these are issues with town boundaries which are not well demarcated contemplating the dilemma of who governs what? Limiting customary chieftaincy institutions from protecting such land. Apart from this, the informants uncovered that there are no feasible steps taken by chieftaincy to protect the environment as they claim to have interference from formal rules yet, they can interrupt disputes which are formal by redrawing them from the court to adjudicate under their institutions. Again, taboos restricting people are adhered to, and none have been challenged by formal rules. This appropriateness is what Osagyefo Oseadeyo Nana Agyeman Badu II and Nana Osei Bonsu II of Dormaa-Ahenkro and Mampong respectively, have demonstrated through their authority to seized ASM, while others seem to have barriers. Such is to highlight how the state empowers chieftaincy to use their discretion in contemporary Ghana’s DGS yet, making it unutilized. These shows that some chiefs are reluctant, giving their power and authority in Ghana’s DGS.

6.6 Symbolism of Chieftains Leadership

Sometimes, I just imagine the governance system of Ghana without chieftaincy, and how Ghanaian societies would be without these institutions, because they are the only institutions recognized as a ‘symbol of unity’ and exhibit this through the LoA. A discourse I had with the chiefs emphasize that chieftaincy institutions are authoritative and embedded in the lives of their subjects to an extent that the little child recognizes them. The following narratives were shared by some chiefs and respondents to ascertain the authority, and power establishing chieftaincy leadership in Ghana’s DGS.

“My brother was involved in illegal mining, and on the site, a command came from the paramount chief that everybody should leave the site”. As they left in a rush, he realized he

had left something behind and decided to go for it and to his surprise in less than 30 mins of receiving the chief's command over thousands of people on the site had all left.

“A man visited the farm on a Tuesday which was a holy day and was intimate with a lady in the forest”. He was made to perform rituals and after that the chief banished him from the town and no government could challenge that authority.

“Elsewhere in Domasua and Tanoso in the Bono and Bono East region respectively, it is a taboo to breed goats in the community and people obey”. Emphasizing that, in Domasua it is forbidden to curse someone and whoever does it, is made to perform rituals to please the gods and if the perpetrator refuses, any deceased family member of the perpetrator is denied burial on the land, and as such equally should be applied to illegal miners.

The kind of authoritative shadow of hierarchy provided by chieftaincy which is equally needed to save born and yet to born generations from future calamities of ASM. And why relent!

Despite these dilemmas there have been a few instances of where the state recognizing customary chieftaincy institutions has enforced them to act, not to dialogue about reducing their power and authority when reluctant. The state only tries to tap their knowledge but not involving them in the evolution as custodians of the land. This is why I argue that the state itself clearly lack the understanding of chieftaincy institutions and the authority vested in them, making the state always rely on enforcement which does not help much. Though there are limited tools to enforce custody of the land, diversity among customary chieftaincy institutions, the LoC, LoE , LoD and the LoA are not entirely working due to the trade-offs, either social or cultural pressure enough to put them on their toes. But once these institutions are involved, there is many potentials in customary laws to halt ASM and much recognition should be given to their role as custodians of the land.

6.8 The Hope: Customary Tools.

ASM is not yet out of hands as there are hopes in customary chieftaincy institutions in mitigating illegal mining. Once Ghanaians give more reverence to taboos and traditions, and there are beliefs that some of their actions are forbidden by the gods, chieftaincy can manipulate human actions through the LoA to regulate ASM. This is where chieftaincy institutions are authoritative and poses the ultimate control to act in the shadow of hierarchy. Illustrating this shows that, declaring most of the land as sacred groves or places for recreational purpose has

existed, and yet to be strengthened. Chiefs emphasize the relevance of this tool to confiscate land from landowners who may go contrary to such taboos (LoD), will lessen ASM activities since no family would want to lose its land. Stressing on instituting penalties for families who lease the land for ASM, such may include refusal to bury the dead on the community's cemetery when their connivances are exposed. Mourning the dead is embedded in chieftaincy and the chiefs have the authority to regulate such local norms to prevent the occurrence.

One of the customary tools involves going back to the ages and ensuring that 50-100m buffer land is separated from farmland and water bodies to protect them against income generation. Adding up to the customary tools highlights Community Based Approach (CBA) that is almost absent in every community. This seeks to engage local community in decision-making and ensuring that they have a stake in protecting the environment. If they feel part of the protection, whenever they are called, they will be obliged and respect the traditions. Following a comprehensive education and creating awareness among the people, chieftaincy ascertained to ensure setting community rangers such as the 'Asafo company' who performs para-military function in the traditional system as a watchdog to protect the environment. Whereas they will have a comprehensive and integrated approach involving various stakeholders, formal and informal rules necessary to manage and protect the environment.

Certainly, they stressed on the Regional House of Chiefs strictly complying with destoolment of chiefs who are into and allow ASM in their communities. Though, this happens but should be strengthened, and since to de-stool is an awful punishment, no chief will want to deserve will further put them on their toes to be involving in the evolution and make Ghana, the land of gold a better place for all.

CHAPTER SEVEN: REFLECTIONS AND CONCLUSION

7.2 Conclusion

Ultimately, whether to mine or not to mine in Ghana's DGS depends on striking the right balance between conservation and income. Chiefs have the authority over the land regulated by customary laws while the state regulates license to mine, and what makes the difference is the 'right balance'. As we generate income, the more we pollute the environment and the lesser we sustain our agriculture. Regardless, this does not objectively deny the relevance of gold on Ghana's economy and income generation for individuals but coming into realization of what constituted the environment as it was inherited from ancestors. There is a proverb that 'sankofa yen nkyi' literally, going back to the olden days of protecting the environment is not forbidden. Income generation existed in those days, but environmental justice was adhered to by formal and customary chieftaincy institutions.

As Ghanaians wrestle with ASM challenges, from land degradation to water pollution; local to regional level and regional level to national, it is obvious that customary institutions of chieftaincy are highly required. Though, the journey may seem to be complex, but the reality is that we cannot afford the cost of inactions of chieftaincy institutions.

That is why through a qualitative method the study focused on exploring the understanding, relevance of chieftaincy institutions and customary tools available to make the 'right balance' in Ghana's DGS. Underlining the gap that most Ghanaians lack the understanding of the relevance of chieftaincy and the authority vested in them by the state as custodians of the land. Through the lenses of governance theory, the research focused on chieftaincy institutions in Kenyasi paying their quota to the common goal of environmental protection. Analytical framework was made to explain the LoC, LoE, LoD and the LoA in relations to ASM in Ghana's DGS. Significantly, these helped in analysing that there is a trade-off between conservation and income generation. Regarding the trade-off, these indicators were identified: Lack of opportunities, diversity, challenges of monitorization and perception of people escalating the issue of land protection.

The study found that the state, Ghana portrays a limited statehood giving ASM challenges. Since there are limited tools for protecting the custody of the land, enforcement and ineffective decision making. LoA seems not enough however, proven to be working in many instances and capable of working in ASM regulations if chiefs are involved in the evolution. Chieftaincy has also shown that they understand land protection and the devastation

of the environment. Recalling the olden days, most chiefs were not educated but protected the environment, unlike today where we have well educated chiefs among them are professionals, judges, doctors and professors who have been involved as the rest have been involved. This means apart from tapping into customary tools, we are also tapping into dynamic cultures associated with modern education to reduce illegal mining. Hence, chieftaincy becomes an authoritative shadow of hierarchy needed to be involved in the evolution. They stand the greatest chance to strike the balance, improve income and provide a sustainable environment. This calls back the question of the judge “Don’t you have chiefs?” This is why we cannot afford the cost of inactions of chieftaincy.

Undertaking this research in Ghana was sensitive as both formal and customary institutions of chieftaincy proved to be a limitation. In addition to this, observing customary laws and practices were expensive which I would urge chieftaincy to embrace such research that enhances local development. Further, researchers should go into similar topics such as how these customary tools are effectively working in ASM regulations, and to research in these specific communities (Dormaa, Mampong and Volta) to examine what specific customary tools have worked in these areas to protect the land. Writing about chieftaincy institutions, one gap identified was lack of getting relevant documents and for that the government must prioritize such research, publish and share it among the National and the sixteen Regional Houses of Chiefs. If more is written, more comprehensive approach would be taken.

I highly recommend that every chief should have a short-term, medium-term and long-term goals in relation to the environment, as they reign for life. Such goals should be clearly stated to the National and Regional House of Chiefs to guide their paramountcy and know how to play their game of chess. Also, there should be a reasonable and safe access to the land between conservation and income so chiefs can utilize the opportunity they have over the land and lease it when the safety of the community is not at risk because of income.

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