



Strathmore University

Law School

**Legal Limits and Deeper Fault Lines: A Legal and Systemic Analysis of the Persistence of
Illegal Mining in Ghana**

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Declaration

I, **DOREEN AFUA ACHAAMA ENYONAM KEDDEY**, do hereby declare that this research is my original work and that to the best of my knowledge and belief, it has not been previously, in its entirety or in part, being submitted to any other university for a degree or diploma. Other works cited or referred to are accordingly acknowledged.

Signed: *Doreen Afua Keddey*

Date:12 May 2025.....

This dissertation has been submitted for examination with my approval as University Supervisor.

Signed: 

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Date:12 May 2025.....

List of Legal Instruments

1. Administration of the Stool Lands Act (Act 123 of 1962)
2. Constitution of Ghana (of 1992)
3. Minerals and Mining (Amendment) Act. 900 of 2015
4. Minerals and Mining (Amendment) Act. 995 of 2019
5. Mines and Minerals Act (Botswana, Act 17 of 1999)
6. Minerals and Mining Act (Ghana, Act 703 of 2006)
7. People's Small-Scale Mining Act (the Philippines Act No. of 7076)
8. Philippine Mining Act (7942 of 1995)
9. Small-Scale Gold Mining Law (PNDCL 218 of 1989)
10. Tribal Land Act (Botswana, Act 1 of 2018)

List of Abbreviations

- AOSL – Administration of Stool Lands Act (Ghana)
- ASM – Artisanal and Small-Scale Mining
- COG – Constitution of Ghana
- EPA – Environmental Protection Agency (Ghana)
- Galamsey – Illegal small-scale gold mining (local term in Ghana)
- GIPC – Ghana Investment Promotion Centre
- HRBA – Human Rights-Based Approach
- LGU – Local Government Unit (Philippines)
- MMA – Minerals and Mining Act (Ghana)
- PNDCL – Provisional National Defence Council Law (Ghana)
- PES – Payment for Ecosystem Services
- TVET – Technical and Vocational Education and Training (Botswana)

Acknowledgement

1 Thessalonians 5:18:

"Give thanks in all circumstances; for this is God's will for you in Christ Jesus."

"Gratitude is the fairest blossom which springs from the soul."

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Abstract

This study examines the pervasive issue of illegal artisanal and small-scale gold mining, known as galamsey, in Ghana, critically assessing the adequacy of the existing legal framework and proposing reforms to address enforcement, community engagement, and environmental remediation. Drawing on a comparative analysis of Ghana's Minerals and Mining Act (2006) with Botswana and the Philippines' regulatory framework, alongside insights from field studies, it reveals systemic weaknesses, including bureaucratic licensing processes, state collusion through corruption, and over-reliance on militarized crackdowns like Operation Vanguard. These approaches criminalize low-income miners while failing to tackle root of illegal mining causes such as poverty, low employment rates, and lack of technical support for formalization. The study highlights galamsey's socio-economic significance, employing over one million Ghanaians, and its environmental toll, notably water pollution and deforestation. Proposed reforms include simplifying licensing through decentralized systems, establishing community mining cooperatives to enhance local participation, and enforcing human rights principles for ecological restoration. By integrating lessons from successful models like the Philippines' Minahang Bayan, the dissertation advocates for a shift from punitive measures to inclusive, sustainable policies that formalize ASM, empower rural communities, and align mining with national development goals. This research contributes to the discourse on resource governance by offering a balanced framework that mitigates galamsey's harms while harnessing its economic potential, urging Ghana to redefine its approach to artisanal mining as a pathway to socio-economic transformation rather than a criminal menace.

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CHAPTER ONE - INTRODUCTION

Introduction

Ghana's rich gold reserves have long been a cornerstone of its economic identity, but this abundance has come at a significant cost to its environment and communities. The phenomenon of illegal small-scale mining, commonly referred to as galamsey, has emerged as a pervasive issue. This practice has led to severe environmental degradation, pollution of water bodies, and loss of livelihoods. While the state has enacted legislation, such as the Minerals and Mining Act, 2006, to regulate mining activities. This persistence of galamsey reflects deeper governance issues, including corruption, mismanagement of funds, and the lack of effective accountability mechanisms. These systemic failures have left mining communities vulnerable, and continue to undermine all efforts of the legal system.

This study aims to expose these governance failures, focusing on the weaknesses of the legal framework. By critiquing the gaps in the existing legal framework and examining global best practices in mining governance, the research seeks to provide actionable recommendations to promote accountability, transparency, and justice for affected communities. In doing so, it contributes to the discourse on sustainable resource management and the protection of fundamental human rights in resource-rich nations like Ghana.

Background

Ghana is a sub-Saharan country blessed with an abundance of natural resources including gold. There are accounts detailing the streets of Ghana being so gold-filled that one could freely gather as they strolled casually and there was only need for light excavating with simple tools to discover and unearth the resource.¹ Gold was so abundant it was used as a currency for barter trade.² The culture of gold mining in Ghana is deeply rooted in the country's history, dating back

¹Awewomom J, Benjamin B, Osei F, Azanu D, Opoku F, Sackey L, Akoto O, *A review of health hazards associated with exposure to galamsey-related pollutants* Health Sciences Investigations Journal, Volume 5 Issue 2, 2024, 1, —<https://www.researchgate.net/publication/381807162_A_review_of_health_hazards_associated_with_exposure_to_galamsey-related_pollutants> on May 2024.

²Awewomom *et al*, *A review of health hazards associated with exposure to galamsey-related pollutants*, 726.

to its colonial era when it was known as the Gold Coast. The presence of abundant gold reserves led to extensive mining activities in the colony; however, the arrival of colonial powers introduced both exploitative and environmentally destructive practices.³ These harmful systems laid the groundwork for large-scale corporate mining, which not only perpetuated destructive mining practices but also resulted in the compulsory acquisition of lands from local communities albeit with some compensation. Over time, poor management and inequitable distribution of mining revenues and benefits exacerbated the socio-economic challenges faced by mining communities.

While mining has brought significant economic benefits⁴, including foreign exchange and national revenue, it has also led to severe environmental degradation,⁵ violated human rights,⁶ and perpetuated poverty.⁷ These challenges expose systemic corruption, governance failures, and the inability to address the needs of affected communities, highlighting the dual nature of mining as both a blessing and a curse.

Modern day Ghana has observed a drastic shift from manual extraction⁸ to using heavy machinery and chemicals in⁹ the mining industry. This has caused an increase in output but on the downside, this change in mining methods, particularly by including the use of chemicals has proven to be an otherwise sour story not only for the environment but also the human body as the serious risks posed have taken on full effect ranging from hypertension to birth defects and premature births.¹⁰ The prevalence of illegal mining in Ghana sets a risky path for the future of the nation in terms of human and environmental rights and general development particularly in income and revenue generation and global competition.

³ Allen K, Gold Mining in Ghana, 57(228), The Royal African Society, 1958, 6.

⁴ Gilson G, Imperial College Centre for Environmental Technology, *A Contextual Review of the Ghanaian Small-scale Mining Industry*, September 2001,7.

⁵ Arthur D, *Human right to Water and in Ghana: A Reality or Otherwise for Indigenous People in Galamsey Communities*, SSRN, 2024, 12.

⁶ Arthur D, *Human right to Water and in Ghana: A Reality or Otherwise for Indigenous People in Galamsey Communities*, SSRN, 2024, 7.

⁷ Gilson G, Imperial College Centre for Environmental Technology, *A Contextual Review of the Ghanaian Small-scale Mining Industry*, September 2001,5.

⁸ Allen K, Gold Mining in Ghana, 57(228), *The Royal African Society*, 1958, 5.

⁹ Awewomom *et al*, *A review of health hazards associated with exposure to galamsey-related pollutants*, 727.

¹⁰ Awewomom *et al*, *A review of health hazards associated with exposure to galamsey-related pollutants*, 727.

Statement of the problem

Gold mining in Ghana is regulated primarily by the Minerals and Mining Act and strengthened by the amendments, Act 900 of 2015 and Act 995 of 2019. Even with efforts to make the legal framework more robust and efficient it becomes clear that the core issue lies not in the absence of laws, but in the framework's failure to address systemic drivers that perpetuate galamsey. The misalignment compounded by inadequate accountability mechanisms leaves numerous gaps which communities grappling with a multitude of severe consequences ranging from health crises to environmental degradation and violation of human rights

Research Questions

1. What is illegal mining (galamsey), and what are the socio-economic, environmental, and human rights of galamsey impacts in Ghana?
2. How robust and effective is Ghana's legal framework, particularly the Minerals and Mining Act, 2006 (Act 703) and its amendments, in regulating the small-scale mining sector and curbing illegal mining (galamsey)?
3. How can Ghana's legal framework and institutional mechanisms be reformed, drawing on best practices from other jurisdictions?

Research Objectives

1. To examine the nature of illegal mining in Ghana and assess its environmental, socio-economic, and human rights consequences.
2. To evaluate the legal framework and institutional mechanisms governing artisanal, small-scale, and illegal mining in Ghana with a focus on identifying systemic gaps that perpetuate galamsey.
3. To propose targeted legal and policy reforms that improve enforcement, accountability, and systemic progress by gaining inspiration from other jurisdictions with the best practices.

Hypothesis

This study hypothesizes that the persistence of illegal mining (galamsey) in Ghana is not merely a result of legal and policy inadequacies, but is primarily driven by deeper systemic failures

including corruption, economic marginalization, and weak institutional enforcement which the existing formal regulatory framework fails to address.

Rationale of the study

The significance of this study lies in its ability to analyse a timely and persistent problem in modern day Ghana. It addresses the persistent environmental degradation, human rights violations, and socioeconomic challenges faced by mining communities in Ghana. It highlights the systemic issues of weak accountability mechanisms, corruption, and mismanagement of public funds, which perpetuate the adverse impacts of illegal mining. By exposing the gaps in Ghana's legal framework and governance structures, this research contributes to the ongoing discourse on sustainable resource management and environmental justice. Moreover, by drawing on best practices from other resource-rich countries, the study provides actionable recommendations to strengthen accountability, improve governance, and safeguard the rights and livelihoods of affected communities. This research is critical for promoting sustainable development and ensuring that the benefits of Ghana's mining resources are equitably distributed.

Research Methodology

This dissertation adopts a doctrinal and comparative research methodology to critically evaluate the legal framework governing artisanal and small-scale gold mining in Ghana, with a focus on proposing actionable reforms. The doctrinal approach involves a systematic analysis of Ghana's Minerals and Mining Act (2006) and related regulations, examining their provisions, enforcement mechanisms, and gaps in addressing galamsey's challenges, such as environmental degradation and socio-economic drivers. By scrutinizing legal texts and literature the study identifies deficiencies, including bureaucratic licensing hurdles and inadequate community engagement. Complementing this, a comparative approach draws on the Philippines' Minahang Bayan model for formalized small-scale mining as well as the transparent governance mechanics of Botswana. This comparison highlights best practices in regularization, enforcement, and participatory governance, adapting them to Ghana's context. Together, these methodologies provide a robust foundation for understanding the legal intricacies of galamsey, critiquing the

reliance on militarized responses, and formulating reforms that promote sustainable mining through simplified licensing, community cooperatives, and environmental accountability.

Theoretical Framework

1. Human Rights Approach (HRBA)

The HRBA integrates human rights principles into governance and policy making. It emphasizes the state's obligation to respect, protect, and fulfil human rights, particularly survival rights (e.g., clean water, health, and a safe environment). Mining-related environmental harm directly infringes on fundamental survival rights recognized under international instruments, such as the African Charter on Human and Peoples' Rights (ACHPR)¹¹ and the International Covenant on Economic, Social, and Cultural Rights (ICESCR)¹².

This study adopts the Human Rights-Based Approach (HRBA) as its primary theoretical framework to evaluate the legal and institutional landscape governing small-scale and illegal mining in Ghana. The HRBA places human rights at the centre of governance, policy formulation, and legal development, asserting that the state holds the primary duty to respect, protect, and fulfil the rights of its citizens including the right to a safe, clean, and sustainable environment, access to clean water, health, and livelihood.

In the context of mining governance, the HRBA provides a lens through which the effectiveness and robustness of Ghana's legal framework, particularly the Minerals and Mining Act, 2006 (Act 703) and its amendments, can be assessed. It emphasizes not only the technical soundness of regulatory instruments but also whether they protect the rights of affected individuals and communities, especially those disproportionately harmed by environmental degradation caused by illegal mining activities (galamsey). The HRBA demands that legal frameworks ensure accountability, transparency, participation, and access to remedies which are principles essential to democratic governance and sustainable development.

¹¹ Article 42, *ACHPR*, 01 June, 1981.

¹² Article 12, *ICESCR*, 16 December 1966.

Literature Review

This section of this paper reviews key literature in the mining sector upon which this dissertation will use as a stepping stone and as a guide towards the goal of filling in the gaps.

In the paper, titled “*Human Rights and Climate Change*” Savaresi provides a comprehensive exploration of the convergence between human rights law and climate change obligations, offering a compelling argument that environmental degradation is fundamentally a human rights issue. The author outlines how various rights such as the rights to life, health, water, food, and adequate housing are increasingly endangered by environmental harm and failures in state action.¹³ While her discussion is rooted in the global climate change context, it bears strong relevance to issues surrounding illegal mining (galamsey) in Ghana, which similarly threatens these core rights, particularly in vulnerable communities.

One of the paper’s key strengths is its articulation of the positive obligations of the state. Savaresi stresses that governments are not only prohibited from directly infringing on human rights but are also required to regulate third parties (including corporations) to prevent them from causing harm.¹⁴ This reinforces one of the central premises of this dissertation: the Ghanaian state’s legal and institutional failure to prevent, regulate, or redress the harms caused by illegal mining constitutes a violation of its human rights obligations.

Additionally, the author highlights the importance of procedural rights, such as access to information, participation in decision-making, and access to remedies.¹⁵ These principles align with the Human Rights-Based Approach (HRBA) adopted in this research and support the call for community involvement and transparency in mining governance.

However, a notable gap in Savaresi’s work lies in its lack of engagement with specific domestic legal frameworks, especially in the Global South. While the paper eloquently frames the state’s duties in international human rights law, it does not delve into how these duties translate or fail to translate into enforceable obligations under national laws.

For Ghana, where weak enforcement, limited access to justice, and systemic corruption obstruct environmental accountability, this gap becomes crucial. Thus, this study seeks to extend

¹³ Savaresi A, Human Rights and Climate Change, *International Environmental Law-making and Diplomacy Review*, SSRN, 2019, 4.

¹⁴ Savaresi A, Human Rights and Climate Change, *International Environmental Law-making and Diplomacy Review*, SSRN, 2019, 12.

¹⁵ Savaresi A, Human Rights and Climate Change, *International Environmental Law-making and Diplomacy Review*, SSRN, 2019, 4.

Savaresi's work by focusing on domestic legal ineffectiveness and state complicity in the mining sector, areas that are largely underexplored in her analysis.

In summary, while Savaresi provides a foundational human rights lens through which environmental harm can be understood and addressed, her work leaves significant room for context-specific, state-level legal analysis and a deeper look into corporate accountability mechanisms, which this research undertakes.

In this next paper by Obeng et al titled '*Impact of illegal mining activities on forest ecosystem services: local communities' attitudes and willingness to participate in restoration activities in Ghana*', the authors examine the pervasive impact of illegal mining, commonly referred to as galamsey, on forest ecosystem services in Ghana. Their study assesses local community perceptions of these impacts and investigates their willingness to participate in restoration through incentive-based schemes like Payment for Ecosystem Services (PES).¹⁶ While the study provides critical insights into ecological degradation and community engagement, it offers limited discussion on the legal obligations and exploration systemic issues that contribute to this problem; a gap that this current dissertation seeks to address.

The research finds that illegal mining causes substantial environmental degradation, including deforestation, water pollution, erosion, and soil infertility.¹⁷ These findings underscore the destruction of non-market ecosystem services such as clean water, flood control, and biodiversity preservation. These adverse effects threaten not only environmental sustainability but also the socio-economic fabric of mining communities whose livelihoods heavily depend on agriculture and forest products¹⁸.

Despite the environmental mandates within Ghana's Minerals and Mining Act (2006) and Environmental Impact Assessment (EIA) requirements for licensed operators, enforcement remains weak. Obeng et al. note that illegal and non-compliant operations persist unchecked, suggesting that regulatory structures are either ineffective or compromised¹⁹. However, their focus remains ecological and behavioral, rather than legal or rights-based, thus sidestepping critical questions of legal and systemic loopholes which is an important dimension to this study.²⁰

¹⁶Obeng E, Oduro K, Obiri B, Abukari H, Guuroh R, Djagbletey G, Appiah-Korang J, and Appiah M, Impact of illegal mining activities on forest ecosystem services: local communities' attitudes and willingness to participate in restoration activities in Ghana, *Heliyon*, 2019, 1.

¹⁷ Obeng et al, Impact of illegal mining activities on forest ecosystem services, *Heliyon*, 2019, 2.

¹⁸ Obeng et al, Impact of illegal mining activities on forest ecosystem services, *Heliyon*, 2019, 5.

¹⁹ Obeng et al, Impact of illegal mining activities on forest ecosystem services, *Heliyon*, 2019, 2.

²⁰ Obeng et al, Impact of illegal mining activities on forest ecosystem services, *Heliyon*, 2019, 1.

The study also highlights that community members are highly aware of the degradation and are largely willing to participate in restoration efforts under PES frameworks.²¹ However, willingness to participate is shaped more by attitudinal factors (e.g., appreciation for ecosystem services, confidence in PES) than by socio-economic status pointing to a latent potential for participatory governance if harnessed properly.²² Yet, the research does not critically examine how current legal frameworks enable or hinder such participation, nor does it analyze whether the state has an obligation to facilitate these community efforts. The paper does not explore legal accountability or mechanisms for redress under national or international legal frameworks.

Another critical paper “*Governance challenges of small-scale gold mining in Ghana: Insights from a process net-map study*” by Adu-Baffour et al. offers an in-depth exploration of the multifaceted governance challenges that plague Ghana’s artisanal and small-scale mining (ASM) sector. It adopts a unique process net-map approach to trace the interactions among various actors and identify the governance bottlenecks across the ASM value chain.

The authors outline that despite Ghana’s relatively comprehensive legal framework, primarily constituted by the Minerals and Mining Act, 2006 (Act 703) and its amendments, effective implementation remains poor. The legislation, although updated in 2015 and 2019, fails to reflect the operational complexities and rapid mechanization characterizing modern ASM²³. Weak enforcement, information asymmetries, and bureaucratic inefficiencies are recurrent themes that undermine the efficacy of the regulatory framework²⁴.

A key strength of the paper lies in its conceptual framework, which classifies governance failures into three broad categories: market, state, and third sector failures.²⁵ Market failures occur when private mining actors externalise environmental costs without mechanisms to internalize them (e.g. land degradation and mercury pollution).²⁶ The state's failure is evident in both institutional design and operational inefficiency, ranging from unclear responsibilities to political leniency

²¹ Obeng et al, Impact of illegal mining activities on forest ecosystem services, Heliyon, 2019, 5.

²² Obeng et al, Impact of illegal mining activities on forest ecosystem services, Heliyon, 2019, 7.

²³ Adu-Baffour F, et al, ‘*Governance challenges of small-scale gold mining in Ghana: Insights from a process net-map study*’, 2021, 2.

²⁴ Adu-Baffour F, et al, ‘*Governance challenges of small-scale gold mining in Ghana: Insights from a process net-map study*’, 2021, 12.

²⁵ Adu-Baffour F, et al, ‘*Governance challenges of small-scale gold mining in Ghana: Insights from a process net-map study*’, 2021, 2.

²⁶ Adu-Baffour F, et al, ‘*Governance challenges of small-scale gold mining in Ghana: Insights from a process net-map study*’, 2021, 13.

and corruption, which contribute to the growing informality of the sector ²⁷. Meanwhile, third sector failures stem from coordination challenges and limited capacity among NGOs and community actors to enforce standards or advocate effectively.²⁸

Importantly, the paper emphasizes the ineffectiveness of formal mechanisms such as reclamation mandates and licensing procedures. While the legal framework mandates land rehabilitation and environmental protection, in practice, these processes are rarely enforced due to limited state capacity and elite capture at the local level²⁹. Even institutions like the EPA and the Minerals Commission, theoretically central to mining governance, are under-resourced, leaving implementation inconsistent and prone to abuse³⁰. This results in widespread environmental degradation, loss of arable land, and the erosion of community rights, particularly among vulnerable groups who depend on these resources for survival.

The study's primary weakness is that while it comprehensively diagnoses the governance problems, it lacks an equally detailed treatment of legal accountability mechanisms and does not delve deeply into human rights implications, especially with respect to constitutional provisions. This presents a clear gap and opportunity for further research into systemic and legal loopholes, and the legal empowerment of affected communities.

Chapter breakdown

Chapter 1 will serve as an introduction to the problem of gold mining and some insights on the background and historical underpinnings as well as the overall importance of the topic.

Chapter 2 will provide deeper understanding and contextual into the dynamics of mining focusing on galamsey and its consequences.

Chapter 3 will take a deep dive into an analysis of the Ghanaian legal framework and highlight its strengths, weaknesses and the loopholes it has which makes illegal mining a thriving industry for this long. To analyse the adequacy of legal and institutional mechanisms and existing legal framework that governs Artisanal and small-scale mining and illegal mining in Ghana.

²⁷ Adu-Baffour F, et al, 'Governance challenges of small-scale gold mining in Ghana: Insights from a process net-map study', 2021, 13.

²⁸ Adu-Baffour F, et al, 'Governance challenges of small-scale gold mining in Ghana: Insights from a process net-map study', 2021, 3.

²⁹ Adu-Baffour F, et al, 'Governance challenges of small-scale gold mining in Ghana: Insights from a process net-map study', 2021, 13.

³⁰ Adu-Baffour F, et al, 'Governance challenges of small-scale gold mining in Ghana: Insights from a process net-map study', 2021, 13.

Chapter 4 will compare the regulatory framework in Ghana to other jurisdictions to gain inspiration and study best practices.

Chapter 4 will investigate other jurisdictions and their best practices to gain insights and comparative lessons.

Chapter 5 will conclude on the findings, make recommendations practical and actionable legal and policy reforms aimed at improving enforcement, and accountability measures for communities impacted by mining-related pollution.

Chapter 2: Understanding galamsey and its effects

Galamsey is an informal term used to describe illegal and unregulated artisanal small-scale gold mining (ASM).³¹ Here, untrained common individuals, engage in mining activities like excavating earth with machinery such as tractors, excavators, and grinding mills. Vegetation is first cleared to enable deep digging into the soil which damages the soil structure. The indiscriminate clearing of the vegetation and cutting down of trees leads to soil erosion, significantly reducing the biodiversity available in the area, and negatively impacts the agricultural industry.³²

The chemicals that are used in mining include mercury, cyanide and sulfuric solvents. Mercury is the primary chemical utilized as it is particularly used for separating gold from the sand and other earth particles.³³ These heavy metals undoubtedly leech into the soil which is concerning because these illicit activities happen on river beds and near agricultural land and thus, they are absorbed into food and water sources of the communities.³⁴ One can infer how detrimental this is to the human body and the growth and development of vulnerable groups like children and pregnant women (and the unborn fetuses).³⁵

A statistic from the Ghana Health Services shows a consistent rise in birth mortality, stillbirths and other numerous birth related complications and difficulties in areas which struggle with illegal mining.³⁶ Not only does this affect the quality of food available, it affects the human body in multiple ways and leaves it incredibly vulnerable. Further, if the health of the human resource is consistently compromised then more spending power is directed towards health care putting further strain on the purses of already impoverished people straining not only individual pockets but also governmental and the national funds will have to be redirected to be utilized for medication and health infrastructure. In fact, one of the major side effects of consistent participation in these small-scale and illegal mining activities is respiratory complications.

³¹ Teye J, Lu J, and Crawford G, 'Inter-regional Migration in the Global South: Chinese Migrants in Ghana' in *The Palgrave Handbook of South-South Migration and Inequality*, 1, Palgrave Macmillan Cham, Research Gate, 2023, 10.

³² Teye J et al, 'Chinese Migrants in Ghana', 19.

³³ Salomons W, 'Environmental impact of metals derived from mining activities: Processes, predictions, prevention' 52 *Journal of Geochemical Exploration* 1, 1995, 6.

³⁴ Salomons W, 'Environmental impact of metals derived from mining activities', 52 *Journal of Geochemical Exploration*, 11.

³⁵ Awewomom *et al*, *A review of health hazards associated with exposure to galamsey-related pollutants*, 727.

³⁶ Awewomom *et al*, *A review of health hazards associated with exposure to galamsey-related pollutants*, 729

Airborne diseases such as pneumoconiosis (black lung disease) is the primary lung disorder acquired by the majority of miners as a result of the constant inhalation of dust and earth particles generated by the mining process³⁷. In addition to Black lung disease, these miners are susceptible to diseases such as asthma, pneumonia and bronchitis with coughing being the major symptom.³⁸

There have been countless efforts to resolve galamsey and its consequences by the government, notably, the utilization of militarized interventions which has proved futile thus far because the reasons for the continuous nature of this practice is incredibly complex including the fact that government officials themselves are involved in its perpetuation.³⁹ The Small-Scale Gold Mining Law 1989 (Provisional National Defense Council Law [PNDCL] 218) which attempted to regularise ASM in Ghana⁴⁰ introduced a licensing process which was consolidated in The Minerals and Mining Act, 2006 and gave miners the venue to apply for concessions of land as well as 3 to 5-year period licenses.⁴¹ Notwithstanding this progress, the process is lengthy, bureaucratic and costly which encourages miners to choose to remain unregistered where there is more freedom and leeway.⁴² Regardless of the seasonal military crackdowns, illegal miners (galamseyers) are able to operate somewhat freely, bestowing upon it an “alegal” nature meaning it is ‘*intentionally tolerated by law enforcement*’.⁴³

The prevalence and the flourishing nature of illegal mining, can also be owed to the prioritisation of the large scale sector, the big concessions of land leaving rural dwellers dispossessed, the role of traditional authorities (chiefs), the interests of politicians and the migration of Chinese miners.⁴⁴ From the year 2006, the influx of Chinese migrant miners increased consistently and exponentially and began to peak and contribute significantly to small-scale production in 2012-2013. Given the visible presence of the aliens, one may ask where the state was while so

³⁷ Awewomom *et al*, *A review of health hazards associated with exposure to galamsey-related pollutants*, 729.

³⁸ Awewomom *et al*, *A review of health hazards associated with exposure to galamsey-related pollutants*, 729.

³⁹ Crawford G *et al*, *Militarisation and criminalisation of artisanal and small-scale gold mining*, 45(156), *Review of African Political Economy*, 2018, 322.

⁴⁰ Small-Scale Gold Mining Law (1989).

⁴¹ Crawford G *et al*, *Militarisation and criminalisation of artisanal and small-scale gold mining*, *Review of African Political Economy*, 2018, 323.

⁴² Gaisie O, ‘Intersection between Ecological Destruction and Human Rights: Study of Illegal Mining Activities in Ghana’ Published, The University of Manitoba, Winnipeg, Year, 54.

⁴³ Teschner BA, ‘Small-scale mining in Ghana: The government and the galamsey’ 37 *Resources Policy* 3, 2012, 310.

⁴⁴ Hilson G, Hilson A and Adu-Darko E, ‘Chinese participation in Ghana’s informal gold mining economy: Drivers, implications and clarifications’ 34 *Journal of Rural Studies* 1, 2014, 295.

much blatant illegalities were ongoing⁴⁵; the most obvious answer being that the state was clearly ignoring this phenomenon up until pressure from the media in mid 2013 essentially cornered them.⁴⁶ The state as well as traditional authorities were not oblivious as all this destruction was taking place and seem to have benefited from the large sums of money being made from illicit mining.⁴⁷ Many allegations have been leveled against state officials and traditional authorities frequently particularly with news that chiefs were in the business of selling land to Chinese miners and local galamseyers for their personal gain despite their traditional role prohibiting this.⁴⁸

One may wonder why military crackdowns which are neither efficient nor sustainable even happen in the first place. A common explanation is that the state is desperate to make a show off move in the face of increasing media pressure and the reason they resort to this heavy handed and dramatic approach is because of the complicit nature of government and state officials and thus the noise could help to conceal their wrong doings.⁴⁹

‘Operation Vanguard’ was launched in the year 2017 as a joint military-police operation to combat and ultimately, end galamsey.⁵⁰ Strangely, the operation which was set up to tackle an internal civilian problem, was led by the army rather than the police.⁵¹ The approach the government tends to take in its efforts to deal with this issue is rather problematic for the reason that ASM, however disorganized, creates numerous and important employment opportunities for a significant number of impoverished rural dwellers.⁵² With unemployment being a significant concern in Ghana, it's difficult to blame the participants wholly and it is worrisome for the authorities to subject them to frequent ineffective military crackdowns.⁵³

⁴⁵ Crawford G et al, *Militarisation and criminalisation of artisanal and small-scale gold mining*, Volume 45, No. 156, Review of African Political Economy, 2018, 6.

⁴⁶ Hilson et al, ‘Chinese participation in Ghana’s informal gold mining economy’, 34 Journal of Rural Studies, 294.

⁴⁷ Hilson et al, ‘Chinese participation in Ghana’s informal gold mining economy’, 34 Journal of Rural Studies, 297.

⁴⁸ Hilson et al, ‘Chinese participation in Ghana’s informal gold mining economy’, 34 Journal of Rural Studies, 295.

⁴⁹ Crawford G et al, *Militarisation and criminalisation of artisanal and small-scale gold mining*, Review of African Political Economy, 2018, 325.

⁵⁰ Danish Institute for International Studies, Halt and Vanguard, December 2021, 2.

⁵¹ Danish Institute for International Studies, Halt and Vanguard, December 2021, 2.

⁵² African Center for Economic Transformation (ACET), Jobless growth is Ghana’s biggest youth challenge, 2023 — <https://acetforafrica.org/research-and-analysis/insights-ideas/commentary/jobless-growth-is-ghanas-biggest-youth-challenge/> on [2 April 2025].

⁵³ Crawford G et al, *Militarisation and criminalisation of artisanal and small-scale gold mining*, Review of African Political Economy, 2018, 329.

Another point worthy of note is the fact that the state itself could derive significant state revenue which could be used for the provision of public services.⁵⁴ The revenue gained by this sector has been underestimated for a long time with the focus being on large scale mining. The increase in illicit activities as well as the smuggling of gold demonstrates that there is an open market for the mineral extracted and with proper and organized systems, the Ghanaian government could regularise and regulate the market and create an avenue where small-scale mining is not done in the dark.⁵⁵ A fundamental issue as to why the notoriety of this sector remains is the state's failure to regularise and formalise the sector.⁵⁶ There are instances where miners submit a license application but due to the fast paced nature of the sector it becomes impossible to wait and thus they begin operations prematurely.⁵⁷ With mechanisation, the entire site may now be mined out in a relatively short period, often before the decision on the licence application is made by state institutions.⁵⁸ Consequently, the sector remains overwhelmingly informal, with all the accompanying problems, most notably environmental destruction. There is clearly a need for the state to simplify the licensing process reducing overburdensome costs and offer support to licensed miners, for instance in improved exploration and mineral processing techniques.⁵⁹ Galamsey has been misunderstood generally to be either an issue one person or one whose solution is straight forward that is why with every new president or administration there are calls all over to #StopGalamseyNow.⁶⁰ It is a socio-political⁶¹ and systemic issue with multiple direct and indirect players, thus all efforts to address or resolve it must be holistic and systemic in nature as many solutions come and do not last because the realities on the ground are far different from what they seem.⁶²

⁵⁴Crawford G, Botchwey G and Atta-Quayson A, The impact of Chinese involvement in small-scale gold mining in Ghana, International Growth Centre, 2015, 50,

—<https://www.theigc.org/sites/default/files/2016/08/Crawford-et-al-2015-Final-Report-1.pdf> on 29 March 2025.

⁵⁵ Crawford et al, The impact of Chinese involvement, 51.

⁵⁶Hilson et al, 'Chinese participation in Ghana's informal gold mining economy', 34 Journal of Rural Studies, 298.

⁵⁷ Crawford G et al, *Militarisation and criminalisation of artisanal and small-scale gold mining*, Review of African Political Economy, 2018, 330.

⁵⁸ Crawford G et al, *Militarisation and criminalisation of artisanal and small-scale gold mining*, Review of African Political Economy, 2018, 331.

⁵⁹ Crawford G et al, *Militarisation and criminalisation of artisanal and small-scale gold mining*, Review of African Political Economy, 2018, 331.

⁶⁰ Asori M, et al, *Is illegal mining socio-politically entrenched?*—<<https://link.springer.com/article/10.1007/s10708-022-10725-1#citeas>> on 8 April 2025.

⁶¹ Asori M, Mpobi R, Morgan A, Apoanaba T, Katey D, Ampofo S, Julius S and Appiah A, *Is illegal mining socio-politically entrenched? An opinion piece of the interaction between formal politics and chief dominance in mineral governance, and its influence on fighting Galamsey in Ghana*, Geojournal, e—<<https://link.springer.com/article/10.1007/s10708-022-10725-1#citeas>> on 8 April 2025.

⁶² Mintah L, *INDABA 2025: How can Ghana combat illegal mining?* Watson Farley & Williams, 2025, 3.

Conclusion

In conclusion, gold in Ghana has been a core part of the nation's identity and progress throughout the years but has seen a dramatic shift in its acquisition. Galamsey, as illegal small-scale gold mining, poses profound socio-economic, environmental, and health challenges in Ghana, driven by systemic governance failures, socio-political complicity, economic desperation and gaps in the current legal and regulatory framework. Illegal mining continues to gain popularity in spite of its consequences and the efforts of the general public and government efforts to put an end to it. The state's contradictory approach in tolerating illegality through corruption, as seen with Chinese miners' influx, then resorting to militarized crackdowns on scapegoats low-income miners while ignoring elite collusion undermines the official and public efforts to resolve the issues practically and systematically. These dynamics underscore galamsey's complexity, rendering simplistic solutions like military interventions ineffective.

Chapter 3: Analysis of the legal Framework in Ghana

Introduction

This part of this study takes a deep dive into an analysis of the Ghanaian legal framework and highlights its strengths, weaknesses and the loopholes which makes illegal mining a thriving industry. The focus here will primarily be on inaccessible licensing⁶³ of mining operations which excludes the poor, driving galamsey as a survival tactic. It will discuss also the weak enforcement of the provisions of the Mining Act⁶⁴, insufficient penalties and inadequate resources which fail to deter illegal mining as well. Environmental neglect provisions⁶⁵ which seem to only apply to licensed miners, leaving galamsey's pollution unchecked community as well as disenfranchisement mainly because benefits are centralized which excludes locals and fuels the resource curse will also be covered by this section.⁶⁶ The way socio-economic oversight as fees and compensation burdens deter legal small-scale mining.⁶⁷

The legal framework for mining in Ghana is anchored in the 1992 Constitution⁶⁸ with the primary legislation being the Minerals and Mining Act (703) 2006⁶⁹, as amended by the Minerals and Mining (Amendment) Act, (2015 Act 900) and Minerals and Mining (Amendment) (Act 2019 Act 995)⁷⁰ which was preceded by the Small-Scale Mining Act.⁷¹

Ownership of Minerals

The 1992 Constitution of Ghana (COG) establishes the foundational principles for mineral resource governance through Article 257(6) which vests all mineral resources in their natural state in the President on behalf of the people of Ghana.⁷²

“ Every mineral in its natural state in, under or upon any land in Ghana, rivers, streams,

⁶³ Sections 9, 11, 83, Minerals and Mining Act, (703 of 2006).

⁶⁴ Sections 106-109, Minerals and Mining Act, (703 of 2006).

⁶⁵ Section 17-18, Minerals and Mining Act, (703 of 2006).

⁶⁶ Sections 1, 27, 49, Minerals and Mining Act, (703 of 2006).

⁶⁷ Sections 22-25, 73-74, Minerals and Mining Act, (703 of 2006).

⁶⁸ Constitution of Ghana, 1992.

⁶⁹ Minerals and Mining Act, (703 of 2006).

⁷⁰ Article 257(6), Constitution of Ghana (1992).

⁷¹ Small-Scale Gold Mining Law, Ghana, 1989 (PNDCL 218)

⁷² Article 257(6), Constitution of Ghana (1992).

water courses throughout Ghana, the exclusive economic zone and any area covered by the territorial sea or continental shelf is the property of the Republic of Ghana and shall be vested in the President on behalf of, and in trust for the people of Ghana.”

Section 1 of the MMA⁷³ reinforces this by stating that, "Every mineral in its natural state... is the property of the Republic and is vested in the President in trust for the people of Ghana."

Upon further examination we discover Article 267 (1) of the COG⁷⁴ which provides as well that ‘All stool lands in Ghana shall vest in the appropriate stool on behalf of, and in trust for the subjects of the stool in accordance with customary law and usage’

The intent of the sections is to centralise mineral ownership under the state to manage resources for national benefit but a tension and contrast is created between the central government and the local authority due to the two seemingly contrasting constitutional provisions. While minerals are state-owned, land is often controlled by chiefs under customary tenure which creates tension with local authorities pointing to a critical gap⁷⁵. In fact, the different types of land tenure systems which creates a dual authority structure where chiefs lease land to illegal miners for personal gain, undermining state control.⁷⁶ The Act does not clarify or regulate this interplay, leaving a loophole for galamsey to flourish on customary lands.

Furthermore, the vesting of all the minerals in the President leads to an exclusion of communities because "in trust for the people"⁷⁷ does not translate to tangible benefits for mining communities, fuelling the resource curse. Profits flow to the central government or foreign firms, while locals face pollution and poverty, driving them to illegal mining as a means of reclaiming benefits.⁷⁸

On the topic of ownership, section 72(3)⁷⁹ of the MMA provides that ‘the lawful occupier of land within an area subject to a mineral right shall retain the right to graze livestock upon or to cultivate the surface of the land if the grazing or cultivation does not interfere with the mineral operations in the area.’ Basically occupiers retain grazing and or cultivation rights if these rights do not interfere with mining activities. This is intended to protect surface rights and to

⁷³ Section 1, Minerals and Mining Act, (703 of 2006).

⁷⁴ Article 267(1), Constitution of Ghana (1992).

⁷⁵ Adjei B, Tudzi E, Owusu-Ansah A, Kidido J and Durán-Díaz P, The Impacts of Mining Industries on Land Tenure in Ghana: A Comprehensive Systematic Literature Review, *Land*, 2024, 2.

⁷⁶ Adu-Baffour F, et al, ‘*Governance challenges of small-scale gold mining in Ghana: Insights from a process net-map study*’, 2021, 6.

⁷⁷ Article 257(1), Constitution of Ghana (1992).

⁷⁸ Adomako-Kwakye C and Adjei-Bediako E, *Is the Mineral Development Fund Act, the Panacea for development of mining areas in Ghana?*, Research Gate, 2019, 17.

⁷⁹ Section 72(3) Minerals and Mining (703 of 2006).

compensate affected parties but this actively cures one problem and then creates another. It is difficult to envision a land that is being used for both mining and farming without there being dire consequences like clashes between the concerned parties and the cross pollution of the soil with heavy metals that leach into the crops.⁸⁰ The provision is unrealistic and unenforceable, leaving communities vulnerable and creating a breeding ground for dispute and tension. Section 73 also places an additional cost burden on the mining right owners for further compensation for disturbance of surface rights.⁸¹ Small-scale miners, unlike large firms, lack funds for resettlement, making compliance unlikely and encouraging illegal operations to evade such costs.⁸²

2. Licensing Requirements

Ghana's Minerals and Mining Act (2006, Act 703), amended in 2015 and 2019, legalized artisanal and small-scale mining (ASM) but imposes a one-size-fits-all licensing process.⁸³ Small-scale miners panning for alluvial gold with rudimentary tools face the same bureaucratic hurdles as larger operators.⁸⁴ The licensing process is costly, time-consuming (sometimes years), and centralized in Accra, alienating rural miners. A substantive percentage of ASM operations remain informal because compliance is impractical.⁸⁵

Section 9(1) of the Act instructs that no person shall conduct mining activities without a mineral right. Section 11 also provides that applications for mineral rights require detailed financial, technical, and employment plans.⁸⁶ In Section 13, the Minister for Lands and Natural Resources decides on applications within 60 days, with notice to chiefs and district Assemblies⁸⁷. Sections 83-94 of the Act⁸⁸ zeros in on the regulation of small-scale mining. Though positive with its intentions to regularise artisanal mining and protect landowners, it does not reflect the reality of

⁸⁰Asuamah S, *Digging Deeper: The Impact of Illegal Mining on Economic Growth and Development in Ghana*, Munich Personal RePEc Archive, 2023, 35.

⁸¹ Section 73, Minerals and Mining Act, (703 of 2006).

⁸²Asuamah S, *Digging Deeper: The Impact of Illegal Mining on Economic Growth and Development in Ghana*, Munich Personal RePEc Archive, 2023, 6.

⁸³ Sections 9, 11 and 13, Minerals and Mining Act, (703 of 2006).

⁸⁴ Arthur-Holmes F and Ofosu G, 'Rethinking state-led formalisation of artisanal and small-scale mining (ASM): Towards mining licence categorisation, women empowerment and environmental sustainability' *Resources Policy* 90, 2024, 2.

⁸⁵ Arthur-Holmes and Ofosu, 'Rethinking state-led formalisation', *Resources Policy*, 3.

⁸⁶Section 11, Minerals and Mining Act (703 of 2006).

⁸⁷ Section 13, Minerals and Mining Act (703 of 2006).

⁸⁸ Sections 83-94, Minerals and Mining Act, (703 of 2006).

current day small-scale mining. There is a limited classification of mining activities which does not provide for different types of mining. There is only large-scale mining, artisanal mining which is legal small-scale mining and then illegal mining which falls outside the scope of the law. The MMA does not provide structures for other forms or classification of mining for people who do not have the capacity to abide by the current procedural and financial requirements. Equally importantly, the licensing process is very bureaucratic which is less than ideal for the largely illiterate and semi-literate population that engages in galamsey which ultimately leads to exclusion due to poverty and illiteracy thus making galamsey seem like a positive alternative. These provisions are intended to regulate mining through a formal licensing process, ensuring only qualified entities operate but they simultaneously create a couple of bureaucratic barriers.⁸⁹ Section 11 provides for financial and technical particulars (an estimate of the amount of money proposed to be spent on the operations)⁹⁰ and excludes impoverished Ghanaians who lack resources or expertise to comply. This pushes them to galamsey, as the legal pathway is inaccessible and simply too expensive.⁹¹

Section 13(7) of this Act further provides that⁹² subject to its provision, a mineral right shall be subject to the terms and conditions that are prescribed from time to time. The phrase '*from time to time*' suggests conditions can change unpredictably, creating uncertainty for applicants and potentially allowing arbitrary ministerial discretion, which could favour large firms over small-scale miners.⁹³

3. Environmental and Resource Use

Sections 17 and 18 of the MMA make provisions⁹⁴ for environmental and resource use with the intent of balancing mining activities with environmental sustainability. In light of the many environmental issues that come along with mining, these are progressive by providing requirements for the approval and permits of the appropriate commissions such as the Forestry

⁸⁹ Chen MA, Rethinking the Informal Economy: Linkages with the Formal Economy and the Formal Regulatory Environment, WIEGO Working Paper No. 46, 2007, 22, —<https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=5eb3b93dac9be3828a1b6e43e163da424e1f447> 7 on 20 March 2025.

⁹⁰ Section 11(b), Minerals and Mining Act, (703 of 2006).

⁹¹ Chen M. A, Rethinking the Informal Economy, 4.

⁹² Section 13(7), Minerals and Mining Act (703 of 2006).

⁹³ Section 13(7), Minerals and Mining Act (703 of 2006).

⁹⁴ Section 17&18, Minerals and Mining Act (703 of 2006).

Commission⁹⁵ and the Environmental Protection Agency (EPA)⁹⁶. Section 93⁹⁷ of the MMA provides the need to utilize effective and efficient methods of mining for environmental preservation in small-scale mining but does not define what such methods are.

However, as is consistent with the rest of the concerns of the provisions in this Act, there is a lack of mechanisms to monitor or penalize unlicensed water use which directly affects and impacts community rights to clean water.⁹⁸ Theoretically, it is such a positive stride but enforcement is inadequate due to underfunded agencies and illegal miners operate outside this framework, rendering these provisions ineffective against galamsey's deforestation and pollution.⁹⁹

4. Fees and Royalties

For sections 22-25 of the MMA, the Act makes provisions for payment of requisite fees and royalties. Section 22 stipulates that 'an applicant for a mineral right shall pay a fee as may be prescribed'.¹⁰⁰ The phrase 'as may be prescribed' is obviously very vague and leaves too much room for undefined fee structures to create uncertainty and potential for corruption. This is important particularly because a systemic issue Ghana struggles with is corruption and this provides a fertile ground for it to flourish. Sections 22, 23 and 24 prescribe different requisite fees: application fees, annual ground rent to landowners and royalties paid to the government. The intent of these provisions is actually to generate income to compensate land owners as well but understanding that illegal miners are driven to engage in illicit activities due to financial difficulties and poverty, the costs add to the licensing burden, driving illegality.¹⁰¹ The purpose of this critique is to in no way suggest that the government should not receive due rent payments but simply to point out the multi-layered levels of commitment which simple members of the community members turned miners cannot afford to subscribe to.

⁹⁵ <<https://mlnr.gov.gh/forestry-commission/>> on 9 April 2025.

⁹⁶ <<https://www.ghana.gov.gh/mdas/ef703f0e96/>> on 9 April 2025.

⁹⁷ Section 93, Minerals and Mining Act (703 of 2006).

⁹⁸ Arthur D, *Human right to Water and in Ghana: A Reality or Otherwise for Indigenous People in Galamsey Communities*, SSRN, 2024, 1.

⁹⁹ Chen M. A, *Rethinking the Informal Economy*, 4.

¹⁰⁰ Section 22, Minerals and Mining Act (703 of 2006).

¹⁰¹ Stærfeldt LK and Stacey PA, 'Environmental governance and political contestation in contexts of illegal small-scale gold mining in Ghana' *Geoforum* 120, 2025, 5, on 2 April 2021.

Furthermore, Article 267(6) of the COG proceeds to prescribe percentages of revenue accruing from stool lands which also goes to the government.¹⁰² The cumulative burden of the fees disproportionately affect small-scale miners, who often lack capital compared to multinational firms. An analysis of just this part of the Act makes it evident that galamsey is a way suitable and cheaper alternative.¹⁰³ Though gold mining should benefit the entire country, the mining communities are disproportionately affected by the undertaken activities, and because they do not see any direct benefit or improvement in the quality of their lives they opt to participate in illegalities in an attempt to level out the playing field.¹⁰⁴

5. Dispute Resolution (Section 27)

At first glance, it is seemingly very positive that this Act has a couple of dispute resolution provisions, particularly section 27 which for the purposes of this paper provides an avenue for disputes between a holder and the Republic to be resolved through discussion or alternative dispute resolution (ADR).¹⁰⁵ The goal is to provide a mechanism for settling conflicts but it is provided for only right holders. There is a lack of provision for regulatory procedure for disputes that arise between non-right holders, which is essentially the rest of the community members who are affected by the mining activities and the states or the corporations.¹⁰⁶ Seemingly, the priority is only given to direct holders of mining rights to the detriment of the community at large. The Act focuses on holders vs. the state, ignoring affected communities (e.g., farmers losing land to pollution). No legal avenue exists for them to seek redress, exacerbating human rights violations and local discontent.¹⁰⁷

7. Offences and Penalties (Sections 106-109)

At the very least, it is a good and progressive effort of the Act to criminalise and put legal measures in place to deter illegal mining.¹⁰⁸ In the subsequent amendments, it is clear that there

¹⁰² Article 267(6), Constitution of Ghana (1992).

¹⁰³ Adu-Baffour F, et al, '*Governance challenges of small-scale gold mining in Ghana: Insights from a process net-map study*', 2021, 12.

¹⁰⁴ Stærfeldt and Stacey, 'Environmental governance and political contestation', 3.

¹⁰⁵ Section 27, Minerals and Mining Act (703 of 2006).

¹⁰⁶ Appiah-Kubi C, Illegal Small-Scale Mining (Galamsey) and its Impact on the Human Rights of Ghanaians, 5(1), *Journal of Modern Law and Policy*, 2025, 4.

¹⁰⁷ Appiah-Kubi C, Illegal Small-Scale Mining (Galamsey) and its Impact on the Human Rights of Ghanaians, 5(1), *Journal of Modern Law and Policy*, 2025, 4.

¹⁰⁸ Adu-Baffour F, et al, '*Governance challenges of small-scale gold mining in Ghana: Insights from a process net-map study*', 2021, 6.

are many efforts to make illegal mining an unattractive and high stakes adventure. ¹⁰⁹ The 2019 Amendment¹¹⁰ introduced new offences and modified existing ones to address emerging issues in the mining sector, reflecting the government's adaptive approach to regulation. It even went as far as including provisions to address offences committed by corporate entities and groups to extend accountability beyond individuals to organizations involved in illegal mining activities.¹¹¹ These amendments collectively demonstrate Ghana's ongoing efforts to refine its mining laws, aiming to balance resource exploitation with environmental protection and community welfare. Unfortunately a problem which undermines the efforts of this Act is that penalties are inconsistent and often lenient as many times the punitive measures veer towards fines over jail time which pales in comparison to the profits raked in by galamsey profits.¹¹² Furthermore, many times these miners have the support of powerful figures behind the scenes which makes it almost impossible to hold them accountable.¹¹³ Additionally, enforcement is rare due to corruption and resource constraints.

Section 109 of the Act¹¹⁴ dictates that “penalty to be civil debt except otherwise provided in this Act, where a fine is imposed on a person under this Act or Regulations made under this Act and there is failure to pay the fine, the amount shall be recoverable as a civil debt owed to the State”. The Act does not specify mechanisms for collecting fines from these illegal miners who often have no tangible assets thus the question is how effective can penalties be? This seems like a practical gap because “how shall it be recovered”?

In the 2015 Amendment, Act 900, section 99 was amended to introduce stricter penalties for illegal mining activities, reflecting the government's commitment to combating unauthorized mining operations.¹¹⁵ Then the 2019 Amendment, Act 905, made further modifications to this section by imposing even harsher penalties for illegal mining. This progression positively underscores the escalating efforts to deter illegal mining practices and protect the environment

¹⁰⁹ Minerals and Mining (Amendment) Acts 900&995

¹¹⁰ Section 81, Minerals and Mining (Amendment) (Act 995 of 2019)

¹¹¹ Section 96A, Minerals and Mining (Amendment) (Act 995 of 2019)

¹¹² Adu-Baffour F, et al, ‘*Governance challenges of small-scale gold mining in Ghana: Insights from a process net-map study*’, 2021, 4.

¹¹³ Adu-Baffour F, et al, ‘*Governance challenges of small-scale gold mining in Ghana: Insights from a process net-map study*’, 2021, 4.

¹¹⁴ Section 109, Minerals and Mining Act (703 of 2006).

¹¹⁵ Section 99, Minerals and Mining (Amendment) Act (900 of 2015).

and indirectly exposes the fact that this is not a particularly legal flaw but rather a systemic and socio-economic one.¹¹⁶

Conclusion

From the analysis of the legal framework there are a couple of issues that come out to light.

First, there is a disconnect between the rules and the actual reality. The framework does not account for the diversity of operations, from subsistence diggers to mechanized groups backed by foreign financiers (e.g., Chinese investors). This mismatch makes rules seem irrelevant to grassroots miners, driving illegality.¹¹⁷

Furthermore, there is not enough consultation and involvement of the inhabitants of the mining communities in the large-scale mining process and the perceived inequitable distribution of socioeconomic benefit.¹¹⁸ This is partly because laws and governing principles are typically created at the federal level, not in the municipalities charged with enforcing the law.”¹¹⁹

Enforcement is also weakened as it is hamstrung by limited resources, inadequate training, and corruption.¹²⁰ Police and officials often take bribes, while politically connected figures such as regional leaders or chiefs allegedly shield operations.¹²¹ Furthermore, due to the lack of sustained and practical effort initiatives like Operation Vanguard (2017) fail as miners return post-crackdown.¹²² Structural socio-economic drivers particularly, poverty and unemployment, push over a million Ghanaians into galamsey.¹²³ With gold prices high,¹²⁴ It is a lucrative, accessible livelihood. Large-scale mining, prioritized under reform, displaces rural communities, leaving them few options but illegal mining on concessioned land.¹²⁵ The complexity of the land

¹¹⁶ Section 99, Minerals and Mining (Amendment) Act (995 of 2019).

¹¹⁷ Kumah R, *Ghana's illegal mining continues because the rules and realities are disconnected*, The Conversation, 2022, 2.

¹¹⁸ Bandura R and Hardman A, Center for Strategic and International Studies (CSIS), *Environmental, Social, and Governance Best Practices Applied to Mining Operations*, 9 April 2025, 3.

¹¹⁹ Bandura R et al, Center for Strategic and International Studies (CSIS), *Environmental, Social, and Governance Best Practices Applied to Mining Operations*, 9 April 2025, 4.

¹²⁰ Bandura R et al, Center for Strategic and International Studies (CSIS), *Environmental, Social, and Governance Best Practices Applied to Mining Operations*, 9 April 2025, 4.

¹²¹ Teye J et al, 'Chinese Migrants in Ghana', 10.

¹²² Crawford G et al, *Militarisation and criminalisation of artisanal and small-scale gold mining*, Volume 45, No. 156, Review of African Political Economy, 2018, 13.

¹²³ Asori M, et al, *Is illegal mining socio-politically entrenched?*, 4

—<<https://link.springer.com/article/10.1007/s10708-022-10725-1#citeas> > on 8 April 2025.

¹²⁴ <<https://www.bullionbypost.co.uk/info/gold-price-forecast-2025/#:~:text=UBS%20have%20revised%20their%20forecast,figure%20of%20%243%2C139%20for%202025.> > on 9 April 2025.

¹²⁵ Gilson G, Imperial College Centre for Environmental Technology, *A Contextual Review of the Ghanaian Small-scale Mining Industry*, September 2001, 17.

tenure system also fuels illegalities as Ghana's dual land system which is characterized by state mineral rights versus customary ownership by chiefs creates confusion and loopholes allowing miners to negotiate informally with traditional leaders for small fees, bypassing formal licensing. This parallel system disrupts accountability and fosters illegality.¹²⁶

Foreign influence especially due to the influx of Chinese miners and equipment since the 2000s, often in illegal partnerships with locals, has escalated galamsey's scale.¹²⁷ Ghanaian law reserves ASM for citizens,¹²⁸ but enforcement is rather lax, and these foreign financiers exploit the regulatory gaps.¹²⁹

¹²⁶ Adjei B, et al, *The Impacts of Mining Industries on Land Tenure in Ghana*, *Land*, 2024, 1.

¹²⁷Section 83(a), *Minerals and Mining Act*, (703 of 2006).

¹²⁸ Teye J et al, 'Chinese Migrants in Ghana', 6.

¹²⁹ Teye J et al, 'Chinese Migrants in Ghana', 9.

Chapter 4: Structural Drivers and Comparative Lessons

Introduction

Through a comparative analysis of Botswana’s transparent governance and the Philippines’ cooperative mining model, this chapter offers practical, context-sensitive strategies for Ghana. It concludes with reform proposals for legal realignment, improved enforcement, enhanced community engagement, and technological integration.

It begins by situating the issue within Ghana’s legal and enforcement failures, then presents comparative case studies, followed by reform proposals for legal, institutional, and community-driven intervention. Although the legal framework is somewhat vague and lacks thorough mechanism of procedure and accountability It has become abundantly clear that the actual problems are deeper than the letter of the law.

Legal and Systemic Failures: Lessons from Botswana and the Philippines

Botswana

Transparent Governance

Botswana, a diamond-dependent economy in Southern Africa, stands out as a regional leader in mining governance, with negligible illegal mining due to robust systemic reforms, community inclusion, and transparent institutions. Its approach provides Ghana with a blueprint for addressing galamsey’s structural drivers and governance failures.

Addressing Systemic Issues

Botswana’s Mines and Minerals Act,¹³⁰ governs mining by centralizing licensing under the Ministry of Minerals and Energy while mandating transparency in contract allocation. Unlike Ghana, where corruption enables galamsey through untracked concessions and missing seized equipment¹³¹ Botswana ranks 43rd globally on the Corruption Perceptions Index¹³², reflecting its relatively low levels of perceived corruption and strong institutional integrity. The Resource Governance Index, 2017¹³³, rates Botswana’s mining sector as “satisfactory” for transparent revenue management, ensuring diamond profits are reinvested into public goods. This contrast

¹³⁰ Section 3, Mines and Minerals Act, (17 of 1999).

¹³¹ Crawford C and Botchwey G, Conflict, collusion and corruption in small-scale gold mining: Chinese miners and the state in Ghana, 55, *Commonwealth & Comparative politics*, 2017, 15.

¹³² <<https://www.transparency.org/en/cpi/2024/index/bwa>> on 7 April 2025.

¹³³ <<https://resourcegovernanceindex.org/country-profiles/BWA/mining?years=2017>> on 11 April 2025.

with Ghana's considerable annual revenue loss to galamsey¹³⁴, much of which bypasses formal channels due to accountability gaps.¹³⁵

Economic diversification

This is central to Botswana's success. The government allocates mining revenue to education, healthcare, and infrastructure through the National Development Plan¹³⁶, reducing poverty-driven illegal mining. For instance, the Technical and Vocational Education and Training (TVET)¹³⁷ developed a training program which trained school children who are over the age of 16 and gives vocational and entrepreneurial skills which works towards actively reducing unemployment and idleness.¹³⁸ This proactive approach addresses the unemployment that fuels Ghana's galamsey, where over 1 million engage in galamsey due to limited alternatives¹³⁹. Botswana's enforcement is equally robust.

The Department of Mines conducts regular audits¹⁴⁰, and high compliance stems from community trust and historic economic stability¹⁴¹, unlike Ghana's underfunded Minerals Commission, which struggles to monitor vast regions¹⁴².

Community and Traditional Authorities

Botswana excels in community engagement, where mining companies like Debswana contribute profits to local development.¹⁴³ Community-based organizations also assist and foster local ownership and oversight, reducing incentives for illicit mining.¹⁴⁴ In contrast, Ghana's Act 703

¹³⁴ World Bank Group, Ghana Country Environmental Analysis, April 2020, 25.

¹³⁵

<<https://www.theguardian.com/world/2024/nov/25/polluted-rivers-taxes-ghana-illegal-gold-mining-boom#:~:text=Today%2C%20galamsey%20accounts%20for%20more,bn>> on 5th April 2025.

¹³⁶ Government of Botswana, National Development Plan 11, 2017, 45.

¹³⁷ World Bank, Building Better Formal Tvet Systems Principles And Practice In Low- And Middle-Income Countries, 22.

¹³⁸ Africa Skills Portal For Youth Employment And Entrepreneurship, *TVET Country Profile Botswana*, 2022, 1-2.

¹³⁹ Teschner B, 'Small-scale mining in Ghana: The government and the galamsey' Resources Policy, 2012, — <<https://www.sciencedirect.com/science/article/abs/pii/S0301420712000074>> on 4 July 2024.

¹⁴⁰ International Idea, Mineral Resource Governance in Botswana, 2024, 14.

¹⁴¹ <<https://thedocs.worldbank.org/en/doc/bae48ff2fefc5a869546775b3f010735-0500062021/related/mpo-bwa.pdf>> on 10 April 2025.

¹⁴² Lujala, P. and Narh, J., Ghana's Minerals Development Fund Act: Addressing the needs of mining communities, *Journal of Energy & Natural Resources Law*, 38(2), 2019, 5.

¹⁴³ World Bank Group, *Botswana Mining Investment and Governance Review*, 2015, 7.

¹⁴⁴ Mbaiwa J.E, Community-Based Natural Resource Management in Botswana in van der Duim, R., Lamers, M., van Wijk, J. (eds) *Institutional Arrangements for Conservation, Development and Tourism in Eastern and Southern Africa*, Springer, 2014, 2.

lacks community engagement mandates, leaving locals marginalized and chiefs free to lease land for galamsey without accountability¹⁴⁵

Traditional authorities in Botswana, under customary law, advise on land use but are subject to state oversight via the Tribal Land Act¹⁴⁶. This prevents unilateral deals, unlike Ghana, where chiefs' unchecked power fuels illegal mining as The Administration of the Stool Lands Act (AOSL),¹⁴⁷ does not have provisions or mechanisms for accountability or transparency. The functions of the AOSL do not even include provision for oversight for transparency with regards to funds received.¹⁴⁸

Philippines:

Minahang Bayan and Local Government Unit (LGU) Governance

The Philippines' Minahang Bayan model, rooted in community-led mining cooperatives, offers a transformative approach to formalizing ASM and curbing illegal mining. By addressing economic exclusion and empowering locals, it provides Ghana with a practical framework to tackle galamsey's socio-economic roots.

Addressing Systemic Issues

The Philippine Mining Act, 1995¹⁴⁹, establish Minahang Bayan zones, where communities mine legally under cooperative structures.¹⁵⁰ This has aided in the formalization of artisanal mining as well as reducing unemployment and supporting the livelihood of another two million people nationwide¹⁵¹. Ghana, with majority of ASM unlicensed under Act 995, faces similar bureaucratic barriers¹⁵².

Enforcement is decentralized to Local Government Units (LGUs), easing pressure on national agencies like the Mines and Geosciences Bureau, unlike Ghana's centralized Minerals Commission, which lacks district-level capacity¹⁵³. However, illegal mining persists outside

¹⁴⁵ Minerals and Mining Act (703 of 2006).

¹⁴⁶ Section 5, Tribal Land Act, (1 of 2018).

¹⁴⁷ Administration of the Stool Lands Act, (123 of 1962).

¹⁴⁸ Adomako-Kwakye C and Adjei-Bediako E, *Is the Mineral Development Fund Act, the Panacea for development of mining areas in Ghana?*, Research Gate, 2019, 8.

¹⁴⁹ Section 4, Philippine Mining Act (7942 of 1995).

¹⁵⁰ Llaguno E, Soriano V, Tamayao M, *Improving the Minahang Bayan Declaration Process: A First Step Towards Achieving Sustainability in Philippine Small-Scale Gold Mining Industry*, 37(1) 2016, 2.

¹⁵¹ Planet Gold, *The Resiliency of the Philippine Small-Scale Mining Communities*, 24 December 2020, 1.

¹⁵² World Bank Group, Ghana Country Environmental Analysis, April 2020, 85.

¹⁵³ Santos, M, Analysis and Lessons from Decentralisation and its Implications to Local Environmental Planning and Management in the Philippines, *Journal of Public Policy*, 5(2), 2013, 109.

zones due to poverty, echoing galamsey's economic pull. Minahang Bayan addresses this through economic inclusion particularly through cooperatives sharing profits, funding jobs and businesses. This offers Ghana's mining community inhabitants an alternative to the farming-galamsey binary.

Community and Traditional Authorities

Section 5 of the People's Small-Scale Mining Act¹⁵⁴, details how the Secretary can designate specific areas for small-scale mining. While not explicitly stating community consent, the Act includes a provision for public consultations and participation during the declaration process, which could be seen as a form of community involvement. Section 16¹⁵⁵ of the Act emphasizes that no ancestral land shall be opened for mining operations without the prior consent of the indigenous cultural community concerned. This highlights the importance of community agreement before mining activities can begin on their lands. Communities are empowered to reject non-compliant projects and veto licenses, a power Ghana's locals lack under Act 995¹⁵⁶. Elected leaders manage operations, ensuring accountability, unlike Ghana's top-down licensing, which excludes communities¹⁵⁷. These local government are empowered to legislate and make policies beneficial to their societies by engaging with NGOs as well as the public ensuring a wider range and distribution of benefits and intragenerational equity¹⁵⁸. Their role is structured, requiring community consensus, unlike Ghana's chiefs, who lease land for galamsey without oversight. Ghana could adapt this to regulate chiefs as anti-galamsey partners.

Lessons for Ghana

Botswana's transparent licensing suggests Ghana publish concessions online, enhancing Act 995's monitoring and reducing corruption. Funding inspections with forfeiture proceeds could mirror Botswana's audit model. Piloting Minahang Bayan-style zones in galamsey hotspots (e.g., Tarkwa) would formalize miners under Act 995, with district assemblies overseeing compliance. With regards to community engagement adopting Trust Funds would redirect Ghana's royalties (currently mismanaged) to community projects, incentivizing local anti-galamsey vigilance and

¹⁵⁴ Section 5 of Small People's Small-Scale Mining Act (Act 7076 of 1991).

¹⁵⁵ Section 5 of Small People's Small-Scale Mining Act (Act 7076 of 1991).

¹⁵⁶ Holden W and Jacobson D, Mining amid decentralization local governments and mining in the Philippines, Natural Resources Forum, 2006, 5.

¹⁵⁷ Holden W et al, Mining amid decentralization local governments and mining in the Philippines, 2006, 5.

¹⁵⁸ Holden W et al, Mining amid decentralization local governments and mining in the Philippines, 2006, .

regulating chiefs via oversight boards. Mandating community consent and cooperative governance would empower Ghanaian locals and curb chief-driven land deals, integrating traditional authorities into regulated forums.

Furthemore, investing royalties in TVET programs, like Botswana, would diversify livelihoods, addressing the goal of breaking Ghana's farming-galamsey trap. Cooperatives' job creation supports diversification suggesting that Ghana form ASM collectives to fund trades like carpentry, reducing galamsey reliance.

In conclusion, Ghana has a good and valuable position to learn lessons from other countries who are also developing and face similar challenges that the nations face and their quest and journey to overcoming them. By undertaking a comparative analysis it makes clear the comparative and contextual models that Ghana can adapt to its systems to strengthen governance and promote efficiency and sustainability.

Chapter 5: Conclusion and Recommendations

Building on the comparative insights from Botswana, the Philippines and the available literature., this section proposes context-specific reforms aimed at addressing the legal, institutional, and systemic gaps that continue to hinder Ghana’s efforts to regulate artisanal and small-scale mining.

1. Reform the Legal Framework

There is a mismatch between the laws of the land and the realities on the ground.¹⁵⁹ The laws that are meant to govern the lives of the people are not sensitive to their real lives and nuances there is very little incentive to obey and the perception that legal frameworks disproportionately target certain populations while allowing others to operate with impunity continues to thrive.¹⁶⁰

Notwithstanding the fact that a mining licence as well as environmental permit can only be acquired in the head office situated in Accra Ghana’s small-scale governance has a positively fair amount of decentralization with district-level Minerals Commission offices and regional EPA oversight.¹⁶¹ Expectedly this decentralized nature should alleviate governance challenges but in actual fact identified constraints with regards to staff, technological, logistical capacity and due to security concerns in most of these districts, regional and zonal public regulating offices are restricted in their duties and are often instructed to keep regulations limited to reporting to the appropriate agencies instead of active visitation and oversight.¹⁶²

As it turns out these illegally operating mines are occasionally backed by powerful individuals within the government, however which makes it even more possible for them to continue to operate even after police (and sometimes military) intervention.¹⁶³

¹⁵⁹ Kumah R, *Ghana’s illegal mining continues because the rules and realities are disconnected*, The Conversation, 2022, 1.

¹⁶⁰ Kumah R, *Ghana’s illegal mining continues because the rules and realities are disconnected*, The Conversation, 2022, 2.

¹⁶¹ Corbett T, O’Faircheallaigh C and Regan A, “Designated areas” and the regulation of artisanal and small-scale mining’ 52 Resources Policy 1, 2017, 5–6.

¹⁶² Adu-Baffour F, et al, ‘*Governance challenges of small-scale gold mining in Ghana: Insights from a process net-map study*’, 2021, 13.

¹⁶³ Adu-Baffour F, et al, ‘*Governance challenges of small-scale gold mining in Ghana: Insights from a process net-map study*’, 2021, 13.

Furthermore, there is a need for regulations to be tailored. The current legal framework takes on a blanket one-size-fits-all approach.¹⁶⁴ It provides for large corporations and small-scale miners. Anything that does not fit in this category is illegalized which puts more pressure on individuals to defy the laws for self-sustenance.¹⁶⁵ Providing a framework for distinguishing between different types of mining such as artisanal (subsistence) and small-scale (mechanized) mining, and setting appropriate and practical rules and fees provides more room for participants to engage in mining activities in a way that the government can be involved and can monitor with much ease.¹⁶⁶ This is all the more crucial because the informal sector continues to grow and depart from rudimentary mechanisms and machines. There is increasing development and income generation which is unfortunately being undermined by the current framework.¹⁶⁷ The current framework also does not provide legal remedy mechanisms for individuals and communities who are affected by the consequences of mining to seek redress.¹⁶⁸ Mining activities interfere with the normal and daily lives of the inhabitants and thus there must be increased community involvement as well as a framework or mechanism which offers effective legal remedies through which the community can be protected from harm and their rights, upheld.¹⁶⁹

2. Strengthen Governance and Enforcement

It is important to enact clear systemic positive initiatives such as equipping and training forestry guards and police to counter armed miners, possibly integrating military support with clear oversight. This is crucial because history shows that arming and enabling regulatory forces in fact contributes to more tensions and clashes between miners and the police and authorities.¹⁷⁰

¹⁶⁴ Kumah R, Artisanal and small-scale mining formalization challenges in Ghana: Explaining grassroots perspectives, Resources Policy, 2022, 1, ---<<https://www.sciencedirect.com/science/article/abs/pii/S0301420722004214>> on 9 April 2025.

¹⁶⁵ Kumah R, *Ghana's illegal mining continues because the rules and realities are disconnected*, The Conversation, 2022, 2.

¹⁶⁶ Kumah R, *Ghana's illegal mining continues because the rules and realities are disconnected*, The Conversation, 2022, 2.

¹⁶⁷ Van Bockstael S, 'The persistence of informality: perspectives on the future of artisanal mining in Liberia' 62 Futures 10, 2014, 12–16.

¹⁶⁸ Minerals and Mining Act (703 of 2006).

¹⁶⁹ Mensah A, Mahiri I, Owusu O, Mireku O, Wireko I, and Kissi E, Environmental Impacts of Mining: A Study of Mining Communities in Ghana, 3(3) *Applied Ecology and Environmental Sciences*, 2015, 12.

¹⁷⁰ Bansah K, Acquah and Assan E, Guns and fires: The use of military force to eradicate informal mining, 11(101139), *The Extractive Industries and Society*, 2022, 2.

There is a need for proper and seamless coordination between different levels of government in Ghana which has been hindered by inconsistent policies and limited communication can hinder the effective enforcement of mining regulations.¹⁷¹

A major way this can be achieved is by the integration of traditional and local authorities. The structure of many African countries supports informal politics because the formal economy is not developed enough to allow the proper allocation of resources through more formal channels.¹⁷²

Local authorities (Chiefs) are a part of the illegal mining ecosystem and therefore it is necessary to partner with them in terms of licensing and monitoring especially because they are not as vulnerable as politicians are to the masses as they do not require public vote to be in power.¹⁷³

Furthermore, due to the historic, ethnic ties the people have towards their local and traditional authorities, it makes it a brilliant move to heavily involve these parties in the change we are aiming to make.¹⁷⁴ A more formal role within the state frameworks then makes for effective governance as they would have legal and financial backing.¹⁷⁵

Traditional authorities, apparently, are greatly revered which makes it out to seem as though they possess a status of invincibility but it is crucial that all forms of government have a system of checks and balances. The tenure land system needs alignment and the leaders must be accountable and not just gatekeepers.¹⁷⁶

3. Address Structural Drivers

It is clear now that one of the biggest drivers of illegal mining is systemic and structural more than legal. Many Ghanaians especially in mining communities are living in poverty and the provision of training for alternative work spaces can help alleviate the pressure felt to engage in quick money schemes regardless of the huge risks (fines, imprisonment, bodily danger, pollution ets).¹⁷⁷ These individuals and communities believe they have a binary way of self-sustenance;

¹⁷¹ Mintah L, *INDABA 2025: How can Ghana combat illegal mining?* Watson Farley & Williams, 2025, 3.

¹⁷² Lawer ET, Lukas MC and Jørgensen SH, 'The neglected role of local institutions in the "resource curse" debate: Limestone mining in the Krobo region of Ghana' 54 *Resources Policy* 43, 2017, 45.

¹⁷³ Adu-Baffour F, et al, '*Governance challenges of small-scale gold mining in Ghana: Insights from a process net-map study*', 2021, 10.

¹⁷⁴ Lawer et al, 'The neglected role of local institutions', 46.

¹⁷⁵ Lawer et al, 'The neglected role of local institutions', 47.

¹⁷⁶ Article 36(8), Constitution of Ghana(1992).

¹⁷⁷ Adu-Baffour F, et al, '*Governance challenges of small-scale gold mining in Ghana: Insights from a process net-map study*', 2021, 3.

farming or mining so there is an urgent need to diversify the human resource and invest in alternative livelihoods

In the Philippines, "Livelihoods Restoration Programme" under the "Minahang Bayan" initiative is a government-led effort to formalize and support artisanal and small-scale mining (ASM) while mitigating its social and environmental harms. This program includes training in alternative livelihood, financial literacy as well as environmental practices.¹⁷⁸

The government should invest in agriculture, vocational training or agro processing in mining regions as well as investing in small-scale mining communities. The overarching goal should be ensuring that the skills acquired match job requirements which empowers the miners and reduces and hopefully eradicates dependence on illicit activities and helps to promote sustainable economic growth in the long term.¹⁷⁹ A challenge that can be foreseen, though, is acquiring government approval and funding for these investments. This is of utmost importance as a big part of such initiatives is consistency and sustained flow of support, at least at the infancy stages and then working towards a sustainable self-sufficient system. This is crucial as a breakage in the flow would cause anxiety leading to a return to the 'old ways' due to the lack of stability or security. Proper management and progressive sustainable actions and development will be a long shot but the future of self-funding in the small-scale mining industry, which does not need to be shouldered by the central government is bright.¹⁸⁰

Furthermore, these mining activities provide different types of downstream employment opportunities to different people thus when there is a crackdown it affects and disrupts a whole ecosystem bigger than the direct partakers of the mining.¹⁸¹

Formalizing communities as well is important. By having systems through which galamsey workers can register into cooperatives which will offer technical support (e.g. mercury-free tech) and market access.¹⁸²

4. Leverage Technology

¹⁷⁸ Mintah L, *INDABA 2025: How can Ghana combat illegal mining?* Watson Farley & Williams, 2025, 4.

¹⁷⁹ Mintah L, *INDABA 2025: How can Ghana combat illegal mining?* Watson Farley & Williams, 2025, 4.

¹⁸⁰ Mintah L, *INDABA 2025: How can Ghana combat illegal mining?* Watson Farley & Williams, 2025, 4.

¹⁸¹ Hilson G and McQuilken J, 'Four decades of support for artisanal and small-scale mining in sub-Saharan Africa: A critical review' *1 Extractive Industries and Society* 2, 2014, 109.

¹⁸² Adu-Baffour F, et al, '*Governance challenges of small-scale gold mining in Ghana: Insights from a process net-map study*', 2021, 14.

This is a good idea in theory and to bring it to life will require a substantial amount of investments and efficiency. Usage of drones, satellite imagery and geoscience technology as is done in South Africa¹⁸³, to monitor illegal sites, can assist authorities in monitoring mineral rich areas and to keep track of illegal mining activities and to report violations in real-time.

Additionally, to promote the marketing of sustainably and ethically sourced gold, blockchain tracking tools such as De Beers' blockchain diamond tracking¹⁸⁴ could prove to be very helpful.¹⁸⁵ However, this would require extensive investment and technology transfer, likely requiring public-private partnerships to ensure successful implementation. Such investments may require registration with the Ghana Investment Promotion Centre (GIPC), which is in alignment with the country's framework to encourage and regulate foreign investments.¹⁸⁶

In conclusion, Botswana and the Philippines offer a balanced framework for Ghana to combat galamsey. Botswana's transparency and Trust Funds prevent illicit mining by addressing governance and poverty, while the Philippines' Minahang Bayan formalizes ASM through community control and livelihoods. By blending these transparent licensing, cooperative zones, tribunals, and diversification funds initiatives Ghana can reform Act 995 to enforce laws, engage communities, remedy harm, and break the farming-galamsey binary. These reforms alleviate galamsey's causes (economic desperation, corruption) and consequences (environmental ruin, exclusion), paving the way for sustainable mining governance.

Conclusion

This study set out to examine the persistent plague of illegal small-scale mining, also known as, galamsey, in Ghana, initially hypothesizing that inadequate or lenient laws underpin its environmental, human rights, and socio-economic tolls on mining communities.

Chapter 1 set forth a strong foundation for an introduction to this paper by giving a preliminary context and outlook to the research that followed. It provided the structure within which the research was being conducted, its background, and provided its importance.

¹⁸³ —<<https://www.geoscience.org.za/cgs/scientific-operations/geoscience-mapping/>> on 9 April, 2025.

¹⁸⁴ —<<https://www.debeersgroup.com/sustainability-and-ethics/leading-ethical-practices-across-the-industry/tracr>> on 9 April 2025.

¹⁸⁵ Mintah L, *INDABA 2025: How can Ghana combat illegal mining?* Watson Farley & Williams, 2025, 3.

¹⁸⁶ —<<https://www.ghana.gov.gh/mdas/ad4daaa174/>> on 9 April 2025.

Chapter 2 conducted a deep dive into the socio-economic, political and environmental underpinnings of galamsey. It traced gold mining's historical roots from pre-colonial abundance to colonial exploitation and post-independence mechanization, revealing how galamsey emerged as an unregulated byproduct of systemic neglect, exacerbated by Chinese involvement since the 2000s. It highlighted the stark consequences: the increasing pollution of water bodies, the loss of forest cover due to deforestation and rising health crises like birth defects and respiratory diseases, disproportionately burdening vulnerable populations. These impacts, framed through a Human Rights-Based Approach (HRBA) underscored a governance crisis beyond mere legal inadequacy

Chapter 3 progressed into analysing the legal framework, the Minerals and Mining Act, 2006 (Act 703), as amended by Acts 900 (2015) and 995 (2019) which governs mining activities in Ghana. While the Act and its predecessors, like the Small-Scale Gold Mining Law, 1989 (PNDCL 218), establish a robust structure by centralizing mineral ownership, mandating licenses, and imposing penalties, its effectiveness is undermined by systemic flaws. Inaccessible licensing (Sections 9, 11, 83) excludes over 1 million impoverished Ghanaians with bureaucratic hurdles and costs, driving them to galamsey. Weak enforcement (Sections 106-109), despite harsher penalties post-2019, falters under resource constraints and corruption, rendering initiatives like Operation Vanguard temporary. Environmental provisions (Sections 17-18) neglect galamsey's pollution, community disenfranchisement (Sections 1, 27, 49) centralises benefits, and socio-economic oversight (Sections 22-25, 73-74) burdens small-scale miners, amplifying illegality. Structural drivers such as poverty, dual land tenure, and foreign influence further entrench galamsey's "alegal" status, disproving that legal stringency alone is the issue.

Chapter 4 pivoted toward systemic reform by exploring practical solutions beyond legal amendment. It proposed a multi-faceted approach to address the entrenched structural drivers of galamsey, drawing on comparative insights from Botswana and the Philippines. Key recommendations included decentralized licensing mechanisms and tailored regulatory categories to formalize diverse types of artisanal and small-scale mining (ASM). Inspired by Botswana's transparent licensing regime and the Philippines' Minahang Bayan cooperative zones, these measures aim to enhance local oversight and improve compliance. It also emphasized community-based enforcement structures, and the integration of traditional

authorities into formal governance frameworks, echoing Botswana and The Philippines' success in aligning local leadership with national regulation.

Chapter 5 concludes by making tailored recommendations to Ghana underscoring the importance of economic diversification through investments in agro-processing, vocational training, and cooperatives as seen in both Botswana's vocational programs. The proposals reflect a shift from punitive crackdowns to a holistic governance model that recognizes the socio-economic realities underpinning illegal mining in Ghana. These reforms, grounded in comparative analysis, shift the focus from punitive crackdowns to holistic governance, prioritizing the layman-turned-miner over corporate dominance.

This dissertation concludes that galamsey's persistence in Ghana reflects not merely a failure of legal design but a deeper crisis of systemic governance. While Act 703 and its amendments provide a comprehensive framework, their vague provisions (e.g., "effective methods," Section 93), bureaucratic barriers, and enforcement deficits, compounded by poverty, corruption, and a dual land tenure system create a permissive environment for illegal mining. The state's reliance on militarized responses masks its complicity, as traditional authorities and officials profit from galamsey's proceeds, without accountability. This misalignment between rules and reality perpetuates a resource curse, where gold wealth fuels environmental ruin and human rights violations rather than development, leaving mining communities in Western and Ashanti regions impoverished despite their mineral riches. The proposed reforms offer a path forward, aligning with HRBA's call for state accountability. Decentralizing licensing and tailoring regulations can formalize informal ASM, reducing illegality's scale. Strengthening enforcement through community wardens and anti-corruption measures, paired with economic alternatives, tackles root causes; poverty and unemployment, while integrating chiefs ensures governance coherence. Comparative models prove these strategies viable, yet their success hinges on Ghana's political will to prioritize systemic reform over short-term crackdowns.

These findings urge Ghana's policymakers to rethink mining governance holistically. Parliament should amend Act 703 to clarify operational terms, streamline licensing with subsidized fees and diversify classification of small-scale mining. Traditional authorities should be empowered and given more formal and protected roles with transparency mandates, while civil society (e.g.,

NGOs) monitor implementation. Collectively, these steps could transform ASM into a regulated, revenue-generating sector, aligning mineral wealth with sustainable development.

Final Reflection

Without addressing root causes, crackdowns like Galamstop or Vanguard will remain temporary like bandages on a festering wound. Galamsey's toll on Ghana's environment and people is a call for change. Legal clarity alone cannot dismantle its roots; only an integrated approach melding enforceable laws with structural solutions can restore the vibrancy of Ghana's gold and green. This dissertation offers a blueprint, urging stakeholders to act decisively for justice, sustainability, and the rights of those who bear mining's heaviest burdens.

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