

THE MINING INVESTMENT AND GOVERNANCE REVIEW (MInGov)



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ZAMBIA MINING INVESTMENT AND GOVERNANCE REVIEW - FINAL REPORT



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1818 H Street NW

Washington DC 20433

Telephone: 202-473-1000

Internet: www.worldbank.org

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ABBREVIATIONS & ACRONYMS

ASM	Artisanal and Small-scale Mining
CSR	Corporate Social Responsibility
EITI	Extractive Industries Transparency Initiative
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Mitigation and Management Plan
FDI	Foreign direct investment
GDP	Gross Domestic Product
ICSID	International Center for Settlement of Investment Disputes
IMF	International Monetary Fund
MInGov	Mining Investment and Governance Review
PEFA	Public Expenditure and Financial Accountability
SADC	Southern Africa Development Community
SOE	State Owned Enterprise
VPSHR	Voluntary Principles on Security and Human Rights
ZCCM	Zambia Consolidated Copper Mines
ZCCM-IH	ZCCM Investments Holdings Plc
ZEMA	Zambia Environmental Management Authority
ZRA	Zambia Revenue Authority

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This report presents data on mining investment and governance indicators for Zambia that are current as of **October 1, 2015**. Scores for any of the indicators in the review may have changed since that date.

EXECUTIVE SUMMARY

The Zambia Mining Investment and Governance Review (MInGov) collects and shares information on mining sector governance, its attractiveness to investors, and how it contributes to national development. The review, based on data from primary and secondary sources and in-country interviews, assesses sector performance from the perspective of three stakeholder groups – government, investors in the mining value chain and civil society – and identifies gaps between declared and actual government policy and practice. Findings are categorized by topics, and topics are grouped under stages of the mining “value chain” and “themes” relevant to mining investment and governance.

The mining sector is important in Zambia and is likely to continue to be so. Zambia has a long history of mining and a large known resource base of copper, emeralds and other deposits, as well as good potential for further discoveries given the high degree of prospectivity. The mining sector is a major contributor to foreign direct investment, and mining tax revenues contribute a significant portion of total government revenue. The sector is also a significant source of formal employment - both directly and indirectly - which is a result of it being a more mature mining economy.

The review's key findings are:

- **Performance across the value chain is strongest in topics most closely associated with mining** and which are related to the content of laws and regulations, though implementation of these is wanting in some instances;
- **Sector development is constrained by a number of bottlenecks.** The bottlenecks include, among others, insufficient resources are allocated to attracting new investment (such as for the provision of adequate geological information); the mineral policy is not well integrated into the national development framework; fiscal policy has been highly unstable in recent years; a lack of policy for local content within the mining industry; and the absence of spatial development planning that could, for example, link infrastructure development with mineral areas or leverage private sector investment in infrastructure.
- **According to investors, a number of areas are constraining mining investment and returns.** These areas include inadequate fiscal and tax stability, and consultation on proposed changes; the management of licenses, including disconnects between the requirements of different ministries (e.g., those dealing with mining, environment, and land and water access); poor infrastructure access; and, ineffective practices regarding public financial management and accountability, revenue sharing and public investment integrity.
- **The three key stakeholder groups agree on a number of topics they believe are particularly important to strengthen sector governance, investment and development impact.** These topics are: Rules for License Allocation and Geological Data Collection, Openness, Transparency and Independence of Licensing Process, Sector Management and Intragovernmental Coordination, Tax policy, Instruments and State Owned Enterprise Rules, and Mining Taxation and State Owned Enterprise Financial Management.
- **Civil society believes there is a number of weaknesses sector governance,** including the poor handling of environment and social impacts of mining; problems with human rights associated with the sector; ineffective development planning as it relates to mining; issues concerning land access, compensation and resettlement; and the absence of revenue sharing between national and local government. These topics were identified by civil society considers as priorities for mining sector governance and growth.

Possible areas for action are identified in the review. A survey of priorities for stakeholder groups identifies six “low hanging fruit” to improve governance. These are:

- Committing to better policy stability for the mining sector, particularly in the tax regime, and integrating the mineral sector into national development plans;
- Instituting mechanisms to ensure meaningful consultation among all stakeholders on all significant local, social and environmental issues, mining procedures, fiscal issues and other policy affecting the mining sector;
- Developing (and subsequently implementing) local content, local employment and local development policies for the mining sector;
- Adequately resourcing sector regulatory and monitoring agencies, particularly ZEMA and geodata services;
- Treating the mining sector as an integral and driving force in development planning and implementation; and
- Establishing a small cell in government to centralize action on artisanal and small-scale mining, which could have benefit for the mining sector at large, for ASM miners and for environmental and social impacts of mining.

Three more challenging options – which remain fundamental to the good governance of the mining sector and its contribution to national development – are:

- Ensuring communication and coordination among ministries whose actions affect the mining sector;
- Improving public financial management, including budget management and public investment programs; and
- Managing government discretion in mining licensing decisions, and making what discretion there is transparent and accountable.

1. INTRODUCTION

The Zambia Mining Investment and Governance Review (MInGov) collects and shares information on mining sector governance, its attractiveness to investors and how its activities affect national development. It reviews sector performance from the perspective of three main stakeholder groups – government, investors in the mining value chain and civil society – and identifies gaps between declared and actual government policy and practice.

MInGov identifies the status and challenges facing mining governance and investment across seven themes and the extractive industry value chain. Three of these themes are assessed across five stages of the value chain—Contracts, Licenses and Exploration; Operations; Taxation and State Participation; Revenue Distribution and Management; and Local Impact.

The three value chain themes are:

- A. **Policy, Legislation and Regulation.** This theme measures de jure governance, or in other words the scope and quality of mining sector rules compared to good practice.
- B. **Accountability and Inclusiveness.** This theme measures accountability, transparency practices and the extent to which the public and other relevant stakeholders are involved in governance processes.
- C. **Institutional Capacity and Effectiveness.** This theme measures the quality of government organizations and their ability to effectively govern, including the extent to which the de jure intent of the rules is applied in practice (de facto governance).

The remaining four themes are either cross-cutting (D to F) or assess the importance of mining (M) in Zambia. These themes are:

- D. **Economic Environment.** This cross-cutting theme reviews broader economic factors, including cost competitiveness, economic stability, the general investment climate, and skills and human capital.
- E. **Political Environment.** This cross-cutting theme measures political risks relevant to the mining sector and which include stability of mining and fiscal policy, political stability and security, and expropriation risk.
- F. **Sustainable Development.** This cross-cutting theme covers development planning, local supplier development, economic diversification and leveraging private sector investments in infrastructure.
- M. **Mining Sector Importance.** This theme measures the importance of the mining sector in Zambia in terms of geological potential, the level of foreign direct investment, and its contribution to national revenue and employment.

MInGov's methodology focuses on the status of governance and investment conditions in the mining sector from the perspective of stakeholders, and as reported in primary and secondary sources. However, while analysis is based on data from 314 questions, some areas important to the mining sector and government and civil society in relation to mining are not covered. These less-well-covered areas include the quality of its infrastructure services, the security of property from theft, the underlying strength of institutions, and ways to enhance mining's contribution to local and national development.

The Zambia MInGov report has one annex: The Zambia MInGov Data Compendium. It contains scores for each of the 314 individual questions, and their aggregation to theme and value chain stage level. In time, the MInGov website will provide access to MInGov country reports and their underlying data, as well as other information on MInGov.

Country review data is made available in this report (and in future on the website) to facilitate: (i) the user's ability to drill down into the data; (ii) the identification of countries that are similar in terms of mining sector importance, governance and investment attractiveness; and (iii) the identification of stakeholder priorities. This information should help stakeholders develop options to strengthen sector governance, investment and impact. However, it should be kept in mind that MInGov is neither a ranking nor an index: it does not present rankings of countries on the strength of their mining sector governance or attractiveness for investment in the sector.

This report presents data on mining investment and governance indicators for Zambia that are current as of October 2015.

2. MINING IN ZAMBIA – COUNTRY CONTEXT

Mining is important in Zambia and is likely to continue to be so in the future. Zambia has a long history of mining and a large known resource base of copper and other deposits, and good potential for further discoveries. Although copper production in Zambia (its main mining product) is generally high cost compared to other countries, the overall economic environment is generally favorable and the overall political environment is satisfactory—making Zambia an attractive mining location.

Key features of the mining sector in Zambia are summarized in Figure 1.

Figure 1: Mining in Zambia at a Glance

Main minerals mined

- Copper – 730,000 tonnes, world’s eighth largest producer (USGS); copper accounts for 85% of national mining revenue (2014)
- Cobalt – 3,100 tonnes, world’s eighth largest producer (2014)
- Mining share of GDP 12% (2014)

Mining exports (2014)

- 70% of total export value is from the mining sector

Mining contribution to national revenue

- 28% of total revenue comes from mining taxes (2014)
- Government revenue from mining sector is equivalent to 4.0 % of GDP (2014)

Employment in the mining sector

- Employment in mining: 90,000 (2012)
- Mining employment that is in formal sector: 82% (2012)
- Share of total employment: 2.3% (2013)
- Share of total formal employment: 8.3% (2012)

Foreign direct investment

- Mining accounts for 61.7 % of FDI (2014)

Local procurement

- Up to 95% of goods and services locally procured by the mining industry are imported

Two aspects of the Zambian mining environment are key to understanding today's context of the mining investment and governance environment. One is the recent historic context of the sector's ownership and management. The other is the overall national economic and social development status.

The Zambian mining sector has undergone fundamental ownership transformation in recent decades, from being nationalized in 1969 and re-privatized in the late 1990s. The period of state ownership and management had an enduring impact on national and popular perceptions of the role and performance of the sector, such as a community's expectations of mine-provided social services.

The Mines and Minerals Development Act 2008 revoked Minerals Development Agreements on which privatization had been based. It established a legal framework based on international good practice, and strove to create a favorable environment for foreign investment. Since then, FDI has risen steadily, notwithstanding price fluctuations for major minerals including copper and cobalt.

The private sector companies that purchased the de-nationalized mines raised concerns that the complexity of the mining business was not well understood by the public or government. As a result of this mutual lack of understanding, the mining sector and government have had a somewhat volatile relationship over the past decade. This period has seen a fluctuating copper price, inadequate consultation between government and industry (and within government), and changing political priorities.

The absence of policy continuity has been particularly apparent concerning mining taxation. Since 1995, there have been eight amendments to the Mineral Royalty Tax system, as well as imposition and revocation of three Statutory Instruments related to financial requirements affecting the mining sector. These changes included a proposed (but eventually not enacted) windfall tax on "excess" profits created by a rise in copper prices, and a proposal in late 2014 to increase royalty rates and introduce a one-tier tax regime where expenses did not appear to be taken into account. After the change was announced (with little consultation within or beyond government), and implemented for a short period, government returned to a two-tier royalty and profit tax system in mid-2015 as mining companies struggled to remain profitable under the all-royalty system as the copper price dropped.

It is this environment of policy flux and recrimination among the main stakeholder groups – as well as falling commodity prices and investment interest – in which MInGov was undertaken in 2015.

In terms of national development, and despite the country's overall strong economic management performance over the past decade, Zambia remains a country with low levels of human development and employment, significant poverty and increasing inequity. Mining plays a disproportionately large role in the national economy; efforts over the years to diversify the economy have had limited impact. The mining sector, like elsewhere, has limited direct impact on employment and its impact on development depends largely on government's ability to manage the revenue generated by the sector – which in Zambia is considerable in both absolute and relative terms.

3. OVERVIEW OF MInGov FINDINGS

This section presents an overview of the results of the Zambia MInGov.

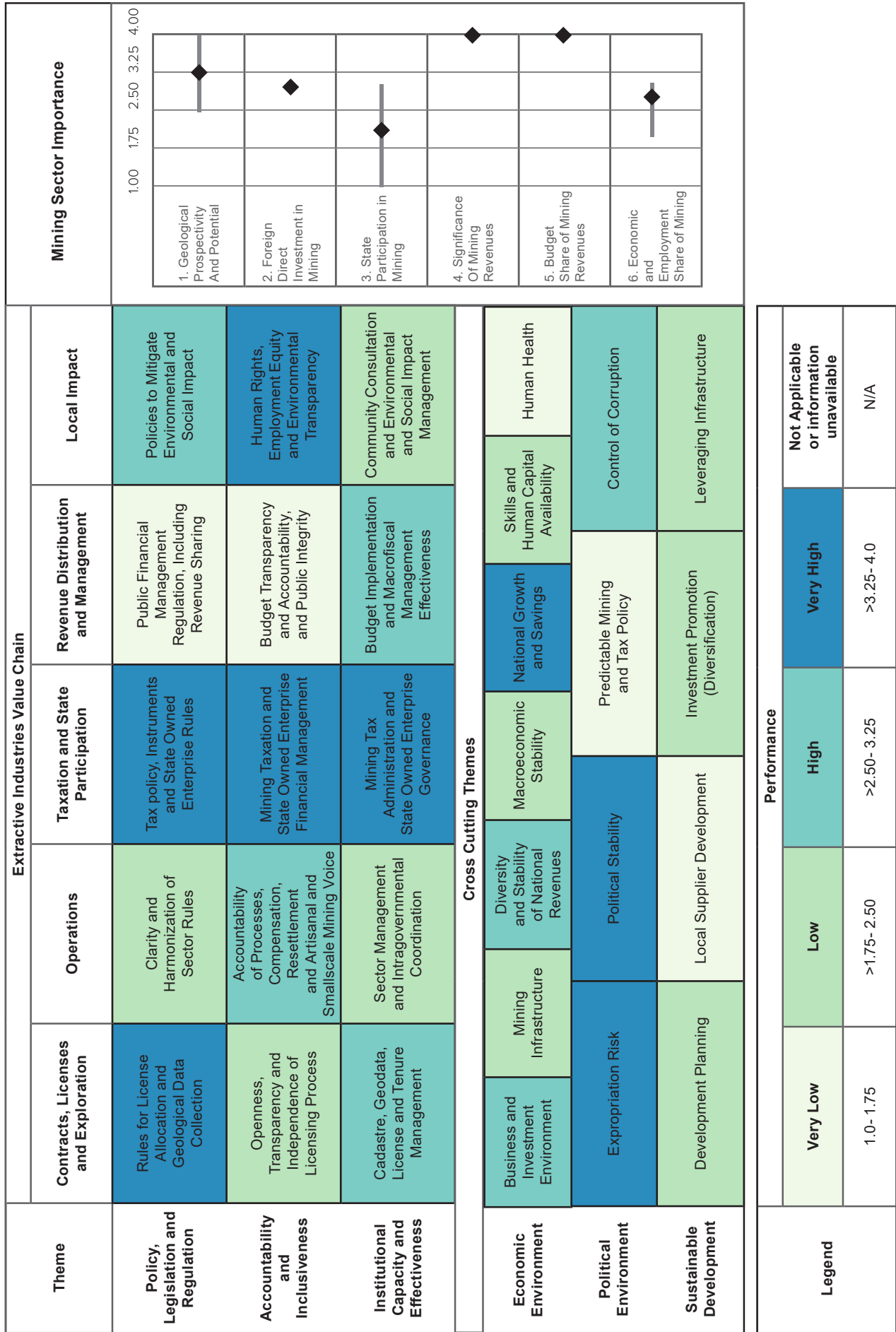
3.1 Introduction and Performance Summary

Findings of the Zambia MInGov are summarized in the “dashboard” of Figure 2. The dashboard gives an **overview of performance** of the mining sector in Zambia with respect to governance, attractiveness for investment and broader impact of the sector on national development.¹

The dashboard presents the results of the questionnaire-based review against 36 topics, each one of which is represented by a cell in the matrix or, in the case of Mining Sector Importance, a bar. Results of performance per topic (cell) are color coded according a scoring key of Very Low to Very High (see Scoring Key, Figure 2).

¹ Results of the analysis of data derived from the questionnaire are summarized in Annex 1. This annex includes the score given the answer to each question, and the score for value chain stages, themes, topics and indicators; the relationship between these different categories is shown in Annex 1, Table 1.

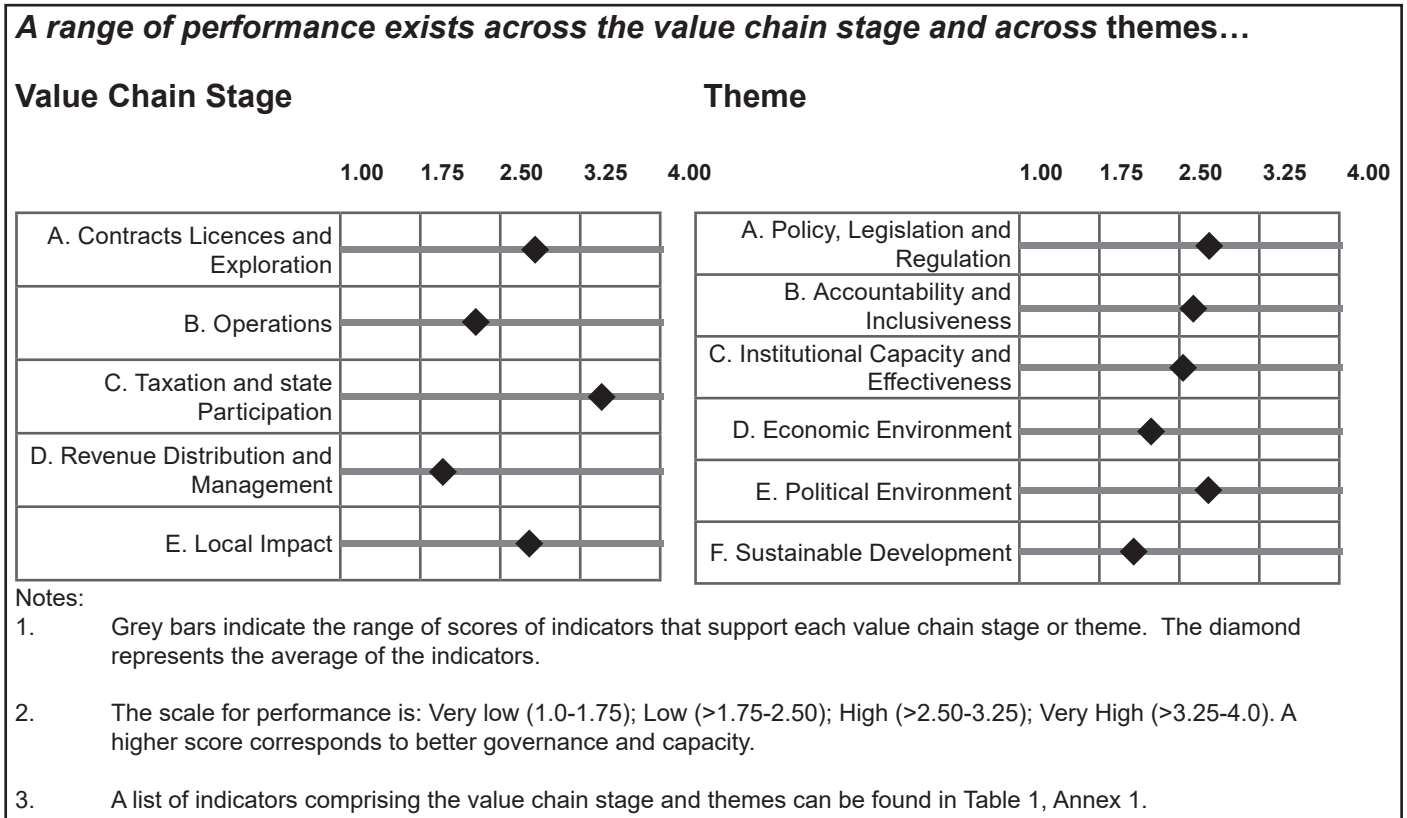
Figure 2: Zambia Country Dashboard



3.2 Overview of “Value Chain” and “Theme” Performance

This section provides an overview of performance across the five value chain stages and the six cross-cutting themes.² Subsequent sections present detailed results for each value chain stage and theme.

Figure 3: Performance by Value Chain Stage and Theme



The performance of each value chain stage and theme are discussed in subsequent sections. However, three general comments on value chain stage and theme performance are:

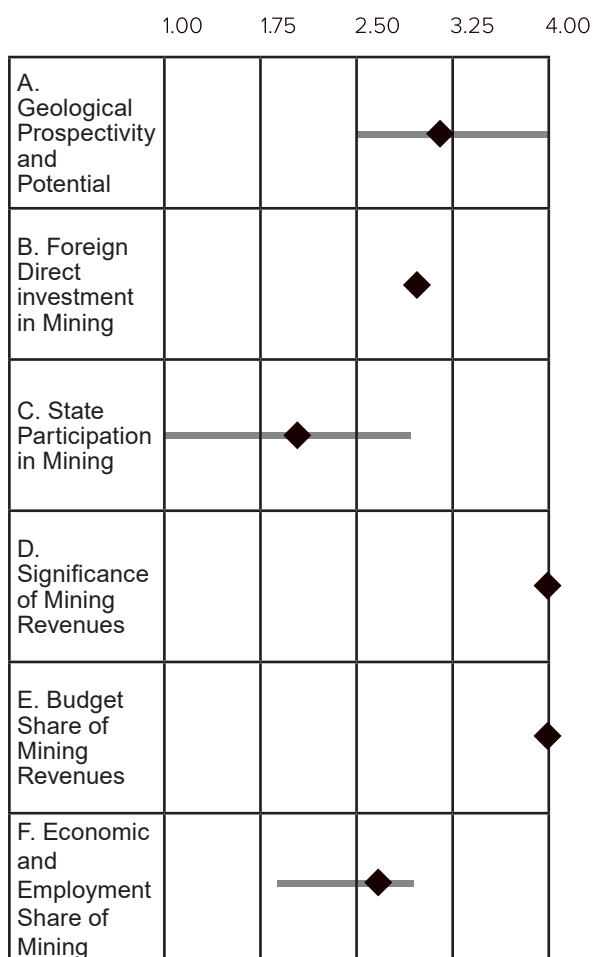
- *Taxation and State Participation* is the only stage in the value chain (stage 3) that scores “very high”; all remaining topics are clustered in the “low” to “high” performance range, with no topic scoring “very low”;
- Although themes A to C all fall in the “high” category, theme “A”, *Policies, Legislation and Regulation* scores better than theme “B”, *Accountability and Inclusiveness*, and the actual or de facto situation as shown in theme “C”, *Institutional Capacity and Effectiveness*; and
- *Revenue Distribution and Management* (value chain stage 4) and *Sustainable Development* (theme F) score lowest; these entail considerable public policy involvement and relate to issues removed from the immediate business of mining.

² Scores of questions, indicators, topics, value chain stages and themes are in Annex 1, the Data Compendium.

3.3 Mining Sector Importance

Mining Sector Importance (Figure 4, also represented in the dashboard, Figure 2), the seventh theme, is composed of six indicators: *Geological Prospectivity and Potential*, *Foreign Direct Investment in Mining*, *State Participation in Mining*, *Significance of Mining Revenue*, *Budget Share of Mining Revenues* and *Employment and Economic Share of Mining*. Scores for these indicators, which are based on primary and secondary data, indicate the importance of the mining sector in a given economy, from its geological potential to its impact on the economy and measure the potential for mining led growth.^{3,4}

Figure 4: Mining Sector Importance



As can be seen from Figure 4, mining is important in Zambia and is likely to continue to be so in the future. Zambia has a long history of mining and a large known resource base of copper, emeralds and other deposits and good potential for further discoveries given the high degree of prospectivity. The mining sector is a major contributor to foreign direct investment and mining tax revenues contribute a significant portion of total government revenue. The sector is also a significant source of formal employment – both directly and indirectly, which is generally consistent with more mature mining economies.

³ With respect to the topic State Participation in Mining, government participation in the mining industry is through a 77.7 per cent shareholding in ZCCM Investments Holdings Plc (ZCCM-IH), which has a 10-20 per cent shareholding in most major mining companies. Given the size of this shareholding, ZCCM-IH is treated in this MInGov review as a state-owned enterprise (SOE). There is no other SOE in the mining sector in Zambia.

⁴ Intervals for scoring performance are as in the dashboard, that is: Very low (1.0-1.75); Low (>1.75-2.50); High (>2.50-3.25); and Very High (>3.25-4.0). A higher score corresponds to better governance and capacity

3.4 Performance from a Value Chain Perspective

This section presents findings against the five stages of the extractive industry value chain. Scores reflect mining governance performance and the attractiveness of the sector to investment. The five value chain stages are assessed against three themes: Policy, Legislation and Regulation; Accountability and Inclusiveness; and Institutional Capacity and Effectiveness. The other three cross-cutting themes are discussed in Section, 3.5.

3.4.1 Contracts, Licenses and Exploration

Contracts, Licenses and Exploration, the first of the five value chain stages, is the second strongest performing of the five stages. Within this stage of the value chain, Rules for License Allocation and Geological Data Collection – that is, the de jure situation – is the highest scoring topic. It is also the highest scoring of all 15 topics that apply to value chain stages.

Table 1: Performance of the Contract, Licenses, and Exploration Stage

Value Chain Stage 1 - Contracts, Licenses and Exploration (2.86)		
Theme	Topic	Underlying indicator
Policy, Legislation and Regulation (2.77)	Rules for License Allocation and Geological Data Collection (3.71)	Clarity of rules for license allocation, conversion and transfer (3.83)
		Geological data collection rules (4.0)
		Modern mining cadastre (4.0)
		License approval and review timeframes (3.0)
Accountability and Inclusiveness (2.65)	Openness, Transparency and Independence of Licensing Process (1.99)	Openness and transparency of licensing process (2.99)
		Independence of licensing authority (1.0)
Institutional Capacity and Effectiveness (2.62)	Cadastre, Geodata, License and Tenure Management (2.88)	Collecting geological information (2.83)
		State of mapping and geological exploration (2.60)
		Mining cadastre effectiveness (3.13)
		Allocating licenses effectively (2.56)
		Transferability of licenses (3.63)
		Managing licenses effectively (2.56)

Note: The score for each theme is the average of scores of the five value chain stages in that theme (see Figure 2). The score for the value chain stage is the average of the three topics within that stage (which are shown in this figure). The score against the topic is the average of the scores of the underlying indicator scores; the indicator scores are the average of the scores of their underlying questions. The color coding is the same as in the matrix (Figure 2). Intervals for scoring performance are as follows: Very low (1.0-1.75); Low (>1.75-2.50); High (>2.50-3.25); and Very High (>3.25-4.0). A higher score corresponds to better governance and capacity.

In contrast to the strong de jure situation, the accountability and inclusiveness of the licensing procedure is less strong. This is caused by issues with the openness, transparency and independence of the licensing process, shortfalls in mining contracts being made publically available and, especially, a lack of independence of the license awarding authority from the mining ministry.

⁵ Government notes that an Act was subsequently passed that improves the independence of the licensing authority.

The actual (de facto) performance of cadastre, geodata, license and tenure management is also not as strong as the de jure situation. This rating is dragged down in particular by weaknesses in three areas:

- Interview responses on allocating and managing licenses raised concerns on the use of discretionary power, whether procedures are followed in practice, the application of procedural timeframes, the application of sanctions on non-performing companies, and poor resourcing of the unit managing license monitoring;
- Keeping the mining cadastre up to date; and
- State of mapping and geological exploration falls short due to a low proportion of licensed ground being serviced by active mapping and limited recent geologic mapping, and because the development of geological information, including geological mapping and databases, is not strong (perhaps contributed to by the reported low staffing and resources of the Geological Survey).

3.4.2 Operations

Operations is the second weakest performing of the five value chain stages. Its performance is particularly weakened by issues affecting Sector Management and Intragovernmental Coordination, though performance of the topic Clarity and Harmonization of Sector Rules – measuring the de jure situation - is also rated “low.”

Table 2: Performance of the Operations Stage

Value Chain Stage 2 – Operations (2.36)		
Theme	Topic	Underlying indicator
Policy, Legislation and Regulation (2.77)	Clarity and Harmonization of Sector Rules (2.30)	Clarity of legislation, rules and timeframes (2.5)
		Harmonization of legislation and government coordination (1.89)
		Provision for artisanal and small-scale mining (2.5)
Accountability and Inclusiveness (2.65)	Accountability of Processes, Compensation, Resettlement and Artisanal and Small-scale Mining Voice (2.81)	Access to land, compensation and resettlement (2.05)
		Access and accountability of mining legislation and processes (3.14)
		Artisanal and small-scale mining voice representation (3.25)
Institutional Capacity and Effectiveness (2.53)	Sector Management and Intragovernmental Coordination (1.98)	Timeframes for approvals (N/A)
		Intragovernmental coordination (1.47)
		Support to artisanal and small-scale mining (2.5)

Note: The score for each theme is the average of scores of the five value chain stages in that theme (see Figure 2). The score for the value chain stage is the average of the three topics within that stage (which are shown in this figure). The score against the topic is the average of the scores of the underlying indicator scores; the indicator scores are the average of the scores of their underlying questions. The color coding is the same as in the matrix (Figure 2). Intervals for scoring performance are as follows: Very low (1.0-1.75); Low (>1.75-2.50); High (>2.50-3.25); and Very High (>3.25-4.0). A higher score corresponds to better governance and capacity.

The inter-ministerial arrangements for managing overlaps in authority covering natural resource issues affected by mining rights, timeframes for extensions of mining operations, and laws and

regulations for dispute settling between ASM and other miners are not well developed in Zambia. Harmonization of Legislation and Government Coordination scores barely above a “very low” level.

Given the low level of performance of de jure elements, it is not surprising that the corresponding de facto topic, Sector Management and Intragovernmental Coordination, also performs poorly. Support to ASM performs relatively well but overall topic performance is negatively affected by a “very low” rating for Intragovernmental Coordination. Numerous challenges affect sector management and coordination within government. There are virtually no effective devices for coordination over issues that affect the mining sector, which by nature is multi-sectoral with activities and impacts that affect a range of government agencies. Inevitably, conflict between ministries about their roles in sector governance is not uncommon. For example, there was little coordination between the mining and finance ministries in 2014-2015 concerning revisions in the tax code that had deep ramifications for the mining sector. And while the Zambia Environmental Management Authority, ZEMA, is on an inter-ministerial committee that decides on mining licenses, it has limited say at the exploration stage, resulting in one case in mining exploration being approved in a protected area.

The Operations stage of the value chain includes more than half of the questions in the review that directly concern artisanal and small-scale mining. An overview of ASM findings is in Section 3.6.

3.4.3 Taxation and State Participation

Taxation and State Participation scores in the “very high range”, and is the highest performing value chain stage.

Table 3: Performance of the Taxation and State Participation Stage

Value Chain Stage 3 – Taxation and State Participation (3.39)		
Theme	Topic	Underlying indicator
Policy, Legislation and Regulation (2.77)	Tax Policy and Instruments, and State Owned Enterprise Rules (3.33)	Tax policy and instruments (3.0)
		Rules for auditing, base erosion and profit shifting (3.0)
		State owned enterprise governance rules (4.0)
Accountability and Inclusiveness (2.65)	Mining Taxation and State Owned Enterprise Financial Management (3.41)	Accountability of mining taxation (2.81)
		State owned enterprise financial management (4.0)
Institutional Capacity and Effectiveness (2.62)	Mining Tax Administration and State Owned Enterprise Governance (3.44)	Mining tax administration (3.18)
		State owned enterprise governance (3.7)

Note: The score for each theme is the average of scores of the five value chain stages in that theme (see Figure 2). The score for the value chain stage is the average of the three topics within that stage (which are shown in this figure). The score against the topic is the average of the scores of the underlying indicator scores; the indicator scores are the average of the scores of their underlying questions. The color coding is the same as in the matrix (Figure 2). Intervals for scoring performance are as follows: Very low (1.0-1.75); Low (>1.75-2.50); High (>2.50-3.25); and Very High (>3.25-4.0). A higher score corresponds to better governance and capacity.

The scores of topics at this value chain stage benefit from the high ratings given to the rules, financial management and governance of ZCCM-IH. As noted above (Section 3.3), ZCCM-IH Plc is treated as a state owned enterprise (and the only one). “Very high” ratings for state owned enterprise (SOE) elements are in large part driven by that fact that the publically listed ZCCM-IH operates within a framework of international governance standards and accountability to its shareholders and the

stock markets where it is registered.

In addition to the impact of high scores from SOE-related indicators, though, this value chain stage rates well because tax policies and instruments (the de jure situation), accountability and inclusiveness, and institutional capacity and effectiveness (de facto) all perform in the “high” range. Tax policies and instruments and rules for auditing, base erosion and profit shifting are generally strong. The tax code is clear and readily available. Tax, cost and physical audits are undertaken with the major mining companies. Transfer pricing, advanced pricing and thin capitalization are each increasingly subject to policies developed by the Zambia Revenue Authority (ZRA). Tax policy affecting the mining sector continues to evolve. Efforts have been made to ensure that government has an adequate minimal revenue stream in all production periods but this has so far borne limited results in a relatively turbulent mining taxation and market environment. Finally, it is noteworthy that Mining Tax Administration scores higher at the de facto level than at the de jure level: this may reflect the impact of the ZRA once laws and regulations have been established.

3.4.4 Revenue Distribution and Management

Revenue Distribution and Management is the poorest performing of any value chain stage or theme. This is significant given that sound public financial management is required to ensure that mining sector revenue contributes to national growth, and to help ensure support of the sector by all stakeholders.

Table 4: Performance of the Revenue Distribution and Management Stage

Value Chain Stage 4 – Revenue Distribution and Management (2.04)		
Theme	Topic	Underlying indicator
Policy, Legislation and Regulation (2.77)	Public Financial Management Regulation, including Revenue Sharing (1.75)	Public financial management and revenue sharing (2.5)
		Macroeconomic management rules and stabilization (1.0)
Accountability and Inclusiveness (2.65)	Budget Transparency and Accountability, and Public Integrity (1.75)	Budget transparency and accountability (1.0)
		Public investment integrity (2.5)
Institutional Capacity and Effectiveness (2.62)	Budget Implementation and Macroeconomic Management Effectiveness (2.62)	Budget implementation (2.86)
		Large scale public investment (2.5)
		Macroeconomic management and revenue stabilization effectiveness (2.5)

Note: The score for each theme is the average of scores of the five value chain stages in that theme (see Figure 2). The score for the value chain stage is the average of the three topics within that stage (which are shown in this figure). The score against the topic is the average of the scores of the underlying indicator scores; the indicator scores are the average of the scores of their underlying questions. The color coding is the same as in the matrix (Figure 2). Intervals for scoring performance are as follows: Very low (1.0-1.75); Low (>1.75-2.50); High (>2.50-3.25); and Very High (>3.25-4.0). A higher score corresponds to better governance and capacity.

The strongest performing topic falls under the Institutional Capacity and Effectiveness theme, which suggests that the challenge is more in establishing effective policies, laws, accountability and inclusiveness than in implementation.

While there is a multi-year perspective in fiscal planning and comprehensive budget documentation, which are both good practice, a key short-coming is the absence of a legislated requirement for sharing resource revenue between central and sub-national governments. In addition, experience is mixed with public investment integrity concerning large-scale public investment. While there is an established process for screening projects for consistency with government priorities, there is little oversight external to the implementing ministry. Other concerns are that cost benefit analysis is unevenly followed, ministries do not have master procurement plans, cost overruns are common, and independent audits are not done of completed public investments.

3.4.5 Local Impact

The Local Impact value chain stage covers the environmental and social management of the impact of mining, including consultation processes and human rights issues. It scores in the “high” range, with the strongest performance from the topic, Human Rights, Employment Equity and Environmental Transparency.

Table 5: Performance of the Local Impact Stage

Value Chain Stage 5 – Local Impact (2.75)		
Theme	Topic	Underlying indicator
Policy, Legislation and Regulation (2.77)	Policies to Mitigate Environmental and Social Impact (2.78)	Community impact, consultation and corporate social responsibility (1.83)
		Rules for environmental and social impact management (2.5)
		Rules for financial sureties for decommissioning (4.0)
Accountability and Inclusiveness (2.65)	Human Rights, Employment Equity and Environmental Transparency (3.28)	Human rights and employment equity (2.56)
		Environmental and social impact transparency (4.0)
Institutional Capacity and Effectiveness (2.62)	Community Consultation and Environmental and Social Impact Management (2.18)	Impact and community consultation (2.4)
		Environmental and social impact management effectiveness (1.64)
		Effectiveness of sureties for decommissioning (2.5)

Note: The score for each theme is the average of scores of the five value chain stages in that theme (see Figure 2). The score for the value chain stage is the average of the three topics within that stage (which are shown in this figure). The score against the topic is the average of the scores of the underlying indicator scores; the indicator scores are the average of the scores of their underlying questions. The color coding is the same as in the matrix (Figure 2). Intervals for scoring performance are as follows: Very low (1.0-1.75); Low (>1.75-2.50); High (>2.50-3.25); and Very High (>3.25-4.0). A higher score corresponds to better governance and capacity.

A main challenge facing the Local Impact stage is the gulf between policies, legislation and regulation, the de jure situation, and actual performance.

This situation is most apparent in the challenge facing the management of the environmental and social impacts of mining where that the 2011 environmental law is not yet fully covered by regulation. A 2013 regulation covers general environmental issues (such as chemicals, hazardous waste, air and ozone) but the strategic environmental assessment aspects of the law – which are focused on community-level organization and impacts – have yet to be regulated: they are managed through combination of 1997 regulations linked to the previous act, and guidelines approved by the ZEMA Board but which do not have a statutory basis. Another challenge to local impact is that the informed consultation as required under the current law is difficult to achieve in many situations, and particularly so in mining-affected communities.

Procedures in effect allow an Environmental and Social Impact Assessment (ESIA) to be prepared once an exploration license has been issued but prior to the award of a mining license. An ESIA system is in place. However, its effectiveness can be constrained by a range of factors. For example: (i) biodiversity issues are included in the ESIA/ESMMP rather than being specifically addressed in a separate document; (ii) ESIA's are primarily handled by ZEMA with limited input from other ministries; (iii) environmental and social issues associated with artisanal and small scale mining are not fully addressed; and (iv) ZEMA has inadequate resources to monitor ESIA preparation and implementation. Resource constraints also mean that ZEMA is largely unable to conduct field and even incisive desk reviews of mining license applications, implementation of license conditions or environmental and social regulations.

Human rights and employment equity has good practices in the existence of an independent human rights commission (though it faces staffing and budget constraints) and government rules that promote employment equity. Main deficiencies include that government is not a signatory to Voluntary Principles on Security and Human Rights (VPSHR), and the fact that companies are not required to carry out due diligence as part of the licencing procedure.

3.5. Performance of Cross-cutting Themes

Performance of the cross-cutting themes is summarized in the matrix (Figure 2). A more detailed review is presented below.

3.5.1 Economic Environment

The cross-cutting theme of Economic Environment covers elements relevant to investment in the mining sector and the national economy. Overall performance of this theme is at the upper end of the “low” range but performance by topic is highly variable.

Table 6: Economic Environment Performance

Cross-Cutting Theme	Topic (and indicator)						
Economic Environment (2.36)	Business and Investment Environment (2.78)	Mining Infrastructure (2.0)	Diversity and Stability of National Revenues (1.75)	Macro-economic Stability (2.5)	National Growth and Savings (4.0)	Skills and Human Capital Availability (2.5)	Human Health (1.0)

Note: The score for the cross-cutting theme is the average of the scores of the underlying topics (which are in effect indicators since the topics for cross-cutting themes do not have indicators). The topic score is the average of the scores of questions that comprise the topic. The color coding is the same as in the matrix (Figure 2). Intervals for scoring performance are: Very low (1.0-1.75); Low (>1.75-2.50); High (>2.50-3.25); and Very High (>3.25-4.0). A higher score corresponds to better governance and capacity.

The lowest scoring topic rating, Human Health, is due to Zambia scoring in the lowest 25 percent of comparator countries for life expectancy, causes of death and HIV prevalence.

The rating for the diversity and stability of national revenues measures the variation of domestic revenues in real terms over five years. The high rate of variability is likely to continue given the ongoing slump in the mining sector (which accounts for some 28 per cent of national revenue), and as

⁷ Information on cross-cutting themes is collected from a similar range of primary, secondary and in-country interview sources as other themes. However, given the nature of information required and available, secondary sources are more significant to cross-cutting themes than to other themes (see Annex 2, Table 1).

such is likely to exacerbate the weak macroeconomic outlook for Zambia.

National growth and savings scores well as the two data points on which it is based – five-year cumulative GDP growth and the five-year adjusted net savings – both score in the top 75 percent range for secondary data (i.e., above 75 percent). As this topic reflects 5-year performance, changes in scoring are subject to a lag and the topic may not perform as well in coming years.

The general business and investment environment topic reflects a ranking similar to Zambia’s rating in the 2016 Doing Business survey (97th globally and 5th among 15 SADC countries); that is, a rating in the mid-range. This is to be expected as half the data sources for this question are from Doing Business. The secondary data on which this topic score is based show poor performance against enforcing contracts, dealing with construction permits and the effectiveness of the civil law system. Improvement in these and other areas of the general business and investment environment would benefit the mining sector.

3.5.2 Political Environment

Political Environment is the second highest scoring theme, and is the theme identified by stakeholders as having the most topics that are priority to a sound mining investment and governance priority (see Section 5 below).

Table 7: Political Environment Performance

Cross-Cutting Theme	Topic (and indicator)			
Political Environment (2.67)	Expropriation Risk (3.33)	Political Stability (3.33)	Predictable Mining and Tax Policy (1.0)	Control of Corruption (3.0)

Note: The score for the cross-cutting theme is the average of the scores of the underlying topics (which are in effect indicators since the topics for cross-cutting themes do not have indicators). The topic score is the average of the scores of questions that comprise the topic. The color coding is the same as in the matrix (Figure 2). Intervals for scoring performance are: Very low (1.0-1.75); Low (>1.75-2.50); High (>2.50-3.25); and Very High (>3.25-4.0). A higher score corresponds to better governance and capacity.

Zambia is a politically stable and safe country: the country has never been at war and elections are generally free and fair. The World Economic Forum Global Competitiveness Index (the data source for this topic) gives Zambia a “political stability” rating equivalent to a “very high” score (4).

The “very low” score for Predictable Mining and Tax Policy reflects frequent changes in the main features of the mining fiscal regime, including ad hoc changes. This was particularly topical in 2015 given government’s proposed adjustment to the royalty and tax regime. The out-cry amongst miners about these proposed taxation changes, aside from the changes themselves, focused on the fact that there had been little consultation with the industry before the changes were proposed, and subsequent “consultation” was seen as having minimal impact.

3.5.3 Sustainable Development

Sustainable Development, the poorest performing of all themes, covers four topics that are crucial to maximize the positive impact of mining for national economic and social development. However, handling these topics effectively is challenging as doing so can entail fundamental changes in how government plans and implements development.

Table 8: Sustainable Development Performance

Cross-Cutting Theme	Topic (and indicator)			
Sustainable Development (2.16)	Development Planning (2.33)	Local Supplier Development (1.74)	Investment Promotion (Diversification) (2.5)	Leveraging Infrastructure (2.06)

Note: The score for the cross-cutting theme is the average of the scores of the underlying topics (which are in effect indicators since the topics for cross-cutting themes do not have indicators). The topic score is the average of the scores of questions that comprise the topic. The color coding is the same as in the matrix (Figure 2). Intervals for scoring performance are: Very low (1.0-1.75); Low (>1.75-2.50); High (>2.50-3.25); and Very High (>3.25-4.0). A higher score corresponds to better governance and capacity.

Development Planning prioritizes integrated planning across the national economy, spatial development approaches that focus on mining (and other growth industries and growth poles), and a high level of consultation; none of these approaches is well established in Zambia.

Local Supplier Development is the development, implementation and monitoring of local procurement policy and regulation, plus a focus on local employment; for a mining industry as old as that of Zambia, and given the publicity given by all stakeholders to the importance of local content and local supplier development, it is surprising that a national policy does not exist.⁸ The absence of such a policy or other relevant government-led programs is the reason that this topic is one of only three with a “very low” performance rating.

Investment Promotion (Diversification) is a long-established national goal. However, the low score for this topic reflects more the priority given the issue in policy is not reflected in actual progress in this area.

Leveraging Infrastructure involves the use of private or publically funded infrastructure by the mining industry and others. Such infrastructure could be for transport, power or water supply. There is little development of such opportunities, and indeed some participants in the review cited examples of such leveraging not being encouraged by government and state owned utilities.

⁸ Another significant lacuna is the absence of a national policy and guideline for corporate social responsibility investment by the mining (or any other) sector.

3.6 Special Topic: Artisanal and Small-scale Mining

Artisanal and Small-scale Mining (ASM) attracts attention due to its ability to create employment and to impact positively on the poor, the way in which it affects the environment, how it interacts with formal mining activities, and its treatment in policy, law and regulation. The 15 questions on ASM and their scores are in Table 13.

ASM performance is similar to other key features of the mining sector in Zambia in the sense that there is a generally appropriate policy, legislative and regulatory framework in place but implementation of this framework is wanting.

An important achievement is that ASM is recognized in the mining law and such miners can operate legally under defined regulations. There are also instances of formal miners and ASM operating in adjacent areas without conflict.

Beyond these achievements, however, artisanal and small-scale miners are largely left to operate without government monitoring or support. There is no governmental agency dedicated to ASM. A number of private associations claim to represent the interests of ASM but overall the miners have no effective support for skill development, for conflict resolution in dealing with the formal mining sector, other stakeholders or among themselves, or for their economic and social development needs.

Areas seen in review results concerning ASM that require attention include skills development support, dispute resolution and environmental impact. The creation of a dedicated unit within government focused on ASM could help ensure improved economic and social returns from ASM, a less negative environmental impact, fewer disputes within the sector, and improved tax returns.

Figure 5: Performance of the Artisanal and Small-scale Mining Sector

		1.00	1.75	2.50	3.25	4.00
Clarity and Harmonization of Sector Rules	To what extent is there a regulation in place that allows the formalization of artisanal and small-scale miners? (76)					◆
	To what extent is artisanal and small-scale mining legally recognized in the mining law or regulations? (77)					◆
	To what extent do the laws and regulations allow for artisanal and small-scale and industrial mining activities to coexist? (78)			◆		
	To what extent are there detailed laws and regulations to settle disputes between ASM and other mining activities? (79)	◆				
Accountability of Processes, Compensation, Resettlement and ASM Voice	Is there a non-state association that represents artisanal and small-scale miners? (89)					◆
	To what extent do artisanal and small-scale miner associations participate in the monitoring, advocacy and enforcement of their property rights? (90)			◆		
	Is there a dedicated unit within the Ministry dealing with artisanal and small scale mining? (97)	◆				
Sector Management and Intragovernment Coordination	To what extent is support provided by government to artisanal and small scale miners concerning technical or business skills? (98)					◆
	To what extent is the government effectively using a dispute resolution system dedicated to ASM to tackle disputes between artisanal and small scale mining and other mining activities? (99)	◆				
	In practice, are there instances of coexistence of ASM and industrial mining activities? (100)			◆		
	To what extent are artisanal and small-scale miners legally allowed to operate? (101)					◆
	To what extent is artisanal and small-scale mining taking place under formalized procedures? (102)			◆		
Tax Policies and Instruments, and State Owned Enterprise Rules	Does the government have a simplified tax collection system for ASM? (111)	◆				
	In the law and regulations, is there a simplified environmental permit or impact assessment for artisanal and small-scale mining? (189)			◆		
	To what extent is the government monitoring compliance with environmental requirements for artisanal and small-scale miners? (220)	◆				

4. STAKEHOLDER PRIORITIES

Stakeholders who participated in in-country interviews were asked to indicate topics from among those on the matrix that are priorities, in their view, for sound governance of the mining sector in Zambia, including for attracting investment to the sector and to facilitate the sector's development impact. Stakeholders were requested to identify their top five priorities.

The results of this prioritization are shown below, for all stakeholder groups combined (Figure 7). Similar figures for three stakeholder groups (government, mining industry and civil society) are in Annex 1, Figures 4-6. The figure shows the importance that stakeholders attach to review topics, the larger the size of a topic "cell", the more important it is regarded for sound sector governance and investment; the color key is used throughout this report and is explained in Figure 2.⁹

Points that stand out from stakeholder priorities at a value chain stage and theme level include:

- *Taxation*, especially *Tax Policy, Instruments and State Owned Enterprise Rules*, is a top priority for all stakeholder groups, so highlighting the interest in the revenue component of mining rather than its broader economic impact;
- Similarly, the *de jure* topic *Rules for License Allocation and Geological Data Collection* is a shared priority of all stakeholder groups. However, the *de facto* *Cadastre, Geodata, License and Tenure Management* topic is considered a top priority only by government and industry, which suggests that CSOs are more focused on policy than implementation in this area. *Rules for License Allocation and Geological Data Collection* is the topic assigned highest priority by stakeholders from among the 15 topics that apply to value chain stages;
- *Openness, Transparency and Independence of Licensing Process* is another high priority for all stakeholder groups, which highlights a perceived lack of independence of the licensing authorities;
- Government and industry stakeholders also give priority to *Clarity and Harmonization of Sector Rules*, highlighting perceived inconsistencies on regulation monitoring mining operations and which may hamper policy implementation;
- CSOs give priority to the legislation and accountability topics of the Local Impact value chain stage, so reflecting a focus on environmental issues and labor rights;
- Industry and CSO stakeholders emphasize more strongly than government that *Mining Taxation and State Owned Enterprise Financial Management*, highlighting that despite the strong performance (a "very high" rating) of the topic, companies continue to be concerned about it; and
- Despite being the lowest performing value chain stage, *Revenue Distribution and Management* is not a major priority for any stakeholder group, with the exception of government concerns over performance on *Budget Implementation and Macroeconomic Management Effectiveness*; this lack of stakeholder priority may explain why legislation and accountability topics in this stage are rated as "very low".

⁹ Stakeholders indicate their priority topics from a list of the 30 topics in the matrix. Weighted scores (see, Methodology document) are grouped within their respective value chain stage or cross-cutting theme, the size of each topic representing its weighted value: the larger the topic and theme/value chain is portrayed, the greater the priority assigned to it by stakeholders. The color of individual topics is as it appears on the matrix which indicates the performance of topics (and not, for example, the performance of them from the stakeholder perspective).

Figure 6: Overlap between Stakeholder-selected Priorities

Intersection of Stakeholders	No. of Common Priorities	Topics (Shared Priorities)
CSOs, Government, Industry	5	<ul style="list-style-type: none"> • Rules for License Allocation and Geological Data Collection • Openness, Transparency and Independence of Licensing Process • Sector Management and Intragovernmental Coordination • Tax policy, Instruments and State Owned Enterprise Rules • Mining Taxation and State Owned Enterprise Financial Management
Government, Industry	4	<ul style="list-style-type: none"> • Cadastre, Geodata, License and Tenure Management • Macroeconomic Stability • Skills and Human Capital Availability • Clarity and Harmonization of Sector Rules
CSOs, Industry	2	<ul style="list-style-type: none"> • Accountability of Processes, Compensation, Resettlement and Artisanal and Small-scale Mining Voice • Mining Tax Administration and State Owned Enterprise Governance
CSOs, Government	3	<ul style="list-style-type: none"> • Political Stability • Policies to Mitigate Environmental and Social Impact • Human Rights, Employment Equity and Environmental Transparency
Industry	2	<ul style="list-style-type: none"> • Development Planning • Business and Investment Environment
Government	3	<ul style="list-style-type: none"> • Local Supplier Development • Predictable Mining and Tax Policy • Budget Implementation and Macroeconomic Management Effectiveness.
CSOs	2	<ul style="list-style-type: none"> • National Growth and Savings • Budget Transparency and Accountability, and Public Integrity

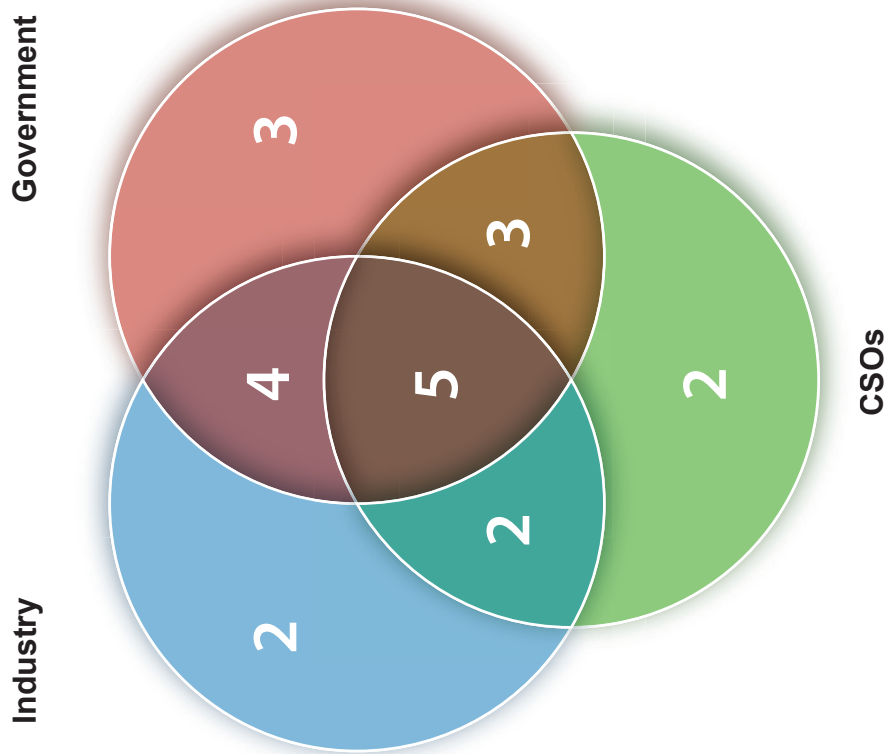
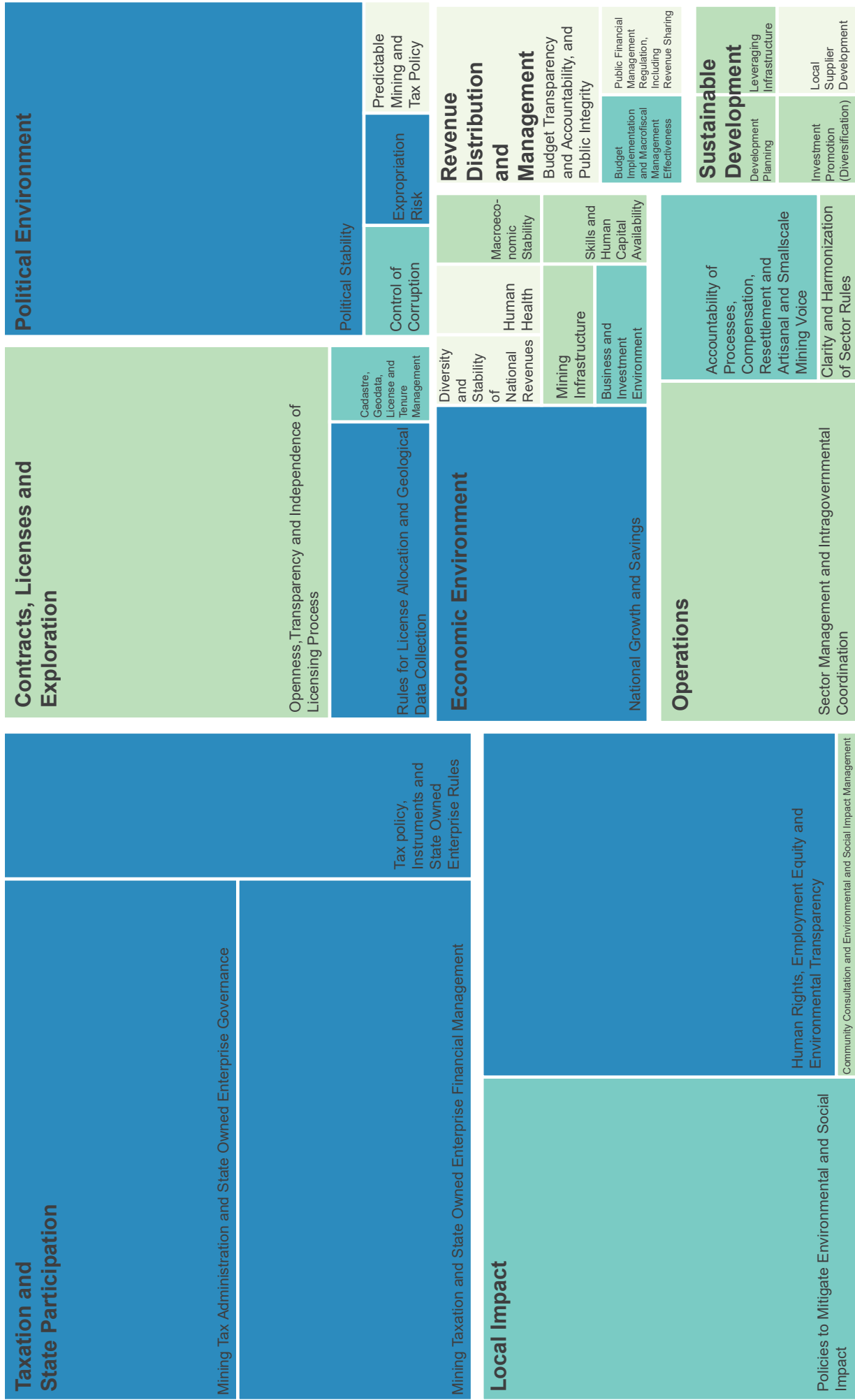


Figure 7: Stakeholder-selected Priorities (All Stakeholders)



5. CONCLUSIONS AND ACTION POINTS

5.1 Conclusions

The mining sector in Zambia has significant national importance and makes an important contribution to the national economy and development resources. However, sector development and investment are constrained by a bottlenecks and areas of weak performance that need attention to strengthen the mining governance and investment environment, as well as the impact of the sector's reform and growth potential. These include:

- Insufficient resources are allocated to attracting new investment (such as for the provision of adequate geological information);
- Mineral policy is not well integrated into the national development framework – which would help ensure mining's contribution to sustainable development and broader support for the mining sector;
- Mineral revenues are not shared with the local governments or communities where minerals are extracted, so undermining their social and physical development and indeed the social license of miners and government;
- The absence of a formal benefit sharing framework, as a result of which company contributions to social development are ad hoc and inconsistent, and their relationship with national development efforts unclear;
- A lack of policy and realistic expectations for local content within the mining industry;
- National development plans not integrating the mining sector, and the absence of spatial development planning that could, for example, link infrastructure development with mineral areas;
- Parliament's limited capacity for oversight of the mining sector;
- The absence of a “whole of government” approach to mineral development, including in relation to environmental governance;
- Weak and inconsistently applied public and inter-ministerial consultation mechanisms;
- A tendency for government to rely on administrative orders rather than on legislative development and parliamentary review processes;
- Clarification of the role and mandate of the Ministerial Advisory Committee; and
- Development of the capacity of the mining cadastre.

5.2 Action points

Areas for action by government and other stakeholders are apparent from this review. Based on the views of the main stakeholder groups – government, industry and civil society – the review provides a shared view of the status mining governance. Discussion about the sector within Zambia sometimes appears to be based on entrenched views.

It is up to the stakeholders in the Zambian mining economy to decide how they might follow-up on this Mining Governance Review. To help initiate this process, more than 20 recommended follow-up actions are identified below in Figure 8. Amongst these, some easy wins and more challenging options stand out.

Six “low hanging fruit” are:

- Committing to better policy stability for the mining sector, particularly in the tax regime, and integrating the mineral sector into national development plans;
- Instituting mechanisms to ensure meaningful consultation among all stakeholders on all significant local, social and environmental issues, mining procedures, and fiscal issues and other policy affecting the mining sector;
- Developing (and subsequently implementing) local content, local employment and local development policies for the mining sector;
- Adequately resourcing sector regulatory and monitoring agencies, particularly ZEMA and geodata services;

Regarding the mining sector as an integral and driving force in development planning and implementation; and

- The establishment of a small cell in government to centralize action on artisanal and small-scale mining could have benefit for the mining sector at large, for ASM miners and for environmental and social impacts of mining.

Three more challenging options – which remain fundamental to the good governance of the mining sector and its contribution to national development – are:

- Ensuring communication and coordination among ministries that can affect the mining sector;
- Improving public financial management, including budget management and public investment programs; and
- Managing government discretion in mining licensing decisions, and make what discretion there is transparent and accountable.

Figure 8: Recommended Follow-up Points

Contracts, Licenses and Exploration Value Chain Stage

- **Improved institutional performance.** Quick wins include (a) keeping the mining cadastre up to date, (b) facilitating public access to useful geological data, and (c) making mining contracts and license details readily accessible.
- **More efficient exploration rights.** Address the reasons that exploration rights appear to be more open to dispute and uncertainty in comparison to mining licenses.
- **Acceptable levels of transparent government discretion.** Minimize the application of discretion in license award and management, and apply it consistently and transparently.

Operations Value Chain Stage

- **Improve intra-governmental coordination.** Clarify inter-ministerial arrangements that affect mining, and identify and implement incentives to address that the multi-sectoral nature of mining sector development and investment.
- **Effective support for ASM.** Establish a body (with participation of all relevant stakeholders) to develop and implement a strategy to address the economic, social and environmental concerns and impacts of ASM.
- **Timeframes and processes.** Ensure that timeframes and processes for all required review and approval steps affecting mine operations are established, monitored and enforced.

Taxation and State Participation Value Chain Stage

- **Refinement of some tax policies.** Finalize modification of tax policies on transfer pricing and related party transactions.
- **Minimum revenue streams.** Review fiscal policy to ensure government receives an adequate minimum revenue stream at all stages of mine production.

Revenue Distribution and Management Value Chain Stage

- **Fiscal discipline and rules.** Strengthen steps needed for fiscal discipline and fiscal rules for savings and expenditure of minerals revenues (supported by adequate cost-benefit analysis).
- **Reliable revenue sharing.** Define and implement a system of sharing resource revenue between central and sub-national governments.
- **Public expenditure and financial accountability.** Apply continued attention to improving performance against PEFA indicators.
- **Efficient public investment.** Address the policy and practical constraints that appear to weaken the effectiveness and efficiency of the public investment program.

Local Impact Value Chain Stage

- **An effective ZEMA.** Ensure that ZEMA is provided with sufficient resources, support and accountability to enable it to perform its foreseen and required role with respect to the mining (and other sectors).
- **Effective addressing of environmental and social impacts.** Review the effectiveness of procedures meant to address mining environmental and social impacts.
- **Attention to human rights and employment equity.** Assess how to better implement human rights and employment equity relevant to the mining sector, and develop and implement an action plan to this end.
- **Timely, comprehensive and meaningful consultation.** Continue efforts to ensure timely, comprehensive and meaningful consultations on the environmental and social impacts of all scales of mining.

Cross-Cutting Themes

- **MInGov and Doing Business link with investment environment.** Use MInGov and Doing Business findings to monitor the business and investment environment from the perspective of investors across the value chain.
- **Mining key to development planning.** Review the place of mining in the national development plan and identify steps to attract investment to the sector and to maximize its contribution to economic and social development.
- **Missing: national local supplier development policy.** Develop and implement a national policy on local supplier development for the mining sector that covers employment, skills development, procurement, investment and social programs.
- **Spatial planning perspective.** Introduce spatial planning concepts into the national development plan and sector plans, and use spatial planning to facilitate infrastructure support for the mining sector.
- **Private-public partnerships for infrastructure.** Overcome constraints to public/private investment in the provision of infrastructure, especially that of value to the mining sector and communities around mining activities.

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Table 1: Themes, Value Chain Stage, Topics, Indicators and Information Source

Value Chain Stage (5)	Theme (7)	Topic (36)	Indicator (64)	Information Source: 314 Questions			
				Primary (132)	Secondary (61)	In-country Interview (121)	
1. Contracts, Licenses and Exploration	A. Policy, Legislation and Regulation	A1, Rules for license allocation and geological data collection	A1.1 Clarity of rules for license allocation, conversion and transfer	10	0	0	
			A1.2 Geological data collection rules	1	0	0	
			A1.3 Modern mining cadastre	1	0	0	
			A1.4 License approval and review timeframes	4	0	0	
	B. Accountability and Inclusiveness	B1, Openness, transparency and independence of licensing process	B1.1, Openness and transparency of licensing process	5	0	3	
			B1.2 Independence of licensing authority	1	0	1	
	C. Institutional Capacity and Effectiveness		C1, Cadastre, geodata, license and tenure management	C1.1, Collecting geological information	2	0	7
				C1.2, State of mapping and geological exploration	4	1	1
				C1.3, Mining cadastre effectiveness	2	0	8
				C1.4, Allocating licenses effectively	0	0	7
				C1.5, Transferability of licenses	0	0	2
				C1.6, Managing licenses effectively	0	0	9
2. Operations	A. Policy, Legislation and Regulation	A2, Clarity and harmonization of sector rules	A2.1 Clarity of legislation, rules and timeframes	3	0	0	
			A2.2 Harmonization of legislation and government coordination	3	0	0	
			A2.3 Provisions for artisanal and smallscale mining	4	0	0	
	B. Accountability and Inclusiveness	B2, Accountability of processes, compensation resettlement and artisanal and small scale mining voice	B2.1, Access to land, compensation and resettlement	3	0	2	
B2.2 Access and accountability of mining legislation and processes			2	0	2		

Value Chain Stage (5)	Theme (7)	Topic (36)	Indicator (64)	Information Source: 314 Questions				
				Primary (132)	Secondary (61)	In-country Interview (121)		
3. Taxation and State Participation	C. Institutional Capacity and Effectiveness	C2, Sector management and intra-governmental coordination	B2.3 Artisanal and small-scale mining voice representation	1	0	1		
			C2.1, Timeframes for approvals	0	0	2		
			C2.2, Intra-governmental coordination	1	0	3		
			C2.3 Support to artisanal and small-scale mining	2	0	4		
	A. Policy, Legislation and Regulation	A3, Tax policy, instruments and state owned enterprise rules	A3.1, Tax policy and instruments	9	0	0		
			A3.2 Rules for auditing, base erosion and profit shifting	6	0	0		
			A3.3 State owned enterprise governance rules	2	0	0		
			B3.1, Accountability of mining taxation	2	0	2		
			B3.2, State owned enterprise financial management	3	0	2		
			C3.1, Mining tax administration	2	1	13		
4. Revenue Distribution and Management	C. Institutional Capacity and Effectiveness	C3, Mining tax administration and state owned enterprise governance	C3.2, State owned enterprise governance	1	0	4		
			A4.1, Public financial management and revenue sharing	3	0	1		
	A. Policy, Legislation and Regulation	A4, Public financial management regulation, including revenue sharing	A4.2, A4.2 Macroeconomic management rules and stabilization	1	0	0		
			B4.1, Budget transparency and accountability	0	1	0		
			B4.2, Public investment integrity	4	0	1		
			C4.1, Budget implementation	0	7	2		
			C4.2, Large-scale public investment	0	0	6		
			C4.3 Macroeconomic management and revenue stabilization effectiveness	0	0	2		
			5. Local Impact	A. Policy, Legislation and Regulation	A5.1 Community impact, consultation and corporate social responsibility	3	0	0

Value Chain Stage (5)	Theme (7)	Topic (36)	Indicator (64)	Information Source: 314 Questions			
				Primary (132)	Secondary (61)	In-country Interview (121)	
5. Local Impact	A. Policy, Legislation and Regulation	A5, Policies to mitigate environmental and social impact	A5.1 Community impact, consultation and corporate social responsibility	3	0	0	
			A5.2 Rules for environmental and social impact management	12	0	0	
			A5.3 Rules for financial sureties for decommissioning	1	0	0	
	B. Accountability and Inclusiveness	B5, Human rights, employment equity and environmental transparency	B5.1, Human rights and employment equity	6	0	5	
			B5.2, Environmental and social impact transparency	1	0	1	
	C. Institutional Capacity and Effectiveness	C5, Community consultation and environmental and social impact management	C5.1 Impact and community consultation	0	0	5	
			C5.2 Environmental and social impact management effectiveness	0	0	9	
			C5.3 Effectiveness of sureties for decommissioning	0	0	1	
	N.A.	D. Economic Environment	D1, Business and investment environment	D1.1, Business and investment environment	0	9	0
			D2, Mining infrastructure	D2.1, Mining infrastructure	0	5	0
D3, Diversity and stability of national revenues			D3.1, Diversity and stability of national revenues	0	2	0	
D4, Macroeconomic stability			D4.1, Macroeconomic stability	0	3	0	
D5, Economic growth and savings			D5.1, Economic growth and savings	0	3	0	
D6, Skills and human capital			D6.1, Skills and human capital	1	6	0	
D7, Human health			D7.1, Human health	0	3	0	
E. Political Environment			E1, Expropriation risk	E1.1, Expropriation risk	2	4	0
				E2, Political stability	0	3	0
				E3, Predictable mining and tax policy	E3.1, Predictable mining and tax policy	1	0
N.A.	F. Sustainable Development	F1, Development planning	E4, Control of corruption	0	1	0	
			F1.1, Development planning	5	0	5	

Value Chain Stage (5)	Theme (7)	Topic (36)	Indicator (64)	Information Source: 314 Questions		
				Primary (132)	Secondary (61)	In-country Interview (121)
N.A.	M. Mining Sector Importance	F2, Local supplier development	F2.1, Local supplier development	4	2	4
		F3, Investment promotion (diversification)	F3.1, Investment promotion (diversification)	3	0	2
		F4, Leveraging infrastructure	F4.1, Leveraging infrastructure	4	0	2
		M1, Geological prospectivity	M1.1, Geological prospectivity	0	3	0
	M2, Mining foreign direct investment	M2.1, Mining foreign direct investment	0	1	0	
	M3, Significance of state participation	M3.1, Significance of state participation	4	0	0	
		M4, Significance of mining revenue	M4.1, Significance of mining revenue	0	2	0
		M5, Budget share of mining revenue	M5.1, Budget share of mining revenue	0	2	0
		M6, Economic and employment share of mining	M6.1, Economic and employment share of mining	3	2	0

Descriptive Topics	No. Questions (Primary Source)
X.1, Licenses and Exploration—descriptive information	3
X.2, Mining Policy, Law and Regulations—descriptive information	5
X.3, Mining Tax Policies and Tax Instruments—descriptive information	9
X.4, Public Financial Management and Revenue Sharing—descriptive information	5
X.5, Environmental and Social Impact Management—descriptive information	4
X.6, Sustainable Development—descriptive information	3

Table 2: Theme Scores

Theme	Title	Min.	Max.	Score
A	Policy, Legislation and Regulation	4.00	1.00	2.77
B	Accountability and Inclusiveness	4.00	1.00	2.65
C	Institutional Capacity and Effectiveness	4.00	1.00	2.62
D	Economic Environment	4.00	1.00	2.36
E	Political Environment	4.00	1.00	2.67
F	Sustainable Development	4.00	1.00	2.16
M	Mining Sector Importance	4.00	2.50	3.36

Table 3: Value Chain Stage Scores

Value Chain Stage	Title	Max.	Min.	Score
1	Contracts, Licenses and Exploration	4.00	1.00	2.86
2	Operations	4.00	1.00	2.36
3	Taxation and State Participation	4.00	1.00	3.39
4	Revenue Distribution and Management	4.00	1.00	2.04
5	Local Impact	4.00	1.00	2.75

Table 4: Topic Score

Value Chain Stage	Theme	Topic	Max	Min	Average
Contracts, Licenses and Exploration	Policy, Legislation and Regulation	Rules for License Allocation and Geological Data Collection	4.00	2.50	3.71
	Accountability and Inclusiveness	Openness, Transparency and Independence of Licensing Process	4.00	1.00	1.99
	Institutional Capacity and Effectiveness	Cadastre, Geodata, License and Tenure Management	4.00	1.00	2.88
Operations	Policy, Legislation and Regulation	Clarity and Harmonization of Sector Rules	4.00	1.00	2.30
	Accountability and Inclusiveness	Accountability of Processes, Compensation, Resettlement and Artisanal and Smallscale Mining Voice	4.00	1.00	2.81
	Institutional Capacity and Effectiveness	Sector Management and Intragovernmental Coordination	4.00	1.00	1.98
Taxation and State Participation	Policy, Legislation and Regulation	Tax policy, Instruments and State Owned Enterprise Rules	4.00	1.00	3.33
	Accountability and Inclusiveness	Mining Taxation and State Owned Enterprise Financial Management	4.00	2.25	3.41
	Institutional Capacity and Effectiveness	Mining Tax Administration and State Owned Enterprise Governance	4.00	1.75	3.44
Revenue Distribution and Management	Policy, Legislation and Regulation	Public Financial Management Regulation, Including Revenue Sharing	4.00	1.00	1.75
	Accountability and Inclusiveness	Budget Transparency and Accountability, and Public Integrity	2.50	1.00	1.75
	Institutional Capacity and Effectiveness	Budget Implementation and Macroeconomic Management Effectiveness.	4.00	1.00	2.62
Local Impact	Policy, Legislation and Regulation	Policies to Mitigate Environmental and Social Impact	4.00	1.00	2.78
	Accountability and Inclusiveness	Human Rights, Employment Equity and Environmental Transparency	4.00	1.00	3.28
	Institutional Capacity and Effectiveness	Community Consultation and Environmental and Social Impact Management	4.00	1.00	2.18
Cross-cutting themes					
Economic Environment	Business and Investment Environment		4.00	1.00	2.78
	Mining Infrastructure		3.00	1.00	2.00
	Diversity and Stability of National Revenues		2.50	1.00	1.75
	Macroeconomic Stability		3.00	2.00	2.50
	National Growth and Savings		4.00	4.00	4.00
	Skills and Human Capital Availability		3.00	1.00	2.50
	Human Health		1.00	1.00	1.00
Political Environment	Expropriation Risk		4.00	2.00	3.33
	Political Stability		4.00	3.00	3.33
	Predictable Mining and Tax Policy		1.00	1.00	1.00
	Control of Corruption		3.00	3.00	3.00
Sustainable Development	Development Planning		4.00	1.00	2.33
	Local Supplier Development		4.00	1.00	1.74
	Investment Promotion (Diversification)		4.00	1.00	2.50
	Leveraging Infrastructure		4.00	1.00	2.06
Mining Sector Importance	Geological Prospectivity and Potential		4.00	2.50	3.17
	Foreign Direct Investment in Mining		3.00	3.00	3.00
	State Participation in Mining		3.00	3.00	3.00
	Significance of Mining Revenues		4.00	4.00	4.00
	Budget Share of Mining Revenues		4.00	4.00	4.00
	Economic and Employment Share of Mining		3.00	3.00	3.00

Figure 1: Topic Scores (Max-Min Chart)

1.00 1.75 2.50 3.25 4.00

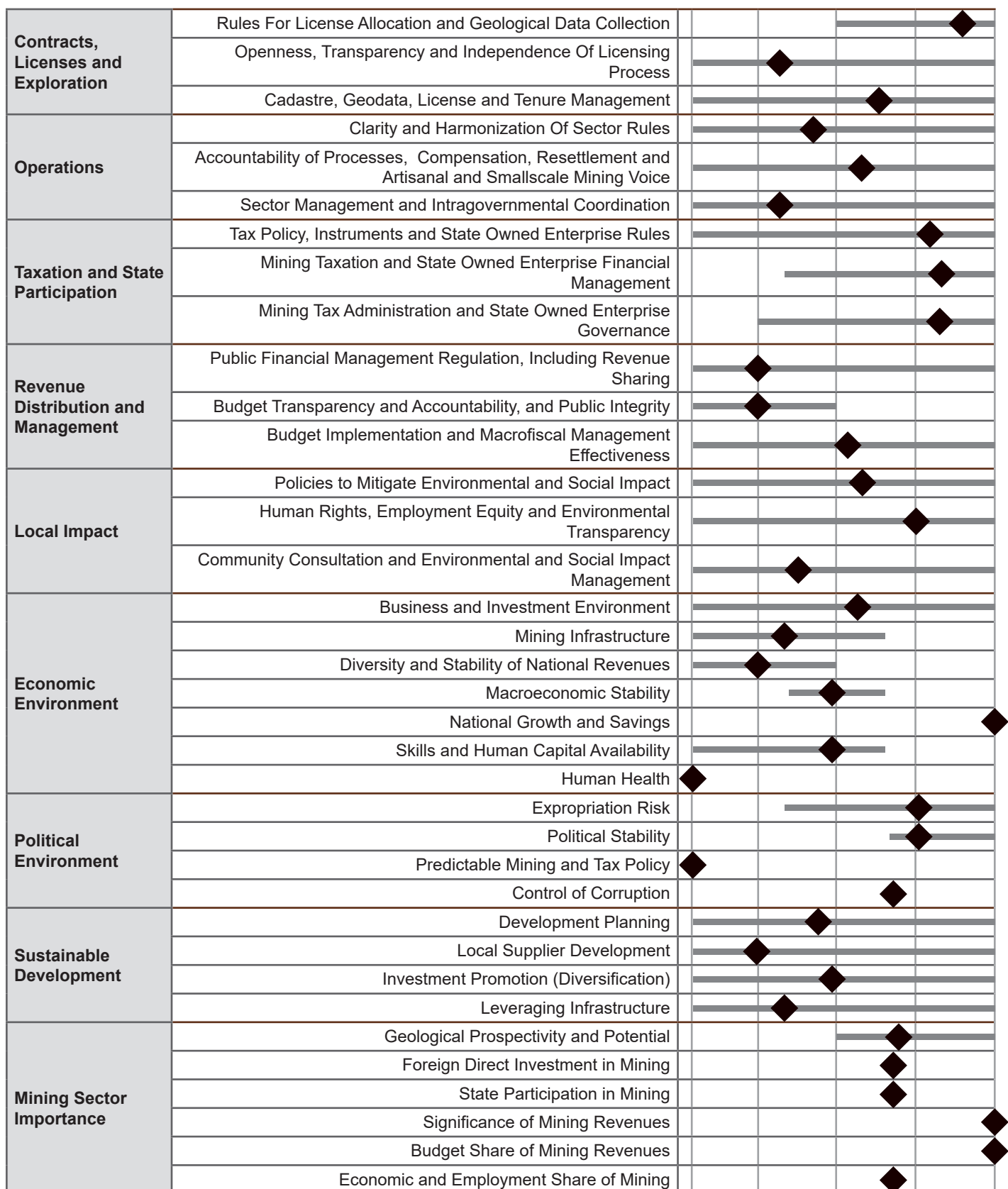


Table 5: Indicator Scores

Value Chain Stage	Theme	Topic	Indicator	Max	Min	Average
Contracts, Licenses and Exploration	Policy, Legislation and Regulation	Rules for License Allocation and Geological Data Collection	Clarity of Rules for License Allocation, Conversion and Transfer	4.00	2.50	3.83
			Geological Data Collection Rules	4.00	4.00	4.00
			Modern Mining Cadastre	4.00	4.00	4.00
			License Approval and Review Timeframes	4.00	2.50	3.00
			Openness and Transparency of Licensing Process	4.00	1.00	2.99
	Accountability and Inclusiveness	Openness, Transparency and Independence of Licensing Process	Independence of Licensing Authority	1.00	1.00	1.00
			Collecting Geological Information	4.00	1.00	2.83
			State of Mapping and Geological Exploration	4.00	1.00	2.60
			Mining Cadastre Effectiveness	4.00	1.00	3.13
			Allocating Licenses Effectively	4.00	1.86	2.56
Operations	Policy, Legislation and Regulation	Clarity and Harmonization of Sector Rules	Transferability of Licenses	4.00	3.25	3.63
			Managing Licenses Effectively	4.00	1.00	2.56
			Clarity of Legislation, Rules and Timeframes	4.00	1.00	2.50
			Harmonization of Legislation and Government Coordination	2.50	1.00	1.89
			Provisions for Artisanal and Smallscale Mining	4.00	1.00	2.50
	Accountability and Inclusiveness	Accountability of Processes, Compensation, Resettlement and Artisanal and Smallscale Mining Voice	Access to Land, Compensation and Resettlement	2.50	1.00	2.05
			Access and Accountability of Mining Legislation and Processes	4.00	2.07	3.14
			Artisanal and Smallscale Mining Voice Representation	4.00	2.50	3.25
			Timeframes for Approvals	0.00	0.00	..
			Intragovernmental Coordination	2.50	1.00	1.47
Taxation and State Participation	Institutional Capacity and Effectiveness	Sector Management and Intragovernmental Coordination	Support to Artisanal and Smallscale Mining	4.00	1.00	2.50
			Tax Policy and Instruments	4.00	1.00	3.00
			Rules for Auditing, Base Erosion and Profit Shifting	4.00	1.00	3.00
			State Owned Enterprise Governance Rules	4.00	4.00	4.00
			Accountability of Mining Taxation	4.00	2.25	2.81
	Policy, Legislation and Regulation	Tax policy, Instruments and State Owned Enterprise Rules	State-Owned Enterprise Financial Management	4.00	4.00	4.00
			Accountability and Inclusiveness	4.00	4.00	4.00
			Accountability and Inclusiveness	4.00	4.00	4.00
			Accountability and Inclusiveness	4.00	4.00	4.00
			Accountability and Inclusiveness	4.00	4.00	4.00

Value Chain Stage	Theme	Topic	Indicator	Max	Min	Average
Revenue Distribution and Management	Institutional Capacity and Effectiveness	Mining Tax Administration and State Owned Enterprise Governance	Mining Tax Administration	4.00	1.75	3.18
			State-Owned Enterprise Governance	4.00	2.50	3.70
	Policy, Legislation and Regulation	Public Financial Management and Revenue Sharing	Public Financial Management and Revenue Sharing	4.00	1.00	2.50
			Macroeconomic Management Rules and Stabilization	1.00	1.00	1.00
		Accountability and Inclusiveness	Budget Transparency and Accountability	1.00	1.00	1.00
			Public Investment Integrity	2.50	2.50	2.50
	Institutional Capacity and Effectiveness	Policies to Mitigate Environmental and Social Impact	Budget Implementation	4.00	1.00	2.86
			Large Scale Public Investment	4.00	1.00	2.50
		Human Rights, Employment Equity and Environmental Transparency	Macroeconomic Management and Revenue Stabilization Effectiveness	4.00	1.00	2.50
			Community Impact, Consultation and Corporate Social Responsibility	2.50	1.00	1.83
Local Impact	Policy, Legislation and Regulation	Policies to Mitigate Environmental and Social Impact	Rules for Environmental and Social Impact Management	4.00	1.00	2.50
			Rules for Financial Sureties for Decommissioning	4.00	4.00	4.00
	Accountability and Inclusiveness	Human Rights, Employment Equity and Environmental Transparency	Human Rights and Employment Equity	4.00	1.00	2.56
			Environmental and Social Impact Transparency	4.00	4.00	4.00
	Institutional Capacity and Effectiveness	Community Consultation and Environmental and Social Impact Management	Impact and Community Consultation	4.00	1.00	2.40
			Environmental and Social Impact Management Effectiveness	2.50	1.00	1.64
		Business and Investment Environment	Effectiveness of Sureties for Decommissioning	2.50	2.50	2.50
	Economic Environment	Business and Investment Environment	Business and Investment Environment	4.00	1.00	2.78
			Mining Infrastructure	3.00	1.00	2.00
Diversity and Stability of National Revenues			2.50	1.00	1.75	
Macroeconomic Stability			3.00	2.00	2.50	
National Growth and Savings			4.00	4.00	4.00	
Skills and Human Capital Availability			3.00	1.00	2.50	
Human Health			1.00	1.00	1.00	
Expropriation Risk			4.00	2.00	3.33	
Political Stability			4.00	3.00	3.33	
Predictable Mining and Tax Policy			1.00	1.00	1.00	
Political Environment	Control of Corruption	Control of Corruption	3.00	3.00	3.00	

Theme	Indicator	Max	Min	Average
Sustainable Development	Development Planning	4.00	1.00	2.33
	Local Supplier Development	4.00	1.00	1.74
	Investment Promotion (Diversification)	4.00	1.00	2.50
	Leveraging Infrastructure	4.00	1.00	2.06
Mining Sector Importance	Geological Prospectivity and Potential	4.00	2.50	3.17
	Foreign Direct Investment in Mining	3.00	3.00	3.00
	State Participation in Mining	3.00	3.00	3.00
	Significance of Mining Revenues	4.00	4.00	4.00
	Budget Share of Mining Revenues	4.00	4.00	4.00
	Economic and Employment Share of Mining	3.00	3.00	3.00

Figure 2: Indicator Scores (Max-min Chart)

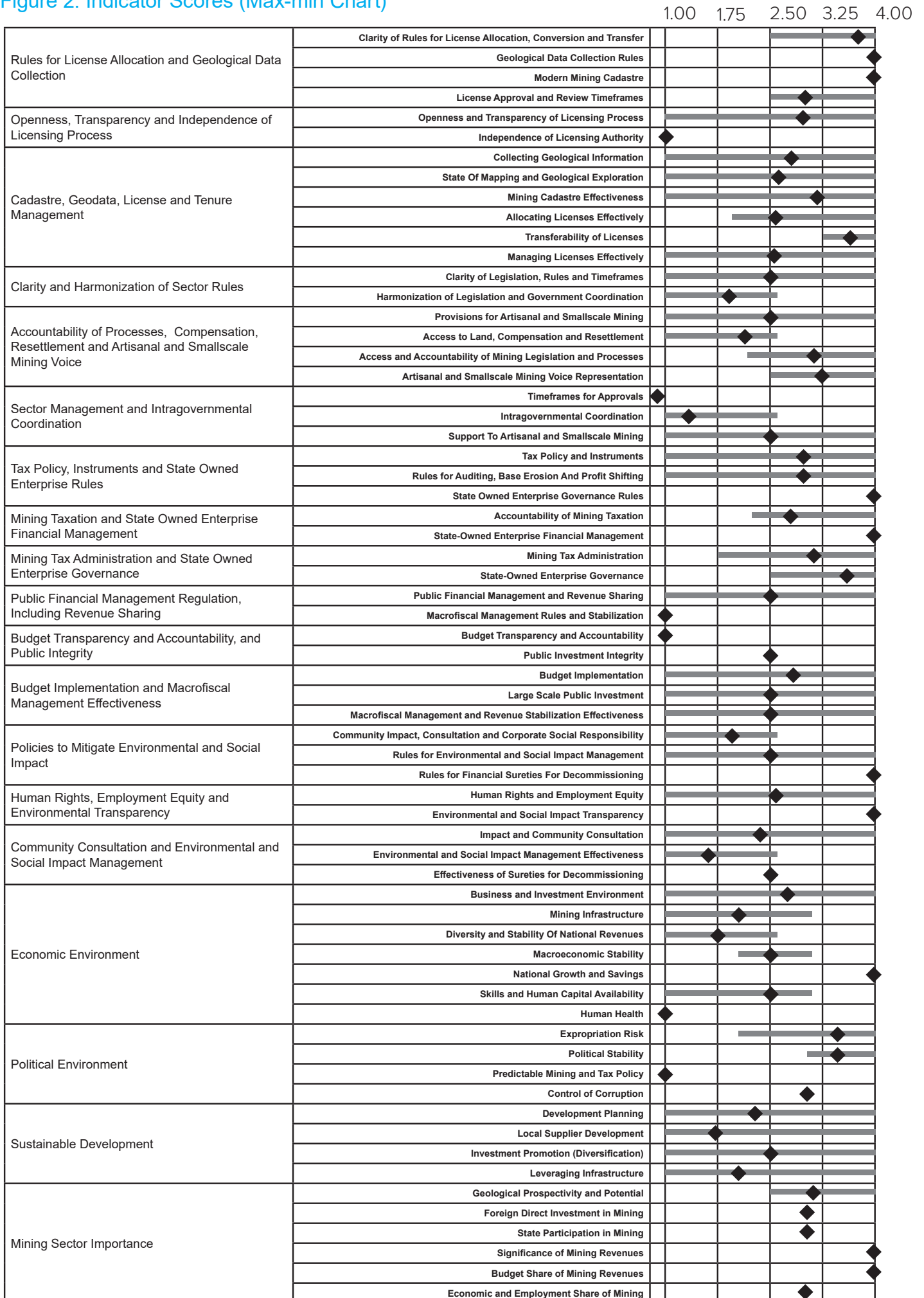


Table 6: Performance of the Artisanal and Small-scale Mining Sector

Value Chain Stage & Theme	Topic	Indicator	Question	Answer Score	Answer Interpretation	Data Source
Operations Policy, Legislation and Regulation	Clarity and Harmonization of Sector Rules	Provision for ASM	To what extent is there a regulation in place that allows the formalization of artisanal and small-scale miners? (76)	4	Good practice in place	Primary
			To what extent is artisanal and small-scale mining legally recognized in the mining law or regulations? (77)	4	Good practice in place	Primary
			To what extent do the laws and regulations allow for artisanal and small-scale and industrial mining activities to coexist? (78)	2.5	Good practice partially in place	Primary
Operations Accountability and Inclusiveness	Accountability of Processes, Compensation, Resettlement and ASM Voice	ASM Voice Representation	To what extent are there detailed laws and regulations to settle disputes between ASM and other mining activities? (79)	1	Good practice not in place	Primary
			Is there a non-state association that represents artisanal and small-scale miners? (89)	4	Good practice in place	Primary
			To what extent do artisanal and small-scale miner associations participate in the monitoring, advocacy and enforcement of their property rights? (90)	2.5	Partly meeting own goal	In-country Interview
Operations Institutional Capacity and Effectiveness	Sector Management and Intragovernment Coordination	Support to ASM	Is there a dedicated unit within the ministry responsible for mining that deals with ASM? (97)	1	Good practice not in place	Primary
			To what extent is support provided by government to artisanal and small scale miners concerning technical or business skills? (98)	4	Good practice in place	Primary
			To what extent is the government effectively using a dispute resolution system dedicated to ASM to tackle disputes between artisanal and small scale mining and other mining activities? (99)	1	Not meeting own goal	In-country Interview
Taxation and State Participation Policy, Legislation and Regulation	Tax Policies and Instruments, and State Owned Enterprise Rules	Tax Policy and Instruments	To what extent is ASM permitted on areas of industrial mining activity? (100)	2.5	Partly meeting own goal	In-country Interview
			101. To what extent are artisanal and small-scale miners legally allowed to operate? (101)	4	Meeting own goal	In-country Interview
			102. To what extent is artisanal and small-scale mining taking place under formalized procedures? (102)	2.5	Partly meeting own goal	In-country Interview
Local Impact Policy, Legislation and Regulation	Policies to Mitigate Environmental and Social Impact	Rules for Environment and Social Impact Management	Does the government have a simplified tax collection system for ASM? (111)	1	Good practice not in place	Primary
			In the law and regulations, is there a simplified environmental permit or impact assessment for artisanal and small-scale mining? (189)	2.5	Good practice partially in place	Primary
			To what extent is the government monitoring compliance with environmental requirements for artisanal and small-scale miners? (220)	1	Not meeting own goal	In-country Interview

Figure 3: Performance of the Artisanal and Small-scale Mining Sector, by Graph

		1.00	1.75	2.50	3.25	4.00
Clarity and Harmonization of Sector Rules	To what extent is there a regulation in place that allows the formalization of artisanal and small-scale miners? (76)					◆
	To what extent is artisanal and small-scale mining legally recognized in the mining law or regulations? (77)					◆
	To what extent do the laws and regulations allow for artisanal and small-scale and industrial mining activities to coexist? (78)			◆		
	To what extent are there detailed laws and regulations to settle disputes between ASM and other mining activities? (79)	◆				
Accountability of Processes, Compensation, Resettlement and ASM Voice	Is there a non-state association that represents artisanal and small-scale miners? (89)					◆
	To what extent do artisanal and small-scale miner associations participate in the monitoring, advocacy and enforcement of their property rights? (90)			◆		
	Is there a dedicated unit within the Ministry dealing with artisanal and small scale mining? (97)	◆				
Sector Management and Intragovernment Coordination	To what extent is support provided by government to artisanal and small scale miners concerning technical or business skills? (98)					◆
	To what extent is the government effectively using a dispute resolution system dedicated to ASM to tackle disputes between artisanal and small scale mining and other mining activities? (99)	◆				
	In practice, are there instances of coexistence of ASM and industrial mining activities? (100)			◆		
	To what extent are artisanal and small-scale miners legally allowed to operate? (101)					◆
	To what extent is artisanal and small-scale mining taking place under formalized procedures? (102)			◆		
Tax Policies and Instruments, and State Owned Enterprise Rules	Does the government have a simplified tax collection system for ASM? (111)	◆				
	In the law and regulations, is there a simplified environmental permit or impact assessment for artisanal and small-scale mining? (189)			◆		
	To what extent is the government monitoring compliance with environmental requirements for artisanal and small-scale miners? (220)	◆				

Figure 4: Stakeholder prioritisation, Government



Figure 5: Stakeholder prioritisation, CSO

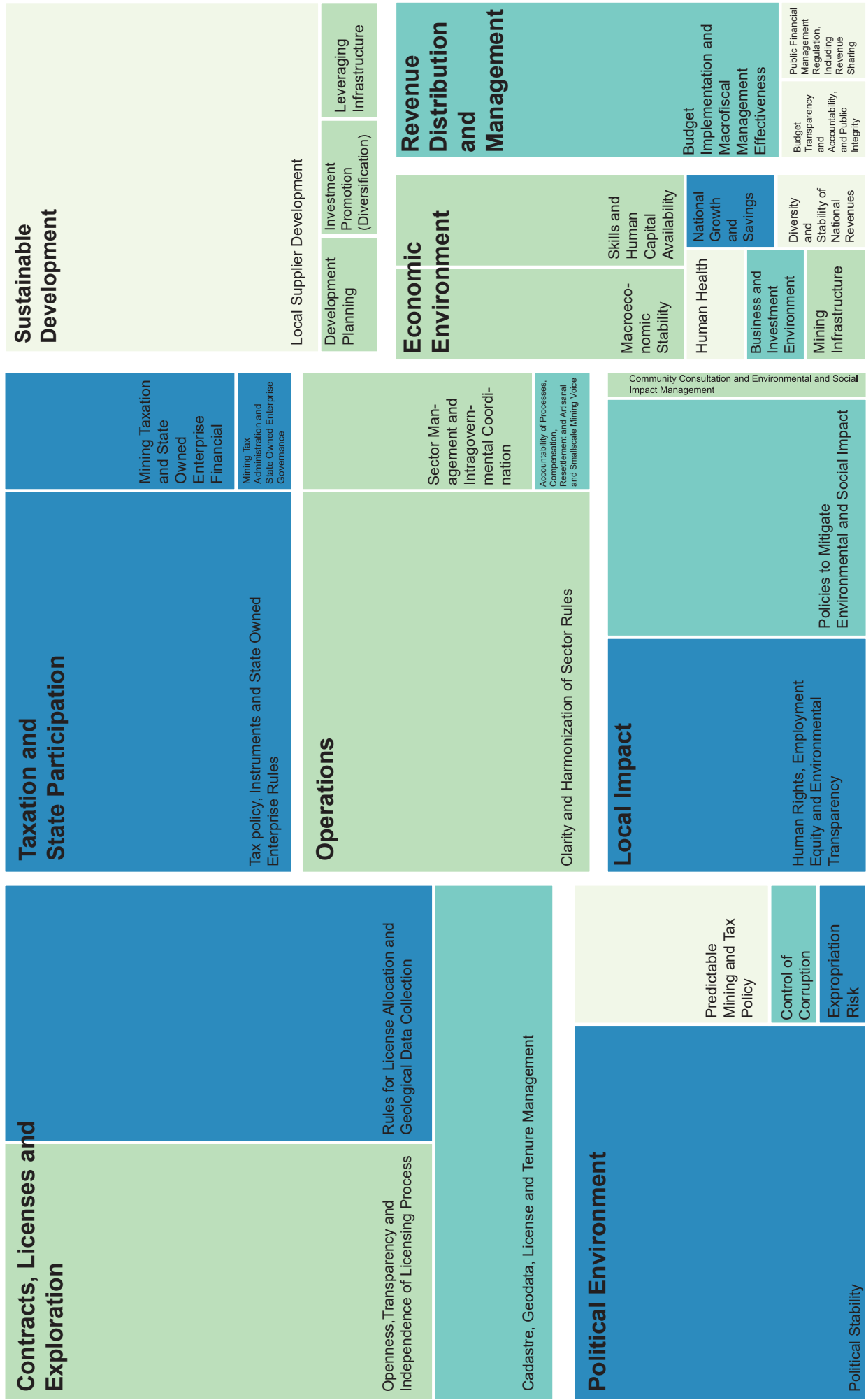


Figure 6: Stakeholder prioritisation, Industry

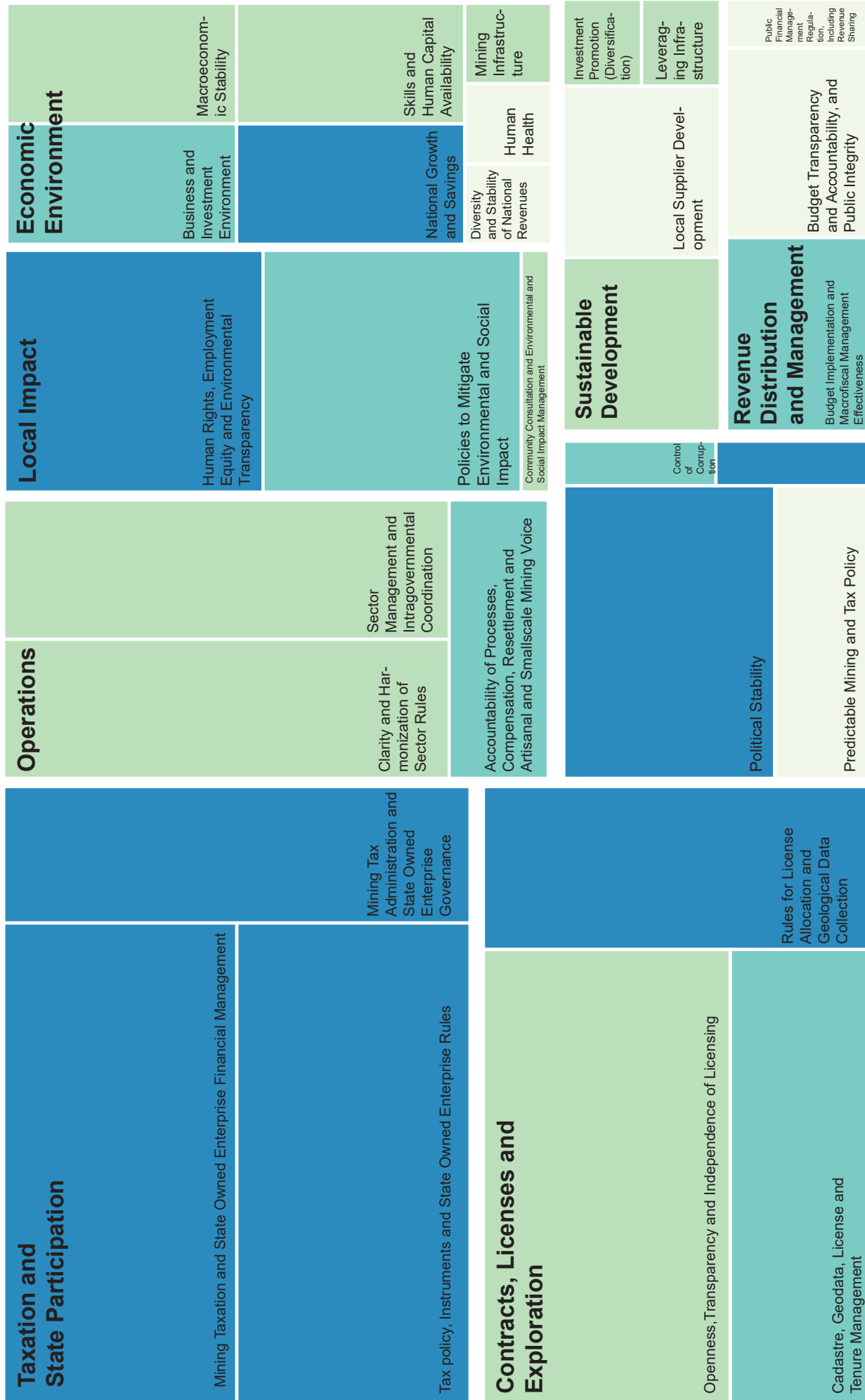


Table 7: Question Scores

Question Number	Question	Data Source	Interpretation	Score
1. Contracts, Licenses and Exploration				
A. Policy, Legislation and Regulation				
A1 Rules for License Allocation and Geological Data Collection				
A1.1 Clarity of Rules for License Allocation, Conversion and Transfer				
1	To what extent are the procedures for the allocation of exploration rights detailed, laid out in law and regulations, and compatible with relevant legislation?	Primary	Good practice in place	4.00
2	To what extent are the procedures for the allocation of mining rights detailed, laid out in the law and/or regulations, and compatible with relevant legislation?	Primary	Good practice in place	4.00
3	To what extent does the legislation impose clear limits to the discretionary powers of the authority in charge of awarding exploration licenses?	Primary	Good practice in place	4.00
4	To what extent are limits to the discretionary powers of the authority in charge of awarding mining licenses laid out in the law?	Primary	Good practice in place	4.00
5	To what extent are exceptions to the First Come, First Served principle allowed?	Primary	Good practice in place	4.00
6	In the law, to what extent does a company that holds an exploration license (and is in compliance with license conditions) have an automatic prior right to apply for a mining lease in that area?	Primary	Good practice in place	4.00
7	According to the law, to what extent do license holders have the freedom to transfer their licenses to eligible companies	Primary	Good practice partially in place	2.50
8	To what extent are sanctions for non-performance by companies regarding licenses prescribed in the regulations?	Primary	Good practice in place	4.00
9	To what extent are mining contracts allowed to be used to supersede the provisions of prevailing laws?	Primary	Good practice in place	4.00
10	To what extent is it defined in law which government body negotiates and approves mine development agreements?	Primary	Data not available or not applicable	..
A1.2 Geological Data Collection Rules				
11	In the law, to what extent are exploration companies required to regularly report quantitative operational information, including geological information, to the GSD or mining authority?	Primary	Good practice in place	4.00
A1.3 Modern Mining Cadastre				
12	Is the establishment and operation of a mining cadastre provided for in the law?	Primary	Good practice in place	4.00
A1.4 License Approval and Review Timeframes				
13	According to regulation, to what extent is there a clear timeframe for the allocation of licenses?	Primary	Good practice in place	4.00
14	In the law, to what extent is there discretion in the speed of approval for license applications?	Primary	Data not available or not applicable	..
15	To what extent does the regulation ensure that applications not meeting criteria are rejected as opposed to remain pending?	Primary	Good practice not in place	2.50
16	To what extent is the timeframe for approval of exploration work programs set out in regulations?	Primary	Good practice partially in place	2.50
B. Accountability and Inclusiveness				
B1 Openness, Transparency and Independence of Licensing Process				
B1.1 Openness and Transparency of Licensing Process				
17	To what extent is the information required for license applications easily accessible?	Primary	Good practice in place	4.00
18	To what extent do the regulations require that the reasons for license application denial be communicated to the applicant?	Primary	Good practice in place	4.00
19	To what extent does the legislation detail a transparent process for license cancellations?	Primary	Good practice in place	4.00

20	In practice, when licenses are cancelled to what extent are the reasons communicated to the license holder in an accurate, complete and timely fashion?	In-country Interview	Meeting its own goal	3.40
21	To what extent are mining contracts required to be made publicly available in the law?	Primary	Good practice not in place	1.00
22	To what extent are mining contracts made publicly available?	In-country Interview	Not meeting its own goal	1.00
23	To what extent does the legislation contain barriers to the disclosure of license and contract information, such as state secrecy laws?	Primary	Good practice in place	4.00
24	To what extent does the government publish key details for each license such as the license holder, duration of license and license type?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
B1.2 Independence of Licensing Authority				
25	In the law, to what extent is the authority in charge of awarding licenses for exploration and mining independent from the mining ministry?	Primary	Good practice not in place	1.00
26	To what extent is the authority in charge of awarding licenses for exploration and mining independent from the mining ministry?	In-country Interview	Data not available or not applicable	..
C. Institutional Capacity and Effectiveness				
C1 Cadastre, Geodata, License and Tenure Management				
C1.1 Collecting Geological Information				
27	To what extent is there a government website that describes what national geological information is available and at what cost (if not free)?	Primary	Good practice partially in place	2.50
28	To what extent is there a library with current national geological information maintained by the Geological Survey Department (GSD) or a similar organization?	Primary	Good practice in place	4.00
29	In practice, how reliably are exploration companies delivering the required operational information, including geological information, to the GSD or mining authority?	In-country Interview	More than half way towards meeting its own goal	3.25
30	To what extent does the Geological Survey Department (GSD) or similar organization collect geological information in an accessible library?	In-country Interview	Not meeting its own goal	1.75
31	To what extent does the Geological Survey Department (GSD) or similar organization store geological information from companies in a confidential manner?	In-country Interview	Meeting its own goal	4.00
32	To what extent does the Geological Survey Department (GSD) or a similar organization make use of the geological data collected from companies to improve understanding of geological prospectivity?	In-country Interview	Meeting its own goal	4.00
33	To what extent does the Geological Survey Department (GSD) or a similar organization make use of the geological data collected from companies to monitor compliance with licenses?	In-country Interview	Meeting its own goal	4.00
34	To what extent is the Geological Survey Department (GSD) or similar organization staffed with well-trained professionals?	In-country Interview	Not meeting its own goal	1.00
35	To what extent is the Geological Survey Department (GSD) or similar organization appropriately financially resourced?	In-country Interview	Not meeting its own goal	1.00
C1.2 State of Mapping and Geological Exploration				
36	What proportion of the country's land has been licensed for exploration?	Primary	Data not available or not applicable	..
37	To what extent is the licensed ground being serviced by active exploration?	In-country Interview	Not meeting its own goal	1.00
38	Is there a country-wide geological map (usually at scale 1:1,000,000, 1:2 000 000, 1: 1 500 000)?	Primary	Good practice partially in place	2.50
39	What proportion of the country is covered at scale of 1:250,000 or similar (e.g. 1:200 000)?	Primary	Good practice partially in place	2.50

40	What proportion of the country is covered at scale of 1:100,000 by geological maps or similar (for example, 1:100,000, 1:62,500, 1:50,000)?	Primary	Good practice in place	4.00
41	Quality of geological database - Fraser Institute	Secondary	Higher 50%-75%	3.00
C1.3 Mining Cadastre Effectiveness				
42	To what extent are the mining cadastre rules being correctly implemented and information is accessible to the public?	In-country Interview	Meeting its own goal	4.00
43	To what extent does the relevant legislation or guidelines provide for a map component to record license boundaries in the cadastre?	Primary	Good practice in place	4.00
44	To what extent is the topographic map for the cadastre compatible with GPS systems?	In-country Interview	Meeting its own goal	4.00
45	In practice, are there boundary disputes between license holders due to the ambiguity of boundaries?	In-country Interview	Not meeting its own goal	1.00
46	To what degree is the mining cadastre up-to-date?	In-country Interview	Not meeting its own goal	1.50
47	To what extent is the mining cadastre used to support the management of licenses?	In-country Interview	Meeting its own goal	4.00
48	To what extent does the cadastre system ensure that license information (including boundaries) cannot be tampered with?	In-country Interview	Meeting its own goal	4.00
49	To what extent is the computerized cadastre system operating without major technical problems?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
50	If there is a decentralized cadastre system in place, to what extent is there a clearance requirement from central office?	Primary	Data not available or not applicable	..
51	In practice, if there is a decentralized cadastre system in place, to what extent is a clearance from the central office required before issuing a license?	In-country Interview	Data not available or not applicable	..
C1.4 Allocating Licenses Effectively				
52	To what extent are the procedures for the allocation of exploration rights laid out in the legal framework followed in practice?	In-country Interview	Working towards meeting its own goal, but less than half way	2.17
53	To what extent are the procedures for the allocation of mining rights laid out in the legal framework followed in practice?	In-country Interview	Meeting its own goal	4.00
54	To what extent are limits to discretionary power in the award of exploration licenses followed?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
55	To what extent are limits to discretionary powers in the award of mining licenses followed?	In-country Interview	Working towards meeting its own goal, but less than half way	1.86
56	To what extent is there a preference for local companies or producers in the allocation process of exploration or mining licenses?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
57	To what extent is it clear which government body (or bodies) negotiates and approves mining contracts?	In-country Interview	More than half way towards meeting its own goal	2.88
58	To what extent do license cancellations or denied applications result in appeals?	In-country Interview	Working towards meeting its own goal, but less than half way	2.00
C1.5 Transferability of Licenses				
59	In practice, if a company holds an exploration license and is in compliance with license conditions, to what extent does that translate into an automatic priority in obtaining a mining lease in that area?	In-country Interview	More than half way towards meeting its own goal	3.25

60	In practice, are license holders able to transfer their licenses to eligible companies?	In-country Interview	Meeting its own goal	4.00
C1.6 Managing Licenses Effectively				
61	To what extent are the legislated timeframes for license application and allocation followed?	In-country Interview	Not meeting its own goal	1.75
62	To what extent is the cadastre system mostly free of long-standing pending applications?	In-country Interview	Meeting its own goal	4.00
63	In the case of FCFS (First Come, First Served), to what extent are applications time-stamped as they are received?	In-country Interview	Meeting its own goal	4.00
64	To what extent are the sanctions regarding licenses for non-performance by companies enforced?	In-country Interview	Working towards meeting its own goal, but less than half way	2.13
65	To what extent are the timelines for deciding on exploration and/or mining rights applications compatible with the timelines of other required permits?	In-country Interview	Working towards meeting its own goal, but less than half way	2.13
66	To what extent is the timeframe for the approval of exploration work programs followed?	In-country Interview	Not meeting its own goal	1.50
67	To what extent is the unit managing the monitoring of licenses staffed appropriately to perform its duties?	In-country Interview	Meeting its own goal	4.00
68	To what extent is the unit managing the monitoring of licenses receiving an adequate operational budget to perform its duties?	In-country Interview	Not meeting its own goal	1.00
69	In practice, how long does the approval for exploration license applications take?	In-country Interview	Data not available or not applicable	..
2. Operations				
A. Policy, Legislation and Regulation				
A2 Clarity and Harmonization of Sector Rules				
A2.1 Clarity of Legislation, Rules and Timeframes				
70	To what extent do regulations cover all relevant mining procedures (exploration, license issuance, work programs, mines inspection, health and safety, explosives, emergency, mine closure, etc.)?	Primary	Good practice in place	4.00
71	To what extent is the timeframe for the approval of mine development plans set out in the regulations?	Primary	Good practice not in place	1.00
72	To what extent is the timeframe for the approval of extensions of mining operations set out in the regulations?	Primary	Good practice not in place	1.00
A2.2 Harmonization of Legislation and Government Coordination				
73	To what extent is mining sector legislation consistent with other relevant legislation?	Primary	Working towards meeting its own goal, but less than half way	2.17
74	To what extent are legislation or inter-ministry arrangements covering natural resource issues that may be affected by mineral rights (e.g., land use, water, forests and nature reserves) well defined to minimize overlaps or gaps?	Primary	Good practice not in place	1.00
75	How clearly does mining or other legislation assign roles and responsibilities between government ministries/agencies in the mining sector?	Primary	Good practice partially in place	2.5
A2.3 Provisions for Artisanal and Smallscale Mining				
76	To what extent is there a regulation in place that allows the formalization of artisanal and small-scale miners?	Primary	Good practice in place	4.00
77	To what extent is artisanal and small-scale mining legally recognized in the mining law or regulations?	Primary	Good practice in place	4.00
78	To what extent do the laws and regulations allow for artisanal and small-scale and industrial mining activities to coexist?	Primary	Good practice partially in place	2.50
79	To what extent are there detailed laws and regulations to settle disputes between ASM and other mining activities?	Primary	Good practice not in place	1.00

B. Accountability and Inclusiveness				
B2 Accountability of Processes, Compensation, Resettlement and Artisanal and Smallscale Mining Voice				
B2.1 Access to Land, Compensation and Resettlement				
80	Does the holder of a mineral right have guaranteed access rights to (surface) land, or does this need to be negotiated with landowners (or users) separately?	Primary	Good practice not in place	1.00
81	Is there an established procedure following Equator Principles for the resettlement of communities displaced by mining activities?	Primary	Good practice partially in place	2.50
82	To what extent does the government enforce the legal requirements to resettle communities affected by mining activities?	In-country Interview	More than half way towards meeting its own goal	2.50
83	Is there an established procedure for the payment of compensation to landowners (and/or users) when exploration and mining activities interfere with their activities?	Primary	Good practice partially in place	2.50
84	To what extent does the government enforce the legal requirements of mining companies to compensate people affected by mining activities?	In-country Interview	Not meeting its own goal	1.75
B2.2 Access and Accountability of Mining Legislation and Processes				
85	To what extent are the key laws and regulations governing mining operations available from a single and up-to-date online government source? ?	Primary	Good practice in place	4.00
86	To what extent does the legislative branch carry out an oversight role regarding the mining sector beyond the consideration and approval of legislation?	In-country Interview	Working towards meeting its own goal, but less than half way	2.07
87	In the law, is there a domestic process to appeal decisions by mining authorities that is outside and independent of the mining ministry?	Primary	Good practice in place	4.00
88	To what extent is this independent domestic appeal process able to challenge decisions by mining authorities?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
B2.3 Artisanal and Smallscale Mining Voice Representation				
89	Is there a non-state association that represents artisanal and small-scale miners?	Primary	Good practice in place	4.00
90	To what extent do artisanal and small-scale miner associations participate in the monitoring, advocacy and enforcement of their property rights?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
C. Institutional Capacity and Effectiveness				
C2 Sector Management and Intragovernmental Coordination				
C2.1 Timeframes for Approvals				
91	To what extent is the timeframe for the approval of a mine development plan followed?	In-country Interview	Data not available or not applicable	..
92	To what extent is the timeframe for the approval of an extension of a mining operations followed	In-country Interview	Data not available or not applicable	..
C2.2 Intragovernmental Coordination				
93	How common are conflicts between government ministries/agencies over the roles and responsibilities assigned for the mining sector?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
94	To what extent are there formal mechanisms for sharing information between government agencies closely working on mining (MOUs, intra-governmental working groups)?	Primary	Good practice not in place	1.00
95	To what extent is there regular sharing of information between government agencies that have regulatory responsibilities for the mining sector?	In-country Interview	Not meeting its own goal	1.38

96	To what extent are there instances where mineral rights conflict with other legislation on natural resources (e.g., on land use, water, forests or nature reserves)?	In-country Interview	Not meeting its own goal	1.00
C2.3 Support to Artisanal and Smallscale Mining				
97	Is there a dedicated unit within the Ministry dealing with artisanal and small scale mining?	Primary	Good practice not in place	1.00
98	To what extent is support provided by government to artisanal and small scale miners concerning technical or business skills?	Primary	Good practice in place	4.00
99	To what extent is the government effectively using a dispute resolution system dedicated to ASM to tackle disputes between artisanal and small scale mining and other mining activities?	In-country Interview	Not meeting its own goal	1.00
100	In practice, are there instances of coexistence of ASM and industrial mining activities?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
101	To what extent are artisanal and small-scale miners legally allowed to operate?	In-country Interview	Meeting its own goal	4.00
102	To what extent is artisanal and small-scale mining taking place under formalized procedures?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
3. Taxation and State Participation				
A. Policy, Legislation and Regulation				
A3 Tax policy, Instruments and State Owned Enterprise Rules				
A3.1 Tax Policy and Instruments				
103	Is it clear in the law which government agencies have the authority to collect taxes and payments from resource companies?	Primary	Good practice in place	4.00
104	To what extent are taxes from mining required by law to be placed in the national treasury?	Primary	Good practice in place	4.00
105	Does the legislation prescribe rates, formulas and bases for the main elements of the fiscal regime?	Primary	Good practice in place	4.00
106	To what extent are there well-defined provisions for the renegotiation or review of fiscal terms?	Primary	Good practice partially in place	2.50
107	To what extent does the mining or investment legislation provide clear rules on the types of tax incentives that can be granted to large investors?	Primary	Good practice in place	4.00
108	To what extent does the fiscal regime ensure that the government has an adequate minimum revenue stream in all production periods?	Primary	Good practice not in place	1.00
109	To what extent does the mining fiscal regime include progressive fiscal instruments?	Primary	Good practice not in place	2.50
110	To what extent are there clear rules in the tax code or regulations for the following payment processes:	Primary	Good practice in place	4.00
111	Does the government have a simplified tax collection system for ASM?	Primary	Good practice not in place	1.00
A3.2 Rules for Auditing, Base Erosion and Profit Shifting				
112	According to regulations, to what extent are regular tax, cost or physical audits required to be conducted of small-scale operators and large mining companies?	Primary	Good practice in place	4.00
113	Is there a legal provision providing for an arm's-length principle for regulation of transfer-pricing practices?	Primary	Good practice in place	4.00
114	To what extent are there clear documentation requirements to demonstrate compliance with transfer pricing rules?	Primary	Good practice in place	4.00
115	To what extent are there clear procedures for using advanced pricing agreements to limit transfer pricing?	Primary	Good practice not in place	1.00
116	Is there an annual disclosure requirement for related party transactions?	Primary	Good practice not in place	1.00
117	To what extent do the legal provisions limit the risk from thin capitalization?	Primary	Good practice in place	4.00

A3.3 State Owned Enterprise Governance Rules				
118	To what extent does law or regulation require mining sector SOEs to adhere to good corporate governance when examining the Board's composition?	Primary	Good practice in place	4.00
119	Where the mining SOE engages in quasi-fiscal activities, to what extent are the roles and responsibilities of the SOE to provide subsidies or social expenditures (quasi-fiscal activities) clearly set out?	Primary	Good practice not in place	4.00
B. Accountability and Inclusiveness				
B3 Mining Taxation and State Owned Enterprise Financial Management				
B3.1 Accountability of Mining Taxation				
120	To what extent are changes to mining tax legislation done through a consultative process that is timely, meaningful, comprehensive and transparent?	In-country Interview	Working towards meeting its own goal, but less than half way	2.25
121	Does the country disclose through EITI or another disclosure process, details of mining revenues?	Primary	Good practice in place	4.00
122	Are government officials with a role in the oversight of the mining sector required to disclose information about their financial interests in any extractive activity or project?	Primary	Good practice not in place	2.50
123	To what extent do government officials with a role in the oversight of the mining sector disclose information about their financial interests in any extractive activity or project?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
B3.2 State-Owned Enterprise Financial Management				
124	If there are State Owned Enterprises (SOEs) in the mining sector, do such SOEs have a legal obligation to publish financial reports?	Primary	Good practice in place	4.00
125	To what extent do mining sector SOEs publish annual financial reports?	In-country Interview	Meeting its own goal	4.00
126	Are mining SOEs subject by law to annual audits by an independent external auditor?	Primary	Good practice in place	4.00
127	In practice, are annual audits of mining SOEs undertaken by an independent external auditor?	In-country Interview	Meeting its own goal	4.00
128	Do mining SOEs have to follow internationally recognized accounting standards?	Primary	Good practice in place	4.00
C. Institutional Capacity and Effectiveness				
C3 Mining Tax Administration and State Owned Enterprise Governance				
C3.1 Mining Tax Administration				
129	To what extent does the taxation authority issue guidance notes or interpretations?	Primary	Good practice in place	4.00
130	To what extent are the bases on which taxes are levied subject to disputes between companies and government?	In-country Interview	Not meeting its own goal	1.75
131	To what extent, are tax, cost or physical audits of mining companies conducted systematically?	In-country Interview	More than half way towards meeting its own goal	2.88
132	To what extent are the timing of physical audits and cost audits of mining companies coordinated?	In-country Interview	Working towards meeting its own goal, but less than half way	2.13
133	To what extent are transfer pricing rules enforced in practice?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
134	To what extent are there regular audits for transfer pricing of related party transactions and advanced pricing rules for regularly occurring transactions?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
135	To what extent are the advanced pricing rules followed for regularly occurring transactions?	In-country Interview	Meeting its own goal	4.00

136	To what extent are there regular audits of companies following thin capitalization rules?	In-country Interview	Data not available or not applicable	..
137	Does the tax administration have a large taxpayer unit/office or one specialized in natural resources/mining?	Primary	Good practice in place	4.00
138	To what extent is the unit specialized in taxation of natural resources/mining staffed appropriately to carry out its activities?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
139	To what extent, is the unit specialized in natural resources/mining receiving appropriate funding to carry out its mandate?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
140	Effectiveness in the collection of tax payments—Public Expenditure and Financial Accounting (PEFA) indicator	Secondary	Higher 50%-75%	3.00
141	In practice, are taxes and payments only collected by the mandated agencies?	In-country Interview	Meeting its own goal	4.00
142	In practice, are taxes from mining only placed in the national treasury?	In-country Interview	Meeting its own goal	4.00
143	To what extent are the fiscal terms in the law followed?	In-country Interview	Meeting its own goal	4.00
144	To what extent are the terms for investment incentives in the law followed?	In-country Interview	Meeting its own goal	4.00
C3.2 State-Owned Enterprise Governance				
145	To what extent do mining sector SOEs have a board with: independent expert members with private sector experience, separate positions of chair and chief executive officer, and a board of a reasonable size?	In-country Interview	Meeting its own goal	4.00
146	Is there an internal audit department within mining SOEs?	Primary	Good practice in place	4.00
147	In practice, does the internal audit department of mining SOEs review the effectiveness of internal controls annually?	In-country Interview	Meeting its own goal	4.00
148	To what extent do mining SOEs follow the role (including any subsidies or social expenditures) set out for them?	In-country Interview	Meeting its own goal	4.00
149	To what extent, are mining SOEs or state equity partners honoring their financial obligations?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
4. Revenue Distribution and Management				
A. Policy, Legislation and Regulation				
A4 Public Financial Management Regulation, Including Revenue Sharing				
A4.1 Public Financial Management and Revenue Sharing				
150	Are arrangements for resource revenue sharing between central and sub-national governments defined by legislation?	Primary	Good practice not in place	1.00
151	Are ministries required to undertake procurement plans for infrastructure projects according to the laws and regulation?	Primary	Good practice in place	4.00
152	In the regulation, to what extent is it clear when and how yearly budget allocations to sub-national governments should be disbursed?	Primary	Good practice partially in place	2.50
A4.2 Macroeconomic Management Rules and Stabilization				
153	Does the law provide for a fund to protect budget expenditures from revenue volatility using savings or other funds?	In-country Interview	Data not available or not applicable	..
154	Are there macrofiscal rules in place to stabilize the budget?	Primary	Good practice not in place	1.00

B. Accountability and Inclusiveness				
B4 Budget Transparency and Accountability, and Public Integrity				
B4.1 Budget Transparency and Accountability				
155	Open Budget Index - Open Budget Survey	Secondary	Lowest 25%	1.00
B4.2 Public Investment Integrity				
156	To what extent is there well-publicized, detailed and up-to-date strategic guidance for public investment decisions?	Primary	Good practice partially in place	2.50
157	Are public investment projects required to be evaluated after completion by an independent auditor according to the laws and regulation?	Primary	Good practice partially in place	2.50
158	To what extent are completed public investment projects evaluated by an independent auditor?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
159	Are the assets and liabilities of mining sector SOEs included in the public sector balance as reported by the Ministry of Finance?	Primary	Good practice partially in place	2.50
160	Are the assets and liabilities of the natural resource fund included in the public sector balance as reported by the Ministry of Finance?	Primary	Data not available or not applicable	..
C. Institutional Capacity and Effectiveness				
C4 Budget Implementation and Macroeconomic Management Effectiveness.				
C4.1 Budget Implementation				
161	Budget cycle (performance of key systems, processes, and institutions)—PEFA indicator	Secondary	Higher 50%-75%	3.00
162	Control of expenditures—PEFA indicator	Secondary	Low 25%-50%	2.00
163	To what extent do subnational governments receive their budget allocations in a full and timely manner?	In-country Interview	Not meeting its own goal	1.00
164	Robust budget classification system—PEFA indicator	Secondary	Higher 50%-75%	3.00
165	Comprehensiveness of information included in budget documentation – PEFA indicator	Secondary	Higher 50%-75%	3.00
166	Extent of unreported extra-budgetary expenditure – PEFA indicator	Secondary	Data not available or not applicable	--
167	Multi-year perspective in fiscal planning – PEFA indicator	Secondary	Top 75%+	4.00
168	To what extent, does the government follow the rules established by resource revenue sharing legislation?	In-country Interview	Data not available or not applicable	..
169	In this country, how efficiently does the government spend public revenue? – WEF GCI	Secondary	Top 75%+	4.00
C4.2 Large Scale Public Investment				
170	In practice, is there an established process for screening public investment project proposals for consistency with government policy and strategic guidance, and to what extent does the government follow it?	In-country Interview	Meeting its own goal	4.00
171	To what extent does the government use a formal cost benefit appraisal process for public investment project proposals?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
172	To what extent are the project appraisals of public investment projects undertaken by an external agency or expert?	In-country Interview	Not meeting its own goal	1.00
173	To what extent do ministries prepare procurement plans for major public investment projects in key sectors?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
174	To what extent are there regular cost over-runs on major public investment projects in key sectors?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50

175	Are there often delays in project completion relative to the initial estimated time on major public investment projects in key sectors?	In-country Interview	Data not available or not applicable	..
C4.3 Macroeconomic Management and Revenue Stabilization Effectiveness				
176	To what extent is the fund to protect budget expenditures from revenue volatility working?	In-country Interview	Not meeting its own goal	1.00
177	To what extent does the government follow its macrofiscal rules?	In-country Interview	Meeting its own goal	4.00
5. Local Impact				
A. Policy, Legislation and Regulation				
A5 Policies to Mitigate Environmental and Social Impact				
A5.1 Community Impact, Consultation and Corporate Social Responsibility				
178	To what extent is there a requirement for extensive, timely, well-informed community stakeholder consultation with affected communities before the commencement of mining operations?	Primary	Good practice partially in place	2.50
179	In the law, to what extent are community development agreements required for mining operations?	Primary	Good practice partially in place	2.00
180	Is there a national policy on corporate social responsibility (CSR) that applies to mining?	Primary	Good practice not in place	1.00
A5.2 Rules for Environmental and Social Impact Management				
181	In the law, is there a requirement for companies to submit plans on managing and mitigating the environmental impact of operations?	Primary	Good practice partially in place	2.50
182	In the law, is there a requirement for companies to submit plans on managing and mitigating the socio economic impacts of operations?	Primary	Good practice partially in place	2.50
183	In the law, are company plans to manage and mitigate the social and environmental impacts of operations subject to review by an inter-ministerial committee?	Primary	Good practice not in place	1.00
184	In the law, are there clear rules on fees and timeframes for submitting, approving and updating environmental and social impact assessments (or other key environmental and social impact related documents such as EMMPs)?	Primary	Good practice partially in place	2.50
185	In the law, is an environmental and social impact assessment (or similar) required before a mining license/lease can be granted or as a condition to begin operations?	Primary	Good practice partially in place	2.50
186	In the law, are there requirements in place on managing the environmental and social impact of closure of mine sites?	Primary	Good practice partially in place	2.50
187	Is there a policy or regulation that protects biodiversity on a mine site?	Primary	Good practice partially in place	2.50
188	Is there a regulation that enables biodiversity off-setting for a mine site?	Primary	Good practice partially in place	2.50
189	In the law and regulations, is there a simplified environmental permit or impact assessment for artisanal and small-scale mining?	Primary	Good practice partially in place	2.50
190	In the law, does the agency or ministry responsible for environmental protection have a say in the approval of exploration rights?	Primary	Good practice partially in place	2.50
191	Is an agency independent from the mining authorities responsible for environmental protection and rehabilitation?	Primary	Good practice in place	4.00
192	In the law, is there a grievance and complaints mechanism defined in the environmental regulations?	Primary	Good practice partially in place	2.50
A5.3 Rules for Financial Sureties for Decommissioning				
193	Does legislation require the posting of environmental bonds or similar financial assurance methods to cover the cost of environmental rehabilitation post-mining?	Primary	Good practice in place	4.00

B. Accountability and Inclusiveness				
B5 Human Rights, Employment Equity and Environmental Transparency				
B5.1 Human Rights and Employment Equity				
194	Is government implementing the African Charter for Human Rights?	Primary	Good practice partially in place	2.50
195	Is the state's duty to protect human rights (Pillar I of the UN Guiding Principles on Business and Human Rights, UNGP) implemented through a National Action Plan?	Primary	Good practice partially in place	2.50
196	Is the government a signatory to the Voluntary Principles on Security and Human Rights (VPSHR)?	Primary	Good practice not in place	1.00
197	In practice, if government is a signatory to the VPSHR, to what extent is it monitoring VPSHR implementation?	In-country Interview	Data not available or not applicable	..
198	In practice, does the government require companies to carry out human rights due diligence as part of the licensing process?	In-country Interview	Not meeting its own goal	1.00
199	Is there an independent Human Rights Commission?	Primary	Good practice in place	4.00
200	To what extent is the Human Rights Commission adequately staffed to facilitate a grievance and complaint mechanism?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
201	To what extent is the Human Rights Commission receiving an adequate budget to facilitate a grievance and complaint mechanism?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
202	Are there adequate government rules to promote employment equity?	Primary	Good practice in place	4.00
203	To what extent is an institution mandated to ensure consistent compliance with employment equity rules?	In-country Interview	More than half way towards meeting its own goal	3.00
204	Does the government recognize indigenous peoples on its territory and their rights in relation to mining (free, prior and informed consent)?	Primary	Data not available or not applicable	..
B5.2 Environmental and Social Impact Transparency				
205	Are environmental and social impact assessments (or other key environmental and social impact related documents required such as EMMPs) required to be made public?	Primary	Good practice in place	4.00
206	To what extent are environmental and social impact assessments (or other key environmental and social impact related documents required such as EMMPs) made public in a way accessible to affected communities?	In-country Interview	Meeting its own goal	4.00
C. Institutional Capacity and Effectiveness				
C5 Community Consultation and Environmental and Social Impact Management				
C5.1 Impact and Community Consultation				
207	To what extent do mining companies consult with affected communities in a timely, meaningful, informed, comprehensive and transparent manner?	In-country Interview	Working towards meeting its own goal, but less than half way	2.13
208	To what extent are comprehensive community development agreements negotiated prior to mining operations?	In-country Interview	Working towards meeting its own goal, but less than half way	2.00
209	To what extent does the agency or ministry responsible for environmental protection have a say in the approval of mining rights?	In-country Interview	Meeting its own goal	4.00
210	To what extent are operating mining companies setting aside funds for mine closure?	In-country Interview	More than half way towards meeting its own goal	2.88
211	To what extent do government and mining companies collaborate in the planning and implementation of CSR activities?	In-country Interview	Not meeting its own goal	1.00

C5.2 Environmental and Social Impact Management Effectiveness				
212	To what extent is the institution tasked with monitoring and enforcing environmental regulations staffed appropriately?	In-country Interview	Not meeting its own goal	1.00
213	To what extent is the institution tasked with monitoring and enforcing environmental regulations receiving appropriate funding to carry out its task?	In-country Interview	Not meeting its own goal	1.00
214	To what extent are environmental requirements enforced systematically through inspections and penalties for non-compliance?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
215	To what extent is a grievance and complaints mechanism used to challenge decisions by the agency monitoring environmental regulation?	In-country Interview	Data not available or not applicable	..
216	To what extent are company plans to manage and mitigate the social and environmental impacts of operations reviewed by government?	In-country Interview	Data not available or not applicable	..
217	To what extent does the government approve environmental and social impact assessments (or other key environmental and social impact related documents required such as EMMPs) according to fees and timeframes in the regulation?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
218	To what extent are environmental and social impact assessments (or similar) carried out and approved before a mining license/lease/operating permit is granted as a condition to begin operations?	In-country Interview	Not meeting its own goal	1.00
219	To what extent are mining companies submitting plans on mitigating biodiversity impacts that are free standing annexes to environmental and social impact assessments?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
220	To what extent is the government monitoring compliance with environmental requirements for artisanal and small-scale miners?	In-country Interview	Not meeting its own goal	1.00
C5.3 Effectiveness of Sureties for Decommissioning				
221	To what extent are the funds for mine closure and environmental rehabilitation kept in an escrow account or bond or similar entity?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
D. Economic Environment				
D1. Business and Investment Environment				
D1.1 Business and Investment Environment				
222	Starting a business – Doing Business indicators	Secondary	Higher 50%-75%	3.00
223	Dealing with construction permits – Doing Business indicators	Secondary	Low 25%-50%	2.00
224	Getting credit – Doing Business indicators	Secondary	Top 75%+	4.00
225	Enforcing contracts – Doing Business indicators	Secondary	Low 25%-50%	2.00
226	How would you rate the level of efficiency of customs procedures (related to the entry and exit of merchandise)? – WEF GCI	Secondary	Top 75%+	4.00
227	How burdensome is it for businesses to comply with governmental administrative requirements (e.g., permits, regulations, reporting)? – WEF GCI	Secondary	Top 75%+	4.00
228	Perceptions index measuring effectiveness of civil law system – World Justice Project (WJP)	Secondary	Low 25%-50%	2.00
229	Average number of procedures required to start a foreign subsidiary – World Bank Investing Across Borders	Secondary	Higher 50%-75%	3.00
230	Average number of days required to start a foreign subsidiary – World Bank Investing Across Borders	Secondary	Lowest 25%	1.00
D2. Mining Infrastructure				
D2.1 Mining Infrastructure				
231	Quality of roads – WEF GCI	Secondary	Data not available or not applicable	..
232	Logistics Performance Index – World Bank	Secondary	Low 25%-50%	2.00

233	Extent of infrastructure (for example transport, telephony, and energy) – WEF GCI	Secondary	Higher 50%-75%	3.00
234	Quality of the railroad system – WEF GCI	Secondary	Low 25%-50%	2.00
235	Quality of port facilities, or port accessibility in case of land-locked country – WEF GCI	Secondary	Lowest 25%	1.00
	D3.Diversity and Stability of National Revenues			
	D3.1 Diversity and Stability of National Revenues			
236	Trend in level of non-extractive revenues over 5 years – IMF GFS	Secondary	Data not available or not applicable	2.50
237	237. Variation of domestic revenues in real terms over 5 years – IMF WEO	Secondary	Lowest 25%	1.00
D4. Macroeconomic Stability				
D4.1 Macroeconomic Stability				
238	Five-year cumulative inflation – IMF WEO	Secondary	Low 25%-50%	2.00
239	Credit rating – Standard and Poor's	Secondary	Data not available or not applicable	..
240	Five-year average total debt service to gross national income (GNI) – World Bank WDI	Secondary	Higher 50%-75%	3.00
	D5. National Growth and Savings			
	D5.1 National Growth and Savings			
241	Five-year cumulative gross domestic product (GDP) growth – IMF WEO	Secondary	Top 75%+	4.00
242	Five-year total average debt to GDP – IMF WEO	Secondary	Data not available or not applicable	..
243	Five-year average adjusted net savings – World Bank WDI	Secondary	Top 75%+	4.00
D6. Skills and Human Capital Availability				
D6.1 Skills and Human Capital Availability				
244	Perception of the availability of labor/skills – Fraser	Secondary	Higher 50%-75%	3.00
245	Gross tertiary education enrolment rate – WEF GCI	Secondary	Lowest 25%	1.00
246	Quality of math and science education – WEF GCI	Secondary	Higher 50%-75%	3.00
247	Attraction and retention of talented nationals – WEF GCI	Secondary	Higher 50%-75%	3.00
248	Is there a post-secondary school, college or university providing curriculum for mining sector development?	Primary	Good practice partially in place	2.50
249	Mean years of schooling – Human Development Index	Secondary	Low 25%-50%	2.00
250	Expected years of schooling – Human Development Index	Secondary	Higher 50%-75%	3.00
D7. Human Health				
D7.1 Human Health				
251	Life expectancy at birth – Human Development Index	Secondary	Lowest 25%	1.00
252	Death caused by communicable diseases and maternal, prenatal, and nutrition conditions (percentage of total) – WB WDI	Secondary	Lowest 25%	1.00
253	Prevalence of Human Immunodeficiency Virus (HIV) - WB WDI	Secondary	Lowest 25%	1.00
E. Political Environment				
E1. Expropriation Risk				
E1.1 Expropriation Risk				
254	Transfer and convertibility risk, force majeure - OECD country risk classification	Secondary	Higher 50%-75%	3.00
255	Expropriation risk – Delcredere Ducreire	Secondary	Low 25%-50%	2.00
256	Protection of property rights, including financial assets – WEF GCI	Secondary	Top 75%+	4.00
257	Is the country signatory to the International Center for the Settlement of Investment Disputes (ICSID) Convention?	Primary	Good practice in place	4.00
258	Does the country provide in its domestic law for the international arbitration of foreign investment disputes?	Primary	Good practice in place	4.00
259	Protecting investors – Doing Business indicators	Secondary	Higher 50%-75%	3.00

E2. Predictable Mining and Tax Policy				
E2.1 Predictable Mining and Tax Policy				
260	Political stability – WGI	Secondary	Top 75%+	4.00
261	Order and security (control of crime, civil conflict, and violence) – WJP	Secondary	Higher 50%-75%	3.00
262	Security Situation (includes physical security due to the threat of attack by terrorists, criminals, guerrilla groups, etc.) – Fraser Institute	Secondary	Higher 50%-75%	3.00
E3. Predictable Tax Terms				
E3.1 Predictable Tax Terms				
263	How frequently and to what extent were the main features of the fiscal regime changed in the past five years?	Primary	Good practice not in place	1.00
264	To what extent are the fiscal terms for mining generally stable over time or are there ad hoc changes?	In-country Interview	Data not available or not applicable	..
265	To what extent is the mining legislation generally stable over time?	In-country Interview	Not meeting its own goal	1.00
E4. Control of Corruption				
E4.1 Control of Corruption				
266	Control of corruption – WGI	Secondary	Higher 50%-75%	3.00
F. Sustainable Development				
F1. Development Planning				
F1.1 Development Planning				
267	To what extent is there a current multi-year national development plan?	Primary	Good practice in place	4.00
268	Does the current multi-year national development plan have a section on the mining sector as a driver for development?	Primary	Good practice partially in place	2.50
269	Is the multi-year national development plan on track to meet its targets?	In-country Interview	Not meeting its own goal	1.50
270	To what extent are plans to leverage the mining sector as a driver of development within the national development plan being implemented?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
271	Does the country undertake spatial development plans that leverage mining and investment locations?	Primary	Good practice not in place	1.00
272	To what extent are the plans to develop mining regions within the national development plan meeting the targets set?	In-country Interview	Data not available or not applicable	..
273	Is the national development plan publicly available?	Primary	Good practice in place	4.00
274	To what extent, did an informed and meaningful national consultation take place during the preparation of the national development plan?	In-country Interview	Working towards meeting its own goal, but less than half way	2.00
275	Is the mining development policy publicly available?	Primary	Good practice partially in place	2.50
276	To what extent did an informed and meaningful national consultation take place during the preparation of the mining development policy?	In-country Interview	Not meeting its own goal	1.00
F2. Local Supplier Development				
F2.1 Local Supplier Development				
277	Are local content requirements for goods and services within the mining value chain accessible to the public?	Primary	Good practice not in place	1.00
278	Has the government sought the views of a wide range of stakeholders in preparing the local content policy for goods and services within the mining value chain?	In-country Interview	Not meeting its own goal	1.19
279	To what extent do local content regulations for goods and services within the mining value chain target specific value pools?	Primary	Good practice not in place	1.00
280	In practice, are the local content regulations for goods and services in the mining sector targeting an adequate value pool based on country capacity?	In-country Interview	Data not available or not applicable	..

281	Do local content regulations within the mining value chain have clear timeframes?	Primary	Good practice not in place	1.00
282	To what extent is there support for companies in attaining local content targets?	In-country Interview	Data not available or not applicable	..
283	Is there within government an enforcement mechanism for local content regulations?	Primary	Good practice not in place	1.00
284	In practice, is there a designated institution monitoring the progress of local content policy implementation?	In-country Interview	Data not available or not applicable	..
285	Quality of local suppliers for the mining sector – WEF GCI	Secondary	Higher 50%-75%	3.00
286	Number of local suppliers – WEF GCI	Secondary	Top 75%+	4.00
F3. Investment Promotion (Diversification)				
F3.1 Investment Promotion (Diversification)				
287	Are there no or low tariff on import of capital equipment?	Primary	Good practice in place	4.00
288	Are there no or low tariff (or non-tariff barriers) on raw material exports?	Primary	Good practice not in place	1.00
289	Is there an Investment Promotion Agency?	Primary	Good practice in place	4.00
290	To what extent is the investment promotion agency adequately staffed to fulfill its mandate?	In-country Interview	Working towards meeting its own goal, but less than half way	2.50
291	To what extent is the investment promotion agency receiving adequate funding to fulfill its mandate?	In-country Interview	Not meeting its own goal	1.00
F4. Leveraging Infrastructure				
F4.1 Leveraging Infrastructure				
292	To what extent do regulations allow for sharing of transport infrastructure associated with resource extraction?	Primary	Good practice not in place	1.00
293	Are there examples of shared infrastructure in the transport sector related to resource extraction?	In-country Interview	More than half way towards meeting its own goal	2.88
294	To what extent do regulations allow for sharing of energy infrastructure?	Primary	Good practice not in place	1.00
295	Are there examples of shared infrastructure in the energy sector?	In-country Interview	Meeting its own goal	4.00
296	Is there a law that encourages the private financing of infrastructure?	Primary	Good practice not in place	1.00
297	Is a governmental unit responsible for negotiating the private finance of infrastructure?	Primary	Good practice partially in place	2.50
M. Mining Sector Importance				
M1. Geological Prospectivity and Potential				
M1.1 Geological Prospectivity and Potential				
298	Mineral resource wealth – World Bank	Secondary	Higher 50%-75%	2.50
299	Best Practices Mineral Potential Index – Fraser Institute	Secondary	Top 75%+	4.00
300	Exploration spending relative to production value – ICMM / SNL Metals & Mining	Secondary	Higher 50%-75%	3.00
M2. Foreign Direct Investment in Mining				
M2.1 Foreign Direct Investment in Mining				
301	What is the share of mining FDI as % total FDI in the country?	Secondary	Higher 50%-75%	3.00
M3. State Participation in Mining				
M3.1 State Participation in Mining				
302	What is the extent of state participation in the mining sector?	Primary	Good practice partially in place	3..00
303	What are the main type of state participation in the mining sector?	Primary	Data not available or not applicable	..

304	What is the SOE or state equity share in mining projects?	Primary	Data not available or not applicable	..
305	What is the total revenue (turnover) of mining sector SOEs and income from state equity in mining companies as a percentage of GDP?	Primary	Data not available or not applicable	..
M4. Significance of Mining Revenues				
M4.1 Significance of Mining Revenues				
306	Government revenues from mining as a percentage of sector revenues—IMF/National statistics	Secondary	Top 75%+	4.00
307	Government revenues from mining as a percentage of total GDP—IMF/National statistics	Secondary	Top 75%+	4.00
M5. Budget Share of Mining Revenues				
M5.1 Budget Share of Mining Revenues				
308	Total mining revenues as a percentage of total government budget expenditure—IMF GFS or EITI	Secondary	Top 75%+	4.00
309	Mining revenues for subnational governments as a percentage of subnational budgets—National statistics	Secondary	Data not available or not applicable	..
M6. Economic and Employment Share of Mining				
M6.1 Economic and Employment Share of Mining				
310	What is the number of ASM miners?	Primary	Data not available or not applicable	..
311	How many local mining supply companies exist?	Primary	Data not available or not applicable	..
312	Mining employment as percentage of total labor force—National statistics	Secondary	Higher 50%-75%	3.00
313	What is the total SOE employment as a percentage of the mining labor force?	Primary	Data not available or not applicable	..
314	Mining sector as percentage of GDP—National statistics	Secondary	Higher 50%-75%	3.00

