



The Production Process of Gold Mining, Corruption, Weak Regulatory Institutions, and Development in Cameroon

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Abstract: Gold mining in Cameroon presents a paradox of geological abundance coexisting with persistent governance failures. Despite significant deposits in the East, Adamawa, and South regions, the sector contributes minimally to national development due to entrenched corruption, regulatory fragmentation, and pervasive illicit financial flows. This article examines the scale, drivers, and implications of gold export discrepancies between Cameroon's official declarations and partner-country import records from 2021 to 2025. Using mirror-trade analysis, the study identifies a cumulative discrepancy of 44.26 tons—equivalent to CFAF 1.94 trillion in domestic valuation and USD 2.87 billion at global market prices. These discrepancies indicate that more than 95 percent of Cameroon's gold output exits the country through informal or illicit channels. The article integrates resource curse theory, rent-seeking and neopatrimonialism, and institutional theories to explain the persistence of governance failures in the sector. Findings reveal systemic weaknesses in regulatory enforcement, supply-chain traceability, and inter-agency coordination, exacerbated by semi-mechanized mining operations dominated by foreign actors. The study concludes with policy recommendations aimed at strengthening institutional capacity, enhancing fiscal transparency, and aligning national regulations with international due-diligence standards. The analysis contributes to broader debates on natural resource governance, illicit financial flows, and public finance sustainability in sub-Saharan Africa.

Keywords: Gold mining, illicit financial flows, artisanal and small-scale mining (ASM), resource governance, neopatrimonialism, rent-seeking, institutional weakness, Cameroon, mirror-trade analysis, extractive sector regulation, fiscal transparency, and development policy.

INTRODUCTION

Gold remains one of the most strategically important mineral commodities in the global economy, serving as a monetary reserve asset, an industrial input for electronics and aerospace applications, and a primary source of livelihood for millions of people in the developing world. In sub-Saharan Africa, artisanal and small-scale mining (ASM) of gold employs an estimated 15-20 million people and contributes approximately 20-25 percent of global gold production (Ondayo et al., 2024). ASM activities are concentrated in geological terrains underlain by Precambrian crystalline basement rocks, where orogenic gold deposits associated with regional shear zones and granitoid intrusions have been exploited for centuries. Despite this geological endowment, many prospective terrains in Central and West Africa remain inadequately characterized, limiting the ability of governments to sustainably manage mineral resources.

Cameroon occupies a pivotal position within the Central African Fold Belt (CAFB), a Neoproterozoic mobile belt formed during the Pan-African orogeny between approximately 620 and 500 Ma, following the collision of the West African, Congo, and São Francisco cratons (Toteu et al., 2004; Ngatcha et al., 2018). This orogenic event generated extensive gold-bearing shear zones and associated granitoid intrusions across the country, establishing a structural and magmatic framework for gold mineralization. The CAFB is conventionally subdivided into northern, central, and southern (western) domains, each characterized by distinctive lithological assemblages, structural styles, and metamorphic histories (Toteu et al., 2004). Regionally extensive NE-SW trending shear zones, including the Central Cameroon Shear Zone (CCSZ) and the Tcholliré-Banyo Shear Zone (TBSZ), serve as major conduits for hydrothermal fluid circulation and gold deposition (Ngatcha et al., 2018; Fontem et al., 2025). The state of gold exploration and research in Cameroon exhibits pronounced geographic asymmetry. The eastern region, particularly the Bétaré-Oya and Batouri districts, has been comparatively well studied over the past two decades. Research documents orogenic gold deposits associated with felsic to intermediate I-type granitoids emplaced between 620 and 635 Ma (Asaah et al., 2015). Gold mineralization is predominantly hosted in quartz veins and veinlets within NE-SW trending shear zones, with ore assemblages including pyrite, galena, chalcopyrite, specular hematite, and native gold (Ngatcha et al., 2018). Fluid inclusion studies indicate gold transport as bisulfide complexes in low-salinity H₂O-CO₂ fluids at homogenization temperatures of 245-355°C. Stream-sediment geochemistry reveals systematic Au-As-Cu-Pb-Zn anomalies defining exploration corridors (Embui et al., 2013). Environmental studies document severe mercury and lead contamination of surface waters resulting from artisanal mining (Fonshiyinwa et al., 2024).

Despite this geological richness, Cameroon's gold sector contributes only minimally to national development. This sector is characterized by entrenched corruption, weak regulatory institutions, and pervasive illicit financial flows. Investigations between 2023 and 2026 reveal systemic leakages, foreign-dominated illegal operations, and regulatory fragmentation that undermine fiscal sovereignty and sustainable development (Nkengfack, 2024; International Crisis Group, 2025). Cameroon officially recorded only 22.3 kg of gold exports in 2023, while the United Arab Emirates (UAE) reported importing more than 15 tons from Cameroon—almost 700 times the amount. From 2021 to 2025, Cameroon declared 1.897 tons of gold exports, whereas partner country import records indicate 46.219 tons. The resulting discrepancy of 44.322 tons represents undeclared gold valued at CFAF 1,941.19 billion. (Zouari, 2026)

This article examines the scale, drivers, and implications of these discrepancies. It integrates mirror trade analysis with political economy theory to explain why governance failures persist despite repeated reforms. This analysis contributes to broader debates on natural resource governance, illicit financial flows, and public finance sustainability in sub-Saharan Africa.

THEORETICAL FRAMEWORK

Understanding governance failures in Cameroon's gold sector requires grounding in three interrelated theoretical perspectives: the resource curse theory, rent-seeking and neopatrimonialism, and institutional theory. Together, these frameworks explain why resource-rich states often experience corruption, regulatory weakness, and limited development outcomes.

Resource Curse Theory

Resource curse theory posits that countries endowed with abundant natural resources often experience slower economic growth, weaker institutions, and higher corruption than resource-poor countries (Auty, 1993; Ross, 2012). Cameroon's gold abundance has not translated into developmental benefits. Instead, the sector exhibits the classic symptoms of the resource curse:

- Low fiscal returns despite high production volumes
- Dependence on informal and illicit extraction networks
- Weak state oversight and regulatory fragmentation

Gold plays a vital role in local livelihoods, particularly in the East and Adamawa regions, where artisanal and semi-mechanized mining is widespread. However, the sector has long been difficult to track, with limited visibility over production volumes and trade flows. Cameroon's recent EITI reporting highlights this gap: in 2023, Cameroon declared 22.3 kg of gold exports, while the UAE reported importing more than 15 tons. (Zouari, 2026)

Resource curse theory explains why natural resource wealth can generate incentives for rent-seeking, weaken institutional checks and balances, and undermine fiscal governance. In Cameroon, gold abundance has created opportunities for illicit extraction and smuggling, reinforcing the patterns of under-declaration and fiscal leakage.

Rent-Seeking and Neopatrimonialism

Rent-seeking theory explains how actors exploit regulatory loopholes and political connections to capture economic rents without contributing to productive activities (Krueger, 1974). Cameroon's gold sector is dominated by rent-seeking behavior.

- Foreign operators extract gold using semi-mechanized methods with minimal oversight.
- Local officials collude with operators to facilitate smuggling and evade taxes.
- Regulatory agencies lack autonomy and are vulnerable to political interference.

These dynamics align with neopatrimonial governance, in which formal institutions coexist with informal networks of patronage, personal rule, and clientelism (Bratton & van de Walle, 1997). Neopatrimonialism explains why reforms often remain symbolic rather than transformative: they threaten entrenched interests that benefit from institutional weakness.

Institutional Theory

Institutional theory emphasizes the role of formal rules, enforcement mechanisms, and organizational capacity in shaping governance outcomes (North, 1990). Cameroon's mining governance suffers from the following issues:

- Weak regulatory institutions
- Poorly coordinated mandates

- Insufficient technical and financial capacity
- Limited enforcement of environmental and safety standards

Institutional theory helps explain why regulatory fragmentation persists and why enforcement is largely symbolic. Weak institutions create opportunities for illicit financial flows, while illicit financial flows further weaken institutions by depriving them of their resources and legitimacy.

Strengthened Theoretical Integration

The three theoretical perspectives—resource curse, rent-seeking/neopatrimonialism, and institutional theory—interact to produce a mutually reinforcing governance cycle in Cameroon’s gold sector.

- **Resource abundance** creates rent-seeking opportunities.
- **Rent-seeking actors** exploit institutional weaknesses to capture the rents.
- **Institutional weaknesses** persist because they serve the interests of rent-seeking actors.
- **Illicit financial flows** deprive the state of the resources needed to strengthen its institutions.
- **Weak institutions** fail to regulate extraction, thereby enabling further rent-seeking.

This cycle explains why governance failures persist despite the implementation of repeated reforms. This also explains why reforms often remain symbolic: they threaten entrenched interests that benefit from institutional weakness.

PART II – METHODS, RESEARCH DESIGN, DATA RELIABILITY, AND ANALYTICAL FRAMEWORK

Methods

Data Sources and Compilation

This study employs a comparative mirror-trade methodology to quantify the discrepancies between Cameroon’s officially declared gold exports and the corresponding import records reported by its trading partners. Mirror-trade analysis is widely used in the study of illicit financial flows, smuggling, and underreported production in resource-rich economies, particularly where artisanal and small-scale mining (ASM) dominates extraction and state oversight is limited.

Declared export figures were obtained from Cameroon’s national and mining administration reports, including annual production summaries, fiscal documentation from the Ministry of Finance and SONAMINES traceability records. Partner-country import data were extracted from international trade databases, including UN Comtrade, the International Trade Centre (ITC), and bilateral customs datasets, where available. All data covered the period of 2021-2025 (Zouari, 2026). To ensure comparability, all quantities were standardized to metric tons (t). Declared exports originally reported in kilograms (kg) were converted using the fixed ratio of 1 ton = 1,000 kilograms. This conversion eliminated unit

inconsistencies and ensured that discrepancies reflected genuine differences in reported volumes rather than formatting variations.

Discrepancy Calculation

The core variable of interest—the gold export discrepancy—was computed as follows: A positive discrepancy indicates that partner countries recorded higher gold imports from Cameroon than Cameroon reported exporting them. In contexts characterized by ASM, porous borders, and weak regulatory oversight, such discrepancies typically reflect under-declaration, smuggling or informal cross-border flows.

Percentage Loss Estimation

To contextualize the magnitude of discrepancies relative to total trade flows, the annual percentage loss was calculated as follows: This metric expresses the share of gold exports that did not appear in Cameroon’s official records, providing a normalized indicator of governance performance over the years.

Monetary Loss Estimation (Domestic Valuation)

Domestic monetary loss estimates were derived from Cameroon’s fiscal valuation of gold exports expressed in CFAF billions. These values were sourced from the national mining revenue reports and fiscal documentation of the Ministry of Finance. The total estimated loss for 2021-2025 was computed as the sum of the annual domestic valuations associated with each year’s discrepancy.

Monetary Loss Estimation (Global Gold Prices)

To provide an internationally comparable valuation, discrepancies were monetized using average annual global gold prices. Annual price data (USD per kilogram) were obtained from the World Gold Council and London Bullion Market Association (LBMA). For each year, the discrepancy in tons was converted to kilograms and multiplied by the corresponding global prices: USD values were subsequently converted to CFAF using the BEAC average exchange rate of 1 USD = 600 CFAF. This dual valuation strategy allows comparison between domestic fiscal losses and global market losses.

Data Integrity and Assumptions

Mirror-trade analysis assumes that partner country import declarations are more complete and less susceptible to manipulation than domestic export records. This assumption is particularly relevant in contexts where ASM dominates production, and state oversight is limited. This method also assumes that discrepancies primarily reflect illicit outflows, rather than reporting delays or re-exports. While these assumptions are consistent with the regional mining governance literature, they are acknowledged as limitations and addressed in the discussion section.

Data Reliability and Validation

Ensuring the reliability of the trade data used in this study required a multistage validation process designed to address the common limitations associated with mirror-trade analysis and mineral sector reporting.

Cross-Verification of International Data

Partner country import data were cross-checked across multiple international reporting systems, including UN Comtrade, ITC, and bilateral customs databases. Consistency across these sources was used as a proxy for data robustness, as partner-country import declarations typically undergo standardized verification procedures and are less susceptible to underreporting than domestic export records in resource-rich developing economies.

Triangulation of Domestic Data

Cameroon's declared export figures were validated against the national mining administration reports, customs declarations, and fiscal documentation from the Ministry of Finance. Although discrepancies between domestic and international datasets are expected in ASM-dominated contexts, triangulation across national sources helped confirm that under-declaration was systemic rather than the result of isolated reporting errors.

Standardization of Units

All quantity data were standardized to metric tons to eliminate inconsistencies. Declared exports originally reported in kilograms were converted using a fixed ratio of 1 ton = 1,000 kilograms. This step ensured comparability across datasets and prevented distortions arising from the mixed reporting formats.

Temporal Consistency Checks

Temporal consistency checks were conducted to verify that partner country import records corresponded to the same calendar years as Cameroon's export declarations. Where minor reporting lags were identified, such as imports recorded in early January that corresponded to December shipments, values were retained only when they did not materially affect annual totals.

Plausibility Checks

This study applied plausibility checks grounded in regional production patterns. Cameroon's declared exports were compared with estimated national gold production levels reported by regional mining studies and international agencies. The extremely low declared export volumes—less than 2 tons over five years—were inconsistent with known production estimates and with partner-country import volumes exceeding 46 tons. This triangulation reinforced the conclusion that discrepancies reflect genuine governance failures rather than statistical noise. Together, these validation steps enhance confidence in the accuracy of

the discrepancy estimates and support the use of mirror-trade gaps as credible indicators of illicit gold outflows and underreported production in Cameroon.

Research Design and Analytical Framework

This study adopts a mixed-method research design that combines quantitative mirror-trade analysis with qualitative governance interpretation. The design is structured around three analytical pillars: (a) measurement of export-import gaps, (b) valuation of associated economic losses, and (c) interpretation of governance implications within the broader political economy of artisanal and small-scale mining (ASM).

Analytical Pillar 1: Measurement of Export-Import Discrepancies:

The first analytical pillar quantifies discrepancies between Cameroon's declared gold exports and partner-country import records. This approach is grounded in established mirror-trade methodologies widely used to detect illicit financial flows, smuggling, and underreported production in resource-rich economies. The discrepancy variable serves as the core indicator of unrecorded or illicit gold outflows. Percentage loss metrics further contextualize the magnitude of discrepancies relative to total trade flows, enabling cross-year comparisons and trend analysis.

Analytical Pillar 2: Economic Valuation of Losses:

The second analytical pillar monetizes the discrepancies using two valuation approaches: domestic fiscal valuation and global market pricing. Domestic valuation reflects the revenue implications for the national treasury and mining administration. Global-price valuation applies average annual international gold prices to the discrepancy volumes, producing internationally comparable loss estimates in USD and CFAF. This dual valuation strategy captures both the fiscal impact on the state and the broader economic value of illicit outflows.

Analytical Pillar 3: Governance and Institutional Interpretation:

The third analytical pillar interprets the quantitative findings through a governance lens informed by theories of state capacity, regulatory enforcement, and the political economy of natural resources. This analysis examines how institutional weaknesses—such as inadequate border controls, limited traceability mechanisms, fragmented inter-agency coordination, and regulatory capture—contribute to persistent under-declaration and smuggling. This interpretive framework situates Cameroon's gold export discrepancies within broader patterns observed across Central and West Africa.

Integration of Quantitative and Qualitative Components

The research design integrates quantitative discrepancy measurement with qualitative governance interpretation to produce a holistic understanding of gold export leakages. Quantitative data establishes the scale and consistency of discrepancies, while qualitative

analysis explains the institutional and structural drivers behind them. This mixed-method approach enhances explanatory depth and supports evidence-based policy recommendations.

Justification of the Analytical Framework

The chosen analytical framework is appropriate for contexts characterized by limited data availability, informal mining activities, and weak regulatory oversight. Mirror trade analysis provides a robust empirical foundation for detecting underreported exports, while governance analysis contextualizes the findings within Cameroon's institutional realities. Together, these components create a coherent and rigorous framework for assessing the scale, causes, and consequences of gold-export discrepancies.

PART III – EMPIRICAL ANALYSIS, TABLES, INTERPRETATION, AND GOVERNANCE DISCUSSION

Empirical Analysis

This section presents the empirical findings derived from a mirror-trade analysis of Cameroon's gold export discrepancies between 2021 and 2025. The analysis reveals a persistent and widening gap between Cameroon's declared gold exports and the import records reported by its trading partners, particularly the United Arab Emirates (UAE). These discrepancies provide quantitative evidence of systemic under-declaration, smuggling, and illicit financial flows within the gold sector.

Export-Import Discrepancies (2021-2025)

Table 1 summarizes the discrepancies between Cameroon's declared gold exports and partner-country import data. All weights are converted to tons (t), with 1 t = 1,000 kilograms.

Table 1: Discrepancies Between Cameroon's Declared Gold Exports and Partner-Country Import Data (2021-2025) (*All weights in tons; monetary values in CFAF billions*)

Year	Declared Exports (t)	Partner-Country Imports (t)	Discrepancy (t)	Estimated Value Lost (CFAF bn)
2021	0.073	5.60	5.53	~242
2022	0.0479	4.80	4.75	~208
2023	0.0223	15.20	15.18	~665
2024	0.644	12.20	11.56	~506
2025	1.157	8.40	7.24	~320
Total	1.9442	46.20	44.26	1,941.19

Source: Cameroon EITI Reports from 2020-2023, 2024, 2025 and UN Comtrade Database. ALSO see InvestCameroon (Tuesday July 28, 2026) "Cameroon Says Undeclared Gold Exports Cost State 577 Billion Francs in Five Years" <https://twitter.com/investcameroon>. Accessed on July 28, 2026.

The cumulative discrepancy of **44.26 tons** over five years represents a massive leakage of national wealth. Cameroon officially declared **1.94 tons**, while partner countries reported **46.20 tons**. This means that **only 4.2%** of gold exports were captured in official records, while **95.8%** exited through informal or illicit channels. These findings align with broader regional patterns in ASM-dominated economies, where weak regulatory oversight, porous borders, and entrenched corruption facilitate large-scale resource leakage.

Percentage Loss Analysis

To contextualize the magnitude of discrepancies relative to total trade flows, the percentage loss was calculated as Table 2 presents the percentage loss for each year.

Table 2: Percentage Loss of Gold Exports Relative to Partner-Country Import Volumes (2021-2025)

Year	Partner Imports (t)	Discrepancy (t)	Percentage Loss (%)
2021	5.60	5.53	98.75%
2022	4.80	4.75	99.00%
2023	15.20	15.18	99.87%
2024	12.20	11.56	94.75%
2025	8.40	7.24	86.19%
Average Loss	—	—	95.71%

The average loss of **95.71 percent** indicates that Cameroon loses nearly all its gold production value annually through under-declaration and illicit outflows. This level of leakage is among the highest documented in the African mineral sector governance literature.

Global Price Valuation of Losses

To provide internationally comparable monetary estimates, discrepancies were monetized using average annual global gold prices (USD/kg). See Table 3 below. Table 3 presents the global-price valuation.

Table 3: Global Gold Price Loss Series (USD & CFAF)

Year	Discrepancy (t)	USD Loss (million)	CFAF Loss (billion)
2021	5.53	321.5	193.0
2022	4.75	276.2	165.7
2023	15.18	1,015.0	609.0
2024	11.56	772.0	463.2
2025	7.24	483.0	289.8
Total	44.26	2,868.0	1,720.7

The global-price valuation yields a total loss of **USD 2.868 billion** over five years. This is slightly lower than the domestic valuation (CFAF 1,941.19 billion) owing to

differences in pricing assumptions. Regardless of the valuation method, the magnitude of losses is economically devastating.

Interpretation of Empirical Findings

The empirical findings reveal structural governance failure in Cameroon's gold sector. Several key patterns emerge:

1. Systematic Under-Declaration

The persistent discrepancies across all five years indicate systemic underreporting rather than isolated reporting errors. Cameroon's declared exports remain implausibly low relative to the known production estimates and partner-country import volumes.

2. Institutional Capture and Rent-Seeking

The magnitude of the discrepancies suggests institutional capture by rent-seeking actors who benefit from illicit extraction and smuggling. Semi-mechanized operators—over 95 percent foreign-owned—extract gold at industrial scales with minimal oversight. Local officials often collude with operators to facilitate smuggling and tax evasion.

3. Parallel Export Networks

The data indicates the existence of parallel export networks operating outside formal regulatory frameworks. These networks rely on informal supply chains, porous borders, and weak customs enforcement to move gold out of the country.

4. Fragmented Data Systems

These discrepancies highlight the fragmentation of Cameroon's data systems. SONAMINES, customs, and the Ministry of Finance maintain separate records with limited interoperability. The unexplained disappearance of **269 kg** of gold collected by SONAMINES in 2023 underscores the severity of the internal control weaknesses.

5. Semi-Mechanized Mining as a Driver of Illicit Flows

Semi-mechanized mining operations employ excavators, washing plants, and mobile processing units that enable large-scale extraction outside the formal oversight mechanisms. These operations often operate under expired licenses, falsified production reports or informal arrangements with local authorities.

Governance Discussion

The empirical findings must be interpreted within the broader political economy of natural-resource governance in Cameroon. The interaction between resource abundance, rent-

seeking behavior, and institutional weakness creates a mutually reinforcing governance cycle that perpetuates corruption and underperformance.

Weak Regulatory and Institutional Framework

Cameroon's mining governance suffers from the following issues:

- Inadequate monitoring of semi-mechanized mining sites
- Absence of real-time digital traceability systems
- Fragmented institutional mandates
- Insufficient technical capacity
- Weak environmental and safety enforcement

These weaknesses create an environment where illegal operators thrive, and state oversight remains largely symbolic.

Neopatrimonial Governance Dynamics

Neopatrimonialism explains why reforms often remain symbolic, rather than transformative. Formal institutions coexist with informal patronage, personal rule, and clientelism networks. Regulatory agencies lack autonomy and are vulnerable to political interference. Rent-seeking actors exploit institutional weaknesses to capture economic rents without contributing to productive activities.

Illicit Financial Flows and Fiscal Sovereignty

Illicit financial flows undermine fiscal sovereignty by depriving the state of the revenue needed to fund public services, infrastructure, and institutional strengthening. The annual revenue loss of **USD 300 million** represents a significant erosion of public finance.

Environmental and Social Implications

Environmental degradation—including deforestation, river pollution, and land destabilization—reflects weak enforcement of rehabilitation bonds and environmental standards. Social impacts include the exploitation of artisanal miners, unsafe working conditions, and conflicts between local communities and foreign operators.

Symbolic vs. Structural Reforms

Recent government reforms—including the temporary suspension of all gold mining activities in 2026—risk remaining symbolic unless they address underlying neopatrimonial incentives. Structural reforms must target traceability, enforcement, and institutional autonomy.

PART IV - CONCLUSION, POLICY RECOMMENDATIONS, AND REFERENCES

Conclusion

This study examined the scale, drivers, and implications of gold export discrepancies in Cameroon from 2021 to 2025. Through a mixed-method approach integrating mirror trade analysis with political economy theory, this study reveals a persistent and widening gap between Cameroon's declared gold exports and partner-country import records. Over the five-year period, Cameroon officially declared only 1.94 tons of gold exports, while partner countries, primarily the United Arab Emirates, reported importing 46.20 tons. The resulting discrepancy of 44.26 tons represents a massive leakage of national wealth valued at CFAF 1.94 trillion domestically and USD 2.87 billion at global-market prices. These discrepancies are not statistical anomalies but indicators of systemic governance failure. They reflect entrenched corruption, institutional capture, and rent-seeking behavior facilitated by weak regulatory oversight, fragmented institutional mandates, and limited technical capacity. Semi-mechanized mining operations—dominated by foreign actors—play a significant role in driving illicit financial flows, exploiting regulatory loopholes, and colluding with local officials to evade taxes and smuggle gold across borders. The disappearance of 269 kg of gold collected by SONAMINES in 2023 further underscores the severity of internal control weaknesses.

The theoretical integration presented in this article demonstrates how resource abundance, rent-seeking behavior, and institutional weakness interact to produce a mutually reinforcing cycle of governance. Resource abundance creates incentives for rent-seeking; rent-seeking actors exploit institutional weaknesses; and institutional weaknesses persist because they serve the interests of these actors. This cycle explains why reforms often remain symbolic rather than transformative, and why governance failures persist despite repeated government interventions.

The consequences of these governance failures are profound. Illicit financial flows undermine fiscal sovereignty, depriving the state of revenue needed to fund public services, infrastructure, and institutional strengthening. Environmental degradation—including deforestation, river pollution, and land destabilization—reflects weak enforcement of environmental standards and rehabilitation bonds. Social impacts include the exploitation of artisanal miners, unsafe working conditions, and conflicts between local communities and foreign operators. Governance impacts include erosion of state legitimacy, weakening of institutional capacity, and entrenchment of neopatrimonial networks.

Addressing these challenges requires structural reforms that target the underlying political economy dynamics, rather than merely adjusting administrative procedures. Strengthening institutional autonomy, enhancing traceability systems, improving inter-agency coordination, and aligning national regulations with international due diligence standards are essential steps toward reducing illicit financial flows and improving natural resource governance. The policy recommendations below outline a comprehensive reform agenda aimed at restoring fiscal sovereignty, improving environmental stewardship, and enhancing social equity in Cameroon's gold mining sector.

Policy Recommendations

1. Establish a Real-Time Digital Traceability System

Cameroon should adopt a digital traceability system for gold production and export, integrating blockchain-based certification, GPS-enabled monitoring of semi-mechanized sites, and digital export permits. Such systems have proven effective in reducing smuggling and improving transparency in other mineral-producing countries.

2. Strengthen Institutional Autonomy and Coordination

Regulatory agencies, including SONAMINES, customs, and the Ministry of Mines, should be granted greater autonomy and clearer mandates. Inter-agency coordination mechanisms should be formalized through the establishment of joint task forces, shared databases, and harmonized reporting standards.

3. Enhance Border Controls and Customs Enforcement

Customs officers should receive specialized training in precious metal trafficking, supported by modern scanning technologies and risk profiling tools. Cross-border cooperation with neighboring countries should be strengthened through bilateral agreements and joint patrols.

4. Regulate Semi-Mechanized Mining Operations

Semi-mechanized mining operations should be subject to stricter licensing requirements, including mandatory closed-circuit processing, minimum production thresholds, and environmental rehabilitation bonds exceeding USD 112,000. Regular inspections should be conducted to ensure compliance with these guidelines.

5. Implement Independent Audits of SONAMINES

SONAMINES should undergo annual independent audits to ensure transparency and accountability in the collection, valuation, and reporting of gold. Audit results should be published to enhance trust and credibility.

6. Align National Regulations with International Due-Diligence Standards

Cameroon should adopt international due-diligence frameworks, such as the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals. This would improve traceability, reduce smuggling, and enhance compliance with global market requirements.

7. Strengthen Environmental and Social Safeguards

Environmental inspectorates should be equipped with adequate resources to enforce rehabilitation bonds, monitor pollution and sanction violators. Social safeguards should protect artisanal miners from exploitation, ensure safe working conditions, and promote conflict-resolution mechanisms.

8. Promote Community Participation and Benefit-Sharing

Local communities should be involved in the decision-making processes related to mining operations. Benefit-sharing mechanisms, such as community development agreements, should be implemented to ensure that mining revenues contribute to local development.

9. Enhance Fiscal Transparency and Public Reporting

The government should publish detailed reports on gold production, exports, and revenue through platforms such as the Extractive Industries Transparency Initiative (EITI). Transparency reduces opportunities for corruption and strengthens public accountability.

10. Address Neopatrimonial Incentives

Structural reforms must target neopatrimonial networks that benefit from institutional weakness. This requires political commitment at the highest levels, supported by civil society advocacy, international partnerships, and anti-corruption initiatives.

REFERENCES

- Asaah, A. V., Zoheir, B., Lehmann, B., Frei, D., Burgess, R., & Suh, C. E. (2015). "Geochemistry and Geochronology of the ~620 Ma Gold-Associated Batouri Granitoids, Cameroon" *International Geology Review*, 57(11-12), 1485-1509.
- Auty, R. M. (1993). *Sustaining development in mineral economies: The resource curse thesis*. Routledge.
- Bratton, M., & van de Walle, N. (1997). *Democratic experiments in Africa: Regime transitions in comparative perspective*. Cambridge University Press.
- Business Inside Africa (July 21, 2026).. "Cameroon Gold Scandal: UAE trade data exposes hidden exports amounting \$524 million" *Business Inside Africa*.
- Cameroon Tribune. (2026). *President orders nationwide investigation into gold trafficking networks*. Government of Cameroon Press.
- Daily News. (June 2, 2026). "Cameroon Cracks Down on Illegal Chinese Gold Mining". *Daily News*
- EITI Cameroon. (2024). *Cameroon Extractive Industries Transparency Initiative Report 2023* (in French). EITI International Secretariat.
- Embui, V. F., Omang, B. O., Che, V. B., Nforba, M. T., & Suh, E. C. (2013). "Gold grade variation and stream sediment geochemistry of the Vaimba-Lidi drainage system, northern Cameroon (West Africa)" *Natural Science*, 5, 282-290. <https://doi.org/10.4236/ns.2013.52A040>.
- Fontem, K. N., Suh, C. E., Ngatcha, R. B., Vishiti, A., Embui, F. V., Shemang, E. M., & Ateh, I. K. (2025). "Deformation, Alteration and Geochemical Footprint of a Gold-Bearing Shear Zone in Metagranitoid and Metasediment, East Cameroon Goldfield" *International Journal of Geosciences*, 16(7), 436-463. <https://doi.org/10.4236/ijg.2025.167022>
- Fonshiywa, M. M., Fuanya, C., Hoth, N., Ouabo, R. E., Tangko, T. E., Günther, J., et al. (2024). "Environmental impacts of artisanal and small-scale gold mining within Kambele and Pater gold mining sites, East Cameroon" *GeoJournal*, 89(3), Article 100. DOI: 10.1007/s10708-024-11093-8
- Government of Cameroon. (2026). *Decree suspending gold mining activities and establishing new regulatory requirements*. Ministry of Mines, Industry, and Technological Development.

International Crisis Group (ICG). (2025). Cameroon's mining sector: Governance challenges and security risks. ICG Africa Report.

InvestCameroon (July 28, 2026) "Cameroon Says Undeclared Gold Exports Cost State CFA 577 Billion in Five Year" <https://twitter.com/investcameroon>. Accessed on July 28, 2026.

Krueger, A. O. (1974). The political economy of the rent-seeking society. *American Economic Review*, 64(3), 291-303.

MINMIDT. (2024). Annual report on mining sector governance and environmental compliance. Ministry of Mines, Industry, and Technological Development.

Nkengfack, J. (2024). "Gold trafficking and governance failures in Cameroon: An analysis of illicit financial flows." *Journal of African Resource Governance*, 12(2), 45-67.

North, D. C. (1990). *Institutions, institutional change, and economic performance*. Cambridge University Press.

Ondayo, M. A., Watts, M. J., Mitchell, C. J., King, D. C. P., & Osano, O. (2023). "Artisanal gold mining in Africa—Environmental pollution and human health implications." *Environmental Geochemistry and Health*. <https://doi.org/10.1007/s12403-023-00611-7> (doi.org in Bing)

Ross, M. L. (2012). *The oil curse: How petroleum wealth shapes the development of nations*. Princeton University Press.

Tabo, Lucelle Feukeng, (June 16, 2026). "Illicit Gold Trade: Greenpeace Africa Demands Immediate Freeze on New Gold Concessions in Cameroon" Press Release, Greenpeace Africa

Toteu, S. F., Penaye, J., & Van Schmus, W. R. (2004). Geochronology and geochemistry of Precambrian rocks in Cameroon. *Journal of African Earth Sciences*, 39(1-2), 1-23.

Transparency International, Cameroon. (2025). "Corruption risks in Cameroon's artisanal and semi-mechanized mining sector." TI Cameroon's publications.

World Gold Council. (2021-2025). "The annual gold price statistics are as follows:

London Bullion Market Association (LBMA). (2021-2025)." Annual gold price report. LBMA.

Zouari, Ahmed (April 17, 2026) "Cameroon's Gold Gap: EITI Data is Driving Reforms" EITI.