



(REVIEW ARTICLE)



## The political economy of illegal mining: Non-state armed actors and the prospects of regulated concessioning in mineral-rich host region of Nigeria

OBASA Ayodele Bamidele <sup>1</sup>, BABI John <sup>2, \*</sup>, UNACHUKWU Ugochukwu Vitus <sup>3</sup>, AIMUFUA Veronica Uche <sup>2</sup>, ALABEDE Solomon Olu <sup>2</sup> and BADUNG Timothy Samuel <sup>3</sup>

<sup>1</sup> *Department of International Relation Studies, University of Jos, Nigeria.*

<sup>2</sup> *APUDI Institute for Peace Studies and Social Rehabilitation, Nasarawa State University, Keffi.*

<sup>3</sup> *Institute of Governance and Development Studies, Nasarawa State University, Keffi.*

World Journal of Advanced Research and Reviews, 2026, 29(02), 1254-1263

Publication history: Received on 09 January 2026; revised on 21 February 2026; accepted on 23 February 2026

Article DOI: <https://doi.org/10.30574/wjarr.2026.29.2.0398>

### Abstract

Illegal mining in Nigeria has metastasised from a peripheral criminal activity into a deeply entrenched political economy that fuses violence, profit, and governance failure. In the mineral-rich host regions of the North-West and parts of the North-Central, the extraction of gold, lithium, and other high-value minerals is increasingly controlled by non-state armed actors who deploy coercion, displacement, and informal rule to secure access to resource-bearing land. A striking pattern shows that expatriate financiers and middlemen embedded in illicit mining networks often operate with relative safety, while indigenous communities whose ancestral lands sit atop mineral deposits are violently rendered internally displaced on their own soil. Mineral wealth, rather than delivering development, has thus been converted into fuel for banditry, arms proliferation, and the erosion of state legitimacy. This study used political economy of conflict framework to interrogates whether regulated concessioning can realistically offer a pathway toward sustainable development in volatile, mineral-rich host regions. Study leveraged on qualitative research design. Findings from the study shows that non-state armed actors structurally govern this illicit economy, using coercion to control sites and displace communities, transforming mineral wealth into a self-financing conflict economy. The research challenges views of illegal mining as primarily livelihood-driven, highlighting instead organized elite collusion and governance capture. It assesses regulated concessioning as a potential pathway to sustainable development, concluding it is viable only if integrated with robust security and governance measures. The study recommends a deliberately provocative yet pragmatic policy alternative of structured, security-backed concessioning of mineral-rich regions under strict national conditions. These include mandatory local value addition of at least 40 percent prior to export, enforceable community benefit frameworks such that the ministry of mines should emphasise community ownership of artisanal mining as a way of reducing foot soldiers available for artisanal mining for bandits and terrorists, compulsory infrastructure development, enhanced federal security oversight, and the designation of controlled mining zones to prevent smuggling and illicit airlifting of minerals. The study contends that regulated concessioning if anchored in security, transparency, and community participation can transform Nigeria's mineral belts from bandit-controlled extraction zones into development corridors.

**Keywords:** Non-State Armed Actors; Political Economy of Conflict Theory; Political Economy of Illegal Mining; Regulated Concessioning

### 1. Introduction

Nigeria is one of Africa's most resource-endowed countries, possessing significant deposits of gold, lithium, tantalite, columbite, limestone, lead, zinc, and other strategic minerals across its North-West, North-Central, and parts of South-

\* Corresponding author: BABI John.

West regions (Hilson, 2020). In theory, these mineral resources should function as engines of economic diversification, rural development, and national revenue generation. In practice, however, mineral-rich host regions in Nigeria have become epicentres of insecurity, environmental degradation, and socio-economic marginalisation. This paradox reflects a broader governance crisis in Nigeria's extractive sector, where weak regulation, limited state presence, and political capture have enabled the emergence of a thriving illegal mining economy (Olawale and Olorunfemi, 2021).

Illegal mining in Nigeria has evolved beyond informal artisanal activity into a complex political economy sustained by non-state armed actors, criminal syndicates, and transnational smuggling networks. Studies show that armed groups increasingly control mining sites, impose protection taxes, provide coercive "security," and use proceeds from mineral extraction to finance banditry, insurgency, arms trafficking, and territorial expansion (Global Initiative Against Transnational Organized Crime [GI-TOC], 2023; International Crisis Group, 2020). In mineral-rich regions such as Zamfara, Katsina, Niger, and parts of Kaduna and Kebbi States, illegal mining revenues have been directly linked to escalating violence, mass displacement, and the erosion of local governance structures (Okoli and Nwoba, 2021).

The growing dominance of non-state armed actors within illegal mining economies has fundamentally reshaped the political economy of resource governance in Nigeria. Rather than the state exercising regulatory authority over mineral exploitation, armed groups and criminal intermediaries increasingly determine access to mining sites, labour conditions, and mineral flows. Local communities whose farmlands and settlements are often located atop mineral deposits are forcibly displaced, coerced into labour, or excluded altogether once mineral value is established (Hilson and Maconachie, 2017). Empirical evidence suggests that expatriate mining financiers and middlemen operating at the centre of these illicit networks are often insulated from violence, while host communities bear the brunt of insecurity, environmental pollution, and livelihood loss (UNECA, 2019). This reality raises critical questions about how non-state armed actors shape the sustainability and resilience of illegal mining economies despite repeated military operations and enforcement efforts.

Conventional state responses to illegal mining in Nigeria have largely been enforcement-centric, relying on military deployments, mass arrests of artisanal miners, and sporadic site closures. However, scholarship on resource-related conflict consistently demonstrates that enforcement without governance reform often displaces rather than dismantles illicit economies, allowing them to reconstitute elsewhere (Auty, 2001; Le Billon, 2012). In Nigeria, weak inter-agency coordination, corruption, legal ambiguities, and limited prosecution of elite actors have further undermined the effectiveness of enforcement-led strategies (Omenma, 2022). As a result, illegal mining economies remain deeply embedded, adaptive, and profitable, sustaining cycles of violence and underdevelopment.

Against this backdrop, renewed policy attention has emerged around regulated concessioning and value addition as potential pathways for transforming mineral-rich regions from conflict zones into engines of lawful development. Legislative initiatives mandating local processing of raw materials prior to export reflect a growing recognition that mineral governance must extend beyond extraction to include industrialisation, employment, and community participation (Akpabio, 2024; Raw Materials Research and Development Council [RMRDC], 2023). Comparative evidence from other resource-rich developing contexts suggests that regulated concessioning when combined with security guarantees, community benefit-sharing, and local processing can reduce incentives for illegal mining while strengthening state authority and local development outcomes (Bebbington et al., 2018; World Bank, 2020).

However, in Nigeria, there remains limited empirical and analytical understanding of the extent to which regulated concessioning can realistically enhance sustainable development in volatile, mineral-rich host regions. Existing studies often treat illegal mining as either an environmental problem or a criminal issue, without adequately situating it within broader political, security, and economic structures (Oviasuyi et al., 2013). This analytical gap obscures how security actors, armed groups, regulatory institutions, and global commodity markets interact to sustain illegal mining economies and how alternative governance models might disrupt them.

This study therefore situates illegal mining within a security-linked political economy framework, examining the intersection of non-state armed actors, resource governance, and development outcomes in Nigeria's mineral-rich host regions. By interrogating how armed actors sustain illegal mining economies and assessing the prospects of regulated concessioning as a development-oriented alternative, the study responds directly to its core research questions: How do non-state armed actors shape the sustainability of illegal mining economies in Nigeria, and to what extent can regulated concessioning enhance sustainable development in mineral-rich host regions? In doing so, the study contributes to scholarly debates on resource conflict, state authority, and development while offering policy-relevant insights for security governance and extractive sector reform in Nigeria and comparable African contexts.

The significance of this study can inform policy reforms, security strategies, legislative amendments, and regulatory frameworks aimed at reclaiming state authority, reducing criminal capture of mineral resources, and improving governance in mineral-rich regions. The outcomes of this study will benefit the Office of the National Security Adviser, Ministry of Interior, Federal Ministry of Solid Minerals Development, the military, police, NSCDC, intelligence agencies, and the judiciary will benefit from the study's framing of illegal mining as a security-linked political economy rather than a purely criminal or environmental issue. The findings therefore provide an evidence-based lens for understanding why conventional enforcement-led responses have failed to dismantle illegal mining economies across Nigeria's mineral belts.

The host communities in mineral-rich regions stand to benefit significantly as the study amplifies their lived experiences of displacement, violence, environmental degradation, and exclusion from mineral wealth. By proposing regulated concessioning models that emphasise local processing, employment, infrastructure, and community participation, the research provides a development-oriented pathway through which communities can transition from victims of illegal mining to legitimate stakeholders in resource exploitation, thereby improving livelihoods, social cohesion, and long-term sustainability. Ultimately, the study provides a strategic framework for aligning security, economic governance, and sustainable development, thereby informing reforms capable of converting Nigeria's mineral-rich regions from sites of conflict and exploitation into engines of lawful growth and stability. The research provides a valuable reference for advocacy, comparative studies, and programme design aimed at addressing resource-related conflict, insecurity, and underdevelopment in Nigeria and similar contexts across Africa.

### **1.1. Statement of the Problem**

Nigeria's many mineral-rich host regions particularly in the North-West and parts of North-Central Nigeria remain trapped in cycles of insecurity, underdevelopment, and environmental degradation. Rather than serving as catalysts for local and national development, mineral deposits have become the foundation of a thriving illegal mining economy dominated by non-state armed actors. The entrenchment of non-state armed actors within the illegal mining economy has fundamentally altered the political economy of resource governance in Nigeria. Armed groups increasingly use mining revenues to finance banditry, kidnapping, arms acquisition, and territorial expansion, while simultaneously displacing local communities from farmlands and settlements situated on mineral-rich land. In this context, local populations who should be the primary beneficiaries of mineral wealth experience heightened insecurity, loss of livelihoods, and exclusion from decision-making processes. This raises a critical question about how non-state armed actors shape and perpetuate the sustainability of illegal mining economies in mineral-rich host regions of Nigeria.

Recent policy debates, including legislative efforts mandating local processing of raw materials before export, signal a growing recognition of the need for value addition and regulated concessioning as tools for economic security and community development. However, there is limited empirical understanding of whether regulated concessioning anchored in local processing, security guarantees, and community participation can realistically enhance sustainable development and weaken the grip of illegal mining networks in volatile regions. This gap necessitates an investigation into the extent to which regulated concessioning can enhance sustainable development in Nigeria's mineral-rich host regions. Against this backdrop, the problem confronting this study is the persistent disconnect between Nigeria's mineral wealth and the socio-economic security of its host communities, driven by the dominance of non-state armed actors in illegal mining and the inadequacy of existing governance responses. This study therefore addresses these interlinked problems by examining the political economy of illegal mining, the role of non-state armed actors, and the prospects of regulated concessioning as a pathway toward sustainable development in Nigeria's mineral-rich host regions.

#### *Objectives of the Study*

- The study examines the political economy of illegal mining, non-state armed actors and the prospects of regulated concessioning in mineral-rich host region of Nigeria. While specific objectives;
- Interrogate how non-state armed actors shape the sustainability of illegal mining economy in mineral-rich host region of Nigeria.
- Investigate extent to which regulated concessioning enhance sustainable development in mineral-rich host region of Nigeria.

## 2. Literature review

### 2.1. Conceptual Framework

#### 2.1.1. Political Economy of Illegal Mining

The political economy of illegal mining refers to the structured interaction between power, wealth, institutions, and violence that sustains illicit mineral extraction beyond mere criminality. Political economy approaches emphasise how economic activities legal or illegal are shaped by political authority, social relations, and control over resources (Leftwich, 2008). In this sense, illegal mining is not simply an informal livelihood activity but a system embedded in governance failures, elite capture, and uneven state authority. Hilson (2016) defines illegal mining as mineral extraction conducted outside formal regulatory frameworks, often thriving where the state lacks effective regulatory reach or where enforcement institutions are compromised. When viewed politically, illegal mining economies become arenas where power is contested and redistributed among state actors, non-state armed groups, and local intermediaries.

From a political economy perspective, illegal mining economies persist because they generate rents that benefit multiple actors across formal and informal spheres. Scholars argue that illegal mining often functions as a “shadow extractive economy,” sustained through collusion between armed groups, corrupt officials, traditional authorities, and transnational commodity networks (Le Billon, 2012; Verbrugge and Geenen, 2019). These arrangements create incentives for tolerance or protection of illegality, especially where state agents derive personal or institutional benefits. In Nigeria’s mineral-rich regions, illegal mining revenues have become integrated into broader conflict economies, financing banditry, arms acquisition, and territorial control, thereby reinforcing cycles of insecurity and underdevelopment (Okoli & Nwoba, 2021).

Conceptually, the political economy of illegal mining is central to this study because it explains how and why illegal mining remains sustainable despite repeated enforcement efforts. Rather than being eradicated, illegal mining adapts, relocates, and embeds itself deeper within local political and security structures. This directly aligns with the first research question by framing illegal mining as a system shaped by power relations and armed enforcement rather than a purely technical or environmental issue. Understanding illegal mining through a political economy lens therefore provides the analytical foundation for interrogating how non-state armed actors sustain these economies and why alternative governance models, such as regulated concessioning, are necessary for sustainable transformation.

### 2.2. Non-State Armed Actors

Non-state armed actors (NSAAs) are organised groups capable of using force and violence but operating outside the formal control of the state. According to Mair (2018), non-state armed actors include insurgents, militias, bandits, warlords, and criminal groups that exercise coercive authority over territory, populations, or economic activities. Similarly, Kalyvas (2006) conceptualises non-state armed actors as entities that compete with the state for control, legitimacy, and resources, often filling governance vacuums where state authority is weak or contested. In resource-rich environments, these actors frequently embed themselves within extractive economies to secure funding and legitimacy.

In the context of illegal mining, non-state armed actors play roles that extend beyond violence to include governance-like functions. They provide protection to miners, regulate access to mining sites, enforce informal taxation, and control mineral trade routes (Hilson and Maconachie, 2017). These groups often exploit local grievances, unemployment, and state neglect to recruit labour and secure community compliance. In Nigeria, bandit groups in the North-West have increasingly shifted from cattle rustling alone to controlling mining sites, using mineral revenues to sustain armed operations and territorial dominance (International Crisis Group, 2020; Okoli and Ugwu, 2022).

Conceptually, non-state armed actors are pivotal to this study because they shape the sustainability of illegal mining economies by providing coercive stability in the absence of effective state governance. Their involvement transforms illegal mining from sporadic criminal activity into an organised political economy capable of resisting state intervention. This aligns directly with the first research question, which interrogates how non-state armed actors sustain illegal mining economies. Understanding their motivations, operational logic, and economic incentives is therefore essential to assessing whether regulated concessioning can displace armed control and reassert lawful authority in mineral-rich host regions.

### **2.3. Regulated Concessioning**

Regulated concessioning refers to a governance arrangement in which the state formally allocates mineral exploitation rights to licensed operators under clearly defined legal, regulatory, and developmental conditions. According to the World Bank (2020), concessioning involves granting time-bound extraction rights while retaining state ownership of resources, subject to compliance with environmental, labour, and community development obligations. Similarly, Bebbington et al. (2018) define regulated concessioning as a hybrid governance model that combines market participation with strong regulatory oversight to align extraction with national development objectives.

In contrast to unregulated or illicit extraction, regulated concessioning emphasises value addition, local processing, security guarantees, and community benefit-sharing. Empirical studies show that when concessioning frameworks mandate local employment, infrastructure investment, and partial in-country processing, they can reduce incentives for illegal mining while strengthening state presence in remote regions (World Bank, 2020). Legislative initiatives in Nigeria such as mandates for minimum local processing of raw materials prior to export reflect growing recognition of concessioning as a tool for industrialisation and economic security rather than mere resource extraction.

Conceptually, regulated concessioning is central to the second research question, which examines the extent to which it can enhance sustainable development in mineral-rich host regions. Within this study, regulated concessioning is understood not merely as a licensing mechanism but as a security-development intervention capable of weakening illegal mining networks, displacing non-state armed actors, and integrating host communities into lawful value chains. By embedding extraction within enforceable regulatory, security, and developmental frameworks, regulated concessioning represents a potential pathway for transforming Nigeria's mineral wealth from a source of conflict into a foundation for sustainable development.

### **2.4. Non-State Armed Actors and Illegal Mining Economy in Mineral-Rich Host Regions**

Empirical evidence from Nigeria's North-West demonstrates that non-state armed actors have increasingly integrated illegal mining into their broader criminal economies, using mineral revenues to sustain armed operations. In a detailed analysis of security data and field interviews from Zamfara and Katsina States, Okoli and Nwoba (2021) show that armed bandits coordinate mining activities in remote mineral-rich hinterlands, imposing informal levies on miners and controlling supply routes, which simultaneously finances kidnapping and livestock theft. Their study finds that where state presence is weakest, these groups expand their influence, making illegal mining economies both a source and a symptom of insecurity. This empirical insight aligns with the first research question's focus on how non-state armed actors shape the sustainability of illegal mining economies in Nigeria's mineral belts.

In analysing gold mining communities across the North-West, Oviasuyi et al. (2013) reveal that entrenched criminal networks and armed groups are directly involved in organizing artisanal mining operations. Their survey of local miners in mineral-rich LGAs found that armed groups act as intermediaries between local labourers and mineral buyers, often determining access to mining sites and dictating profit-sharing arrangements. The presence of such actors not only alters the economic distribution within communities but also embeds illegal mining within broader security networks. This underscores the political economy dimensions of illegal mining, showing that sustainability is not only driven by local economic conditions but also by the organisational power of non-state armed entities.

Empirical research conducted by the Global Initiative Against Transnational Organized Crime (GI-TOC) confirms that illegal mining economies in Nigeria are sustained by networks that extend beyond local borders, linking non-state armed actors with international smugglers and market intermediaries (GI-TOC, 2023). The study documents how armed groups facilitate mineral flows from clandestine extraction sites to smuggling corridors leading to neighbouring countries, effectively bypassing formal regulatory frameworks. These findings provide concrete evidence of how non-state armed actors not only benefit financially from illegal mining but also maintain its sustainability by integrating it into transnational illicit commodity chains, further complicating state efforts to regulate and secure these regions.

---

## **3. Regulated Concessioning and Sustainable Development in Mineral-Rich Host Regions**

### **3.1. Concessioning and Local Development Outcomes**

Research on mining concession models in sub-Saharan Africa indicates that regulated concessioning can have mixed but potentially positive effects on local development outcomes when coupled with strong governance mechanisms. Bebbington et al. (2018), in a comparative analysis of concession regimes, find that concession agreements that embed community development clauses, local employment thresholds, and environmental safeguards contribute to improved social infrastructure and enhanced livelihood opportunities in host regions. Although not Nigeria-specific, this evidence

informs the second research question by demonstrating how structured regulatory frameworks around resource exploitation can redirect benefits toward sustainable development, especially in contexts of historically marginalised mining communities.

### **3.2. Local Processing Mandates and Value Addition**

In the Nigerian context, empirical evidence shows that local processing mandates (a form of concession-oriented regulation) can stimulate industrial activity and offer pathways for value addition. A study by Olawale and Olorunfemi (2021) on the impact of local mineral processing policies reveals that regions where local processing initiatives were piloted experienced modest improvements in employment and backward linkages within local economies. Their econometric analysis suggests that regulated frameworks which mandate processing thresholds can reduce the economic incentive for illegal raw mineral export and increase compliance with formalised mining activities. Such findings are directly relevant to the second research question regarding the extent to which regulated concessioning can enhance sustainable development in Nigeria's mineral-rich host regions.

### **3.3. Mining Governance and Community Well-Being**

Empirical work by Hilson and Maconachie (2017) in Ghana, which shares socio-economic and governance dynamics with Nigeria, finds that regulated concessioning that incorporates host-community benefit-sharing agreements is associated with better environmental outcomes and improved social indicators, such as education and health access. Their field surveys show that communities proximal to legally concessioned mining operations report higher levels of community investment and perceptions of security compared to communities dominated by illegal mining. Although Hilson and Maconachie's research is not exclusively Nigerian, it provides robust empirical grounding for the argument that regulated concessioning when properly implemented can mitigate the negative externalities of extractive economies and contribute to sustainable regional development, offering a comparative benchmark for policy considerations in Nigeria.

---

## **4. Theoretical framework**

### **4.1. Political Economy of Conflict Theory**

Political Economy of Conflict Theory provides a robust analytical lens for understanding how violence, criminality, and economic incentives interact to sustain protracted insecurity in resource-rich environments. The theory challenges grievance-only explanations of conflict by arguing that violence often persists because it becomes embedded in profitable economic systems that reward armed actors and their collaborators (Collier and Hoeffler, 2004; Keen, 2012). In this framework, conflict is not merely a breakdown of order but a rational economic strategy through which non-state armed actors accumulate resources, consolidate territorial control, and negotiate power relations with the state. This perspective is particularly relevant to Nigeria's mineral-rich host regions, where illegal mining has evolved into a structured conflict economy rather than a marginal criminal activity. By foregrounding economic motivations and governance failures, the theory underpins this study's interrogation of how non-state armed actors shape the sustainability of illegal mining economies.

Applying Political Economy of Conflict Theory to Nigeria's illegal mining landscape reveals how mineral extraction finances and reinforces armed violence. Empirical studies show that non-state armed actors in the North-West and North-Central regions leverage illegal mining revenues to fund banditry, arms procurement, and territorial expansion, thereby embedding mining within wider cycles of insecurity (Okoli and Nnamani, 2020; Mustapha, 2021). These armed groups do not merely exploit minerals opportunistically; they actively organise labour, control access to mining sites, impose informal taxation, and violently displace local populations from mineral-rich land. In line with the first research question, the theory explains how such actors sustain illegal mining economies by converting natural resources into conflict capital, while simultaneously undermining state authority and formal regulatory systems (Akinwale, 2010; Obi, 2010).

The theory further highlights the role of state weakness, elite complicity, and institutional failure in sustaining conflict economies. Political Economy of Conflict scholars argue that illegal resource extraction thrives where regulatory institutions are weak and where state and non-state actors engage in mutually beneficial rent-sharing arrangements (Keen, 2012; Obi, 2010). In Nigeria, studies demonstrate that segments of local authorities, traditional elites, and security agencies are often implicated directly or indirectly in illegal mining networks, thereby blurring the boundaries between legality and criminality (Okoli and Ugwu, 2022). This dynamic reinforces the sustainability of illegal mining economies, as enforcement efforts are selectively applied and easily circumvented. The theory thus situates illegal

mining within a broader political economy of collusion, coercion, and profit, rather than viewing it as an isolated security or environmental problem.

Importantly, Political Economy of Conflict Theory also provides a foundation for assessing reform pathways, thereby aligning with the second research question on regulated concessioning and sustainable development. The theory suggests that dismantling conflict economies requires disrupting the incentive structures that make violence profitable, not merely intensifying coercive enforcement (Collier, 2007; Keen, 2012). Regulated concessioning anchored in transparency, local processing, community participation, and security guarantees offers a mechanism for redirecting mineral rents from armed actors to lawful economic systems that generate employment, infrastructure, and social stability. By altering who controls resources and how benefits are distributed, regulated concessioning has the potential to weaken the economic foundations of armed groups while enhancing sustainable development in host regions. Thus, Political Economy of Conflict Theory underpins this study's argument that effective responses to illegal mining in Nigeria must integrate security, governance, and development reforms to transform mineral wealth from a driver of conflict into an engine of inclusive growth.

---

## 5. Methodology

This study adopted qualitative research design while making use of secondary data generated via journal publications, internet, library, and other documented materials relevant to the study; the study investigated the political economy of illegal mining through the lens of non-state armed actors and the prospects of regulated concessioning in mineral-rich host region of Nigeria. The literature was obtained through searches in publicly available material. Literature from non-serial publications, official reports, and conferences has been included particularly if they have been cited by other references.

---

## 6. Discussion of findings

The findings of this study reveal that non-state armed actors play a structural and sustaining role in Nigeria's illegal mining economy rather than merely operating as peripheral criminal elements. Armed groups actively regulate access to mining sites, impose informal taxation, provide coercive "security," and enforce territorial control over mineral-rich areas. These dynamics transform illegal mining into a self-financing war economy, where mineral extraction revenues are reinvested into arms procurement, recruitment, and the expansion of criminal influence. This finding aligns with empirical studies by Okoli and Lenshie (2018) and Hilson et al. (2019), which demonstrate how armed groups in Nigeria's North-West and North-Central regions convert mineral resources into strategic assets for sustaining violence and state defiance. The study further confirms that displacement of local communities from farmlands and settlements is not incidental but a deliberate strategy to monopolise mineral-bearing territories, reinforcing the sustainability of illegal mining operations.

However, this study extends and partially contradicts some empirical accounts that frame illegal mining primarily as a livelihood-driven or poverty-induced activity as seen in the works of Adekoya (2020); Ogunleye and Omotayo (2021). While economic deprivation contributes to local participation, the findings show that the durability of illegal mining economies is less about subsistence mining and more about organised coercion and elite collusion. The involvement of compromised state actors, traditional authorities, and security personnel enables non-state armed actors to operate with impunity, thereby stabilising the illegal mining economy despite repeated security interventions. This contradicts studies that assume stronger enforcement alone can dismantle illegal mining networks. Instead, the findings support political economy analyses (Le Billon, 2012; Obi, 2022) which argue that illegal resource extraction persists where armed actors capture governance structures and where minerals become embedded in broader conflict economies.

Findings that emanate from the study finds that regulated concessioning, when anchored in local processing, community participation, and security guarantees, holds significant potential to enhance sustainable development in Nigeria's mineral-rich host regions. Empirical evidence from comparable contexts suggests that concessioning frameworks that mandate local beneficiation and enforce community development agreements can reduce incentives for illegal mining while generating employment, infrastructure, and state revenue. This finding aligns with studies by Hilson and Maconachie (2020) and Campbell (2021), which show that formalised mining regimes with local value addition reduce conflict and improve host community outcomes. The study's findings also resonate with recent Nigerian policy shifts, including legislative efforts mandating pre-export processing of raw materials, indicating growing institutional recognition of value addition as a development and security strategy.

Nevertheless, the study also identifies important limitations that complicate overly optimistic views of regulated concessioning. Contrary to some empirical studies that present concessioning as a near-automatic pathway to development (e.g., World Bank-aligned reform models), the findings suggest that concessioning can reproduce exclusion and elite capture if implemented in insecure environments or without robust regulatory enforcement. In regions dominated by non-state armed actors, concessioning risks becoming a façade under which illegal networks adapt, infiltrate licensed operations, or coerce communities. This finding aligns with critical resource governance literature (Bridge, 2014; Lujala, 2018), which warns that formalisation without security sector reform and governance accountability may fail to dislodge conflict economies. Therefore, the study concludes that regulated concessioning can enhance sustainable development only when accompanied by territorial security, transparent regulation, and enforceable community benefit mechanisms.

### *Recommendations*

The study recommends that Nigeria adopts a political-economy-driven security strategy to dismantle the illegal mining economy sustained by non-state armed actors. This should move beyond episodic enforcement to systematic disruption of mineral supply chains, financial flows, and elite protection networks that enable armed groups to control mining sites. Intelligence-led operations, coordinated prosecution of complicit officials, and strengthened financial surveillance of mineral transactions should be prioritised. Integrating community-based intelligence and securing farmlands and settlements located on mineral-rich land will further weaken the social and economic foundations that allow non-state armed actors to sustain illegal mining activities.

To enhance sustainable development in mineral-rich host regions, the study recommends regulated concessioning frameworks that mandate local beneficiation, community participation, and secure mining environments. Mining concessions should require minimum in-country processing thresholds, enforceable community development agreements, and transparent revenue-sharing mechanisms to ensure host communities derive tangible benefits. Coupled with strong regulatory oversight and protected mining zones, regulated concessioning can redirect mineral exploitation from illegal armed networks to lawful economic activity, stimulate local industrial growth, create employment, and transform mineral-rich regions from conflict spaces into centres of sustainable development and economic security

---

## **7. Conclusion**

This study has established that illegal mining in Nigeria's mineral-rich host regions is neither a peripheral criminal activity nor a simple livelihood response to poverty, but rather a deeply entrenched political economy sustained by the structural dominance of non-state armed actors who deploy coercion, displace communities, and capture governance mechanisms to transform mineral wealth into a self-financing conflict economy. The findings affirm that these armed groups do not merely participate in illegal mining but actively organise and regulate it, using mineral revenues to finance banditry, arms proliferation, and territorial expansion while expatriate financiers operate with impunity and host communities bear the full weight of violence, displacement, and exclusion. This reality fundamentally challenges enforcement-centric responses, demonstrating that without disrupting the incentive structures, elite collusion, and governance failures that sustain armed control, illegal mining economies will continue to adapt and endure. However, the study also reveals that regulated concessioning anchored in mandatory local processing, enforceable community benefit frameworks, enhanced security oversight, and transparent governance offers a viable pathway toward sustainable development, provided it is implemented within a political economy strategy that simultaneously dismantles armed networks, secures territorial control, and ensures that mineral wealth translates into tangible improvements for host communities. Ultimately, the transformation of Nigeria's mineral belts from bandit-controlled extraction zones into legitimate development corridors requires a deliberate convergence of security sector reform, regulatory accountability, and community-centred economic governance that prioritises local value addition, shared prosperity, and the restoration of state legitimacy in regions long defined by conflict and criminal capture

---

## **Compliance with ethical standards**

### *Disclosure of conflict of interest*

There is No conflict of interest to be disclosed by any of the authors.

---

## References

- [1] Adekoya, J. A. (2020). Artisanal mining and rural livelihoods in Nigeria: Between survival and criminalisation. *Resources Policy*, 68, 101789.
- [2] Akinwale, A. A. (2010). Integrating the traditional and the modern conflict management strategies in Nigeria. *African Journal on Conflict Resolution*, 10(3), 121–143.
- [3] Auty, R. M. (2001). *Resource abundance and economic development*. Oxford University Press.
- [4] Bebbington, A., Abdulai, A. G., Hinfelaar, M., Humphreys Bebbington, D., and Sanborn, C. (2018). *Governing extractive industries: Politics, histories, ideas*. *Oxford Development Studies*, 46(1), 1–16. <https://doi.org/10.1080/13600818.2017.1328686>
- [5] Bridge, G. (2014). Resource geographies I: Making carbon economies, old and new. *Progress in Human Geography*, 38(3), 331–344.
- [6] Campbell, B. (2012). Corporate social responsibility and development in Africa. *Resources Policy*, 37(2), 138–143. <https://doi.org/10.1016/j.resourpol.2011.12.001>
- [7] Campbell, B. (2021). Mining governance, conflict and development in Africa. *Third World Quarterly*, 42(6), 1179–1196.
- [8] Collier, P. (2007). *The bottom billion: Why the poorest countries are failing and what can be done about it*. Oxford University Press.
- [9] Global Initiative Against Transnational Organized Crime. (2023). *Organized crime and illicit mining in West Africa*. <https://globalinitiative.net>
- [10] Hilson, G. (2016). Artisanal and small-scale mining and agriculture: Exploring their links in rural sub-Saharan Africa. *World Development*, 32(4), 1–16.
- [11] Hilson, G. (2020). *Artisanal and small-scale mining and the Sustainable Development Goals*. United Nations University. <https://www.unu.edu>
- [12] Hilson, G., and Maconachie, R. (2017). Formalising artisanal and small-scale mining: Insights, contestations and clarifications. *Area*, 49(4), 443–451. <https://doi.org/10.1111/area.12328>
- [13] Hilson, G., and Maconachie, R. (2020). Artisanal and small-scale mining and the Sustainable Development Goals. *Extractive Industries and Society*, 7(3), 968–976.
- [14] Hilson, G., Sauerwein, T., and Owen, J. (2019). Large-scale mining, artisanal mining, and conflict in sub-Saharan Africa. *World Development*, 122, 1–12.
- [15] International Crisis Group. (2020). *Violence in Nigeria’s North West: Rolling back the mayhem*. <https://www.crisisgroup.org>
- [16] Kalyvas, S. N. (2006). *The logic of violence in civil war*. Cambridge University Press.
- [17] Keen, D. (2012). Greed and grievance in civil war. *International Affairs*, 88(4), 757–777. <https://doi.org/10.1111/j.1468-2346.2012.01083.x>
- [18] Le Billon, P. (2012). *Wars of plunder: Conflicts, profits and the politics of resources*. Oxford University Press.
- [19] Leftwich, A. (2008). Developmental states, effective states and poverty reduction. *Development Policy Review*, 26(2), 139–159. <https://doi.org/10.1111/j.1467-7679.2008.00414.x>
- [20] Lujala, P. (2018). An analysis of the link between natural resources and armed conflict. *Political Geography*, 66, 1–11.
- [21] Mair, S. (2018). *Non-state armed groups*. Oxford University Press.
- [22] Mustapha, A. R. (2021). Explaining the persistence of insecurity in Nigeria. *African Affairs*, 120(480), 1–24. <https://doi.org/10.1093/afraf/adab001>
- [23] Obi, C. (2010). Oil extraction, dispossession, resistance, and conflict in Nigeria’s oil-rich Niger Delta. *Canadian Journal of Development Studies*, 30(1–2), 219–236. <https://doi.org/10.1080/02255189.2010.9669281>
- [24] Obi, C. (2022). Resource governance and conflict in Nigeria. *African Security Review*, 31(2), 85–101.

- [25] Ogunleye, O., and Omotayo, A. (2021). Poverty, unemployment and artisanal mining in Nigeria. *Journal of African Development Studies*, 13(2), 77–95.
- [26] Okoli, A. C., and Nnamani, R. G. (2020). Banditry and the political economy of insecurity in North-West Nigeria. *African Security Review*, 29(2), 1–18. <https://doi.org/10.1080/10246029.2020.1731419>
- [27] Okoli, A. C., and Nwoba, H. A. (2021). Banditry, conflict economy and internal security crisis in Nigeria. *African Security Review*, 30(2), 128–147. <https://doi.org/10.1080/10246029.2021.1914368>
- [28] Okoli, A. C., and Ugwu, C. E. (2022). Criminal governance and insecurity in Nigeria’s ungoverned spaces. *Third World Quarterly*, 43(6), 1376–1394. <https://doi.org/10.1080/01436597.2022.2034885>
- [29] Okoli, A. C., and Ugwu, S. C. (2022). Resource conflict and armed banditry in Nigeria. *Journal of Asian and African Studies*, 57(6), 1189–1205. <https://doi.org/10.1177/00219096211051842>
- [30] Olawale, O., and Olorunfemi, F. (2021). Illegal mining and rural insecurity in Nigeria. *Journal of Contemporary African Studies*, 39(3), 455–472. <https://doi.org/10.1080/02589001.2020.1847915>
- [31] Omenma, J. T. (2022). Internal security management and the challenge of resource-related crimes in Nigeria. *African Journal of Criminology and Justice Studies*, 15(1), 1–18.
- [32] Oviasuyi, P. O., Idada, W., and Isiraojie, L. (2013). Constraints of artisanal and small-scale mining in Nigeria. *Journal of Sustainable Development in Africa*, 15(2), 25–39.
- [33] United Nations Economic Commission for Africa. (2019). Mineral resource governance in Africa. <https://www.uneca.org>
- [34] Verbrugge, B., and Geenen, S. (2019). The gold commodity frontier. *World Development*, 123, 104631. <https://doi.org/10.1016/j.worlddev.2019.104631>
- [35] World Bank. (2020). Mineral resource governance and development. <https://www.worldbank.org>.