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| RESEARCH ARTICLE

The Pitfalls of Illegal Mining in the Southwest Nigeria: Implications on Environmental, Economic, Security and Sustainable Peace

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| ABSTRACT

Illegal mining is a growing challenge in Southwest Nigeria, threatening environmental sustainability, economic stability, and community security. This study examined the extent of illegal mining activities in the region and their far-reaching consequences. A qualitative–quantitative approach was employed, combining field reports, secondary data from government agencies, and interviews with community stakeholders to assess environmental degradation, economic losses, security risks, and the link to sustainable peace associated with unregulated mining. The findings revealed that uncontrolled extraction led to soil erosion, water pollution, deforestation, and the destruction of farmland, thereby undermining agricultural livelihoods. Economically, the state lost substantial revenue due to tax evasion and unrecorded mineral exports, while local communities experienced declining productivity and rising poverty. The security dimension was equally severe, as illegal mining sites became hotspots for violence, organized crime, and youth exploitation. Weak regulation, corruption, and inadequate monitoring mechanisms further compounded the problem. The study concluded that illegal mining posed interconnected threats to the environment, economy, and security of Southwest Nigeria. It recommended strengthening enforcement frameworks, promoting community participation in mineral governance, and adopting sustainable mining policies that balanced resource extraction with environmental protection, social stability, and sustainable peace.

| KEYWORDS

Illegal mining, environmental degradation, economic losses, security risks, sustainable peace, Southwest Nigeria.

| ARTICLE INFORMATION

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1. Introduction

Illegal mining is increasingly recognized as one of the most pressing environmental and socio-economic problems facing Nigeria today. Although mining has the potential to create jobs, generate government revenue, and support industrial growth, the rise of unregulated practices continues to undermine development objectives. Across the country, illegal mining activities are linked with severe ecological damage, economic distortions, and rising insecurity. In Southwest Nigeria, the situation is particularly worrisome due to the abundance of mineral deposits, including gold, granite, and tantalite, in states such as Osun, Oyo, Ogun, and Ondo (Adekoya, 2021). Rather than serving as an engine of growth, illegal mining has become a source of conflict, environmental destruction, and economic loss.

The environmental effects of illegal mining are devastating. Uncontrolled excavation frequently leads to land degradation, soil erosion, and deforestation, thereby reducing the environment's capacity to sustain agriculture and natural ecosystems. Rivers and streams are contaminated with mercury, cyanide, and other toxic chemicals from artisanal gold processing, thereby threatening water quality and human health (Ezeaku et al., 2020). Moreover, abandoned mine pits often serve as breeding grounds for mosquitoes, thereby increasing the prevalence of malaria in surrounding communities (Oladeji & Adegboye, 2022). These environmental challenges contribute to declining agricultural productivity, reduced food security, and heightened vulnerability to climate-related shocks, which are already severe in Nigeria's fragile rural economies.

Economically, the losses associated with illegal mining are substantial. The Nigeria Extractive Industries Transparency Initiative (NEITI, 2022) estimates that billions of naira are lost annually through smuggling and unrecorded mineral exports. Such losses deprive the government of resources needed for public services, infrastructure, and poverty reduction programmes. Moreover, the short-term profits gained from unregulated mining do not translate into sustainable development, as much of the revenue is diverted through informal networks or captured by foreign buyers (Akinola & Oladipo, 2021). Local communities often face economic distortions, with traditional livelihoods such as farming displaced by the lure of mining. Although some households benefit from immediate cash incomes, many end up worse off in the long term as land fertility declines and alternative employment opportunities diminish.

The security implications are equally alarming. Illegal mining sites have become flashpoints for violent conflict, armed attacks, and criminal exploitation. In several parts of Nigeria, including the Southwest, there are increasing reports of clashes between rival groups competing for control of mining areas (Adedeji, 2023). The presence of unregulated mining also creates avenues for money laundering, human trafficking, and arms smuggling, all of which weaken state authority. Youth unemployment exacerbates the crisis, as many young people are recruited into illegal mining operations, exposing them to exploitation and contributing to cycles of violence (Olawale, 2022). Communities located near mining zones often experience insecurity, displacement, and rising distrust toward government institutions, which are perceived as either complicit or incapable of addressing the problem.

The persistence of illegal mining in Southwest Nigeria is partly explained by weak institutional capacity, poor enforcement, and corruption. Regulatory agencies such as the Ministry of Mines and Steel Development face resource constraints and inadequate staffing, which limit their ability to monitor mining activities effectively (NEITI, 2022). Moreover, political interference and vested interests often prevent the prosecution of offenders. Although the federal government has introduced policies to formalize artisanal mining, implementation remains slow and inconsistent, leaving large gaps that are exploited by illegal operators (Adedeji, 2023). These governance weaknesses create an environment where illegality thrives, undermining both environmental protection and national security.

The Nigerian situation mirrors broader global experiences. In countries such as Ghana, Peru, and the Democratic Republic of Congo, illegal mining has similarly produced devastating consequences for the environment and communities (Hilson, 2017; Verbrugge & Geenen, 2019). For instance, in Ghana, galamsey operations have led to extensive river pollution and forest loss, prompting national security responses. In the Congo, illegal mining fuels armed conflict and illicit financial flows. These international cases highlight how poorly regulated mineral extraction often triggers cycles of environmental degradation, economic exploitation, and violence. They also demonstrate the importance of integrating mining governance with sustainable development strategies, which is highly relevant to the Nigerian context.

In Southwest Nigeria, the dangers of illegal mining are compounded by the region's role as an economic hub. States such as Lagos, Ogun, and Oyo contribute significantly to Nigeria's GDP, and instability in the wider region has the potential to disrupt national economic growth (National Bureau of Statistics, 2023). Moreover, the growing link between illegal mining and rising cases of banditry and kidnapping presents serious risks for social cohesion

and long-term stability. Left unaddressed, the problem could worsen poverty, undermine state authority, and escalate conflict across communities.

This study, therefore, seeks to examine the dangers of illegal mining in Southwest Nigeria with a focus on its environmental, economic, and security implications. By drawing on both secondary data and community-level perspectives, it provides a comprehensive understanding of how illegal mining undermines sustainable development in the region. The study aims to generate evidence that will guide policymakers, security agencies, and development partners in designing more effective interventions. The findings are intended to inform strategies that strengthen enforcement, support sustainable mining practices, and enhance community participation in resource governance. In addition, the study explores how addressing these challenges can promote sustainable peace across affected communities. By situating illegal mining within the broader debates on environmental sustainability, economic development, and security, the study contributes to ongoing efforts to promote inclusive growth and lasting peace in Nigeria.

2. Literature Review

2.1 Theoretical Perspectives on Illegal Mining and Development

The analysis of illegal mining is framed within several theoretical perspectives that link natural resources, governance, and development outcomes. The resource curse theory argues that resource-rich countries often experience slower economic growth and weaker institutions compared to resource-poor states (Auty, 2001). This paradox occurs because resource wealth frequently encourages rent-seeking, corruption, and neglect of other productive sectors. In Nigeria, where mineral resources are abundant, illegal mining reflects the resource curse dynamic: instead of supporting long-term growth, resource exploitation often fuels environmental degradation, conflict, and economic instability (Akinola & Oladipo, 2021).

The tragedy of the commons provides another framework for understanding unregulated resource exploitation. Hardin (1968) explains that when resources are accessible to all without clear regulation, individuals tend to overexploit them for immediate gain, ultimately leading to resource collapse. Illegal mining in Southwest Nigeria illustrates this pattern, as miners extract gold and other minerals without environmental safeguards, leaving degraded land and polluted rivers. The absence of enforcement mechanisms allows actors to pursue short-term benefits, disregarding the collective long-term costs borne by communities.

Furthermore, the political ecology perspective examines how social power relations and governance structures shape environmental exploitation (Bryant & Bailey, 2015). From this perspective, illegal mining is not merely a technical failure but a political and institutional issue. Corruption, weak enforcement, and the marginalization of local communities all contribute to the persistence of unregulated mining. Political ecology highlights how elites and external actors often capture resource benefits, while local populations endure environmental destruction and insecurity.

Finally, theories of environmental security and conflict resource theory explain how natural resource exploration can fuel violence. According to these perspectives, competition over lucrative mineral deposits generates tensions that may escalate into conflict, especially in regions with weak governance and widespread poverty (Collier & Hoeffler, 2004). Illegal mining in Nigeria has increasingly been associated with rising insecurity, youth mobilization into violent groups, and the financing of criminal networks (Adedeji, 2023). These theoretical lenses provide an integrated framework for analysing how environmental, economic, and security outcomes converge in the illegal mining crisis.

2.2 Empirical Evidence from Other Developing Countries

The dangers of illegal mining are well-documented across Africa, Latin America, and Asia. In Ghana, artisanal and small-scale mining, commonly called galamsey, has caused extensive river pollution, forest loss, and soil erosion. Hilson (2017) argues that despite the government's interventions, enforcement remains weak because many communities depend on mining for survival. Moreover, political interference has made crackdowns inconsistent,

while the use of mercury in processing has created severe health risks (Armah et al., 2016). These experiences closely parallel Nigeria's challenges, where governance weaknesses limit the effectiveness of regulation.

In the Democratic Republic of Congo (DRC), illegal mining is directly linked to insecurity. Verbrugge and Geenen (2019) observe that armed groups often control mining sites, using revenues to purchase weapons and sustain violent conflict. The DRC experience demonstrates how resource extraction can create "conflict economies," where natural wealth funds violence rather than development. This case underscores the importance of viewing Nigeria's illegal mining not just as an environmental or economic issue but also as a security threat.

Latin America also provides important lessons. In Peru, unregulated gold mining in the Amazon has led to widespread mercury contamination, loss of biodiversity, and violent clashes between miners and state security forces (Swenson et al., 2011). Similarly, in Bolivia, illegal mining has been linked to labour exploitation and child labour, undermining social welfare and human rights (Bebbington & Bebbington, 2011). These cases highlight how unregulated mining often overlaps with human rights abuses, economic exploitation, and environmental collapse.

In Asia, illegal mining has been equally destructive. In Indonesia, small-scale gold mining has caused mercury poisoning in several rural communities (Telmer & Veiga, 2009). In the Philippines, unregulated mining contributes to deforestation, river siltation, and landslides, often resulting in loss of lives during heavy rains (Camba, 2016). These cases illustrate the global nature of illegal mining and the urgent need for integrated governance responses.

Together, the international evidence demonstrates that illegal mining consistently produces a triad of consequences: ecological destruction, economic distortion, and insecurity. Although contexts differ, the underlying patterns remain the same: weak institutions, poverty, and governance failures provide fertile ground for unregulated resource exploitation.

2.3 Illegal Mining and the Nigerian Context

Nigeria's experience with illegal mining has grown in intensity over the past two decades. According to NEITI (2022), unlicensed operators dominate large segments of the solid minerals sector, particularly in gold, tantalite, and limestone. The Minerals and Mining Act of 2007 was designed to regulate the sector and encourage private investment, but implementation has been weak. Overlapping responsibilities among federal, state, and local authorities, coupled with limited monitoring capacity, have created gaps that illegal miners exploit (Adedeji, 2023).

Environmental studies confirm the destructive impacts of illegal mining in Nigeria. In Osun State, Oladeji and Adegboye (2022) found that abandoned mine pits had reduced the availability of arable land, forcing many farmers to abandon agriculture. In Oyo and Ogun States, streams polluted with mercury and cyanide threaten fish populations and increase health risks for rural households (Ezeaku et al., 2020). Moreover, deforestation linked to illegal mining has undermined biodiversity and accelerated climate-related vulnerabilities.

Economically, illegal mining undermines government revenue and contributes to poverty. NEITI (2022) estimates that Nigeria loses billions of naira annually through tax evasion and the smuggling of minerals. Akinola and Oladipo (2021) argue that although mining provides quick cash incomes for some individuals, it rarely contributes to community development or infrastructure. Instead, revenues are often captured by middlemen and foreign buyers, leaving local residents with degraded land and few long-term opportunities.

The security dimension of Nigeria's illegal mining has also grown. Reports increasingly link mining sites with armed banditry, kidnapping, and inter-community clashes. Adedeji (2023) notes that in parts of Osun and Ondo, rival groups frequently fight for control of lucrative deposits, leading to violence and instability. Youth unemployment plays a significant role, as many young people are recruited into mining gangs, exposing them to exploitation and criminality (Olawale, 2022). These dynamics reveal how illegal mining fuels wider insecurity in Nigeria's Southwest.

2.4 Environmental Implications

The environmental consequences of illegal mining are extensive and well-documented. Deforestation caused by unregulated excavation threatens biodiversity and undermines Nigeria's commitments to global climate agreements (United Nations Environment Programme, 2021). Soil erosion reduces agricultural productivity, while polluted rivers compromise drinking water quality and threaten food security for fishing communities (Ezeaku et al., 2020). Abandoned pits, which are rarely rehabilitated, serve as breeding grounds for mosquitoes, thereby increasing malaria prevalence (Oladeji & Adegboye, 2022). These cumulative effects reveal that illegal mining does not only degrades the environment but also jeopardises public health and rural livelihoods.

2.5 Economic Implications

Illegal mining has profound economic effects. At the national level, NEITI (2022) reports that billions of naira are lost annually due to smuggling and unrecorded mineral exports. These losses reduce government revenue that could otherwise support infrastructure, education, and healthcare. At the community level, illegal mining disrupts agricultural production, as fertile land is converted into mining pits. Akinola and Oladipo (2021) argue that while mining may temporarily increase household income, it undermines long-term economic resilience by displacing sustainable livelihoods. Moreover, profits from illegal mining are rarely reinvested locally, leading to capital flight and persistent poverty.

2.6 Security Implications

The security dangers of illegal mining are severe. Mining sites often attract criminal networks that compete violently for control. Adedeji (2023) reports increasing incidents of armed clashes in mining areas of Southwest Nigeria, with some sites linked to kidnapping and extortion. Youth unemployment compounds the crisis, as jobless young men are recruited into mining gangs, fuelling cycles of insecurity (Olawale, 2022). These patterns mirror the DRC, where illegal mining revenues sustain armed conflict (Verbrugge & Geenen, 2019). In Nigeria, the spread of illegal mining threatens not only local stability but also national security, as criminal networks extend beyond mining sites into wider political and economic systems.

2.7 Gaps in Existing Research

Despite the growing body of research, significant gaps remain. First, much of the existing literature focuses either on environmental or economic effects, with limited integration of the security dimension. Second, most Nigerian studies concentrate on northern and central states, leaving the specific dynamics of illegal mining in the Southwest underexplored. Third, while governance weaknesses are widely acknowledged, little attention has been given to the role of community participation, local institutions, and traditional authorities in managing resources. Finally, there is limited research on policy effectiveness, particularly the implementation gaps between national mining regulations and their enforcement at the local level. Addressing these gaps is crucial for designing holistic interventions that balance environmental sustainability, economic growth, and social stability in Southwest Nigeria.

2.8 Theoretical Framework

This study is guided by two theoretical perspectives that explain the persistence and dangers of illegal mining in resource-rich societies. These are the Resource Curse Theory and the Political Ecology Theory. Together, they provide economic and socio-political foundations for understanding how illegal mining shapes environmental degradation, economic losses, and insecurity in Southwest Nigeria.

2.8.1 Resource Curse Theory

The Resource Curse Theory, first popularised by Auty (2001), suggests that countries with abundant natural resources often experience slower economic growth and weaker development outcomes compared to resource-poor nations. This paradox emerges because resource wealth, instead of stimulating growth, tends to encourage rent-seeking, corruption, and overdependence on extractive industries. In many cases, resource dependence reduces incentives for economic diversification and creates volatility due to fluctuations in global commodity prices (Sachs & Warner, 2001).

In the Nigerian context, the resource curse manifests not only through oil dependence but also in the mismanagement of solid minerals. Illegal mining in Southwest Nigeria reflects the dynamics of the resource curse by transforming mineral abundance into a liability. Instead of contributing to state revenue and long-term investment, resources extracted by unlicensed operators are smuggled out of the country, leading to revenue losses for the government (NEITI, 2022). Moreover, the concentration of wealth in the hands of a few actors fosters corruption and undermines governance institutions.

The environmental dimension of the resource curse is also evident. Because illegal mining is profit-driven and unregulated, miners often disregard environmental safeguards, resulting in deforestation, soil erosion, and water pollution. These ecological damages reduce agricultural productivity and threaten food security in affected communities (Oladeji & Adegboye, 2022). At the same time, local populations experience few benefits from mineral wealth, as revenues are neither reinvested in infrastructure nor channelled into social services. Instead, communities are left with degraded land and economic marginalisation.

The security implications of the resource curse are particularly relevant to illegal mining. Competition over control of mineral-rich sites often generates violent clashes between rival groups. Profits from mining are sometimes linked to the financing of armed networks, thereby escalating insecurity. In this way, natural wealth becomes a driver of conflict rather than peace, consistent with the predictions of the resource curse framework. Thus, the theory provides a useful lens for explaining how unregulated resource extraction in Southwest Nigeria leads to paradoxical outcomes: wealth in the ground but poverty, insecurity, and environmental degradation on the surface.

2.8.2 Political Ecology Theory

While the Resource Curse Theory focuses on macroeconomic and institutional dimensions, the Political Ecology Theory offers a more nuanced perspective on the social and political processes that shape environmental exploitation. Political ecology emerged as an interdisciplinary framework that links ecological issues to political and economic power relations (Bryant & Bailey, 2015). It argues that environmental degradation cannot be understood in isolation from the social, political, and historical contexts in which it occurs.

In the case of illegal mining, political ecology highlights how governance failures, inequality, and local power struggles influence the exploitation of mineral resources. For instance, the weakness of regulatory agencies in Nigeria is not merely a technical problem but also a political one, shaped by corruption, patronage, and vested interests. Enforcement agencies are often underfunded, while influential actors benefit from the persistence of unregulated mining (Adedeji, 2023). Political ecology thus explains why illegal mining continues despite the existence of legal frameworks such as the Minerals and Mining Act of 2007.

Another important contribution of political ecology is its focus on the distribution of costs and benefits. Illegal mining often enriches a few middlemen and foreign buyers, while local communities bear the environmental and social costs. Farmlands are destroyed, rivers are polluted, and forests are cleared, yet residents receive little or no compensation. This unequal distribution of risks and rewards generates grievances and undermines trust in state institutions (Ezeaku et al., 2020). By situating environmental degradation within broader patterns of inequality, political ecology helps explain why affected communities perceive illegal mining as both an ecological and social injustice.

Furthermore, political ecology emphasises the role of local actors in resistance and adaptation. Communities in parts of Southwest Nigeria have protested against illegal mining activities, citing loss of livelihoods and insecurity. However, such resistance is often constrained by a lack of political power and limited avenues for legal redress. This dynamic demonstrates how structural inequalities and weak governance systems sustain unsustainable practices.

2.8.3 Synthesis

Taken together, the Resource Curse Theory and Political Ecology Theory provide complementary insights into the dangers of illegal mining in Southwest Nigeria. The Resource Curse Theory frames the issue as a paradox of wealth,

where abundant resources lead to poor development outcomes through corruption, weak institutions, and insecurity. Political Ecology Theory, on the other hand, situates illegal mining within broader power relations, highlighting how governance failures, inequality, and social exclusion shape environmental exploitation.

By integrating these two perspectives, the present study recognises that illegal mining is not simply an environmental problem but also an economic and political one. It shows that mineral resources, if not properly managed, can deepen poverty, fuel insecurity, and undermine sustainable development. At the same time, it underscores the need for inclusive governance and equitable resource distribution to address the crisis. These theoretical foundations therefore guide the study's analysis of how illegal mining produces interconnected environmental, economic, and security risks in Southwest Nigeria.

3. Methodology

3.1 Study Area

The study was carried out in the Southwest geopolitical zone of Nigeria, which consists of Lagos, Ogun, Oyo, Osun, Ondo, and Ekiti States. The region was chosen because of its economic significance and its endowment with mineral resources such as gold, granite, limestone, and tantalite. Illegal mining activities were especially widespread in rural and peri-urban communities where regulatory oversight was weak. Osun and Oyo were known for gold deposits, while Ogun and Ondo were notable for granite and limestone extraction. These activities left visible footprints of land degradation, deforestation, and water contamination. In addition, several mining sites were associated with rising insecurity, making the region suitable for a focused investigation into the dangers of unregulated mining.

3.2 Research Design

The study employed a mixed-methods design that combined both quantitative and qualitative approaches. This design was adopted to capture the scale of the problem in measurable terms while also exploring community-level experiences. The quantitative aspect focused on analyzing data on mining activities, land degradation, and economic losses. The qualitative aspect involved interviews and focus group discussions that provided deeper insights into how illegal mining affected people's lives. The use of mixed methods ensured that statistical patterns were complemented with lived experiences, thereby producing a more comprehensive assessment.

3.3. Data Sources

Both primary and secondary sources of data were used. Secondary data were gathered from government reports, institutional records, and published documents that contained information on mineral production, environmental impacts, and economic trends in the region. These data provided background context and helped in identifying patterns across states.

Primary data were collected through semi-structured interviews and focus group discussions. A total of 20 interviews were conducted with policymakers, regulatory officials, security personnel, and community representatives. These interviews were spread across the six states to capture diverse perspectives. In addition, four focus group discussions were organised in selected communities in Osun, Oyo, Ondo, and Ogun. Each group consisted of between eight and ten participants, including farmers, traders, youth leaders, and elders. These discussions offered detailed accounts of the environmental, economic, and security implications of illegal mining as experienced at the community level.

3.4 Analytical Framework

Data analysis followed both quantitative and qualitative procedures. Quantitative data were analyzed using descriptive statistics and trend analysis to identify patterns in mining activities, environmental changes, and economic losses. Tables and figures were used to present the results clearly.

Qualitative data were analyzed thematically. Interview transcripts and focus group notes were carefully reviewed, and recurring themes such as environmental degradation, livelihood disruption, insecurity, and governance challenges were identified. These themes were then compared across states to highlight common patterns as well

as state-specific variations. By integrating both types of analysis, the study was able to generate findings that were comprehensive and well-balanced.

3.5 Ethical Considerations

Ethical standards guided the entire research process. Approval was obtained from the appropriate institutional review board before fieldwork began. Participation was entirely voluntary, and all respondents gave informed consent before being engaged in interviews or focus group discussions. Respondents were assured that their identities would be kept confidential, and pseudonyms were used in place of real names where necessary. Data were stored securely and used strictly for academic purposes. Care was also taken to ensure that the discussions did not expose participants to risks, especially in communities where illegal mining activities were linked to powerful groups. These measures ensured that the rights, dignity, and safety of all participants were fully protected.

4. Results

4.1 Overview of Illegal Mining Trends in Southwest Nigeria

The findings of the study showed that illegal mining activities were widespread across the Southwest, particularly in Osun, Oyo, Ogun, Ekiti, and Ondo States. Communities located near mineral-rich zones experienced more intense mining operations, with local youths and external operators participating in unlicensed extraction. The activities were mostly small-scale and artisanal in nature, yet their cumulative effects on the environment, economy, and security were significant. Field reports and community accounts revealed that many operators worked with rudimentary tools, while others used mechanized equipment provided by financiers who are either foreigners or illegal dealers. Although some mining was carried out discreetly in forested areas, several sites were openly active, with little or no state intervention.

4.2 Environmental Implications

Environmental damage was one of the most visible outcomes of illegal mining. Large tracts of farmland were excavated and abandoned without rehabilitation. These abandoned pits were common in parts of Osun, Ekiti, and Oyo, where they rendered once-productive land unsuitable for agriculture. In addition, soil erosion became a recurring problem, especially during the rainy season, when unprotected topsoil washed away. The result was a decline in agricultural productivity and the loss of livelihoods for many farming households.

Water contamination also emerged as a major concern. Rivers and streams near mining sites were reported to have contained residues of mercury and other chemicals used in gold processing. In Ogun and Ondo States, residents expressed concerns about changes in water colour and taste, which they attributed to nearby mining activities. This contamination posed risks not only to human health but also to aquatic life, reducing fishing opportunities for communities that depended on rivers for food and income.

Deforestation further compounded the ecological crisis. Mining in forest reserves led to illegal tree felling and the destruction of biodiversity. Forest communities reported declining availability of non-timber resources such as fruits, herbs, and fuelwood. These losses undermined food security and increased household dependence on already scarce resources. Overall, the findings confirmed that environmental degradation caused by illegal mining was both widespread and severe, threatening the ecological balance of the region.

4.3 Economic Implications

The economic consequences of illegal mining were equally pronounced. Government agencies reported revenue losses because operators evaded taxes, royalties, and licensing fees. Community respondents also noted that illegal miners often sold minerals through informal markets, depriving the state of potential income. Moreover, the lack of reinvestment in local infrastructure meant that the economic benefits of mining remained minimal.

At the community level, short-term financial gains from illegal mining disrupted traditional livelihoods. Farmers who abandoned agriculture for mining earned immediate cash but faced long-term income instability when degraded land could no longer support crops. Women traders reported fluctuations in household incomes, as mining incomes

were irregular and often spent on consumption rather than investment. In several communities, respondents stated that food prices had increased because agricultural production declined as labour shifted to mining.

The findings also indicated that illegal mining encouraged capital flight. Minerals were frequently smuggled out of the region by middlemen and foreign buyers, leaving communities without lasting economic benefits. Although mining provided some opportunities for employment, the jobs created were unstable, poorly paid, and carried high risks. Consequently, the overall economic picture was one of short-term gain but long-term loss.

4.4 Security Implications

The security dangers of illegal mining were strongly emphasized by both community respondents and security officials. Several mining sites had become hotspots for violence, with clashes reported between rival groups competing for control of deposits. In Osun and Ondo States, cases of assault, theft, and even killings were linked to disputes among miners. Moreover, the findings revealed connections between illegal mining and broader criminal activities, including banditry and kidnapping.

Youth involvement was a particularly concerning dimension. Many unemployed young men were drawn into mining operations, where they were exposed to exploitation and violence. Some were recruited into gangs that not only mined illegally but also engaged in extortion and other criminal acts. Security officials interviewed during the study confirmed that the porous nature of mining areas made them difficult to police, creating safe havens for criminal networks.

The perception of insecurity also extended beyond mining communities. Farmers reported that they avoided certain farmlands near mining sites out of fear of attacks. Traders expressed concerns about transporting goods through areas where miners were active, citing harassment and robbery. These findings suggested that illegal mining contributed not only to direct violence but also to a wider climate of fear that disrupted economic and social life.

4.5 Integrated Implications

Taken together, the results showed that illegal mining in Southwest Nigeria had environmental, economic, and security effects that were closely interconnected. Environmental degradation reduced agricultural productivity, which in turn undermined livelihoods and increased poverty. Economic losses created grievances, while insecurity disrupted community cohesion. The lack of effective regulation and weak institutional presence allowed the problem to persist unchecked, leaving communities vulnerable to cycles of exploitation and instability.

5. Discussion

The findings of this study confirm that illegal mining in Southwest Nigeria has severe environmental, economic, and security implications. These results align with evidence from existing literature while also adding original perspectives from community voices. By integrating both secondary data and primary accounts, the study demonstrates that the problem of illegal mining is not only a matter of environmental damage but also a challenge of economic justice and human security.

5.1 Environmental Implications and Global Comparisons

Environmental degradation emerged as one of the most visible dangers of illegal mining. Respondents consistently described how farmland was destroyed and rivers contaminated by mining activities. A farmer in Osun explained, "Our farmlands are gone, the soil is no longer fertile because of the pits left behind by miners." This direct account reflects the widespread problem of abandoned pits that reduce agricultural productivity (Oladeji & Adegboye, 2022).

Water contamination was another recurring theme. Community members in Ogun and Ondo reported changes in the taste and colour of water sources. One respondent in Ondo remarked, "The river we used to drink from now has a strange colour. We are afraid to use it for cooking." This aligns with earlier evidence that mercury and cyanide from gold processing pollute streams, posing long-term health risks (Ezeaku et al., 2020).

These findings mirror global cases. In Ghana, galamsey operations have similarly polluted rivers and reduced access to safe water (Hilson, 2017). In Peru, unregulated mining has caused mercury poisoning and forest loss in the Amazon (Swenson et al., 2011). Although these contexts differ, the pattern is consistent: weak regulation leads to environmental collapse. The study's results, therefore, confirm that environmental degradation in Southwest Nigeria is part of a wider global trend, but with particularly damaging consequences for rural livelihoods dependent on farming and fishing.

5.2 Economic Implications and the Resource Curse

The economic dangers of illegal mining were evident at both state and community levels. Government agencies were deprived of tax revenue, while communities experienced unstable incomes. A trader in Ogun explained, "Food is more expensive now because fewer people farm. Mining money does not last, and prices are high in the market." This reflects how short-term gains from mining often give way to long-term losses in household and community welfare.

The shift of labour from farming to mining illustrates the distortion predicted by the resource curse theory (Auty, 2001). Instead of supporting development, resource wealth undermines sustainable economic systems. The Nigeria Extractive Industries Transparency Initiative (NEITI, 2022) has similarly reported revenue losses worth billions of naira due to unlicensed mining. Comparable trends exist in the Democratic Republic of Congo, where state revenues are undermined by illicit mineral flows (Verbrugge & Geenen, 2019).

However, this study adds new insights by showing how mining disrupts local economies. Women traders and farmers in the focus groups emphasised that agricultural decline directly raised food prices. A youth leader in Oyo observed, "Most young men here now prefer mining to farming. Farming is slow, but mining gives quick money, even if it does not last." This statement illustrates how illegal mining destabilises community economies and deepens dependency on unstable sources of income. The evidence confirms earlier findings by Akinola and Oladipo (2021) that unregulated mining shifts local economies away from sustainable livelihoods.

5.3 Security Implications and Conflict Economies

The results also highlighted the strong link between illegal mining and insecurity. Several respondents described violence and clashes in mining communities. In Osun, a community elder noted, "There are constant fights among the miners. Sometimes people are injured or killed when they quarrel over pits." These accounts echo Adedeji's (2023) findings that illegal mining sites have become hotspots for violence and criminality in parts of Nigeria.

The involvement of unemployed youths was especially concerning. A youth respondent in Ondo explained, "Many young men here have joined mining gangs because there are no jobs. It is risky, but they have no other option." This highlights how joblessness drives young people into exploitative and criminal mining networks, supporting arguments that illegal mining exacerbates insecurity (Olawale, 2022).

These dynamics are not unique to Nigeria. In the Democratic Republic of Congo, mining revenues are widely used to sustain armed groups, creating full-scale conflict economies (Verbrugge & Geenen, 2019). Although the Nigerian case has not reached this level, the findings reveal early warning signs of similar dynamics, with illegal mining financing criminal networks and weakening state authority. This confirms conflict resource theory, which links natural wealth to insecurity in fragile governance contexts (Collier & Hoeffler, 2004).

5.4 Integrated Implications

The study's findings show that environmental, economic, and security consequences are deeply interconnected. Environmental degradation reduces crop yields, which lowers household incomes and increases poverty. Economic instability creates grievances and forces communities to depend on short-term mining incomes, while insecurity further undermines social and economic life. This interconnection confirms earlier observations that resource exploitation in fragile contexts often produces cumulative effects across multiple dimensions (Bryant & Bailey,

2015). These interlinked pressures not only threaten sustainable development but also hinder efforts to achieve sustainable peace in Southwest Nigeria.

For instance, a farmer in Osun explained, "Because the land is no longer fertile, young people turn to mining. When they start, they join groups that fight each other. The whole community suffers." This statement captures the cycle linking environmental damage, economic hardship, and insecurity. It also demonstrates how community voices reinforce theoretical perspectives on the dangers of unregulated mining.

5.5 Policy and Practice Implications

The findings suggest that tackling illegal mining requires an integrated approach. Strengthening enforcement alone will not be sufficient unless communities are given sustainable livelihood alternatives. As the respondents indicated, many people turned to mining because of unemployment and poverty. Therefore, policies must combine stronger regulation with programmes that support agriculture, vocational training, and small-scale entrepreneurship.

Moreover, the evidence shows that communities must be included in decision-making processes. Respondents expressed frustration that their concerns were often ignored by government officials. Empowering communities through participatory governance could reduce grievances and encourage cooperation in regulating mining. Finally, because of the strong link between illegal mining and insecurity, mining regulation should be integrated into broader security strategies, particularly those that address youth unemployment and criminal recruitment. Conclusion and Recommendations.

6. Conclusion

This study examined the dangers of illegal mining in Southwest Nigeria with a focus on its environmental, economic, and security implications. The results revealed that illegal mining has grown into a multidimensional challenge that undermines development, stability and sustainable peace in the region. By combining field evidence with secondary data, the study highlighted not only the scale of the problem but also the experiences of communities directly affected.

Environmentally, illegal mining caused widespread land degradation, soil erosion, deforestation, and water contamination. Farmlands were destroyed, rivers were polluted, and abandoned pits created hazards that made once-productive land unfit for agriculture. These outcomes did not only damage ecosystems but also threatened food security and rural livelihoods.

Economically, the study showed that illegal mining deprived government of vital revenue while destabilising local economies. Although some households gained temporary financial benefits, these were short-lived and often came at the expense of agriculture and long-term income security. Labour shifts from farming to mining increased food prices and reduced productivity, while smuggling and tax evasion weakened state finances. The result was a situation in which mineral wealth benefited private actors but left communities and the state with losses.

The security implications were found to be equally serious. Several mining sites had become flashpoints for violence, rivalry, and criminal activities. Unemployed youths were recruited into gangs that exploited mining opportunities, while communities lived under constant fear of attacks and disruptions. This climate of insecurity weakened social cohesion and further undermined livelihoods.

Overall, the findings confirm that the dangers of illegal mining in Southwest Nigeria are interconnected. Environmental degradation reduced agricultural productivity, which deepened poverty and increased vulnerability. Economic distortions eroded government capacity and community welfare, while insecurity disrupted both economic activities and social stability. Illegal mining, therefore, represents not only an environmental crisis but also a broader threat to sustainable development and peace in the region.

6.1 Recommendations

Drawing from these findings, several recommendations are proposed to address the dangers of illegal mining.

i. **Strengthen Regulation and Enforcement**
Government agencies must be empowered with adequate resources, personnel, and technology to effectively monitor mining activities. Laws should be strictly enforced, and offenders prosecuted to serve as deterrents. Coordination between federal, state, and local authorities must also be improved to eliminate overlaps and weaknesses in enforcement.

ii. **Promote Community Participation**
Communities should be actively involved in resource governance processes. Their voices must be included in licensing, monitoring, and benefit-sharing decisions. Traditional leaders, civil society groups, and youth organisations can help ensure transparency and accountability. This will also reduce grievances and build trust between citizens and the state.

iii. **Provide Alternative Livelihoods**
Since poverty and unemployment are key drivers of illegal mining, the government must expand programmes that provide alternative sources of income. Investments in agriculture, agro-processing, small businesses, and vocational training can reduce reliance on mining. Youth empowerment initiatives, in particular, are essential to prevent young people from being recruited into mining gangs.

iv. **Link Mining Regulation with Security Strategies**
Security agencies should work closely with mining regulators to dismantle criminal networks associated with illegal mining. At the same time, addressing insecurity requires tackling root causes such as unemployment, exclusion, and poverty. A holistic approach that combines enforcement with social development is necessary to break the cycle of violence.

v. **Encourage Sustainable Mining Practices**
Formalising artisanal and small-scale mining through proper licensing, training, and environmental safeguards can reduce illegality while preserving livelihoods. Providing incentives such as credit facilities and access to markets will encourage miners to operate responsibly. This will allow communities to benefit from mineral resources without sacrificing environmental and social stability.

vi. **Strengthen Regional and International Cooperation**
Because illegal mineral trade often crosses borders, Nigeria must work closely with neighbouring countries to curb smuggling. Regional partnerships and international cooperation can provide technical support and best practices for sustainable resource management.

The dangers of illegal mining in Southwest Nigeria are profound but not beyond control. This study has shown that the problem is deeply rooted in weak regulation, poverty, and insecurity. However, with decisive policies, active community participation, and sustainable alternatives, illegal mining can be curtailed and transformed into legal, beneficial, and sustainable practices. The challenge for policymakers, communities, and civil society is to act quickly and collectively to prevent the deepening of its destructive consequences and to promote sustainable peace in affected communities.

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