

# IGF MINING POLICY FRAMEWORK ASSESSMENT

Rwanda

August 2017



**IGF**

INTERGOVERNMENTAL FORUM  
on Mining, Minerals, Metals and  
Sustainable Development

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The IGF supports 60 nations committed to leveraging mining for sustainable development to ensure that negative impacts are limited and financial benefits are shared.

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The IGF is focused on improving resource governance and decision making by governments working in the sector. It provides a number of services to members including: in-country assessments; capacity building and individualized technical assistance; guidance documents and conference which explore best practices and provide an opportunity to engage with industry and civil society.

These efforts are largely framed by IGF's flagship policy guidance and assessment tool, the Mining Policy Framework (MPF). The MPF lays out international best practices in six key pillars of mining policy and law: the legal and policy environment; financial benefit optimization; socioeconomic benefit optimization; environmental management; mine closure and post-mining transitions; and artisanal and small-scale mining.

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August 2017

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## ABOUT THE MPF ASSESSMENT SERIES OF REPORTS

With support from the Government of Canada, the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) is working with a voluntary selection of its member states to help them operationalize practices consistent with the IGF's Mining Policy Framework (MPF). Assessments completed since 2014 include Dominican Republic, Madagascar, Mongolia, Senegal, Suriname and Uganda; based on the success of these evaluations, the IGF will conduct three or four assessments each year in response to member requests.

The MPF assessment process is made up of two main steps. First, the MPF assessment team evaluates relevant national, regional and international laws, policies, conventions and administrative frameworks for mining and minerals development and management relative to the six themes of the MPF: Legal and Policy Environment, Financial Benefit Optimization, Socioeconomic Benefit Optimization, Environmental Management, the Post-Mining Transition, and Artisanal and Small-scale Mining (ASM). This work is done both through desk- and field-based research involving diverse stakeholders. The assessment identifies key strengths and gaps in the country's mining laws and policies (compared to the international best practices outlined in the MPF) which helps measure the readiness of the member state to implement the MPF through its existing government measures. The first phase includes documenting the results in a draft report, validating the reported results with the government and its stakeholders, and publishing the report of results. Building on outcomes of the assessment and validated reporting process, the second phase of the project involves working with the government to develop a capacity-building program that addresses its gaps and needs. The MPF capacity building is designed to strengthen the government's capacities and increased understanding to enhance national legislation, policies and governance to best leverage mining for sustainable development and poverty alleviation.

This report presents the assessment results for Rwanda, with a view to: helping the government target its efforts in implementing the MPF; informing capacity-building efforts; and allowing for monitoring of progress over time.

The authors would like to thank their colleagues from the Government of Rwanda, particularly those at the Ministry of Natural Resources (MINIRENA) for their help and support with this project. Special thanks to both Donat Nsengumuremyi, Director, Mining and Petroleum Unit, and Joseph Butera, Mining and Petroleum Economist, for their invaluable help in conducting this assessment.



## EXECUTIVE SUMMARY

This assessment was conducted by the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) and its associates at the International Institute for Sustainable Development (IISD) between December 2016 and February 2017 with support from the Government of Canada. It assesses the mining laws and policies of Rwanda and the country's capacity to implement the IGF Mining Policy Framework (MPF). The assessment involved extensive desk-based research and a five-day field visit to Rwanda, during which the project team met with a broad array of stakeholders from government, civil society, international organizations and the private sector. The assessment included visits to two mine sites and a smelter facility. The assessment phase of this project concludes with this report.

The assessment team identified the following major **strengths** in Rwanda's mining law and policy framework:

1. There is a strong legal and regulatory framework in place for the mining sector: guidance for environmental impact assessments (EIAs), environmental monitoring, a checklist for mine inspectors is in place and being used by regulators and industry, and revised mining standards focused on health and safety have been drafted for approval.
2. The government has a strong willingness to improve the mining sector by updating and improving the mining legal framework and resulting mining policy as necessary, and the government takes the lead on advancing and improving mining practices through the regular issuance of ministerial orders and the periodic review of policies and guidelines.
3. Legislation and policies are in place that are attractive to investors in the sector, and Rwanda is looking to support foreign direct investment.
4. The government is committed to continuously evaluating the national mineral potential.
5. Rwanda is exploring options for becoming a regional hub for mineral services, such as processing and beneficiation.

Rwanda's proximity to other known mining areas, its own mineral potential, combined with the legislation and policy strengths noted here, position it well to expand its mining sector in a responsible manner aligned with its socioeconomic development and poverty reduction strategies. Regardless of its location among other mining jurisdictions and clear high mineral potential, the lack of large mines and large investors suggests further geological and mineral assessment is warranted.

The following major **gaps** were also identified:

1. Both the Rwanda Development Board (RDB) and the Ministry of Natural Resources (MINIRENA) need to better understand the needs of potential investors and existing investors, especially regarding geological data and mineral potential. The lack of digitized existing detailed geological data is another challenge, as is how detailed information is presented and accessed. While to some investors the available data is sufficient, other investors find that it lacks the level of detailed resource evaluations to justify investment.
2. The mining sector in Rwanda has seen limited direct foreign investment to date, which results in low capacities in the following areas: managing capital investments; mine planning and efficient mining; mineral processing recovery; securing steady markets; mitigating mineral price fluctuations; and implementing mining policies and legal provisions.
3. There is a lack of harmonization across ministries, as RDB's priorities of energy, manufacturing, communications and technology, and tourism do not clearly prioritize mining despite it being the second-highest foreign exchange earner and a key funding sector for Rwanda's poverty reduction-strategy.

**TABLE 1. KEY STRENGTHS AND GAPS OF EACH PILLAR OF THE MPF**

MPF THEME	LEVEL OF PROGRESS TOWARD MPF STANDARDS	STRENGTHS	GAPS
Legal and policy framework	<b>MEDIUM</b>	<ul style="list-style-type: none"> <li>• Strong legal and regulatory framework for the mining sector: Guidance for EIAs, environmental monitoring, checklists for mine inspectors, and mining standards drafted.</li> <li>• Plans in place to upgrade the permitting process to an online application through the mining cadastre system.</li> <li>• Mining policy is regularly reviewed and set to be updated this year.</li> <li>• Historical and current geological information provides a reasonable amount of data (up to the 1:100 000 scale).</li> </ul>	<ul style="list-style-type: none"> <li>• Implementation of the 2010 Mining Policy remains a challenge (~50 per cent achieved by 2016); coordinated transitional steps and action plans lacking among responsible authorities.</li> <li>• Policies need to account for scale of operations.</li> <li>• Some investors require more detailed geological information in areas with high mineral potential.</li> <li>• Lack of integration between MINIRENA and RDB.</li> <li>• There is a lack of reporting standards and follow-up monitoring for exploration works.</li> <li>• Legislation lacks acceptable permit approval requirements for mine closure planning and closure financial assurance.</li> </ul>
Financial Benefit Optimization	<b>MEDIUM</b>	<ul style="list-style-type: none"> <li>• Revenues generated from a mix of financial mechanisms: variable corporate income tax consistent with the national rate of 0 to 30 per cent; set 4 per cent royalty on base metals and 6 per cent on precious metals and gemstones (gross production value); license and surface fees.</li> <li>• Proposed 10 per cent of the revenues of the mining sector back to communities (spending decisions and mechanisms, and management arrangements with local authorities still being determined).</li> </ul>	<ul style="list-style-type: none"> <li>• Some practices result in base erosion and profit shifting.</li> <li>• Miners have limited access to financing.</li> <li>• There are no mining specialists in financial institutions and government bodies such as MINECOFIN, RDB, MINEACOM, and RRA.</li> <li>• Little value addition and diversification in resources produced.</li> <li>• Rwanda EITI membership policy target has not yet been implemented.</li> <li>• Miners perceive cost of due diligence and certification to be excessive.</li> <li>• Existing incentives to address Rwanda's poor household savings culture insufficient.</li> </ul>



MPF THEME	LEVEL OF PROGRESS TOWARD MPF STANDARDS	STRENGTHS	GAPS
Socioeconomic benefit optimization	<b>LOW</b>	<ul style="list-style-type: none"> <li>• Corporate Social Responsibility (CSR) plans are required as part of formal permitting process (though implementation and monitoring remain a challenge).</li> <li>• Education and health are being emphasized and prioritized in national law.</li> <li>• The government recently approved a benefit-sharing requirement where 10 per cent of mining revenues go back to mine-affected communities.</li> <li>• Recent efforts made to align and draft mining standards regarding Health and Safety, now awaiting approval and implementation.</li> <li>• Mines source workers and services locally, benefiting the community and integrating mining into local social and economic fabric.</li> <li>• Rwanda has integrated the Regional Initiative on Natural Resources (RINR) to ensure the export of non-conflict-minerals from the region.</li> </ul>	<ul style="list-style-type: none"> <li>• The community consultation process does not meet international best practice standards (i.e., International Finance Corporation [IFC] Performance Standards).</li> <li>• No grievance mechanisms in place for the neighbouring communities of mine sites.</li> <li>• Subcontractors are often hired as casual labourers with informal agreements (verbal) and payments (cash).</li> <li>• Social impact assessments (SIAs) and health impact assessments (HIAs) to international standards are not formally required as part of EIAs.</li> <li>• The Voluntary Principles for Business Human Rights and Security are not part of the mining law or policy.</li> <li>• The exploration practices in place are not favourable for landowners, as only financial compensation considerations are made and they are inconsistently applied.</li> </ul>
Environmental management	<b>LOW</b>	<ul style="list-style-type: none"> <li>• EIA and Environmental Auditing Guidance are in place and are used.</li> <li>• Strategic impact assessments are being conducted in a manner consistent with national land-use planning.</li> <li>• EIAs are required and the process is clear; they are conducted by government-approved, Rwandan consultants.</li> <li>• Strong land-use planning in place, including mine plans that are integrated into district-level land-use plans that are made part of provincial level land-use plans and then sector land-use master plans.</li> <li>• Identified Environmental High Biodiversity Value Areas are protected and cannot be mined.</li> </ul>	<ul style="list-style-type: none"> <li>• Water quality guidelines and monitoring—specific to metal contamination of water catchment areas—do not exist.</li> <li>• There is an insufficient number of mine inspectors in the country, and inspectors do not have specialized skill sets in the various topics covered in the monitoring of the Environmental Management Plan.</li> <li>• Local government capacity on environmental issues is limited, and the consultants who carry out the EIAs require capacity building.</li> <li>• Waste management is not formalized.</li> <li>• Quality of emergency planning, preparedness and response is low.</li> <li>• Insufficient collaboration in assessment and approval of EIAs between agencies responsible for mining, environmental management, and the agency in charge of land.</li> <li>• Lack of adequate consultation of local communities in mining areas before EIA approval.</li> </ul>



MPF THEME	LEVEL OF PROGRESS TOWARD MPF STANDARDS	STRENGTHS	GAPS
Post-mining Transition	<b>LOW</b>	<ul style="list-style-type: none"> <li>• License renewal and surrender requires a mine plan that costs out rehabilitation; costs are reviewed and adjusted prior to relinquishing or renewing permits.</li> <li>• The government is willing to amend the mining policy to include a best-practice mine closure checklist.</li> <li>• Environmental guarantee deposited to Environmental Guarantee fund with account opened in Central Bank.</li> </ul>	<ul style="list-style-type: none"> <li>• Limited experience with mine closure.</li> <li>• Lack of sufficiently detailed planning and costing for closure.</li> <li>• Insufficient coordination between institutions and authorities— notably relative to inspection.</li> <li>• International standards experts are not consistently used in the design and planning of closure, and are not used for costing.</li> <li>• External periodic reviews to International Standards not consistently applied.</li> <li>• Environment guarantee (financial assurance) perceived as insufficient by RMA.</li> <li>• Planning and design requirements for waste and metal bearing materials storage is poor.</li> <li>• Lack of a formal process to address or take ownership for abandoned and orphaned mines.</li> </ul>
Artisanal and small-scale mining (ASM)	<b>MEDIUM</b>	<ul style="list-style-type: none"> <li>• All mining is subject to permit process, including ASM.</li> <li>• Artisanal miners are encouraged to form associations.</li> <li>• The Rwanda Mining Association advocates on behalf of both ASM and large-scale mining toward scaling up and professionalizing ASM.</li> <li>• The use of cooperatives and small companies to group small-scale miners so they can meet ASM category requirements.</li> <li>• ASM is integrated into the national economy.</li> <li>• No apparent child labour.</li> <li>• Women are well integrated into ASM workforce at the two mine sites visited.</li> <li>• Cooperatives try to deal with ASM conflict cases among miners.</li> <li>• A training strategy for miners (a kind of apprenticeship for people with little formal education) has been finalized by Workforce Development Authority, and is pending implementation.</li> <li>• ASM cooperatives making use of Mining Technician trained in the new IPRC diploma program.</li> <li>• ASM and mining industry will soon benefit from the recently launched School of Mining and Geology, University of Rwanda.</li> </ul>	<ul style="list-style-type: none"> <li>• Some micro-mining operations are struggling to meet the legislative required minimum production of 0.5 tonnes/month concentrate, to avoid having their mining license taken away. Consolidation is the target and has begun with several cooperatives.</li> <li>• Although some ASM workers are paid via bank accounts, informal and cash payments are common.</li> <li>• Incentives to address poor household savings culture among miners needs review and improvement.</li> <li>• Formal initiatives to provide training and capacity building are evolving and not yet implemented or just beginning.</li> <li>• Despite the presence of a mediator (RMA) for ASM, conflicts continue, mostly within ASM cooperatives and between small- and large-scale miners.</li> </ul>



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## ACRONYMS

CSR	Corporate Social Responsibility
DDB	District Development Plan
EDPRS- 1 / 2	Economic Development Poverty Reduction Strategy – Phase 1 / Phase 2
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
ESHIA	[Integrated] Environmental, Social, and Health Impact Assessment
GIIP	Good International Industry Practice
GOR	Government of Rwanda
HIA	[Community/Public] Health Impact Assessment
HSSE	Health, Safety, Security and Environment
IISD	International Institute for Sustainable Development
LOM	Life of Mine
MINIRENA	Ministry of Natural Resources
OHS	Occupational Health and Safety
PPE	Personal Protective Equipment
RDB	Rwanda Development Board
REMA	Rwanda Environmental Management Authority
RNRA	Rwanda Natural Resource Authority
SIA	Social Impact Assessment
SMP	Social Management Plan
3T / 3Ts	Represents the 3 “T” minerals—tin (for cassiterite), tungsten (for wolframite) tantalum (for coltan) and often includes gold ore



## INTRODUCTION

Mining is the second-highest foreign exchange earner in Rwanda (after tourism), and is a key strategic sector expected to support the country's Economic Development and Poverty Reduction Strategy – Phase 2 (EDPRS-2). The country is respected for its highly capable governance and strong legal and policy frameworks. Rwanda's first Mining Sector Policy was implemented in 2004 and updated in 2010. The government is currently undertaking an evaluation of the mining policy and considering revising the legislation. A draft policy has been prepared for review and further consideration—including incorporating the findings from this MFP assessment—with an update planned for adoption in 2017. Rwanda has made strong progress toward formalizing the artisanal and small-scale mining sector, but continues to face challenges in attracting foreign direct investment into the mining sector.

Using the IGF's Mining Policy Framework (MPF) as a guide, this assessment report first presents the national development, mining and legal contexts, and then highlights the key strengths and gaps that were found in Rwanda's existing mining policies and laws, across all MPF thematic areas. The assessment was carried out by the IGF and partners in January and February 2017—with support from Jordon Kuschminder, Independent Social Performance Pte Ltd, and Chiwanza Kasanga, IMCS (Independent Management Consulting Services Ltd)—using the following methodology:

- Desk-based research, including an extensive review of Rwanda's mining laws, policies and regulations, as well as relevant literature on the sector (December 2016–January 2017).
- Visit to Kigali and consultations with government, civil society, and private stakeholders (January 30–February 3, 2017).
- Site visits to Phoenix Metals (tin smelter), New Bugarama Mines in the Burera District of the Northern Province (wolframite mines) and to Cooperative ABAHIZI Mines in the Ngoma District of the Eastern Province (coltan and cassiterite mines).
- Presentation of initial findings to the Minister of Natural Resources and Chief executive officer of Rwanda Mines, Petroleum and Gas Board, for comment and validation; presentation of findings to relevant stakeholders (primarily to the staff of MINIRENA and Rwanda Mines, Petroleum and Gas Board) for their comment and validation.
- Drafting of the assessment report (March 2017).
- Validation of the draft report by Rwanda stakeholders (April 2017).
- Completion of final assessment report (May 2017).
- Publication of the final assessment report (July 2017).

The needs expressed by the Rwanda government and the highest priority gaps identified during the assessment formed the basis for the training and capacity-building program conducted in Kigali at the end of March 2017. These multistakeholder workshops included five days of interactive sessions, as well as training-of-trainers-style group sessions.





## ECONOMIC CONTEXT

Rwanda's economic base is mainly small-scale and subsistence agriculture—about 90 per cent of the population involved in farming. The agricultural sector contributes approximately 46 per cent of the gross domestic product (GDP). Food crops of Rwanda include plantains, sweet potatoes, cassava, potatoes, sorghum, beans and maize. Tea coffee, minerals and tourism are Rwanda's leading sources of revenue (Central Intelligence Agency [CIA], 2016).

Vision 2020, launched in 2000, is a long-term development plan which set the overarching goal of Rwanda attaining the status of middle-income country status by 2020. The approach aims at transitioning from an agricultural economy to a diversified service and knowledge-based economy. In 2008, the Rwandan government adopted a five-year medium-term strategy to accomplish its long-term development goals called the Economic Development and Poverty Reduction Strategy. Phase 2 of the strategy (EDPRS-2) was initiated in 2013 and will be in place until 2018. The EDPRS 2 (Rwanda Ministry of Finance, 2013) aims to achieve the following goals by 2018: raise GDP per capita to USD 1,240, with an average annual growth of 11.5 per cent (IMF, 2013); have less than 30 per cent of the population below the poverty line; and have less than 9 per cent of the population living in extreme poverty (World Bank, n.d.).

Over the last decade, the discussed goals have proven successful. Progress since 2005 includes rapid reductions in poverty levels accompanied by high economic growth, and a reduction in inequality. Reports from the World Bank also indicated that real GDP growth was 8 per cent per annum on average between 2001 and 2015 (World Bank, n.d.).

## ENVIRONMENTAL CONTEXT

Although Rwanda is located only two degrees south of the equator, its high elevation (an average of 915 metres above sea level) makes the climate temperate. There are two rainy seasons in the year: the first runs from February to June, and the second from September to December. These are separated by two dry seasons: the major one is from June to September, when there typically is often no rain at all, and a shorter and less severe dry season from December to February.

The central and western part of the country are dominated by the mountains uplifted by the Albertine Rift branch of the East African Rift. The highest peaks are found in the Virungas volcano chain in the northwest of the country. Heading eastward, the mountains transition to flatter forests, savannahs, plains and swamps. Rwanda has several lakes; Lake Kivu is the largest (and one of the 20 deepest lakes in the world, at 480 metres), occupying the floor of the Albertine Rift and spanning most of Rwanda's western border. The divide between the Congo and Nile River watersheds runs from north to south through Rwanda, with approximately 80 per cent of the country's area draining into the Nile and the remaining 20 per cent into the Congo, via the Rusizi River.

Rwanda and Burundi have recently joined the East African Community (EAC). Rwanda's territory, particularly within its section of the Albertine Rift, is endowed with a rich biodiversity including important endemic species of flora and fauna, some of which are endangered. This includes the endangered mountain gorilla, which is only found in the Virungas landscape. Although Rwanda is relatively small, with an area of just 26,000 km<sup>2</sup> it has dedicated 10 per cent of its territory to conservation and protection in four national parks (Twagiramungu, 2006). Three national parks are transboundary in nature: Volcanoes National Park in the north-west of the country borders parks in DRC and Uganda; Akagera National Park in the east borders a game reserve in Tanzania; and the Nyungwe Forest National Park in the southwest borders Kibira National Park in Burundi. A fourth national park in the west of the country, Gishwati-Mukura, was gazetted in late 2016.



## RWANDA: THE MINING CONTEXT

Rwanda is rich in a variety of minerals (United States Geological Survey, 2014). The most prominent are the rare metals of tin ore (cassiterite), tungsten ore (wolframite) and tantalite (coltan); tin, tungsten, tantalum are commonly known as the 3Ts. Gold is also mined. In 2016, Rwanda was the eighth-largest producer of tungsten in the world (Index Mundi, 2013). Revenues derived from exports of the 3Ts and gold are currently second highest among all sectors nationally (USD 149 million in 2015), after tea and coffee (Rwanda Development Board, January 31, 2017 discussion).

The mining sector experienced a resurgence following the 1994 genocide and the transitional government coming into power. More emphasis was put on development of the sector, and privatization was a major step to recovery: mining was largely privatized, and regulation and supervision were managed closely by the central government. This quickly introduced many private operators into mining and trading in Rwanda, most of whom are relatively small operators. The government formulated and began to implement a mining policy that addressed gaps in the legal framework, skills and capacity, which were sometimes filled by consultants in both the public and private sectors. They also began to consolidate artisanal miners into associations, implement international norms (especially traceability), and are now building technical capacities within universities and technical colleges. Privatization also led to an influx of international companies investing in mining projects and forming joint ventures with local investors.

There are over 250 registered mining and exploration companies in Rwanda, and they are categorized as either artisanal, small-scale, or large-scale operations. Since formalization, the ASM 3T subsector has been in transition, from virtually being non-existent in the late 1980s to becoming the largest producer of 3T minerals in Rwanda. Currently, the majority of the ASM miners do not meet the production requirements to be legally categorized as ASM, but significant efforts have been made to help them organize into cooperatives and unions at the district level, and to together organize these into a national federation of mining cooperatives. Within the cooperatives, ASM miners are paid on production quantity, but production depends on consistent access to deposits, which can result in fluctuating production cycles. Swings in commodity prices also have an impact on the ASM sector, as higher prices appear to increase activity at the ASM mines. Large-scale mining operations are increasing in Rwanda, but they continue to face challenges in accessing equipment, capacity of the workforce, contracting and procurement of services, and access to financing, all exacerbated by their vulnerability to commodity price volatility.



# RWANDA: KEY MINING LAWS AND POLICIES

## KEY INSTITUTIONS

Four key institutions comprise the framework for mining in Rwanda:

### MINISTRY OF NATURAL RESOURCES (MINIRENA)

MINIRENA is a multisector ministry responsible for the five sectors of Lands, Mines and Geology, Water, Forestry, and the Environment. MINIRENA is responsible for the development of policies, laws, and regulation as well as coordination and supervision of all the activities in each of the five sectors. This includes mining and quarrying as well as follow-up and evaluation.

### RWANDA MINES, PETROLEUM, GAS, BOARD (RMPGB) - FORMERLY THE RWANDA NATURAL RESOURCES AUTHORITY (RNRA)

In March 2017, RNRA dissolved and split into three bodies: the Rwanda Mines, Petroleum, and Gas Board (RMPGB), Rwanda Lands Authority, and the Rwanda Water and Forest Authority. The RMPGB is headed by a CEO and holds the mandate to improve mining operations and implementation of the national mining policies and strategies. It should be noted that at the time of the assessment, RNRA was the authority that led the management and promotion of natural resources composed of mines and geology, land, water, and forests. It was entrusted with supervising, monitoring, and ensuring the implementation of issues relating to the protection and promotion of natural resources in programs and all activities of all national institutions. The new RMPGB is comprised of five units: the Geological Survey, RMPGH Business Support Services; the Mining Cadastre and Licenses; Legal; and Mine Inspection.

### RWANDA DEVELOPMENT BOARD (RDB)

The Rwanda Development Board (RDB) was created by Organic Law N° 53/2008 of 02/09/2008. Its mission is the improvement of the economic well-being of all Rwandans by providing a “one-stop-shop” to fast-track development, support sustainable economic growth, and create prosperity for all. The Mining Sector Strategy was developed by the Ministry of Natural Resources, in collaboration with the department responsible for mining. There is also a department within RDB that is in charge of reviewing and approving EIAs, which includes REMA staff positioned within RDB.



## RWANDA ENVIRONMENT MANAGEMENT AUTHORITY (REMA)

The Rwanda Environment Management Authority (REMA) was established to act as the implementation institution for environmental policies and laws. REMA is additionally tasked with:

- Coordinating various environmental protection activities undertaken by environmental promotion agencies.
- Promoting the integration of environmental issues in development policies, projects, plans, and programs.
- Coordinating the implementation of government policies and decisions taken by the Board of Directors.
- Ensuring the integration of environmental issues in national planning among relevant departments within the government.
- Advising the government on issues, legislation, and law relating to environmental management or implementation of regional or international conventions, treaties, and international agreements relevant to the environment.
- To make proposals to the government in the field of environmental policies and strategies.

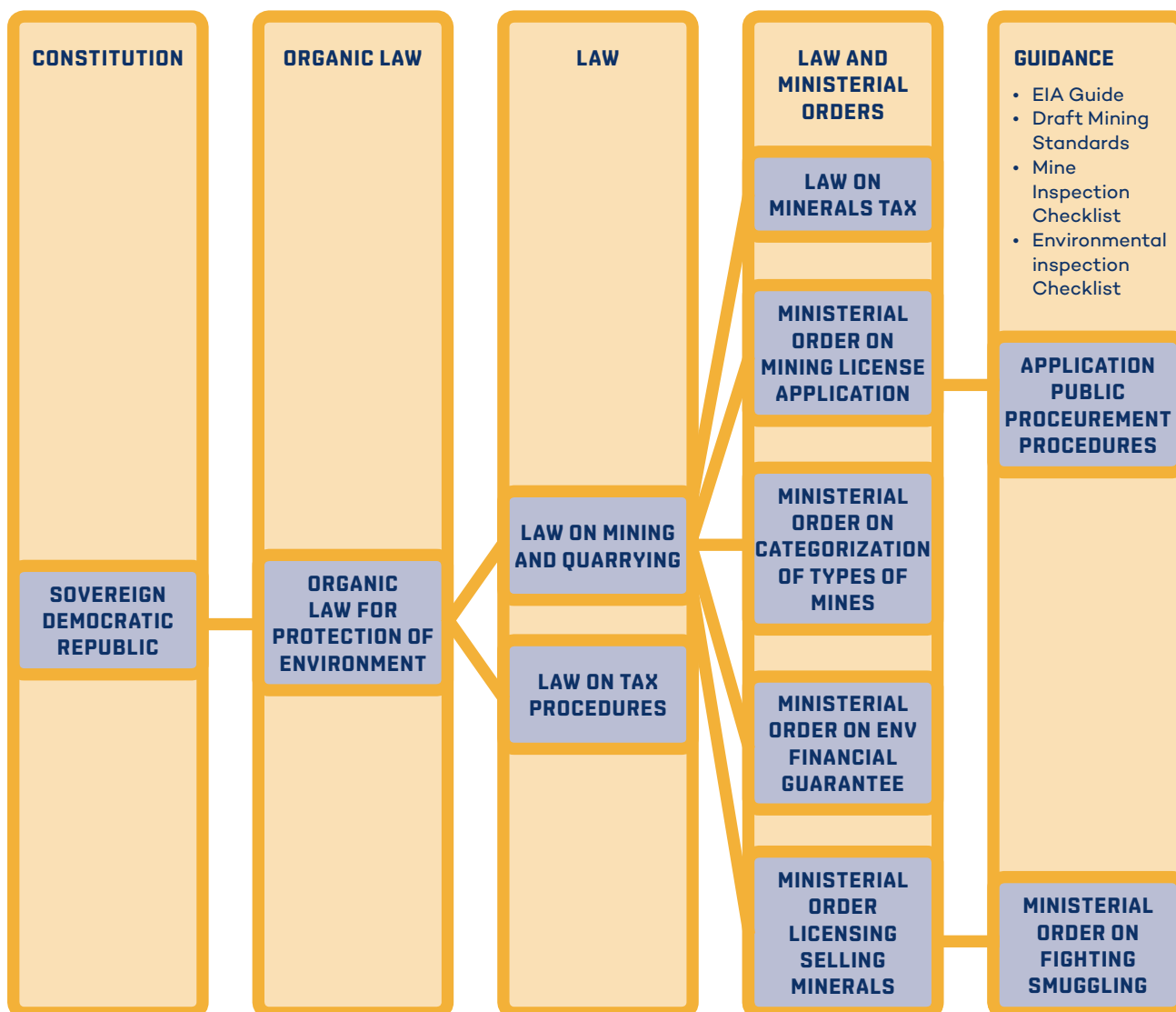
## DOMESTIC LAW AND POLICY

### CONSTITUTIONAL LEVEL

- The **Constitution of the Republic of Rwanda** of 04 June 2003, as amended to date—notably in Articles 62, 66, 67, 90, 92, 93, 108, and 201 (Mining and Quarrying).

### STRATEGIC HIGH LEVEL

- **Rwanda Vision 2020** is a policy statement on the long-term development aspirations of the government and the implications for the country's occupants as it is Rwanda's National Development Strategy.
- **Economic Development and Poverty Reduction Strategy (EDPRS)** which is currently in Phase 2, focuses on economic growth and prioritizes the environment. The EDPRS is a medium-term framework for achieving the country's long-term development aspirations within Rwanda's Vision 2020 and the former Millennium Development Goals (MDGs)—now replaced by the Sustainable Development Goals (SDGs)—using 1990 as the baseline. In recognition of its experience in measuring governance indicators using the Rwanda Governance Scorecards, Rwanda was selected to pilot the SDGs on Governance and Rule of Law.



**FIGURE 2. OVERVIEW OF PRINCIPLE MINING-RELATED GOVERNANCE REFERENCES**

**LAWS**

- Law N° 13/2014 of 20/05/2014 on Mining and Quarry Exploitation
- Law N° 06/2015 of 28/03/2015 Relating to Investment Promotion and Facilitation
- Law N° 55/2013 of 02/08/2013 on Mineral Tax

**MINISTERIAL INSTRUCTIONS, ORDERS, AND REGULATIONS**

- Ministerial Regulations N°001/MINIFORM/2010 of 10/03/2010 Fighting Smuggling in Mineral Trading
- Ministerial Order N°001/MINIRENA/2015 Regarding the Environmental Guarantee Fund
- Ministerial Order N°003/MINIFORM/2010 of 14/09/2010 on Requirements for Granting the License for Purchasing and Selling Mineral Substances in Rwanda
- Ministerial Order N°002/MINIRENA/2015 of 24/04/2015 on Criteria Used in Categorisation of Mines and determining Types of Mines
- Ministerial Order N°003/MINIRENA/2015 of 24/04/2015 Determining Modalities for Application, Issuance, and Use of Mineral and Quarry Licenses





- Ministerial Instruction N°010/MINIRENA/2016 of 11/01/2016 Determining Types, Size Limits, and Modalities for Exporting Mineral Ore Samples

## POLICIES

- The **Rwanda Policy of Mines and Geology** was first defined in 2004 and updated in 2010. The policy focuses on the fair management of mining resources to contribute sustainably and equitably to poverty reduction, responsible resource exploitation, and the importance of geological resources to the Rwandan economy.
- The **Mining and Mineral Policy of Rwanda**, 2017 is currently undergoing public consultation and will guide further strengthening of Rwanda mining governance. This MPF report forms part of the input to the mining policy and future mining governance reforms.

## INTERNATIONAL COMMITMENTS

Rwanda has several international commitments relevant to the mining sector, including but not limited to the following international laws, protocols, and conventions:

- In its preamble, the Rwandan constitution reaffirms the adherence to the principles of human rights enshrined in the United Nations Charter as well as in the core international human rights instruments. The second chapter of the Rwandan Constitution, from Article 10 to Article 52, provides for the fundamental human rights (as contained in the Universal Declaration of Human Rights) and duties of the citizen. Rwanda has effectively ratified all the eight key human rights instruments and most of their additional protocols. (Republic of Rwanda, 2015).
- With regards to the International Labour Organisation, Rwanda has ratified all eight Fundamental Human Rights Conventions, two of the Governance Conventions (C081 on Labour Inspection and C122 on Employment Policy) and 18 of the 177 Technical Conventions.
- Rwanda is part of the International Conference on the Great Lakes Region (ICGLR) which includes commitment to 10 Protocols and four programs of action with 33 priority projects, of which the following are legally binding related to mining:
  - > Protocol on Democracy and Good Governance
  - > Protocol Against the Illegal Exploitation of Natural Resources
  - > Protocol on the Specific Reconstruction and Development Zone
  - > Protocol on the Property Rights of Returning Persons
- Multilateral Environmental Agreements (MEAs) ratified by Rwanda include the United Nations Framework Convention on Climate Change (UNFCCC), the RAMSAR Convention on Wetlands of International Importance, Vienna Convention for the protection of the ozone layer, Stockholm Convention on Persistent Organic Pollutants, and the Convention on Biological Diversity.
- With regards to Regional Economic Integration Treaties (Entry into force of the Treaty for the Contracting Party) Rwanda is signatories to:
  - > [Treaty for the Establishment of the East African Community](#) (July 1, 2007)
  - > [Constitutive Act of the African Union](#) (May 26, 2001)
  - > [Treaty Establishing the Common Market for Eastern and Southern Africa](#) (December 8, 1994)
  - > [Abuja Treaty Establishing the African Economic Community](#) (AEC) (May 12, 1994)
  - > [The Georgetown Agreement \(formally establishing the African, Caribbean and Pacific Group of States, the "ACP Group"\)](#), since 1975 (ACP) (February 12, 1976)



- International Conventions of relevance to Mining that Rwanda has ratified include:
  - > Convention for the Protection of Cultural Property in the Event of Armed Conflict with Regulations for the Execution of the Convention. The Hague, May 14, 1954.
  - > Convention on Technical and Vocational Education. Paris, November 10, 1989.
  - > Convention concerning the Protection of the World Cultural and Natural Heritage. Paris, November 16, 1972.
  - > Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property. Paris, November 14, 1970.
  - > Convention on Wetlands of International Importance especially as Waterfowl Habitat. Ramsar, February 2, 1971.
  - > Convention on the Protection and Promotion of the Diversity of Cultural Expressions. Paris, October 20, 2005.
  - > Convention for the Safeguarding of the Intangible Cultural Heritage. Paris, October 17, 2003.

Rwanda is not yet a signatory to the United Nations Environment Programme (UNEP) Minamata Convention on Mercury, but this process is underway.



## ASSESSMENT: RWANDA AND THE MINING POLICY FRAMEWORK

The MPF presents the best practices required for good environmental, social and economic governance of the mining sector, and for the generation and equitable sharing of benefits in a manner that will contribute to sustainable development and poverty alleviation. Developed by the Member States of the IGF, the MPF has universal application and represents a commitment from the IGF members to ensuring that mining activities within their jurisdictions are compatible with the objectives of sustainable development and poverty reduction (IGF, 2013).

The objective of this assessment is to measure the readiness of the Rwandan government to implement the MPF through existing national laws and policies. It is hoped that by identifying the strengths, weaknesses and gaps in existing mining laws and policies, the assessment will help the Rwandan government target its efforts in implementing the MPF, inform capacity-building efforts and allow for monitoring of progress over time.

The assessment is organized according to the six themes of the MPF: the legal and policy environment, financial benefit optimization, socioeconomic optimization, environmental management, post-mining transition, and artisanal and small-scale mining. Each of the following subsections offers a short summary of the theme, the key legislation and policies applicable to the theme, and the strengths (where implementation is advanced), and gaps (where implementation needs more progress) within each theme. The assessment concludes with recommendations, consistent with the request of CEO of Rwanda Mines, Petroleum and Gas Board during the validation meeting.



## LEGAL AND POLICY FRAMEWORK

The first thematic area of the MPF focuses on national mining laws, policies and permitting processes. It encourages a mature, modern legislative system with clear lines of responsibility and accountability, and highlights the types of laws and policies that serve as a basis for good governance and sustainable development. The MPF standards featured in this thematic area fall into the following categories:

- The ongoing generation of and equal access to geological information.
- The periodic revision and updating of mining legislation and policies.
- A timely, transparent, unambiguous and consistent permitting process that requires:
  - > Consultation with communities in the planning and development stages of a mine.
  - > Submission of integrated social, economic and environmental impact assessments.
  - > Identification of sustainable development opportunities.
  - > Planning for mine closure, with adequate financial assurance.
  - > Protection of indigenous rights and cultural heritage, and addressing resettlement and community safety and security issues.

### KEY LAWS AND POLICIES

- Law N°. 13/2014 of 20/05/2014 on Mining and Quarry Exploitation
- Law N°. 06/2015 of 28/03/2015 Relating to Investment Promotion and Facilitation
- Law N°. 55/2013 of 02/08/2013 on Mineral Tax
- Ministerial Regulations N°. 001/MINIFORM/2010 of 10/03/2010 Fighting Smuggling in Mineral Trading
- Ministerial Order N°. 003/MINIFORM/2010 of 14/09/2010 on Requirements for Granting the License for Purchasing and Selling Mineral Substances in Rwanda
- Ministerial Order N°. 002/MINIRENA/2015 of 24/04/2015 on Criteria Used in Categorization of Mines and Determining Types of Mines
- Ministerial Order N°. 003/MINIRENA/2015 of 24/04/2015 Determining Modalities for Application, Issuance, and Use of Mineral and Quarry Licenses
- Ministerial Instruction N°. 010/MINIRENA/2016 of 11/01/2016 Determining Types, Size Limits, and Modalities for Exporting Mineral Ore Samples

### THE PERMITTING SYSTEM

The mineral licensing process in Rwanda is governed by Ministerial Order N°003/MINIRENA/2015 of 24/04/2015 Modalities for Application, Issuance and use of Mineral and Quarry Licenses. The RDB is tasked with the registration of business and overseeing the EIA process, which is a requirement to start a mining or quarry operation. While RDB registers the mining companies and accepts applications for mineral licensing, the process for mineral licensing is managed by MINIRENA and the Mining, Petroleum and Gas Board. Since 2016, the Rwandan Cabinet approves the mineral license offer before it is granted to the applicant.



Rwanda's Ministerial Order N°002/MINIRENA/2015 on 24/04/2015 provides the criteria for the three legally recognized mining categories:

**TABLE 2. RWANDA MINING PERMITS**

CATEGORY	MINERAL RESERVE ESTIMATE	PRODUCTION ESTIMATE REQUIREMENT	TECHNICAL COMPETENCE REQUIREMENT	CAPITAL INVESTMENT REQUIREMENT	OTHER LIMIT/ REQUIREMENT
<b>Exploration</b>	<b>N/A</b>	<b>N/A</b>	<b>To be developed</b>	<b>To be determined</b>	<b>4 years</b>
<b>ARTISANAL MINE</b>	Minimum 30 tonnes (t)	Minimum ½ t to maximum 3 t per month	Shall use mining equipment and techniques which preserve health, safety, and security of people and environment.	Minimum of *RWF 70,000,000 within 5 years	Not permitted to mine deeper than 40 m without additional permit.
<b>SMALL-SCALE MINE</b>	Minimum 200 t	Minimum 3 t per month	As above, with addition of extracting and processing machines as well as skilled personnel with technical know-how.	Minimum of RWF 700,000,000 within 5 years	No depth limit.
<b>LARGE-SCALE MINE</b>	Minimum 3,000 t – however, estimate determined by exploration report.	Minimum 15 t per month	Must use high-level mining machinery. Must also use high level techniques and expert personnel in mining operations.	Minimum of RWF 3,500,000,000 within 5 years	Mine must be equipped with a mineral processing plant.

*As of early 2017, 100,000 RWF was valued at approximately USD 120.*

The general requirements for an exploitation mineral license include the applicant providing identification, the proposed location of activities, a document describing the action plan (implementation plan with strategies, timeframe and costs of each activity), the planned investment and proof of investment source, the number of employees and level of qualifications expected, a proof of tax clearance, and information on any pending litigation cases. Additionally, a business plan, action plan or investment plan is to be submitted that indicates the investment budget for the entire duration of the license. It outlines funding that is only spent on operations related to exploration, exploitation of the minerals, or value addition.

Small-scale quarrying has no costing and no related requirements for environmental protection plans or environmental management programs. However, large-scale quarries are licensed for a period not exceeding 25 years and require an EIA that has to be submitted within a period of six months after the issuance of the quarrying license.



In addition to the General Requirements, there is a set of Particular Provisions that additionally need to be included in the application. These Particular Provisions for mining licenses include a map with specific geographic coordinates of the proposed license area, an environmental protection plan, the receipt for a non-refundable application fee (RWF 100,000) deposited into the public treasury, an approved exploration report (for the application of a mining license), a copy of the Environmental Impact Assessment (EIA) for the mining area (and in the case where the area was subject to prior mineral exploitation, an environmental audit of the area applied for), a receipt for a non-refundable administrative processing fee deposited into the public treasury (RWF 200,000), and a receipt for the deposit of the financial guarantee of environmental protection in case the application is approved.

When the mining license application is ready for submission, it is to be submitted to the Minister of Natural Resources. Feedback for the license application is mandated to be made within 60 days.

Upon approval of the mining license, the applicant must additionally pay within 60 days an approval fee depending upon the category of the license (exploration license = RWF 200,000; artisanal mining license = RWF 300,000; small-scale license = RWF 500,000; large-scale license = RWF 1,000,000). At the local level, the license holder must then work with the mayor of the district to facilitate the formal demarcation and description of the geographic boundaries of the license, and to consult on the required Corporate Social Responsibility (CSR) plan, which must be submitted to MINIRENA.

Annual fees for mineral license holders are paid per hectare (ha) held (exploration = RWF 250/ha/year; artisanal and small-scale = RWF 300/ha/year; and large-scale = RWF 500/ha/year). Monthly update reports, annual reports and inspections are additionally required. All licenses are eligible to be transferred or renewed following an application process.

There are no requirements in the order pertaining to obligatory community consultations outside of the EIA process.

## STRENGTHS

- Strong legal and regulatory framework for the mining sector: Guidance for EIA, environmental monitoring, a checklist for mine inspectors is in use by authorities and companies, and detailed mining standards (safety- and health-focused) are drafted and awaiting adoption.
- Robust permitting and approval process currently under review for upgrade to an online application process through the mining cadastre system.
- Policy is regularly reviewed and to be updated this year.
- Historical and current geological information provides a reasonable amount of data (up to the 1: 100,000 scale).

The Rwandan mining sector ended its transition from a publicly run industry to a private one in 2006, while at the same time transitioning from a regional trading industry to a local extraction and exporting industry. Rwanda has followed a different reform track than many other mineral-endowed sub-Saharan African countries. Rwanda's first attempt at privatization and attracting foreign direct investment (FDI) shifted toward achieving a broader alignment with international development principles and national development targets. This resulted in several measures common to a reform agenda, such as revised legislation, development of policies, review of tax administration, and modernization of the permitting process (Perks, 2016). While there remains a shared perspective of a "failure of privatization" as a result of the lack of significant attraction of FDI, there is an indication that Rwanda is actively innovating a meaningful approach toward "post-conflict" reconstruction through its preservation of smaller-scale mining. By promoting Rwandan participation in the sector, and focusing on successful growth of its labour force, Rwanda has the capacity to deliver almost half of its mineral export production. This implies that if Rwanda looks beyond its ability to attract FDI and its growth indicators, mining is showing the potential for an important role in the rural social economy (Perks, 2016).



Rwanda has been proactive with regards to ensuring the active evolution of the current Mining Policy, first drafted in 2004 and further revised and implemented since 2010. The Mining Policy has undergone review and will be updated again in 2017; a recent evaluation concluded that nearly 60 per cent of the 2010 policy targets have been achieved. The new policy is expected to further address sustainable development and environmental challenges, and is also expected to address a key shared concern by both REMA and MINIRENA related to the size of contiguous land holdings. At present, a license granted to a single mining operation may be over 400 contiguous hectares in size independent of the license holder's financial capacity to mine, explore or maintain that size of a land tenure. It is anticipated that the new policy will require an increased demonstration of capacity for the license holder requesting large tenure areas to be able to meet the regulatory expectations for exploration and maintenance within a certain period of time.

Rwanda is relatively well positioned with geological data publicly available to the 1:100,000 scale, a regularly updated (on alternate business days) mining cadastre portal website, and a national online land-use planning portal with publicly accessible land-use plans down to the district level. Despite this, investors have expressed concerns to the RDB and MINIRENA that the geological data remains insufficient and serves as an impediment to attracting foreign investment.

## GAPS

- The 2010 Mining Policy was approximately 50 per cent implemented after six years, and implementation remains challenging; stakeholders and authorities noted that coordinated transition steps and actions among various responsible authorities are lacking.
- Policies need to be flexible and appropriate to the scale of the mine (small-scale miners are requesting transitional periods to help reach higher standards and realistic achievement).
- Rwanda has good geological mapping to the 1:100,000 scale, but some investors are still requiring more detailed information for areas of high mineral potential.
- Could improve integration between MINIRENA and RDB.
- Lack of the reporting standard for exploration works carried out by private mining companies.
- Insufficient monitoring of exploration work carried out by private exploration companies.
- Consultation process does not meet international best practice standards.

Despite Rwanda's strengths, there is acknowledgement that the initiation of good practice is still largely internally driven and only seen as a result of governmental efforts. While this should also be commended, a number of stakeholders expressed to the assessment team the perception that the lack of strong civil society groups in Rwanda meant there is limited external contribution toward better practice and policy in mining.

Capacity, notably at the technical and management level within both the professional and government oversight of the mining sector, has resulted in a gap between established policy and the ability to implement it meaningfully on the ground. Aligned with this is a perceived sense that government policies are somewhat removed from the realities faced by active mining operations (small-scale miners especially). Miners suggest that legislative requirements, and the policy targets that drive the legislation, need to become more flexible and appropriate to the scale of the mine; transitional arrangements were mentioned as an option to address the legal requirements. An example of shared concerns is artisanal miners who join cooperatives in order to meet production requirements. Being part of cooperative means that scaling to small-scale is not necessarily that far off, it remains difficult to pool resources to meet the technical requirements—at the same time, incentive is reduced by the increase in fees.



MINIRENA and RDB acknowledge and share the concern of lost opportunity due to limited integration and communication between the two institutions. Given that RDB oversees the registration of mining operations, increased awareness of each organization's responsibilities, current objectives, and current projects would support improved efficiency and effectiveness of the two institutions and better support collaboration on several strategic aspects—notably toward the goal of increasing interest and investment from foreign investors.

Community consultation, as it is understood by international best practice (i.e., alignment with IFC Performance Standard 1), is not a regulatory requirement for securing a mining license or operating a mine in Rwanda. A weak civil society also has limited engagement within the mining sector and is mostly focused on a narrow range of issues, including conflict mineral certification and miners' employment issues.

While the current accessibility and availability of Rwanda's geological data is consistent with the MPF, given the nature of the tin, tungsten, and tantalum reserves in the country Rwanda has received feedback that in order to attract investors geological data needs to be provided to a more detailed scale than 1:100,000. The feedback from investors who have talked with RDB indicated that they would prefer more information on mineral deposits, resources and reserves to assist in making better-informed decisions.

## FINANCIAL BENEFIT OPTIMIZATION

The Mining Policy Framework's second thematic area focuses on the optimization of financial benefits through taxes, royalties and other payments that reflect the value of mineral resources to society. The other major subtopic of this pillar is revenue transparency, on the municipal and national levels. The policy recommendations under this section fall into the following categories:

- The implementation of a revenue-generation framework that optimizes returns from mining activities and allows some minimum level of financial return during periods of low prices.
- The integration of planning for the mining sector with that of other economic sectors.
- Providing a policy that optimizes revenues while offering an adequate rate of return to investors, that uses income tax based on net profits, and that applies such taxes in a similar manner as to non-mining activities.
- The need for a high level of human and intellectual resources, particularly to administer and audit the country's tax system and obtain maximum benefit from its tax regime.
- The integration of fiscal instruments and policy objectives.
- Increasing revenue transparency and knowledge regarding the distribution of benefits from mining.

## KEY LAWS AND POLICIES

- Mining Policy of 2010
- Law N°. 55/2013 of 02/08/2013 addresses minerals tax and royalties payable by mineral classification
- Ministerial Order N°. 001/MINIRENA/2015 of 24/4/2015 on the Financial Guarantee of Environmental Protection





## STRENGTHS

- Revenues are generated from a variety of fiscal instruments, including: corporate income tax (30 per cent of profits consistent with national tax rates for all sectors of the economy); 4 per cent royalty on base metals and 6 per cent on precious metals and gemstones (gross production value); license and surface fees.
- Although it has no legislation for government equity requirements, Rwanda remains on track with its privatization efforts and has sought public-private partnerships with investors.
- Cabinet approved transfer of 10 per cent of all mining revenues back to communities, although the mechanisms and processes for spending and management are being developed.

Rwanda's legal framework, designed by MINIRENA, sets clear guidelines on the management of revenue flows, licensing requirements, environmental conservation, classification of minerals (including base metals, semi-precious gemstones and construction materials) and supporting ministerial regulations, one of which addresses smuggling in the mining sector.

According to the Ministry of Natural Resources, the Rwandan government has adequate capacity to negotiate financial terms and conditions on mineral development agreements through the use of a model mining agreement developed in 2012 with the support of the International Senior Lawyers Project. The Capacity Development and Employment Services Board (CESB) provides specialized training to staff in the ministry upon request. This agency was set up after 2015, and thus its effectiveness has yet to be measured.

Apart from a 30 per cent corporate income tax, consistent with national corporate taxation legislation and rates, revenue is generated through various other means. Mineral royalties are set at 4 per cent of the norm or gross value (the cash price/tonne on a registered exchange or Metal Bulletin multiplied by quantity exported) for base metals, including tin, tungsten, and tantalum; and at 6 per cent of the norm value for precious metal regardless of s such as gold. The 6 per cent rate of the gross value (the realized price for the sale FOB at the point of export) is also applied for diamonds and gemstones. Mineral royalty taxes—which are fixed—for base metals are higher than neighbouring countries, such as DRC, but comparable to Burundi and Tanzania. Separate, pay-as-you-earn income tax is deducted from employee salaries and remitted to RRA. According to RRA, the worst-performing tax type of all the sectors and tax types was mineral royalties (RWF 3 billion) for the 2015/16 fiscal year, a result attributed to the decrease in mineral prices.

### BOX 1. RWANDA'S MINERAL TRACEABILITY SYSTEM

The mineral traceability tagging system, a certification scheme implemented by international organizations such as PACT (and supported by the German Federal Institute for Geosciences and Natural Resources [BGR], which supports some aspects of the implementation of the Regional Certification Mechanism), has been applied to the entire Rwandan mining sector to identify the source of minerals exported, which has aided in the collection of taxes from mining activities. The tagging system involves “bagging and tagging” of mineral ores at their production site to be exported as concentrates. All sealed bags containing the minerals then have a unique code identifying their provenance. Electronic companies, who rely on tin and tantalum particularly, are required to report on the origins of any potential “conflict minerals” they use in their products. Unlicensed miners who might ordinarily be comfortable selling their minerals to intermediaries or buyers without receipts are now facing fewer buyers willing to purchase untagged minerals. Global efforts in mineral traceability have helped motivate buyers and exporters to adopt such an approach and related requirements (source certification).



## GAPS

- Practices that result in base erosion and profit shifting are a challenge.
- Miners have limited access to financing and lack capacity to acquire and present the data required by potential financiers.
- Financial institutions and government bodies such as MINECOFIN, MINEACOM, and RRA lack mining specialists to vouch for mining project viability.
- Little value addition and diversification in resources produced.
- Transparency aspects in specific elements related to Rwanda's EITI membership policy target have not yet been implemented.
- Miners perceive the cost of due diligence and certification to be excessive.
- Existing incentives to address Rwanda's poor household savings culture need review

Artisanal and small-scale mining operations with little to no mechanized equipment find it challenging to add value to the minerals extracted. There is also a strong focus on 3Ts, with very little diversification into gemstones and quarry products. According to observations made in the Mining Policy, there are a lot of products derived from extractives industry, such as quarry products and "development minerals" which are raw materials for construction, manufacturing and infrastructure that cross Rwanda's borders as imports, which could actually be produced locally.

During consultations, mine operators and the RMA stated that access to financing is a challenge that affects both large and small-scale operations. Inasmuch as this issue can be attributed to lack of adequate collateral to secure the credit facilities, there is also limited knowledge of the extractive industry and mining operations among bank staff. Creditors are generally reluctant to provide project financing for projects with which they are not experienced or are uncertain of the risks regarding loan repayment. The exploration reports required by ASM and LSM operations are normally insufficient to provide assurance to lenders that the resources being mined will continue to produce steady income for the duration of the loan. In addition, fluctuating incomes among mining companies and cooperatives add to the negative perception among bankers about capacities to meet the minimum repayments; in periods of low production, companies tend to experience a reduction in seasonal workers, who venture out to earn income in different sectors. Finally, the current limited levels of exploration, reserves, mine plans and the support of technicians make it difficult to present bankable plans for financing expansion of existing mining operations. An Export Growth Facility fund has been set up to increase exports, by providing companies with financing required to expand their business; however, this fund is available to export-oriented Rwandan SME's exclusively.

Under the current Mining Policy there is no tax holiday on investments in the mining sector, and, not surprisingly, this is deemed a major weakness by the mine operators interviewed because most exploration and mining projects in their growth phase require significant capital investments during construction. Consequently, there is a risk of mining companies going out of business in the early stages of operations or in their attempts to increase production; in the worst case, companies decide not to invest in the Rwanda mining sector.

There is limited transparency in reporting revenues obtained from mining. Revenues collected are not published by the Rwanda Revenue Authority, but are instead reported as a national aggregate comprising revenue from every sector. Some civil society organizations expressed concern over the numbers reported to them, as inaccuracy is not uncommon in the numbers reported to RDB and to MINIRENA. Further, details on how the revenue has been distributed is not consistently shared with the public in a manner useful for public discourse.



## **BOX 2. EITI IMPLEMENTATION**

The Extractive Industry Transparency Initiative (EITI) promotes transparency and accountability for the governance of revenue collected from the mining sector. It is a multistakeholder global partnership that employs a transparency standard requiring member governments to report their extractives revenues to be compared and validated with corresponding payments reported by extractives companies. Transparent extractives reporting is a condition of financing for many investors. Rwanda's mining policy identified EITI membership as a target, but to date has not begun the process. Although Rwanda requires detailed revenue and payment reporting, the data was not easily accessed or evaluated during the assessment. Establishing an EITI multistakeholder group and secretariat is costly, and to date Rwanda's authorities and predominantly small-scale mining sector have been unwilling to bear that cost. Funding opportunities may exist, and Rwanda can identify and assess those, possibly with input from the EITI International Secretariat. Neighbouring countries that are EITI members may also be willing to suggest how Rwanda can develop a sustainable EITI implementation plan.

Due diligence measures, such as the U.S. Dodd-Frank Act, though necessary, are costly to miners and mining companies. For artisanal and small-scale miners, these are fixed costs not easily borne except by increasing production, which is a challenge due to lack of access to financing. Miners have to cover the expenses incurred in tagging system and this can be a great burden, particularly in periods of low commodity prices, which tend to lead to reduced productivity (many in Rwanda go back to farming during such times). These costs have been reduced by MINIRENA but are still proving cumbersome to some miners.

## **SOCIOECONOMIC BENEFIT OPTIMIZATION**

The third thematic area of the MPF examines how domestic laws and policies promote the conversion of extracted natural capital into human capital so that the socioeconomic benefits of mining are optimized for local, regional and national stakeholders. The policy recommendations under this theme include:

- Integration of the mining sector into community, regional and national fabrics and strategies, for example by making socioeconomic planning a part of the permitting process and by ensuring that consultations with affected stakeholders take place at various stages of the mining cycle.
- Working collaboratively with governments to ensure that mining activities consider and support education and community health services.
- Ensuring high standards of occupational health and safety.
- Optimizing employment and business opportunities at and around the mine site with an objective of ensuring economic growth beyond the life of the mine.
- Addressing potential security issues.
- Considering the respect of human rights, indigenous people and cultural heritage through norms that are aligned with international laws and standards.

## **KEY LAWS AND POLICIES**

- Rwanda's Economic Development and Poverty Reduction Strategy (EDPRS)
- Rwanda's Mining Policy of 2010



## STRENGTHS

- CSR plans are required as part of formal permitting process (but acknowledging that the monitoring and implementation remain a challenge).
- Education and health are being emphasized and prioritized in national law.
- Cabinet has recently approved a benefit-sharing requirement of 10 per cent of the revenues from the mining sector back to local impacted communities, although spending decision and management processes are to be developed.
- Recent effort to align and draft mining standards with health and safety regulations (awaiting approval and then implementation).
- Mines tend to source workers and services locally, benefiting the community and integrating mining into local social economic fabric, consistent with the law.
- Rwanda has integrated the Regional Initiative on Natural Resources (RINR), a framework to ensure the export of only non-conflict-minerals from the region

The combination of two things—an approved CSR plan submitted to MINIRENA as part of the licensing process, and the recent government instruction that 10 per cent of all mining revenues be returned to local communities as a benefit-sharing requirement—demonstrates both awareness of and commitment to the importance of the sector contributing to host mining communities/regions. This commitment will help maintain the social license to operate. Collectively, the CSR plan and the decree to shift a percentage of tax royalties back to the community move Rwanda toward the good international practice of shared benefits between mining operations and the communities they impact.

The fact that both education and health are common key priorities addressed in CSR contracts demonstrates alignment with both the MPF and the goals of Rwanda's Economic Development Poverty Reduction Strategy Phases 1 and 2. This shows the mining sector's strong alignment with national strategic priorities. In fact, the mining sector is expected to be a key funding source for the EDPRS-2, which could prove problematic in times of lower commodity prices. Education and health are both priorities within the EDPRS-2, which strongly influences both provincial and district-level planning. The impact of this influence is evident when mining companies engage local leaders at the district level as required by the mining license approval process—both education and health are among the top priorities considered as part of the CSR plan submitted for final approval.

Although still predominately centralized, the alignment between national, provincial and local levels of the mining sector appears to be quite robust and functioning well—in part demonstrated from responses by RDB and MINIRENA regarding a shared confidence in the licensing process and limited conflicts or challenges from local-level authorities. Another good but converse (local level-upward, rather than government-down) example of this is how local-level conflicts are dealt with locally prior to significant escalation; escalation only happens if the conflict is deemed inappropriate for local-level resolution, or if the conflict cannot be effectively managed locally. It is then moved up to higher-level processes within the industry (i.e., the Rwanda Minerals Association with both an arbitration and mediating capacity) or higher levels within government.

Rwanda has drafted Mining Health and Safety standards that are currently subject to consultation and awaiting approval and implementation.

Mining companies are required to employ Rwandans, unless local expertise is lacking, consistent with mining legislation. Local procurement of services is also required in mining legislation. Consistent with our observations at two sites, the majority of mining sector labour is sourced directly from local communities closest to the mines. Likely a result of the fact that the majority of mines are artisanal or small-scale in nature, this results in direct integration into the local economy: it nurtures resilience among the communities and companies which they would not have independently.



## GAPS

- Consultation process does not meet international best practice standards (i.e., IFC Performance Standards).
- No indication of grievance mechanisms for mine sites (or neighbouring communities).
- Subcontractors are often hired as casual labourers with informal agreements (verbal) and payments (cash).
- Social Impact Assessments may be part of CSR plan submitted for license but are not formally required and do not consistently consider employment opportunities; SIA is included in some EIAs but are weak, missing important aspects such as in migration and related land tenure tensions; community health is mentioned but health impact assessments (HIAs) are not.
- The Voluntary Principles on Security and Human Rights and grievance solving mechanisms are not part of domestic mining law or policy.
- The expropriation laws in place are not favourable for land owners, as only financial compensation considerations are made and are inconsistently applied.

While there are specific provisions for engaging local administrations and communities in the EIA process at the three distinct stages, the level of engagement does not meet the standards recognized by international expected practice (IFC Performance Standard 1); existing provisions are more about informing stakeholders and providing information, rather than gathering feedback that is incorporated in the proposed or updated mine plan.

There is no requirement for a formal grievance mechanism to mediate conflicts between mine sites and their neighbouring communities. The International Council on Mining and Metals (ICMM) provides guidance that meets the United Nations Business and Human Rights Protect, Respect, and Remedy framework, but this guidance has not been adopted in Rwanda.

During the assessment, it was learned that it is not a typical practice for individual miners to have employment contracts with either subcontractors or with the mining license-holding company directly. This increases their vulnerability and does not follow the expectations set out in Rwanda's labour laws and codes.

While Rwanda provides guidance for EIA and SIA, the consistency in meeting this expectation and the quality of the SIAs themselves are less than adequate. SIAs are often included as a component to EIAs or as part of the CSR contract with the Ministry, but these SIAs are relatively simple, represent a very limited assessment of impacts (both in type and quality), do not show any indication of meaningful consultation, and focus more on how financial benefits will be shared locally.

Health Impact Assessments (HIAs) and the concept of Integrated Environmental, Social, and Health Impact Assessments (ESHIA) are another gap in Rwanda's Impact Assessment requirements. Rwanda's Impact Assessment requirements for identifying and addressing environmental, social and health impacts will need to be updated if they are to meet current international best practices (i.e., IFC Performance Standard 1). There are also concerns that in-country EIA professionals do not have the adequate skills or capacity needed to conduct proper EIAs that incorporate SIAs and consider community health to an international standard. Without building the capacity of these practitioners, it will be a challenge for Rwanda to improve the quality of EIA assessments and management plans to a point where they will provide a meaningful plan to manage impacts and protect the environment.



**BOX 3. UNDERSTANDING COMMUNITY PERCEPTIONS ON MINING IN RWANDA**

A recent academic study (Weldegiorgis & Ali, 2016) sought to understand three classes of shared perspectives on mining of greatest concerns to shareholders in Rwanda’s Rulindo District. In Rulindo, mines are major producers and operate at a semi-industrial scale, but ASM—which is either organized into cooperatives or run by individuals and families—also plays a role in social and environmental impacts in the area.

The study reveals the following interpretation of results:

- There are three distinct perspectives among the stakeholders.
- There is little emphasis on the issue of gender proportion in mining and the impact of population pressure on mining development (this was echoed in the assessment team’s interviews)—however, a minority concern was expressed as to the quality and quantity of opportunities available for women.
- All three perspectives agree that mining benefits outweigh the losses from possible environmental degradation and social upheaval resulting from new (including large-scale) mining projects.

**TABLE 3. A SUMMARY OF THE THREE DISTINCT PERSPECTIVES ON MINING IN RWANDA:**

<b>PERSPECTIVE ‘A’</b> <i>(DOMINATED BY COMMUNITIES WITH GOVERNMENT REPRESENTATION, AND COMPANIES)</i>	<b>PERSPECTIVE ‘B’</b> <i>(DOMINATED BY MINING EMPLOYEES AND COMPANY PERSONNEL)</i>	<b>PERSPECTIVE ‘C’</b> <i>(DOMINATED BY COMMUNITIES WITH NO GOVERNMENT REPRESENTATION)</i>
<ul style="list-style-type: none"> <li>• Highly values mining’s contribution to long-term positive social impact, emphasizes the need for a diversified economy, and sees the government playing an active role.</li> <li>• Advocates for mining to exist, as all appropriate measures, particularly environmental preservation, are in place.</li> <li>• Does not agree that at the large-scale mines, well-paying positions are taken by foreigners and in-migrants but remains unsure whether economic benefits are being spread widely or creating income inequality at the regional level, and whether government revenues from mining are translated into local development.</li> <li>• Does not believe the large-scale mines cause social problems linked to alcohol and drugs.</li> <li>• Does not share the view that mine operations result in increased pregnancies among young local women.</li> <li>• There are some negative impacts on communities such as progressive damage on houses caused by explosives and blasting.</li> <li>• Reaffirms the importance of mining to the economic future of host districts.</li> </ul>	<ul style="list-style-type: none"> <li>• Sees more benefit from mining than other economic sectors and gives little value to a diversified economy for the district.</li> <li>• Advocates for mining to the extent that it should take precedence over agricultural uses of land.</li> <li>• Importance placed on employment benefits to miners and is concerned about competition by foreign workers but acknowledges a constraint created by the lack of domestic skills matching the mining jobs.</li> <li>• Resettlement of people from mining areas is necessary to avoid competing land-use conflict and social issues.</li> <li>• Conflict with illegal miners is not caused by lack of clear boundaries but by residents living within the concession: consultation with residents is acknowledged as not adequately emphasized.</li> <li>• Does not agree that mines have adverse impacts on water bodies or that dust containing harmful chemicals cause environmental impact—including on agriculture.</li> <li>• Agrees that mining may contribute to increases in alcoholism and drug-related social issues.</li> <li>• Also agrees with progressive housing damage as a result of blasting.</li> </ul>	<ul style="list-style-type: none"> <li>• Supports mining but expresses strong concerns regarding negative impacts.</li> <li>• Strongly disagrees that mining should take precedence over agricultural land use.</li> <li>• Despite expectations of long-term benefits from mining, feels that current financial contributions and income earning are merely meeting basic needs such as shelter, education, and health.</li> <li>• Believes mining has directly resulted in social disruption linked to alcohol and drugs, progressive damage on housing from blasting, a higher cost of living, income inequalities caused by unequal distribution of benefits.</li> <li>• An immediate concern of this perspective is the adverse health and safety impacts and the lack of insurance available to miners to protect them.</li> <li>• Feel that consultation with communities should be prioritized, including making them a part of the decision-making process and clarifying that consultation should take place at all stages of mine development.</li> </ul>



## ENVIRONMENTAL MANAGEMENT

The environmental management section of the Mining Policy Framework recognizes the importance of ecosystem management to any society seeking to become more sustainable. The themes covered under this thematic area include:

- Management of water resources, surface and groundwater, guaranteeing the quality and quantity of mining effluents discharged to the environment.
- Avoiding and minimizing potential adverse effects to biodiversity through different actions and measures.
- Managing mine wastes by creating facilities, commissioning reviews by experts and preparing reports to submit to the government.
- The development and implementation of an emergency preparedness program prior to the commencement of operations, updating this program during the life of the mine to meet best practice standards.

## KEY LAWS AND POLICIES

- N° 63/2013 of 27/08/2013 Law Determining the Mission, Organization and Functioning of Rwanda Environment Management Authority (REMA).
- N° 04/2005 of 08/04/2005 Organic Law Determining the Modalities of Protection, Conservation and Promotion of Environment in Rwanda.
- N° 70/2013 of 02/09/2013 Law Governing Biodiversity in Rwanda
- N° 43/2013 of 16/06/2013 Law Determining the Use and Management of Land in Rwanda.
- N° 47bis/2013 OF 28/06/2013 Law Determining the Management and Utilization of Forests in Rwanda.
- N° 62/2008 of 10/09/2008 Law Putting in Place the Use, Conservation, Protection and Management of Water Resources Regulations.

### **BOX 4. THE USE OF ENVIRONMENTAL IMPACT ASSESSMENT, STRATEGIC ENVIRONMENTAL ASSESSMENT AND ENVIRONMENTAL SECURITY ASSESSMENTS IN RWANDA**

The United Nations Development Programme (2011, p. vi) defines environmental impact assessments as “the systematic evaluation of a project to determine its impact on the environment and natural resources.” Strategic Environmental Assessments (SEAs) are an assessment tool that coordinates with the EIA and expand the scope of assessment beyond the project level to address the impacts and cumulative effects of major policies, plans, and programs (PPPs), while EIAs evaluate simply the potential environmental impacts of projects awaiting approval.

Environmental Security Assessments (ESAs) complement the SEA. ESAs are a critical analysis of environmental impacts as they interact with and affect the human security of populations within a geographically defined area (e.g., community, region, transportation corridor, etc.). While ESAs do not focus on a particular project, policy, plan, or program, their primary goal is averting community vulnerability, insecurity and conflict, and supporting movement toward sustainable development. As such, ESAs play a complementary role to help bring attention to the implications of key aspects of SEAs for PPPs.

The complementary relationship between EIAs, ESAs and SEAs in Rwanda is that SEAs are comprised of both an assessment of the PPPs and EIAs, with the consideration of the dynamic context captured with the ESAs. Like many developing countries, Rwanda faces implementation challenges on such strategic management, but the vision of this approach and the fact that they are working toward implementation despite existing gaps within the country’s own PPPs, needs to be acknowledged and commended.

*Source: United Nations Development Programme, 2011.*



## STRENGTHS

- EIA and Environmental Auditing Guidance are both in place and used.
- Strategic impact assessments are conducted in a manner consistent with national land-use planning.
- EIAs are required and the process is clear.
- Strong land-use planning, including mine plans that are integrated into district-level land-use plans that integrate into provincial plans and then into sector-level master plans.
- Protected areas cannot be mined.

Rwanda is one of the leading countries for green growth in Africa, and has achieved impressive development progress over the past 20 years. It is currently working to consolidate gains in social development and address sustainability challenges, while also trying to address the challenge of managing an urban population growing at a rate more than double the worldwide average of 4.5 per cent (Global Green Growth Institute, [GGGI], n.d.).

Rwanda's Law Governing Biodiversity (2013) mandates the identification of high-biodiversity assets within the country and protects them from potentially harmful activities such as mining within the identified areas. Clear and credible environmental policies are supported by sector-specific guidance on EIAs for mining. As mentioned above, REMA staff are embedded into RDB for the purposes of reviewing EIAs, imposing conditions and making recommendations for approval or refusal of the EIA. Rwanda's EIA process can best be understood by going through a simple strengths versus weaknesses assessment (ELaw, n.d.).

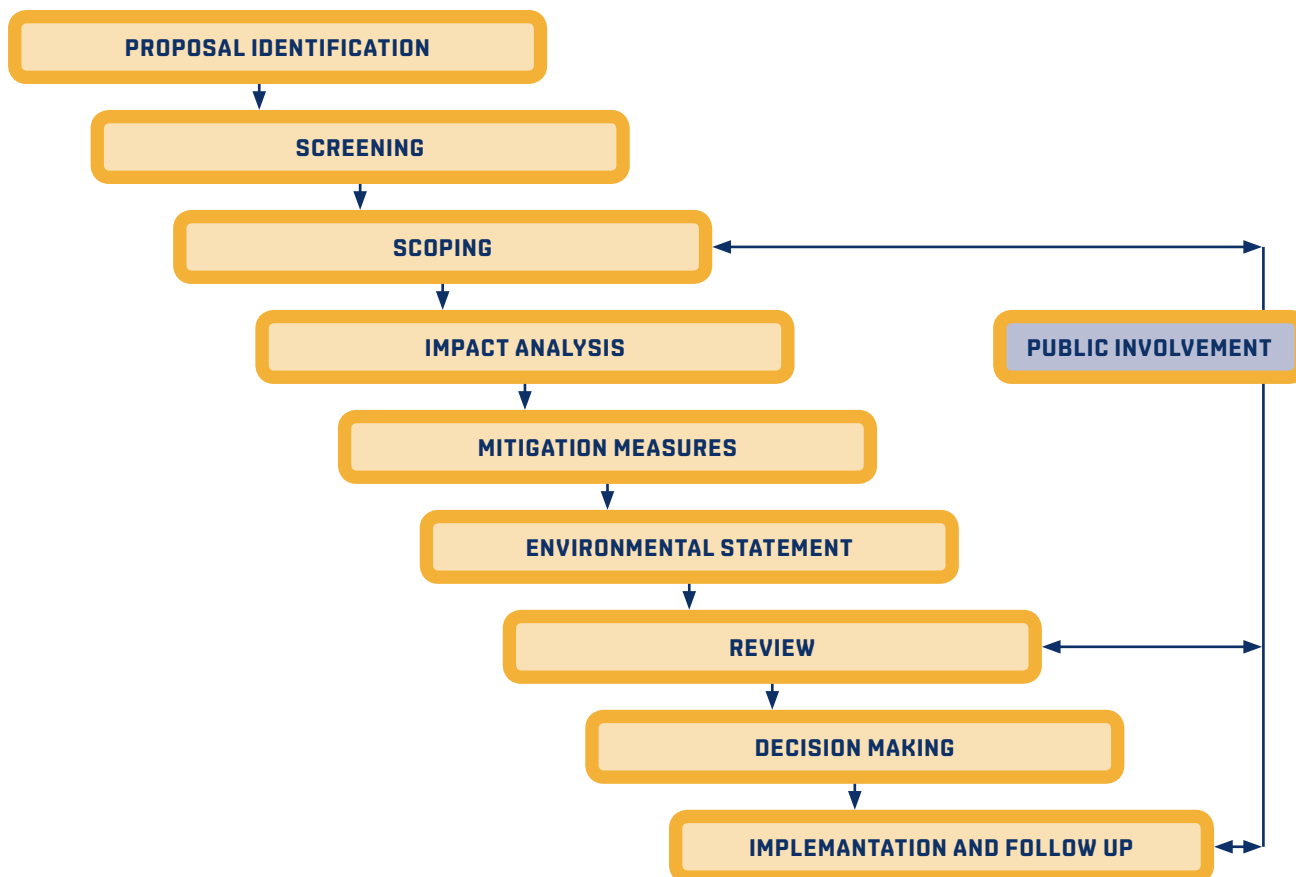


**TABLE 4. STRENGTHS VERSUS WEAKNESSES ASSESSMENT OF RWANDA'S EIA PROCESS**

NOTED STRENGTHS OF RWANDA'S EIA PROCESS	NOTED WEAKNESSES OF RWANDA'S EIA PROCESS
<b>Exploration</b>	<b>N/A</b>
REMA and MINIRENA have the authority to impose conditions on the EIA.	There is no requirement for an interdisciplinary review by the EIA review team.
EIAs are carried out by certified, external experts, funded by the operator.	The quality of consideration of social impacts and community health impacts does not meet international expectations.
The EIA requires that an environmental baseline audit is conducted prior to the issuance of a license and identifies pre-existing liabilities.	The public availability of the EIA is left to the discretion of MINIRENA, who at present only shares the EIA conditions with the local authority and considers the EIA to be "owned" by the mining company.
Impacts are to be considered in the assessment include direct environmental impacts, cumulative environmental impacts, social impacts, and economic impacts.	While the public involvement in the process involves three stages of the EIA process (scoping, review and implementation/follow-up), the description of these public engagements and the report indicate that the process is more about informing the public of what is going to happen rather than an effort toward meaningful consultation. However, Rwanda's EIA guidelines state that "Situations may occur where special provisions need to be made in order to get input from disadvantaged or minority groups."
EIAs must include mitigation measures to reduce, prevent or compensate for damage.	
EIAs must include monitoring plans and the methods to establish baseline conditions, impacts over time, and post-mine conditions.	
There is a public notice of the EIA prior to the public hearing as per the EIA process (see image below).	
There is a requirement within REMA that strategic assessments are conducted (see text box above to better understand the relationship between EIAs and SEAs in Rwanda).	



## EIA PROCESS



**FIGURE 3. RWANDA'S CURRENT ENVIRONMENTAL IMPACT ASSESSMENT PROCESS**

Source: Rwanda EIA Process for Proponents.

While most EIA practitioners would agree that the strengths outweigh the weaknesses—and that overall the EIA process is both robust and generally follows internationally accepted EIA practice—the lack of meaningful public consultation in the process cannot be overlooked if it is to meet international best practice. In addition, the assessment team acknowledges challenges specific to Rwanda including:

- There are historical and legacy issues related to mines being built on top of older mines which have never been remediated but are not considered the responsibility of the current mine owner.
- The Environmental Management Plan (EMP) that results from the impact assessment does not have enough connection to the Mine Operations Plan: they are not integrated, and remain disconnected documents.
- EIA practitioners within the country need capacity building, as do inspectors and evaluators.
- The EIA document itself remains the property of the developer and the government is provided a hardcopy. The EIA is not usually publicly accessible but a copy of the annex of conditions applied by the RBD is shared with local leaders.

EIAs are integrated into the permitting process, which is overseen by the Ministry of Natural Resources and GMD (requiring approval from Cabinet) through the RBD license application team which houses EIA specialists who are staff seconded from REMA.



In addition, Rwanda has a National Land Use Plan that requires all provinces to have district-level land-use plans that integrate licensed mining operations. These land-use plans are publicly available online at the RNRA National Land Use Planning Portal, which permits both public and private planners (including mining companies) to develop operational plans with awareness of the district's full land-use context and strategy. As a part of the land-use planning initiative, Rwanda has additionally mapped out areas of high biodiversity and targeted areas for protection, conservation, and rehabilitation, which will assist mine license applicants with their tenure planning and EIA practitioners with their impact identification, assessment and mapping.

## GAPS

- Water quality guidelines and monitoring – specific to assessing metal contamination of water catchment areas.
- Rwanda does not have enough mining inspectors in the country, and those inspectors do not have specialized skill sets in the various topics covered in the monitoring of the Environmental Management Plan.
- Local government capacity on environmental issues is limited, and EIA consultants who carry out the EIAs themselves require capacity building.
- Waste management is not formalized.
- Quality of emergency planning, preparedness, and response is low.
- Insufficient collaboration in assessment and approval of EIAs between the agencies responsible for mining, environmental management, and land.
- There is a lack of adequate consultation with local communities in mining area before the EIA is approved.

At present, there is an insufficient number of inspectors (only seven for the entire country), a lack of capacity to carry out multidisciplinary inspections, and a concern that inspectors are too centralized, as they are all based in Kigali rather than near key mining regions where they would have more regular access to the mine sites. Additionally, there are concerns around a lack of environmental awareness and capacities among local government regarding the mining sector.

The quality and quantity of water, as well as waste management, are threatened by challenges in implementing related laws and policies on the ground. This was particularly noted during the assessment team site visits, with particular regard to the management of mine discharge and wastes. The assessment team also noted during the mine site visits that spoils and processing fines were stored onsite, often contain high concentrations of saleable metals and minerals (as a result of not being able to further process them with existing equipment), and yet the storage facilities are not lined and are often found near water supplies (and near food gardens at one site). There are also no formal plans for disposal or further processing, raising concerns that storage areas are or could be a potential source of metal contamination to local soils, crops and water bodies.

During the assessment, concerns were expressed regarding the lack of requirements for high-quality emergency planning, preparedness, and responses, resulting in mine sites not meeting basic safety standards regarding personal protective equipment or emergency procedures.

Concerns were also raised to the assessment team regarding the capacity of local governments to both fully understand or have the capacity to respond to environmental issues, accidents or emergencies, to manage compliance on environmental issues, or to respond to concerns raised by local communities. It was pointed out that concerns exist related to the skills and expertise of local in-country EIA practitioners who are hired to conduct the EIAs and questions about whether their capacities meet international standards.



## POST-MINING TRANSITION

This thematic area of the Mining Policy Framework establishes the need to ensure an organized and planned post-operation transition. Adequate measures and plans required to guarantee this transition need to be taken into account and developed throughout the life cycle of the mining operation. Specifically, the aspects of this section of the MPF relate to:

- Ensuring that closure plans prepared by mining companies are of a high standard and are updated regularly.
- Developing financial assurance mechanisms for mine closure.
- Taking a leading role in exploring options for orphaned and abandoned mines within the state's jurisdiction.

## KEY LAWS AND POLICIES

- Organic Law N° 04/2005 of 08/04/2005 Determining Modalities for the Protection, Conservation, and Promotion of Environment in Rwanda
- Law N° 13/2014 of 20/05/2014 on Mining and Quarrying Operations
  - > Ministerial Order N° 001/MINIRENA/2015 of 24/04/2015 Determining Modalities and Requirements for the Financial Guarantee of Environmental Protection and its use in Mining Operations
  - > Ministerial Order N° 002/MINIRENA/2015 of 24/04/2015 On Criteria Used in Categorization of Mines and Determining Types of Mines
  - > Ministerial Order N° 003/MINIRENA/2015 of 24/04/2015 Determining Modalities for Application, Issuance and Use of Mineral and Quarry Licenses

### BOX 5. THE IMPORTANCE OF MINE CLOSURE IN RWANDA

Mine closure risk identification, planning, design, and costing to global standards are not integrated into Rwanda's mining policy or legislation. The country has limited experience with mine closure.

The rehabilitation specified in Rwanda's legislation, and detailed in EIA guidelines, is narrowly focused on revegetation. Related assessment, permit review, and monitoring checks for rehabilitation are conducted without due consideration for other physical and chemical risks such as subsidence, mine waste and mine fines storage stability, acid drainage, and other water-related risks to people, livestock, agriculture, and the environment.

Rwanda authorities require government-approved independent consultants to prepare EIAs and environmental management plans; however, the guidelines, and the consultants' experience do not account for international best practice, as required in the IGF Mining Policy Framework.

Mine closure considerations in the revision of Rwanda mining policy will not only support the protection and of communities, agriculture, and water resources adjacent to mining operations, but also assure large and foreign investors that the closure business risk is well accounted for in Rwanda's legislative framework.

## STRENGTHS

- License renewal and surrender requires a mine plan that costs out rehabilitation, and costs are reviewed and adjusted prior to relinquishing or renewing permits.
- There is a willingness to amend the mining policy to include a best-practice mine closure checklist.



As per the Organic Law on Environment, EIAs are conducted for all mine and quarry projects, and these are used to complete environmental management costing, including for rehabilitation. Rehabilitation is required under the Environmental Law, the Mining Law, the Ministerial Order on Financial Guarantee of Environmental Protection, and the Ministerial Order for Application, Issuance and Use of Mineral and Quarry Licenses. These laws and orders require rehabilitation prior to release of the license or transfer of the license.

The Mining Law requires environmental management programs for mines and environmental protection plans for exploration, based on the EIA and related laws and regulations and guidance, both of which are costed out (Ch. I, Art. 8 Mining Law; Ch. II, Art. 3 Order 001 on Financial Guarantee for Environment; and Ch. II Section 2, Art. 6(2) and Art. 7(3)(4) of Order for Mineral and Quarry Licenses).

Further, rehabilitation is also covered under the EIA Guidelines in place for REMA, the Environmental Authority. REMA also has an environmental site audit checklist, which it uses during inspections and which includes progressive rehabilitation.

In addition, under Article 5 of the Order N° 001 on Financial Guarantees of Environmental Protection, if the financial guarantee is insufficient or if rehabilitation work remains at the end of the license period, the licensee is required to conduct a study of work remaining—with a budget—and pay for the remaining rehabilitation work. As noted above, the Order requires a determination of the environmental management plan (including rehabilitation) guarantee, which must be approved by RDB and of which 20 per cent must be paid into a fund, under an account managed by FONERWA (Rwanda's Green Fund) with four installments paid over three years. The funds can be used by the government in those cases where rehabilitation has not been conducted to the satisfaction of the competent authority. Funds are not released to the permittee until all conditions of the plan are implemented.

Rwandan legislation requires environmental rehabilitation of lands, such as re-sloping and replanting trees. Both mining sites visited during the assessment developed and made use of tree nurseries and had planted trees in areas where mining was completed.

## GAPS

- There is limited experience with post-mining transition in Rwanda.
- There is a lack of sufficiently detailed planning and costing.
- There is insufficient coordination between relevant institutions and authorities, most notably on inspection (capacities for which are also low).
- External experts are not consistently used in post-mining transition risk and opportunity identification, planning, and design, and are not used for costing.
- External periodic reviews are not consistently applied.
- The amount required for environmental guarantees (i.e., financial assurances) is perceived as insufficient; if mines close, there is not enough funding to fully rehabilitate the site.
- There is a lack of formal processes to address abandoned and orphaned mines, which often have open mines, subsidence risks and metal-bearing fines stored near water and crops.

Of particular importance, geotechnical and geochemical (water quality) expertise is not used for closure planning. Unfortunately, closure and environmental liabilities are not fully identified, managed, monitored or costed. Since much of the mining in Rwanda is small-scale, the geotechnical hazards are likely of limited risk, although assessment team visits to three sites which had limited physical risks are not necessarily representative.



Inspections carried out by both mining inspectors and environmental inspectors include the use of detailed checklists; however, while detailed, these checklists lack the mine closure and related planning and design aspects (along with their related cost estimates). In addition, many of the authorities we spoke with suggested their inspections and monitoring were not frequent enough—nor well coordinated among different ministries and directorates—to help improve effectiveness (coverage) and efficiency (to address lack of resources) to adequately identify and mitigate closure and related risks. It is unclear how inspectors or permitting agencies ensure there are no long-term water quality or mine site contaminated seepage risks.

Financial assurance is determined by the RDB based on the environmental management plans submitted by applicants, and not by REMA or by the Ministry of Natural Resources, both of which are better positioned to adequately cost out rehabilitation requirements. Financial assurance is typically inadequate to cover the costs of known liabilities, including the liabilities not identified due to lack of expert geotechnical and geochemical design and planning.

Abandoned mine site rehabilitation is encouraged by the authorities, but there are no formal systems or efforts in place to identify, manage, monitor and cost the liability. Authorities can only encourage new license holders to rehabilitate, and are not authorized to require it as part of the license review and approval process.

## **ARTISANAL AND SMALL-SCALE MINING**

Artisanal and small-scale mining (ASM) is the sixth thematic area of the MPF. With regards to ASM, the MPF aims to enhance the health, safety and quality of life of those miners working in the sector informally and outside the legal framework. It also seeks to enhance the contribution of the ASM sector to sustainable development. Policy recommendations within the ASM pillar focus on the following:

- Integrating ASM into the formal legal system through appropriate legal frameworks, technical support and formalization strategies.
- Integrating ASM into the formal economic system through the promotion of savings and investment in the sector, appropriate and transparent revenue policies, certification programs and collaboration with larger mines.
- A reduction in the social and environmental impacts of ASM operations through the provision of technical training, the adherence to minimal health and safety standards, the elimination of child labour, the promotion of the role and security of women in ASM, and the implementation of rural development and job creation policies to promote alternative livelihoods.

## **KEY LAWS AND POLICIES**

- Sections 1 and 2 of Ministerial Order N°. 002/2015 of 24/04/2015 define the qualifications for artisanal and small-scale mines in terms of reserve quantities, production quantities, technical competence and investment capital.
- Articles 4 and 5 of Law N°. 13/2009 of 27/05/2009 speak to Rwanda's National Child Labour Policy.
- Pillar 4 Mining Policy, 2010 addresses visions and goals for ASM in terms of increased productivity and avenues for accessing finance.



### BOX 6. ASM IN RWANDA

Artisanal and small-scale mining contributes the majority of base minerals produced in Rwanda. There are currently over 60 mining licenses issued to large-scale operations, some of which are inactive or under inspection. The large-scale operations are generally semi-mechanized. ASM operations, on the other hand, are not mechanized. It is estimated that around 35,000 people work in the mining industry, according to Ministry personnel and as tracked by Rwanda National Institute of Statistics. The subsector is relatively well regulated through a licensing process for all mining activities (refer to the mineral licensing process in Section 5.1). The existing policy is general across the board, with the same environmental standards applying to artisanal and small-scale mining and large-scale mining. The subsector is regulated as an integral part of Rwanda's legal and economic systems, and the mining policy targets its expansion. The existing policy and laws apply to ASM and large-scale mines.

The main minerals produced through artisanal and small-scale mining activities are tin, tungsten and tantalum (3Ts). Production of semi-precious stones is significantly less than that of base metals, as the former do not bring in the revenues possible with the latter and are less prevalent than the metals.

All mining cooperatives in Rwanda form a national federation, while all cooperatives in a district form a union. Cooperatives comprised of artisanal-scale mining companies are operationally independent of each other. Currently, the total number of mining cooperatives in Rwanda number less than 50, but the majority of mining operators still fall within the ASM category of mining.

### STRENGTHS

- All ASM mining is subject to permits, with production under 0.5 tonnes/month concentrate considered illegal.
- As part of a consolidation effort (2014 law), artisanal miners are encouraged to form associations.
- The Rwanda Mining Association advocates on behalf of both ASM and large-scale mining toward scaling up and professionalizing the ASM sector.
- The use of cooperatives and small companies to group ASM miners helps meet ASM category requirements.
- ASM is integrated into the economy.
- There is no evidence of child labour.
- Women are well integrated into the ASM workforce.
- Cooperatives try to deal with ASM conflict cases among miners, related to tenure and shared resources, such as water.
- Training strategy (WDA Curriculum), technical training diplomas (IPRC), School of Mining and Geology has been started in the University of Rwanda, being used by the ASM cooperative visited during the assessment.

ASM contributes the majority of 3T minerals produced and is thus very vital to Rwanda's total revenue generated from exports of these minerals. It has, therefore, been awarded the importance that large-scale operations often receive.

Rwanda has adopted due diligence mechanisms in its mining industry to track minerals from production to exportation, ensuring that the minerals mined do not change hands illegally. The International Tin Research Institute's Tin Supply Chain Initiative (iTSCi) is being implemented for all 3Ts miners and traders in Rwanda with the Certified Trading Chains system (CTC) being used on a voluntary basis. When artisanal miners are subjected to this mineral tagging system—in which buyers are increasingly selective about purchasing only tagged minerals—there is less incentive to operate independently.



There is a strong effort to formalize the ASM sector by consolidation. Local government, specialized police units, and various institutions are actively involved in monitoring concessions and identifying illegal activity (for example, on large-scale concessions where operations have not started or where the licensee lacks the expertise or capacity to secure the site). The aim is to eradicate non-licensed ASM mineral extraction.

Rwanda's ASM sector consists of cooperatives and formalized and informal ASM companies. The concept of mining districts and partnerships is being promoted by government to pool resources and formalize ASM operations and human resources: this seeks to increase productivity among ASM miners and meet the strict requirements set out by the mining policy, such as those for investment (RWF 70,000,000), safety, environmental management, minimum targets for women workers (30 per cent target), and minimum production targets. Technical colleges are being established to help provide workers that attain the standards, and capacity building has been provided by government for miners (via the GMD, RCA, and RMA). Many cooperatives and small-scale companies incorporate worker's insurance, offer microfinancing to artisanal miners, and contribute a portion of total earnings to developing the surrounding community. They provide support in health and safety, environmental awareness and structured payments. They also help their workers pool their resources and increase their overall capital. However, accessing financing is still a great challenge for the ASM community. This is due in part to limited productivity, resulting in periods of little to no income. The workers are often forced to turn to other income-earning activities, particularly farming.

Efforts have been made to reduce and eliminate child labour in the mining sector. Among several mining concessions, the youngest artisanal miner allowed to work within the concession is 18 years of age. At these concessions, people from ages 18 to 35 make up approximately 90 per cent of the workers.

Women too are increasingly being encouraged to participate in ASM, and the government aims to have 30 per cent representation of women in mining by the year 2020. Women In/And Mining (WIAMO) is advocating for women to be considered for subcontracting opportunities, involvement in mining and mineral processing, as well as providing services and supplies to miners.

## **GAPS**

- Micro-mining operations must work diligently to meet the legislatively required minimum production of 0.5 tonnes/month concentrate, otherwise their mining license is taken away.
- Although the two mines visited by the assessment team paid workers via bank accounts, informal and cash payments are common.
- Incentives to address poor household savings culture need review and improvement, especially for miners.
- Formal initiatives to provide training and capacity building are evolving, but are not yet implemented or have just begun.
- Despite the presence of a mediator for ASM (in the form of RMA), conflicts continue, mostly within ASM cooperatives and between ASM-LSM.

Under the current legislation, the production quantities required for artisanal mining are 0.5 tonnes/month as a minimum limit. The limit is monitored and checked by authorities. Miners are required to provide exploration reports with actual and forecast production level. Both production and forecast production levels must be above the 0.5 tonnes per month limit, consistent with the ASM license requirement, otherwise the license can be revoked. Some miners find it difficult to meet the minimum limit, and face getting their license revoked if they cannot operate within the legal production limits.





Lack of access to financing is an impediment for ASM operations. Extraction is labour-intensive, and exploration by exploitation means miners follow ore-grade veins until they disappear. Processing improvements are expensive. In the case of a tin mine visited by the assessment team, manual and simple processing methods (shaker tables, and other gravity separation) could achieve 40 to 50 per cent recovery of contained mineral in ore. A lack of financing means it is difficult for small-scale and artisanal miners to purchase the equipment needed for further processing and increased production. In addition, ASM miners who mine cassiterite, containing a mix of coltan and tin, only realize the value of the tin when they sell the ore; having a separator would add value to their product. While this poses an immediate problem, it is expected that equipment such as jigs, crushers and shaking tables will be common in ASM concessions in the coming years. Lacking access to financing is a common problem for ASM across the region; however, with ASM the backbone of Rwanda's mining sector, more needs to be done to increase financing for the sector.

There is limited training and technical know-how within the ASM sector. Many of the methods used are outdated and may lead to environmental (metals contamination, suspended solids in water) and safety hazards. Many of the disputes the RMA handles deal with tension between large-scale and ASM operations, some of which are attributed to limited capacity among ASM miners, which results in several cases of stealing property from larger concessions.

With regards to non-mechanized and semi-mechanized ASM operations, the challenge of adding value to extracted minerals is difficult. Coupled with the sector's focus on the 3Ts and only limited diversification into gemstone and quarry products, the ASM subsector remains underperforming, undervalued, and economically vulnerable.

The issue of conflicts within cooperatives is inevitable; however, there is little information on the nature of management within these groups. According to RMA, the bulk of the disputes that are brought forth are ASM-related. RMA states that disputes between LSM and ASM often occur when artisanal miners trespass on large-scale mining areas and pose a threat to the environment; this is usually the case with artisanal miners who are not formally operating. These miners have no access to basic microfinance and hence may steal from the large-scale mine. Resolving these types of disputes begins with dialogue among the two sub-groups before the matter is presented to the respective RMA district. Within ASM cooperatives, conflicts arise when there is mismanagement. Dividends are shared among the shareholders; however, little information exists on how much is retained within the co-op and how dividends are paid out during periods of low production and low prices. Further analysis of reporting and transparency measures can help improve planning and targeting by ASM associations and their members.



## ANALYSIS OF STRENGTHS AND GAPS

The Government of Rwanda's request for the IGF to conduct this assessment of their mining policies and laws reflects their openness to further improve their current legislation, and to identify how the country's mining sector might better contribute to Rwanda's already strong commitment to sustainable development.

Overall, the IGF MPF assessment team found Rwanda's existing mining laws, policies, and regulations to be of medium strength with regard to their potential to optimize the contributions and benefits of the mining sector to Rwanda's sustainable development across all thematic areas of the MPF. However, it is noted that the contribution from Rwanda's strong, comprehensive and clear laws and policies are at risk of being undermined by the lack of capacity to meaningfully implement, adequately monitor, and effectively enforce them.

The MPF assessment team believes that Rwanda can improve its mining governance in three thematic areas relatively easily, considering that the country's mining legislation framework covers most of the aspects noted in the MPF. Specifically, adopting best practices and international standards relative to three of the MPF's key thematic areas:

1. Financial benefit optimization.
2. Socioeconomic benefit optimization.
3. Mine closure and related environmental management relative to water quality (to prevent metals contamination of water sources and agricultural areas).

Improving governance in these three thematic areas will not only have significant positive contributions toward sustainable development within Rwanda through overall improved performance of the mining sector, but it will also have a significant positive impact toward improving investor confidence. The reality currently facing Rwanda is that the anticipated and hoped-for growth in the economic contribution from the mining sector will only increase liabilities and risks if international standards specifically related to these three thematic areas of the MPF are not adopted.

With regards to the first thematic area, Rwanda's current mining legal and policy context is robust and reasonably comprehensive, scoring at medium in the MPF assessment. It is also expected that it will be further improved through the upcoming revision of its Mining Policy in 2017, judging from the draft version that was shared by MINIRENA with the MPF assessment team. Rwanda has demonstrated a commitment to proactively improving both its mining laws and policies, but more importantly, its guidance and standards. Within the existing legal context, the permitting and licensing process, and each category of mining operation, are clear and transparent. The Rwanda government should also be commended for its efforts to drive innovation and better practice within the sector. However, the concerns shared with the assessment team regarding the absence of strong local civil society organizations working with the mining sector should be considered a concern. Weaknesses within the sector can often be tied to lack of access



to project financing and/or skill and expert capacity restraints. Improved integration between MINIRENA and RDB (and on some issues, REMA) could increase the awareness and quality of strategic efforts and programming through both improved awareness and alignment between the institutions.

In the consideration of financial benefit optimization, Rwanda is scored at medium to low. Rwanda has both a robust and diverse revenue-generation framework from its mining sector with clear guidelines on royalties. The country has also been experiencing less difficulty on collecting revenue, particularly taxes, in part due to the international certification and tagging systems implemented to identify the source of origin for minerals. The MPF assessment team agrees that transfer pricing presents a challenge, and acknowledges that, comparatively, miners in Rwanda face multiple difficulties when attempting to access financing to fund mining activities.

For socioeconomic benefit optimization, Rwanda has a reasonable but limited approach to local benefits through the two main mechanisms for transferring support to mine-affected communities: the CSR contract that license holders sign with the Ministry as part of their permitting process; and the recent presidential order that 10 per cent of mining revenues are to be directed toward the local districts to support community and sustainable development programs. Implementation of the drafted but not yet released mining-specific health and safety standards this year is also anticipated to improve the occupational health and safety (OHS) and health, safety, security and environment (HSSE) situations at the mine sites. The most notable gaps in the socioeconomic thematic area relate to a lack of specific provisions on community engagement consultations, grievance mechanisms, socioeconomic impact assessments (SIAs), and health impact assessments (HIAs) to a level that would be adequate to be recognized as meeting international standards (i.e., the IFC Performance Standards).

Regarding environmental management, it is acknowledged that Rwanda has made the environment and sustainable development a key priority for the country through its “Green Growth” initiative, which influences law and policy across the country. Rwanda has a strong EIA process and a strong national land-use planning process, with planning occurring at the district level and integrating upwards. The risks and weaknesses determined by the MPF assessment team were felt to warrant a score of “low” specifically due to concerns related to water quality guidelines and monitoring capacity (especially in relation to risk of metals contamination of water catchment areas), an inadequate number of mine site inspectors (seven for the entire country, all Kigali-based), concerns about the capacities of local government and authorities on environmental issues, informal waste management planning and processes, and the limited quality of emergency planning, preparedness and response. It is anticipated that some of these may be addressed/improved upon in the new mining policy, to be released in 2017.

Post-mining transition also scored low: closure plans are not specifically required in Rwanda; geotechnical and geochemical water quality expertise not used for closure planning; closure and environmental liabilities are not fully identified, managed, monitored or costed; current regulations and guidelines do not use international best practise; and inspection checklists inadequately address these identified aspects. Additionally, financial assurance is determined by RDB as opposed to REMA or MINIRENA, either of which would be better positioned to adequately cost out rehabilitation requirements. Finally, there remain no formal systems in place to address and manage abandoned or orphaned mines.

ASM scored medium during the assessment. ASM is the major contributor of 3T metals to the sector, and is therefore of vital importance to Rwanda’s export revenues. To date, significant efforts have been made to formalize the ASM sector in Rwanda, with the aim of eradicating non-licensed mineral extraction through industry consolidation and encouraging partnerships that will help to meet the conditions for formally recognized ASM. The lack of access to finance is understood to be the greatest challenge for ASM operators, as the high costs of extraction make it a challenge for both artisanal and small-scale miners to expand their operations to any meaningful degree. The challenge is compounded by the limited training available to ASM miners to further develop their capacity and technical expertise, which would assist in improving the performance of their operations.



## RECOMMENDATIONS

Rwanda's decision to use its mining sector as one of the key financial contributors to Phase 2 of the country's Economic Development Poverty Reduction Strategy underscores the sector's importance to national development. Many of the weaknesses listed above result from resource constraints—both human (capacity and expertise) and financial (i.e., appropriate funding for mining inspections and ability to invest in government-led exploration and research). It is anticipated that MINIRENA's revision of the 2010 Mining Policy will attempt to at least partially address these constraints and bring additional focus to environmental protection and sustainable development.

Based on the findings of this assessment, there are a few areas in which Rwanda's legal and policy frameworks could be strengthened to ensure that the sector further contributes to sustainable development and poverty reduction. These are outlined in the capacity-building themes identified below.

### **PRIORITY AREA 1: FINANCIAL BENEFIT OPTIMIZATION**

Though it is agreed that profit-based taxation is harder to manage as mining companies have tendencies to under-report profits (financial statements can be manipulated with creative accounting methods), the Rwandan government can still seek ways of reducing this tax-avoidance strategy through regular mandatory audits with qualified and reputable auditors. In addition, although constrained by the costs involved, the government should continuously build the institutional and human capacities to manage more advanced tax regimes, or streamlined tax rates more consistent with other sectors within Rwanda.

Continue efforts to encourage positive relationships between the finance sector and mining industry, and emphasize the large impact mineral export revenues have on the economy. It is also important for the financial institutions to have knowledgeable staff who are aware of the risks and uncertainties of mineral resource estimates and geological models. Government should also aid in the provision of financial and business planning training for miners. Schools such as IPRC for technical education produces mining engineers and technicians who undoubtedly add value to the mining sector and enable miners to build their capacities.

Assist mining operators to devise schemes whereby machinery that adds value is leased among different concessions. This scheme would require an active manager ensuring that equipment is utilized and maintained correctly.

The government should also assess options for funding its EITI efforts, and review EITI requirements in anticipation of its candidacy. In the interim, they should explore ways of adopting EITI standards, such as publishing revenue values specific to each sector.



Rwanda should also consider how to best optimize and market its existing geological and mineral data, identify what types of new geologic data might be required, and which should be generated through public financing, after identifying and categorizing how the different types of current and potential investors, ASM miners, and the public will need to use the data.

## **PRIORITY AREA 2: SOCIOECONOMIC BENEFIT OPTIMIZATION**

Legal and policy frameworks should promote sustainability to ensure the benefits of mining contribute to long-term social and economic development, particularly in communities located near mining projects. Clear, formal requirements for SIAs and associated social management plans should be consistently applied and communities should be meaningfully engaged.

Appropriately implementing and acknowledging international expectations (IFC Performance Standards 1, 4, 5, 7, and 8) and best practice with regards to community relations, resettlement and social performance. All interviewees and assessors agreed that transition arrangements need to be considered to address the challenge of building capacity and ability to adopt them at the ASM level of operation. The priority is to improve dialogue to ensure meaningful community consultation.

Further developing the capacity of government staff (and potentially the private sector) tasked with engaging communities and practitioners conducting/reviewing social impact assessments and social management plans. Additionally, being able to demonstrably show the integration of local needs into the planning and implementation of the already required CSR contract components. Given the current regulatory context, Rwanda is well positioned to adapt a Model Community Development Agreement process.

## **PRIORITY AREA 3: ENVIRONMENTAL MANAGEMENT/POST-MINING TRANSITION**

Adopt international best practice standards, such as IFC's performance standard 1 (IFC also provides specific guidelines on mine closure and closure plans), perhaps with training on the standard to identify priority aspects that can be piloted at mine sites around Rwanda. Such efforts may be supported by multilateral and bilateral funders, and help them better understand Rwanda's mineral potential.

Rwanda will consider adopting the APEC Mine Closure Checklist, currently under development for planned release by end 2017. The checklist can help Rwanda authorities identify its highest closure risks and priorities for improvement. Priorities can be piloted and tested, possibly with support from funders. The IGF and APEC have agreed that IGF will pilot the checklist in 2018 in an APEC member country, and Rwanda can benefit from the lessons learned during the checklist pilot.

Environmental rehabilitation and other potential long-term liabilities need to be thoroughly identified and adequately costed. Using experts to assist and train the existing competent authorities will help. However, the formal practices employed by approval and inspecting authorities will have to be improved, possibly under existing or slightly amended ministerial orders, and Rwanda can consider using phase-in periods, rather than changing the legislation again. Examples of environmental and mine closure issues to be addressed include potential heavy metal concentration in Rwanda water sources, silting of surface waters, identifying and mitigating open holes, tunnels and subsidence risks, and post-mining social and economic transition planning.

Finally, to improve stability in the industry, the institutions involved in enforcing good practice standards at mine sites need to develop a coherent approach and agree upon checklists and measures needed to encourage and enforce compliance.



## REFERENCES

- Central Intelligence Agency (CIA) (2016). *The world fact book: Rwanda*. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/geos/rw.html>
- ELaw. (n.d.). *EIA Country Report for Rwanda*. Retrieved from <https://eialaws.elaw.org/eialaw/rwanda>
- Global Green Growth Institute, [GGGI]. (n.d.). Rwanda. Retrieved from <http://ggi.org/rwanda-2/>
- Index Mundi. (2013). Tungsten. Retrieved from <http://www.indexmundi.com/minerals/?product=tungsten>
- Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF). (2013). *IGF Mining Policy Framework: Mining and sustainable development*. Retrieved from <http://igfmining.org/wp-content/uploads/2017/02/MPF-English-Oct-2013.pdf>
- International Monetary Fund (IMF). (2013). *Rwanda: Poverty reduction strategy paper—joint staff Advisory note*. Retrieved from <https://www.imf.org/external/pubs/ft/scr/2013/cr13361.pdf>
- Ishihara, Y., Bundervoet, T., Sanghi, A., & Nishiuchi, T. (2016). *Rwanda - Economic update: Rwanda at work* (Rwanda Economic Update; no. 9). Washington, D.C.: World Bank Group. Retrieved from <http://documents.worldbank.org/curated/en/126991468197359041/pdf/103618-WP-P156677-PUBLIC-Rwanda-Economic-Update-Feb-25-2016.pdf>
- National Institute of Statistics of Rwanda (NISR). (2012). Rwanda Administrative Map. Retrieved from <http://www.statistics.gov.rw/publication/rwanda-administrative-map>
- Perks, R. (2016) Re-framing the nature and success of the “post-conflict” mineral reform agenda in Rwanda. *The Extractive Industries and Society*, 3(2): 329–339.
- Republic of Rwanda. (2013). *Constitution of Rwanda*. Retrieved from [www.rwandahope.com/constitution.pdf](http://www.rwandahope.com/constitution.pdf)
- Rwanda Environmental Management Authority. (2006). *General guidelines and procedure for environmental impact assessment*. Retrieved from [http://www.rema.gov.rw/rema\\_doc/publications/RW\\_EIA\\_Guidelines\\_Final\\_version1\\_Nov\\_2006.pdf](http://www.rema.gov.rw/rema_doc/publications/RW_EIA_Guidelines_Final_version1_Nov_2006.pdf)
- Rwanda Ministry of Finance and Economic Planning (2013). *Economic Development and Poverty Reduction Strategy II – 2013-2018*. Retrieved from [http://www.minecofin.gov.rw/fileadmin/templates/documents/NDPR/EDPRS\\_2.pdf](http://www.minecofin.gov.rw/fileadmin/templates/documents/NDPR/EDPRS_2.pdf)
- Twagiramungu, F. (2006) *Environmental Profile of Rwanda*. European Commission. Retrieved from <http://www.vub.ac.be/klimostoolkit/sites/default/files/documents/rwanda-environmental-profile.pdf>



UNdata. (2017). *Country profile: Rwanda*. Retrieved from <http://data.un.org/CountryProfile.aspx?crName=RWANDA>

United Nations and Development Programme (UNDP). (2011). *Rwanda from post-conflict to environmentally sustainable development*. Retrieved from [http://www.zaragoza.es/contenidos/medioambiente/onu/issue07/1117\\_eng\\_ch9.pdf](http://www.zaragoza.es/contenidos/medioambiente/onu/issue07/1117_eng_ch9.pdf)

United Nations Development Programme. (2017). *Human Development Reports: Rwanda*. Retrieved from <http://hdr.undp.org/en/countries/profiles/RWA>

United Nations Development Programme–Rwanda. (2011). *General guidelines & procedures for strategic environmental assessment (SEA)*. Retrieved from [http://www.minirena.gov.rw/fileadmin/Environment\\_Subsector/Laws\\_\\_Policies\\_and\\_Programmes/Useful\\_documents/SEA\\_Guidelines.pdf](http://www.minirena.gov.rw/fileadmin/Environment_Subsector/Laws__Policies_and_Programmes/Useful_documents/SEA_Guidelines.pdf)

United States Geological Survey (USGS). (2014). *The mineral industry of Rwanda*. Retrieved from <https://minerals.usgs.gov/minerals/pubs/country/2012/myb3-2012-rw.pdf>

Van Straaten, P. (2002). *Rocks for crops: Agro minerals of sub-Saharan Africa*. Nairobi, Kenya: Guelph, Canada: ICRAF ; University of Guelph

Weldegiorgis, F.S. & Ali, S.H. (2016). Mineral resources and localised development: Q-methodology for rapid assessment of socioeconomic impacts in Rwanda. *Resources Policy*, 49: 1–11. Retrieved from [https://www.csr.uq.edu.au/publications?task=download&file=pub\\_link&id=1531](https://www.csr.uq.edu.au/publications?task=download&file=pub_link&id=1531)

World Bank. (n.d.). GINI index (World Bank estimate) | Data. Retrieved from <http://data.worldbank.org/indicator/SI.POV.GINI>



## ANNEX: LIST OF LAWS AND POLICIES REVIEWED

### LAWS AND MINISTERIAL ORDERS

- The Constitution of the Republic of Rwanda
- Law N° 04/2005 of 08/04/2005 Organic Law Determining the Modalities of Protection, Conservation and Promotion of Environment in Rwanda
- Law N° 13/2014 of 20/05/2014 on Mining and Quarry Exploitation
- Law N°. 13/2009 of 27/05/2009 speak to Rwanda's National Child Labour Policy
- Law N° 06/2015 of 28/03/2015 Relating to Investment Promotion and Facilitation
- Law N° 43/2013 of 16/06/2013 Determining the Use and Management of Land in Rwanda
- Law N°47bis/2013 OF 28/06/2013 Determining the Management and Utilization of Forests in Rwanda
- Law N° 55/2013 of 02/08/2013 on Mineral Tax
- Law N°62/2008 of 10/09/2008 Putting in Place the Use, Conservation, Protection and Management of Water Resources Regulations
- Law N° 63/2013 of 27/08/2013 Determining the Mission, Organization and Functioning of Rwanda Environment Management Authority (REMA)
- Law N° 70/2013 of 02/09/2013 Governing Biodiversity in Rwanda
- Ministerial Order N°001/MINIFORM/2010 of 10/03/2010 Fighting Smuggling in Mineral Trading
- Ministerial Order N°001/MINIRENA/2015 Regarding the Environmental Guarantee Fund
- Ministerial Order N°003/MINIFORM/2010 of 14/09/2010 on Requirements for Granting the License for Purchasing and Selling Mineral Substances in Rwanda
- Ministerial Order N°002/MINIRENA/2015 of 24/04/2015 on Criteria Used in Categorisation of Mines and Determining Types of Mines
- Ministerial Order N°003/MINIRENA/2015 of 24/04/2015 Determining Modalities for Application, Issuance, and Use of Mineral and Quarry Licenses
- Ministerial Instruction N°010/MINIRENA/2016 of 11/01/2016 Determining Types, Size Limits, and Modalities for Exporting Mineral Ore Samples

### GUIDELINES AND POLICIES

- **The Rwanda Policy of Mines and Geology** was first defined in 2004 and then updated in 2010. The focus of the policy is on the fair management of mining resources to contribute sustainably and equitably to poverty reduction, responsible resource exploitation, and the importance of geological resources to the Rwandan economy.
- Rwanda's Economic Development and Poverty Reduction Strategy (EDPRS) Phases I and II

### RWANDA MINES INSPECTION CHECKLIST

- Rwanda Environmental Impact Assessment guidelines for proponents
- Draft Rwanda Mining Standards (health and safety)





## LIST OF CONSULTED STAKEHOLDERS

### GOVERNMENT

Minister of Mines  
Permanent Secretary, Ministry of Mines  
CEO, Rwanda Oil, Gas and Mining Board  
Ag. Director of Mines Inspection, GMD  
Head of former Geology and Mines Department (GMD)  
Division Manager, GMD  
Director General Trade and Investment General Directorate  
IDEC Coordinator  
RDB mining specialist  
RINR National Expert  
Director of Mining and Petroleum Unit/MINIRENA  
MINIRENA Geologist  
GMD Geologist  
Mining and Petroleum Economist  
Mining and Petroleum Contract Management Specialist  
Minister of MINIRENA (Natural Resources)  
Deputy Commissioner for Large Taxpayers Office

### CIVIL SOCIETY

Women in Mining (WIAMO)  
BSP Rwanda  
Representative of REWU(NGOs)

### PRIVATE SECTOR

Executive Secretary, RMA  
Vice president, RMA  
Operations manager at Phoenix Metals Ltd  
Mine Manager, New Bugarama Mines  
Executive and Management, Abahizi Cooperative

### INTERNATIONAL ORGANIZATIONS

Manager Certification and Formalization, BGR  
Pact Rwanda



**IGF**

INTERGOVERNMENTAL FORUM  
on Mining, Minerals, Metals and  
Sustainable Development