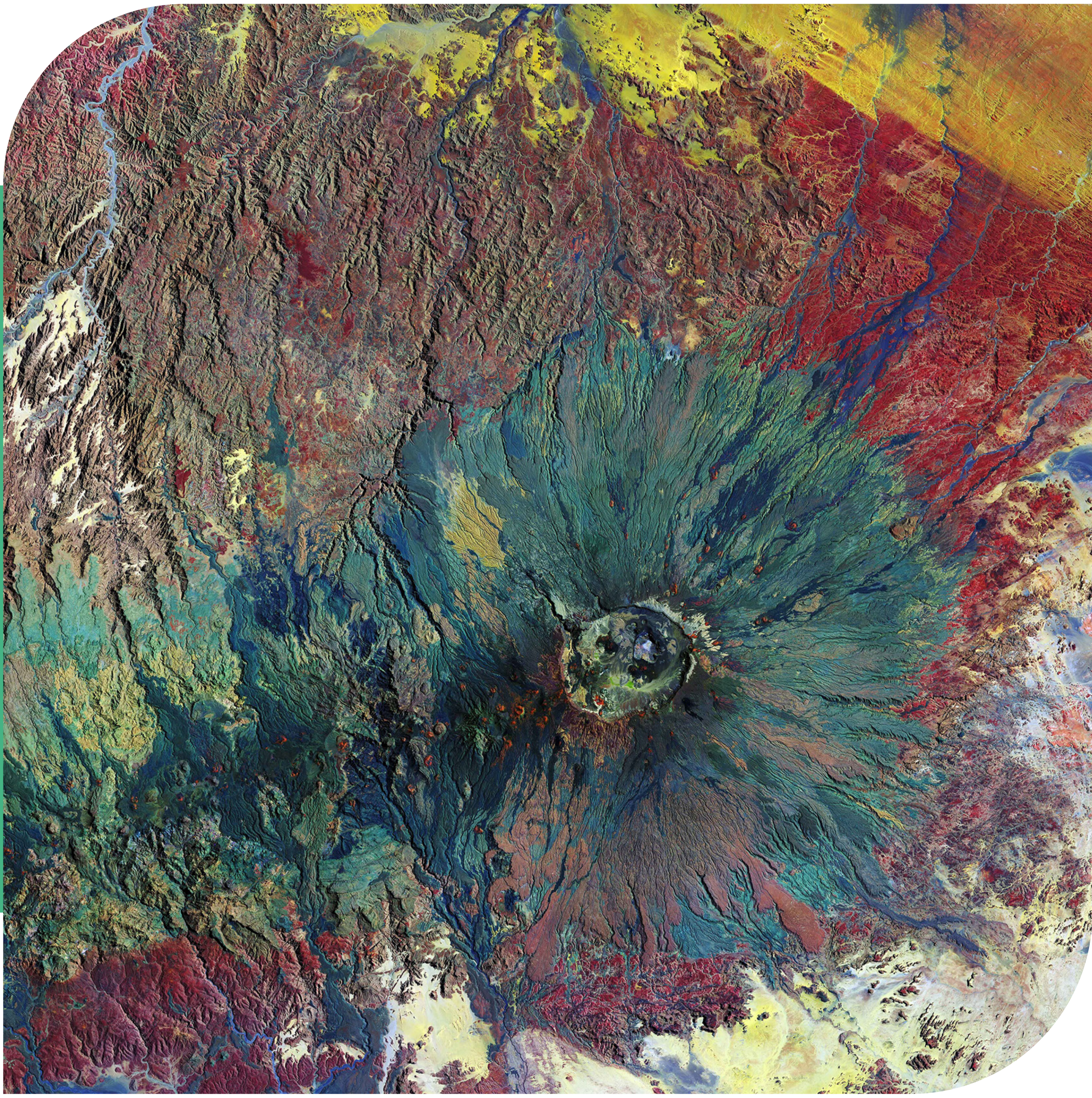
MINERAL RESOURCE GOVERNANCE IN AFRICA

A Comparative Study



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A Comparative Study

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Abbreviations

AEC	African Economic Community
AfCFTA	African Continental Free Trade Area
AGOA	African Growth and Opportunity Act
AMDC	African Minerals Development Centre
AMGF	African Minerals Governance Framework
AMU	Arab Maghreb Union
AMV	Africa Mining Vision
AU	African Union
CEMAC	Central African Economic and Monetary Community
CENSAD	Community of Sahel-Saharan States
COMESA	Common Market for Eastern and Southern Africa
EAC	East African Community
ECCAS	Economic Community of Central African States
ECOWAS	Economic Community of West African States
EITI	Extractive Industries Transparency Initiative
GAFTA	Greater Arab Free Trade Area
GDP	Gross domestic product
ICGLR	International Conference on the Great Lakes Region
IGAD	Intergovernmental Authority on Development
MCAS	Mining Cadastre Administration System
MPRDA	Mineral and Petroleum Resources Development Act
MRU	Mano River Union
NEITI	Nigeria Extractive Industries Transparency Initiative
PWYP	Publish What You Pay
RMDI	Responsible Mineral Development Initiative
REC	Regional economic community
SACU	Southern African Customs Union
SADC	Southern African Development Community
SAMREC Code	South African Code for the Reporting of Exploration Results, Mineral Resources, and Mineral Reserves
STEM	Science, technology, engineering and mathematics
TAWOMA	Tanzania Women Miners Association
UEMOA	West African Economic and Monetary Union

Contents

EXECUTIVE SUMMARY

This report presents a comprehensive analysis of governance frameworks, challenges and opportunities across eight African countries—Botswana, the Democratic Republic of the Congo, Egypt, Nigeria, Senegal, Sierra Leone, South Africa and Tanzania. The study examines how these nations manage their mineral wealth, assessing governance frameworks, transparency mechanisms, environmental safeguards and community engagement approaches to harness mineral resources for sustainable socio-economic development.

KEY FINDINGS

1. **Resource wealth potential**. Africa's mineral wealth is substantial, comprising a significant portion of the world's reserves of critical resources, including 73 per cent of global cobalt production (predominantly from the Democratic Republic of the Congo), 65 per cent of manganese (mostly from South Africa) and 44 per cent of global diamond production (primarily from Botswana, the Democratic Republic of the Congo and Angola). These minerals are vital to economic development and the global shift towards green technologies. Despite this potential, governance challenges persist, hindering the effective use of these resources to foster socio-economic development across the continent.

2. **Governance challenges**. The study identifies critical gaps within governance structures that weaken effective resource management. Ambiguities in legal frameworks, coupled with weak enforcement and inconsistencies across regulatory systems, contribute to conflicts, corruption and the unequal distribution of resource revenues. For example, jurisdictional conflicts in Nigeria over federal and state control create uncertainties for investors and complicate governance. Similarly, the Democratic Republic of the Congo and South Africa face complex regulatory environments that inhibit compliance and deter foreign investment, impacting their ability to capitalize on mineral wealth.

Africa's mineral wealth is substantial, comprising a significant portion of the world's reserves of critical resources.

3. **Regional and continental frameworks**. Transnational governance instruments, notably the Extractive Industries Transparency Initiative (EITI) and the Africa Mining Vision (AMV), alongside regional bodies such as the Economic Community of West African States (ECOWAS) and the Southern African Development Community (SADC), provide structured frameworks designed to improve transparency, accountability and sustainable management within the mining sector. However, the alignment and integration of these frameworks across countries are often limited. Overlapping memberships in multiple regional economic communities (RECs) contribute to conflicting policies, complicating efforts to implement standardized governance measures and slowing down the effective application of these frameworks.

4. **Impact of geopolitical influence**. Africa's mineral governance landscape is profoundly shaped by international trade agreements and partnerships with major global powers. Strategic alliances, such as China's Belt and Road Initiative, provide crucial infrastructure investment in exchange for access to Africa's natural resources, notably in the Democratic Republic of the Congo and Zambia. While these partnerships drive economic growth, they also raise concerns regarding transparency, as certain agreements may prioritize foreign interests over local needs. Similarly, Russia's security-driven alliances in mineral-rich countries such as the Central African Republic impact local governance, with security provisions sometimes overshadowing efforts towards accountable, transparent resource management.

5. **Community participation**. Although the involvement of local communities in mineral resource management is gradually improving, limited inclusion in decision making continues to exacerbate socio-economic inequalities in mining regions. Communities often bear the environmental and social costs of extraction without sharing in its benefits, leading to tension and resistance towards mining projects. In Nigeria and Tanzania, for instance, insufficient consultation with affected communities has led to opposition and conflicts with mining companies, underscoring the need for meaningful stakeholder engagement.

6. **Environmental and human rights concerns**. Weak enforcement of environmental and social regulations is widespread, with mining activities leading to land degradation, water pollution and public health risks. The lack of rigorous environmental safeguards contributes to significant ecological harm and socio-economic disruption, particularly for communities proximate to mining operations. This study stresses the importance of strong environmental and human rights protections to mitigate these adverse impacts.

COMPARATIVE ANALYSIS

The report's comparative analysis across the eight countries studied reveals both shared and unique governance challenges, organized into key thematic areas:

- *Transparency and accountability*. Countries that have adopted the EITI or similar transparency measures show signs of improved accountability, though full compliance and enforcement are inconsistent. Transparency issues in revenue management, auditing and data disclosure enable corruption and erode public trust, necessitating more robust accountability mechanisms.
- *Revenue management and distribution.* Despite the considerable wealth generated from mining, revenue distribution remains uneven. Resource-rich regions frequently face high poverty levels and limited public services, indicating a lack of equitable revenue-sharing mechanisms. More structured approaches to revenue allocation are essential to ensuring that benefits reach the communities most affected by resource extraction.
- *Legal and institutional frameworks.* Ambiguous, unstable legal frameworks create an environment of regulatory uncertainty that impedes effective governance and deters investment. For instance, frequent regulatory changes in Egypt hinder investor confidence, while regulatory complexity in South Africa limits the effectiveness of governance. Countries need clear, stable legal frameworks aligned with international best practices to improve investment climates and governance outcomes.
- *Environmental and social governance.* The lack of stringent environmental protections and effective community engagement hinders sustainable development. Enhanced frameworks for environmental assessments, social impact mitigation and community benefit sharing are essential to ensuring that mining activities contribute positively to social and economic welfare.

POLICY RECOMMENDATIONS

The report presents a set of actionable recommendations for strengthening mineral governance across African nations.

To address these challenges, the report presents a set of actionable recommendations for strengthening mineral governance across African nations:

1. **Strengthening legal and institutional frameworks**. African countries should enhance the clarity, consistency and enforcement of mining laws. Clearer regulations, reduced ambiguities and alignment with international standards are necessary to mitigate conflicts, build investor confidence and improve the effectiveness of resource governance.

2. **Enhancing transparency and accountability**. Expanding the adoption of EITI standards across Africa and ensuring full implementation can significantly improve transparency in revenue management. Additionally,

establishing independent oversight bodies is critical to ensuring that mineral revenues are managed accountably and contribute to national development goals.

3. **Improving revenue distribution**. Equitable revenue-sharing mechanisms are crucial to ensuring that mining benefits reach local communities, particularly those directly affected by extraction. Structured, transparent frameworks should guide the allocation of revenues to address regional disparities and support socio-economic development in mining regions.

4. **Fostering community participation**. Governments and mining companies must prioritize community engagement through meaningful, inclusive consultation processes. This approach ensures that community voices are heard in decision making, helps mitigate social tensions and ensures that mining operations contribute positively to local economies and development.

5. **Addressing environmental and social concerns**. African governments should strengthen environmental regulations, mandating comprehensive environmental impact assessments, health impact assessments and mine closure plans. Enforcing social safeguards will protect communities from the adverse impacts of mining and ensure that resource extraction aligns with sustainable development principles.

6. **Managing geopolitical influence**. Countries should strive for balanced partnerships with global powers, ensuring that foreign investments and trade agreements align with national priorities and sustainable development goals. African governments must negotiate terms that prioritize the economic interests of local populations and promote transparent, accountable governance.

Africa's mineral wealth has the potential to drive inclusive growth, reduce poverty and support sustainable development.

CONCLUSION

The report concludes that Africa's mineral wealth has the potential to drive inclusive growth, reduce poverty and support sustainable development. However, realizing this potential will require comprehensive governance reforms. Strengthening transparency, enhancing legal and institutional frameworks and ensuring equitable revenue distribution are all essential components of effective resource management. While regional frameworks like the AMV offer valuable guidance, successful implementation will rely on national commitment, capacity building and strengthened regional cooperation.

The report underscores the urgency of addressing governance gaps to harness Africa's natural resources as engines of sustainable economic development. By implementing the recommendations presented in the report, African countries can build resilient economies, improve socio-economic outcomes for mining communities and secure long-term prosperity across the continent.

INTRODUCTION

Effective governance of mineral resources is vital to Africa's sustainable development, with the potential to transform resource wealth into broad-based economic growth. With the right governance frameworks, the continent's vast mineral endowments can benefit local communities, national economies and global markets. However, many African countries face ongoing challenges related to governance, transparency and the equitable distribution of resource revenues. These obstacles have hindered the continent from fully capitalizing on its resource wealth, often resulting in socio-economic inequalities and missed opportunities for development.

With the right governance frameworks, the continent's vast mineral endowments can benefit local communities, national economies and global markets.

In response to these challenges, International IDEA, in collaboration with the Open Society Foundation, commissioned a comparative study to support the enhancement of policy frameworks and governance mechanisms for natural resource management across Africa. This report outlines the study's key objectives, methodologies and case studies, addressing the following critical questions:

1. What is the value of available natural resources in each priority country?
2. What legal frameworks guide mineral resource governance in Africa? What challenges exist in their adoption and implementation? How much progress has been made?
3. Where are the key gaps in regional and national legal frameworks?
4. How well are national policies aligned with the AMV and regional governance frameworks?
5. How do geopolitical factors impact mineral resource governance in Africa?

6. What can be learned from emerging experiences in resource governance contracts, transparency, accountability and the environmental and human rights impacts of extractive industries?

7. What is the level of local community involvement in mineral resource governance?

8. What key policy recommendations can enhance governance in Africa's mining sector?

The report examines these questions through detailed case studies of eight countries—Botswana, the Democratic Republic of Congo, Egypt, Nigeria, Senegal, Sierra Leone, South Africa and Tanzania. The case studies provide insights into the unique governance challenges and opportunities each country faces in managing its mineral wealth, offering actionable recommendations for policymakers and stakeholders to foster a more transparent, accountable and sustainable mining sector across the continent.

BACKGROUND AND CONTEXT

Mineral resource governance plays a pivotal role in Africa's socio-economic future, given the continent's substantial wealth in natural resources such as diamonds, gold, oil, cobalt, copper and platinum. These resources are critical drivers of economic growth, especially in sub-Saharan Africa, where extractive industries form a significant portion of government revenue and export income. In many nations, these resources make a significant contribution to gross domestic product (GDP) and public finances (IMF 2012). Furthermore, natural resources are essential for financing infrastructure, energy, industry and governance—key elements in Africa's pursuit of the United Nations Sustainable Development Goals.

Africa is home to 30 per cent of the world's mineral resources and benefits from abundant renewable energy potential in solar, wind and hydropower.

Africa is home to 30 per cent of the world's mineral resources and benefits from abundant renewable energy potential in solar, wind and hydropower (Ushie 2023). Renewable and non-renewable resources together account for 62 per cent of Africa's GDP, positioning the continent as a major player in both traditional and renewable energy sectors. However, the governance of these resources has often been weakened by poor policy frameworks, corruption and mismanagement, perpetuating the so-called resource curse (Cust and Zeufack 2023).

Although Africa experienced rapid economic growth during the 2004–2014 commodity boom, the downturn in 2015 exposed the vulnerabilities of resource-dependent economies. The decline highlighted governance weaknesses and a lack of long-term planning, as countries failed to mitigate the volatility of commodity markets (World Bank 2021). Poor governance has also contributed to conflict in resource-rich regions such as Angola and the

Democratic Republic of the Congo, where natural wealth has fuelled violence and instability (Tana High-Level Forum on Security in Africa 2017).

Since 2015 efforts to address the resource curse have improved, but Africa's growth model remains vulnerable, particularly in the face of climate change (Ushie 2023). Although Africa's carbon emissions are minimal, the continent is highly susceptible to climate risks. Climate change, coupled with shocks such as the Covid-19 pandemic and fluctuating commodity prices, underscores the urgency of building resilience in Africa's resource-based economies (Ushie 2023).

Since 2015 efforts to address the resource curse have improved, but Africa's growth model remains vulnerable, particularly in the face of climate change.

A central challenge is ensuring that the extraction of finite natural resources translates into sustainable economic growth. Ideally, resource revenues should be reinvested in infrastructure, education and healthcare to secure long-term prosperity. However, many African nations have struggled to convert natural wealth into human or physical capital, leading to the depletion of resources without corresponding development gains (Cust et al. 2022). Governance failures have also led to environmental degradation and inequitable revenue distribution, fuelling tensions between local communities and extractive companies, as seen in Nigeria's Niger Delta (Tana High-Level Forum on Security in Africa 2017).

A related issue is asset concentration, where resource-dependent countries rely heavily on natural resources without diversifying their economies. This lack of diversification leaves them vulnerable to commodity price fluctuations (Cust and Zeufack 2023). While Botswana and Namibia increased their wealth during the commodity boom, inequality persisted, and countries such as Gabon saw wealth decline due to resource depletion and population growth (World Bank 2021).

Hartwick's Rule emphasizes that revenues from depleting natural resources should be reinvested into alternative forms of capital for sustainable growth (Cust and Zeufack 2023). However, many African nations failed to follow this principle during the boom years, resulting in negative adjusted net savings—where natural wealth was exhausted without investment in future growth (Cust and Zeufack 2023). This pattern has left resource-rich nations more vulnerable to economic shocks caused by commodity price declines.

Mineral resource governance is crucial for Africa's socio-economic development. In resource-rich countries, rents from extractive industries account for a large share of GDP, providing revenues that could address poverty, inequality and infrastructure deficits (World Bank 2021). However, governance failures and underinvestment in sustainable development have resulted in persistent poverty and inequality. Wealth often remains concentrated among elites, fostering corruption, rent-seeking behaviour and conflict, as observed in Angola and Nigeria (Tana High-Level Forum on Security in Africa 2017).

By 2030 it is projected that over 80 per cent of the world's poor will reside in sub-Saharan Africa, with many living in resource-rich countries (Cust et al. 2022). This stark forecast underscores the urgency of improving governance in the extractive sector to ensure that resource wealth contributes to broader development goals.

The global shift towards clean energy further highlights Africa's strategic importance in the mineral sector.

The global shift towards clean energy further highlights Africa's strategic importance in the mineral sector. The demand for critical minerals such as lithium, cobalt, copper and manganese, essential for renewable energy technologies, is expected to surge (Ushie 2023). Africa's vast reserves of these minerals offer a significant opportunity to capitalize on the clean energy transition but only if governance structures are strengthened so that they can manage both the economic and environmental impacts of extraction (World Bank 2020). Effective management is key to ensuring the equitable distribution of benefits and supporting sustainable development.

Chapter 1
METHODOLOGY OVERVIEW

This study adopts a mixed-methods approach, integrating both qualitative and quantitative research techniques to provide a comprehensive analysis of mineral resource governance across the selected African countries. The methodology is designed to assess governance frameworks, identify key socio-economic impacts and offer actionable policy recommendations.

1.1. **CASE STUDIES**

In-depth case studies were conducted on eight countries: Botswana, the Democratic Republic of the Congo, Egypt, Nigeria, Senegal, Sierra Leone, South Africa and Tanzania. The case studies aimed to uncover the specific governance practices, challenges and opportunities in each country. The diverse set of governance models and socio-economic contexts within these nations allows for a comparative analysis that will highlight both best practices and existing governance gaps.

1.1.1. **Data collection**

The study employed a combination of primary and secondary data collection methods:

1. *Primary data*. Targeted surveys and semi-structured interviews were conducted with key stakeholders, including policymakers, industry experts, civil society organizations and community representatives. These interactions provided first-hand insights into governance issues, stakeholder engagement and local community experiences in the mining sector.

2. *Secondary data*. Secondary data was gathered from government reports, industry publications, academic literature and reports from international organizations. These sources provided background information, legal frameworks and quantitative data relevant to the governance of mineral resources in the selected countries.

1.1.1.1. Quantitative analysis

The study used statistical methods to assess the economic impact of the mining sector, focusing on key indicators such as (a)contributions of mining to GDP; (b) employment statistics; (c) trends in exploration, production and export revenues; and (d) revenue distribution and transparency.

The quantitative analysis illustrated the economic value of mineral resources and the distribution of their benefits across national and local levels.

1.1.1.2. Qualitative analysis

Qualitative data from interviews and surveys was analysed using thematic analysis to identify key themes related to (a) governance frameworks; (b) stakeholder engagement; (c) community participation; and (d) environmental and social impacts.

This approach enabled a deeper understanding of the socio-economic and political dynamics influencing governance outcomes in the selected countries.

The research questions were carefully aligned with the African Minerals Governance Framework (AMGF), ensuring that the study addressed core principles of resource governance, transparency, accountability and sustainable development. The AMGF will be discussed in more detail in later sections, providing a comprehensive understanding of its importance and relevance to the study.

1.1.2. **Comparative analysis**

The study employed comparative analysis techniques to identify common challenges and successful practices across the selected countries. By examining how different governance frameworks performed under varying socio-economic and political conditions, the study distilled lessons that could inform governance improvements across the continent. Special attention was given to:

- the alignment of national policies with the AMV and other regional frameworks;
- the role of geopolitical influences in shaping governance practices; and
- the effectiveness of transparency and accountability measures.

1.1.3. **Policy recommendations**

Based on the findings from the quantitative and qualitative analyses, the study developed a set of actionable policy recommendations. These recommendations focused on strengthening governance frameworks, enhancing transparency, improving socio-economic outcomes and promoting sustainability in the mining sector.

Chapter 2

MAPPING AND AUDITING MINERAL RESOURCES ON THE CONTINENT

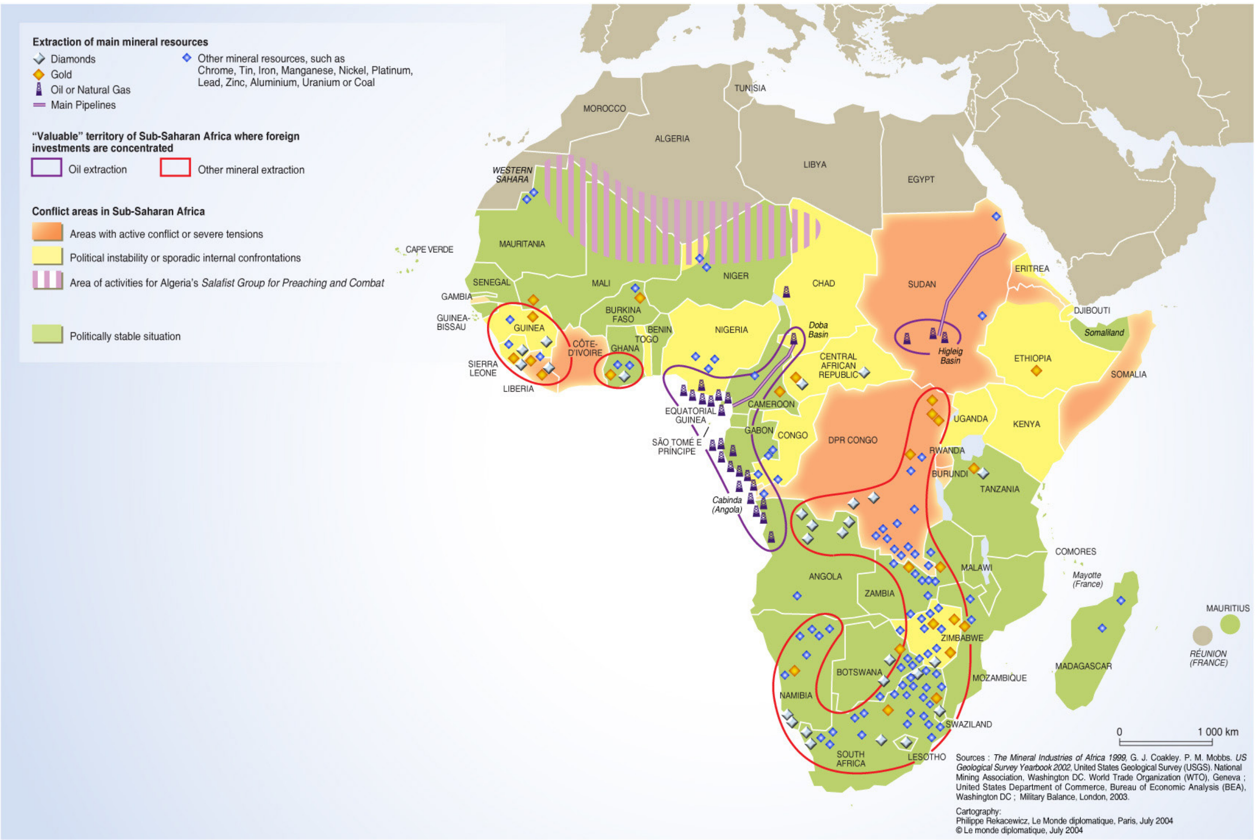
2.1. ECONOMIC VALUE OF NATURAL RESOURCES

Africa is endowed with rich natural resources, including arable land, water, oil, natural gas, minerals, forests and wildlife (see Figure 2.1). The continent holds approximately 30 per cent of the world's mineral reserves, 12 per cent of its oil reserves and 8 per cent of its natural gas reserves (UNEP n.d.). Notably, Africa possesses 40 per cent of the world's gold and up to 90 per cent of its chromium and platinum, highlighting its significance in the global minerals market (Al Jazeera 2022).

Natural capital accounts for 30–50 per cent of total wealth in many African countries, with over 70 per cent of people in sub-Saharan Africa relying on forests and woodlands for their livelihoods (UNEP n.d.). In 2019 Africa produced nearly one billion tonnes of minerals valued at USD 406 billion, making a significant contribution to government revenues and GDP (U.S. Geological Survey 2024). The region's GDP based on purchasing power parity was approximately USD 4.49 trillion in 2019, representing 3.3 per cent of the world's GDP, although the real GDP growth rate decreased by about 4 per cent compared with the previous year (U.S. Geological Survey 2024).

Africa's significant reserves, however, continue to hold untapped potential. The region has seen major oil and gas discoveries since 2000, accounting for 50 per cent of all giant petroleum discoveries in the 2010s (Cust and Zeufack 2023). Additionally, the global shift towards clean energy could increase demand for critical minerals found in Africa, such as lithium, cobalt, copper, platinum and manganese. These resources are crucial for the low-carbon transition, which will create new economic opportunities for the continent (Cust and Zeufack 2023).

Figure 2.1. **Map of mineral resources in sub-Saharan Africa, showing different levels of political stability**



Source: GRID-Arendal, Sub-Saharan Africa: Mineral Resources and Political Instability, 2006, <https://www.grida.no/resources/7867>, accessed 30 November 2024.

In 2019 Africa accounted for a significant portion of the global production of the following resources (U.S. Geological Survey 2024):

1. *Cobalt*. Africa accounted for 73.3 per cent of global cobalt production, primarily from the Democratic Republic of Congo (68.8 per cent).

2. *Manganese*. The continent contributed 65.2 per cent of global manganese production, with South Africa as the leading producer (51.1 per cent).

3. *Diamonds*. Africa produced 43.7 per cent of the world's diamonds, with Botswana (17.2 per cent), the Democratic Republic of the Congo (9.8 per cent) and Angola (6.6 per cent) as the top contributors.

4. *Chromium*. The region was responsible for 43.3 per cent of global chromium production, primarily from South Africa (39.6 per cent).

5. *Gold*. Africa contributed 20.8 per cent of global gold production, with Ghana and South Africa among the largest producers.

6. *Uranium*. The continent provided 15.8 per cent of the world's uranium production, with significant contributions from Namibia (10.1 per cent) and Niger (5.5 per cent).

Several African countries are among global leaders when it comes to the production of certain minerals (U.S. Geological Survey 2024):

1. *Gold. Major producers include South Africa, Ghana and Mali.*
2. *Diamonds. Top producers are Botswana, the Democratic Republic of the Congo and Angola.*
3. *Cobalt. Cobalt production is dominated by the Democratic Republic of the Congo, which produced the majority of the world's supply in 2019.*
4. *Manganese. South Africa is the leading global producer of manganese, followed by Gabon and Ghana.*
5. *Uranium. Namibia and Niger are Africa's top uranium producers, making a significant contribution to global supply.*

Despite the wealth generated from these resources, the benefits have not consistently translated into widespread poverty reduction. Extreme poverty remains concentrated in resource-rich nations, with projections indicating that by 2030 over 80 per cent of the world's poor will live in sub-Saharan Africa, predominantly in countries rich in natural resources (Cust and Zeufack 2023). This disparity highlights the challenges of effective resource management and equitable distribution of wealth. While Africa's mineral resources hold immense economic value, in order to realize this potential, nations will have to overcome governance challenges, adopt sustainable practices and address poverty to create an equitable economic landscape.

Extreme poverty remains concentrated in resource-rich nations, with projections indicating that by 2030 over 80 per cent of the world's poor will live in sub-Saharan Africa.

Chapter 3

LEGAL FRAMEWORKS GUIDING MINERAL RESOURCE GOVERNANCE

Transnational, continental and regional governance instruments aim to improve transparency, accountability and sustainable resource management in the extractive sector. Key transnational initiatives, such as the EITI and Publish What You Pay (PWYP), promote global standards for revenue disclosure. The AMV provides a continental framework for leveraging mineral resources for sustainable development. Regionally, bodies such as the Southern African Development Community and the Economic Community of West African States work to harmonize mining policies, ensuring responsible resource governance across member states. This chapter explores these governance instruments in detail and examines their impact on the sector.

There have been significant concerns about the lack of transparency in managing revenues from mineral extraction, as well as the accountability of countries and corporations.

3.1. TRANSNATIONAL GOVERNANCE INSTRUMENTS

Historically, there have been significant concerns about the lack of transparency in managing revenues from mineral extraction, as well as the accountability of countries and corporations in their dealings with mining-affected communities and citizens of resource-rich countries (Ushie 2017). In response, transnational civil society movements advocating for greater transparency and corporate accountability in mineral revenues have emerged, driving the creation of various governance frameworks (Ushie 2017). These include the following:

1. *The EITI*. The EITI is a global standard that promotes transparency in the management of extractive industries by ensuring the publication of government revenues and corporate payments. African countries such as Ghana, Nigeria, Liberia and Zambia have implemented EITI frameworks to foster accountability in the handling of extractive revenues. By disclosing payments from companies and government earnings, the EITI helps curb corruption and mismanagement of resources, enabling civil society to hold governments accountable. In turn, this builds trust and improves

investment climates by ensuring that revenues from natural resources contribute to broader economic development.

2. *The PWYP campaign.* The PWYP campaign advocates for full disclosure of payments made by extractive companies to governments, thereby promoting transparency and combating corruption. African countries like Cote d'Ivoire, Kenya and South Africa are active participants in this movement. The PWYP pushes for legal reforms and corporate transparency, empowering civil society to scrutinize the distribution of resource wealth. This initiative strengthens governance by ensuring that citizens benefit from the natural resources extracted from their land.

3. *The Natural Resource Charter*. The Natural Resource Charter provides a framework of principles designed to guide governments and societies in managing resource wealth responsibly. African countries such as Nigeria use the Charter to improve their governance practices by embedding sustainability and equitable resource management into national strategies. The Charter encourages governments to adopt long-term planning and invest resource revenues in economic diversification, reducing dependency on the extractive sector. Such planning and investment lead to more resilient economies and societies that can better weather commodity price volatility and the negative impacts of the so-called resource curse.

4. *The Responsible Minerals Development Initiative (RMDI).* The RMDI encourages mining companies to adopt sustainable and responsible practices, particularly in fragile environments. Countries such as Botswana, Namibia and South Africa are involved in RMDI initiatives that promote environmental stewardship, community engagement and ethical practices within their mining sectors. By aligning with RMDI standards, African nations can reduce environmental degradation, improve labour conditions and ensure that mining activities contribute to social and economic development. The RMDI also addresses issues of conflict minerals, aiming to reduce the exploitation of resources that fuel violence and human rights abuses.

5. *The Open Government Partnership (OGP).* The OGP provides a platform for governments to promote transparency, empower citizens and combat corruption. African countries such as Ghana, Kenya and South Africa are OGP members, and they apply OGP principles to their natural resource governance frameworks. Through open access to data and increased citizen participation in decision making, these countries can reduce opaque dealings and improve the public's ability to influence resource management policies. By enhancing public oversight, the OGP strengthens institutional integrity and fosters a more equitable distribution of resource wealth.

6. *The Open Contracting Partnership*. The Open Contracting Partnership focuses on improving transparency and accountability in public procurement, including in extractive industries. African countries such as Tanzania and Uganda are engaging with this initiative to open up their contracting processes for natural resource extraction projects. Open

contracting ensures that public contracts are awarded fairly, thereby reducing the risk of corruption and ensuring that the benefits of resource projects are maximized for the local population. By making contracting processes more transparent, the initiative helps African countries manage their resources more effectively and secure better deals for their people.

7. *The Kimberley Process Certification Scheme.* The Kimberley Process Certification Scheme is an international certification scheme designed to prevent conflict diamonds from entering the mainstream diamond market. African countries, including Angola, Botswana, the Democratic Republic of the Congo and South Africa play critical roles in the Kimberley Process, ensuring that diamonds sold in the global market do not fund armed conflict. By implementing the Kimberley Process, these countries have reduced the trade in conflict diamonds, stabilized their diamond sectors and improved their international reputations as responsible producers. Additionally, the Kimberley Process fosters greater international collaboration to address illicit trade and protect legitimate diamond markets.

In addition to these transnational initiatives, African natural resource governance is influenced by a range of national and international legal and policy frameworks (Ushie 2017). Legislation in other jurisdictions plays a pivotal role in enhancing transparency and accountability in the extractive sector. For example, Sections 1502 and 1504 of the US Dodd–Frank Act require companies to disclose payments to governments and conduct due diligence on conflict minerals, specifically those sourced from the Democratic Republic of the Congo and neighbouring countries. Similarly, the European Union Accounting and Transparency Directives mandate that large extractive firms publicly disclose payments to governments, strengthening transparency in Africa’s resource management. Further legislation in countries such as Canada, Norway and the United Kingdom extends this accountability by requiring extractive companies to report payments made to foreign governments.

Simultaneously, several multilateral initiatives aim to promote transparency and accountability across the sector. The Equator Principles, adopted by global financial institutions, provide a framework for managing environmental and social risks in large extractive projects. Likewise, the International Finance Corporation Performance Standards offer guidance on mitigating these risks by expecting corporates receiving finance from the International Finance Corporation to conform to these standards. The Organisation for Economic Co-operation and Development Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, which criminalizes the bribery of foreign public officials, is also particularly relevant to the extractive industries, where the sector’s high risk of corruption makes these safeguards critical.

3.2. **CONTINENTAL FRAMEWORKS**

Continental frameworks play a crucial role in advancing Africa's socio-economic development.

Continental frameworks play a crucial role in advancing Africa's socio-economic development by ensuring coherence and alignment across key sectors such as agriculture, trade, infrastructure and mining. These frameworks provide a common roadmap for member states to achieve shared goals under the African Union's Agenda 2063. Some of the notable frameworks include (a) the Comprehensive African Agricultural Development Programme, enhancing agricultural productivity and food security; (b) the Programme for Infrastructure Development in Africa, improving cross-border infrastructure in energy, transport and water; (c) the Science, Technology and Innovation Strategy for Africa, advancing science, technology and innovation for economic growth; (d) Boosting Intra-African Trade, promoting increased trade within Africa by addressing regulatory and logistical barriers; and (e) Accelerated Industrial Development for Africa, accelerating industrial development and economic diversification.

These frameworks set the stage for sector-specific strategies such as the AMV, which focuses on transforming Africa's mineral resources into drivers of sustainable development.

3.2.1. **Africa Mining Vision**

The AMV, adopted by the African Union (AU) in 2009, is a transformative policy framework aimed at utilizing Africa's vast mineral resources as a catalyst for sustainable economic development and inclusive growth. Developed in response to the persistent challenges African countries face in leveraging their mineral wealth, the AMV seeks to break the historical pattern of enclave-based extractive industries, where the benefits of mineral exploitation were limited and often failed to make a significant contribution to local economies (Ushie 2017).

3.2.1.1. Vision and objectives

At its core, the AMV envisions a knowledge-driven African mineral sector that contributes to broad-based development by strategically managing mineral resources. The AMV shifts away from simply exporting raw materials and instead focuses on maximizing value through industrialization, diversification and the development of linkages between mining and other sectors of the economy (African Union 2009).

The AMV vision statement emphasizes the creation of a mineral sector that:

- ensures transparent, equitable and optimal exploitation of mineral resources;
- contributes to broad-based, sustainable growth and socio-economic development;
- promotes environmental sustainability and socio-economic benefits for all African citizens; and
- empowers marginalized groups, including women and artisanal and small-scale miners, by addressing gender justice and socio-economic inclusion.

3.2.1.2. Guiding principles

Several core principles shape the AMV's approach to mineral governance, aligning the sector with Africa's broader developmental goals:

1. *Resource-based industrialization*. A central principle of the AMV is that Africa's mineral wealth should serve as a platform for local value addition and industrialization. The AMV calls for increased beneficiation and processing within African economies to retain more value domestically.

2. *Backward and forward linkages.* The AMV encourages the development of backward linkages, such as local supply chains for goods and services for mining operations, and forward linkages, including value-added processing and manufacturing from extracted minerals.

3. *Human and institutional capacity building*. The AMV underscores the importance of building Africa's capacity for mineral governance, emphasizing expertise in areas such as contract negotiation, fiscal management and resource governance.

4. *Transparent governance and accountability*. A key tenet is ensuring transparency and accountability in the management of mineral resources. The AMV supports the adoption of global standards, such as the EITI, to ensure that mineral revenues are used for the benefit of all citizens.

5. *Sovereign control over resources.* The AMV advocates sovereign control by African governments over their mineral resources. This control includes designing contracts and policies that prioritize national development objectives rather than catering solely to the interests of multinational corporations.

6. *Environmental and social stewardship.* To ensure sustainability, the AMV calls for environmental impact assessments and health impact assessments as mandatory for all mining operations. It promotes community engagement through processes involving free, prior and informed consent to protect the rights of local populations (Ushie 2017).

7. *Formalization of artisanal and small-scale mining.* Given the significant role of artisanal and small-scale mining in African economies, the AMV seeks to formalize the sector, providing better regulation, access to finance, improved technology and more effective market access strategies to support the livelihoods of millions involved in artisanal and small-scale mining.

8. *Gender equality and empowerment.* The AMV promotes gender equity, encouraging greater participation of women in the mining sector and integrating gender justice into mineral governance. This principle aims to enhance economic opportunities for women along the mining value chain and ensure that their voices are included in decision-making processes.

3.2.1.3. Key implementation tools

To realize the vision of the AMV, several strategic tools and frameworks have been established:

1. *Country mining visions*. Country mining visions provide a roadmap for African countries to align their national policies with the AMV principles. These policies are developed through a multi-stakeholder process involving the government, the private sector, civil society and local communities to address specific national challenges in the mining sector (Ushie 2017).

2. *African Minerals Development Centre (AMDC).* The AMDC was created as a technical support body for AU member states, helping countries design their own mining visions, build institutional capacities and harmonize national mining policies with the AMV's broader objectives. The AMDC also oversees the implementation of the AMGF.

3. *AMGF.* This tool is designed to monitor and evaluate the progress of AMV implementation across the continent. It helps track achievements in key areas such as revenue management, sector governance and the formalization of artisanal and small-scale mining. (The AMGF will be elaborated upon in more detail below, as it serves as a cornerstone for structuring this report and guiding its key focus areas).

4. *AMV Compact with the private sector*. The AMV Compact encourages public–private partnerships, urging mining companies to adopt standards of corporate social responsibility, adhere to environmental and social safeguards and respect human rights (Ushie 2017).

The AMGF, developed to complement the AMV, provides a structured approach for evaluating and improving mineral resource governance in African countries.

The AMGF, developed to complement the AMV, provides a structured approach for evaluating and improving mineral resource governance in African countries.

The AMGF has the following key objectives:

1. *Incorporate the AMV at the national and subregional levels.* The framework is designed to ensure that AMV principles are adopted by AU member states. Adoption includes aligning national mineral policies, legal structures and institutional frameworks to the overarching goals of the AMV.

2. *Assess and review policies and laws.* The AMGF provides a comprehensive tool for evaluating the effectiveness of mineral sector governance. It helps identify policy gaps, inefficiencies and areas needing reform to foster sustainable development.

3. *Enhance the capacity of national institutions.* The AMGF focuses on strengthening national institutions, enhancing their capacity to govern the mineral sector effectively. It also encourages collaboration with subregional bodies, the AU and international partners to ensure long-term sustainability.

4. *Promote multi-stakeholder participation.* To enhance accountability and transparency, the framework promotes the involvement of civil society organizations, local communities and private sector actors in mineral governance.

5. *Improve accountability.* The framework aims to create accountability mechanisms for government and non-government actors to ensure that mineral resources are managed in the public interest and that revenues are used for socio-economic development.

The AMGF is structured around six key pillars, each focusing on a different aspect of mineral resource governance.

The AMGF is structured around six key pillars, each focusing on a different aspect of mineral resource governance:

1. *Legal and institutional framework for contracts and licensing*. This pillar focuses on creating transparent legal processes for awarding mineral rights and licensing. It emphasizes competitive bidding, public disclosure and minimizing discretionary powers in contracts. The goal is to ensure fair access to mineral resources and prevent corruption in the allocation of mining rights.

2. *Geological and mineral information systems*. This pillar highlights the importance of strong geological surveys and mineral data management. Having accurate and comprehensive geodata is critical for attracting investment, supporting exploration and planning mining activities. This pillar also advocates standardized and harmonized data policies across borders.

3. *Fiscal regime and revenue management.* Ensuring that African countries receive an optimized share of mineral revenue is a key goal. The AMGF focuses on improving the legal and fiscal instruments for revenue collection, enhancing transparency in how revenues are managed and preventing illicit financial flows. It also encourages an equitable distribution of revenues to support broader development.

4. *Linkages, investment and diversification*. This pillar aims to integrate the mining sector into the broader economy by encouraging linkages with other sectors. It promotes investment in value-added activities such as processing and manufacturing and the development of multi-use infrastructure, such as transport and energy systems, which can benefit the wider economy.

5. *Artisanal and small-scale mining.* Recognizing the role of artisanal and small-scale mining in job creation and rural development, the AMGF focuses on improving the viability and sustainability of this sector. It encourages access to training, finance, technology and markets for artisanal and small-scale mining operators, aiming to reduce environmental impacts and enhance livelihoods.

6. *Environmental and social issues*. This pillar seeks to ensure that mining activities do not harm the environment or negatively impact local communities. It promotes stronger environmental laws, social protection mechanisms and community consultations. A key focus is on ensuring that mine-affected communities benefit from resource extraction and that their rights are protected.

The AMGF outlines four key elements for implementation and monitoring:

The AMGF outlines four key elements for implementation and monitoring.

1. *National assessments*. Countries are expected to conduct periodic (every three years) assessments using the AMGF, enabling them to track their progress in implementing the AMV. These assessments are based on a detailed set of guiding questions across the AMGF's six pillars.

2. *Scoring system*. The AMGF uses a five-tier scoring system to evaluate each country's progress, from 'Beginner' (early stages of implementation) to 'Peak' (full implementation of the AMV). This system encourages countries to continuously improve their governance structures and practices.

3. *Multi-stakeholder platforms*. National and regional platforms composed of government officials, civil society, industry representatives and community leaders will be set up to administer the AMGF and monitor its outcomes to ensure that it remains inclusive and accountable.

4. *Online portal*. A key tool for implementing the AMGF is the establishment of an online portal that will host assessment reports, provide access to data on country-level mineral governance and allow for country comparisons and progress tracking.

The implementation of the AMGF is expected to deliver the following benefits:

1. *Improved accountability.* By creating transparent and accountable governance mechanisms, the AMGF helps ensure that mineral resources are used for the broader benefit of society.

2. *Capacity building*. The AMGF supports national institutions in strengthening their governance capacity, enabling them to effectively negotiate, manage and monitor mineral contracts and revenues.

3. *Fostering regional integration.* Through peer learning and sharing best practices, the AMGF supports regional integration by encouraging cross-country collaboration in mineral governance.

4. *Inclusive development.* By ensuring the participation of local communities, women, youth and marginalized groups, the AMGF helps promote more inclusive and equitable development in the mineral sector.

3.2.1.4. The AMV Action Plan

In 2011, the AMV Action Plan was adopted to provide a clear, actionable pathway for member states to follow in implementing the AMV. The plan identifies nine programme clusters that target areas needing reform:

- mineral sector governance, strengthening legal frameworks and governance structures;
- geological and mining information systems, improving data on Africa's mineral resources;
- human and institutional capacity, building the skills and institutions necessary for effective governance;
- formalizing the ASM and improving conditions;
- sectoral linkages and diversification, promoting backward and forward linkages;
- governance of environmental and social issues, mitigating the environmental and social impacts of mining;
- research and development, fostering innovation and technological advancement;
- mobilizing financial resources, securing investments to grow the mining sector; and
- revenue collection and distribution, ensuring a fair distribution of mining revenues.

3.2.1.5. Partnerships and institutional framework

The implementation of the AMV is supported by a network of partners, including the AU, regional economic communities, the African Development Bank and the United Nations Economic Commission for Africa.

The AMV, through its principles and implementation strategies, presents a comprehensive framework aimed at transforming Africa's mineral wealth into a lever for sustainable development.

The AMV, through its principles and implementation strategies, presents a comprehensive framework aimed at transforming Africa's mineral wealth into a lever for sustainable development. Its emphasis on value addition, inclusive governance, environmental stewardship and gender equity positions the AMV as a critical tool for overcoming the challenges associated with Africa's mineral resources, ensuring that they benefit current and future generations.

3.2.1.6. Progress and challenges in adoption

The AMV has made notable progress in aligning national mining policies across African countries and promoting sustainable and transparent governance. However, several challenges continue to impede its full realization.

Progress has been made in the following key aspects of the AMV:

1. *Adoption of the AMV at the national level.* A number of African countries have taken steps to align their mining policies with the AMV through the development of their own mining visions. This approach promotes more integrated, transparent and sustainable governance within the mining sector. Countries such as Lesotho, Mozambique and Tanzania have developed country mining visions, which have facilitated multi-stakeholder dialogues, broadening the inclusion of civil society, local communities and

the private sector in mineral sector governance (Busia and Akong 2017; Ushie 2017).

2. *Establishment of the AMDC*. The AMDC represents a major milestone in AMV implementation, providing technical support to member states. The AMDC has been instrumental in capacity building, policy alignment and knowledge sharing, aiding countries in their efforts to operationalize the AMV (Busia and Akong 2017; Ushie 2017). Additionally, the AMGF has been developed as a tool to monitor and assess countries' progress towards achieving the AMV's objectives, fostering peer learning among governments (Ushie 2017).

3. *Enhancement of transparency and governance initiatives.* A growing number of African countries have committed to global governance initiatives such as the EITI and PWYP, which align with the AMV's objectives to improve transparency and accountability in the mineral sector. The AMV also encourages stronger contract negotiations and fiscal regimes to ensure more equitable revenue sharing between governments and mining companies (Busia and Akong 2017; Ushie 2017).

4. *Integration of mining into broader development frameworks.* The AMV advocates the integration of mining into national and regional development plans, including infrastructure development and industrialization strategies. Progress has been made in fostering backward and forward linkages between mining and other sectors of the economy, which contribute to broader economic growth (Busia and Akong 2017).

5. *Promotion of sustainable development and environmental governance.* The AMV has contributed to the adoption of policies that emphasize environmentally responsible mining practices. Progress has been observed in areas such as environmental protection, health and safety standards and community engagement in mining regions (Busia and Akong 2017).

6. *Formalization of and support for artisanal and small-scale mining.* The AMV underscores the importance of artisanal and small-scale mining for local development. Considerable progress has been made in formalizing these types of mining, integrating small-scale miners into formal economic structures and improving access to financing and safer working conditions (Busia and Akong 2017; Ushie 2017).

The AMV faces the following key challenges:

1. *Global commodity price volatility.* African economies remain heavily reliant on the export of raw minerals, rendering them vulnerable to global commodity price fluctuations. This volatility complicates efforts to implement long-term development strategies that depend on mineral revenues (Busia and Akong 2017).

2. *Weak institutional capacities.* Many countries face institutional and administrative constraints that hinder their ability to effectively regulate

the mining sector. These constraints include limited capacity to enforce regulations, weak monitoring and evaluation frameworks and a shortage of technical expertise (Busia and Akong 2017).

3. *Entrenched interests and resistance to reform.* Efforts to implement AMV reforms have encountered resistance from vested interests, including multinational mining corporations and local elites. These groups often benefit from the status quo and are resistant to changes aimed at promoting more transparent and equitable governance in the sector (Busia and Akong 2017).

4. *Limited value addition and industrialization*. Despite the AMV's emphasis on creating value chains and promoting industrialization, many African countries continue to export raw materials with minimal processing, limiting their ability to diversify their economies and achieve sustainable long-term growth (Busia and Akong 2017).

5. *Transparency and accountability.* Although progress has been made in governance, challenges remain in improving transparency and accountability. Illicit financial flows, corruption and tax evasion on the part of multinational corporations undermine efforts to maximize the benefits of mineral resources for national development (Busia and Akong 2017; Ushie 2017).

6. *Social and environmental impacts*. Mining activities continue to generate significant negative environmental and social impacts, including land degradation, water pollution and community displacement. Stronger enforcement of environmental regulations and improved mechanisms for compensating affected communities are required to mitigate these issues (Busia and Akong 2017).

7. *Slow and inconsistent implementation*. Fifteen years after the introduction of the AMV, implementation remains slow and inconsistent across the continent. While some countries, such as Lesotho, have fully adopted the AMV, others are still in the early stages of aligning their policies with its principles (Ushie 2017).

8. *Inadequate participation of civil society and communities*. Civil society organizations and local communities have not been fully engaged in AMV implementation processes. Furthermore, the shrinking civic space in some countries has hindered the meaningful participation of these actors in national mining governance (Ushie 2017).

9. *Gender justice and representation*. Although the AMV promotes gender equity, its implementation plans lack detailed actions to ensure women's participation throughout the mining value chain. Gender issues are often insufficiently addressed at the national level (Ushie 2017).

10. *Threats from global trade agreements*. The policy space necessary for AMV implementation is under pressure from global trade agreements, such as those under the World Trade Organization and economic partnership agreements. These agreements may restrict the ability of African states to develop local industries and capture more value from their mineral resources (Ushie 2017).

While the AMV has made commendable progress in areas such as policy alignment, transparency and the formalization of the artisanal and small-scale mining sector, it continues to face significant challenges. Overcoming obstacles such as global commodity price volatility, weak institutional capacities and entrenched interests will require stronger political will, enhanced governance frameworks and greater collaboration among governments, the private sector and local communities. Successful implementation of the AMV has the potential to drive sustainable, equitable development across Africa's mining sector.

While the AMV has made commendable progress in areas such as policy alignment, transparency and the formalization of the artisanal and small-scale mining sector, it continues to face significant challenges.

3.2.2. **Regional economic communities**

Africa is home to a complex and dynamic array of regional economic blocs, each formed with the primary goals of fostering economic integration, promoting peace and advancing the collective prosperity of their member states. These blocs—some of which are officially recognized by the AU and often referred to as regional economic communities—serve as key building blocks for the continental integration agenda outlined by the AU and the African Economic Community.

Many of these RECs are shaped by geographic, cultural and historical commonalities, which guide their trade agreements, economic policies and social programmes (see Figure 3.1). While some have achieved considerable success in promoting regional cooperation and trade integration, others face challenges such as political instability, overlapping memberships in multiple RECs and economic disparities between member states. Nevertheless, all of these blocs are working towards the ambitious vision of a fully integrated Africa, particularly through initiatives such as the African Continental Free Trade Area (AfCFTA).

Table 3.1 provides an overview of Africa's key regional economic blocs, outlining their establishment dates, member countries and key objectives, demonstrating the wide-ranging efforts being made to unify the continent through economic cooperation and development.

The RECs are central to Africa's governance structure, as they promote regional cooperation and legal harmonization. By developing common legal frameworks, RECs align member states' policies in areas such as trade, security and environmental management. For example, the EAC and ECOWAS have binding protocols on trade liberalization and free movement that require national adoption.

Figure 3.1. **Regional economic groups in Africa**

Source: In On Africa, 'Africa's Regional Economic Communities: The pieces assembling Africa's economic and security mosaic', 25 July 2017, <https://www.inonafrica.com/2017/07/25/africas-regional-economic-communities-pieces-assembling-africas-economic-security-mosaic>, accessed 1 December 2024.

Table 3.1. **Regional economic groups in Africa**

Regional economic bloc	Date of establishment	Member states	Key objectives
African Union	2002	55 member states—all African countries	To promote an integrated, prosperous and peaceful Africa through economic integration, political stability and development. To coordinate and harmonize policies among RECs.
Arab Maghreb Union (AMU)	1989	Algeria, Libya, Mauritania, Morocco, Tunisia	To promote regional unity, peace and economic development among member states, strengthen political institutions and facilitate the movement of goods and people.
Community of Sahel-Saharan States (CENSAD)	1998	Benin, Burkina Faso, Central African Republic, Chad, Comoros, Côte d'Ivoire, Djibouti, Egypt, Eritrea, The Gambia, Ghana, Guinea-Bissau, Kenya, Liberia, Libya, Mali, Morocco, Mauritania, Niger, Nigeria, São Tomé and Príncipe, Senegal, Sierra Leone, Somalia, Sudan, Togo, Tunisia	To promote external trade, communication and market integration among member states. To overcome challenges due to overlapping memberships in other RECs.
Common Market for Eastern and Southern Africa (COMESA)	1994	Burundi, Comoros, Democratic Republic of the Congo, Djibouti, Egypt, Eritrea, Eswatini, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Somalia, Sudan, Tunisia, Uganda, Zambia, Zimbabwe	To support the private sector and sustainable economic advancement through cooperation. To establish a free-trade area.
East African Community (EAC)	1999	Burundi, Kenya, Rwanda, South Sudan, Uganda, Tanzania	To establish a customs union, monetary union and political federation. To promote economic integration through the Common Market Protocol.
Economic Community of Central African States (ECCAS)	1983	Angola, Burundi, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Rwanda, São Tomé and Príncipe	The gradual creation of a free-trade area and customs union. The ECCAS has faced difficulties due to instability and lack of implementation.
Economic Community of West African States	1975	Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo	To achieve collective self-sufficiency through economic integration. Specialized agencies have been established to support regional development and trade integration.

Table 3.1. **Regional economic groups in Africa (cont.)**

Regional economic bloc	Date of establishment	Member states	Key objectives
Intergovernmental Authority on Development (IGAD)	1996	Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan, Uganda	To promote collective economic development, food security and environmental protection (still in the early stages of integration).
Southern African Development Community	1992	Angola, Botswana, Comoros, Democratic Republic of the Congo, Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Tanzania, Zambia, Zimbabwe	To promote self-sufficiency and interdependence among member states. Issues have been encountered with trade integration due to overlapping REC memberships.
Southern African Customs Union (SACU)	1910	Botswana, Eswatini, Lesotho, Namibia, South Africa	To streamline the movement of goods, integrate member states into the global economy and promote industrial policies. The SACU is the oldest customs union in the world.
Central African Economic and Monetary Community of Central Africa (CEMAC)	1994	Cameroon, Central African Republic, Chad, Republic of the Congo, Equatorial Guinea, Gabon	To promote monetary integration through a common currency and financial institutions. CEMAC is focused on trade integration but faces challenges due to reliance on oil exports.
West African Economic and Monetary Union (UEMOA)	1994	Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, Togo	To promote trade and economic integration among francophone West African states (uses the CFA franc as a common currency).
West African Monetary Zone	2000	The Gambia, Ghana, Guinea, Liberia, Nigeria, Sierra Leone	To establish a stable currency for anglophone West Africa to rival the CFA franc, with the ultimate goal of merging it with the UEMOA's currency.
Economic Community of the Great Lakes Countries	1976	Burundi, Democratic Republic of the Congo, Rwanda	To promote peace, security and the streamlined transportation of goods and people between member states. The Community has established specialized institutions to support these goals.
Indian Ocean Commission	1982	Comoros, Madagascar, Mauritius, Seychelles, Réunion	To promote sustainable economic growth and environmental conservation among island nations in the Indian Ocean.

Table 3.1. **Regional economic groups in Africa (cont.)**

Regional economic bloc	Date of establishment	Member states	Key objectives
Mano River Union (MRU)	1973	Côte d'Ivoire, Guinea, Liberia, Sierra Leone	To promote regional collaboration in political economic, and social sectors. The MRU was reestablished after periods of civil conflict.
African Economic Community (AEC)	1991	Members of eight RECs: AMU, CENSAD, COMESA, EAC, ECCAS, ECOWAS, IGAD, SADC	To promote trade integration across Africa by coordinating the efforts of RECs. The AEC aims to establish a single market and common external tariffs and to eliminate trade barriers.
African Continental Free Trade Area	2018	44 signatories (AU member states)	To create a single market for goods and services, establish a customs union and promote economic development and trade integration across Africa.
Tripartite Free Trade Area	2008	26 member states (COMESA, EAC, SADC): Angola, Botswana, Burundi, Comoros, Democratic Republic of the Congo, Djibouti, Egypt, Eritrea, Eswatini, Ethiopia, Kenya, Lesotho, Libya, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Rwanda, Seychelles, Somalia, South Africa, South Sudan, Sudan, Tanzania, Uganda, Zambia, Zimbabwe	To promote tariff liberalization, the transportation of goods and the creation of a single economic space to overcome challenges of overlapping REC memberships.
Greater Arab Free Trade Area (GAFTA)	1997	Arab states and Egypt, Libya, Mauritania, Morocco, Sudan, Tunisia	To achieve full trade liberalization and exemption of customs duties among Arab member states. GAFTA faces challenges due to economic disparities between member states

Sources: AfronomicsLaw, Africa's regional and sub-regional economic cooperation frameworks: A summary.AfronomicsLaw, [n.d.], <https://www.afronomicslaw.org/category/repository/africas-regional-and-sub-regional-economic-cooperation-frameworks-summary>, accessed 18 November 2024; United Nations Economic Commission for Africa, Regional Economic Communities (RECs), [n.d.], <https://archive.uneca.org/oria/pages/regional-economic-communities>, accessed 18 November 2024.

The RECs also enforce regional agreements through mechanisms such as the SADC tribunal. They play a key role in implementing continent-wide initiatives, such as the AMV and AfCFTA, linking AU goals with national legislation.

Though overlapping REC memberships can lead to legal conflicts, efforts such as the Tripartite Free Trade Area between COMESA, the EAC and the SADC work to harmonize regulations. Ultimately, RECs are vital to regional integration and a unified legal framework for Africa's development, including natural resource governance.

Several regional economic blocs in Africa have developed frameworks and policies that influence mining governance in their member countries. These frameworks aim to harmonize national laws, promote sustainable development and address regional challenges. An overview of the laws and frameworks governing mining in some of Africa's key regional blocs is outlined in the following subsections.

3.2.2.1. Southern African Development Community

- The SADC Mining Protocol was adopted in 1997 to promote sustainable and responsible mining development in Southern Africa through cooperation among member states. Its key elements include: harmonizing mining policies and regulations across member states;
- promoting regional cooperation in geological research, exploration and mineral development;
- encouraging environmentally sustainable practices and social responsibility in mining; and
- facilitating the development of human resources in the mining sector.

The law governing the SADC is the SADC Model Mining Code, a non-binding legal instrument that provides a harmonized framework for member states to adapt national mining laws to ensure that mining contributes to economic and social development. The Code includes provisions on transparency, environmental protection and community engagement.

3.2.2.2. Economic Community of West African States

The ECOWAS Directive on the Harmonization of Guiding Principles and Policies in the Mining Sector was adopted in 2009 to harmonize national mining codes and laws across West Africa and ensure that mining contributes to sustainable economic development.

Its key elements include:

- promoting good governance and transparency in the mining sector;
- enhancing environmental protection and community participation;
- promoting local content and regional cooperation; and
- supporting artisanal and small-scale mining.

The governing law is the ECOWAS Mining Directive, which is aimed at fostering uniformity in mining legislation among ECOWAS member states. It focuses on environmental standards, social obligations and transparent financial practices.

Another applicable ECOWAS policy is the Model Mining and Development Act, which was developed to guide member states in aligning national mining policies with international best practices. Its key features include:

- environmental protection—mandates responsible waste management to prevent pollution and degradation;
- artisanal and small-scale mining—limits hazardous substances such as mercury and promotes safer artisanal and small-scale mining practices, especially in respect of gold mining);
- waste management—requires companies to manage and remediate hazardous waste, such as tailings;
- human rights—emphasizes respect for mining communities and the mitigation of social impacts;
- sustainability—requires that companies provide impact assessments, mine closure plans and rehabilitation programmes; and
- best practices—encourages globally recognized standards for responsible mining.

Overall, the ECOWAS Model Mining and Development Act enhances transparency, environmental responsibility and sustainable development in West Africa's mining sector.

3.2.2.3. East African Community

The EAC Mining Policy was adopted in 2009 and subsequently updated. Its purpose is to promote sustainable mineral resource development and investment while ensuring social and environmental responsibility. Its key features include:

- harmonization of laws—promotes alignment of mining laws across EAC member states for a consistent regulatory environment;
- sustainable development—ensures that mining contributes to economic growth while protecting the environment and communities;
- investment promotion—attracts local and international investors with stable, clear regulations.
- capacity building—strengthens human and institutional capacities to manage mining activities effectively; and
- environmental and social responsibility—requires environmental risk assessments, mine closure plans and rehabilitation, with a focus on hazardous material management and community rights.

Two additional EAC policies of note include the 2017 EAC Mining Bill, which emphasizes environmentally sustainable artisanal and small-scale mining and requires risk assessments and mine closure plans, as well as the Protocol on

Environment and Natural Resources Management, which harmonizes policies on chemicals, toxic substances and transboundary waste management.

3.2.2.4. Common Market for Eastern and Southern Africa

The COMESA Mining Vision is aligned with the AMV and emphasizes the sustainable development of mineral resources in the region. COMESA member states are encouraged to harmonize their mining laws and policies with regional and international best practices. Its key elements include:

- promoting transparency, good governance and equitable resource distribution;
- encouraging environmentally friendly mining practices;
- supporting the formalization of artisanal and small-scale mining; and
- enhancing regional cooperation in mining-related infrastructure and investment.

3.2.2.5. Central African Economic and Monetary Community

The CEMAC Mining Code was adopted in 2000 to create a uniform legal framework for mining in Central Africa that encourages investment and ensures sustainable development. Its key elements include:

- harmonizing national mining laws;
- improving revenue transparency and management in the sector;
- supporting the formalization of artisanal and small-scale mining and ensuring environmental and social responsibility; and
- ensuring equitable benefit sharing with local communities.

3.2.2.6. Intergovernmental Authority on Development

The IGAD Mining Vision was created to promote the responsible and sustainable development of mineral resources in the IGAD region. Its key elements include:

- supporting investment in mineral exploration and mining development;
- harmonizing legal frameworks to enhance regional cooperation; and
- ensuring that mining activities contribute to socio-economic development and environmental protection.

3.2.2.7. West African Economic and Monetary Union

Relevant policies include the Common Mining Policy (Act No. 01/2000), which focuses on creating a favourable climate for mining investments, promoting the coexistence of industrial and artisanal mining and ensuring environmental preservation, as well as the Community Mining Code (Regulation No. 18/2003/CM/UEMOA), which establishes comprehensive rules for health and safety, environmental protection and site rehabilitation. The Code mandates that all mining operations must undergo an environmental impact assessment to ensure that natural heritage is conserved and environmental standards are upheld throughout the life cycle of mining projects. It also emphasizes that companies are responsible for restoring and rehabilitating mining sites once operations have ceased. Rehabilitation includes addressing potential land degradation and mitigating long-term environmental impacts through sustainable rehabilitation practices.

These regional blocs provide important guidelines for member states to shape their mining legislation and policies. While the frameworks are not always legally binding, they often influence national legislation and contribute to the harmonization of mining practices across regions. They aim to ensure that mineral wealth contributes to sustainable development, good governance and socio-economic growth in Africa.

3.2.3. **Regional frameworks: Challenges and opportunities**

African regional integration has faced numerous challenges despite the establishment of ambitious frameworks such as the Abuja Treaty and the Lagos Plan of Action. A major obstacle has been the slow pace of economic integration, exacerbated by overlapping memberships in various RECs such as ECOWAS, the IGAD and the SADC. These overlapping commitments often result in conflicting policies and priorities, making it difficult to harmonize trade, fiscal policies and legal frameworks across the continent. Additionally, divergent macroeconomic policies and persistent political instability in some regions create further hurdles to achieving deeper integration (Qobo 2007).

African regional integration has faced numerous challenges despite the establishment of ambitious frameworks such as the Abuja Treaty and the Lagos Plan of Action.

A significant challenge to integration is the low level of intra-African trade, which accounts for only about 10 per cent of the continent's total trade. Various factors contribute to the lack of trade on the continent, including disparate trade rules, customs procedures and standards between African countries, which complicate efforts to create a unified market (Qobo 2007). The legacy of state-led economies and import-substitution industrialization strategies in the post-colonial era has also left many African economies inefficient and uncompetitive, hindering efforts to boost intraregional trade (Qobo 2007).

Moreover, Africa's infrastructural deficit further complicates cross-border trade and economic cooperation. Inadequate transport networks, poor access to reliable energy and inefficient ports drive up the cost of doing business, reducing the competitiveness of African goods in global markets (Hailu 2014). For integration to succeed, significant investment in infrastructure, as well as the harmonization of regulations and policies among member states, is crucial.

Despite these challenges, progress has been made in certain regions. For example, the EAC is often considered one of the most advanced regional blocs on the continent, having implemented a common market protocol and taken steps towards further integration through initiatives such as a single tourist visa and joint infrastructure projects (Hailu 2014). Similarly, ECOWAS has introduced a common passport, facilitating free movement across the region, and made strides in reducing non-tariff barriers (Hailu 2014). These examples indicate that, with the right reforms and political will, regional integration can yield tangible economic benefits.

Natural resource governance plays a pivotal role in Africa's regional integration efforts, given the continent's wealth of minerals, oil and gas.

Natural resource governance plays a pivotal role in Africa's regional integration efforts, given the continent's wealth of minerals, oil and gas. Effective governance of these resources is essential for fostering economic growth, reducing poverty and promoting sustainable development. However, poor governance has historically led to the so-called resource curse, which undermines both national development and regional cooperation.

A key challenge in natural resource governance is the lack of transparency and accountability in the management of resource revenues. Opaque fiscal policies, corruption and weak institutional frameworks often lead to the misallocation of funds, undermining efforts to use resource wealth for national and regional development.

The unequal distribution of resource revenues also presents a significant issue. Communities near mining and extraction sites often bear the brunt of environmental and social costs but see little benefit from the wealth generated. Weak legal protections for land and surface rights, as well as insufficient enforcement of existing regulations, exacerbate these challenges, impeding both domestic development and regional integration.

Despite these issues, several RECs, including ECOWAS, the SADC and the UEMOA, have adopted regional frameworks to improve resource governance. These frameworks aim to harmonize policies, promote joint infrastructure projects and increase transparency in cross-border resource management. For instance, ECOWAS has developed a mining code to guide member states in harmonizing their legal frameworks and attracting sustainable investment in the mining sector (ECOWAS Mining Directive 2009). Similarly, the SADC has been fostering greater cooperation in mining through initiatives such as the Southern African Development Community Mining Protocol.

The prospects for African integration remain cautiously optimistic. The AfCFTA represents a significant opportunity to increase intra-African trade by creating a single continental market for goods and services. Its success, however, will depend on the ability of member states to implement harmonized policies, address infrastructural deficits and maintain political stability. The New Partnership for Africa's Development and the African Peer Review Mechanism also offer frameworks to address governance deficits and foster stronger economic cooperation.

Natural resource governance will play a central role in this integration. If African countries can improve transparency, accountability and the equitable distribution of resource revenues, natural resources can become a catalyst for deeper regional integration and sustainable development. However, success will depend on overcoming governance challenges, particularly in ensuring that smaller and less developed economies benefit equitably from the continent's wealth.

While African regional integration faces substantial challenges, particularly related to infrastructure, governance and political stability, there are promising opportunities on the horizon. Initiatives such as the AfCFTA and the AMV, along with regional cooperation frameworks, offer a pathway towards stronger economic ties and sustainable growth. Success will depend on sustained political commitment, targeted domestic reforms and policies that ensure that the benefits of integration and natural resource wealth are shared across all member states, including smaller economies (Kodero 2024).

While African regional integration faces substantial challenges, particularly related to infrastructure, governance and political stability, there are promising opportunities on the horizon.

Chapter 4

IMPACT OF GEOPOLITICS ON MINERAL RESOURCE GOVERNANCE ON THE CONTINENT

International trade agreements and geopolitical alliances play a crucial role in shaping mineral resource governance in Africa.

International trade agreements and geopolitical alliances play a crucial role in shaping mineral resource governance in Africa. These frameworks not only determine access to global markets but also influence regulatory standards for environmental protection, labour rights and transparency in resource management. Several key agreements and geopolitical dynamics exemplify how external partnerships and trade arrangements impact governance in Africa's mining sector.

4.1. BILATERAL TRADE AGREEMENTS AND THEIR IMPACT

One of the most notable bilateral agreements affecting Africa's governance landscape is the US African Growth and Opportunity Act (AGOA). Established to facilitate African exports to the USA, AGOA goes beyond mere trade by embedding conditions for governance reforms, including those related to transparency and accountability in resource management. For African countries to maintain their eligibility under AGOA, they must demonstrate improvements in governance, which has had a knock-on effect in sectors such as mining, where poor governance historically led to illicit financial flows, environmental degradation and labour exploitation. For example, countries benefiting from AGOA have been prompted to adopt stricter labour and anti-corruption laws, indirectly promoting better governance in the mining sector (Mulholland et al. 2024).

While AGOA is not focused exclusively on mining, its broader governance framework encourages reforms across various sectors. In some countries, this broader focus has resulted in improved policies related to labour rights and transparency in revenue management, thereby curbing the flow of illicit financial transactions in the extractives industry (Tadesse 2024). However, the full potential of AGOA is not realized due to low utilization rates and a limited focus on non-mining sectors such as oil and gas, restricting its broader impact on mineral resource governance.

EU economic partnership agreements with African, Caribbean and Pacific countries are another significant driver of governance reform in the mineral sector. These agreements aim to enhance trade relations while promoting sustainable development and governance reforms. Economic partnership agreements provide African countries with preferential access to EU markets, contingent on compliance with stricter standards in areas such as labour rights, environmental protections and revenue transparency, which are highly relevant to the extractives sector.

For instance, the SADC–EU economic partnership agreement, signed in 2016, allows countries such as Botswana, Namibia and South Africa to protect sensitive sectors, including mining, from full liberalization while ensuring that their industries align with international standards for sustainable development (European Commission n.d.). The agreement contains chapters on sustainable development that directly impact mining operations by requiring compliance with stricter environmental and social standards, thus promoting better governance and responsible resource extraction practices.

However, these agreements also face challenges in implementation. Many African countries still struggle with institutional capacity constraints, which hinder the enforcement of the governance standards prescribed in trade agreements, such as economic partnership agreements. Additionally, the focus of some trade agreements on specific sectors, such as oil and gas, limits the broader applicability of these frameworks to other critical mineral resources. Addressing these challenges requires investments in capacity building and stronger governance systems to ensure that the full benefits of trade agreements are realized.

Many African countries still struggle with institutional capacity constraints, which hinder the enforcement of the governance standards prescribed in trade agreements, such as economic partnership agreements.

4.2. **GEOPOLITICAL ALLIANCES AND INFLUENCE ON MINERAL GOVERNANCE**

Beyond formal trade agreements, geopolitical alliances have a significant impact on Africa’s mineral governance landscape. Major global powers, such as China, the EU, Russia and the USA, exert influence through a mix of foreign investment, infrastructure development, security arrangements and technology transfers, all of which shape the governance of Africa’s natural resources.

China’s Belt and Road Initiative is a prime example of how geopolitical alliances influence Africa’s mining sector. Through the Initiative, China has made extensive investments in African infrastructure, providing loans for large-scale projects, including transport networks, power plants and mining-related infrastructure. In return, African countries, particularly resource-rich nations such as Angola, Kenya and Zambia, have become more reliant on Chinese capital and technology for the development of their mining sectors (Dollar 2019).

China's strategic interest in securing long-term access to Africa's critical minerals, including cobalt and copper, is evident in its investments in infrastructure tied directly to the mining industry.

China's strategic interest in securing long-term access to Africa's critical minerals, including cobalt and copper, is evident in its investments in infrastructure tied directly to the mining industry. In the Democratic Republic of the Congo, for example, Chinese companies have played a leading role in developing mining operations for cobalt, a key mineral for global renewable energy technologies (Andreoni and Roberts 2023). However, concerns about the terms of Chinese loans, often seen as 'debt-trap diplomacy', and the opacity of Chinese involvement have raised governance issues related to transparency and local employment generation.

While China dominates the economic sphere, Russia's influence in Africa has been growing in the realm of security, particularly in conflict-affected regions. Russia has positioned itself as a key security partner in countries such as the Central African Republic, Mali and Sudan. In exchange for providing military assistance, often through private military contractors such as the Wagner Group and its successor, Africa Corps, Russia has secured access to critical minerals, including gold and diamonds (Banchereau and Donati 2024). This quid pro quo arrangement complicates governance in resource management, as these deals are often opaque, undermining efforts to promote transparency and accountability in the extractive sectors.

In the Central African Republic, for example, Russian mercenaries have provided security for the government in exchange for mining concessions, leading to concerns about the long-term impacts of such arrangements on local communities and resource governance. The lack of transparency in these deals, combined with the involvement of non-state actors such as mercenaries, has created governance challenges that complicate efforts to manage resources sustainably and equitably (Sematumba 2024).

4.3. GOVERNANCE CHALLENGES AND REGIONAL COOPERATION

The distribution and governance of natural resources in Africa also have significant implications for regional geopolitics. In regions such as West Africa and the Great Lakes, competition over resources fuels internal conflicts and cross-border tensions. In the Democratic Republic of the Congo, for instance, control of valuable minerals such as coltan, diamonds and gold has perpetuated decades of violence, drawing in neighbouring countries such as Rwanda, which has been accused of exploiting the Democratic Republic of the Congo's mineral wealth to fund its own activities (Kennes 2024).

The resurgence of the M23 rebellion in the eastern part of the Democratic Republic of the Congo, allegedly supported by Rwanda, has escalated tensions between the two countries. Control over mineral-rich areas has been a key driver of the conflict, complicating governance efforts to establish transparent and responsible mineral extraction practices (Sematumba 2024).

To address the challenges posed by resource-driven conflicts and external influence, African nations are increasingly turning to regional cooperation through frameworks such as the AMV. In addition to the AMV, successful bilateral initiatives, such as the Nigeria–São Tomé and Príncipe Joint Development Zone, demonstrate the potential for regional collaboration in managing shared resources. In this case, the two nations jointly manage contested oil reserves, sharing the benefits of their extraction, which helps prevent resource-driven tensions (Bassou 2017).

To address the challenges posed by resource-driven conflicts and external influence, African nations are increasingly turning to regional cooperation through frameworks such as the AMV.

Regional economic communities such as ECOWAS and the SADC also play critical roles in fostering cross-border collaboration on natural resource governance. ECOWAS, for example, has facilitated peace agreements and promoted cooperation on resource management, helping to mitigate resource-related tensions across the region.

In summary, international trade agreements and geopolitical alliances are central to shaping the governance of Africa's mineral resources. Trade agreements such as AGOA and economic partnership agreements push African countries to adopt stronger governance frameworks, while geopolitical alliances with powers such as China and Russia provide both opportunities and challenges for resource management. Regional geopolitics, resource-driven conflicts and external influence further complicate governance, necessitating a stronger focus on transparency, accountability and regional cooperation. Strengthening institutional capacity and implementing effective governance systems remain critical to ensuring that Africa's vast natural resource wealth contributes to sustainable development and equitable growth (Mulholland et al. 2024; Banchereau and Donati 2024).

Chapter 5

COMPARATIVE ANALYSIS OF LEGISLATIVE FRAMEWORKS ACROSS EIGHT AFRICAN COUNTRIES

This analysis explores the legislative frameworks governing the mining sectors in Botswana, the Democratic Republic of the Congo, Egypt, Nigeria, Senegal, Sierra Leone, South Africa and Tanzania. The objective is to identify common challenges and country-specific issues within key aspects of mining legislation, offering a comprehensive assessment of the current legal frameworks across these nations.

Across the examined countries, a prevalent issue is the presence of ambiguities within mining laws, leading to misinterpretation and conflicts among stakeholders.

5.1. LEGISLATIVE GAPS IN MINING SECTORS ACROSS SELECTED AFRICAN COUNTRIES

5.1.1. Clarity and comprehensiveness of legal frameworks

Common gaps

Across the examined countries, a prevalent issue is the presence of ambiguities within mining laws, leading to misinterpretation and conflicts among stakeholders. This lack of clarity often results in disputes between mining companies, local communities and government entities. Additionally, there is a widespread challenge in fully integrating international best practices into national legislation, creating discrepancies between global standards and local implementation.

The following country-specific issues were identified:

1. *Botswana*. Although Botswana's Mines and Minerals Act has remained stable for over 50 years, it lacks clarity around licensing procedures, particularly regarding the absence of specified time frames for processing licences. Experts suggest that the legal framework drafted in 1999 does not fully account for the unique aspects of coal mining compared

with diamond mining, indicating a need for updates. The lack of a clear resettlement policy for communities displaced by mining also remains a significant gap, leading to tensions over compensation and land rights.

2. *The Democratic Republic of the Congo.* The country's legal framework exhibits significant ambiguities, particularly in regulations pertaining to tax exemptions for resource-backed loan agreements. This lack of clarity has resulted in substantial revenue losses and uncontrolled extensions of exemptions. Furthermore, the legal insecurity surrounding customary land rights in mining regions frequently leads to conflicts between local communities and mining operations.

3. *Egypt*. The country faces challenges due to frequent changes in its mining legislation, creating an environment of uncertainty for long-term investments. This instability in the legal framework discourages potential investors and complicates the planning processes for existing operations.

4. *Nigeria*. A key issue in Nigeria is the jurisdictional conflict between federal and state authorities over mining control. The Minerals and Mining Act places mining under exclusive federal control, which conflicts with the Land Use Act, which grants states authority over land administration. This lack of clear delineation has led to intergovernmental conflicts and created confusion for investors.

5. *Senegal*. While Senegal has ratified various international conventions on mining and environmental protection, there are significant gaps in fully incorporating these best practices into national law. These gaps are particularly evident in the areas of environmental management and social safeguards.

6. *Sierra Leone*. Recent reforms in Sierra Leone, particularly the 2022 Mines and Minerals Development Act, have improved clarity in the legal framework. Implementation challenges persist, however, especially in areas of community rights and benefit-sharing mechanisms.

7. *South Africa*. The country faces ambiguities in the application of its Mining Charter and Broad-Based Black Economic Empowerment regulations. The legal enforceability of these charters under the Mineral and Petroleum Resources Development Act (MPRDA) has been contentious, resulting in court cases and investor uncertainty.

8. *Tanzania*. The mining sector is affected by frequent changes in financial regulations, often driven by annual budget approvals. While large-scale investments benefit from stabilization clauses in mineral development agreements, other mineral rights holders face challenges due to these regulatory fluctuations.

A universal challenge across all examined countries is insufficient financial and human resources for the effective enforcement of mining regulations.

5.1.2. Enforcement mechanisms

Common gaps

A universal challenge across all examined countries is insufficient financial and human resources for the effective enforcement of mining regulations. This constraint has a significant impact on the ability to monitor and inspect mining operations, particularly in the artisanal and small-scale mining sector. The lack of adequate resources often results in irregular and insufficient inspections, allowing non-compliance to persist.

The following country-specific issues were identified:

1. *Botswana*. The enforcement of regulations in Botswana is generally effective, but gaps in stakeholder involvement and transparency regarding licensing and grievance mechanisms can hinder effective oversight.

2. *The Democratic Republic of the Congo*. The country struggles with inadequate enforcement due to ongoing conflicts, pervasive corruption and severe institutional limitations. The country's vast territory and limited government control in certain regions exacerbate these challenges, making consistent enforcement nearly impossible in some areas.

3. *Egypt*. A significant issue in Egypt is the lack of mining-specific expertise within environmental enforcement bodies. The Environmental Affairs Agency often lacks the specialized knowledge required to effectively monitor and regulate the unique environmental impacts of mining operations.

4. *Nigeria*. The enforcement of mining regulations in Nigeria is hampered by the involvement of politically exposed persons in the sector. These individuals often leverage their connections to evade penalties and regulatory oversight, undermining the effectiveness of enforcement mechanisms.

5. *South Africa*. South Africa struggles with the inconsistent application of penalties, particularly for larger mining companies. This disparity in enforcement creates an uneven playing field and undermines the credibility of the regulatory framework.

6. *Tanzania*. Tanzania's enforcement approach has been criticized for being overly punitive, with some government institutions viewing mining primarily as a revenue source rather than a sector to be developed. This perspective can lead to disproportionate fines and penalties, potentially discouraging investment and compliance.

5.1.3. **Environmental standards**

Common gaps
Across all examined countries, there is a consistent weakness in the enforcement of requirements for environmental impact assessments, especially for artisanal and small-scale mining operations. This gap often results in inadequate environmental protections and potential long-term ecological damage. Additionally, most countries have insufficient provisions for mine closure and land rehabilitation, leading to abandoned mine sites and persistent environmental hazards.

Across all examined countries, there is a consistent weakness in the enforcement of requirements for environmental impact assessments, especially for artisanal and small-scale mining operations.

The following country-specific issues were identified:

1. *Botswana*. Although Botswana's environmental standards are comprehensive, environmental impact assessments often lack rigour and fail to provide meaningful assessments, particularly when conducted late in the project planning stages.

2. *The Democratic Republic of the Congo*. The environmental legislation lacks detailed guidance on assessment methods and techniques for environmental impact assessments. This lack of specificity leads to inconsistencies in the quality and comprehensiveness of environmental assessments, potentially overlooking significant environmental impacts.

3. *Egypt*. A notable gap in Egypt's environmental framework is the absence of formal provisions for strategic environmental assessments. This omission limits the country's ability to assess the cumulative and long-term environmental impacts of mining activities at a strategic level.

4. *Nigeria*. The environmental legislation in Nigeria is characterized by weak penalties. The fines prescribed for environmental violations are often too low to serve as effective deterrents, allowing mining companies to treat them as a cost of doing business rather than a serious regulatory breach.

5. *Senegal*. The country's environmental impact assessment process shows limited consideration of climate risks. Given Senegal's vulnerability to climate change, this gap in the environmental assessment framework could lead to inadequate preparation for and mitigation of climate-related impacts on mining operations and affected communities.

6. *South Africa*. While South Africa has a comprehensive framework in place for environmental impact assessments, enforcement is inconsistent, especially in the post-approval phase. This lack of consistency results in a disconnect between initially approved environmental management plans and actual practices during mining operations.

7. *Tanzania*. The country faces challenges due to weak coordination between environmental agencies and mining authorities. This lack of synchronized efforts leads to overlapping jurisdictions and potential gaps in environmental oversight, as well as conflicting directives for mining operators.

A pervasive issue across the examined countries is the inadequate protection of Indigenous peoples and local communities affected by mining operations.

5.1.4. **Social safeguards**

Common gaps

A pervasive issue across the examined countries is the inadequate protection of Indigenous peoples and local communities affected by mining operations. Many countries struggle with weak implementation of the principles of free, prior and informed consent, leading to conflicts between mining companies and local populations. There is also a general lack of robust mechanisms to ensure that mining benefits are equitably shared with affected communities.

The following country-specific issues were identified:

1. *Botswana*. The lack of clear resettlement policies and compensation frameworks generates tensions between the government and mining-affected communities.

2. *The Democratic Republic of the Congo*. The country exhibits significant deficiencies in ensuring free, prior and informed consent for affected communities. The legal framework does not provide clear, effective guidelines for obtaining meaningful consent from local populations before mining activities commence.

3. *Egypt*. The mining legislation recognizes a limited number of Indigenous rights. This gap in the legal framework leaves Indigenous communities vulnerable to displacement and the loss of their traditional livelihoods without adequate protection or compensation.

4. *Nigeria*. While Nigeria's mining law acknowledges community development agreements, there is a lack of explicit protections for Indigenous peoples beyond these agreements. This gap leaves room for potential exploitation and marginalization of Indigenous communities in mining areas.

5. *Senegal*. A key issue in Senegal is the inadequate legal protection for customary land rights. This gap often leads to conflicts between mining operations and local communities, particularly in cases of land acquisition for mining projects.

6. *Sierra Leone*. Recent improvements in community rights have been made through the Mines and Minerals Development Act of 2022. However, implementation challenges persist, particularly in ensuring that communities fully benefit from the provisions outlined in the new legislation.

7. *South Africa*. The country faces issues with the inconsistent application of social and labour plans. While these plans are mandated by law, their implementation and monitoring often fall short, leading to unfulfilled commitments to local communities and workers.

8. *Tanzania*. Regulations mandate an assessment of project alternatives, including a no-project scenario, to enhance decision making on project design and implementation. However, these regulations do not adequately address the community's limited understanding of potential impacts, which weakens social safeguards. Additionally, the depth of analysis of alternatives remains unregulated and is often left to the discretion of the project owner. Involving sector experts in the approval process could enhance oversight and safeguard effectiveness.

5.1.5. **Revenue management**

Common gaps

A consistent challenge across the examined countries is the limited transparency in the allocation and expenditure of mining revenues. This lack of transparency often leads to public mistrust and allegations of mismanagement. Additionally, there is a widespread weakness in mechanisms for ensuring the equitable distribution of mining benefits to local communities, often resulting in a disconnect between national wealth generation and local development.

A consistent challenge across the examined countries is the limited transparency in the allocation and expenditure of mining revenues.

The following country-specific issues were identified:

1. *Botswana*. While Botswana has a well-structured revenue management framework in place, the non-disclosure of mining agreements and contracts raises concerns about transparency and accountability.

2. *The Democratic Republic of the Congo*. The country lacks clear allocation guidelines for directing mining revenues towards sustainable development objectives. This absence of a structured approach to revenue distribution often results in ad hoc spending decisions that may not align with long-term development goals.

3. *Egypt*. The country faces challenges related to limited public reporting on revenue allocation and expenditure. This lack of transparency makes it difficult for civil society and the public to hold the government accountable for the use of mining revenues.

4. *Nigeria*. A significant issue in Nigeria is the substantial revenue leakage through illegal mining and mineral smuggling. The country's porous borders and weak enforcement mechanisms contribute to this problem, resulting in significant losses of potential state revenue.

5. *Senegal*. There are struggles with challenges in tracking and confirming actual transfers and expenditures at the local level. This difficulty in monitoring creates opportunities for mismanagement and corruption in the distribution of mining benefits to affected communities.

6. *Sierra Leone*. A key issue is the weak local oversight mechanisms for revenue management. While there are provisions for community development funds, the lack of robust local monitoring systems makes it challenging to ensure that these funds are used effectively and as intended.

7. *South Africa*. Only a small number of international transparency initiatives were adopted such as the EITI. This reluctance to fully embrace global standards for revenue transparency hinders comprehensive scrutiny of the country's mining revenue management.

8. *Tanzania*. Mining companies in Tanzania express frustrations over delayed value-added tax refunds and frequent tax rate changes. These issues create uncertainty in the fiscal environment and can discourage investment in the sector.

Across the examined countries, there is a prevalent weakness in the enforcement of existing anti-corruption laws.

5.1.6. **Anti-corruption measures**

Common gaps

Across the examined countries, there is a prevalent weakness in the enforcement of existing anti-corruption laws. This enforcement gap often stems from a lack of political will, insufficient resources or compromised institutions. Additionally, many countries have limited mechanisms for effectively monitoring conflicts of interest and illicit financial flows in the mining sector, creating opportunities for corruption and financial misconduct.

The following country-specific issues were identified:

1. *Botswana*. The country lacks specific anti-corruption laws and combined with jurisdictional constraints on the Directorate on Corruption and Economic Crime, it limits the effectiveness of anti-corruption efforts in the mining sector.

2. *The Democratic Republic of the Congo*. A significant gap in the Democratic Republic of the Congo is the lack of independent anti-corruption bodies with investigative authority specifically focused on the mining sector. This absence of specialized oversight leaves the industry vulnerable to corrupt practices at various levels.

3. *Egypt*. The country lacks a comprehensive anti-corruption law and adequate whistleblower protection mechanisms. These gaps in the legal framework discourage the reporting of corrupt practices and limit the effectiveness of anti-corruption efforts in the mining sector.

4. *Nigeria*. A key issue is the involvement of politically exposed persons in illegal mining activities. The influence of these individuals often undermines enforcement efforts and perpetuates a culture of impunity in the sector.

5. *Senegal*. The country faces challenges in monitoring conflicts of interest, particularly in its emerging oil and gas sector. The lack of robust mechanisms to identify and manage potential conflicts of interest among government officials and industry actors creates vulnerabilities in the governance of extractive resources.

6. *South Africa*. The requirements for disclosing beneficial ownership in the mining sector are enforced inconsistently, which creates opportunities for hidden ownership structures that can facilitate corruption and tax evasion.

7. *Tanzania*. Challenges are faced in enforcing the requirements for disclosing beneficial ownership and the regulations on transfer pricing regulations. These difficulties hinder efforts to combat illicit financial flows and to ensure that the country receives fair value for its mineral resources.

5.1.7. **Artisanal and small-scale mining**

Common gaps

A universal challenge across the examined countries is the inadequacy of legal frameworks for formalizing and supporting artisanal and small-scale mining operations. This gap often results in artisanal and small-scale mining activities operating in legal grey areas, leading to environmental degradation, unsafe working conditions and lost revenue for the state. Additionally, there is a widespread lack of technical and financial support for artisanal and small-scale mining operators, hindering their ability to operate safely and efficiently.

A universal challenge across the examined countries is the inadequacy of legal frameworks for formalizing and supporting artisanal and small-scale mining operations.

The following country-specific issues were identified:

1. *Botswana*. There is no specific legislative framework in place for artisanal and small-scale mining, although the Mines and Minerals Act provides for the issuance of minerals permits with strict guidelines that limit the operational scope and investment.

2. *The Democratic Republic of the Congo*. The country lacks regulations for accessing financial services that are specific to artisanal and small-scale mining. This gap makes it difficult for artisanal miners to secure funding for improving their operations or transitioning to more formal mining practices.

3. *Egypt*. Egypt's legal framework recognizes and supports artisanal and small-scale mining activities to only a limited extent. This lack of acknowledgment leaves a significant portion of the mining sector unregulated and unsupported, potentially leading to environmental and social issues.

4. *Nigeria.* A key issue is the lack of distinction between artisanal and small-scale mining in legislation. This one-size-fits-all approach fails to address the specific needs and challenges of different scales of mining operations.

5. *Senegal*. Senegal faces challenges in effectively enforcing regulations in designated artisanal and small-scale mining zones. This enforcement gap leads to persistent issues with illegal mining and associated environmental and social problems.

6. *Sierra Leone*. While recent improvements have been made in regulations on artisanal and small-scale mining, significant implementation gaps remain. The challenge lies in translating policy improvements into effective on-the-ground practices.

7. *South Africa*. A notable issue is the lack of comprehensive data on the artisanal and small-scale mining sector's size and impacts. This information gap hinders effective policymaking and targeted support for the sector.

8. *Tanzania*. Tanzania's legal framework does not distinguish between artisanal and advanced small-scale mining operations. This lack of differentiation allows some medium-scale operations to exploit less restrictive small-scale mining licences, potentially circumventing more stringent regulations.

While the examined African countries face many common challenges in their mining legislation, each also grapples with unique issues shaped by its specific political, economic and social context.

This comparative analysis reveals that, while the examined African countries face many common challenges in their mining legislation, each also grapples with unique issues shaped by its specific political, economic and social context. Addressing these legislative gaps will require tailored approaches that consider each country's particular circumstances while also learning from international best practices. Key areas for improvement across the board include strengthening enforcement mechanisms, enhancing transparency in revenue management, improving environmental and social safeguards and developing more comprehensive frameworks for artisanal and small-scale mining. Progress in these areas could make a significant contribution to more sustainable and equitable mining sectors in these nations.

5.2. ADOPTION AND DOMESTICATION OF REGIONAL AND CONTINENTAL FRAMEWORKS

This section provides a comparative analysis of how the eight African countries studied are adopting and domesticating regional and continental frameworks into their mining sectors.

5.2.1. Alignment with the African Mining Vision

1. *Botswana*. Botswana's approach to aligning with the AMV is characterized by its stable regulatory environment and comprehensive frameworks developed over decades, particularly in diamond mining. While the country has not formally adopted the AMV, its policies reflect many of its principles, including transparency, community benefit and investment in human capital. The government's focus on maintaining an internationally competitive fiscal regime and incorporating community development into

mining operations shows alignment with AMV objectives. Additionally, Botswana's recent 2022 Minerals Policy emphasizes the sustainable use of mineral resources for national development, echoing the AMV's goals.

2. *The Democratic Republic of the Congo.* The 2018 revision of the Mining Code aligns with some AMV principles, introducing provisions for local content, value addition and community development. However, the Democratic Republic of the Congo lacks a comprehensive national mining strategy articulating how mineral resources can be leveraged for long-term sustainable development.

3. *Egypt*. Egypt shows strong alignment with the AMV's goals through its Mining Sector Modernization Programme. This initiative emphasizes transparency, investment attraction and equitable revenue distribution. Recent amendments to the 2019 Mining Law reflect AMV principles in areas such as transparency and simplified licensing processes.

4. *Nigeria.* Nigeria lags behind in fully reflecting AMV principles, lacking a specific country vision to incorporate AMV guidelines. Despite commitments to international standards, Nigeria's national policies and legal frameworks fall short of fully reflecting the AMV's principles, highlighting a significant gap in implementation.

5. *Senegal*. While not explicitly referencing the AMV, Senegal's mining policies strongly align with its principles. The Plan for an Emerging Senegal prioritizes using mineral resources for economic growth and socio-economic development. Key initiatives include the Falémé Integrated Iron Project for mineral-based industrialization and infrastructure investments in mining regions to build economic linkages.

6. *Sierra Leone*. The country has made significant strides in adopting AMV principles, particularly in transparency, accountability and community engagement. The 2022 Mines and Minerals Development strengthens governance through updated provisions for licensing, environmental management and community development. Sierra Leone's participation in EITI further demonstrates its commitment to the AMV's objectives.

7. *South Africa*. Despite predating the AMV, some elements of the AMV are reflected in South Africa's MPRDA and Mining Charter. However, a formal process for AMV domestication has not been undertaken. South Africa shows strengths in areas such as its legal frameworks for contracts and licensing but is lacking in others, such as adopting the EITI and implementing competitive bidding for state-assessed land.

8. *Tanzania*. Tanzania has addressed most AMV requirements through amendments to its Mining Act, showing mixed but generally positive progress across the nine AMV clusters. It is notably strong in transparency and accountability through EITI membership and in geological data management. However, challenges remain in research and development, environmental management for artisanal and small-scale mining and infrastructure development in mining areas.

5.2.2. Regional framework integration

1. *Botswana*. As a member of the SADC, Botswana has made efforts to align its mining policies with regional frameworks, particularly in fostering transparency and sustainable practices. The country's robust legal and regulatory environment facilitates compliance with SADC mining protocols, although challenges in integrating local communities and addressing environmental concerns remain. Botswana's participation in initiatives such as the EITI further reflects its commitment to regional integration and best practices.

2. *The Democratic Republic of the Congo*. The country is involved in multiple regional bodies (SADC, ECCAS, COMESA, ICGLR) but faces challenges in fully aligning with and enforcing regional objectives. The Democratic Republic of the Congo's national mining policies exhibit partial alignment with these regional frameworks, but significant gaps remain in enforcement, community engagement and environmental protection.

3. *Egypt*. Egypt actively participates in COMESA initiatives, harmonizing mining regulations with regional standards and investing in cross-border infrastructure projects. Egypt's mining policies align well with regional frameworks, particularly in areas of sustainability, labour rights and infrastructure development.

4. *Nigeria*. Nigeria struggles to fully incorporate elements of the ECOWAS Directive, particularly in areas such as gender mainstreaming. While the AMV, ECOWAS Directive and EITI Principles collectively govern mining in ECOWAS countries, Nigeria faces challenges in fully implementing crucial elements.

5. *Senegal*. Senegal actively participates in ECOWAS and the UEMOA, aligning its mining policies with regional frameworks on transparency, environmental protection and fiscal harmonization. Senegal's Mining Code aligns well with the ECOWAS Mining Directive (2009) and UEMOA policies on fiscal harmonization and environmental standards.

6. *Sierra Leone*. Sierra Leone has made progress in implementing ECOWAS protocols, particularly in harmonizing tariffs and streamlining customs procedures. The country's Medium-Term National Development Plan (2024–2030) aligns with the AU's Agenda 2063, promoting infrastructure, human capital development and sustainable growth.

7. *South Africa.* As an SADC member, South Africa is party to the SADC Regional Mining Vision but faces gaps in implementation, especially in regional cooperation and economic linkages. South Africa lacks deeper integration between the mining and manufacturing sectors and does not have a comprehensive strategy for local or regional content in procurement.

8. *Tanzania*. Tanzania has implemented the SADC Mining Protocol to only a limited degree and has not ratified the EAC Protocol on Environment and Natural Resources Management. However, Tanzania is a member of the EITI, demonstrating its commitment to regional transparency standards.

While all eight countries show varying degrees of alignment with regional and continental frameworks, significant disparities exist in the level of adoption and implementation. Egypt, Senegal and Sierra Leone demonstrate stronger alignment and implementation efforts, while the Democratic Republic of the Congo and Nigeria face more substantial challenges. Botswana, South Africa and Tanzania occupy a middle ground, with robust foundations but notable gaps in certain areas of alignment and implementation. Addressing these disparities will be crucial for achieving the goals set out in the AMV and regional mining frameworks.

5.3. TRANSPARENCY AND ACCOUNTABILITY: BEST PRACTICES AND CHALLENGES

This section offers a comparative analysis of the best practices and challenges related to transparency and accountability in the mining sector in Botswana, the Democratic Republic of the Congo, Egypt, Nigeria, Senegal, Sierra Leone, South Africa and Tanzania. It examines key areas such as legal and regulatory frameworks, transparency initiatives, licensing systems, anti-corruption measures, stakeholder engagement and information accessibility. Table 5.1 highlights how countries have implemented mechanisms to improve governance, such as EITI compliance, modernized licensing systems and anti-corruption frameworks. However, challenges such as inconsistent implementation, political interference and limited community involvement persist. This analysis identifies both successful practices and areas for reform to enhance transparency and accountability in natural resource governance.

The analysis highlights both best practices and persistent challenges in governance within these nations, offering insights into areas for improvement and knowledge-sharing opportunities.

5.3.1. Legal and regulatory frameworks

Among the countries examined, Senegal and Tanzania stand out for their comprehensive and up-to-date legal frameworks. Senegal's 2016 Mining Code and 2021 procedures manual form a solid governance foundation that aligns with international standards. Likewise, Tanzania's 2010 Mining Act and 2017 reforms have created a strong legal basis for mining operations, ensuring that sector activities are well regulated.

Among the countries examined, Senegal and Tanzania stand out for their comprehensive and up-to-date legal frameworks.

In contrast, the Democratic Republic of the Congo and Egypt struggle with effective implementation. While the Democratic Republic of the Congo has a Mining Code and mining cadastre, political interference hampers licensing processes, and Egypt's recent reforms have not yet translated into consistently

Table 5.1. **Emerging best practices and challenges in transparency and accountability**

Legal and regulatory frameworks

Country	Best practices	Challenges
Senegal	The 2016 Mining Code and 2021 procedures manual provide a robust governance structure.	There are ongoing issues with effective implementation and transparency in some licensing processes.
Tanzania	The 2010 Mining Act with 2017 reforms provide a strong legal framework for mining operations.	Implementation of some reforms remains inconsistent.
Democratic Republic of the Congo	The Mining Code and mining cadastre provide a basic structure.	High levels of political influence undermine licensing effectiveness.
Egypt	Recent reforms were carried out to simplify legal processes for mining operations.	Licensing criteria are applied inconsistently.
South Africa	The MPRDA provides a comprehensive legal structure.	Systemic challenges within the Department of Mineral Resources and Energy hinder transparency.
Sierra Leone	The 2023 Mines and Minerals Development Act strengthens the legal framework.	Transparency in process execution could be enhanced.
Nigeria	The 2007 Nigerian Mining Act provides the legal basis, with ongoing policy reviews to improve governance.	Enforcement of mining regulations and the impact of illegal mining remain challenges.
Botswana	A regulatory environment is in place through the Mines and Minerals Act, emphasizing transparency and community engagement; investor confidence is maintained through a consistent legal framework.	Gaps in the clarity of licensing procedures and community consultation processes remain.

Transparency initiatives

Country	Best practices	Challenges
Senegal	In compliance with the EITI, mining agreements are disclosed, and beneficial ownership requirements are in place.	There are challenges with full transparency in rural areas.
Tanzania	The Tanzania Extractive Industries Transparency Initiative operates through a multi-stakeholder working group, with 14 reports published to date.	The effectiveness of transparency at all levels of the mining sector requires further evaluation.
Democratic Republic of the Congo	EITI-compliant, but transparency in the negotiation and execution of mining contracts remains a challenge.	There are high levels of corruption as well as a lack of transparency in mining contracts.
Sierra Leone	EITI compliance is being leveraged for enhanced public disclosure of mining agreements and licence holders.	There are issues with full public access to all relevant data.

Table 5.1. **Emerging best practices and challenges in transparency and accountability (cont.)**

Country	Best practices	Challenges
South Africa	South Africa is not an EITI member but ensures transparency through the South African Code for the Reporting of Exploration Results, Mineral Resources, and Mineral Reserves (SAMREC Code) for mineral reporting.	Licensing process transparency remains a significant challenge.
Egypt	Efforts have been made to ensure transparency, though they are not EITI-compliant.	Efforts to implement transparency and anti-corruption measures remain inconsistent.
Nigeria	EITI-compliant through the Nigeria Extractive Industries Transparency Initiative (NEITI), Nigeria publishes comprehensive annual reports on revenue and royalties.	The enforcement of transparency initiatives at local government levels is inconsistent.
Botswana	There is a strong emphasis on transparency through regulatory frameworks and stakeholder engagement; public financial data is disclosed, and revenues are audited.	There is a lack of public access to detailed information on mining agreements and inconsistent community engagement.

Licensing systems

Country	Best practices	Challenges
Senegal	A mining cadastre is being developed; clear licensing criteria were outlined in the 2021 procedures manual.	The development of an open data system for licensing is ongoing.
Tanzania	The cadastral system is managed by the Mining Commission; applications are processed efficiently.	Data on the artisanal and small-scale mining sector has not been integrated into the licensing system.
Democratic Republic of the Congo	A mining cadastre exists but is largely ineffective; manual submissions are still used in practice.	Licensing processes are highly inefficient and provide opportunities for corruption.
Sierra Leone	The Mining Cadastre Administration System (MCAS) offers accessible data on issued licenses.	The MCAS has been harmonized with other governance frameworks to only a limited degree.
South Africa	The South African Mineral Resources Administration System faces severe backlogs in application processing. A new system is under development for 2025.	There are systemic issues with backlogs and inefficiencies in the current system.
Egypt	Competitive tenders for exploration licences have been introduced.	Accessibility and transparency in licensing processes still need improvement.
Nigeria	An electronic mining cadastre is being introduced.	Illegal mining activities present a major challenge to the formal system.

Table 5.1. **Emerging best practices and challenges in transparency and accountability (cont.)**

Country	Best practices	Challenges
Botswana	There is an online cadastre portal for real-time licensing information, ensuring transparency in processing licence applications	Gaps in terms of the clarity of licensing procedures and the effectiveness of community consultation remain.

Anti-corruption measures

Country	Best practices	Challenges
Senegal	There is a strong focus on the transparency of financial transactions, the disclosure of beneficial ownership and permit withdrawal provisions for fraud.	Enforcement of anti-corruption measures remains a challenge in some areas.
Tanzania	EITI and local content regulations promote transparency, and the multi-stakeholder working group ensures oversight.	The effectiveness of anti-corruption measures in the sector is still under evaluation.
Democratic Republic of the Congo	Comprehensive anti-corruption policies for the mining sector are lacking, and there are high levels of political influence.	There is persistent political interference and a lack of strong anti-corruption measures in the mining sector.
Sierra Leone	The Anti-Corruption Commission monitors licensing and digitalization effort to reduce corruption.	The minister of mines retains substantial discretionary power, weakening enforcement.
South Africa	Corruption Watch identified significant corruption risks in the application process.	There are high levels of corruption within the Department of Mineral Resources and Energy.
Egypt	Competitive tenders and regulatory bodies aim to address corruption.	The enforcement of anti-corruption policies is inconsistent.
Nigeria	The NEITI promotes transparency, with some success in reducing corruption.	The enforcement of anti-corruption measures is inconsistent, especially at the local level.
Botswana	The Directorate on Corruption and Economic Crime was established to investigate corruption; stakeholder engagement was increased in oversight processes.	Jurisdictional constraints limit the effectiveness of anti-corruption measures.

Stakeholder engagement

Country	Best practices	Challenges
Senegal	There are formal processes for community consultation, and social and labour plans are required.	There have been reports of inadequate community engagement in some rural areas.
Tanzania	The 2018 Mining (Local Content) Regulations require local content.	There are challenges in ensuring meaningful participation in some localities.

Table 5.1. **Emerging best practices and challenges in transparency and accountability (cont.)**

Country	Best practices	Challenges
Democratic Republic of the Congo	Legal requirements for stakeholder engagement are in place, but community involvement remains limited.	Stakeholder engagement is limited due to political dynamics and restricted access to information.
Sierra Leone	Community development agreements and public consultations are required in the environmental impact assessment process.	Ensuring meaningful participation and addressing community concerns remain challenges.
South Africa	Mechanisms for stakeholder engagement are in place, and social and labour plans are required for mining rights.	Significant issues with effective community engagement and benefit sharing persist.
Egypt	There is an emphasis on free, prior and informed consent, but the application is inconsistent.	There is a lack of robust channels for stakeholders to voice concerns.
Nigeria	Community development agreements are required, with some success in community involvement.	Participation is limited in the broader mining governance framework.
Botswana	Formal stakeholder consultation processes are conducted through the Ministry of Mineral Resources, Green Technology and Energy; ongoing efforts are being made to enhance community engagement in licensing processes.	There are gaps in community consultation and participation, particularly among marginalized groups.

Information systems and data accessibility

Country	Best practices	Challenges
Senegal	Partnerships are in place with international bodies to improve data accuracy and public access to mining data.	Development is ongoing, with incomplete public access to all relevant information.
Tanzania	The cadastral system contributes to formalizing the artisanal and small-scale mining sector.	The sector relies on international reporting standards rather than country-specific data standards.
Democratic Republic of the Congo	There are significant challenges with information system development; only 29 per cent of mineral resources are known.	Geological and mineral information systems are severely underdeveloped.
Sierra Leone	A countrywide airborne geophysical survey was completed in 2021.	Data harmonization remains a challenge, with inconsistencies across sources.
South Africa	Advanced systems are in place through the Council for Geoscience, and efforts are under way to centralize geological data.	There are challenges when it comes to effectively disseminating geoscience information to all stakeholders.
Egypt	Efforts are ongoing to digitize geological records and introduce a centralized database.	The accuracy and comprehensiveness of data remain limited.

Table 5.1. **Emerging best practices and challenges in transparency and accountability (cont.)**

Country	Best practices	Challenges
Nigeria	Work is ongoing to establish a comprehensive geological database, supported by the NEITI.	Discrepancies in data reporting and accessibility remain challenges in some regions.
Botswana	The Botswana Geoscience Institute is developing online data portals to provide improved access to geoscientific information.	There is limited public awareness of and accessibility to geological data and information.

Source: Authors compilation.

applied standards. Sierra Leone and South Africa and have shown intermediate progress: while South Africa's MPRDA provides a solid legal structure, the Department of Mineral Resources and Energy faces systemic challenges. Similarly, Botswana exhibits a robust legal framework through its Mines and Minerals Act, which has been stable for over 50 years, but challenges remain, including gaps in licensing clarity and community consultation. Sierra Leone's 2023 Mines and Minerals Development Act has strengthened the country's governance framework, but transparency in execution remains a concern.

5.3.2. Transparency initiatives

EITI compliance plays a pivotal role in enhancing transparency across several of the countries studied. The Tanzania Extractive Industries Transparency Initiative is particularly notable for its structured approach and consistent publication of reports. Senegal has also made strides in transparency, particularly in disclosing mining agreements and introducing beneficial ownership requirements.

However, Botswana, Egypt and South Africa are not EITI members, which limits their formalized approaches to transparency. In South Africa, transparency is managed through the SAMREC Code, but the licensing process remains opaque. Botswana's emphasis on transparency is evident in its detailed public financial disclosures, though it still grapples with the lack of public access to detailed mining agreements, which complicates accountability. The Democratic Republic of the Congo faces major challenges despite its membership of the EITI, as corruption and non-transparent negotiations continue to hinder governance.

Licensing systems in Botswana, Sierra Leone and Tanzania represent best practices for efficient and transparent governance.

5.3.3. Licensing systems

Licensing systems in Botswana, Sierra Leone and Tanzania represent best practices for efficient and transparent governance. Sierra Leone's Mining Cadastre Administration System and Tanzania's Mining Commission Cadastral System provide public access to licensing data and streamline application processes, reducing opportunities for corruption. Senegal is working towards a similar goal with its evolving mining cadastre and clear licensing criteria.

On the other hand, the Democratic Republic of the Congo and South Africa face significant challenges with their licensing systems. The Democratic Republic of the Congo's Mining Code and mining cadastre remain ineffective, with manual submissions persisting and facilitating corruption, while South Africa's Mineral Resources Administration System is dysfunctional, leading to long application backlogs. Egypt has shown moderate progress, having introduced competitive tenders for exploration licences, though issues with transparency remain.

5.3.4. **Anti-corruption measures**

In terms of anti-corruption efforts, Senegal leads with stringent measures, including permit withdrawal provisions for fraudulent activities and transparency in financial transactions. Similarly, Sierra Leone has leveraged digitalization and public disclosure to reduce corruption risks, with its Anti-Corruption Commission actively monitoring the sector.

Botswana established its Directorate on Corruption and Economic Crime to address corruption within public bodies; however, jurisdictional constraints limit its ability to investigate private entities, including those making significant contributions to the economy.

Despite these advances, corruption remains a major challenge in the Democratic Republic of the Congo and South Africa. The Democratic Republic of the Congo lacks comprehensive anti-corruption policies and remains plagued by political interference, while a Corruption Watch report identified severe risks within South Africa's licensing process.

5.3.5. **Stakeholder engagement**

Senegal and Tanzania have emerged as leaders in stakeholder engagement, with both countries integrating corporate social responsibility and local content requirements into their mining legislation. South Africa also emphasizes stakeholder engagement through the MPRDA, requiring mining companies to consult with local communities, though the effectiveness of these consultations is often criticized. Senegal's formal processes for community consultation and social and labour plans ensure structured stakeholder participation. In contrast, the Democratic Republic of the Congo and Egypt lag in this area. The Democratic Republic of the Congo's legal requirements for stakeholder engagement are poorly implemented, and community involvement remains minimal. Egypt's efforts, including free, prior and informed consent, are inconsistently applied, leaving stakeholders with limited avenues to voice their concerns.

5.3.6. **Information systems and data accessibility**

South Africa's Council for Geoscience exemplifies a best practice in geological data management, offering an advanced system for mapping and data centralization. Tanzania has also made progress in formalizing the artisanal and small-scale mining sector through its cadastral system, though it lacks country-specific data standards.

Botswana has made strides in geological data management through the Botswana Geoscience Institute, which provides access to geoscientific data. However, challenges in public awareness of and accessibility to this information remain.

While significant progress has been made in legal frameworks and transparency initiatives, challenges persist in implementation, anti-corruption efforts, stakeholder engagement and data accessibility.

Senegal and Sierra Leone have partnered with international organizations to improve data accessibility, with Senegal working on a comprehensive open data mining cadastre. In contrast, the Democratic Republic of the Congo faces severe challenges, with only 29 per cent of its mineral resources known, highlighting the urgent need for data modernization.

This comparative analysis reveals that, while significant progress has been made in legal frameworks and transparency initiatives, challenges persist in implementation, anti-corruption efforts, stakeholder engagement and data accessibility. Senegal and Tanzania demonstrate best practices that could serve as models for their regional counterparts, while the modernization of Sierra Leone's licensing system offers valuable lessons. However, substantial reforms are still needed in the Democratic Republic of the Congo, Egypt and South Africa to address systemic inefficiencies and improve overall governance (Box 5.1).

5.4. MINERAL RESOURCE GOVERNANCE: BEST PRACTICES AND CHALLENGES

This section provides an overview of key practices and challenges in resource governance, focusing on revenue maximization, revenue management and equitable use across the countries studied. Table 5.2 provides a comparative overview of these best practices and challenges across key areas of resource governance—revenue maximization, revenue management, equitable use and community development—offering a country-by-country breakdown that highlights both successes and persistent challenges in each of the eight countries.

The analysis identifies best practices that can serve as models for resource-rich nations while also highlighting persistent challenges in achieving transparency, accountability and equitable distribution of mining revenues.

5.4.1. Revenue maximization

Among the countries examined, Botswana has established a robust fiscal regime that effectively captures significant revenue from its mineral wealth, particularly diamonds, through a combination of taxes, royalties and dividends, positioning it as a leader in resource governance. Egypt and Senegal stand out for their balanced approaches to revenue maximization. Egypt's model minerals exploitation agreement harmonizes terms for international investments while ensuring that the state captures a fair share of mining profits, helping boost the sector's GDP contribution. Similarly, Senegal's tax incentives—such as tax holidays and equipment import exemptions—have

Box 5.1. **Best practices in transparency and accountability the mining sector across Africa**

The comparative analysis of mining sector governance in Botswana, the Democratic Republic of the Congo, Egypt, Nigeria, Senegal, Sierra Leone, South Africa and Tanzania highlights several noteworthy best practices. While these practices are not uniformly implemented across all countries, they represent significant strides towards improving transparency and accountability in the African mining sector.

1. Comprehensive and updated legal frameworks

Senegal and Tanzania have demonstrated the importance of maintaining up-to-date legal frameworks that are aligned with international standards and tailored to local needs. Key aspects of their success include:

- regular revisions of mining laws to incorporate evolving global standards;
- detailed procedural manuals that support the practical implementation of regulations; and
- the integration of transparency and accountability measures within the legal frameworks.

Best practice: Regularly reviewing and updating mining legislation to ensure that it is responsive to new developments in the industry and to address local governance challenges.

2. Structured transparency initiatives

The Tanzania Extractive Industries Transparency Initiative represents a model for structured transparency initiatives. By establishing a dedicated multi-stakeholder working group, consistently publishing reports and integrating EITI principles into national law, Tanzania demonstrates how to foster robust transparency in the mining sector. Senegal's disclosure of mining agreements and beneficial ownership requirements is another notable practice.

Best practice: Establishing structured, multi-stakeholder approaches to transparency, underpinned by regular public reporting and strong legal integration of international initiatives like the EITI.

3. Advanced licensing systems

Sierra Leone's MCAS and Tanzania's cadastral system provide efficient, transparent platforms for managing mining licences, ensuring public access to licensing data and supporting quick and fair application processing. These systems help prevent disputes and corruption in the licensing process.

Best practice: Implementing digitalized, publicly accessible licensing systems that ensure efficiency and transparency and minimize opportunities for fraud.

4. Stakeholder engagement and corporate social responsibility

Senegal's and Tanzania's approaches to stakeholder engagement stand out. Senegal's social and labour plans and formal community consultation processes ensure that communities benefit directly from mining activities. Similarly, Tanzania's legal integration of corporate social responsibility and local content requirements ensures that mining companies contribute to local economies.

Best practice: Legislating stakeholder engagement and corporate social responsibility requirements, with diverse and structured feedback mechanisms that facilitate meaningful community participation.

Box 5.1. **Best practices in transparency and accountability the mining sector across Africa (cont.)**

5. Beneficial ownership disclosure

Senegal's focus on beneficial ownership disclosure aligns with global anti-corruption measures. This practice improves transparency by requiring mining companies to disclose significant interests held by individuals, ensuring accountability in company ownership structures.

Best practice: Implementing and enforcing beneficial ownership disclosure requirements as part of a broader effort to increase transparency and combat corruption in the mining sector.

6. Geological data management and accessibility

South Africa's Council for Geoscience takes a comprehensive approach to geological data management. The Integrated and Multidisciplinary Geoscience Mapping Programme enables efficient geological mapping and data dissemination, facilitating both government oversight and investor decision making.

Best practice: Establishing dedicated institutions for the management and dissemination of geological data, with a focus on comprehensive mapping, digitization and accessibility for all stakeholders.

7. Local content and skills development

Tanzania's local content regulations require mining companies to contribute to skills development, technology transfer and the procurement of goods and services from local suppliers. This approach not only promotes economic development but also ensures that mining benefits are shared within local communities.

Best practice: Requiring local content and skills development plans as part of mining licences to ensure technology transfer, employment and broader economic benefits for the host country.

8. Environmental and social impact assessments

Senegal and Sierra Leone have implemented strong requirements for environmental and social impact assessments as part of their licensing processes. These assessments involve public consultations and are integrated into mining decisions, ensuring that environmental and social considerations are prioritized.

Best practice: making environmental and social impact assessments a mandatory part of the mining approval process, with meaningful public participation and the integration of findings into final decisions on mining operations.

successfully attracted investment. However, both countries face challenges in maintaining these incentives without compromising long-term revenue maximization.

In contrast, the Democratic Republic of the Congo and South Africa struggle to maximize revenues due to external challenges. While the Democratic Republic of the Congo's 2018 Mining Code aimed to raise government revenue through increased tax rates and a tax on so-called super profits, these measures have discouraged new investments. Similarly, South Africa's Mineral and Petroleum Resources Royalty Act ensures a fair return for the government, but illegal mining and illicit financial flows continue to undermine revenue generation efforts.

Table 5.2. **Emerging best practices and challenges in mineral resource governance**

Revenue maximization

Country	Best practices	Challenges
Democratic Republic of the Congo	The 2018 Mining Code raised tax rates, introduced a tax on so-called super profits and increased the state's stake in projects.	High tax rates have deterred new investments since the revised code's implementation.
Egypt	The model minerals exploitation agreement harmonizes terms for international investment and increases the mining sector's GDP contribution.	Limited enforcement and varying investment climates create inconsistent returns.
Senegal	Incentives such as tax holidays, exemptions on equipment imports and stability agreements attract investment.	There is a need to ensure that tax incentives do not compromise long-term revenue maximization.
Sierra Leone	A graduated royalty system is in place for different minerals, complemented by corporate income tax and levies.	The complex and burdensome fiscal system may deter investment.
South Africa	The Mineral and Petroleum Resources Royalty Act ensures government revenue, and the Mining Charter promotes transformation and community welfare.	Illegal mining and illicit financial flows undermine revenue maximization.
Tanzania	The acquisition of mineral rights and formalization of artisanal and small-scale mining have been simplified. District-level markets have boosted revenue collection.	The informal sector is still under-regulated, leaving room for revenue loss.
Nigeria	A tiered tax and royalty system with transfer pricing regulations ensures accurate taxation.	Illegal mining and limited enforcement of regulations cause revenue losses.
Botswana	Robust fiscal regulations capture significant revenue from mineral wealth, especially diamonds, through taxes, royalties and dividends.	There are concerns over transparency in some mining agreements and potential information asymmetry.

Revenue management

Country	Best practices	Challenges
Democratic Republic of the Congo	EITI-compliant mechanisms are in place for distributing mining royalties among different levels of government.	Anti-corruption measures are weak, and there is a lack of clarity in accountability frameworks.
Egypt	Public disclosure of contracts and regular audits have improved transparency.	Not EITI-compliant, and efforts aimed at transparency are inconsistent.
Senegal	The Mining Cadastre System ensures transparent licensing, and the National Fund for Local Development manages revenue.	There are some challenges with ensuring full transparency at local levels.
Sierra Leone	The MCAS provides accessible data on licenses, improving efficiency.	Further development is needed to align with broader governance frameworks.

Table 5.2. **Emerging best practices and challenges in mineral resource governance (cont.)**

Country	Best practices	Challenges
South Africa	Tax collection is being improved through the South African Revenue Service and the SAMREC Code for reporting reserves.	There are ongoing challenges with corruption in revenue management, which is still not EITI-compliant.
Tanzania	Revenue management is EITI-compliant and requires a parliamentary review of all resource contracts for transparency and legislative oversight.	Full enforcement of transparency initiatives remains challenging.
Nigeria	The NEITI oversees transparency and publishes detailed annual reports on revenues, royalties and taxes.	Enforcement of anti-corruption measures is weak, especially in rural areas.
Botswana	The Minerals Policy Committee oversees mining agreements, with independent audits and public reporting enhancing accountability.	The limited transparency in some mining agreements remains a concern.

Equitable use

Country	Best practices	Challenges
Democratic Republic of the Congo	Revenue is distributed across national, provincial and local governments, including a fund for future generations.	Ensuring that funds reach and benefit local communities remains a major challenge.
Senegal	Local governments receive a portion of mining revenue to fund development projects under the Decentralization Act.	Persistent challenges remain when it comes to balancing national and local development priorities.
Sierra Leone	A detailed distribution system is in place for surface rent—50 per cent to landowners and 50 per cent to local authorities and funds.	The use and management of allocated funds is ineffective, particularly at local levels.
South Africa	Mining revenues are distributed across government levels, ensuring that mining communities benefit.	There are challenges when it comes to providing adequate infrastructure and services in mining-affected communities.
Tanzania	Mining revenues are collected centrally and redistributed according to national development priorities.	Issues remain with ensuring direct benefits to local communities in mining regions.
Nigeria	The Federation Account Allocation Committee distributes mining revenues across federal, state and local governments to ensure equitable sharing.	Local governments have limited capacity to effectively manage and utilize mining revenues.
Botswana	Portions of mining royalties are allocated to land boards for local community benefits; revenues are invested in infrastructure, education and healthcare.	Ensuring the effective use of resource revenues at local levels is a continuous challenge.

Table 5.2. **Emerging best practices and challenges in mineral resource governance (cont.)**

Community development

Country	Best practices	Challenges
Senegal	Social and labour plans are mandated to outline mining companies' commitments to local communities.	There are some concerns about the effectiveness of community development plans.
Sierra Leone	Community development agreements are required between mining companies and host communities.	Monitoring of the implementation of community development agreements and community projects is weak.
South Africa	Social and labour plans are required as part of mining rights applications to ensure that benefits are shared with communities.	Implementation gaps remain, and stakeholder engagement in benefit-sharing processes is insufficient.
Nigeria	Community development agreements are required; the use of a sovereign wealth fund ensures long-term benefits from resource revenues.	There is little capacity for and transparency in the management of community development funds.
Tanzania	Mining companies are required to develop corporate social responsibility plans in collaboration with local authorities.	Community development initiatives often lack proper monitoring and evaluation, reducing their effectiveness.
Botswana	While Botswana's legislation provides for procedural consultations with affected communities, it prioritizes state projects over landholder rights.	The absence of robust corporate social responsibility regulations has led to a weakened civil society and limited substantive involvement in decision-making and licensing processes.

Source: Authors compilation.

Sierra Leone and Tanzania have shown intermediate progress. Sierra Leone's graduated royalty system and corporate income tax structure create a comprehensive fiscal framework, although its complexity may deter investors. Tanzania's focus on simplified mineral rights acquisition and the establishment of district-level mineral markets has improved revenue collection, but the informal sector remains under-regulated, leaving room for revenue loss.

5.4.2. **Revenue management**

Transparency in revenue management is crucial for ensuring that resource wealth is effectively translated into development. Nigeria and Tanzania lead the way in this regard. The NEITI provides annual reports detailing revenues, royalties and taxes, fostering a transparent environment in the mining sector. Tanzania's EITI-compliant approach requires parliamentary review of all natural resource contracts, enhancing oversight and accountability.

Senegal and Sierra Leone have also made strides in revenue management. Senegal's Mining Cadastre System supports transparent licensing, complemented by a National Fund for Local Development to manage revenues, while Sierra Leone's Mining Cadastre Administration System has improved licensing efficiency and transparency. However, both countries face challenges in ensuring transparency at local levels, where governance structures are less robust.

The Democratic Republic of the Congo and South Africa continue to face significant challenges despite some positive steps. While the Democratic Republic of the Congo is EITI-compliant and has mechanisms in place to distribute mining royalties across different levels of government, weak anti-corruption measures and unclear accountability frameworks hinder effective revenue management. South Africa, although not an EITI member, has implemented its own transparency measures, but corruption within revenue management processes persists.

5.4.3. **Equitable use**

When it comes to the equitable distribution of mining revenues, Botswana employs mechanisms that allocate a portion of mining royalties to local communities, fostering greater participation in development projects and ensuring that residents directly benefit from resource extraction, although ensuring the effective use of resource revenues at local levels is a continuous challenge. Senegal and Sierra Leone stand out for their detailed approaches. Senegal's Decentralization Act mandates that local governments in mining regions receive a portion of revenues to fund development projects. Sierra Leone's surface rent distribution system ensures that revenues are shared between landowners, local authorities and development funds. However, both countries struggle to ensure the effective use of these funds at the local level, with inadequate infrastructure and social development often limiting impact.

The Democratic Republic of the Congo and South Africa face challenges in ensuring that mining revenues benefit local communities. In the Democratic Republic of the Congo, while a portion of revenues is allocated to provincial and local governments, ensuring that these funds reach communities remains a major hurdle. Similarly, South Africa redistributes mining revenues across government levels, but the provision of services and infrastructure in mining-affected communities is often inadequate.

Nigeria and Tanzania take more centralized approaches, where mining revenues are collected centrally and then redistributed according to national development priorities. While this approach ensures that mining revenues support broader national development, ensuring direct benefits to local communities remains a challenge, particularly in regions directly impacted by mining activities.

Across all countries, notable efforts have been made to improve revenue maximization, management and the equitable use of mineral resources. Egypt and Senegal provide strong examples of balancing investment incentives with revenue generation, while Nigeria and Tanzania demonstrate robust transparency and oversight mechanisms in revenue management. However, persistent challenges remain, particularly in ensuring that mining revenues are equitably shared and effectively used to improve local infrastructure and services. Addressing issues of corruption, enforcing policies and building local capacity will be essential for these countries to fully realize the benefits of their natural resources (Box 5.2).

5.5. LINKAGES, INVESTMENT AND DIVERSIFICATION: BEST PRACTICES AND CHALLENGES

This section provides a comparative overview of the best practices and challenges related to education and skills development, sector linkages and value-added activities across the eight African countries studied. Table 5.3 provides a comparative overview of these best practices and challenges when it comes to linkages, investment and diversification of the natural resources sector in all the case study countries.

Each country has made progress in strengthening linkages, investment and diversification, but they also face unique challenges that affect their ability to fully integrate their mining sectors into broader economic development goals.

5.5.1. Education and skills development

Among the countries examined, Nigeria and South Africa stand out for their comprehensive approaches to education and skills development in the mining sector. Nigeria has made significant strides through international partnerships and its Local Content Development Policy, which incentivizes local education in mining-related fields. The collaboration between the Nigerian Institute of Mining and Geosciences and universities across West Africa has helped to enhance training quality, fostering a skilled workforce in modern mining technologies. Similarly, South Africa's Mining Qualifications Authority, mandated by the South African Qualifications Authority Act and the National Skills Framework, requires that mining companies allocate a portion of their payroll towards employee training, and public–private initiatives such as the Mandela Mining Precinct emphasize STEM education and research in mining technologies.

Among the countries examined, Nigeria and South Africa stand out for their comprehensive approaches to education and skills development in the mining sector.

Botswana's Vision 2036 report envisions a transition to a knowledge-based economy through investments in education, innovation and skills development, aiming to diversify the country's economy beyond diamond mining while promoting local manufacturing and job creation in value-added activities.

In contrast, the Democratic Republic of the Congo and Tanzania face challenges in creating a skilled local workforce despite their rich mineral endowments. The Democratic Republic of the Congo's 2018 Mining Code includes provisions for skills development, but gaps in its implementation and weak policies on vocational training and STEM education have left the

Box 5.2. **Best practices in revenue maximization, management and equitable use**

The analysis of revenue governance across the eight countries studied highlights several best practices that can serve as models for other nations striving to improve their mining sector governance. These practices focus on maximizing revenues, ensuring transparency in revenue management and promoting the equitable use of resource wealth to benefit local communities.

1. Balanced fiscal incentives for revenue maximization

Egypt and Senegal stand out for their well-designed fiscal frameworks that balance attracting investment with ensuring that the state receives a fair share of revenues. Egypt's model minerals exploitation agreement and Senegal's use of tax holidays and import duty exemptions on mining equipment are examples of how to encourage foreign investment while safeguarding long-term revenue.

Best practice: Implementing fiscal incentives that attract investment without compromising future revenue. These incentives should be regularly reviewed to ensure that they align with national development goals and global market conditions.

2. Transparent and accountable revenue management

Nigeria and Tanzania are leaders in transparency and oversight in revenue management. The NEITI offers a clear example of how to implement the EITI effectively, and Tanzania's requirement for parliamentary review of natural resource contracts ensures legislative oversight. Both countries demonstrate the importance of publishing detailed, accessible reports on mining revenues and taxes to promote accountability.

Best practice: Implementing mechanisms for parliamentary oversight and regular public reporting on revenues and contracts to ensure accountability. Countries should also strive to join or comply with the EITI to bolster transparency across the sector.

3. Comprehensive licensing systems

Senegal and Sierra Leone have established robust licensing systems, such as the Mining Cadastre System and the Cadastre Administration System, respectively, which provide transparent, accessible data on mining licences. These systems reduce opportunities for corruption and streamline the application process, enhancing governance and investor confidence.

Best practice: Developing a digitalized and transparent licensing system that provides public access to licensing data, reduces application backlogs and that can be integrated with other governance frameworks to ensure compliance and prevent corruption.

4. Equitable distribution of revenues

In Botswana, a portion of mining royalties is allocated to land boards, ensuring that local communities receive direct benefits from resource extraction and enhancing local development initiatives. Senegal's Decentralization Act, which allocates a portion of mining revenues to local governments for development projects, offers a model for equitable revenue distribution. Similarly, Sierra Leone's system of distributing surface rent revenues between landowners, local authorities and development funds represents a best practice in ensuring that local communities benefit directly from mining activities.

Best practice: Designing revenue-sharing mechanisms that allocate a fair portion of mining revenues to local communities and development projects, ensuring that the people most affected by mining activities benefit from the sector's growth.

Box 5.2. **Best practices in revenue maximization, management and equitable use (cont.)**

5. Community development agreements and social plans

Nigeria, Sierra Leone and South Africa have adopted community development agreements and social and labour plans, which formalize mining companies' commitments to local communities. These agreements and plans help ensure that mining operations contribute to the social and economic development of host communities.

Best practice: Mandating community development agreements or social and labour plans for all mining projects, with clear commitments from mining companies to support local development. These agreements should be subject to regular monitoring and evaluation to ensure their effective implementation and to adjust plans as necessary.

6. Strengthening anti-corruption measures

Nigeria and Tanzania show the value of combining transparency initiatives with strong anti-corruption frameworks. Strengthening enforcement mechanisms, increasing due diligence requirements and promoting whistleblower protections are key strategies to prevent corruption in the mining sector.

Best practice: Enforcing anti-corruption measures through clear accountability frameworks, ensuring due diligence across the mining sector and adopting whistleblower protection laws to enhance integrity in resource management.

country struggling to build the technical capacity needed in the mining sector (AMDC 2022). Tanzania, while providing formal education through institutions such as the University of Dar es Salaam, continues to face obstacles due to weak linkages between artisanal and small-sector mining training and sectoral demands.

Egypt and Senegal have shown intermediate progress. Egypt has made targeted investments in training programmes and technology transfer, particularly in gold refining and phosphoric acid production, helping to modernize its mining sector (Samir 2023). Senegal, through its Mining Code, mandates that companies develop training programmes for local workers, supported by a Mining Sector Support Fund that allocates a percentage of mining revenues to capacity building. However, both countries still face challenges in fully bridging the gap between educational initiatives and the specific skills required in their growing mining industries.

Sierra Leone has adopted a more corporate-driven approach to skills development, with mining companies offering scholarships and the government establishing funds for specialized mining education. However, the complexity involved in accessing these training opportunities and the reliance on informal networks continue to limit broader workforce development.

5.5.2. **Sector linkages**

When it comes to fostering sector linkages, Botswana, Egypt and Nigeria have made notable advancements. Botswana has made strides in enhancing sector linkages, particularly through its Diamond Hub and the Tokafala training programme, which promote local value addition and reduce dependence on imports in the diamond industry. Egypt has implemented policies that

Table 5.3. **Emerging best practices and challenges in linkages, investment and diversification**

Education and skills development

Country	Best practices	Challenges
Democratic Republic of the Congo	The 2018 Mining Code includes provisions for skills development.	There are gaps in vocational training and science, technology, engineering and mathematics (STEM) education, limiting the development of a skilled workforce.
Nigeria	Nigeria is collaborating with Australia and other international partners to improve skills in modern mining technologies.	Slow progress is being made in improving the quality of vocational training and in addressing gender disparities in access to mining education.
Egypt	Targeted training programmes are available in collaboration with the Ministry of Petroleum and Mineral Resources, fostering innovation and specialized mining education.	There is limited outreach in rural areas, and there are gender equity issues in mining sector training.
Senegal	The Mining Code mandates training and promotion plans for workers, supported by the Mining Sector Support Fund.	Formal training programmes have limited reach in rural mining areas.
Sierra Leone	Scholarships are offered by mining companies, with the government supporting the development of specialized mining skills through the Training Research and Development Fund.	The application procedures for scholarships are complex, and there is a limited focus on STEM subjects.
South Africa	The Mining Qualifications Authority ensures that 5 per cent of payroll is spent on employee training, with public–private partnerships for developing STEM skills.	A skills gap still exists in specialized mining technologies despite investments.
Tanzania	Formal mining education is provided through national institutions such as the University of Dar es Salaam and technical training for artisanal and small-scale mining.	The linkages between artisanal and small-scale mining training programmes and real sectoral demands are weak.
Botswana	The Vision 2036 Report emphasizes education and skills development as critical to transforming Botswana into a knowledge-based economy, focusing on quality education, lifelong learning, and promoting STEM education from primary to tertiary levels.	Economic inequality remains a challenge, with limited impact in rural areas and marginal improvements in the Gini index.

Table 5.3. **Emerging best practices and challenges in linkages, investment and diversification (cont.)**

Sector linkages

Country	Best practices	Challenges
Democratic Republic of the Congo	The National Strategic Development Plan highlights sector linkages.	Major infrastructure deficits, particularly in the energy sector, limit integration with other sectors such as manufacturing and agriculture.
Nigeria	The Mining Resource Corridor supports economic diversification through infrastructure and mineral processing.	Heavy reliance on foreign technologies and underdeveloped local industries reduce sector linkages.
Egypt	Government policy fosters partnerships between mining and industrial sectors, with infrastructure projects supporting sector growth.	Infrastructure improvements are still needed to support growing mining activities.
Senegal	The Mining Code promotes agromineral linkages and infrastructure developments such as the Sendou power plant to support mining.	Integration between the mining and agricultural sectors is weak despite substantial infrastructure investments.
Sierra Leone	Mining activities drive infrastructure development such as ports and roads.	There is a lack of coordination between mining and other economic sectors.
South Africa	An amendment to the Electricity Regulation Act allows mining companies to generate electricity independently, enhancing energy security for the sector.	Sector linkages are developing slowly, particularly in relation to energy independence from the national grid.
Tanzania	Local content regulations prioritize Tanzanian goods and services in mining sector supply chains.	Tanzania continues to rely on imported machinery and technology.
Botswana	The Diamond Hub and Diamond Trading Company were established to enhance sector linkages and promote local beneficiation in the diamond industry.	Botswana continues to depend on imported equipment despite efforts to increase domestic production of mining supplies.

Table 5.3. **Emerging best practices and challenges in linkages, investment and diversification (cont.)**

Value-added activities

Country	Best practices	Challenges
Democratic Republic of the Congo	The 2018 Mining Code encourages local processing.	Infrastructure and energy deficits limit the development of value-added industries.
Nigeria	The National Industrial Revolution Plan incentivizes local mineral processing, encouraging the development of downstream industries.	The development of downstream processing has been slow due to insufficient investment in local infrastructure.
Egypt	The government targets value-added activities such as the processing of phosphates and precious metals through tax breaks and subsidies.	Egypt is highly dependent on imported technology for value-added processes.
Senegal	Production-sharing contracts and special economic zones encourage beneficiation and local economic growth.	Investments in local processing facilities are insufficient, limiting value-added activities.
Sierra Leone	The 2007 Diamond Cutting and Polishing Act facilitates licences for local processing, while export duties encourage domestic value addition.	The domestic markets for value-added products are limited, resulting in a continued reliance on raw material exports.
South Africa	The 2011 Beneficiation Strategy and Mining Charter support procurement from local suppliers to foster downstream value chains.	Governance issues hinder the implementation of beneficiation and local content strategies.
Tanzania	The Kabanga Nickel Project and Mwanza Precious Metals Refinery promote domestic value-added activities.	Underdeveloped infrastructure limits the scaling of value-added activities.
Botswana	Government initiatives have successfully increased the share of polished diamond exports, with programmes encouraging local cutting and polishing of diamonds.	Operational costs are high compared with other markets, limiting competitiveness in value-added processing.

Table 5.3. **Emerging best practices and challenges in linkages, investment and diversification (cont.)**

Artisanal and small-scale mining

Country	Best practices	Challenges
Democratic Republic of the Congo	The 2018 Mining Code designates artisanal mining zones.	Weak enforcement limits formalization. Informal mining is widespread, and access to formal training and financial mechanisms is limited.
Nigeria	The Presidential Artisanal Gold Mining Initiative seeks to formalize artisanal and small-scale mining through gold-buying centres and financial access.	Illegal mining persists, costing the country billions annually.
Egypt	None	Artisanal small-scale gold mining is legal. Formal channels for artisanal and small-scale mining are lacking, and regulatory enforcement is weak; therefore, the sector continues to operate informally, posing environmental and health risks due to mercury use.
Senegal	The artisanal and small-scale mining sector benefits from formalization efforts, including purchasing counters and designated artisanal and small-scale mining zones.	Mercury use and weak regulatory enforcement remain challenges in ensuring sustainable artisanal and small-scale mining practices.
Sierra Leone	The 2018 Artisanal Mining Policy aims to formalize the sector.	Difficulty accessing formal finance and complex licensing processes hinder progress.
South Africa	The 2022 Artisanal and Small-Scale Mining Policy aims to formalize artisanal and small-scale mining and promote sustainability.	Institutional challenges, inadequate technical support and limited access to finance hamper the formalization of artisanal and small-scale mining.
Tanzania	Artisanal and small-scale mining zones and technical training have been prioritized.	Environmental management in the artisanal and small-scale mining sector is weak, especially in respect of mercury usage.

Source: Authors compilation.

encourage partnerships between the mining and industrial sectors, with significant infrastructure projects aimed at enhancing transport and energy systems to support mining activities. Nigeria's Mining Resource Corridor aims to link mineral extraction with broader economic diversification, particularly through local mineral processing, which is a key component of the country's National Industrial Revolution Plan.

The Democratic Republic of the Congo and Sierra Leone, however, face substantial challenges. Sector linkages in the Democratic Republic of the Congo are constrained by severe infrastructure deficits, including a 700-megawatt energy shortfall for the mining sector (Chambre des mines de la FEC/RDC 2022), which limits the integration of mining with other industries such as manufacturing and agriculture. Sierra Leone, while benefiting from infrastructure development projects driven by the mining sector, such as ports and railroads, still struggles with connecting mining activities to broader economic sectors, partly due to governance and regulatory inefficiencies.

Senegal and South Africa present more balanced scenarios. Senegal's Mining Code promotes the use of local goods and services in the mining industry, with significant agromineral linkages, particularly through phosphate-based fertilizers for agriculture. South Africa's historical role in developing rail and power infrastructure has fostered stronger sectoral integration, and recent amendments to the Electricity Regulation Act provide mining companies with opportunities for independent power generation, improving energy security and sectoral linkages.

In Tanzania, recent reforms have focused on increasing local content and prioritizing Tanzanian goods and services in mining operations, though the country still relies heavily on imported machinery due to a weak industrial base. Efforts to improve sector linkages continue, but the country's dependence on foreign inputs remains a challenge.

5.5.3. **Value-added activities**

When it comes to value-added activities, Botswana, Senegal and South Africa have established strong frameworks to encourage local mineral processing and beneficiation. Botswana has also made significant strides in value addition, particularly in the diamond sector, by requiring that a portion of rough diamonds mined by De Beers be processed domestically. The government invites international companies to establish operations in Botswana, enhancing local processing capacity and creating jobs. Senegal's Mining Code encourages value addition through production-sharing contracts and incentives for beneficiation, supported by special economic zones. Similarly, South Africa's Beneficiation Strategy and Mining Charter promote procurement from local suppliers to foster downstream value chains. However, governance issues in Senegal and South Africa continue to hinder the full implementation of these strategies, limiting the overall growth of value-added industries.

In contrast, the Democratic Republic of the Congo and Nigeria face significant obstacles to developing value-added activities despite having considerable mineral resources. The Democratic Republic of the Congo's 2018 Mining Code encourages local processing, but infrastructure and energy deficits prevent the country from establishing industries such as domestic battery manufacturing, despite being the world's largest cobalt producer. Similarly, Nigeria's National Industrial Revolution Plan offers incentives for local mineral processing, but slow infrastructure development has impeded the growth of downstream industries.

Sierra Leone and Tanzania have shown intermediate progress. In Sierra Leone, the 2007 Diamond Cutting and Polishing Act facilitates licences for local processing, while export duties encourage domestic value addition. Despite these policies, limited domestic markets for value-added products have resulted in continued reliance on raw material exports. Tanzania's Kabanga Nickel Project and Mwanza Precious Metals Refinery represent key initiatives promoting domestic value-added activities. However, underdeveloped infrastructure limits the scaling of these activities, restricting the country's ability to fully benefit from its mineral wealth.

5.5.4. Artisanal and small-scale mining

Among the countries studied, Senegal and Tanzania stand out for their concerted efforts to formalize and support the artisanal and small-scale mining sector. Senegal has made strides through the establishment of artisanal and small-scale mining zones and purchasing counters to encourage legal mining and improve gold traceability. Similarly, Tanzania has prioritized the formalization of artisanal and small-scale mining since the introduction of its 2009 Mining Policy, establishing designated artisanal mining zones and offering technical training to small-scale miners. These initiatives aim to provide a structured environment for miners while improving their technical skills. Both countries, however, continue to struggle with environmental management and the informal gold trade, particularly around the use of mercury and inadequate enforcement of environmental standards.

Among the countries studied, Senegal and Tanzania stand out for their concerted efforts to formalize and support the artisanal and small-scale mining sector.

In contrast, the Democratic Republic of the Congo and Nigeria continue to face significant challenges in formalizing their artisanal and small-scale mining sectors. The Democratic Republic of the Congo's 2018 Mining Code provides for artisanal mining zones, but poor enforcement has resulted in many artisanal miners continuing to operate informally. The lack of access to training and financial services further limits the sector's potential, leaving the country unable to fully leverage its vast artisanal mining activities. Nigeria initiated the Presidential Artisanal Gold Mining Initiative to address these issues by establishing gold-buying centres and improving miners' access to formal financing. Despite these initiatives, illegal mining remains rampant, costing the country an estimated USD 9 billion annually in lost revenue and undermining efforts to formalize the sector.

Sierra Leone and South Africa have shown intermediate progress in formalizing artisanal and small-scale mining. Sierra Leone's 2018 Artisanal Mining Policy aims to simplify the licensing process for small-scale miners while introducing training programmes to improve their practices. However, complex licensing procedures and reliance on informal funding mechanisms continue to hamper the sector's development. South Africa introduced a new Artisanal and Small-Scale Mining Policy in 2022 to promote sustainability and formalize the sector, but it still faces challenges with inadequate technical support and limited financial access for small-scale miners, hindering the policy's effectiveness.

5.5.4.1. Environmental and social challenges

In Egypt and Senegal, artisanal mining operations are still heavily linked to environmental and social challenges. Egypt, where artisanal and small-scale mining are technically illegal, experiences widespread informal gold mining, particularly along the Nile Valley. This activity poses significant environmental risks, as miners commonly use mercury, leading to contamination and associated health risks. Similarly, in Senegal, the use of mercury in gold extraction continues to pose serious environmental concerns, with weak regulatory enforcement making it difficult to manage the sustainability of the sector. Both countries struggle to transition their artisanal and small-scale mining activities into formal, regulated frameworks.

Access to finance remains a critical bottleneck for the artisanal and small-scale mining sector across all countries studied.

5.5.4.2. Financial and technical support gaps

Access to finance remains a critical bottleneck for the artisanal and small-scale mining sector across all countries studied. In Nigeria and Tanzania, efforts have been made to provide formal financial mechanisms and facilitate access to credit. However, these efforts have not fully resolved the challenges, as many miners still rely on informal funding sources, making it difficult to scale up their operations or adopt more sustainable mining practices. Sierra Leone faces similar hurdles, with limited access to formal financial systems preventing small-scale miners from transitioning into formalized operations. Meanwhile, the Democratic Republic of the Congo and South Africa are also grappling with the absence of adequate technical support, which inhibits miners from improving their productivity and adopting more environmentally friendly techniques.

Across all countries studied, efforts to improve education and skills development, strengthen sector linkages and promote value-added activities have seen varying levels of success. Egypt and Senegal have made notable strides in building capacity and infrastructure to support sector linkages and value addition, although challenges remain in extending the benefits to rural areas and addressing gender disparities. The Democratic Republic of the Congo and Nigeria, despite having abundant mineral resources, face significant challenges in infrastructure development and local industrialization, limiting their ability to fully capitalize on value-added activities. South Africa and Tanzania have developed comprehensive policies to promote local beneficiation and skills development, yet slow progress in implementation and infrastructure limitations continue to hinder the realization of these goals.

In all countries examined, formalizing the artisanal and small-scale mining sector remains a major challenge despite ongoing efforts. Senegal and Tanzania lead in formalization initiatives but must continue improving environmental management and tackle the informal gold trade. On the other hand, the Democratic Republic of the Congo and Nigeria face substantial obstacles due to illegal mining and weak enforcement, which limit the impact of their formalization policies. Sierra Leone and South Africa have made strides but still struggle with access to finance and technical support, limiting the sector's growth. Egypt, where artisanal and small-scale mining are technically illegal but widespread, faces particularly severe environmental and social risks, making it urgent for the government to formalize and regulate the sector. Addressing these challenges will require stronger regulatory frameworks, improved access to finance and technical training to ensure that artisanal and small-scale mining contributes sustainably to national economic development while minimizing its negative environmental and social impacts.

To further harness the potential of their mining sectors, these countries will need to invest in infrastructure development, skills training and strong governance frameworks. By addressing these challenges, they can ensure that the benefits of mining extend beyond resource extraction, contributing to broader economic diversification and sustainable development (Box 5.3).

5.6. THE ENVIRONMENT AND HUMAN RIGHTS: BEST PRACTICES AND CHALLENGES

Notable efforts have been made to enhance environmental governance and ensure that mining activities deliver social and economic benefits to communities.

Across the countries examined, notable efforts have been made to enhance environmental governance and ensure that mining activities deliver social and economic benefits to communities. However, weak enforcement, insufficient community engagement and ongoing environmental degradation remain key challenges. Table 5.4 compares the environmental and human rights regimes across the eight countries.

This section compares the approaches of Botswana, the Democratic Republic of the Congo, Egypt, Nigeria, Senegal, Sierra Leone, South Africa and Tanzania in addressing issues relating to the environment and human rights, highlighting both best practices and persistent obstacles.

5.6.1. Environmental protection

The Democratic Republic of the Congo and Nigeria have established comprehensive regulatory frameworks aimed at mitigating environmental impacts from mining activities. The Democratic Republic of the Congo's 2018 Mining Code and 2023 Law on Environmental Protection are designed to improve environmental governance, with specific provisions for environmental monitoring. Enforcement is weak in both countries, however, which leads to persistent environmental degradation, particularly in mining-affected areas. The Directorate for the Protection of the Mining Environment in the Democratic Republic of the Congo and Nigeria's National Environmental Standards and Regulations Enforcement Agency struggle with limited monitoring capacity and weak penalties for non-compliance, resulting in ongoing damage to local ecosystems.

In contrast, Egypt and Senegal have developed stronger enforcement mechanisms. Egypt's 1994 Environmental Law mandates environmental impact assessments and periodic audits of mining projects, with the Egyptian Environmental Affairs Agency playing an active role in monitoring compliance. However, there are still gaps in community involvement in environmental monitoring. Senegal's adherence to international conventions, such as the

Box 5.3. **Best practices for linkages, investment and diversification in the mining sector**

The comparative analysis across eight African countries reveals several best practices that can be instrumental in fostering education, strengthening sector linkages and promoting value-added activities within the mining sector. These practices, drawn from the successes and lessons learned in countries such as Egypt, Senegal, South Africa and Tanzania, provide a framework that other countries can adapt to enhance the sustainability and diversification of their mining sectors.

1. Targeted education and skills development

Egypt and South Africa have shown the importance of aligning education and skills development initiatives with the specific needs of the mining sector. Egypt's collaboration with its Ministry of Petroleum and Mineral Resources to deliver specialized training programmes in gold refining and phosphoric acid production has fostered innovation in mining education. Similarly, South Africa's Mining Qualifications Authority mandates that 5 per cent of payroll be allocated to employee training, ensuring a focus on continuous skills development. Both countries have set a standard in creating targeted educational programmes that address sector-specific demands.

Best practice: Implementing frameworks that encourage targeted skills development through vocational training and STEM education focused on mining. Mandating financial contributions from mining companies for skills development, as seen in South Africa, ensures long-term investment in workforce capacity building.

2. Promoting sector linkages

Building strong linkages between mining and other industries is crucial for achieving economic diversification. Egypt and Senegal have successfully fostered such linkages, with Egypt focusing on infrastructure projects that support mining, such as road networks and port expansions, and Senegal emphasizing agromineral integration through phosphate-based fertilizers. These linkages enable the mining sector to drive growth in other areas of the economy, including agriculture and manufacturing.

Best practice: Promoting policies that integrate mining with other economic sectors. Promotion can be carried out through cross-sector initiatives such as agromineral linkages, supported by investments in infrastructure such as transport and energy that benefit both mining and other industries.

3. Incentivizing local value-added activities

Botswana, Nigeria and Senegal have developed policies that incentivize local mineral processing and downstream industries. Botswana requires that a portion of rough diamonds mined by De Beers be processed domestically. Nigeria's National Industrial Revolution Plan incentivizes local mineral processing through tax breaks and export prohibitions on raw materials, aiming to boost the local value addition of mineral resources, and Senegal's special economic zones and production-sharing contracts encourage local beneficiation.

Best practice: Implementing fiscal incentives, such as tax breaks, production-sharing contracts, and special economic zones, as an effective way to encourage value-added activities. These initiatives should be supported by policies that promote local processing and the development of downstream industries, which will increase the economic impact of the mining sector.

4. Developing infrastructure through public–private partnerships

Addressing infrastructure deficits is critical to unlocking the full potential of the mining sector. Egypt and South Africa have leveraged public–private partnerships to support the development of infrastructure that enhances the mining sector's operational efficiency. Egypt's infrastructure projects in transport and energy have helped integrate mining

Box 5.3. **Best practices for linkages, investment and diversification in the mining sector (cont.)**

with other sectors, while South Africa's amendment to the Electricity Regulation Act allows mining companies to generate their own electricity, improving energy security and reducing reliance on the national grid.

Best practice: Collaborating with the private sector through public–private partnerships to develop critical infrastructure that supports mining and other industries. Investments in energy, transport and logistics infrastructure are essential for reducing operational costs and improving the integration of mining with the broader economy.

5. Local content and employment requirements

South Africa and Tanzania have implemented strong Local content regulations to ensure that the benefits of mining are shared with local communities. South Africa's Mining Charter mandates local procurement and the inclusion of historically disadvantaged groups in mining operations, while Tanzania's policies prioritize the use of local goods and services in mining supply chains. These policies stimulate local industries and ensure that the growth of the mining sector has a direct, positive impact on national and local economies.

Best practice: Implementing local content policies that require mining companies to source goods and services locally, which promotes the development of domestic industries and ensures that local communities benefit economically from mining activities. Employment quotas for local workers and skills training should also be prioritized to build a competitive workforce.

6. Formalization of artisanal and small-scale mining

Formalizing the artisanal and small-scale mining sector can have significant economic and social benefits, as seen in Sierra Leone and Tanzania. In Sierra Leone, policies such as the 2007 Diamond Cutting and Polishing Act have facilitated local value addition in the artisanal mining sector, while efforts are being made to simplify licensing and improve access to formal financial mechanisms. Tanzania has designated specific artisanal and small-scale mining zones and provides technical training to small-scale miners, improving the sector's contribution to the economy.

Best practice: Supporting the formalization of artisanal and small-scale mining through dedicated zones, technical training and easier access to financial services. These steps would not only help reduce environmental and safety risks but also enhance the sector's contribution to local economies by encouraging value-added activities such as local processing.

Minamata Convention, and biodiversity conservation efforts through projects such as the Mako Gold Project, aim to minimize environmental harm. Despite these efforts, Senegal continues to face challenges such as land grabs and limited enforcement of environmental regulations, particularly in rural mining areas.

Sierra Leone and South Africa have seen some improvements in environmental governance, but both countries still grapple with significant challenges. The Environmental Protection Agency Sierra Leone is responsible for ensuring compliance, but weak enforcement in the areas of artisanal and small-scale mining has led to water contamination and other forms of ecological damage. South Africa has streamlined its regulatory framework since 2014, with the Department of Environmental Affairs and the Department of Mineral Resources and Energy overseeing compliance. However, incidents such as what occurred

Table 5.4. **Emerging best practices and challenges in the environment and human rights**

Environment and human rights

Country	Best practices	Challenges
Democratic Republic of the Congo	The 2018 Mining Code and 2023 Law on Environmental Protection aim to improve governance.	Challenges include weak monitoring capacity and ongoing environmental damage in mining areas.
Nigeria	The Environmental Impact Assessment Act mandates environmental assessments.	Weak enforcement, inadequate penalties for non-compliance with environmental laws and persistent degradation in mining communities pose challenges.
Egypt	The Environmental Law requires environmental impact assessments and audits, with the Egyptian Environmental Affairs Agency responsible for monitoring.	There is limited community involvement in environmental monitoring.
Senegal	Mining governance is aligned with international conventions such as the Minamata Convention on Mercury. Biodiversity conservation projects are underway to offset impacts.	Land grabs and inadequate enforcement of environmental laws continue to impact communities.
Sierra Leone	The Environmental Protection Agency Sierra Leone oversees compliance.	Weak enforcement in artisanal and small-scale mining areas, water contamination and a lack of environmental rehabilitation continue to pose major challenges.
South Africa	Environmental governance has been improved through streamlined regulations.	There are ongoing human rights violations and environmental impacts in mining-affected communities. The Marikana incident revealed gaps in addressing human rights violations.
Tanzania	Environmental compliance is mandated in the 2010 Mining Act.	Weak enforcement in respect of artisanal and small-scale mining limits effectiveness, and there is a lack of awareness and capacity among small-scale miners to adhere to environmental regulations.
Botswana	Botswana has committed to sustainable management of natural resources through legal frameworks, including the 2011 Environmental Assessment Act and the 2021 Botswana Climate Change Policy.	Environmental legislation is outdated, no ESG reporting framework is in place, and the legal protections for social rights of affected communities are weak.

Table 5.4. **Emerging best practices and challenges in the environment and human rights (cont.)**

Social and economic benefits

Country	Best practices	Challenges
Democratic Republic of the Congo	The Mining Code provides for community benefit sharing through royalties.	Communities face displacement and environmental damage without adequate compensation. The mismanagement of funds from royalties benefit-sharing schemes limits impact.
Nigeria	None	Poor enforcement of environmental laws has led to lead poisoning incidents, and livelihood disruptions continue to affect mining communities.
Egypt	The Mineral Resources Law ensures that revenues are allocated to local development projects, with policies protecting communities' cultural rights.	The benefits from mining operations are unevenly distributed, leaving communities behind.
Senegal	The 2016 Mining Code mandates community development agreements and the Fund for Local Development to channel mining revenues into local projects.	Land grabs and environmental degradation continue despite strong governance frameworks.
Sierra Leone	Community agreements and funds contribute to local infrastructure.	Community development funds are often mismanaged, limiting their effectiveness. Transparency issues limit the equitable distribution of funds.
South Africa	Social and labour plans distribute mining benefits to local communities.	Poor implementation of social and labour plans leaves many communities without adequate services and support.
Tanzania	Corporate social responsibility initiatives and national programmes distribute benefits, with local governments playing a key role.	Gaps in monitoring corporate social responsibility initiatives reduce their effectiveness in improving social outcomes for local communities.
Botswana	National policies prioritize centralized social and economic development, with mineral resource rents collected by the treasury.	The absence of mandatory benefit-sharing frameworks leads to uneven social development and weak protections for affected communities.

Source: Authors compilation.

in Marikana in 2012 exposed serious governance failures related to both environmental impacts and human rights violations in mining communities.

In Tanzania, environmental compliance is mandated under the 2010 Mining Act, with companies required to submit environmental impact statements. Despite this legal framework, enforcement remains weak, particularly in the artisanal and small-scale mining sector, where many small-scale miners lack the capacity or awareness to comply with environmental regulations. The environmental challenges in Tanzania highlight the need for better education and support for artisanal and small-scale miners to adhere to sustainable practices. Similarly, Botswana has demonstrated a commitment to sustainable management of natural resources through a robust legal framework; however, the country still faces challenges in enforcement and coordination of its environmental regulations.

5.6.2. **Social and economic benefits**

Mining regulations across these countries also address the distribution of social and economic benefits to local communities, though the effectiveness of these frameworks varies. The Democratic Republic of the Congo and Nigeria have provisions for community benefit sharing through mining royalties and social programmes, but mismanagement of funds and weak enforcement mechanisms limit their impact. In the Democratic Republic of the Congo, many mining-affected communities suffer from displacement and environmental damage, with little compensation, while in Nigeria, environmental degradation, such as lead poisoning, continues to disrupt traditional livelihoods.

Egypt and Senegal have developed more structured approaches to ensure that mining benefits are distributed to local communities. Egypt's 2014 Mineral Resources Law allocates revenues from mining projects to local development initiatives, and the 2008 Cultural Heritage Policy protects the cultural rights of communities affected by mining operations. In practice, however, the distribution of these benefits has been uneven, leaving some communities behind. In Senegal, the 2016 Mining Code mandates the creation of community development agreements and the Fund for Local Development, which channels mining revenues into local infrastructure and social projects. Despite this development, issues such as land grabs and environmental degradation persist, diminishing the intended social and economic benefits for affected communities.

Sierra Leone and South Africa face similar issues with the equitable distribution of mining benefits. Sierra Leone's community agreements and funds, such as the Community Development Fund and the Mining District Development Fund, have contributed to local infrastructure development, but transparency issues often lead to inequitable distribution. In South Africa, social and labour plans, mandated under the MPRDA, aim to ensure that local communities benefit from mining activities. However, the Marikana incident revealed gaps in the implementation of social safeguards, as many mining communities continue to suffer from inadequate services and social support.

Tanzania has implemented corporate social responsibility initiatives and national programmes that aim to distribute the benefits of mining more broadly. Local governments play a significant role in ensuring that mining companies contribute to community development. However, gaps in monitoring corporate social responsibility initiatives reduce their overall effectiveness in delivering meaningful social and economic outcomes for local communities. Botswana's mining regulations also acknowledge the need for community benefits; however, the lack of specific legal requirements for benefit sharing means that local communities often do not receive a proportionate share of the mining revenues generated from their regions.

The comparative analysis reveals that, while many countries have established environmental governance frameworks and mechanisms for distributing mining benefits, challenges related to enforcement, transparency and equitable distribution persist. Egypt and Senegal demonstrate stronger regulatory frameworks and international compliance, but they continue to face issues such as land grabs and environmental degradation. The Democratic Republic of the Congo and Nigeria struggle with weak enforcement and mismanagement, which limit the positive impact of their environmental and social policies. Botswana, while emphasizing equitable development in its mining regulations, faces challenges due to the lack of specific legal requirements for benefit sharing, which can leave local communities without their fair share of mining revenues. Sierra Leone, South Africa and Tanzania have shown progress but still face significant gaps in implementing social safeguards and ensuring sustainable environmental practices, particularly in the artisanal and small-scale mining sector. To improve, these countries must focus on strengthening enforcement, enhancing community engagement and monitoring the equitable distribution of mining benefits (Box 5.4).

While many countries have established environmental governance frameworks and mechanisms for distributing mining benefits, challenges related to enforcement, transparency and equitable distribution persist.

5.7. **COMMUNITY PARTICIPATION IN NATURAL RESOURCE GOVERNANCE: BEST PRACTICES AND CHALLENGES**

Community participation is vital for sustainable and equitable natural resource governance. This section provides a comparative analysis of best practices and challenges in community engagement across the mining sectors of eight African countries—Botswana, the Democratic Republic of the Congo, Egypt, Nigeria, Senegal, Sierra Leone, South Africa and Tanzania. Table 5.5 highlights the key practices, such as community development agreements and participatory platforms, alongside common challenges such as limited transparency, weak oversight and a lack of local capacity. Gender equity also remains a pressing issue, with women often marginalized in decision-making and leadership roles.

This analysis identifies successes and gaps in community participation, offering recommendations to strengthen inclusive governance in the mining sector.

Box 5.4. **Best practices for addressing environmental and human rights issues in the mining sector**

The comparative analysis of environmental and human rights challenges across the mining sectors in Botswana, the Democratic Republic of the Congo, Egypt, Nigeria, Senegal, Sierra Leone, South Africa and Tanzania highlights several emerging best practices that could be adopted more broadly. These practices focus on strengthening governance, ensuring community participation and enhancing transparency and enforcement in environmental and social safeguards.

1. Strengthening environmental enforcement and monitoring

Egypt and Senegal have made progress in enforcing environmental regulations by integrating international standards such as the Minamata Convention and mandating environmental impact assessments. Egypt's Environmental Law requires periodic audits and community involvement in monitoring mining activities, offering a strong model for other countries. In Senegal, biodiversity conservation projects such as the Mako Gold Project aim to achieve no net loss of biodiversity while aligning with international environmental protocols.

Best practice: Implementing stronger enforcement mechanisms by adopting international environmental standards, conducting regular audits and involving local communities in environmental monitoring. Empowering local regulatory agencies through enhanced funding and training is crucial for ensuring compliance in both large-scale and small-scale mining sectors.

2. Community benefit sharing and development funds

Senegal and Sierra Leone have introduced structured systems for community benefit sharing through community development agreements and dedicated funds such as the Fund for Local Development and the Community Development Fund. These mechanisms ensure that a portion of mining revenues is allocated directly to local communities for infrastructure and social development projects. In Senegal, community development agreements have been instrumental in channelling funds to local communities affected by mining.

Best practice: Mandating Community development agreements and establishing dedicated development funds to ensure that mining revenues are used to directly benefit local communities. These funds should be subject to transparency and accountability mechanisms to prevent mismanagement and ensure the equitable distribution of benefits.

3. Integrating human rights safeguards into mining policies

The Marikana incident in South Africa highlighted the need for stronger human rights safeguards in the mining sector. Since then, South Africa has improved its regulatory framework, incorporating human rights considerations into social and labour plans and requiring mining companies to provide basic services and support for local communities. This approach recognizes that mining activities should not only focus on economic outcomes but also prioritize the well-being and rights of affected communities.

Best practice: Ensuring that mining policies include explicit provisions for human rights protections, requiring companies to submit social and labour plans that outline their commitments to improving community welfare, Box 5.4. **Best practices for addressing environmental and human rights issues in the mining sector (cont.)**

safety and access to services. These plans should be monitored regularly to ensure compliance and effectiveness in addressing human rights violations.

4. Promoting transparency and accountability

Egypt, Sierra Leone and South Africa have demonstrated the importance of transparency in ensuring that environmental and social regulations are upheld. Regular publication of environmental impact statements and mining royalties data ensures that the public and affected communities are informed of mining activities and their impacts. Egypt's public audits and Senegal's biodiversity conservation projects, combined with Sierra Leone's efforts to improve the transparency of community development funds, are steps in the right direction.

Best practice: Adopting open data practices, ensuring that environmental assessments, royalty payments and development fund allocations are published regularly and are accessible to the public. This level of transparency is essential for building trust between mining companies, governments and local communities.

5. Capacity building in artisanal and small-scale mining

Senegal and Tanzania have begun addressing environmental challenges in artisanal and small-scale mining by providing technical training and designating artisanal and small-scale mining zones. These steps have helped improve compliance with environmental regulations and increased awareness among small-scale miners of sustainable mining practices. Despite ongoing challenges, the formalization of artisanal and small-scale mining in Tanzania is a step towards reducing environmental degradation in the sector.

Best practice: Investing in capacity building for small-scale miners by providing training programmes on sustainable mining practices and environmental compliance. Formalizing artisanal and small-scale mining operations and creating dedicated artisanal and small-scale mining zones can help regulate the sector, reduce environmental impacts and improve working conditions.

6. Enhancing collaboration with international partners

Collaborating with international organizations and adhering to global standards, such as the Minamata Convention and the EITI, has enabled countries such as Senegal and South Africa to enhance their environmental and social governance frameworks. These partnerships have helped integrate best practices, particularly in biodiversity conservation, community engagement and environmental monitoring.

Best practice: Forming Partnerships with international organizations and aligning mining regulations with global environmental and human rights standards. This approach can enhance governance frameworks, attract responsible investors and ensure that mining activities contribute to sustainable development.

Table 5.5. **Emerging best practices and challenges in community participation in natural resource governance**

Community participation in resource governance

Country	Best practices	Challenges
Democratic Republic of the Congo	Fourteen per cent of mining royalties are channelled to local entities.	There is limited community involvement in mining planning processes due to corruption and a lack of capacity; this limits benefits from mining royalties.
Nigeria	Community development agreements are in place.	Local communities lack the tools and knowledge to manage resources, leading to conflicts over land and mining rights.
Egypt	Participatory governance platforms allow communities to engage in decision making on mining.	Access to formal mining governance structures is limited, particularly for marginalized groups; hence, benefits remain unevenly distributed.
Senegal	The 2016 Mining Code mandates community development agreements and contributions to the Local Development Fund to support community participation in resource governance.	Reports of land grabs and inadequate environmental management limit meaningful community participation.
Sierra Leone	The Community Development Fund and Mining District Development Fund support local capacity building.	A lack of transparency and oversight limit the effectiveness of community engagement efforts.
South Africa	Social and labour plans ensure that mining companies invest in community development.	The misallocation of resources and lack of accountability undermine effective community participation.
Tanzania	Mining and environmental laws mandate community consultations.	There is limited community capacity to engage in more technical discussions on mining and environmental impacts.
Botswana	The Environmental Assessment Act requires public consultations for proposed mining activities, enhancing community involvement, and is supported by the Community-Based Natural Resource Management Policy, which encourages local participation through community trusts.	There is limited transparency in government negotiations for diamond contracts; communities feel disenfranchised and affected by poverty in mining areas, and community trusts are underutilized in the extractive industries, limiting local benefits from mining.

Table 5.5. **Emerging best practices and challenges in community participation in natural resource governance (cont.)**

Gender equity

Country	Best practices	Challenges
Democratic Republic of the Congo	None.	Gender-based discrimination and a lack of economic support expose women to significant health risks in mining operations. Women face significant barriers in accessing economic opportunities in the artisanal and small-scale mining sector, with widespread discrimination confining them to low-income tasks.
Nigeria	The government's gender strategy aims to address disparities in mining.	Women make up only 6.8 per cent of the workforce, with limited access to higher-paying jobs and opportunities.
Egypt	National policies align with gender equity initiatives.	Women in artisanal and small-scale mining face significant risks, particularly from mercury exposure and limited economic opportunities. Societal norms still limit women's participation in the mining sector.
Senegal	Women play important roles in artisanal and small-scale mining.	Gender-based income disparities persist, with limited access to financing for women miners. Women are often confined to lower-value tasks, with mercury use posing significant health risks.
Sierra Leone	Women constitute nearly half of the artisanal and small-scale mining workforce. Recent legislative efforts aim to increase women's political and economic participation.	Complex licensing processes and reliance on informal networks hinder women's access to economic opportunities.
South Africa	The Mining Charter includes gender equity provisions.	Women's representation in leadership positions is limited, and issues with gender-based violence in mining communities persist.
Tanzania	The government promotes gender equality through awareness campaigns, with organizations such as the Tanzania Women Miners Association (TAWOMA) empowering women in artisanal and small-scale mining.	Women in artisanal and small-scale mining continue to face socio-economic barriers, including limited access to training, financing and decision-making platforms.
Botswana	The Economic Inclusion Act promotes the effective participation of women in economic development, including mining.	There is limited integration of gender equity issues in mining-specific policies; the mining sector remains male-dominated.

Source: Authors compilation.

5.7.1. Community capacity building

The Democratic Republic of the Congo and Nigeria have both implemented frameworks aimed at improving community capacity in mining regions, but their effectiveness has been undermined by weak governance and mismanagement. The Democratic Republic of the Congo's 2018 Mining Code allocates 14 per cent of mining royalties to local entities, intending to empower communities and improve their involvement in resource management. However, corruption and limited oversight have hampered these efforts, with communities often excluded from meaningful participation in mining planning and development processes. Similarly, community development agreements in Nigeria are intended to foster local capacity, but low community participation and a lack of tools and knowledge to manage mineral resources have led to frequent conflicts over land and mining rights. Despite these initiatives, both countries struggle to effectively build community capacity, leaving local populations marginalized in decision-making processes related to mining.

In contrast, Egypt and Senegal have developed more structured approaches to engaging communities. In Egypt, participatory governance platforms allow local communities to engage in decision-making processes related to mining, particularly through corporate social responsibility projects. However, despite these platforms, the benefits of mining are not evenly distributed, with certain communities receiving more attention than others, which limits the overall effectiveness of these initiatives. In Senegal, the 2016 Mining Code mandates the establishment of community development agreements and the creation of a Local Development Fund, both aimed at directing mining revenues towards local capacity building. While these initiatives show promise, ongoing issues such as land grabs and weak environmental governance have limited meaningful community engagement, suggesting that more robust enforcement and accountability measures are needed.

Sierra Leone and South Africa also have mechanisms in place to promote community capacity building, but both face significant challenges in implementation. In Sierra Leone, the Community Development Fund and the Mining District Development Fund are designed to invest in local infrastructure and enhance community participation. However, transparency issues and poor oversight have limited the funds' effectiveness, leaving many communities without the capacity to influence mining-related decisions. Similarly, South Africa's social and labour plans require mining companies to invest in local development projects, but there are concerns about the misallocation of resources and the lack of accountability in ensuring that these projects genuinely benefit local communities.

In Tanzania, the government mandates community consultations under its mining and environmental laws, but these discussions are often limited to land access and compensation. Communities rarely participate in more technical discussions related to mining's environmental impacts or broader economic opportunities. The limited capacity of local communities to engage in these areas reflects a broader need for increased education and training to empower communities to play a more active role in mining governance.

In Botswana, the Community-Based Natural Resource Management Policy encourages local participation in natural resource governance through community trusts. However, these trusts are primarily utilized in conservation rather than the extractive industries. The Environmental Assessment Act mandates public consultations for proposed mining activities, but the effectiveness of these consultations is limited by a lack of transparency in government negotiations for diamond contracts. Communities often feel disenfranchised and affected by poverty in mining areas, indicating the need for more robust frameworks that prioritize local empowerment and resource management.

5.7.2. **Gender equity**

The Democratic Republic of the Congo and Nigeria face significant challenges in promoting gender equity within their mining sectors. In the Democratic Republic of the Congo, despite women making up a large portion of the artisanal and small-scale mining workforce, they are often confined to low-income, high-risk roles such as gold washing, which exposes them to serious health risks, including mercury poisoning. Gender-based discrimination and social norms limit women's access to higher-paying and more secure jobs within the mining value chain, and little progress has been made to address these systemic barriers. Similarly, in Nigeria, women represent only 6.8 per cent of the mining workforce. Despite the government's introduction of a gender strategy aimed at improving women's participation in the sector, slow implementation and persistent structural barriers prevent women from advancing in the industry. These barriers also prevent women from accessing decision-making roles or benefiting fully from economic opportunities within mining.

In contrast, Egypt and Senegal have made some progress towards gender equity, but significant gaps remain. Egypt's national policies align with broader efforts to promote gender equality, but deeply ingrained societal norms continue to restrict women's participation in the mining sector, particularly in artisanal and small-scale mining. Women working in artisanal and small-scale mining are exposed to severe health risks, including mercury poisoning, and have limited access to economic opportunities due to social exclusion and a lack of financing. In Senegal, women play a significant role in the artisanal and small-scale mining sector, but they are typically confined to lower-value tasks such as gold washing. Despite Senegal's ratification of the Minamata Convention, which addresses mercury-related health risks, gender disparities in income and access to financing continue to hold back women's advancement within the sector.

Sierra Leone and South Africa have shown some intermediate progress in addressing gender equity. In Sierra Leone, women make up nearly 50 per cent of the artisanal and small-scale mining workforce, but they are still concentrated in lower-value activities. The recent Gender Equality and Women's Empowerment Act aims to improve women's participation in both economic and political decision-making processes, although significant challenges remain in terms of implementation and overcoming cultural barriers that limit women's advancement in mining. In South Africa, the Mining Charter mandates gender equity by requiring that women make up a certain percentage of the workforce in the mining sector. However, women remain underrepresented in leadership roles and higher-paying technical positions. Furthermore, gender-based violence in mining communities continues to be a critical issue, undermining broader gender equity efforts.

In Tanzania, gender equality is promoted through national awareness campaigns and the efforts of organizations such as TAWOMA, which focus on empowering women in the artisanal and small-scale mining sector. TAWOMA provides training and financial support for women miners, helping to improve their economic prospects. However, socio-economic barriers such as limited access to credit and persistent discrimination in the sector continue to hinder women's ability to fully benefit from mining activities. Progress in addressing these challenges has been slow, but Tanzania's initiatives represent an important step towards achieving gender equity in the mining sector.

In Botswana, despite the existence of policies aimed at advancing gender equity, significant gaps remain. Women are increasingly recognized in the mining sector, with recent amendments to the Mines, Quarries, Works and Machinery Act allowing women to work in underground mines. Gender disparities persist, however, with women making up only about 18 per cent of the mining workforce. The lack of mining-specific gender equity policies and the predominance of societal norms continue to restrict women's participation in higher-paying roles within the sector. Advocacy organizations such as the Women in Mining in Botswana Organisation have been vocal about the need for greater inclusion of and support for women in mining.

Strengthening institutional frameworks, improving access to education and training and addressing gender disparities will be essential for these countries to fully realize the potential of their mining sectors to drive inclusive and sustainable development.

Across Botswana, the Democratic Republic of the Congo, Egypt, Nigeria, Senegal, Sierra Leone, South Africa and Tanzania, efforts to build community capacity and promote gender equity in the mining sector have yielded mixed results. While some countries have established frameworks aimed at empowering local communities and women, issues related to enforcement, transparency and social norms continue to limit the effectiveness of these initiatives. Strengthening institutional frameworks, improving access to education and training and addressing gender disparities will be essential for these countries to fully realize the potential of their mining sectors to drive inclusive and sustainable development (Box 5.5).

Box 5.5. **Best practices for promoting community participation and gender equity in the mining sector**

1. Strengthening governance and oversight

In the Democratic Republic of the Congo and Nigeria, weak governance and limited oversight have undermined efforts to build community capacity through mechanisms such as the 2018 Mining Code in the Democratic Republic of the Congo and community development agreements in Nigeria. To address these concerns, countries should focus on improving transparency and accountability in the management of mining royalties and community development funds.

Best practice: Establishing independent oversight bodies to monitor the allocation and use of community development funds. These bodies should include representatives from local communities, civil society organizations and government agencies to ensure that resources are directed towards meaningful community investments. Additionally, regular audits and public reporting on fund allocations and expenditures can enhance transparency and trust.

2. Engaging communities in decision making

Egypt and Senegal have developed participatory governance platforms and frameworks, such as local development funds and community development agreements, to involve communities in mining-related decisions. However, these initiatives need more robust enforcement to ensure that community voices are not only heard but also lead to tangible benefits.

Best practice: Developing inclusive decision-making processes that actively engage local communities in every stage of mining operations, from planning to implementation. Community advisory boards can be established to serve as liaisons between mining companies and local populations, ensuring that the concerns of communities are reflected in corporate and governmental policies. Effective stakeholder engagement should also include training programmes to improve community members' understanding of mining impacts and governance structures.

3. Investing in education and technical training

In Sierra Leone and South Africa, the effectiveness of community development funds and social and labour plans has been limited due to transparency and implementation challenges. For these initiatives to be more effective, there is a need to link them directly to education and technical training that can enhance community capacity to manage resources and engage with the mining sector.

Best practice: Channelling a portion of mining revenues into local educational programmes and technical training that focus on mining governance, environmental management and economic development. By empowering local populations with the skills needed to engage meaningfully in resource governance, countries can create more sustainable and mutually beneficial relationships between mining companies and communities. Public–private partnerships can also be developed to fund training programmes that align with local development needs.

4. Ensuring a fair distribution of benefits

To prevent mismanagement and the inequitable distribution of mining benefits, as seen in the Democratic Republic of the Congo and Nigeria, governments and companies should ensure that revenues are fairly distributed across all affected communities. Initiatives such as Senegal's Local Development Fund aim to achieve a fair distribution of benefits, but stronger governance mechanisms are needed to prevent land grabs and environmental mismanagement.

Best practice: Implementing transparent benefit-sharing mechanisms where a specified percentage of mining profits is allocated directly to community development projects. These mechanisms should be supported by legally binding agreements that clearly outline the obligations of mining companies to local populations. Ensuring that local communities have a direct say in how revenues are used can also help reduce conflicts and promote equitable development.

Box 5.5. **Best practices for promoting community participation and gender equity in the mining sector (cont.)**

5. Promoting gender-responsive policies

South Africa and Tanzania have implemented frameworks aimed at improving gender equity in the mining sector, but gaps in implementation and cultural barriers remain. TAWOMA's efforts to provide financial and training support to women miners in Tanzania represent a positive step, but greater efforts are needed to scale up these initiatives and address systemic barriers.

Best practice: Implementing gender-responsive mining policies that include quotas for women's participation in leadership roles and access to financing for women in artisanal and small-scale mining. These policies should also provide for childcare, healthcare and workplace safety to ensure that women can participate fully in the sector without facing additional social or economic burdens. Mining companies should be required to implement gender equity strategies as part of their corporate social responsibility commitments, with clear targets and monitoring mechanisms.

6. Supporting gender equity through financial inclusion

Access to credit and financial resources remains a significant barrier to women's participation in mining, particularly in countries such as Nigeria and Senegal. Financial inclusion initiatives that specifically target women miners can empower them to take on higher-value roles and invest in their businesses.

Best practice: Establishing microcredit schemes and financial literacy programmes tailored to women in artisanal and small-scale mining and other mining-related activities. Governments and international donors should work together to create gender-responsive financial products that address the specific needs of women miners, including flexible repayment terms and low-interest loans. Programmes should also focus on building financial literacy among women to help them manage their businesses effectively and access larger markets.

7. Addressing health and safety concerns for women in mining

In the Democratic Republic of the Congo, Nigeria and Senegal, women in artisanal and small-scale mining face severe health risks due to mercury exposure and other hazardous conditions. While Senegal has ratified the Minamata Convention, implementation needs to be strengthened to reduce the disproportionate impact of health risks on women.

Best practice: Implementing gender-specific health and safety regulations that protect women from hazardous working conditions, particularly in artisanal and small-scale mining. Governments should collaborate with international organizations to provide protective equipment, health services and training on safer mining practices for women. Regular health check-ups and safety audits should be mandated for all artisanal and small-scale mining operations involving women.

Chapter 6
CONCLUSION

This comprehensive analysis of mineral resource governance across eight African countries—Botswana, the Democratic Republic of the Congo, Egypt, Nigeria, Senegal, Sierra Leone, South Africa and Tanzania—reveals a multifaceted landscape of both progress and ongoing challenges. The study highlights the critical importance of effective governance in converting Africa's rich mineral endowment into sustainable development outcomes. Despite notable advancements in establishing legal frameworks, promoting transparency initiatives and recognizing the necessity of environmental and social safeguards, significant gaps persist, particularly in enforcement, community engagement and the equitable distribution of mining benefits.

The variability in governance practices across the countries examined underscores the need for tailored, context-specific approaches, while also emphasizing the importance of regional cooperation and alignment with continental frameworks such as the AMV. Addressing these governance gaps will be essential for ensuring that mining activities contribute positively not only to economic growth but also to social development and environmental sustainability.

The variability in governance practices across the countries examined underscores the need for tailored, context-specific approaches, while also emphasizing the importance of regional cooperation and alignment with continental frameworks such as the AMV.

As African nations continue to navigate the complexities of mineral resource management, the following key findings and recommendations offer a roadmap for enhancing governance practices and ensuring that Africa's mineral wealth translates into lasting, inclusive prosperity.

KEY FINDINGS

1. *Legal and regulatory frameworks.* While most countries have developed comprehensive legal frameworks for mining governance, enforcement remains a significant hurdle. For instance, Senegal and Tanzania have aligned their policies with international standards, whereas the Democratic Republic of the Congo and Nigeria face challenges in both implementation and enforcement.

2. *Transparency and accountability.* Although many countries have adopted transparency initiatives such as the EITI, implementation remains inconsistent. Nigeria and Tanzania have made strides in publishing detailed reports on mining revenues, but there are still significant gaps in ensuring full transparency, particularly at the local level.

3. *Environmental and social safeguards*. While environmental protection measures are present in all the countries studied, enforcement is generally weak, resulting in ongoing environmental degradation in mining areas. Social safeguards, including benefit-sharing mechanisms, exist but are often poorly implemented or underutilized.

4. *Community participation.* Efforts to involve local communities in mining governance vary widely across the countries studied. Senegal and Sierra Leone have established community development funds, but many other countries struggle to ensure effective community engagement and the fair distribution of mining benefits.

5. *Gender equity.* Promoting gender equity in the mining sector remains a challenge in all the countries studied. Women, particularly those in artisanal and small-scale mining, face significant barriers to participation and are often exposed to disproportionate health and safety risks.

6. *Linkages and value addition.* Initiatives to enhance local content and value addition in the mining sector face major challenges due to infrastructure deficits and capacity constraints. Botswana, Egypt and South Africa have made some progress, but much more is required to integrate mining into broader economic development efforts.

7. *Artisanal and small-scale mining.* The formalization of artisanal and small-cale mining remains a challenge in all eight countries, with persistent issues related to environmental degradation, informal practices and human rights abuses.

8. *Regional and continental framework alignment.* While progress has been made in adopting principles from the AMV, implementation at the national level varies considerably, and many countries fall short of achieving the AMV's ambitious goals.

RECOMMENDATIONS

1. *Strengthen enforcement mechanisms.* Increase investment in capacity building for regulatory bodies and impose stricter penalties for non-compliance with mining laws and regulations.

2. *Enhance transparency.* Fully implement EITI standards and create digital platforms for real-time disclosure of mining-related data, including contracts, licences and revenues.

3. *Improve environmental and social safeguards.* Mandate regular environmental audits, strengthen regulations on waste management and water use, and establish comprehensive mine closure and rehabilitation plans.

4. *Promote community participation.* Enforce community development agreements with clear, measurable outcomes, and establish participatory platforms to ensure that local communities are meaningfully involved in decision-making processes.

5. *Advance gender equity.* Develop gender-responsive policies, provide targeted support for women in mining, and address gender-based violence and discrimination in mining communities.

6. *Foster local content and value addition.* Prioritize investments in infrastructure, offer incentives for value-added activities, and align skills training programmes with sectoral needs to promote local economic linkages.

7. *Improve artisanal and small-scale mining governance.* Develop comprehensive frameworks to formalize and support artisanal and small-scale mining, including access to finance, technical assistance and regulatory oversight to mitigate environmental and social risks.

8. *Enhance data management.* Invest in modern geological surveying technologies and develop centralized, publicly accessible databases for mineral resource information.

9. *Strengthen regional cooperation.* Harmonize mining policies across regional economic communities and establish mechanisms for knowledge-sharing and best practices.

10. *Align with continental frameworks.* Accelerate national implementation of the AMV and conduct regular assessments to gauge progress against its objectives.

By addressing the identified governance gaps and adopting the proposed recommendations, African nations can achieve more equitable, transparent and sustainable management of their mineral resources.

FINAL THOUGHTS

Although African countries have made substantial progress in improving mineral resource governance, significant challenges remain in ensuring that mining activities contribute meaningfully to sustainable development. By addressing the identified governance gaps and adopting the proposed recommendations, African nations can achieve more equitable, transparent and sustainable management of their mineral resources. This approach will not only maximize economic benefits but also safeguard the environment, promote social equity and empower communities. Ultimately, effective mineral resource governance can serve as a catalyst for inclusive economic growth and sustainable development across the continent.

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Effective governance of mineral resources is vital to Africa's sustainable development, with the potential to transform resource wealth into broad-based economic growth. With the right governance frameworks, the continent's vast mineral endowments can benefit local communities, national economies and global markets. However, many African countries face ongoing challenges related to governance, transparency and the equitable distribution of resource revenues. These obstacles have hindered the continent from fully capitalizing on its resource wealth, often resulting in socio-economic inequalities and missed opportunities for development.

This report presents a comprehensive analysis of governance frameworks, challenges and opportunities across eight African countries—Botswana, the Democratic Republic of the Congo, Egypt, Nigeria, Senegal, Sierra Leone, South Africa and Tanzania. The study examines how these nations manage their mineral wealth, assessing governance frameworks, transparency mechanisms, environmental safeguards and community engagement approaches to harness mineral resources for sustainable socio-economic development.

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