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Mining Stakeholder and Institutional Landscape Report for Nigeria's Critical Minerals Sector

A Roadmap for Nigeria's Critical Minerals Strategy

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Acknowledgements and Citation

This report was produced by APRI - Africa Policy Research Institute as part of the project: the *Roadmap for Nigeria's critical minerals strategy.* It draws on field engagement, stakeholder mapping and policy landscape analysis undertaken across selected critical mineral-rich states in Nigeria between December 2025 and April 2026.

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Acronyms

AfCFTA	African Continental Free Trade Area
APRI	Africa Policy Research Institute
ASM	Artisanal and small-scale mining
AU	African Union
CDA	Community Development Agreement
ECOWAS	Economic Community of West African States
ESG	Environmental, social and governance
FGD	Focus group discussion
LGA	Local government area
MCO	Mining Cadastre Office
MIREMCO	Mineral Resources and Environmental Management Committee
MSMD	Ministry of Solid Minerals Development
NEITI	Nigeria Extractive Industries Transparency Initiative
NGSA	Nigeria Geological Survey Agency
NSMC	Nigeria Solid Minerals Company
PPE	Personal protective equipment
REEs	Rare earth elements
SMDF	Solid Minerals Development Fund

Executive Summary

This report provides a multi-dimensional analysis of the stakeholder and institutional landscape shaping Nigeria's critical minerals sector. It synthesises the main outputs of Phase 1 of APRI's project, the *Roadmap for Nigeria's critical minerals strategy,* drawing on field engagement in five mineral-rich states, the development of interactive *Stakeholder and Policy databases,* and a review of the institutional and governance architecture underpinning critical minerals development in the country.

In this report, the term 'critical minerals' refers primarily to minerals of growing strategic importance to energy transition, industrial development and supply-chain security. Because mining realities at the community level often involve mixed mineral occurrences and associated extraction, the report also notes other strategically relevant minerals encountered during field engagement that help explain local livelihoods, value chain dynamics and governance conditions.

Nigeria has significant deposits of the critical minerals lithium, columbite-tantalite and bauxite, as well as rare earth elements (REEs) and other strategic minerals, all of which are increasingly relevant to global clean energy transitions. Despite this mineral endowment, the mining sector is characterised by widespread informality, raw mineral extraction and export, weak institutional coordination, limited value addition and low benefit capture for mining communities. Phase 1 of the project was designed to build the grounded evidence base needed to better understand these dynamics; address how Nigeria's critical minerals sector is currently structured across stakeholders, institutions, policies and mining-community realities; and identify the reforms needed to move the sector towards more coordinated, value-added and justice-centred development.

The report shows that Nigeria's critical minerals ecosystem is broad but fragmented. Institutional mandates exist, but coordination and implementation remain uneven. Mining communities, artisanal and small-scale miners, women, and local actors remain insufficiently integrated into formal decision-making and sector planning processes. The findings suggest that the current structure of the sector continues to favour low local value retention, limited processing and beneficiation, weak pricing transparency and poor access to mineral testing and formal support systems

Rising global strategic interest in critical minerals has increased Nigeria's negotiating leverage with bilateral partners, multilateral development institutions and clean energy investors. Growing attention to supply chain security among major economies such as the EU, the US, Japan and others creates conditions under which Nigeria may be able to attract more ambitious investment terms than the current raw-extraction model commands. Regionally, Nigeria's ratification of the African Continental Free Trade Area (AfCFTA) and emerging African Union (AU) and Economic Community of West African States (ECOWAS) frameworks on critical minerals and green industrialisation create additional pathways for value-chain integration and beneficiation investment within West Africa and the wider continent.

The *Stakeholder and Policy* databases developed for this project provide a practical foundation for more targeted engagement, stronger policy coherence and improved visibility of the institutions and actors shaping the sector. Renewed government attention to the solid minerals sector, including signals from the Ministry of Solid Minerals Development (MSMD) on licensing reform and formalisation, also provides an institutional opening for targeted advocacy and reform dialogue.

Field engagement further shows that mining communities have articulated a clear and practical vision of justice-centred mineral development: transparent partnerships between companies and communities, fully implemented Community Development Agreements (CDAs), employment and skills opportunities for local people, community infrastructure investment, and meaningful consent processes. The report identifies the main coordination gaps, stakeholder dynamics, institutional weaknesses and community-level concerns that should inform the next stage of analysis and engagement. In doing so, it lays the groundwork for a more evidence-based and politically informed roadmap for Nigeria's critical minerals strategy.

Methodology and Approach

Phase 1 used a mixed-method approach combining field visits to mining communities in Nasarawa, Kogi, Kwara, Benue and Oyo states; focus group discussions (FGDs) and structured interviews with artisanal and small-scale miners, community leaders, and state-level actors; stakeholder ecosystem mapping across fourteen categories; and a comprehensive review of the policy and regulatory landscape. The stakeholder mapping was consolidated into two interactive databases: a Stakeholder database and a Policy database, accessible through APRI's project webpage. Survey data were collected from 106 artisanal and small-scale mining (ASM) practitioners across four states.

Key Findings

- Nigeria's critical minerals ecosystem is broad but fragmented, with influence concentrated in a smaller set of federal institutions and foreign mining companies. ASM actors remain structurally under-supported despite constituting the backbone of current extraction activity.

- Mining community realities remain weakly connected to national policy ambition. Extraction is predominantly manual, low-tech and conducted without personal protective equipment (PPE), formal pricing mechanisms or reliable testing facilities.

- Persistent value loss is a defining feature of the sector. Raw minerals are exported with minimal domestic beneficiation; middlemen and foreign buyers systematically capture value at the point of sale.

- Institutional mandates exist, but coordination and implementation are uneven. Multiple federal agencies hold overlapping remits over mining governance, and state-level coordination structures such as the Mineral Resources and Environmental Management Committee (MIREMCO) are largely inactive.

- Licensing barriers are among the most significant structural obstacles, with costs ranging from ₦20 million (≈ USD14,600) to ₦50 million (≈ USD36,600) and processes requiring personal connections to government offices.

- Security challenges are severe in several mining areas, including kidnappings targeting ASM owners, military extortion of miners and active conflict in border areas.

- Gendered exclusion is systemic. Women participate primarily as sorters and labourers and are most excluded from ownership, decision-making and formal recognition within the sector.

Observed Challenges

- Fragmented stakeholder ecosystem and weak inter-institutional coordination

- Limited support for ASM formalisation and prohibitively costly licensing processes

- Absence of mineral testing, certification and laboratory infrastructure at the local level

- Weak pricing transparency and systematic undervaluation of minerals at the point of sale

- Critical infrastructure deficits: road access, electricity, water and healthcare

- Insecurity and safety risks across multiple mining areas

- Gendered participation barriers and child labour in sorting activities

Opportunities

- Rising global demand for critical minerals creates significant leverage for policy reform and investment attraction.

- The APRI *Stakeholder and Policy databases* provide a unique evidence base for advocacy and engagement.

- Growing government attention to the solid minerals sector, including the MSMD's reform agenda, is opening a window for targeted engagement.

- Nigeria's 2022 Energy Transition Plan (ETP), updated through the 2024 Energy Transition Investment Plan (ETIP), provides a relevant policy bridge between the mining and clean energy agendas, while Nigeria's ratification of the AfCFTA creates further opportunities for regional beneficiation, processing and green industrialisation.

- Inclusive ASM formalisation pathways could generate significant livelihood gains and strengthen local benefit capture.

- Investment in Nigerian universities, geological survey institutions and community-based monitoring systems would build the domestic research capacity needed to support a more self-determined, evidence-based approach to critical minerals governance over time.

Pathways Forward

Nigeria's critical minerals sector would benefit from a focused reform agenda built around five priorities: accessible formalisation, transparent mineral valuation, stronger institutional coordination, enforceable community benefit mechanisms and domestic technical capacity. Some of these are achievable in the near term through administrative action alone, notably the implementation of a tiered licensing model that reduces cost and complexity for artisanal miners, cooperatives and small companies. Others require sustained investment and coordination over a longer horizon: accessible mineral testing and evaluation services to close pricing information gaps; reactivated and resourced MIREMCO structures to improve coordination between federal institutions, state actors, companies and communities; and stronger monitoring and enforcement of CDAs, with the Nigeria Extractive Industries Transparency Initiative (NEITI) potentially supporting greater transparency. Investment in Nigerian universities, geological training institutions and research capacity would strengthen the domestic knowledge base needed to build a future workforce and to support more self-determined critical-minerals governance over time.

1. Introduction

1.1 Context and Background

Nigeria, the largest economy and most populous country in Africa, stands at an important moment in its economic and energy transition. Decades of reliance on oil and gas revenues have exposed the country to commodity price volatility and limited its ability to expand into manufacturing, industrial production and other value-added sectors. In this context, critical minerals such as lithium, columbite-tantalite, rare earth elements (REEs), bauxite and other strategically relevant minerals are receiving growing attention in relation to economic diversification, green industrialisation and a more self-determined development pathway.

In this report, the term 'critical minerals' is used primarily to refer to minerals that are strategically important to clean energy and battery and electronics value chains and their growing prominence in international supply-chain security. This is related to, but distinct from, the broader 'strategic' or 'green minerals' framing used in some African Union (AU) and Economic Community of West African States (ECOWAS) policy documents, which places more emphasis on green minerals and value addition to support broader structural transformation and regional industrialisation than on international supply-chain security. The report also documents other minerals encountered during field engagement, including gold, fluorite, lead, zinc, tourmaline, beryllium and kunzite, where these are economically significant to the mining communities visited, even though they do not appear on formal critical minerals lists. The term 'critical minerals sector' is therefore used broadly throughout this report to capture this wider set of mineral activities, actors and institutions. Specific findings are flagged where they relate to globally listed critical minerals in particular.

The global shift towards cleaner energy sources is boosting demand for critical minerals, as electric vehicles, battery systems, wind turbines, solar panels and advanced electronics all depend on secure and diversified mineral supply chains. For Nigeria, formalising the critical minerals sector offers a strategic opportunity to reduce dependence on oil revenues, generate jobs, increase tax and royalty income, attract responsible investment and support domestic industrialisation. It also creates an opportunity to move beyond raw mineral exports towards local processing, beneficiation and value addition, allowing more economic value to remain within Nigerian states and mining communities. Formalisation of artisanal small-scale mining (ASM) is central to this transition, improving environmental regulation, reducing illegal and informal trade, strengthening community benefit mechanisms and giving these miners better access to finance, training, equipment and fairer markets. Despite this potential, Nigeria's mining sector remains dominated by raw extraction and export, with limited domestic value addition and only modest contributions to inclusive economic development.

Realising these opportunities will require addressing longstanding governance challenges. Fragmented institutional mandates; limited coordination among federal, zonal and state actors; weak enforcement of environmental and community protections; and the continued

informality of ASM have contributed to revenue leakage, poor oversight and limited benefits for mining communities. Together, these conditions have constrained industrial development, reduced public revenues and prevented Nigeria from fully translating its mineral wealth into community benefit and a just energy transition.

This report forms part of APRI's project, the *Roadmap for Nigeria's critical minerals strategy.* It is organised around three core questions: Who are the actors and institutions shaping Nigeria's critical minerals sector? How effectively are they coordinated? And what do mining communities themselves identify as the conditions for a fairer, more value-retaining sector? Its purpose is to map the stakeholder ecosystem, institutional architecture and policy landscape shaping the sector, and to analyse the governance gaps, coordination weaknesses and community-level concerns that should inform future engagement and reform. In doing so, it aims to build an evidence-based foundation for a justice-centred critical minerals strategy that responds to the needs of mining communities while aligning with national development priorities and broader global climate goals.

1.2 Overview of Nigeria's Critical Minerals Sector

In Nigeria's national economic planning, the solid minerals sector has long been dominated by oil and gas. Yet the country hosts a diverse range of mineral deposits that are increasingly relevant to debates on economic diversification, industrial policy and energy transition. Field engagement across the states visited documented active extraction or strong evidence of ongoing commercial activity, involving lithium, tantalite, columbite-tantalite (coltan), gold, bauxite, REEs, fluorite, lead, zinc, tourmaline, beryllium-bearing minerals, kunzite and other strategically relevant minerals.

Nasarawa State hosts some of Nigeria's most significant lithium activity, with three Chinese-affiliated processing companies operating within a 30-mile radius of Gidan Kwanu. Kogi State is an active site for lithium, tantalite and bauxite extraction around Isanlu in Yagba East local government area (LGA). In Kwara State, Kaiama LGA hosts significant mining activity at Daba Bani and Banni, where more than 1,000 people were observed working at a single site. Benue State has significant deposits of lithium and coltan in Logo LGA, and gold, lead, fluorite and zinc in Kwande and Oju LGAs. In Oyo State, the Iwerele area in Iwajowa LGA hosts lithium, beryllium-bearing minerals, tourmaline, kunzite and other gemstones.

It is important, however, to distinguish between mineral occurrence, active extraction and realistic downstream opportunity when interpreting these findings. Confirmed geological occurrence does not by itself imply commercial-scale viability. Likewise, the active artisanal and small-scale extraction documented across the sites we visited, while substantial in intensity and central to local livelihoods, does not necessarily indicate the level of commercial maturity required to support large-scale processing or export-grade beneficiation. Some locations, particularly parts of Nasarawa and Kwara states, show clearer evidence of sustained investor interest and emerging industrial activity. Others remain predominantly artisanal, low-technology and more uncertain in their near-term prospects for value addition.

Where the evidence allows, later sections of this report distinguish between minerals that are confirmed present, those under active artisanal extraction and those with a more realistic near-term case for formal investment or downstream processing.

Despite this mineral wealth, the sector currently accounts for less than 1% of Nigeria's GDP. Many operations remain informal or semi-formal, a substantial share of minerals is exported in raw form, and local communities often see little visible benefit from extraction on their land. Successive policy initiatives have sought to address these structural weaknesses. The 2016 Nigerian Mining Roadmap, developed by the then Federal Ministry of Mines and Steel Development, set out a national strategy for repositioning the solid minerals sector, including ambitions around investment, formalisation, institutional reform and increased economic contribution. More recently, the Raw Materials Research and Development Council (RMRDC) developed the 2025 Roadmap for the Development of Nigeria's Raw Materials Sector, which places greater emphasis on domestic raw-material utilisation, value addition and industrial linkages. While these initiatives signal sustained policy interest in strengthening Nigeria's minerals economy, neither has yet produced the scale of structural transformation required to shift the sector decisively from predominantly raw extraction towards coordinated, value-adding and community-responsive mineral development.

Plate 1. Open-pit lithium and quartz mining at Daba Bani, Kaiama LGA, Kwara State.
Photo: APRI Field Team, 2026

2. Methodology

2.1 Overall methodology

This project adopted a mixed-method research approach designed to reflect the realities of Nigeria's mining landscape and the diversity of actors engaged in the sector. The approach combined primary field research through community visits and stakeholder consultations, secondary research through policy and literature review, and database development to consolidate and visualise key findings. The methodology was designed to be responsive to Nigeria's socio-political context, including insecurity, linguistic diversity, mistrust of external researchers, and the fragmented nature of the sector.

2.2 Field engagement

Field visits were conducted across five mineral-rich states: Nasarawa, Kogi, Kwara, Benue and Oyo (Table 1). These states were selected through a combination of desk-based screening of known mineral occurrence and mining activity, consultations with field partners and state-level contacts, and practical considerations of accessibility and security during the field window from December 2025 to April 2026. The aim was to capture meaningful variation in mineral type, mining conditions and regional context, rather than to produce a statistically representative sample of all mining states in Nigeria.

Within each state, specific sites and communities were identified with the support of local field partners and stakeholder engagement officers. Site selection prioritised locations with active or recently active mining, visible relevance to critical minerals and associated supply chains, and places where some degree of community access could be secured through local intermediaries. In several cases, access remained partial or restricted and was shaped by security conditions, local mistrust and the willingness of community actors or community leaders to permit engagement. This selective approach was necessary given security, logistical and time constraints, but it means the five states and their constituent sites should be read as illustrative case studies of mining community realities rather than a statistically representative sample of Nigeria's critical minerals geography. States and sites with significant mineral potential but limited field access during this phase, including parts of the North East and South South, are not represented in the current evidence base and remain priorities for future field engagement.

At each site, field engagement teams carried out structured focus group discussions (FGDs), one-on-one interviews and observational assessments. Engagements were conducted in English, Nigerian Pidgin, Hausa, Yoruba, Eloyi and other local languages as needed, with trained local researchers and mediators supporting interpretation and community access. All participants provided verbal consent and were assured of anonymity. In locations where photography or video documentation was restricted by community members, field researchers relied on written field notes and observational records.

STATE	KEY SITES VISITED	KEY MINERALS	KEY OBSERVATION
Nasarawa	Gidan Kwanu, Endo, Nasarawa LGA; Ruwa-Uke; Udege-Umbeki	Lithium, columbite, tantalite, gold, REEs	Three Chinese-affiliated lithium mining and processing companies are operating near the ASM sites; dynamite blasting was observed; women are primarily engaged in sorting activities
Kogi	Isanlu, Yagba East LGA	Lithium, tantalite, bauxite	Access was denied at one site due to fear of surveillance. Operations are largely manual; bauxite activity was suspended following the kidnapping of an ASM site owner; no formal pricing or testing infrastructure
Kwara	Daba Bani and Banni, Kaiama LGA	Lithium and mixed minerals	More than 1,000 workers observed at a single site; open-pit mining; around 30 pits examined; multiple informal levies at checkpoints
Benue	Ayilamo/Anyiin, Logo LGA; Menankwagh, Kwande LGA; Oboru Oye, Oju LGA	Lithium, coltan, lead, fluorite, zinc	State mining ban in effect; evidence of illegal activity; significant child labour observed; no processing plants
Oyo	Iwerele, Abuja Leather, Itase, Aget, Iwajowa LGA	Lithium, beryllium, tourmaline, kunzite, gemstones	Access denied at two sites; no visible regulatory presence; mineral access controlled by private companies

Table 1. Summary of field visits by state and site

2.3 Survey data collection

In addition to qualitative field engagement, a structured survey interview using Google Forms was administered to 106 artisanal and small-scale mining (ASM) practitioners across five states: Kogi, Oyo, Kwara, Benue and Nasarawa (Figure 1). The survey captured respondents' motivations, challenges, support needs, perspectives on formalisation and visions of justice-centred mining. In Kogi State, structured focus group discussions (FGDs) were the primary mode of engagement used within the mining community and yielded qualitative evidence. Across the full survey sample, 77% of respondents were male and 23% were female, reflecting the broader male dominance observed in ASM participation across the study sites. Gender representation varied across the five states, however. Female respondents

accounted for 38% of the Benue sample and 32% of the Nasarawa sample, compared with 17% in Kwara and Kogi, while no female respondents were captured in the Oyo survey sample (Figure 2). These differences should be interpreted as characteristics of the respondents reached during field engagement rather than as representative estimates of women's participation in ASM within each state. Field observations nevertheless showed that women were actively involved in mining activities, particularly sorting, carrying and washing, while being less visible in ownership and decision-making roles. This points to a broader gap between women's labour participation and their formal recognition and influence within the sector.

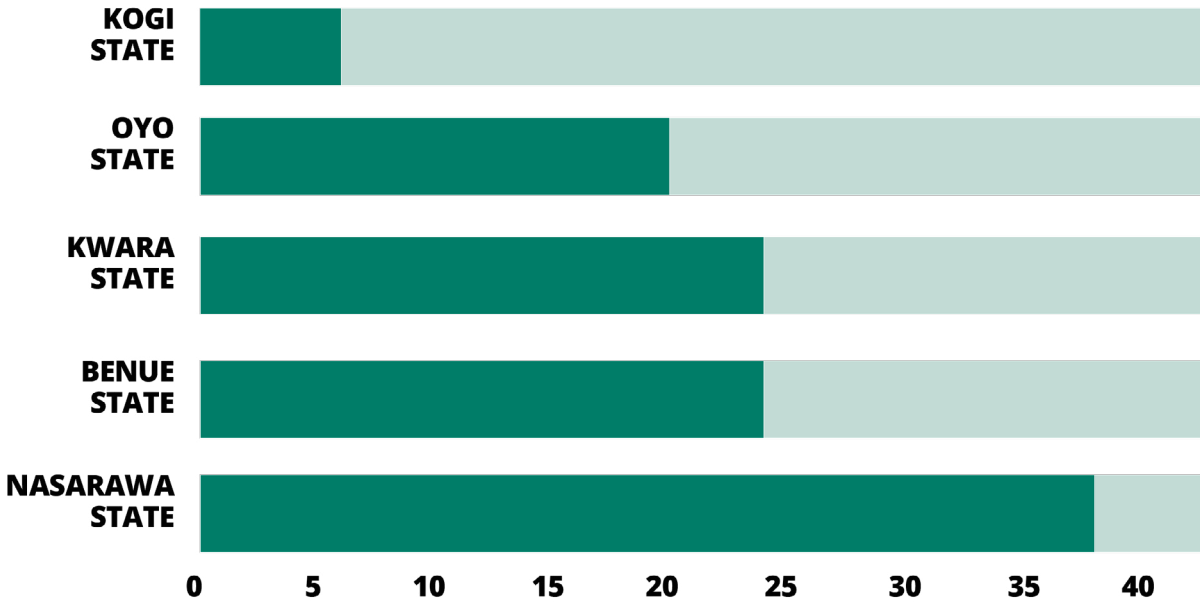

Figure 1. Survey respondents by state

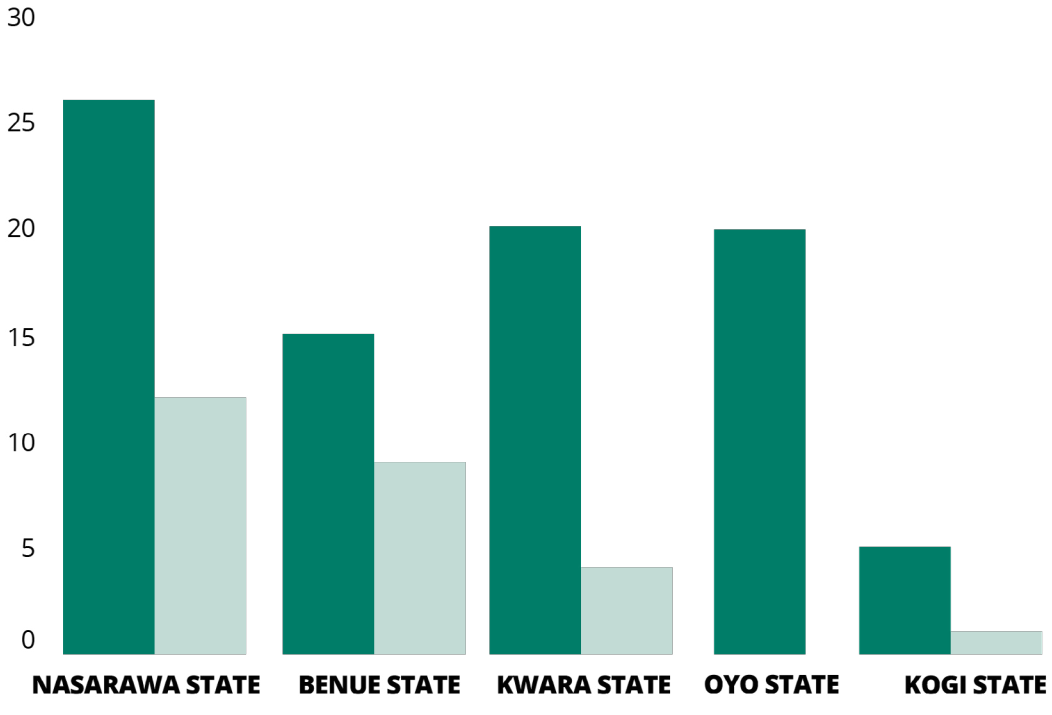

Figure 2. Overall gender distribution by state

2.4 Stakeholder and institutional mapping

The stakeholder mapping identified actors operating across Nigeria's critical minerals sector and assessed their roles, geographic distribution, influence and relationship to the sector. Actors were identified through a combination of desk-based research, including corporate registries, licensing records and institutional directories; referrals from field partners and state-level contacts; and triangulation against information gathered during field visits and stakeholder interviews.

Where possible, identified actors were validated through cross-referencing with public records or confirmation by a field partner or state contact, and then grouped into one of thirteen stakeholder categories developed to reflect the structure of the sector. The resulting ***Stakeholder database*** should be understood as a living Phase 1 dataset. Some entries currently rely on a single source and have not yet been independently corroborated, while others have undergone stronger validation. The database is therefore designed to be iteratively updated as further verification takes place in subsequent phases. The ***Stakeholder database*** is accessible at:
https://afripoli.org/projects/nigeria-critical-minerals-strategy/stakeholders/.

2.5 Policy mapping

The policy mapping consolidated key documents relevant to mining governance, critical minerals development, institutional responsibilities and implementation challenges in Nigeria. These documents were identified through a desk-based review of legislation, policy frameworks, strategy documents, institutional publications and publicly available regulatory and advisory materials relevant to the solid minerals sector. Selection was guided by the document's relevance to sector governance, licensing, environmental oversight, transparency, formalisation, industrial policy and value addition. The review sought to capture both the formal legal and regulatory architecture of the sector and the wider policy environment shaping critical minerals development, including national development planning, energy transition and regional frameworks relevant to mineral value chains. The resulting *Policy database* was organised as a structured, publicly accessible Phase 1 resource to improve visibility of the policy landscape and support future research, stakeholder engagement and reform dialogue. As with the *Stakeholder database*, this should be understood as a living dataset that can be expanded and refined in subsequent phases of the project. The *Policy database* is accessible at:
https://afripoli.org/projects/nigeria-critical-minerals-strategy/policies/.

2.6 Limitations

Security issues prevented access to some sites. Mistrust of external researchers limited the depth of engagement in some communities. Language barriers required translation intermediaries. Gender norms in certain communities also limited women's participation in focus group settings. The informal nature of the sector means that stakeholder relationships, operational conditions and site-level information may change rapidly.

3. Key elements of the mapping

3.1 Stakeholder mapping

The stakeholder mapping exercise identified actors across Nigeria's critical minerals sector, including federal agencies, state institutions, foreign and domestic mining companies, artisanal and small-scale miners, cooperatives and associations, community-based organisations, and international development partners. These actors were structured across thirteen categories to reflect the sector's institutional, commercial, technical and social dimensions (Table 2).

Field engagement also highlighted several actor groups that are central to how value, risk and authority are distributed within the sector, but which are not yet fully developed as standalone categories in the current ***Stakeholder database.*** These include host-community structures and traditional authorities that mediate land access, local consent and Community Development Agreements (CDAs); local traders, aggregators and informal buyer networks that shape pricing and mineral movement; processors and prospective testing or certification actors, which remain sparse at the local level; finance providers, including cooperatives, microfinance institutions and public financing mechanisms that miners often struggle to access; logistics and export-linked actors involved in transport and mineral movement; and formal and informal security actors, ranging from the military and the Nigeria Security and Civil Defence Corps to community-funded vigilante structures.

Based on field testimony and observations from field engagement officers, these actor groups are discussed qualitatively in Sections 3.4, 5 and 6. Expanding the formal database to capture them more systematically is identified as a priority for the next phase of stakeholder mapping. This broader stakeholder picture is important because critical minerals governance in Nigeria is shaped by formal institutions and licensed operators, and also by intermediary actors who influence access to sites, mineral valuation, dispute management and the distribution of benefits and risks.

The geographic spread of these stakeholders highlights the sector's uneven growth. Nasarawa and Kogi states host some of the most active critical mining operations and a significant number of commercial actors, whereas Benue, Kwara and Oyo states are marked by higher informality and less visible institutional activity on the ground. Northern states such as Zamfara, Kaduna and Niger also have substantial critical mining activity. However, these states were not included in the project scope for the field visit due to security challenges that impact access to the mining community.

STAKEHOLDER CATEGORY	KEY EXAMPLES	ROLE IN CRITICAL MINERALS SECTOR
Federal government and regulators	Ministry of Solid Minerals Development (MSMD), Nigeria Geological Survey Agency (NGSA), Mining Cadastre Office (MCO), Nigeria Extractive Industries Transparency Initiative (NEITI)	Policy formulation, licensing, regulation, geological surveying and transparency oversight
State agencies and coordination bodies	State ministries responsible for solid minerals, Mineral Resources and Environmental Management Committee (MIREMCO) structures, state mineral development companies	State-level coordination, facilitation, investment support and joint venture participation
Federal field and zonal offices	MSMD zonal and field offices across mining states	Front-line regulatory presence, licensing support and local engagement
Mining companies	Avatar New Energy, Ganfeng Mining, Sinoma	Mining and domestic lease holders. Large-scale extraction, processing, investment and export
Mining consultancies and processing, testing and technical service actors	Geological consultancies/survey firms, local processing plants, sorting sheds, mineral laboratories, assay/testing services	Processing, grading, testing, technical advisory and environmental or site assessment support

Table 2. Stakeholder categories used in the database

STAKEHOLDER CATEGORY	KEY EXAMPLES	ROLE IN CRITICAL MINERALS SECTOR
Artisanal operators and cooperatives	ASM operators, artisanal miners, site owners, cooperatives	Dominant form of extraction activity across much of the sector; livelihood generation and local mineral supply
Associations	Mining associations, cooperatives, unions	Collective representation, dispute mediation and market linkages
Logistics and infrastructure actors	Haulage operators, motorcycle transporters, road and laboratory infrastructure providers, export-linked logistics actors	Mineral movement, transport, infrastructure support and market access
NGOs	Environmental and development NGOs	Advocacy, community support, and environment, social and governance (ESG) monitoring
Civil society	Community groups, youth organisations	Rights advocacy, benefit-sharing oversight
Donors	Bilateral and multilateral development partners	Finance, technical assistance and programme support
Non-university training institutions	Vocational and technical training institutions	Skills development, research, geological knowledge generation and technical capacity building
Universities	Federal and state universities with geology/mining departments	Research, technical expertise and geological knowledge generation

Table 2 Continued. Stakeholder categories used in the database

Box 1. The APRI Stakeholder Database

The APRI Stakeholder database provides a publicly accessible and interactive map of actors in Nigeria's critical minerals sector. The platform allows users to search and filter stakeholders by name, state and category, and visualises their distribution across all 36 states and the Federal Capital Territory. **It is accessible at: https://afripoli.org/projects/nigeria-critical-minerals-strategy/stakeholders/**

3.2 Institutional landscape

The institutional landscape of Nigeria's critical minerals sector involves a diverse range of federal, state and local entities, each with distinct mandates, capacities and levels of engagement with mining communities (Table 3). The project highlighted several recurring patterns crucial to understanding governance issues, especially the disconnect between official institutional mandates and the conditions of the artisanal and small-scale miners on the ground.

INSTITUTION	MANDATE/ROLE	RELEVANCE TO CRITICAL MINERALS
Ministry of Solid Minerals Development (MSMD)	Policy formulation, sector regulation and investment promotion	Primary ministry for all critical minerals policy
Nigeria Geological Survey Agency (NGSA)	Geological surveying, mapping and data management	Critical for mineral inventory, deposit assessment and investor information
Mining Cadastre Office (MCO)	Licensing and lease administration	Controls access to mining rights; central to formalisation and ASM support
Mineral Resources & Environmental Management Committee (MIREMCO)	State-level coordination of mining activities and environmental compliance	Intended to support subnational coordination; found largely inactive
Solid Minerals Development Fund (SMDF)	Oversight of financing and investment support for solid minerals	SMDF financing instruments to catalyse private sector-led investments in Nigeria's mining sector
Nigeria Solid Minerals Company (NSMC)	An emerging government-backed investment vehicle for the mining sector	NSMC is an emerging actor in investment facilitation, exploration support, project de-risking, and downstream value-chain development, though its institutional role is still evolving

Table 3. Key institutions, mandates and relevance to critical minerals

INSTITUTION	MANDATE/ROLE	RELEVANCE TO CRITICAL MINERALS
Nigeria Extractive Industries Transparency Initiative (NEITI)	Revenue transparency and accountability in extractive sectors	Relevant to royalty flows, production reporting and extractive governance
State Ministries of Solid Minerals	State-level mining coordination and local engagement	Capacity varies considerably; some states have imposed mining restrictions
Federal Ministry of Environment	Environmental regulation and Environmental Impact Assessment (EIA) oversight	Relevant to mine rehabilitation, environmental standards and host community protection

Table 3 continued. Key institutions, mandates and relevance to critical minerals

A recurring finding from field visits is that institutional mandates exist on paper but are rarely experienced as effective support at the community level. Across all five states, miners reported little or no interaction with government regulators, aside from encounters related to extraction, enforcement or demands for informal payments by some security agencies. The Mining Cadastre Office (MCO) was referenced in multiple locations as an important institutional contact point; however, the cost, opacity and complexity of licensing processes mean that most artisanal and small-scale mining (ASM) actors remain outside the formal system.

3.3 Policy landscape

The policy mapping consolidated key documents relevant to mining governance, critical minerals development, institutional responsibilities and implementation challenges (Table 4). Nigeria's critical minerals policy environment remains fragmented. Multiple relevant laws, strategies and plans exist, yet their practical visibility and implementation remain limited, particularly for mining communities and smaller operators. As mentioned in section 2.5, the APRI Policy database organised these policies and regulatory documents in a searchable, publicly accessible and downloadable format at: **https://afripoli.org/projects/nigeria-critical-minerals-strategy/policies/.**

POLICY INSTRUMENT	YEAR	RELEVANCE
Nigerian Minerals and Mining Act	**2007**	Primary legislative framework governing all solid minerals mining, licensing and royalty arrangements
2016 Mining Roadmap	**2016**	National strategy for solid minerals development; sets targets for sector growth, though implementation remains limited
Minerals and Metals Integrated Policy	**2020**	Comprehensive framework for minerals and metals development, including ambitions on value addition and local content
Nigeria Energy Transition Plan (ETP, 2022) and updated Energy Transition Investment Plan (2024)	**2022; 2024**	Provides a relevant policy bridge between Nigeria's energy transition agenda and minerals-linked industrial opportunities. The 2024 ETIP update gives a more current basis for this linkage, including future demand for energy-transition inputs, infrastructure and value-addition pathways, although it is not itself a core critical minerals policy instrument
National Development Plan 2021–2025	**2021**	Includes diversification objectives relevant to the solid minerals sector
Nigerian Oil and Gas Industry Content Development Act	**2010**	Establishes local content principles with partial relevance for mining localisation debates
NEITI Act	**2007**	Mandates transparency and accountability in extractive industries
Environmental Impact Assessment Act	**1992**	Governs environmental review requirements; enforcement remains weak in ASM contexts
African Mining Vision	**2009**	Continental policy framework positioning African minerals within development and value-addition objectives

Table 4. Overview of key policies and instruments included in the database

3.4 Mining community realities

Field engagement across the five states revealed a mining landscape in which extraction is predominantly labour-intensive, low-tech and conducted with limited support from formal systems of testing, pricing, regulation, occupational safety, or healthcare. The findings below combine direct field observations with testimonies from FGDs and structured interviews. Throughout this section, claims based primarily on what was witnessed by the field team are presented as observations, while claims about prices, costs, production volumes, motivations or lived experiences that the field team could not directly verify are attributed to the miners, community members or officials who reported them.

3.4.1 Extraction methods and conditions

Across the sites where extraction activity could be directly observed, the dominant methods were open-pit and alluvial mining using manual tools such as chisels, hammers, jackhammers, shovels and rope-and-bucket systems. In Nasarawa State, miners reported the use of dynamite for blasting, followed by manual breaking of rock into sizes suitable for sorting and sale. Excavators and compressors were observed at a limited number of licensed sites, but these remained inaccessible to most ASM operators due to cost.

Observed and reported output levels varied considerably across sites. At some smaller sites, miners in Isanlu, Kogi State, reported production of around 100 kg of lithium per day, while at larger operations in Kwara State, field teams encountered activity levels suggesting substantially higher daily output, with local estimates running to several tonnes per day. This variation likely reflects differences in geology, labour intensity, scale of operation and access to capital and equipment.

Plate 2. Alluvial mining near a river site in Benue State

Plate 3. Benue State mining site showing manual extraction activity and informal infrastructure

3.4.2 Workforce and labour conditions

Workforces across the visited sites were predominantly adult, with significant participation by women in sorting, carrying, washing and other processing-related activities. Women in Nasarawa State described mining as an important source of income and financial independence, particularly in supporting household needs. However, their participation remained concentrated in lower-paid and lower-status segments of the value chain.

Child labour was observed in Benue State, where school-age children were seen participating in sorting activities during school hours. Across all five states, occupational safety standards were extremely weak. No workers were observed wearing full personal protective equipment (PPE), and only limited use of face masks was noted at some sites in Kogi and Nasarawa. No accessible healthcare infrastructure was identified at or near any of the visited mining sites, leaving workers exposed to unmanaged risks associated with dust, injury, blasting, fatigue and long hours of manual labour.

Plate 4. Women sorters at Lama community in Kwara State, with panning equipment

Plate 5. Women miners participating in an FGD at Endo community, Nasarawa State

Box 2. What Mining Communities Told Us

Across all five states, mining community members consistently expressed three overriding concerns during interviews and FGDs: that they were being paid too little for the minerals they extract, that they did not know the real value of what they were selling and that they received little meaningful benefit from the formal governance systems that are supposed to regulate and support the sector. In Endo community, Nasarawa State, one focus group participant stated that larger companies often secure licences over sites already worked by ASM miners and, in some cases, obtain community consent through non-transparent arrangements with local leaders. In Isanlu, Kogi State, miners reported that licensing costs were estimated at between ₦20 million (≈ USD14,600) and ₦50 million (≈ USD36,600), placing them out of reach, and that navigating the process often depended on personal connections to government offices.

3.4.3 Mineral movement and value chain

A consistent finding across the states is that minerals are sold in raw or only minimally processed form, with value captured progressively by middlemen, traders, buyers and, ultimately, foreign processing companies. In Kwara State, field teams observed minerals being transported by motorcycle to collection points in Banni and Igbeti, from where they were reportedly loaded onto 40–50-tonne trucks for onward transport to Lagos or Ogun State and eventual sale to international buyers. In Nasarawa State, respondents likewise reported that columbite, tantalite and REE-bearing minerals were transported to Lagos for onward shipment to China. Domestic processing capacity appeared limited in the communities covered in this study. Only lithium activity in Nasarawa showed clear evidence of local processing. This occurred through three Chinese-affiliated companies operating around Gidan Kwanu. Elsewhere, raw or minimally processed mineral movement remained the dominant pattern observed or reported during field engagement. Taken together, these findings suggest that current mineral development pathways continue to pursue extraction activities without adequately supporting domestic beneficiation, retaining local value or providing widespread community benefits.

Nigeria's federal policy direction has increasingly emphasised local value addition. In 2024, government statements and subsequent reporting pointed to a shift towards making local processing a condition of new mining licences, and by 2025 the Ministry of Solid Minerals Development (MSMD) stated that this policy direction had helped attract more than USD800 million in processing-related investment commitments. While these developments indicate an important policy and investment shift, they do not yet alter the findings that raw mineral movement remains the dominant reality across most of the sites covered in this report.

Plate 6. Raw kunzite/spodumene crystals from Iwerele-Komu mining area, Oyo State

Plate 7. Artisanal and small-scale lithium mining at an open excavation site, Kwara State

3.5 Infrastructure and value-chain bottlenecks

A number of infrastructure, market and service bottlenecks limit the ability of mining communities and domestic mining companies to retain value within Nigeria's critical minerals sector (Table 5).

BOTTLENECK	DESCRIPTION AND EVIDENCE FROM FIELD VISITS
Road Access	Several sites, including Daba Bani in Kwara State and Oboru Oye in Benue State, were only accessible by motorcycle via dirt roads. Poor road access limits the use of heavier equipment, constrains formal buyers and reinforces dependence on informal middlemen.
Mineral Testing and Certification	No accessible mineral testing laboratories were identified in any of the visited communities. Miners reported using mobile applications such as Rock Identifier for preliminary identification, but in practice they remained dependent on
Pricing Transparency	In the absence of accessible testing facilities that can independently verify mineral value, miners reported having limited means to assess what they were selling and often depended on buyers to set prices. Government laboratories in Abuja and Sagamu were mentioned by some respondents, but distance and cost appeared to place these beyond the practical reach of most ASM operators.
Processing Facilities	No domestic processing facilities were identified during field visits in Benue or Oyo states. In Kwara and Kogi, respondents reported that minerals were moved out of state for onward processing or export. Nasarawa State showed evidence of domestic lithium-processing capacity operated by foreign-affiliated companies, although access to these facilities was not granted during fieldwork.
Finance and Capital	None of the miners interviewed reported having successfully accessed formal loans, grants or cooperative financing. Equipment hire schemes were also not identified at local government level, limiting opportunities to improve productivity or scale operations.
Healthcare	No accessible healthcare facility was identified at or near any of the mining sites, despite widespread exposure to dust, blast-related risks, musculoskeletal strain and malaria.

Table 5. Key infrastructure and value-chain bottlenecks identified during field visits

These bottlenecks are mutually reinforcing and collectively sustain a low-value extractive model. Poor road access limits equipment mobility, formal market entry and the presence of more structured mineral buyers. The absence of accessible testing facilities weakens ASM's pricing power and reinforces information asymmetries in favour of buyers and intermediaries. Limited access to finance constrains upscaling, mechanisation and the adoption of safer working conditions, while the lack of locally accessible processing capacity means that much of the value generated by mineral extraction is captured outside mining communities and, in many cases, outside Nigeria.

In sum, these broader structural weaknesses prevent mineral wealth from driving inclusive growth, industrial development and substantial community benefits. Mining can therefore be highly active at the community level while only generating limited local benefit and weak national value retention.

4. Insights from field engagement and stakeholder consultations

4.1 Insights from mining communities

Three challenges are consistently reported by mining communities across all five states: the absence of fair pricing, the inaccessibility of formalisation pathways and the limited visibility of community interests within mining governance.

On pricing, miners across all visited sites reported being unable to independently verify the value of the minerals they extract. In Isanlu, Kogi State, miners highlighted the absence of any government mechanism to regulate, publish or stabilise mineral prices at the point of sale. In Endo, Nasarawa State, focus group participants described how middlemen purchased lithium at suppressed prices and then sold it onward at significantly higher rates to processing companies. Although the exact dynamics varied by location, the broader pattern was consistent across all five states: Miners operate with limited market information and weak bargaining power, while buyers and intermediaries benefit from greater knowledge and control over the chain.

On formalisation, the dominant perception across communities was that existing pathways are either inaccessible or actively hostile to artisanal and small-scale mining (ASM) interests. High licensing costs, administrative complexity and the perceived need for political connections were repeatedly cited as barriers. In Endo, several respondents appeared uncertain about the legal status of artisanal mining, suggesting a broader information gap regarding ASM rights and regulatory pathways. In Isanlu, miners noted that when communities attempt to secure access to sites for ASM use, larger companies are often better positioned to obtain Mining Cadastre Office (MCO) licences and, in some cases, to influence local consent processes through payments to community leaders

On governance and benefit-sharing, community representatives in Endo articulated a clear vision of what justice-centred mining should look like: Mining should be treated as a partnership between communities and operators, Community Development Agreements (CDAs) should be fully implemented and extraction should generate tangible local benefits such as employment, infrastructure and scholarship opportunities. In practice, however, they described a significant gap between what had been promised and what had been delivered.

Plate 8. Focus group discussion with ASM practitioners at Endo community, Nasarawa State

Plate 9. Lama multipurpose community miners with panning equipment, Kwara State

4.2 Insights from state-level stakeholders

Engagement with state-level stakeholders revealed considerable variation in both institutional capacity and political will to govern the sector effectively. In Kwara State, field engagement was facilitated through the State Ministry of Solid Minerals Development (MSMD), which demonstrated awareness of the sector's dynamics and expressed interest in supporting formalisation. In Benue State, by contrast, the governor's ban on mining activities in Logo LGA was cited by licensed operators as evidence of a contradiction between official policy and practical governance.

Across all visited states, field researchers noted the limited presence of meaningful regulatory authority at active mining sites. Where security actors such as the military or the Nigeria Security and Civil Defence Corps were present, their role was generally perceived as extractive rather than protective. At most sites, the dominant security arrangements were community-funded, relying on local hunters, vigilante groups or informal security structures rather than formal state protection.

5. Analysis and discussion

5.1 Key insights from the stakeholder landscape

The stakeholder mapping reveals that Nigeria's critical mineral ecosystem is more extensive and varied than often thought. It includes federal and state agencies, foreign corporations, local artisanal and small-scale miners, civil society groups, donors and universities (Table 6). However, influence is largely held by a few key players: the federal ministry responsible for solid minerals, several large mining firms, many foreign-owned companies operating in key extraction areas, and informal buyer networks that significantly influence local prices. Artisanal and small-scale mining (ASM) actors make up the majority of the workforce and are the practical backbone of extraction activities, yet, despite being essential to the sector's operations, they remain excluded from governance, financing and value sharing. This imbalance is a defining feature of Nigeria's critical minerals sector and presents a major barrier to initiatives focused on fairness and justice-centred inclusion.

STAKEHOLDER GROUP	POWER/INFLUENCE	INTEREST/STAKE	SALIENCE
Federal government & regulators (MSMD, NGSA, MCO)	High	High	High
Large mining companies (domestic and foreign)	High	High	High
State government agencies	Medium	High	Medium–high
Mining associations and cooperatives	Low–medium	High	Medium
Artisanal and small-scale miners	Low–medium	High	Medium
Development partners & donors	Medium	High	Medium
Civil society organisations	Medium	High	Medium
Academic and research institutions	Low	High	Medium
Mining communities and host communities	Low	Very High	High (often overlooked)
International buyers & middlemen	High (informal)	High	Low (formal visibility)

Table 6. Preliminary assessment of stakeholder power, interest and salience

This distribution of power and salience illustrates a central tension in the sector: Those with the greatest material stake in mining outcomes, particularly miners and host communities, are often those with the least formal influence over how the sector is governed.

The 'power', 'interest', and 'salience' ratings in Table 6 should be understood as preliminary analytical judgements rather than fixed or quantitative scores. They are based on a combination of desk-based stakeholder mapping, field observations, interview evidence and the project team's assessment of each group's influence over sector decisions, material stake in sector outcomes, and practical importance to critical minerals governance and reform. In this context, 'power' refers to the ability to shape decisions, control access or influence resource flows; 'interest' refers to the degree to which an actor is materially affected by sector outcomes; and 'salience' refers to the actor's practical significance in understanding and engaging the sector, including where formal visibility may not match real-world influence.

5.2 Key insights from the institutional landscape

The institutional mapping suggests that the central challenge in Nigeria's critical minerals sector is not the absence of institutions but rather weak coordination, ambiguous mandates and inconsistent implementation.

Multiple federal agencies hold overlapping or adjacent responsibilities: the MSMD provides policy direction, the NGSA manages geological data, the MCO administers licences, NEITI oversees aspects of transparency, and state-level bodies are expected to play coordination and facilitation roles. In practice, however, these institutions operate with limited information-sharing and without a clearly enforced accountability framework for community-level outcomes. A further institutional development worth noting is the newly established Nigeria Solid Minerals Company (NSMC), a sovereign investment vehicle with a planned ownership structure split among private investors, the government and the Nigerian public, intended to catalyse private capital for exploration, development and processing. Although its operational track record is still emerging, the NSMC could become a significant actor in investment facilitation and value-chain development, and its relationship to existing institutions such as the MSMD, NGSA and MCO will be an important coordination question for subsequent phases of this project to track.

MIREMCO structures, which are intended to provide state-level coordination, were found to be largely inactive across the states visited. The Solid Minerals Development Fund (SMDF), which could serve as a vehicle for ASM support, formalisation and investment in beneficiation, remains underutilised relative to its potential. These mid-tier governance weaknesses create space for informal actors, exploitative pricing arrangements and weak environmental oversight to persist with limited challenge.

5.3 Key insights from the policy landscape

Nigeria's critical minerals governance framework remains fragmented. The Nigerian Minerals and Mining Act (2007) provides the primary legislative foundation, but it predates the current strategic significance of critical minerals in global energy-transition and supply-chain debates

and does not specifically address the emerging importance of lithium, REEs, tantalite and other transition-relevant minerals. The 2016 Mining Roadmap sets ambitious targets for the sector's contribution to GDP, but implementation has been limited. Nigeria's 2022 Energy Transition Plan (ETP), updated through the 2024 Energy Transition Investment Plan (ETIP), provides a relevant policy bridge between mining and Nigeria's clean energy and industrial transition agenda, but functions more as an adjacent framework than as a dedicated critical minerals governance instrument, and has not yet translated into specific governance reforms for the sector.

A key analytical finding from this study is that policy coherence between mining and adjacent domains, including environmental regulation, land and community rights, industrial policy, and local value addition, remains weak. Community Development Agreements (CDAs) exist under the law, but enforcement is inconsistent. Environmental Impact Assessment (EIA) requirements formally apply but are rarely meaningful in ASM contexts. Local content and localisation ambitions are frequently referenced in policy discussions, yet there is limited evidence that these are being systematically translated into mining-sector practice.

5.4 Key insights from field engagement

Field evidence consistently points to a major disconnect between national strategic narratives about Nigeria's critical minerals potential and the current mining model at the state and community level. While policy documents describe a future of value-added mineral processing, industrial upgrading and stronger participation in clean-energy supply chains, the lived reality in many mining communities is still defined by dangerous manual labour, information asymmetries, exploitative buyer relationships and a near-total absence of visible state support.

This disconnect reflects deeper structural conditions: the concentration of capital and information within buyer and company networks; the exclusion of ASM actors from meaningful governance processes; the absence of public investment in infrastructure and services within mining areas; and gendered and age-based patterns of labour exploitation reproduced through informality. Effective reform will require more than improved policy language or stronger formal regulation on paper. It will require addressing the underlying political, institutional and market conditions that continue to sustain extraction without inclusion.

5.5 Survey findings: challenges and support needs

The structured survey of 112 ASM practitioners across five states provides quantitative grounding for the qualitative findings from the field engagement. Technical barriers, particularly access to equipment and technical support, were the most frequently identified challenge, cited by 77% of respondents. Financial barriers followed closely at 69%, while 53% identified safety and security risks. Market and value-chain barriers were cited by 40% of respondents and regulatory barriers by 35%. Because respondents could identify more than one challenge, percentages are not mutually exclusive and do not sum to 100% (Figure 3).

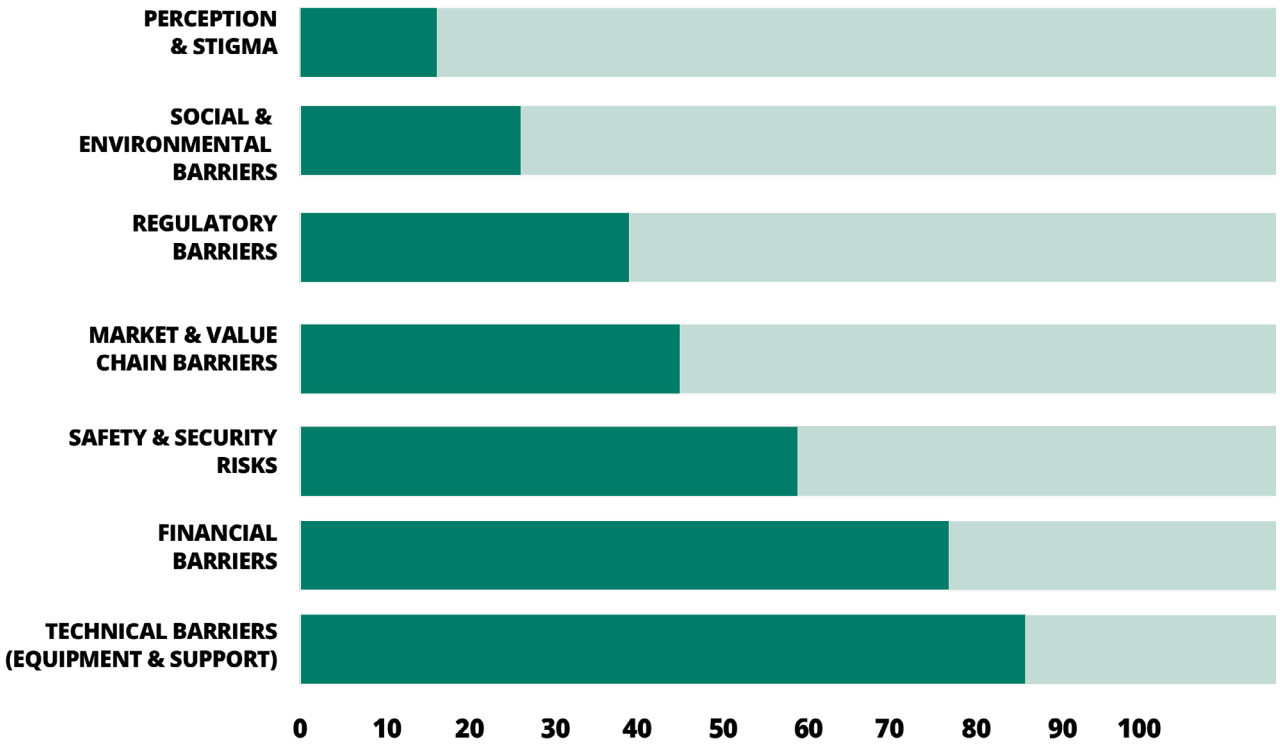

Figure 3. Key challenges faced by ASM miners (n=106)

These constraints are closely reflected in the forms of support ASM said they require. Just over half of respondents (60%) identified access to finance and grants as a priority, while 47% called for improved access to equipment and technology. Government intervention or policy support was identified by 37%, followed by stronger market linkages (19%), licensing reform (13%) and training and capacity building (10%) (Figure 4). The close correspondence between the challenges identified and the support requested suggests that ASM operators principally view formalisation and productivity constraints as problems of access to capital, technology and enabling institutional support rather than regulation alone.

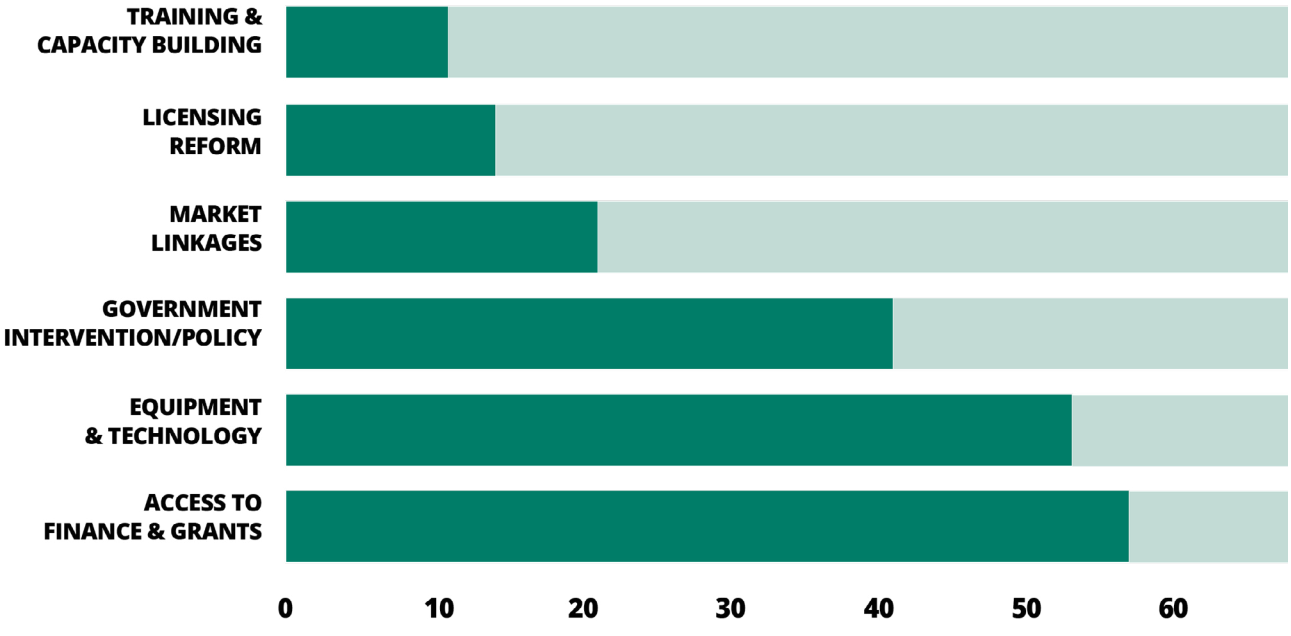

Figure 4. Priority support needs identified by ASM miners (thematic coding, n=106)

5.6 Community vision of justice-centred mining

When asked what a justice-centred approach to mining would look like for their communities, respondents placed participation and distributional fairness at the centre of their responses. Community consent and participation was the most frequently identified theme, cited by 45% of respondents, followed by fair and equitable benefit sharing at 36%. Infrastructure and community development was identified by 20%, while 18% emphasised respect for rights. Transparency and accountability and safety and environmental protection were each identified by 13% of respondents (Figure 5). These responses reinforce the qualitative evidence from mining communities presented earlier in the report. Justice-centred mining is not understood solely in terms of environmental protection or regulatory compliance; respondents also associate it with having a meaningful voice in decisions, receiving a fair share of the benefits generated by extraction, respect for community rights, and visible improvements in local development

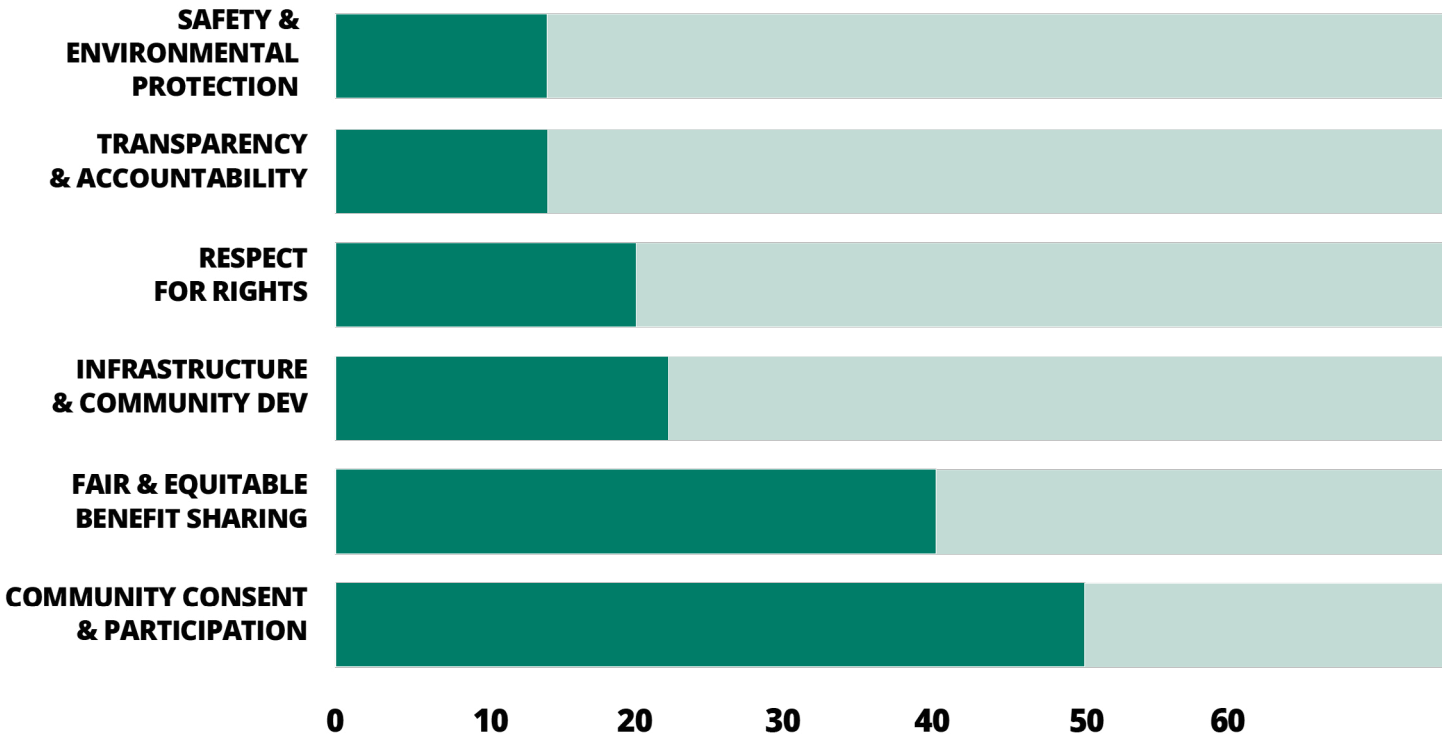

Figure 5. Community vision of justice-centred mining (thematic coding, n=106)

When respondents were asked specifically about the barriers preventing ASM operators from formalising and scaling their activities, lack of finance and capital emerged as the most frequently cited constraint, identified by 35% of respondents. Regulatory complexity was cited by 30%, followed by land and access issues (26%) and high licensing costs (25%). Lack of equipment was identified by 18% of respondents, while security and extortion concerns were cited by 7% (Figure 6). These findings suggest that informality is not driven by a single regulatory obstacle, but by the combined effects of limited finance, complex administrative processes, land-access challenges, high licensing costs and constrained productive capacity.

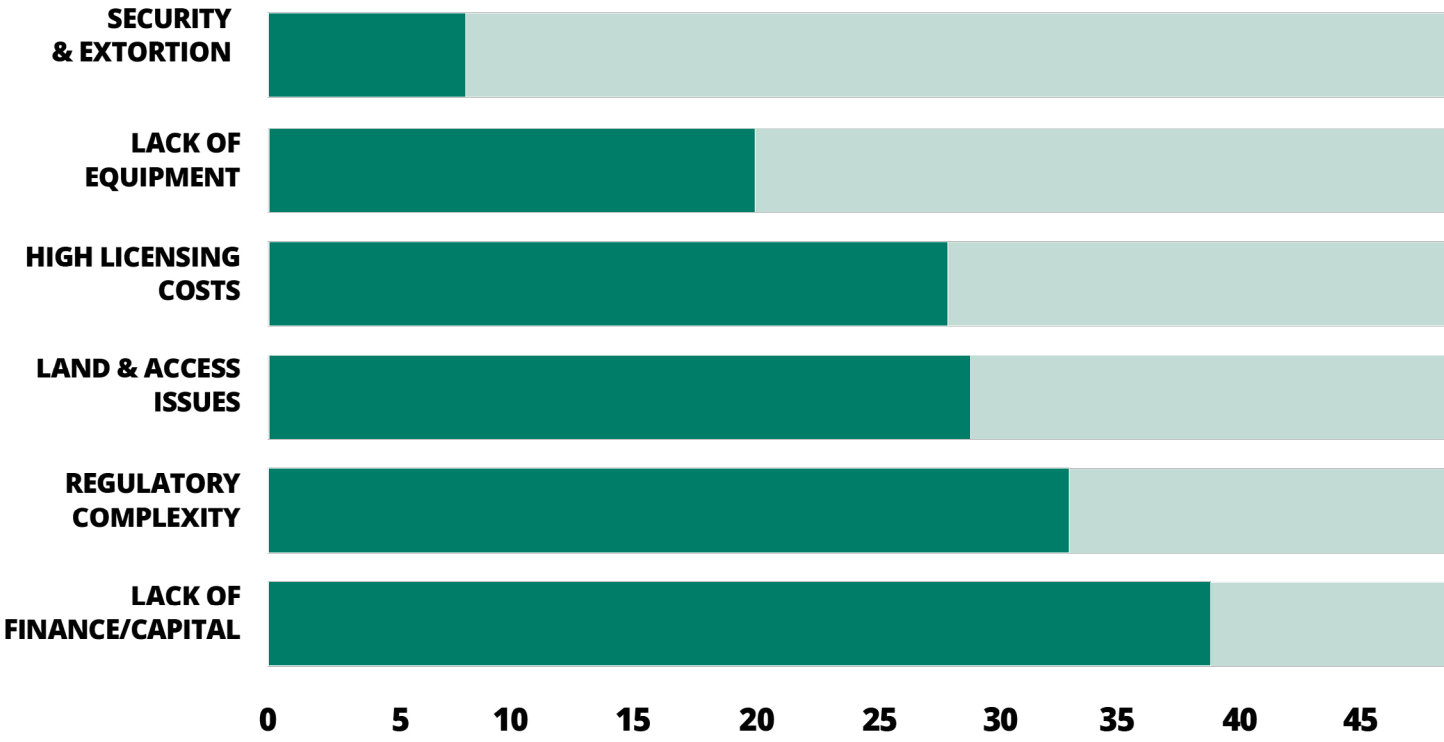

Figure 6. Barriers to formalisation and scaling of ASM operations

5.7 Key insights from the justice-centred engagement architecture

A justice-centred engagement approach must recognise that stakeholder groups enter mining governance processes with very different levels of power, access and institutional influence. Mining communities require engagement processes that build trust, use accessible language, enable meaningful participation and recognise expectations of reciprocity. While engagement with federal institutions and larger mining companies requires evidence-based analysis, clearly articulated reform options and defined areas of responsibility. A single consultation model is unlikely to produce inclusive or effective outcomes. Justice-centred engagement requires differentiated approaches that respond to these unequal positions within the sector while creating clearer pathways for participation, accountability and dialogue.

6. Observed challenges

Nigeria faces a set of interlinked challenges in translating its critical minerals endowment into sustainable, inclusive, value-adding development. The findings suggest that these challenges are not confined to a single part of the sector but cut across governance, markets, infrastructure, security and social inclusion. This helps explain why mineral-rich communities can experience intense extraction activity without corresponding gains in livelihoods, public services or local economic transformation.

6.1 Governance and regulatory challenges

- Fragmented regulatory architecture, with overlapping mandates and weak coordination across federal and state institutions
- Inactive or weak state-level governance structures, including MIREMCO, limiting effective mediation between national policy and local realities
- Licensing processes administered through the MCO that are widely perceived as costly, opaque and difficult to navigate without informal connections
- State-level bans and conflicting policies that create legal uncertainty for operators and communities alike

6.2 Economic and market challenges

- Systematic undervaluation of minerals at the point of sale due to deep information asymmetries between miners and buyers
- Absence of any effective government mechanism to regulate, publish or stabilise mineral prices at the community level
- Limited domestic processing capacity in most states, making raw mineral export the default pattern
- Inability of ASM operators to access formal finance, equipment hire or viable cooperative financing models
- Multiple informal levies, checkpoint payments and transaction costs that extract value from mining communities

6.3 Infrastructure and technical challenges

- Severely limited road access to many mining communities, restricting the movement of equipment, buyers and services
- No accessible mineral testing or certification facilities at the local government area (LGA) or community level

- No functional healthcare infrastructure in or near most active mining sites
- Predominantly manual mining operations, with mechanisation largely inaccessible due to cost and financing barriers

6.4 Security and safety challenges

- Reported kidnappings targeting ASM site owners and operators in parts of Kogi and Benue states
- Reports of extortion by military and security actors in areas where protective services are weak or absent
- Boundary disputes between communities over mineral-rich land, including tensions linked to the Benue–Cross River axis
- Absence of PPE at virtually all visited sites
- Insecurity linked to armed banditry and herder-related violence in some mining areas, increasing risks for workers, operators and local residents

6.5 Social and inclusion challenges

- Gendered exclusion of women from ownership, decision-making and formal recognition despite their significant labour contribution
- Child labour in sorting and related mining activities observed in parts of Benue State
- Deep mistrust of external researchers, government officials and foreign investors, rooted in histories of exploitation and exclusion
- CDAs that exist formally but are weakly implemented, with infrastructure, employment and livelihood promises often unmet
- Low awareness among many ASM actors of their legal rights and available support mechanisms

7. Opportunities

Despite the challenges documented in this report, our findings also point to several important opportunities for reform, coordination and long-term sector transformation. These opportunities arise not only from Nigeria's mineral endowment but also from the growing strategic attention to critical minerals at national, regional and global levels.

- Rising global demand for critical minerals driven by the energy transition gives Nigeria greater leverage to attract investment and negotiate more ambitious terms around value addition, processing and local participation.

- Growing government attention to the solid minerals sector, including recent policy signals on mining formalisation and renewed interest in sector reform, creates a timely window for targeted advocacy and high-level engagement.

- The APRI *Stakeholder and Policy databases* address a genuine information gap and can serve as practical tools for donor coordination, reform dialogue, stakeholder targeting and community-facing advocacy.

- The ASM sector has demonstrated significant entrepreneurial capacity, adaptability and resilience. With more inclusive formalisation pathways, improved pricing transparency and better access to finance, ASM activity could become safer, more productive and more development oriented.

- Regional frameworks, including the AfCFTA and emerging AU thinking on critical minerals, present opportunities for Nigeria to position itself within regional processing, manufacturing and industrial value chains.

- International donor and policy interest in critical minerals governance is growing, creating opportunities for partnerships and policy engagement where there is already a credible evidence base.

- Rather than functioning as a dedicated critical minerals instrument, Nigeria's ETP (2022), updated through the ETIP (2024), provides a relevant policy bridge between the mining sector and the wider climate and industrial transition agenda.

8. Pathways forward

To chart a more strategic and inclusive pathway for Nigeria's critical minerals sector, the findings of this report point to a set of reforms that are best understood in sequence rather than as a single undifferentiated agenda. Some actions depend mainly on administrative decisions and targeted coordination and are therefore more achievable in the near term. Others require new investment, stronger inter-agency cooperation or longer-term political commitment. The sequencing proposed here is indicative rather than fixed, but it provides a practical framework for prioritising engagement.

Near-term priorities (roughly 0–12 months) are those that depend primarily on administrative action within the Ministry of Solid Minerals Development (MSMD) and related agencies, with relatively limited need for new legislation or large-scale financing. These include piloting a tiered, more accessible licensing track for artisanal and small-scale mining (ASM) operators and cooperatives and reactivating Mineral Resources and Environmental Management Committee (MIREMCO) structures in the states already covered in this report. Medium-term reforms (roughly one to three years) require stronger inter-agency coordination and targeted investment. These include establishing more accessible mineral testing, certification and valuation infrastructure at the state or zonal level and strengthening the monitoring and enforcement of Community Development Agreements (CDAs). Longer-term structural shifts (three years and beyond) depend on sustained political commitment, institutional consolidation and more durable financing. These include building stronger domestic research and technical training capacity, improving pricing and testing systems, and developing the broader value-chain infrastructure needed to shift Nigeria more meaningfully from raw mineral movement towards beneficiation and greater domestic value retention.

This sequencing remains provisional. Political incentives within MSMD and state governments, the administrative capacity of emerging institutions such as the Nigeria Solid Minerals Company (NSMC) and the availability of donor or private co-financing will all affect which reforms prove achievable on this timeline. A more detailed political economy assessment of reform feasibility should be prioritised for the next phase of the project.

8.1 Reform licensing and formalisation

Field evidence that licensing costs of ₦20–50 million (≈ USD14,600–36,600), administrative complexity and reliance on personal connections to government offices systematically exclude ASM operators from formalisation (Sections 3.4 and 6.1) suggests that Nigeria should prioritise reform of the licensing system to make formalisation more accessible and realistic for ASM operators. This includes reducing cost barriers, simplifying administrative procedures, digitising application processes, establishing decentralised licensing support points and addressing informal gatekeeping practices. A tiered licensing model with differentiated requirements for individual miners, cooperatives and small companies could help expand formal participation without displacing existing livelihoods.

8.2 Invest in mineral testing and pricing infrastructure

The consistent finding that no accessible mineral testing facilities exist in any of the communities visited, leaving miners entirely dependent on buyers to set prices (Sections 3.5 and 4.1). Investment in more accessible mineral testing, certification and pricing infrastructure would represent a high-impact intervention. Potential options include mobile testing units, state- or zonal-level mineral valuation services and more transparent reference pricing mechanisms. Such measures would directly address the information asymmetries that currently enable systematic undervaluation of minerals and weaken miners' bargaining power.

8.3 Enforce CDAs

The repeated finding that CDAs exist in principle but are rarely delivered in practice, leaving community expectations of partnership and benefit-sharing unmet (Section 4.1), provides the basis for prioritising enforcement over further policy design. Existing CDA frameworks require stronger monitoring and enforcement mechanisms. The federal ministry responsible for solid minerals should establish clearer compliance and reporting systems, while community representatives should be better supported in documenting and reporting non-compliance. There may also be scope to explore whether NEITI's transparency mandate could be extended to questions of CDA delivery and community benefit-sharing.

8.4 Strengthen state-level coordination

The finding that MIREMCO structures were largely inactive across all five states visited (Sections 3.2 and 5.2) is the basis for prioritising their reactivation over the creation of new coordination bodies. MIREMCO structures should be reactivated and better resourced to provide more effective state-level coordination among federal institutions, mining companies and mining communities. More coordinated engagement with state governments, governors' forums and state ministries responsible for solid minerals is needed to assess the institutional, financial and political conditions required to make these coordination structures functional in practice.

8.5 Support research and knowledge production

This recommendation responds directly to the limited domestic research and technical capacity observed during field engagement and to the comparative-literature gap. The relatively low level of Nigerian academic, technical and research engagement with the critical minerals sector points to a wider capacity gap. Supporting university partnerships, geological survey capacity, applied research, technical training institutions and community-based monitoring systems would strengthen the domestic evidence base for reform and help attract higher-quality investment over time. Recent initiatives, such as the SMDF's Early-Stage Mineral Exploration and Research Grant Endowment (EMERGE) programme, suggest growing institutional recognition of the need to support early-stage

exploration and research. The challenge now is to ensure that such initiatives are sustained, transparently administered and linked to a broader strategy for domestic knowledge production, technical capability and long-term value addition.

9. Conclusion

This report mapped the stakeholder and institutional landscape of Nigeria's critical minerals sector through field engagement across five states, the development of interactive Stakeholder and Policy databases, and a review of the institutional mandates, policy frameworks and governance dynamics shaping the sector. It documents the lived realities of the miners, communities and local actors who constitute the backbone of current extraction activity, going beyond top-down policy analysis to build a community-grounded evidence base.

Nigeria's critical minerals, including lithium, tantalite, columbite, REEs, bauxite and beryllium, are significant and increasingly strategic in the context of global clean energy transitions. Field evidence from Nasarawa, Kogi, Kwara, Benue and Oyo states confirms that extraction is already active, widespread and commercially significant: More than a thousand workers were observed at a single open-pit site in Kaiama LGA, Kwara State, and three Chinese-affiliated processing companies were found operating within a thirty-mile radius of ASM communities in Nasarawa. The mineral endowment, the labour and the demand are all present. Yet the sector's current structure translates this into remarkably little benefit for mining communities, institutions or the national economy. Extraction is predominantly manual and unprotected; minerals are sold at black market prices to middlemen and foreign buyers who capture most of the value before it leaves the country; and licensing costs of ₦20–50 million (≈ USD14,600–36,600), administrative complexity and informal gatekeeping exclude most ASM operators from formalisation. CDAs exist on paper but remain largely unimplemented. In Benue State, a governor's ban on mining in one of the most mineral-active LGAs visited for this report illustrates how policy incoherence compounds the governance challenge.

This gap between potential and reality reflects compounding structural failures: weak licensing design, the absence of mineral testing and pricing infrastructure, inactive state-level coordination structures such as MIREMCO, an underdeployed SMDF, and persistent deficits in roads, electricity and water. These failures reinforce one another: Poor roads deter formal buyers, which entrenches dependence on middlemen, which keeps prices low and informality high. Breaking this cycle will require interventions that are targeted, sequenced and politically grounded, rather than generic reforms borrowed from international templates. These conditions make it difficult for Nigeria to translate critical mineral wealth into broader industrial development, local value addition and justice-centred outcomes.

Gender exclusion is systemic: Women form a significant share of the mining workforce across all five states but are concentrated in lower-paid sorting, carrying and washing roles and remain largely excluded from ownership, decision-making and benefit-sharing. The observation of school-age children participating in sorting activities during school hours in Benue State, alongside reports of kidnappings targeting ASM site owners and extortion by security actors in Kogi and Benue states, underline that reform here is a safety and child-protection imperative.

Alongside these challenges, this project identified grounds for cautious optimism. The global strategic environment for critical minerals has shifted substantially, Nigeria's geological diversity gives it leverage with international partners and the MSMD has signalled renewed interest in reform. Nigeria's ratification of the AfCFTA and the emerging AU frameworks on critical minerals governance have opened additional regional pathways for value-chain integration. Most importantly, mining communities themselves have articulated a clear and achievable vision of justice-centred mining: transparent partnerships, fully implemented CDAs, local employment and skills opportunities, and meaningful consent processes. The APRI Stakeholder and Policy databases developed through this project make this ecosystem visible in a single, accessible format for the first time, and have already drawn interest from state ministry contacts, field partners and community representatives. Crucially, the report identifies six priority reform areas: licensing accessibility, mineral testing and pricing infrastructure, CDA enforcement, state-level coordination, and high-level federal engagement and domestic research capacity. Together, these offer a realistic and sequenced agenda for the next phase of this work.

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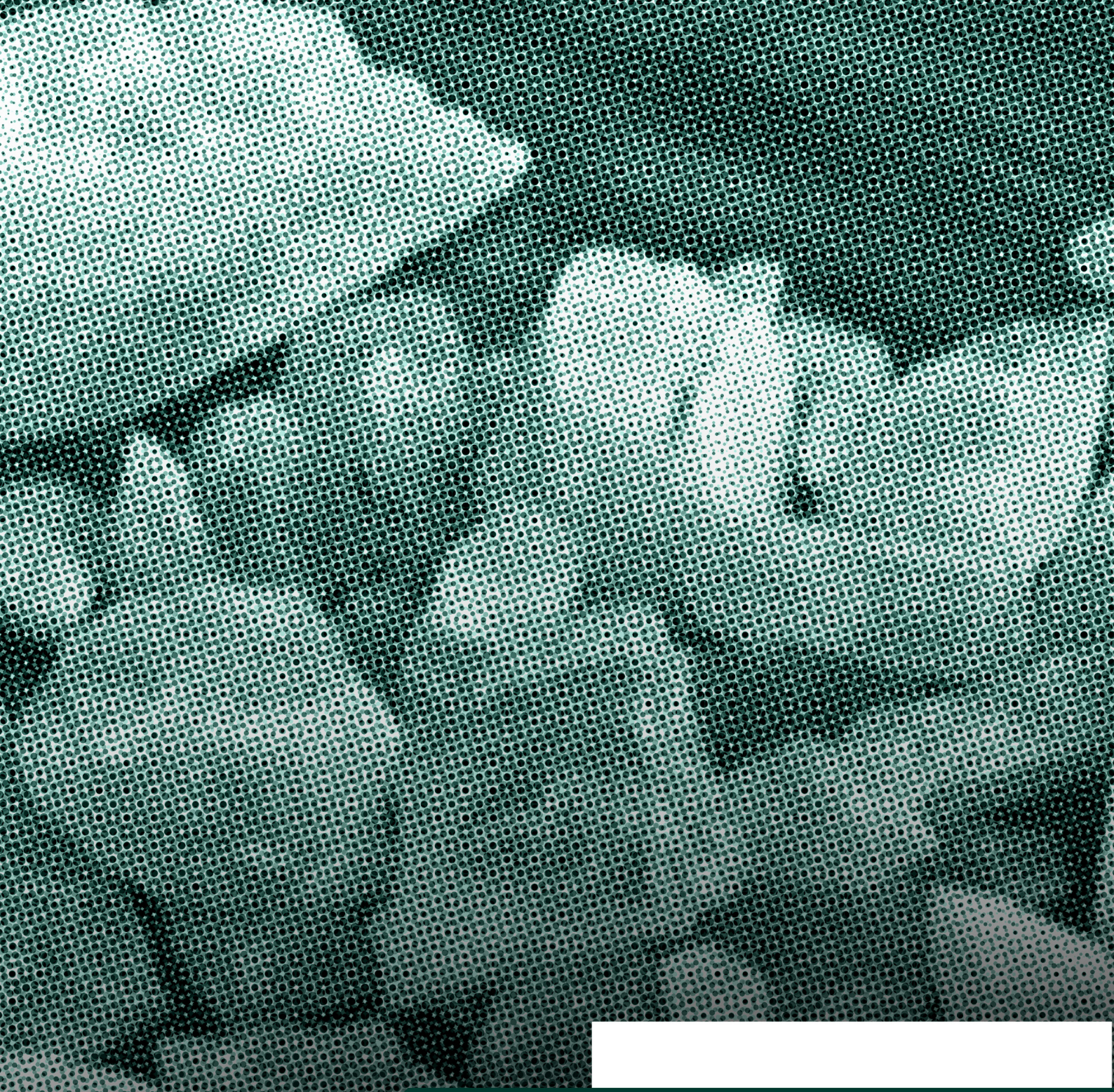

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