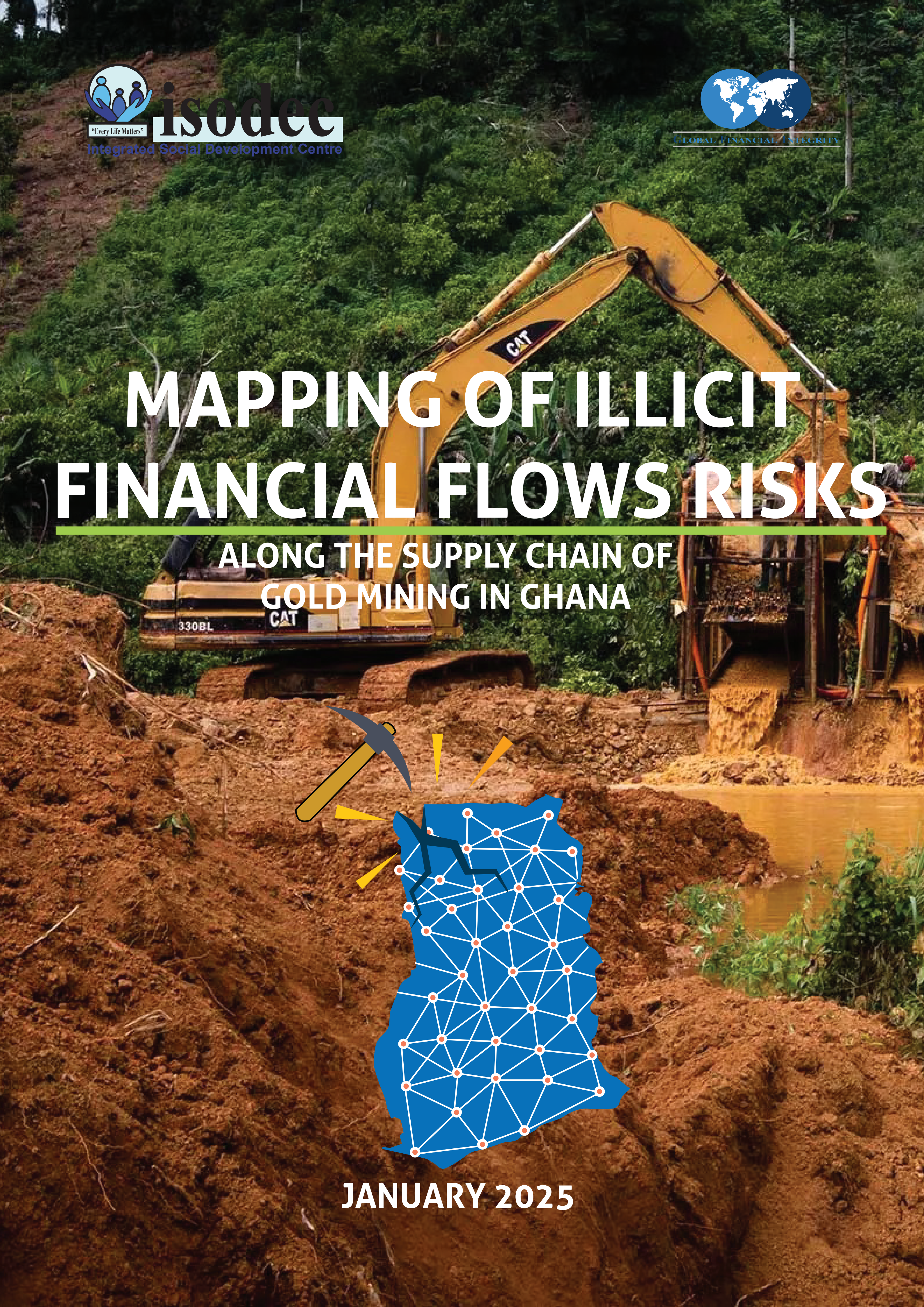
"Every Life Matters" isodec
Integrated Social Development Centre

GLOBAL FINANCIAL INTEGRITY

MAPPING OF ILLICIT FINANCIAL FLOWS RISKS

ALONG THE SUPPLY CHAIN OF GOLD MINING IN GHANA



JANUARY 2025

MAPPING OF ILLICIT FINANCIAL FLOWS RISKS

ALONG THE SUPPLY CHAIN OF GOLD MINING IN GHANA

JANUARY 2025

DISCLAIMER

A Study Prepared for Global Financial Integrity (GFI) by the Integrated Social Development Centre (ISODEC) funded by the Norwegian Agency for Development Cooperation (NORAD)

"Every Life Matters"

isodec

Integrated Social Development Centre

ACKNOWLEDGEMENTS

This report fulfils the deliverable to conduct a study on the "Mapping of Supply Chain Issues that Limit Domestic Resource Mobilization in the Mining Sector of Ghana".

This study was produced at the request of Global Financial Integrity (GFI) as part of the "Project Illicit Financial Flows Reduced and Domestic Resource Mobilisation Increased in Targeted Countries" financed by Norwegian Agency for Development Cooperation (NORAD). It was prepared independently by ISODEC's research team made up of Charlotte Kpogli (Project Lead), Dr. Donatus Ayitey, Dr. Augustine K. Yeboah, and Dr. Bishop Akolgo. It was prepared under the direction of Mr. Samson Salifu Danse, the Executive Director of ISODEC.

ISODEC extends its deepest gratitude to Global Financial Integrity for its generous funding support, which made this study possible. Their commitment to promoting corporate, natural resource, and professional integrity has been instrumental in advancing our research and findings.

We also wish to acknowledge the invaluable contributions of the participants from diverse sectors, particularly respondents from Talensi, Kenyasi and Obuasi. Your insights, expertise, and active engagement were crucial in ensuring the comprehensiveness and accuracy of the report. Your dedication to enhancing transparency and accountability in the mining sector is greatly appreciated.

Editors:

Maxwell Kpebesaan Kuuire - Policy Analyst West Africa, GFI

Philip Nyakundi Gichana- Policy Director Africa, GFI

Design:

Dennis Kabia - Communications Director - East and Central Africa, GFI

Images:

Pixabay

TABLE OF CONTENTS

LIST OF ABBREVIATIONS

ASM	Artisanal Small Scale Mining
AML	Anti-Money Laundering
DRM	Domestic Resource Mobilizations
GFI	Global Financial Integrity
IFFs	Illicit Financial Flows
ISODEC	Integrated Social Development Centre
NORAD	Norwegian Agency for Development Cooperation
GPS	Global Positioning System
GRA	Ghana Revenue Authority

EXECUTIVE SUMMARY

i. Introduction

This study examines the risks of illicit financial flows (IFFs) in the supply chain of Ghana's gold mining sub-sector. The objective of the study is to map the supply chain issues that limit domestic resource mobilization in the mining sub-sector of Ghana. It specifically uncovers the evident strands of exploitation and the hidden knots and tangles that threaten the integrity and future prosperity of the gold mining industry. Furthermore, it highlights how the nation's gold resources could be harnessed for sustainable development and economic integrity. The study was conducted at a community level (micro-level). Primary data on IFFs risk(s), their level of prevalence and institutions involved in the mining or extraction, processing, transportation and marketing and sales, were collected through field visits to the selected mining communities; Talensi, Kenyasi and Obuasi aimed at evaluating the IFFs' risks along the supply chain of gold mining in their communities. These community visits were aimed at facilitating active community involvement and ensured that the participatory approach gives hands-on data in case the community members have experienced any form of IFFs when dealing with the gold mining companies in their communities. A total of 81 individual interviews were conducted and 77 (95%) responses were deemed valid and were used in the analysis. The study also draws on desk research including a review of existing literature and reports at both the community and national levels in other African countries and globally.

ii. Key Findings

Prevalence of Corruption: The study reveals that corruption among government officials is widely perceived as a major driver of IFFs in the mining sector. A substantial 66.23% of respondents believe that corruption contributes to these illicit activities "to a very large extent." This underscores the systemic nature of corruption and its role in facilitating the illegal outflow of funds.

Role of Multinational Mining Companies: The influence of multinational mining companies in driving IFFs is another significant concern. A majority of respondents (74.03%) view the role of these companies as "very significant," highlighting the need for greater scrutiny and accountability in their operations. The practices of these corporations often exploit weak regulatory frameworks, exacerbating the problem of IFFs.

The key findings on IFFs' Risks, Prevalence, and Actors Involvement along the supply chain of gold mining in Ghana are as follows:

(Please note that: above 70% - High Involvement, 50%-69% - Medium Involvement, below 50%- Low Involvement)

1. Mining or Extraction Stage

- Key IFF Risks: Trade mis-invoicing, false reporting of gold quantities, corruption.
- Prevalence: High at this stage due to direct extraction and financial flows.
- Actors Involved (Ranked by Involvement):

1. Minerals Commission – 56 (73%)
2. Local Suppliers – 51 (66%)
3. Mines Inspectorate – 46 (60%)
4. Precious Mineral Marketing Company – 40 (52%)
5. GRA - Mining Audit Desk – 20 (26%)

2. Processing Stage

- Key IFF Risks: Gold smuggling, misreporting of gold purity, trade mis-invoicing, gold laundering.
- Prevalence: High prevalence due to processing loopholes (75%-78%).
- Actors Involved (Ranked by Involvement):

1. Minerals Commission – 54 (70%)
2. Local Suppliers – 53 (69%)
3. Precious Mineral Marketing Company – 50 (65%)
4. GRA - Mining Audit Desk – 48 (62%)
5. Mines Inspectorate – 49 (64%)

3. Transportation Stage

- Key IFF Risks: Gold smuggling, trade mis-invoicing, falsified transportation documents, tax evasion.
- Prevalence: High due to gold movement across borders.
- Actors Involved (Ranked by Involvement):

1. Local Suppliers – 59 (77%)
2. GRA - Large Taxpayer Office – 50 (65%)
3. Precious Mineral Marketing Company – 48 (62%)
4. GRA - Mining Audit Desk – 46 (60%)
5. Minerals Commission – 28 (36%)

4. Marketing and Sales Stage

- Key IFF Risks: Bribery, falsified invoices, tax evasion, trade mis-invoicing, profit shifting, gold smuggling.

- Prevalence: High due to manipulation of sales agreements, misreporting, and corruption.

- Actors Involved (Ranked by Involvement):

1. GRA - Mining Audit Desk – 52 (68%)
2. GRA - Transfer Pricing Unit – 50 (65%)
3. Precious Mineral Marketing Company – 49 (64%)
4. GRA - Customs – 50 (65%)
5. GRA - Large Taxpayer Office – 46 (60%)

iii. Policy Implications

The pervasive nature of IFFs in Ghana's mining sector has far-reaching implications for the country's economy, governance, and social development. These flows not only deplete the nation's financial resources but also perpetuate inequality, weaken institutions, and hinder efforts to improve public services such as healthcare. The widespread perception of corruption and the significant role of multinational corporations in driving IFFs suggest that addressing this issue requires both national and international efforts. Companies that handle the movement of gold, either as raw ore or refined products, might also hide the true ownership of companies. These entities evade scrutiny and accountability by obscuring their real ownership, making enforcing legal and regulatory measures harder. Lack of transparency about gold mining activities, financial transactions, and beneficial ownership can facilitate various forms of illicit financial activities that prevents domestic resource mobilization.

iv. Policy Actions

Policy Action 1: At the mining or extraction stage, government should adopt stringent monitoring and enforcement of royalty and tax payments, including regular auditing of mining operations. The integration of digital tools and automated systems for tracking ore extraction and production will improve accountability.

Policy Action 2: With the processing stage, strengthening customs and trade verification procedures, including independent assay reports for precious metals, can mitigate risks. Implementing traceability systems for mineral processing, such as blockchain technology, will ensure transparency from the mines to markets. Governments should work with regional bodies to establish cross-border cooperation to address smuggling and underreporting.

Policy Action 3: For the transportation stage, strengthening customs enforcement and using digital technologies such as GPS tracking for shipments of minerals can mitigate risks. Regional cooperation is necessary to harmonize border controls and customs protocols. Policies should encourage the use of formal transportation channels and incentivize compliance with tax and customs laws.

Policy Action 4: With the marketing and sales stage, the government must require full transparency in marketing and sales transactions. There should be effective implementation of the law that mandate public disclosure of beneficial ownership of companies involved in marketing. The introduction of automated transaction monitoring systems for pricing and sales agreements could reduce undervaluation and mis-invoicing. Strengthening anti-corruption measures and enforcing penalties for buyers and brokers involved in illicit activities is crucial.

CHAPTER ONE

INTRODUCTION

1.1 Background and context

Mining in Ghana can be equated to a grand tapestry rich with history and intricate patterns. The thread that binds this tapestry is gold, an abundant resource that once earned the country the name "Gold Coast." During the era of British colonial rule, this valuable cord was pulled and manipulated, often to the detriment of the local people, as they weaved their designs of wealth and power through its exploitation. After independence, the nation and corporations continued to assert their wealth and power through modern economic systems, specifically local and international trade. Most importantly, the exploitation and trade of natural endowments continued to dominate, becoming the driver of economic growth and prosperity of citizens of countries such as Norway, the United Arab Emirates, Qatar, Saudi Arabia, Botswana, and Trinidad and Tobago [1]. However, for many nations, combinations of legal and illegal tradecrafts are employed to outsmart partners in trade transactions, resulting in Illicit Financial Flows (IFFs). Global Financial Integrity refers to IFFs as money or capital illegally earned, transferred, or used that crosses borders [2].

There are widespread assertions that developing countries stand to gain significantly from the windfall that comes with natural resources, but there is no assurance that they will be able to take advantage of it and use resources as a springboard for widespread, sustainable prosperity [3]. Interestingly, this observation is accurate mainly because Africa's undue reliance on the extractive sectors for export revenue and income typically exposes the industry to IFFs[4] and its associated consequences. IFFs in the African extractives sector, including Ghana's mining industry, stem from various sources such as tax evasion, corruption, and illegal exploitation [5]. Including the three already mentioned, ACEP added transfer pricing, TIN capitalization manipulations, resource smuggling, and illegal mining activities such as 'Galamsey' through which IFFs are occasioned [6]. Transfer pricing may have a detrimental effect on revenue receipts [7]. They explained that since most mining firms have extensive relationships with linked businesses and conduct business abroad, this expands the possibility of transfer pricing and may reduce tax obligations.

[1] Alhinai, Alkhatab (2017) Economic Diversification Obstacles in Resource-Dependent States Through The Lens Of Resource Curse Theory: Oman As A Case Study, Durham theses, Durham University. Available at Durham E-Theses Online: http://etheses.dur.ac.uk/12446/
[2] Global Financial Integrity (n.d). Illicit Financial Flows. https://gfintegrity.org/issue/illicit-financial-flows/
[3] McKinsey Global Institute (2013), Reverse the curse: Maximizing the potential of resource-driven economies
[4] Ali-Nakyea, A. (2017). Illicit financial flows hampering West Africa's attainment of SDGs. Retrieved from https://www.tighana.org/news/gii-in-the-media/illicit-financial-flows-hampering-westafricas-attainment-of-sdgs-ali-nakyea/
[5] Le Billon, P. (2011). Extractive Sectors and Illicit Financial Flows. http://www.cmi.no/publications/file/4248-extractive-sectorsand- illicit-financial-flows.pdf
[6] African Centre for Energy Policy (ACEP), (2015, February): Illicit Financial Flows and The Extractive Industry in Ghana.
[7] Ayee, J., S.reide, T., Shukla, G. P., & Le, T. M. (2011). Political Economy of the Mining Sector in Ghana. Policy Research Working Paper 5730

On the scale of IFFs in the extractives, UNTAD estimates at least $40 billion is linked to the extractive commodities on the continent, of which gold is the highest contributor, with 77%, 12% to diamonds, 6% to platinum, and 5% to other extractive commodities.[8] Evidence of IFFs in Ghana's gold mining sector is substantial, with many studies suggesting that the country loses billions of dollars annually. For instance, results of an analysis involving daily frequency and transaction-level data from Ghana Customs between 2011 and 2017 indicate gold and cocoa exports to be abnormally undervalued.[9] They observed that corporate tax base erosion of USD 2.2 billion in constant prices (base year 2011), corresponding to an average annual decrease of 0.3% in Ghana's tax-to-GDP ratio.[10] Similarly, Ghana's Economic and Organized Crime Office investigated some Gold Export Companies from 2019 and 2021, revealing that over US$1 billion flowed illegally.[11]

The development challenges posed by IFFs are enormous. They siphon off significant government revenue resources, reducing funds for crucial public services like healthcare, education, and infrastructure. IFFs reduce resources, but they are also symptomatic of other issues that constrain poverty reduction and shared prosperity, such as vested interests and weak transparency and accountability.[12] Besides, IFFs undermine governance and economic stability, fostering cyclical corruption and reducing the state's ability to enforce regulations. Recognizing the negative impacts of IFFs, the Inter-Agency Task Force for Development, popularly called the Addis Ababa Action Agenda, includes commitments to reduce IFFs as a necessary measure to raise domestic resources.

1.2 Purpose of the study

The primary purpose of the study is to examine the risks of illicit financial flows (IFFs) in the supply chain of Ghana's gold mining sub-sector. Specific objectives include the mapping out of the supply chain issues such as the IFFs risks, their prevalence, and the institutions involved at various stages of the gold mining sub-sector. The study particularly highlights the supply chain issues along the mining or extraction, processing, transportation, and marketing and sales that limit domestic resource mobilization in the gold mining sub-sector of Ghana. By evaluating the involvement of key institutions in the supply chain stages of the gold industry, the study seeks to provide insights into how institutional oversight can mitigate risks and enhance transparency in the gold industry's financial operations, with a focus on preventing corruption, tax evasion, and money laundering.

[8] United Nations Conference on Trade and Development (UNTAD): Economic Development in Africa Report (2020). Tackling Illicit Financial Flows for Sustainable Development in Africa

[9] Ama A. Ahene-Codjoe, Angela A. Alu, and Rahul Mehrotra (2022). Abnormal pricing in International Commodity trading: Evidence from Ghana. International Economics 172 (2022) 331–348

[10] Ibid

[11] Ghana Netherland Business and Culture Council (2023, January) Unaccounted gold export: Ghana lost $1.1b in 2 years. https://www.gnbcc.net/News/Item/5982

[12] World Bank Group (2017) Illicit Financial Flows. https://www.worldbank.org/en/topic/financialsector/brief/illicit-financial-flows iffs#:~:text=IFFs%20reduce%20resources%2C%20but%20they,and%20weak%20transparency%20and%20accountability.

1.3 Limitations of the study

Conducting a study on illicit financial flows in Ghana involves several inherent limitations. Access to comprehensive and up-to-date data on IFFs is difficult because of its secrecy nature. The Multinational Mining Companies as well as some small-scale mining companies could not complete the questionnaire. The few who completed the questionnaire did not open up on most of the IFF issues.

1.4 Structure of the Report

This report is structured into six chapters. Chapter one is on introduction followed by chapter two which is on the overview of gold mining and illicit financial flows in Ghana. Chapter three focuses on methodology and data sources while chapter four presents the findings of the study. Chapter five presents some general comments from the unstructured interviews on illicit financial flows risks along the supply chain of the gold mining sub-sector in Talensi, Kenyasi and Obuasi in Ghana. The report ends with chapter six which is on conclusion and policy recommendation.

CHAPTER TWO

Overview of Gold Mining and Illicit Financial Flows in Ghana

2.1 Introduction

This chapter analyzes Ghana's gold mining sub-sector and illicit financial flows. It highlights the political economy context concerning gold mining and Ghana's economy by examining the recent legislature and regulatory regime. It also focused on Ghana's mining fiscal regime particularly fiscal instruments of the mining sector. The chapter highlights Ghana's mining sector institutional framework, the overview of illicit financial flows in gold mining and ended with an overview of the gold supply chain.

2.2 Political Economy Context – Gold Mining and Ghana's Economy

The historical connections between politics, mining, and the Ghanaian economy are well-documented and cannot be over-emphasized. Greg Smith, VP of Exploration of Newcore Gold, pointed out, "Ghana is a modern mining powerhouse, number one for gold in Africa, with a democratic government that wants mining to grow and thrive and keeps putting millions into its tax base. We're in the right place at the right time."[13] His observation epitomizes the critical interplay of politics, democracy, and the country's thriving economy of the mining industry. Furthermore, the statement is a testament to why Ghana's gold sub-sector attracts the dominant inflow of domestic and foreign direct investment in mining. It is worth noting that legal and illegal perspectives can be constructed from the FDI's in the mining sector, particularly with the blurring legality of small-scale or artisanal mining and illegal mining.

Gold production rose from 3.7 million ounces in 2022 to 4 million ounces in 2023, equivalent to an 8.3% increase in production and the country's highest output since the outbreak of the COVID-19 pandemic [14] . The expansion of the small-scale gold mining sub-sector, with about 70.6, from 0.66 million ounces the previous year to 1.1 million ounces in 2023, offset the decline of the 4.9% downturn in the large-scale mining sector [15] . Gold production attributable to the large-scale sub-sector declined from 3.1 million ounces in 2022 to 2.9 million ounces in 2023 [16]. Comparatively, Ghana is Africa's biggest gold producer and ranks sixth globally with 135.1 tonnes of gold production [17]. The driving factors include a geological endowment, a stable political environment, and supportive government policies that stimulate the growth of gold mining activities in Ghana [18].

---

[13] Greg Smith, VP of Exploration of Newcore Gold (n.d). https://newcoregold.com/enchi-project/ghana-1-gold-producer-in-africa/

[14] Ghana Chamber of Mines (2023) Performance of the Mining Industry in 2023. https://ghanachamberofmines.org/wp-content/uploads/2024/06/Performance-of-the-Mining-Industry-in-2023.pdf

[15] Ibid

[16] Ibid

[17] World Gold Council (2024, June 25) Global Mine Production – Gold. https://www.gold.org/goldhub/data/gold-production-by-country

[18] 6Wresearch (2022, May); Ghana Gold Mining Market (2024-2030) Outlook | Analysis, Companies, Trends, Size, Forecast, Growth, Industry, Share, Revenue & Value. https://www.6wresearch.com/industry-report/ghana-gold-mining-market-outlook

Ghana's mining sector has been a significant contributor to the country's economy for decades. Gold is Ghana's most important export commodity, accounting for a substantial portion of foreign exchange earnings and government revenue. According to the Ghana 2023 Trade Report, gold remains the dominant export commodity, representing 45.4% of the total exports, earning the country GH 84.4 billion [19]. Notably, the African Union and African Mineral Development Centre observed that mining remains a fundamental component of Ghana's industrial strategy and the country's transition to an upper-middle-income nation, acting as a lever to provide revenues and jobs[20] Others noticed that while mining has brought considerable economic benefits to Ghana, sustainable approaches that consider environmental protection and social well-being are needed [21].

In recent years, the participation of other foreign nationals in illegal mining has added to the complexity of the political economy discourse of mining in Ghana. The recurring involvement of foreign nationals, mainly Chinese nationals, in small-scale or artisanal gold mining, which explicitly forbade foreigners' participation, remains an eyesore that has yet to be adequately cured. For example, the initial arrest, deportation, and subsequent re-arrest upon her re-entering into the country, prosecution, and jailing of the "Galamsey Queen," a Chinese national En "Aisha" Huang, for four years on December 4, 2023[22] , depicts the murky daily contestation involving politics, illegality, diplomacy, and the economics of gold in Ghana.

The upsurge of small-scale mining, primarily in the gold sub-sector, has brought unintended consequences such as environmental degradation, social conflicts, and revenue leakages. This informality renders the sector and those involved vulnerable to exploitation, thereby increasing the risk of illicit actors deriving illicit profits.[23] Similarly, it is asserted that illegal mining activities in Zimbabwe, such as operating outside licensed concession areas, directly contribute to illicit financial flows as they result in underreporting production, thereby undermining tax collections [24]. In Ghana, therefore, the risks of IFFs may be high in the small-scale mining sector due to foreigners' illegal involvement, lack of CDD/KYC, corruption, and lax enforcement of regulations.

2.3 Recent Legislature and Regulatory Regime

Mineral resources belong to the Ghanaian people in common, and their stewardship is entrusted to the President under the governing provisions of the Constitution.[25] Specifically, Article 257(6) of the 1992 Fourth Republican Constitution declares that "every mineral in its natural state found in Ghana is the property of the Republic of Ghana and is vested in the President for and on behalf of the people" serves as the foundation for the legislative and regulatory framework that supports Ghana's mining sector. Furthermore,

[19] Ghana Statistical Service (2024, May) Ghana 2023 Trade Report. https://statsghana.gov.gh/gssmain/fileUpload/Trade/Ghana%202023%20Trade%20Report.pdf

[20] African Union and African Mineral Development Centre (2024). Assessment of Sustainable Management of Mineral Resources in Ghana and their Alignment with the African Mining Vision

[21] Yeboah, Samuel and James Nyarkoh, Bright (2022). The Impact of Mining on the Ghanaian Economy: A Comprehensive Review (1992-2020) MPRA Paper No. 117502, https://mpra.ub.uni-muenchen.de/117502/

[22] Ghanaweb (2023). Galamsey Queen Aisha Hueng Jailed four years https://www.ghanaweb.com/GhanaHomePage/NewsArchive/Galamsey-queen-Aisha-Huang-jailed-4-years-1892165

[23] Hunter, M. (2020). Illicit Financial Flows-Artisanal and Small-Scale Gold Mining in Ghana and Liberia.

[24] Tax Justice Network Africa (2020, November). Mining Sector and Illicit Financial Flows (IFFs) in Zimbabwe. https://taxjusticeafrica.net/resources/blog/mining-sector-and-illicit-financial-flows-iffs-zimbabwe

[25] Ghana Minerals Commission (2014, November). Minerals and Mining Policy of Ghana. https://www.mincom.gov.gh/wp-content/uploads/2021/06/Mineral-and-Mining-Policy-Ghana.pdf

acting through the sector minister, the Executive actualizes this clause and others through the grant licenses on the President's behalf. Natural resource agreements must be ratified per Article 268(1) unless they are exempted by Parliament per Article 268(2). Required by Article 269(1), the parliament of Ghana enacted the Minerals Commission Act 1993 (Act 450), Ghana's governmental agency primarily responsible for developing and coordinating mineral sector policies and monitoring their implementation.[26] The sector has many policies covering mineral exploration and extraction, licensing requirements for mining operations, environmental impact assessments for mining projects, and revenue-sharing arrangements to benefit local communities and the nation. Figure 1 below captures the Key legislations, regulations, and policies of the mining sector in Ghana.

Figure 1: Key legislations, Regulations, and Policies Governing Ghana's mining industry

Key Acts

1. Minerals and Mining Act, 2006 (Act 703), as amended by the Minerals and Mining (Amendment) Act, 2015 (Act 900), the Minerals and Mining (Amendment) Act, 2019 (Act 995)
2. Minerals Commission Act, 1993 (Act 450)
3. Minerals Development Fund Act, 2016 (Act 912)
4. Minerals Income Investment Fund Act 2018 (Act 978)
5. Kimberley Process Certificate Act, 2003 (Act 652)

Key Regulations

1. Minerals and Mining (General) Regulations, 2012 (L.I 2173)
2. Minerals and Mining (Support Services) Regulations, 2012 (L.I 2174)
3. Minerals and Mining (Compensation and Resettlement) Regulations, 2012 (L.I 2175)
4. Minerals and Mining (Licensing) Regulations, 2012 (L.I 2176)
5. Minerals and Mining (Explosives) Regulations, 2012 (L.I 2177)
6. Minerals and Mining (Health, Safety and Technical) Regulations, 2012
7. Minerals and Mining (Mineral Operations Tracking of Earth Moving and Mining Equipment) Regulations, 2020 (L.I. 2404)
8. Minerals and Mining (Ground Rent) Regulations, 2018 (L.I 2357)
9. Minerals and Mining (Local Content and Local Participation) Regulations, 2020 (L.I. 2431)

National policies with relevance to minerals in Ghana

1. Minerals and Mining policy
2. National Environmental Policy
3. National Land Policy
4. National Water Policy
5. National Climate Change Policy
6. Coordinated Programme of Economic and Social Development Policies (CPESDP), 2017-2024

Source: Adopted from AU and AMDC (2024)

[26] Minerals Commission of Ghana. https://www.mincom.gov.gh/organisation-profile/

2.4 Ghana's Mining Fiscal Regime

The fiscal regime governing the mining sector in Ghana consists of instruments (taxes, royalties, levies, dividends) and incentives [27] aimed at balancing fair revenue generation from mineral wealth for the nation and investment attraction. The primary fiscal regime legislations include the Income Tax Act 2015 (Act 896) and its Amendments[28], as well as the Minerals and Mining Act 2006 (Act 703) as amended.[29] The various mining development agreements also play crucial roles in the fiscal space. Contextually, Ghana's Anti-money Laundering Act 2020 (Act 1044) may be crucial in the broader strategy to prevent IFFs within the extractive sector.

Three broad fiscal incentives pertain to the mining sector.[30] The first relates to investments, including tax holidays, reduced import duties on mining equipment, and accelerated depreciation for capital expenditures. This incentive is designed to lower mining investments' initial costs and risks. Second is the incentive for employing fresh graduates, often a percentage of the employed fresh graduate in workforce comes from the mining sector. The third is Double Taxation Agreements (DTAs), which prevent double taxation on income. DTAs encourage foreign investment by ensuring investors are not taxed twice on the same income.

Even so, the Extractive Industry Transparency Initiative (EITI) has played a significant role in opening up extractives worldwide, including Ghana, which subscribed in 2006.[31] The EITI requires extractive industry companies to publish what they pay and governments to publish what they receive, and these amounts must be audited and reconciled.[32] These EITI principles championed by the Ghana Extractive Industry Transparency Initiative (GHEITI) and other like-minded Civil Society Organizations (CSOs) locally have enhanced transparency, improved revenue management, policy reforms, and stakeholder engagement in the extractive sector. For example, owing to the influence of the CSOs through their reports and advocacy, the Minerals and Mining Act 2006 (Act 703) has amended and incorporated changes, such as an increased corporate income tax from 25% to 35% and abolishing the range royalty between 3% - 6% to a fixed 5%.

Despite undertaking comprehensive tax and non-tax policy reforms over the years, particularly since 1983, Ghana's total revenue ratio of GDP is among the lowest, ranked 13 out of 14 nations in sub-Sahara Africa[33]. Gaps in the fiscal regime may increase the risk of illicit financial flows (IFFs). These may include transfer pricing, tax evasion, and weak enforcement mechanisms. Addressing these gaps requires strengthening tax administrators' capacity, enhancing revenue management transparency, and consistently promoting sector accountability. Table 1 below represents the current fiscal policy instrument in the amended Minerals and Mining Act 2006 (Act 703).

[27] Ghana Minerals Commission. https://www.mincom.gov.gh/fiscal-regime/
[28] Ghana Revenue Authority http://www.gra.gov.gh/acts/
[29] Ghana Minerals Commission http://www.mincom.gov.gh/acts
[30] Ghana Minerals Commission https://www.mincom.gov.gh/fiscal-regime/
[31] Extractive Industry Transparency Initiative. https://eiti.org/countries/ghana
[32] International Monetary Fund (2012), Fiscal Regimes for Extractive Industries: Design and Implementation, Prepared by the Fiscal Department, Approved by Carlo Cottarelli
[33] International Monetary Fund (2011), Revenue Mobilization in Developing Countries, Prepared by the Fiscal Affairs Department, Approved by Carlo Cottarelli

Table 1: Fiscal Instruments of the Mining Sector

FISCAL INSTRUMENT	APPLICABLE RATE
Mineral Royalty	5%
Corporate Income Tax	35%
Capital Allowance	20% straight line on mining assets for 5 years
Losses carried forward	5 years
Thin Capitalization	3:01
VAT	12.5% (Refundable)
NHIL & GET Fund Levy	12.5% each and tax deductible
Pay As You Earn (PAYE tax)	Graduated rate
Dividend tax	8%
National Fiscal Stabilization Levy (NFSL)	5% of profit before tax
Government Carried Equity	10%
Annual Mineral Right Fees	As prescribed by L.I 2176
Withholding tax on resident entities	Goods 3%, Works 5%, Service 7.5%
Withholding tax on interest payable to non-residents	8%
Withholding tax on royalties, natural resource payments and rents	15%
Ground Rent	As prescribed by L.I. 2357

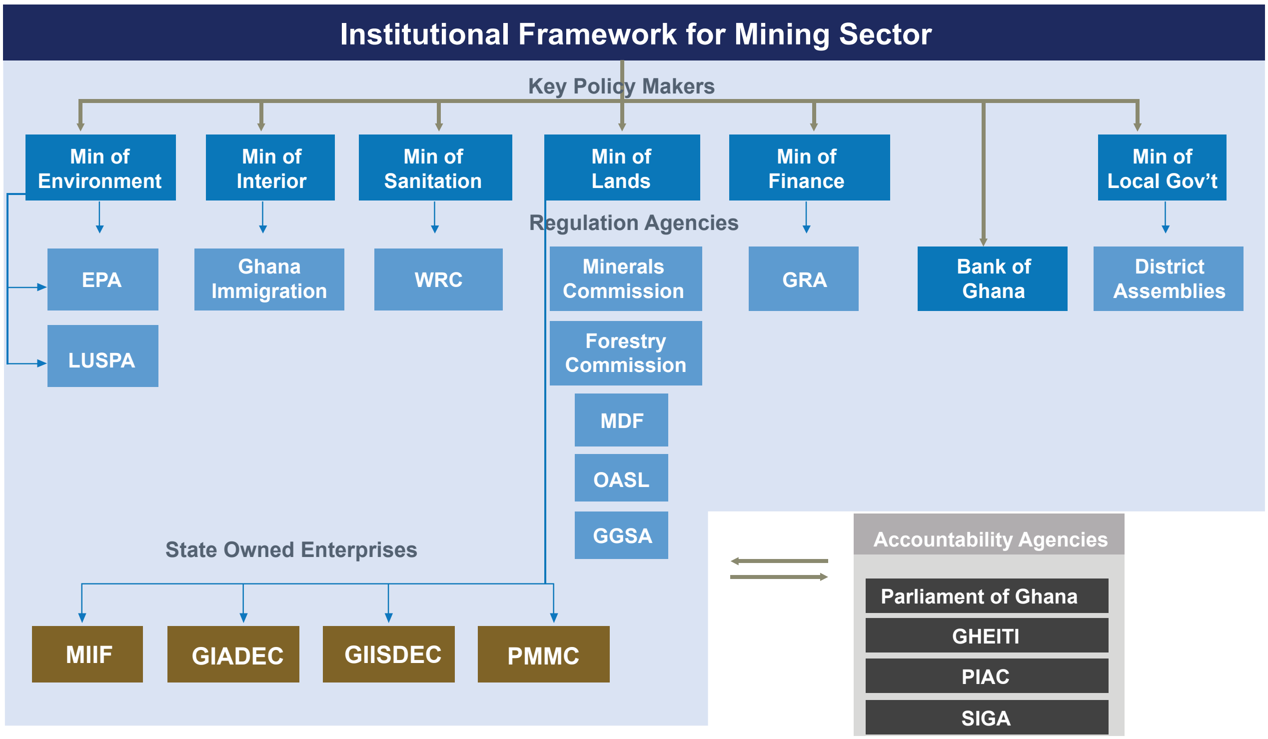
Source: Minerals Commission

2.5 Ghana's Mining Sector Institutional Frame Work

Governance of Ghana's mining sector involves many institutions. However, the Ministry of Lands and Natural Resources and Minerals Commission are two core state agencies that oversee the industry based on their direct relevance as espoused in law. While the ministry provides the sector with a strategic policy direction, the Minerals Commission's statutory role is already stated above. Other vital agencies include the Environmental Protection Agency (EPA), Forestry Commission, Water Resources Commission, Ghana Geological Survey Authority, Lands Commission, and the Land Use and Spatial Planning Authority, which provide quasi-regulatory functions in managing the mining sector[34]. These agencies are responsible for granting various licenses, enforcing regulations, and monitoring compliance standards. Also, the Bank of Ghana (BOG), the Ghana Revenue Authority (GRA), and the Precious Minerals Marketing Company (PMMC) all play significant financial and economic roles. However, coordination and collaboration among these agencies can be improved to enhance the effectiveness of regulatory oversight and ensure the sector's sustainable development. Figure 2 depicts Ghana's institutional framework for the mining sector and reveals the flow of relationships among the national regulatory agencies.

[34] Ghana Extractive Industry Transparency Initiative (2020).

Figure 2: Ghana Mining Sector Institutional Framework



Source: GHEITI 2020 Reconciliation Report

Figure 3: Key Regulatory Agencies and Summary of Their Responsibility

Agency	Responsibilities
Ministry of Lands and Natural Resources	Formulates policies and oversees the overall management of natural resources, including mining.
Minerals Commission	Regulates and monitors mineral exploration, mining, and processing activities. Issues mining licenses and permits.
Environmental Protection Agency	Ensures compliance with environmental regulations and standards. Conducts environmental impact assessments (EIAs) for mining projects.
Ghana Revenue Authority	Collects mining royalties, taxes, and other revenue from the mining sector.
Minerals Income Investment Fund	Manages mineral royalty payments and invests in strategic projects for national development.
Chamber of Mines	Represents the interests of mining companies and promotes dialogue between stakeholders in the mining sector.
Ghana Geological Survey Authority	Conducts geological surveys and provides data and information on mineral resources in Ghana.
Ministry of Finance	Sets fiscal policy and oversees budgetary allocations for the mining sector.
Local Government Authorities	Provide oversight and support for mining activities at the district and municipal levels.

Source: Authors Construct.

2.6 Overview of Illicit Financial Flows in Gold Mining

Illicit financial flows (IFFs) in the gold mining sector pose significant challenges, involving various illegal activities such as tax evasion, corruption, smuggling, money laundering, and profit shifting. The gold mining sector's high value, the complexity of its supply chain, and the often-opaque nature of transactions facilitate IFFs. These flows can include profits from illegal mining, production underreporting, export mis-invoicing, and the usage of gold for money laundering. According to the OECD (2018) report, gold mining contributes to IFFs, particularly in West Africa, where informal and artisanal mining is prevalent. This report highlights the role of smuggling and underreporting in facilitating IFFs[35]. The Global Initiative Against Transnational Organized Crime (2020) report maps out the illicit gold trade networks and associated financial flows, emphasizing the governance and enforcement challenges in regions with significant informal mining activities[36].

2.7 Over View of the Supply Chain of Gold Mining in Ghana

Gold mining is a critical part of Ghana's economy, encompassing three main sectors: large-scale industrial mining, artisanal and small-scale mining (ASM), and illegal mining (galamsey). In the large-scale industrial mining sector, major multinational companies such as AngloGold Ashanti, Newmont Mining Corporation, and Gold Fields dominate operations. These companies utilize advanced technology and heavy machinery to extract gold from deep underground and open-pit mines. Key mining sites include Obuasi, Tarkwa, and Akyem. As the backbone of Ghana's gold industry, large-scale mining significantly contributes to GDP, export earnings, and government revenue through taxes and royalties. Additionally, these operations provide formal employment and support infrastructure development in mining communities. However, challenges remain, including community tensions over land use, environmental degradation, and the need to ensure that the economic benefits of mining are equitably shared with local populations.

Artisanal and small-scale mining (ASM) involves local miners who use basic tools and techniques. While often informal, ASM is legalized under Ghanaian law, distinguishing it from galamsey. ASM plays an important role in Ghana's gold production and provides livelihoods for hundreds of thousands of people, particularly in rural areas with limited formal employment opportunities. Despite its economic significance, ASM is often linked to environmental damage, including deforestation, water pollution, and land erosion. The use of mercury in ASM also poses significant health and environmental risks. The sector faces hurdles in formalization, regulation, and access to finance and technology. To address these issues, the government and development partners have launched programs that provide training, technology, and support to make ASM operations more sustainable and improve miners' livelihoods.

Galamsey, or illegal mining, operates outside the law and is often small-scale but causes significant environmental harm. The term "galamsey" is derived from the phrase "gather them and sell," reflecting the informal nature of these activities. Galamsey is a major contributor to environmental destruction in Ghana, leading to severe deforestation, water

[35] OECD. (2018). Illicit Financial Flows: The Economy of Illicit Trade in West Africa. OECD Publishing.
[36] Global Initiative Against Transnational Organized Crime. (2020). Illicit Gold Markets in East and Southern Africa.

contamination (especially from mercury and cyanide), and land degradation, which harm agriculture and local ecosystems. This illegal activity has also resulted in serious social problems, including land disputes, unsafe working conditions, and the exploitation of vulnerable populations, including children. The Ghanaian government has implemented several measures to combat galamsey, including the military-led Operation Vanguard and stricter regulations. However, despite these efforts, illegal mining persists, driven by high gold prices, poverty, and limited enforcement capacity.

Gold mining in Ghana, spanning large-scale industrial operations, artisanal and small-scale mining (ASM), and illegal mining (galamsey), is deeply intertwined with the global gold supply chain. However, this integration also presents significant risks of illicit financial flows (IFFs). Gold from ASM and galamsey, which are often informal and poorly regulated, can easily be smuggled out of the country, bypassing official channels and evading taxes, royalties, and regulations. This contributes to substantial IFFs that undermine Ghana's revenue mobilization and economic development. Even in the large-scale sector, gaps in transparency and oversight can facilitate tax evasion, transfer mispricing, and money laundering. As a result, the gold mining supply chain in Ghana is vulnerable to financial crimes, making it a critical area of focus for strengthening regulatory frameworks and enforcing anti-IFF measures.

The gold supply chain involves multiple actors and typically includes these key stages: extraction, where gold is mined; transport, where the raw material is moved from the mine to processing facilities; processing, where smelting is done, the ore is refined to extract pure gold which can further be purified and mixed with other metals if necessary. The processing stage includes manufacturing where gold is crafted into products like jewellery or electronics; and finally, the marketing and sale of the end product to consumers, where gold is bought and sold in various forms. Each stage of this complex chain involves various stakeholders and is susceptible to illicit financial flow risks, especially in areas with weak regulation and oversight.

At the mining stage, which is the initial stage where gold deposits are located, and mining operations are carried out to extract the raw ore. This includes geological surveys, drilling, and mining processes, which differ based on whether the operation is large-scale industrial mining, artisanal and small-scale mining (ASM), or illegal mining (galamsey)

After extraction, the raw ore is processed to separate gold from other materials. This involves crushing, grinding, and chemical treatment (e.g., cyanidation or mercury amalgamation). The processed gold is then refined to increase its purity, resulting in refined gold bars or other forms. At refineries, gold is further purified to meet market standards. This involves smelting and refining processes that remove impurities and produce high-purity gold bars. The gold processing and refining stages are vulnerable to mis-invoicing, where the value of gold is underreported to evade taxes and launder money. Refining hubs often lack stringent regulatory oversight, making them hotspots for IFFs. The Financial Action Task Force (FATF) (2015) highlights how gold is used to launder money and finance terrorism, focusing on the vulnerabilities in the refining stage[37].

[37] FATF. (2015). Money Laundering and Terrorist Financing through Trade in Diamonds and Gold. Financial Action Task Force.

Transporting gold from mining sites to refineries involves a complex network of logistics, including road, rail, and maritime transport. Effective management of these logistics is crucial to minimize costs and ensure timely delivery. The transportation of gold can involve smuggling across borders to avoid detection and taxation. Smuggling routes are often established to move gold from conflict areas or countries with high levels of corruption. The Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) (2017) report discusses the movement of illegally mined gold and the associated IFFs .[38]

The final stage involves selling gold to various markets, influenced by factors such as gold prices, demand-supply balance, and economic conditions. Efficient supply chain management enhances competitiveness and profitability. At the market stage, gold is often sold through both formal and informal channels. Informal markets can be used to launder illegally mined gold, mixing it with legally mined gold to obscure its origin. The World Gold Council (2020) report outlines the mechanisms through which illicit gold enters the formal market, highlighting the need for better traceability and regulatory frameworks[39].

[38] IGF. (2017). Global Trends in Artisanal and Small-Scale Mining (ASM): A review of key numbers and issues. Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development.

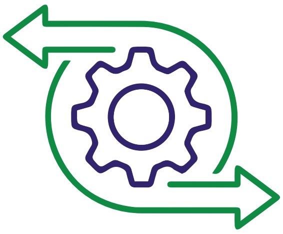
[39] World Gold Council. (2020). Gold and illicit financial flows. World Gold Council.

Chapter Three
Methodology and Data Sources

3.1 Introduction

This chapter focuses on the methodology and the sources of data for the study.

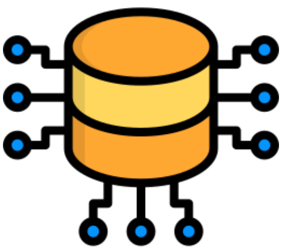
3.2 Methodology



The study was conducted at a community level (micro-level). It involved a combination of desk research and primary data collection. The desk research included a review of existing literature and reports—previous studies related to the subject matter at both the community and national levels in other African countries and globally.

Primary data collection entailed visits to selected mining communities; Talensi, Kenyasi and Obuasi to evaluate the IFFs' risks along the supply chain of gold mining in their communities. This aimed to facilitate active community involvement and ensure that the participatory approach gives hands-on data in case the community members have experienced any form of IFFs when dealing with the gold mining companies in their communities. Field visits also involved identifying stakeholders—communities affected by mining, mining companies, government support agencies for the sector, non-governmental organizations, and community-based organizations—to encourage their effective participation. The participatory methodology was implemented through informal, structured, and semi-structured interviews with institutions, chiefs, opinion leaders, and individuals.

3.3 Data sources



A total of 81 individual interviews were conducted. After data cleaning and validation, 77 responses were deemed valid and were used in the analysis. The remaining 4 responses were excluded due to incomplete or inconsistent data. The structured interview comprised of both closed-ended and open-ended questions, allowing respondents to provide specific details where necessary.

The collected data was subjected to a cleaning process to remove any incomplete or inconsistent responses.

Chapter Four
Findings

4.1 Introduction

This chapter focuses on the findings on awareness, drivers, impact of IFFs, IFFs risk(s), their level of prevalence and institutions involved at the mining or extraction, processing, transportation and marketing and sales, stages along the supply chain of gold mining. Descriptive statistic was used to summarize the demographic data. The result was then categorized and presented in tabular form, showing the distribution of respondents by educational qualification as follows:

4.1.1 Responses by Educational Qualification

Educational attainment among respondents was relatively high, with 68% having a first degree, 25% holding a master's degree, and 6% with a PhD (Table 4.1.1). Only 3% had secondary education, and 1% held a diploma. The data shows that the majority of respondents were well-educated, which could influence their perspectives and responses to the survey questions, particularly those related to complex or technical issues.

Table 4.1.1: Interviews Responses by Educational Qualification

Qualification	Male (Count & %)	Female (Count & %)	Total (Count & %)
Secondary	2 (3%)	0 (0%)	2 (3%)
Diploma	1 (1%)	0 (0%)	1 (1%)
First Degree	39 (51%)	13 (17%)	52 (68%)
Master's Degree	11 (14%)	8 (10%)	19 (25%)
PhD Degree	4 (5%)	1 (1%)	5 (6%)
Total	**57 (74%)**	**20 (26%)**	**77 (100%)**

Source: Interviews

4.2 Awareness, Drivers and Impact of IFFs

4.2.1 Familiarity with Illicit Financial Flows

Respondents' familiarity with illicit financial flows varied, with 65% being very familiar, 29% somewhat familiar, and 6% not familiar (Table 4.1). The majority of respondents (94%) had a good understanding of IFFs, which suggests that the interview population was well informed on the subject, possibly influencing the depth and relevance of their responses. This reflects the high level of education qualification among the respondents.

Table 4.2.1: Forms of IFFs

Familiarity Level	Count	Percentage
Somewhat Familiar	22	29%
Very Familiar	50	65%
Not Familiar	5	6%
Total	**77**	**100%**

Source: Interviews

4.2.2 Significance of IFFs to the Economy

When asked about the significance of IFFs to the economy, 82% of respondents felt they were very significant, 12% significant, 5% moderate, and 1% insignificant (Table 4.2.2). The overwhelming consensus among respondents is that, the existence of IFFs play a crucial role in the economy, indicating a strong awareness of the negative impact illicit financial activities have on economic stability and development.

Table 4.2.2: Forms of IFFs

Significance Level	Count	Percentage
Very Significant	63	82%
Significant	9	12%
Moderate	4	5%
Insignificant	1	1%
Total	**77**	**100%**

Source: Interviews

4.2.3 Forms of Illicit Financial Flows

The interviews identified several forms of Illicit Financial Flows (IFFs) with the following prevalence: 97% identified tax evasion and bribery and corruption, 92% mentioned smuggling, 87% mentioned transfer pricing, and 64% mentioned money laundering. The data highlights tax evasion and bribery/corruption as the most recognized forms of IFFs, pointing to areas where respondents believe illicit activities are most rampant.

Table 4.2.3: Forms of IFFs

Form of IFF	Count	Percentage
Tax Evasion	75	97%
Transfer Pricing	67	87%
Bribery and Corruption	75	97%
Smuggling	71	92%
Money Laundering	49	64%
Other	**1**	**1%**

Source: Interviews

4.2.4 Drivers of Illicit Financial Flows

The interview data identified several drivers of Illicit Financial Flows (IFFs), including weak regulatory environments (83%), corruption (97%), poor enforcement of laws (87%), and high tax rates (45%). Other factors like lack of transparency (71%), inadequate resources (69%), and international challenges (78%) were also significant. This data underscores the complex and multifaceted nature of IFFs, with governance, legal, and economic factors all playing critical roles in facilitating these illicit activities.

Table 4.2.4: Drivers of Illicit Financial Flows

Driver	Count	Percentage
Weak regulatory environment	64	83%
Corruption	70	97%
Poor enforcement of laws	67	87%
High tax rates	35	45%
Lack of transparency	55	71%
Inadequate resources	53	69%
International challenges	60	78%

Source: Interviews

4.2.5 Perceived Effectiveness of Regulatory Framework

A majority (57%) of respondents believe the current regulatory frameworks are "Very ineffective" in curbing illicit financial flows in the mining sector (Table 4.2.5). Only a small proportion (10%) view the frameworks as Effective or Very effective. Just 9% of respondents remain neutral, while 13% find the frameworks to be merely Ineffective. This data suggests a significant lack of confidence in the existing regulatory measures among the respondents.

Table 4.2.5: Perceived Effectiveness of Regulatory Framework

Response	Count	Percentage (%)
Very ineffective	38	57%
Ineffective	9	13%
Neutral	6	9%
Effective	7	11%
Very effective	7	10%
Total	**67**	**100%**

Source: Interviews

4.2.6 To what extent do you believe corruption among government officials contributes to illicit financial flows in the mining sector?

The data reveals that a significant majority of respondents believe that corruption among government officials is a major factor contributing to illicit financial flows in the mining sector. Specifically in Table 4.2.6, 68% of respondents indicated that corruption contributes to a very large extent to these illicit flows, 25% believe it contributes to a large extent. A smaller portion, 4%, felt that corruption plays a role to a moderate extent. Only 3% of respondents believe corruption contributes to a small extent to illicit financial flows in the mining sector. These results highlight the perception that corruption is a predominant issue affecting financial integrity within the mining industry, with a substantial portion of respondents attributing the problem to a significant extent to corrupt practices among government officials.

Table 4.2.6: Perceived corruption among government officials in driving illicit financial flows

Response	Count	Percentage (%)
To a very large extent	51	68%
To a large extent	19	25%
To a moderate extent	3	4%
To a small extent	2	3%
Total	75	100%

Source: Interviews

4.2.7 How significant is the role of multinational mining companies in driving illicit financial flows?

Table 4.2.7 shows that a majority of respondents view the role of multinational mining companies as highly significant in driving illicit financial flows. Specifically: 62% of respondents believe that the role of these companies is very significant, and 27% of respondents consider it Significant. A smaller percentage, 9%, believe the role is moderately significant. Only 1% of respondents view the role as Insignificant. This data suggests a strong consensus among respondents that multinational mining companies play a crucial role in facilitating or driving illicit financial flows within the mining sector.

Table 4.2.7: Role of multinational mining companies in driving illicit financial flows

Response	Count	Percentage
Very significant	48	62%
Significant	21	27%
Moderately significant	7	9%
Insignificant	1	1%
Total	**77**	**100%**

Source: Interviews

4.2.8 Do you believe that the current tax regime in Ghana's mining sector encourages illicit financial flows?

Findings in Table 4.2.8 indicate a significant concern among respondents regarding the current tax regime in Ghana's mining sector and its potential to encourage illicit financial flows. Most respondents (56%) strongly agree that the current tax regime encourages illicit financial flows. Another 25% of respondents Agree with this statement, indicating that a total of 81% have a positive agreement with the notion. Only 9% of respondents were Neutral, indicating they neither agree nor disagree. A minority, 6%, Disagree, and only 4% strongly disagree" with the statement. These results suggest that there is a broad consensus among respondents that the existing tax policies may be contributing to illicit financial activities within the mining sector. This reflects a potential area of concern for policymakers aiming to combat financial crimes and improve the regulation of the mining industry in Ghana.

Table 4.2.8: 8 Do you believe that the current tax regime in Ghana's mining sector encourages illicit financial flows?

Response	Count	Percentage (%)
Strongly agree	43	56%
Agree	19	25%
Neutral	7	9%
Disagree	5	6%
Strongly disagree	3	4%
Total	**77**	**100%**

Source: Interviews

4.3. Illicit Financial Flows Risks along the Supply Chain of Gold Mining

4.3.1 Mining Stage

Figure 4.3.1 details various risks of Illicit Financial Flows (IFFs) associated with the mining stage of the supply chain of gold mining in Ghana, particularly focusing on gold extraction and trade. The risks are ranked by the number of occurrences and their corresponding percentages. Here is a comprehensive write-up based on the ranking:

1. IFFs from bribing inspectors or regulatory officials to overlook violations related to safety, environmental standards, or labour laws (Corruption) - -78%: This is the highest risk, with 60 instances (78%). It indicates that corruption in the form of bribing officials to ignore regulatory violations is a significant issue, leading to potential safety hazards, environmental degradation, and labour exploitation.

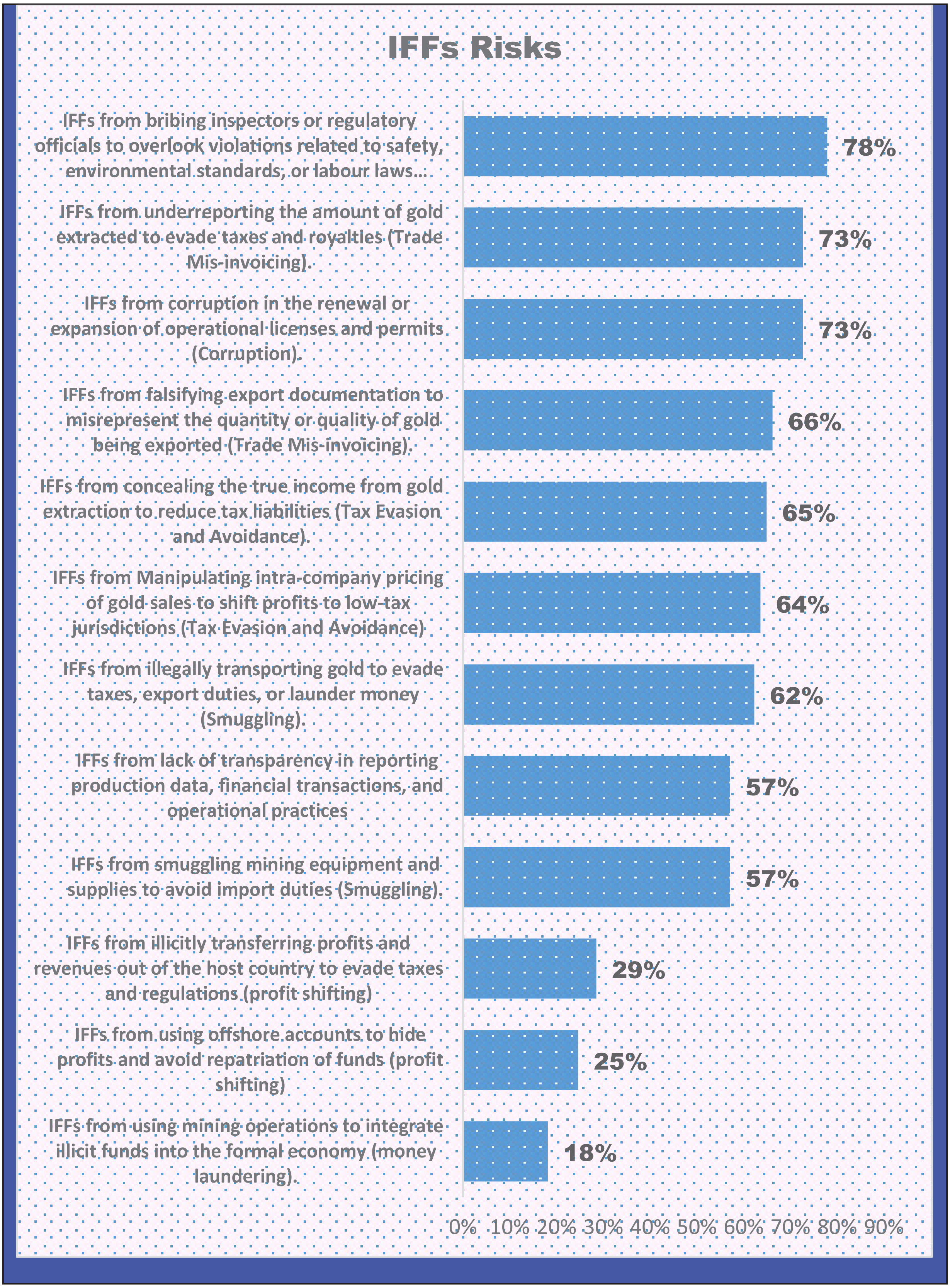
2. IFFs from corruption in the renewal or expansion of operational licenses and permits (Corruption) --- 73%: Also highly prevalent, with 56 instances (73%), this risk highlights how corruption during the renewal or expansion of operational licenses can facilitate illegal activities and undermine regulatory frameworks.

3. IFFs from underreporting the amount of gold extracted to evade taxes and royalties (Trade Mis-invoicing) --- 73%: Equally prevalent as corruption in license renewal, underreporting the quantity of gold extracted is a major concern. It suggests a substantial loss in government revenue due to tax evasion and royalty underpayment.

4. IFFs from falsifying export documentation to misrepresent the quantity or quality of gold being exported (Trade Mis-invoicing) --- 66%: With 51 instances (66%), falsifying export documentation is another critical risk, which affects accurate reporting and transparency in the export sector.

5. IFFs from concealing the true income from gold extraction to reduce tax liabilities (Tax Evasion and Avoidance)-- 65%: Concealing actual income from gold extraction, with 50 instances (65%), represents a significant risk by reducing tax liabilities, impacting the government's ability to collect appropriate revenues

Figure 4.3.1: IFFs Risks at the Mining Stage of Gold Mining in Ghana



Source: Interviews

4. IFFs from manipulating intra-company pricing of gold sales to shift profits to low-tax jurisdictions (Tax Evasion and Avoidance) -- 64%: Manipulating intra-company pricing to shift profits is noted in 49 instances (64%), indicating prevalent practices to evade taxes by shifting profits to jurisdictions with lower tax rates.

5. IFFs from illegally transporting gold to evade taxes, export duties, or launder money (Smuggling)-- 62%: Smuggling gold to evade taxes, reported in 48 instances (62%), reflects significant loss in potential tax revenue and the risk of facilitating money laundering.

8. IFFs from smuggling mining equipment and supplies to avoid import duties (Smuggling)-- 57%: Smuggling mining equipment, with 44 instances (57%), represents moderate risk and indicates efforts to avoid import duties, affecting fair trade practices.

9. IFFs from lack of transparency in reporting production data, financial transactions, and operational practices--57%: A similar number of instances (44, or 57%) indicate that lack of transparency is a significant issue, affecting the integrity and accountability in the mining sector.

10. IFFs from illicitly transferring profits and revenues out of the host country to evade taxes and regulations (Profit Shifting) -- 29%: With 22 instances (29%), profit shifting to evade taxes and regulations represents a lower but still concerning risk.

11. IFFs from using offshore accounts to hide profits and avoid repatriation of funds (Profit Shifting) -- 25%: The use of offshore accounts to hide profits, noted in 19 instances (25%), further highlights issues in tracking financial flows and enforcing repatriation of funds.

12. IFFs from using mining operations to integrate illicit funds into the formal economy (Money Laundering) -- 18%: The least frequent but notable risk is using mining operations for money laundering, reported in 14 instances (18%). This risk points to the use of legitimate mining operations to disguise illicit funds.

4.3.1.1 Are the selected IFFs risk(s) at the Mining stage Low, Medium or High?

Table 4.3.1 indicates that the majority of the selected IFF risks are categorized as:

- High Risk (approximately 86%).
- Medium Risk accounts for about 12% of the cases.
- Low Risk is minimal, making up about 1% of the assessments.

This breakdown indicates a predominance of high-risk IFFs, highlighting the critical need for stringent measures and oversight at this stage

Table 4.3.1.1: Selected IFFs risk(s) at the Mining Stage

Risk Level	Count	Percentage (%)
High Risk	64	86%
Medium Risk	9	12%
Low Risk	1	1%
Total	**74**	**100%**

Source: Interviews

4.3.1.2 What are the actors involved at the Mining stage of the supply chain?

Table 4.4.2 outlines the ranking of key actors involved at the mining stage, alongside their respective scores and percentages. These actors play crucial roles in regulating, monitoring, and facilitating mining activities.

1. Minerals Commission (73%) holds the highest rank, reflecting its pivotal role in overseeing and regulating the entire mining sector. It is the leading regulatory body, ensuring compliance with mining laws and standards.

2. Local Suppliers (66%) follow closely in second place. These suppliers are essential for providing the necessary tools, machinery, and other materials, to support the daily operations of mining companies.

3. Mines Inspectorate (60%) ranks third, focusing on ensuring safety, health, and environmental compliance in mining operations. Their involvement is critical in maintaining standards within the sector.

4. Precious Minerals Marketing Company (PMMC) (52%) comes in fourth, playing a key role in overseeing the marketing, sales, and exportation of minerals, thus contributing to the proper valuation and trade of Ghana's precious resources.

5. Presidency (32%), ranking fifth, signifies the involvement of the executive arm of

government in mining governance, highlighting a level of political oversight in resource management.

6. GRA - Mining Audit Desk (26%) ranks sixth. This unit focuses on auditing mining companies to ensure accurate reporting and tax compliance.

7. GRA – Large Taxpayer Office (21%) is seventh, tasked with ensuring that the larger entities in the mining sector comply with tax regulations.

8. GRA - Customs (19%) follows in eighth place. Its role involves ensuring that mining-related imports and exports are processed according to the law, with duties and taxes accurately applied.

9. GRA – Transfer Pricing Unit (18%), in ninth position, ensures that multinational mining companies engage in fair pricing practices, preventing profit shifting to lower-tax jurisdictions.

10. Financial Intelligence Centre (18%) is also ranked tenth, focusing on detecting and preventing illicit financial flows and money laundering activities within the mining sector.

11. Auditor General (17%), at eleventh, is responsible for auditing the financial records of mining companies to ensure transparency and accountability.

12. Bank of Ghana (16%) ranks twelfth, with its role in managing the financial transactions and regulations pertaining to mining, ensuring the stability of financial activities within the sector.

Table 4.3.1.2: Actors Involved at the Mining Stage

	Institution	Count	Percentage (%)
1	Minerals Commission	56	73%
2	Local suppliers	51	66%
3	Mines Inspectorate	46	60%
4	Precious Mineral Marketing Company	40	52%
5	Presidency	25	32%
6	GRA - Mining Audit Desk	20	26%
7	GRA – Large Taxpayer office	16	21%
8	GRA - Customs	15	19%
9	GRA – Transfer Pricing unit	14	18%
10	Financial Intelligence Centre	14	18%
11	Auditor General	13	17%
12	Bank of Ghana	12	16%

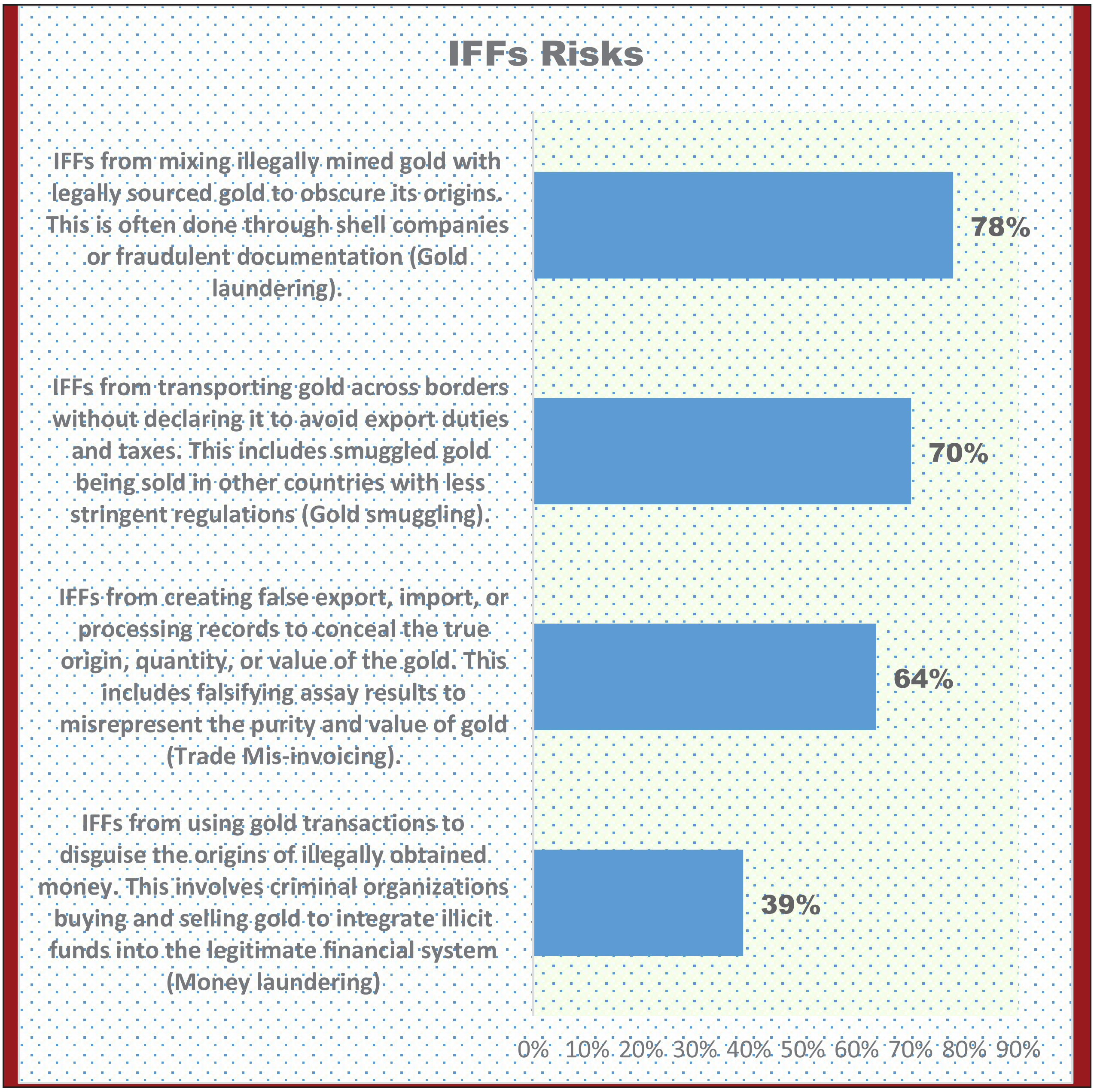
Source: Interviews

4.3.2 Processing Stage

Figure 4.4.1 details various risks of Illicit Financial Flows (IFFs) associated with the Processing stage of the supply chain of gold mining in Ghana, at the processing stage of the gold supply chain, illicit financial flows (IFFs) pose critical risks. These IFF risks, ranked from most to least significant, highlight various illegal practices that undermine the integrity of gold transactions and regulation.

1. Gold Laundering (78%): The most severe risk at the processing stage is the practice of mixing illegally mined gold with legally sourced gold to obscure its origins. This is commonly done through shell companies or fraudulent documentation, making it difficult to distinguish between legal and illegal gold. By blending illegally obtained gold into the legitimate market, criminals effectively 'launder' the gold, allowing it to circulate without detection.

Figure 4.3.2: IFFs Risks at the Processing Stage of Gold Mining in Ghana



Source: Interviews

2. Gold Smuggling (70%): Ranked second, gold smuggling is a major risk where gold is transported across borders without declaration to avoid export duties and taxes. Smuggled gold is often sold in countries with less stringent regulations, enabling criminals to evade legal oversight and benefit financially from illegal transactions. This also creates discrepancies in reporting and further complicates the regulation of gold trade.

3. Trade Mis-invoicing (64%): Another prominent IFF risk involves creating false export, import, or processing records to conceal the true value, quantity, or origin of the gold. This includes falsifying assay results to misrepresent the purity and value of gold. Such practices enable individuals and organizations to manipulate profit margins, evade taxes, and conceal illegal activities.

4. Money Laundering (39%): Ranked fourth, money laundering in gold transactions involves using gold to disguise the origins of illicit funds. Criminal organizations buy and sell gold to integrate illegally obtained money into the legitimate financial system. The opaque nature of gold markets allows for the movement of illicit funds, undermining efforts to combat money laundering and other financial crimes.

4.3.2.1 Are the selected IFFs risk(s) at the processing stage Low, Medium or High?

Table 4.4.1 indicates that the majority of the selected IFF risks are categorized as:

- ➔High Risk (approximately 80%).
- ➔Medium Risk accounts for about 17% of the cases.
- ➔Low Risk is minimal, making up about 3% of the assessments.

This breakdown indicates a predominance of high-risk IFFs, highlighting the critical need for stringent measures and oversight at this stage

Table 4.3.2.1: Selected IFFs risk(s) at the Processing Stage

Risk Level	Count	Percentage (%)
High Risk	56	80%
Medium Risk	12	17%
Low Risk	2	3%
Total	**70**	**100%**

Source: Interviews

4.3.2.2 What are the actors involved at the Processing stage of the supply chain?

Table 4.4.2 outlines the ranking of key actors involved at the mining stage, alongside their respective scores and percentages. At this stage of Ghana's mineral supply chain, key actors play varied roles in ensuring regulatory compliance, oversight, and operational support. The ranking of these actors, based on their involvement, is as follows:

1. Minerals Commission – With 54 counts (70%), the Minerals Commission holds the top rank, reflecting its pivotal role in overseeing mineral licensing, regulation, and sector governance.

2. Local Suppliers – Ranking second, local suppliers contribute significantly with 53 counts (69%), underlining their vital role in providing materials and services essential to the processing stage.

3. Precious Mineral Marketing Company – At third place, with 50 counts (65%), the Precious Mineral Marketing Company is instrumental in marketing and facilitating the trade of processed minerals.

4. Mines Inspectorate – Ranking fourth with 49 counts (64%), the Mines Inspectorate ensures compliance with safety regulations, environmental standards, and labor laws in the processing sector.

Figure 4.3.2: IFFs Risks at the Processing Stage of Gold Mining in Ghana

	Institution	Count	Percentage (%)
1	Minerals Commission	54	70%
2	Local suppliers	53	69%
3	Precious Mineral Marketing Company	50	65%
4	Mines Inspectorate	49	64%
5	GRA - Mining Audit Desk	48	62%
6	Presidency	21	27%
7	GRA - Customs	18	23%
8	GRA – Large Taxpayer office	17	22%
9	GRA – Transfer Pricing unit	16	21%
10	Bank of Ghana	14	18%
11	Auditor General	13	17%
12	Financial Intelligence Centre	11	14%

Source: Interviews

5. GRA - Mining Audit Desk – With 48 counts (62%), the Mining Audit Desk of the Ghana Revenue Authority (GRA) plays a critical role in auditing mining operations to prevent tax evasion and ensure fiscal compliance.

6. Presidency – Ranked sixth with 21 counts (27%), the Presidency contributes to policy oversight and strategic direction in the sector, especially regarding regulatory and national policy frameworks.

7. GRA - Customs – In seventh place, with 18 counts (23%), the GRA - Customs plays a significant role in regulating the import and export of minerals, ensuring adherence to customs laws.

8. GRA – Large Taxpayer Office – Ranked eighth with 17 counts (22%), this office is responsible for managing tax collection from large taxpayers in the sector.

9. GRA – Transfer Pricing Unit – Ranking ninth with 16 counts (21%), this unit focuses on preventing profit shifting by ensuring fair pricing in transactions between related entities within the mining sector.

10. Bank of Ghana – In tenth place, with 14 counts (18%), the Bank of Ghana ensures proper financial practices, managing foreign exchange earnings from the mining sector.

11. Auditor General – Ranked eleventh with 13 counts (17%), the Auditor General contributes to transparency and accountability in financial reporting within the sector.

12. Financial Intelligence Centre – Lastly, in twelfth place with 11 counts (14%), the Financial Intelligence Centre focuses on detecting and preventing illicit financial flows, including money laundering, within the mining sector.

4.3.3 Transportation Stage

Figure 4.5.1 details at the Transportation stage, several illicit financial flows (IFFs) risks are identified, each contributing to financial leakage and regulatory evasion in the gold sector. Ranked by prevalence and percentage, the top IFF risks are:

1. IFFs from gold being transported across borders without declaration to avoid export duties, taxes, and regulatory scrutiny (Gold smuggling) – Ranked first with 58 counts, 75%, this risk highlights the use of undeclared cross-border transportation to evade financial obligations.

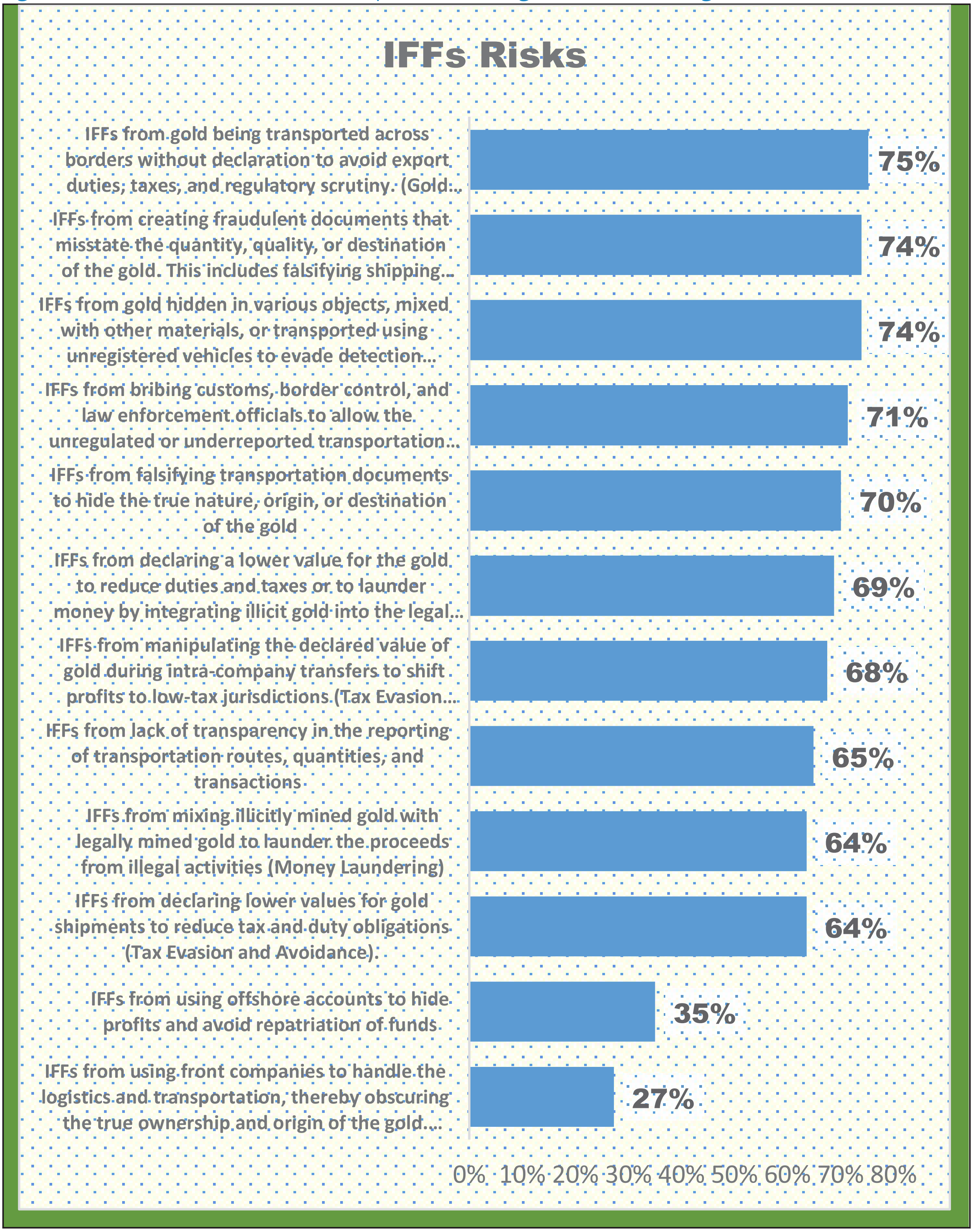
2. IFFs from gold hidden in various objects, mixed with other materials, or transported using unregistered vehicles to evade detection (Gold smuggling) – With 57 counts, 74%, this involves clandestine methods to smuggle gold, blending it with other objects or using unauthorized means of transport.

3. IFFs from creating fraudulent documents that misstate the quantity, quality, or destination of the gold (Misreporting and Mislabeling) – Also at 57 counts, 74%, misreporting is a significant IFF where falsified documents like shipping manifests and customs declarations obscure the true nature of gold transactions.

4. IFFs from bribing customs, border control, and law enforcement officials to allow the unregulated or underreported transportation of gold (Corruption) – Ranking fourth with 55 counts, 71%, corruption emerges as a major risk, where bribes facilitate the passage of underreported or illegal gold shipments.

5. IFFs from falsifying transportation documents to hide the true nature, origin, or destination of the gold – Fifth in the list, with 54 counts, 70%, falsification of transport records helps disguise the origin and destination, enabling illegal gold to pass through undetected.

Figure 4.3.3: IFFs Risks at the Transportation Stage of Gold Mining in Ghana



Source: Interviews

6. IFFs from declaring a lower value for the gold to reduce duties and taxes or to launder money by integrating illicit gold into the legal supply chain (Trade Mis-invoicing) – Sixth place, with 53 counts, 69%, this practice reduces tax liabilities and integrates illicit gold into legitimate markets.

7. IFFs from manipulating the declared value of gold during intra-company transfers to shift profits to low-tax jurisdictions (Tax Evasion and Avoidance) – With 52 counts, 68%, tax evasion through profit-shifting remains a significant concern, manipulating values for gold to minimize tax exposure.

8. IFFs from lack of transparency in the reporting of transportation routes, quantities, and transactions – Ranked eighth, with 50 counts, 65%, this involves opacity in how gold is transported and accounted for, creating avenues for financial malpractice.

9. IFFs from declaring lower values for gold shipments to reduce tax and duty obligations (Tax Evasion and Avoidance) – Ninth place, with 49 counts, 64%, where underreporting shipment values helps minimize tax and duty obligations, contributing to loss of revenue.

10. IFFs from mixing illicitly mined gold with legally mined gold to launder the proceeds from illegal activities (Money Laundering) – Also with 49 counts, 64%, this involves blending illegally sourced gold with legitimate supplies to obscure its origins.

11. IFFs from using offshore accounts to hide profits and avoid repatriation of funds – Ranked eleventh, with 27 counts, 35%, offshore accounts provide a means for companies to stash profits and avoid taxation or repatriation requirements.

12. IFFs from using front companies to handle logistics and transportation, thereby obscuring the true ownership and origin of the gold (Money Laundering) – Finally, with 21 counts, 27%, front companies are used to mask the ownership and traceability of gold, further complicating regulatory oversight.

4.3.3.1 Are the selected IFFs risk(s) at the Transportation stage Low, Medium or High?

Table 4.5.1 indicates that the majority of the selected IFF risks are categorized as:

- High Risk (approximately 83%).
- Medium Risk accounts for about 13% of the cases.
- Low Risk is minimal, making up about 4% of the assessments.

This breakdown indicates a predominance of high-risk IFFs, highlighting the critical need for stringent measures and oversight at this stage

Table 4.3.3.1: Selected IFFs risk(s) at the Transportation Stage

Risk Level	Count	Percentage (%)
High Risk	64	83%
Medium Risk	10	13%
Low Risk	3	4%
Total	**77**	**100%**

Source: Interviews

4.3.3.2 What are the actors involved at the Transportation stage of the supply chain?

Table 4.5.2 provides details about the involvement of various actors at the transportation stage in the mining sector is ranked as follows:

1. Local Suppliers - With a score of 59 (77%), Local Suppliers are the most involved institution at the transportation stage. Their high level of involvement highlights the critical role they play in providing necessary materials and services, ensuring the smooth transit of resources.

2. Presidency - Scoring 50 (65%), the Presidency is highly involved, indicating significant governmental oversight and support in the transportation processes. This involvement underscores the importance of political will and leadership in facilitating mining operations.

3. GRA – Large Taxpayer Office - Also scoring 50 (65%), the GRA's Large Taxpayer Office plays a crucial role in managing and overseeing the fiscal aspects related to the transportation of mining resources, ensuring compliance with tax regulations.

4. GRA – Transfer Pricing Unit - With a score of 49 (64%), this unit's involvement is vital in monitoring and regulating the transfer pricing activities to prevent financial discrepancies and ensure fair pricing during transportation.

5. Precious Mineral Marketing Company - Scoring 48 (62%), this institution is key in the marketing and valuation of precious minerals, ensuring that they are transported at their true market value.

6. GRA - Mining Audit Desk - With a score of 46 (60%), this desk is instrumental in auditing mining operations, including the transportation stage, to ensure regulatory compliance and transparency.

7. GRA - Customs - Also scoring 46 (60%), the Customs department is essential in overseeing the legalities of transporting mining resources across borders, preventing illegal smuggling and ensuring proper documentation.

8. Minerals Commission - With a score of 28 (36%), the Minerals Commission's involvement at the transportation stage is moderate. They primarily focus on regulatory oversight and ensuring that transportation activities adhere to mining laws and regulations.

9. Mines Inspectorate - Scoring 22 (29%), the Mines Inspectorate's role involves inspecting and ensuring safety and compliance during the transportation of mining resources.

Table 4.3.3.2: Actors Involved at the Transportation Stage

	Institution	Count	Percentage (%)
1	Local suppliers	59	77%
2	Presidency	50	65%
3	GRA – Large Taxpayer office	50	65%
4	GRA – Transfer Pricing unit	49	64%
5	Precious Mineral Marketing Company	48	62%
6	GRA - Mining Audit Desk	46	60%
7	GRA - Customs	46	60%
8	Minerals Commission	28	36%
9	Mines Inspectorate	22	29%
10	Financial Intelligence Centre	15	19%
11	Auditor General	12	16%
12	Bank of Ghana	12	16%

Source: Interviews

10. Financial Intelligence Centre - With a score of 15 (19%), this institution is involved in monitoring financial transactions related to the transportation stage, aiming to prevent money laundering and other illicit financial activities.

11. Auditor General - Scoring 12 (16%), the Auditor General's office plays a role in auditing the financial aspects of transportation to ensure accountability and transparency.

12. Bank of Ghana - Also scoring 12 (16%), the Bank of Ghana is involved in the financial regulation and oversight of transactions related to the transportation of mining resources.

4.3.4 Marketing and Sales Stage

Figure 4.6.1 provides information on the ranking of Illicit Financial Flows (IFFs) risks occurring at the marketing and sales stage in 2024:

1. IFFs from bribing buyers or brokers to secure favourable sales agreements or to bypass legal and regulatory requirements (Corruption) - (74%): This risk is the highest, indicating significant issues with corruption to gain favorable sales agreements or bypass regulations.

2. IFFs from corrupting market regulators to overlook violations or to gain inside information (Corruption) - (71%): Corruption involving market regulators is also prevalent, compromising the integrity of market oversight.

3. IFFs from creating false invoices to misrepresent the quantity or value of gold sold (Trade Mis-invoicing) - (70%): Trade mis-invoicing through false invoices is a major risk, leading to financial discrepancies and tax evasion.

4. IFFs from falsifying certificates of purity or quality to sell lower-quality gold at higher prices (Trade Mis-invoicing) - (66%): Misrepresentation of gold quality is a common issue, impacting buyer trust and market stability.

5. IFFs from manipulating the prices at which gold is sold between related entities to shift profits to low-tax jurisdictions (Tax Evasion and Avoidance) - (65%): Price manipulation between related entities is used to evade taxes, a significant risk to fiscal policies.

6. IFFs from underreporting the value of gold sales to reduce taxable income (Tax Evasion and Avoidance) - (64%): Underreporting sales values to minimize tax liabilities is another major risk.

7. IFFs from engaging in black market sales to avoid legal scrutiny and to facilitate money laundering (Gold Smuggling) - (64%): Gold smuggling through black market sales facilitates money laundering and avoids legal scrutiny.

8. IFFs from lack of transparency in sales transactions, including undisclosed beneficial ownership of gold trading entities - (61%): Transparency issues in sales transactions pose a significant risk, hiding the true ownership and financial flows.

9. IFFs from manipulating the declared value of gold during intra-company transfers to shift profits to low-tax jurisdictions (Tax Evasion and Avoidance) - (60%): Value manipulation during intra-company transfers is a risk for profit shifting and tax evasion.

Figure 4.3.4: IFFs Risks at the Marketing and Sales of Gold Mining in Ghana

	Institution	Count	Percentage (%)
1	Minerals Commission	54	70%
2	Local suppliers	53	69%
3	Precious Mineral Marketing Company	50	65%
4	Mines Inspectorate	49	64%
5	GRA - Mining Audit Desk	48	62%
6	Presidency	21	27%
7	GRA - Customs	18	23%
8	GRA – Large Taxpayer office	17	22%
9	GRA – Transfer Pricing unit	16	21%
10	Bank of Ghana	14	18%
11	Auditor General	13	17%
12	Financial Intelligence Centre	11	14%

Source: Interviews

10. IFFs from using the sale of gold to integrate the proceeds of illegal activities into the formal economy (Money Laundering) - (60%): Money laundering through gold sales integrates illicit proceeds into the formal economy.

11. IFFs from selling gold through unregulated markets or channels to evade taxes, duties, and regulatory oversight (Gold Smuggling) - (60%): Unregulated market sales evade taxes and regulatory oversight, posing significant fiscal risks.

12. IFFs from illicitly transferring profits from gold sales out of the host country to evade taxes and regulations (Profit Shifting) - (56%): Illicit profit transfers out of the country to avoid taxes and regulations are common.

13. IFFs from using offshore accounts to hide sales revenues and avoid repatriation of funds (Profit Shifting) - (56%): Offshore accounts are used to hide revenues and avoid financial obligations.

14. IFFs from employing front companies to obscure the origins and destinations of financial flows associated with gold sales (Money Laundering) - 15 (19%): Using front companies to obscure financial flows is a less common but still significant risk.

4.3.4.1 Are the selected IFFs risk(s) at Marketing and Sales stage Low, Medium or High?

Table 4.6.1 indicates that, the majority of the selected IFF risks categorized as:

- High Risk (approximately 83%).
- Medium Risk accounts for about 14% of the cases.
- Low Risk is minimal, making up about 3% of the assessments.

This breakdown indicates a predominance of high-risk IFFs, highlighting the critical need for stringent measures and oversight at this stage

Table 4.3.4.1: Selected IFFs risk(s) at the Marketing and Sales Stage

Risk Level	Count	Percentage (%)
High Risk	60	83%
Medium Risk	10	14%
Low Risk	2	3%
Total	**72**	**100%**

Source: Interviews

4.3.4.2 What are the actors involved at the Marketing and Sales stage of the supply chain?

Table 4.6.2 provides details about the ranking of the actors involved in the marketing stage of the supply chain based on their involvement percentage:

1. GRA - Mining Audit Desk – 52 (68%): The Ghana Revenue Authority's (GRA) Mining Audit Desk plays the most significant role at this stage of the supply chain. Their involvement is essential in ensuring proper financial practices and auditing related to gold marketing.

2. GRA - Transfer Pricing Unit – 50 (65%): The Transfer Pricing Unit of the GRA is also highly involved, with a focus on ensuring that transactions between related entities are valued fairly and in line with market standards to avoid tax evasion.

3. GRA - Customs – 50 (65%): Customs are pivotal at this stage, ensuring that all export procedures are followed, taxes are paid, and that no misreporting of the quantity or value of gold takes place during marketing and sales.

4. Precious Mineral Marketing Company – 49 (64%): The Precious Mineral Marketing Company is heavily involved in the formalization and facilitation of gold sales, contributing to ensuring transparency and the legality of transactions.

Table 4.3.4.2: Actors involved at the Marketing and Stage

	Institution	Count	Percentage (%)
1	GRA - Mining Audit Desk	52	68%
2	GRA – Transfer Pricing unit	50	65%
3	GRA - Customs	50	65%
4	Precious Mineral Marketing Company	49	64%
5	GRA – Large Taxpayer office	46	60%
6	Bank of Ghana	45	58%
7	Minerals Commission	30	39%
8	Local suppliers	26	34%
9	Presidency	22	29%
10	Mines Inspectorate	19	25%
11	Auditor General	14	18%
12	Financial Intelligence Centre	13	17%

Source: Interviews

5. GRA - Large Taxpayer Office – 46 (60%): This office plays a significant role in overseeing taxation related to large-scale mining and ensuring that gold sales are appropriately reported for tax purposes.

6. Bank of Ghana – 45 (58%): The Bank of Ghana's role is important, particularly in the regulation of foreign exchange transactions and ensuring that the proceeds from gold sales are properly accounted for in the national financial system.

7. Minerals Commission – 30 (39%): The Minerals Commission is tasked with regulating and overseeing the broader mining sector, ensuring that operations remain compliant with legal standards, though its involvement at the marketing stage is more limited.

8. Local Suppliers – 26 (34%): Local suppliers are moderately involved at this stage, focusing on supporting logistical operations related to gold marketing and sales.

9. Presidency – 22 (29%): The Presidency is indirectly involved in the gold marketing stage through its influence on policy-making and enforcement of regulations.

10. Mines Inspectorate – 19 (25%): The Mines Inspectorate focuses more on operational safety and compliance, but it still holds a role in ensuring the legality of marketing practices.

11. Auditor General – 14 (18%): The Auditor General's office is involved in financial audits, but its direct role in the marketing stage is relatively limited compared to other institutions.

12. Financial Intelligence Centre – 13 (17%): The Financial Intelligence Centre plays a smaller yet crucial role in monitoring suspicious financial activities linked to gold sales and ensuring that the proceeds do not stem from illicit activities.

Chapter Five

Discussions on Illicit Financial Flows Risks along the Gold Mining Supply Chain

5.1 Introduction

To complement the findings from the structured interviews in chapter four, this chapter presents some general comments from the unstructured interviews on illicit financial flows risks along the supply chain of the gold mining sub-sector in Talensi, Kenyasi and Obuasi in Ghana. Unstructured interviews allowed respondents to provide some additional comments on illicit financial flows risks across the mining, processing, transportation, and marketing and sales stages of the supply chain. Respondents also provided comments on how to address these risks.

5.2 Corruption and smuggling

Respondents: Money for buying gold comes from sources largely unknown following government failure through the Precious Mental Marketing Company to mobilize enough money to buy gold produced, excess gold is bought by foreigners and their local collaborators, smuggled outside Ghana and re-exported in the name of a third country, relations between mining company and their sub-contractors and communities are strained, some attempt at smuggling gold in one instance. All these undermine the local economy leading to less revenue for the government, contributing significantly to illicit financial flows and thus undermining domestic resource mobilization for national development. Supply chain complexity and regulatory compliance are key issues identified which are bordered on the faceless people who funded small-scale mining and also bought the excess gold in the system and where the gold was going. Gold from ASM and galamsey, which are often informal and poorly regulated in the form of the absence of customer due diligence and porous borders facilitate the gold smuggling out of the country.

Talensi: In the case of Talensi, respondents commented on the issue of nearly 40 small-scale miners with valid licenses being displaced by a Chinese company Shanxi Mining that was brought in by one of the small-scale mining companies, Yenya Mining company that suddenly transformed itself from the Chinese state mining service support company into a private large-scale miner and trying to swallow all the small ones with assistance from politicians and traditional authorities in the area, with high IFFs risks.

Obuasi: One case from Obuasi has to do with local service companies bidding for jobs and getting their bids passed onto others from outside. In one instance, the GRA had a printout of over a million Ghana cedi jobs that was recorded against the name of a local company but going through the bank statements of the local company, these incomes did not reflect. If the job that should have gone to the local company went to a foreign one, there is the likelihood that Ghana lost revenue and if the costs were inflated, then there was no value-for-money and thus a leakage with possible IFFs risks:

How to address the issue: Some gold buyers from the ASM called for a state monopoly of gold purchases as follows: "When these politicians were campaigning and came to us we recommended that the state need to take over the purchase of gold like they do with cocoa. We and our people only need technology and financial assistance and we will produce the gold and the government must then come up with the money to buy it. From us and we will stop foreigners from dominating our gold buying" (a gold buyer-Obuasi).

5.3 Mining Stage: Tax Base Erosion and Profit-Shifting issues

Respondents: In the Talensi area, respondents highlighted the smuggling of gold to avoid export taxes. For example, as narrated by Charles Taleo - Director of Yenya Mining: "I suspected my people (Shanxi mining) he contracted to provide mining services were stealing the gold so we organized an ambush and caught them with 21 bars of gold between Bolgatanga and Tamale. The security agencies are still investigating the case but I was surprised that everybody in the minerals commission and politicians in Bolga and Accra and even traditional authorities were calling me to allow the gold to go. But they are forgetting that as a partner I also had a benefit-share of 7% in the gold as my company agreement with Shanxi stipulated and even I deserve compensation from the state for whistleblowing" (Interview, 2024)

Talensi and Kenyasi: Respondents also underlined gold theft at the mining stage: There were also cases of young men attempting to crawl into the mining shafts at night or during stormy weather, leading to several deaths in Talensi and Kenyasi. Those who might have succeeded in the past might not necessarily sell their gold to well-established buying centres for fear of detection and arrest and would likely sell to faceless people who could use it for other cross-border transactions leading to loss of tax revenue and foreign exchange.

How to address the issue: Some strategies may include, security challenges, requiring the installation of CCTV and tracking systems, improving suppliers' dependency by diversifying the supplier base, conducting supplier risk checks/audits and hedging strategies.

5.4 Processing Stage: Misclassification and Misreporting issues

Respondents: Risks according to respondents include the Misclassification of gold purity to manipulate export prices and the Misreporting of by-products to evade additional taxes. Respondents highlighted the smuggling of gold to avoid export taxes. For example, as narrated by Charles Taleo-Director of Yenya Mining:

How to address the issue: Government need to monitor the gold refineries in order to promote transparency and accountability.

5.5 Issues at the Transportation, and Marketing and Sales stages

Respondents: Gold buyers, during the interviews in Talensi and Obuasi were of the view that foreigners have taken over the gold business as they are better able to Marshall cash and pay higher rates for whatever quantity of gold is produced. These local buyers, however, do not know where the money is coming from or where the gold is going. "We are sitting here the whole day but no business as nobody is coming to sell. Several foreign entities previously operated offices for purchasing gold directly, but they have since shifted their strategy and no longer buy it directly.. This is why we advised then candidate Nana Addo that the government should monopolize the purchases of gold as is done with cocoa but after they got into office, they forgot this good advice. Foreigners have taken over the gold trade. It used to be that we local bought the gold and only the excess that we could not absorb that we referred to them but now that is not the case. And we are complaining about the falling value of the cedi? If government buys all the gold, we can use it to stabilize the cedi" (A Gold Buyer-Obuasi, 2024).

How to address the issue: Government should enforce state purchase of gold by allowing citizens access to own gold by buying from an established government institution.

Chapter Six
Conclusion and Policy Recommendations

6.1 Introduction

This chapter draws on the assessments and findings in the previous chapters to provide overall insights and policy recommendations across the various stages of the gold mining supply chain, from exploration to reclamation stages to inform policy interventions.

6.2 Conclusion

In conclusion, the findings in this study paint a concerning picture of the impact of illicit financial flows (IFFs) in the gold mining sector in Ghana. A significant majority of respondents perceive these illicit activities as having a profound effect on various aspects of their livelihoods. The perception that corruption among government officials contributes substantially to IFFs suggests deep-seated governance challenges.

The study also highlights varying degrees of institutional involvement and risks of illicit financial flows (IFFs) along the gold supply chain. The mining stage poses a high risk of IFFs, particularly involving trade mis-invoicing and smuggling, with institutions like the Minerals Commission, Mines Inspectorate, and local suppliers playing crucial roles. The processing stage also carries significant risks, such as smuggling, mis-invoicing, and money laundering, with oversight from the Precious Mineral Marketing Company, GRA Large Tax offices, and the Minerals Commission. In the transportation stage, institutions like GRA - Customs, the Mining Audit Desk, and the Precious Mineral Marketing Company are deeply involved, but challenges in preventing smuggling and mis-invoicing persist. The marketing and sales stage is the most vulnerable to IFFs, with key institutions such as GRA's Mining Audit Desk and Transfer Pricing Unit monitoring transactions but facing risks of corruption, price manipulation, and money laundering. Finally, the reclamation and closure stage, while less risky, still involves potential IFFs from underreporting costs and corruption, with environmental regulatory bodies and local governments ensuring compliance with reclamation commitments. Across all stages, stronger institutional coordination and oversight are critical to mitigating IFF risks.

6.3 Policy Recommendations

Policy Recommendation 1: Addressing artisanal and small-scale mining (ASM) issues in Ghana requires a robust institutional framework that promotes formalization while tackling environmental, social, and safety concerns. The Minerals and Mining Act 2006 (Act 703) provides legal backing for ASM, but enforcement remains weak. Encouraging miners to formalize may involve granting secure access to land and resources through mining corridors and fostering collaboration between industrial and small-scale miners to reduce conflict and improve sustainability (Global Initiative, 2023).

Lessons from Tanzania's success with cooperative movements suggest that supporting collective mining groups in Ghana, with appropriate safeguards, can be effective. Additionally, gender-inclusive policies are essential, as Ghana's current Minerals and Mining Policy (2014) lacks targeted strategies for women, a vital part of the ASM workforce (Aryee, Ntibery & Atorkui, 2003). Establishing decentralized service centers, such as gold processing and purchasing hubs, could enhance engagement and governance in the ASM sector.

To ensure the success of these efforts, comprehensive monitoring and evaluation must assess their impact, particularly on women, adjusting policies as necessary. Ghana's ASM Formalization Strategy (Ministry of Lands and Natural Resources, 2017) and international examples can guide the development of a sustainable and regulated ASM sector (Global Initiative, 2023).

Policy Recommendation 2: Reform the Tax Regime: The tax regime in the mining sector should be reformed to close loopholes that allow for tax evasion and other illicit financial practices. This could involve revising tax laws to ensure they are clear, enforceable, and designed to minimize opportunities for abuse.

Policy Recommendation 3: Promote Public Awareness and Stakeholder Engagement: Raising public awareness about the consequences of IFFs and engaging stakeholders in dialogue on how to address these issues could foster a collective effort to combat them. Community-based monitoring and reporting mechanisms could also be developed to involve local populations in oversight activities.

Policy Recommendation 4: At the mining or extraction stage, the government should implement real-time monitoring systems (such as satellite and drone technologies) to ensure that companies comply with mining laws, safety regulations, and environmental standards. Periodic inspections should be mandated to verify compliance.

Policy Recommendation 5: For the processing stage, government institutions should collaborate to enforce stricter controls on the reporting of the quantity, value, and quality of processed minerals. Collaborate with international bodies to track and eliminate misreporting and illicit financial flows (IFFs) in trade.

Policy Recommendation 6: At the transportation stage, the government should increase oversight and introduce anti-corruption mechanisms for customs and transportation authorities to prevent bribery and ensure the legal movement of minerals across borders.

Policy Recommendation 7: With the marketing and sales stage, the government should mandate full disclosure of sales transactions, including the ultimate beneficiaries (beneficial ownership) of gold trading entities, to improve transparency and reduce tax evasion and profit-shifting practices. Also, legal frameworks and international cooperation should be strengthened to combat gold laundering and smuggling through stricter enforcement of anti-money laundering (AML) measures.

References

Adams, M.D. (2005). Advances in Gold Ore Processing. Elsevier.
African Centre for Energy Policy (ACEP), (2015, February): Illicit Financial Flows and The Extractive Industry in Ghana.

African Union and African Mineral Development Centre (2024). Assessment of Sustainable Management of Mineral Resources in Ghana and their Alignment with the African Mining Vision

Ali-Nakyea, A. (2017). Illicit financial flows hampering West Africa's attainment of SDGs. Retrieved from https://www.tighana.org/news/gii-in-the-media/illicit-financial-flows-hampering-westafricas-attainment-of-sdgs-ali-nakyea/

Ama A. Ahene-Codjoe, Angela A. Alu, and Rahul Mehrotra (2022). Abnormal pricing in International Commodity trading: Evidence from Ghana. International Economics 172 (2022) 331–348

Aryee, B. N. A., Ntibery, B. K., & Atorkui, E. (2003). Trends in the small-scale mining of precious minerals in Ghana: a perspective on its environmental impact. Journal of Cleaner Production, 11(2), 131-140.

Ayee, J., S.reide, T., Shukla, G. P., & Le, T. M. (2011). Political Economy of the Mining Sector in Ghana. Policy Research Working Paper 5730
Deloitte Insights. (2020). "Creating an agile mining supply chain". Deloitte (Deloitte United States).
Extractive Industry Transparency Initiative. https://eiti.org/countries/ghana
FATF. (2015). Money Laundering and Terrorist Financing through Trade in Diamonds and Gold. Financial Action Task Force.

Ghana Chamber of Mines (2023) Performance of the Mining Industry in 2023. https://ghanachamberofmines.org/wp-content/uploads/2024/06/Performance-of-the-Mining-Industry-in-2023.pdf

Ghana Extractive Industry Transparency Initiative (2020).

Ghana Minerals Commission http://www.mincom.gov.gh/acts

Ghana Minerals Commission https://www.mincom.gov.gh/fiscal-regime/

Ghana Minerals Commission. https://www.mincom.gov.gh/fiscal-regime/

Ghana Netherland Business and Culture Council (2023, January) Unaccounted gold export: Ghana lost $1.1b in 2 years. https://www.gnbcc.net/News/Item/5982

Ghana Revenue Authority http://www.gra.gov.gh/acts/

Ghana Statistical Service (2024, May) Ghana 2023 Trade Report. https://statsghana.gov.gh/gssmain/fileUpload/Trade/Ghana%202023%20Trade%20Report.pdf

Ghanaweb (2023). Galamsey Queen Aisha Hueng Jailed four years https://www.ghanaweb.com/GhanaHomePage/NewsArchive/Galamsey-queen-Aisha-Huang-jailed-4-years-1892165

Global Initiative against Transnational Organized Crime. (2020). Illicit Gold Markets in East and Southern Africa.

Global Initiative. (2023). Illicit Gold Mining in West Africa: Scaling Solutions.

Government of Ghana. (2006). The Minerals and Mining Act, 2006 (Act 703). Government of Ghana.

Greg Smith, VP of Exploration of Newcore Gold (n.d). https://newcoregold.com/enchi-project/ghana-1-gold-producer-in-africa/

Hartman, H.L., & Mutmansky, J.M. (2002). Introductory Mining Engineering. Wiley.
Hunter, M. (2020). Illicit Financial Flows-Artisanal and Small-Scale Gold Mining in Ghana and Liberia.

IGF. (2017). Global Trends in Artisanal and Small-Scale Mining (ASM): A review of key numbers and issues. Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development.
International Monetary Fund (2011), Revenue Mobilization in Developing Countries, Prepared by the FiscalAffairs Department, Approved by Carlo Cottarelli

International Monetary Fund (2012), Fiscal Regimes for Extractive Industries: Design and Implementation, Prepared by the Fiscal Department, Approved by Carlo Cottarelli

Le Billon, P. (2011). Extractive Sectors and Illicit Financial Flows. http://www.cmi.no/publications/file/4248-extractive-sectorsand- illicit-financial-flows.pdf
Marsden, J., & House, I. (2006). The Chemistry of Gold Extraction. SME.

McKinsey & Company. (2019). "The mining value chain: A hidden gem". McKinsey (McKinsey & Company).
McKinsey & Company. (2020). "How digital innovation can improve mining productivity". McKinsey (McKinsey & Company)
McKinsey Global Institute (2013), Reverse the curse: Maximizing the potential of resource-driven economies

Ministry of Lands and Natural Resources. (2017). Ghana Artisanal and Small-Scale Mining Formalization Strategy. Government of Ghana.

OECD. (2018). Illicit Financial Flows: The Economy of Illicit Trade in West Africa. OECD Publishing.

SpringerLink. (2019). "Towards Supply Chain Resilience in Mining Industry: A Literature Analysis". SpringerLink (SpringerLink).

Tax Justice Network Africa (2020, November). Mining Sector and Illicit Financial Flows

(IFFs) in Zimbabwe. https://taxjusticeafrica.net/resources/blog/mining-sector-and-illicit-financial-flows-iffs-zimbabwe

Taylor, R.G. (2007). Gold: History and Genesis of Deposits. Springer.

UNEP. (2020). Addressing the Illicit Financial Flows in the Extractive Sector. United Nations Environment Programme.

United Nations Conference on Trade and Development (UNTAD): Economic Development in Africa Report (2020). Tackling Illicit Financial Flows for Sustainable Development in Africa

World Bank Group (2017) Illicit Financial Flows. https://www.worldbank.org/en/topic/financialsector/brief/illicit-financial-flows iffs#:~:text=IFFs%20reduce%20resources%2C%20but%20they,and%20weak%20transparency%20and%20accountability.

World Gold Council (2024, June 25) Global Mine Production – Gold. https://www.gold.org/goldhub/data/gold-production-by-country
World Gold Council. (2020). "Gold Industry Supply Chain Confirms Steps to Underscore Trust from Mine to Market". World Gold Council (World Gold Council).

World Gold Council. (2020). Gold and illicit financial flows. World Gold Council.
Wresearch (2022, May); Ghana Gold Mining Market (2024-2030) Outlook | Analysis, Companies,

Trends, Size, Forecast, Growth, Industry, Share, Revenue & Value. https://www.6wresearch.com/industry-report/ghana-gold-mining-market-outlook

Yeboah, Samuel and James Nyarkoh, Bright (2022). The Impact of Mining on the Ghanaian Economy: A Comprehensive Review (1992-2020) MPRA Paper No. 117502, https://mpra.ub.uni-muenchen.de/117502/

Global Financial Integrity

www.gfintegrity.org

@illicitflows

Comms@gfintegrity.org

Global Financial Integrity