



WORLD BANK GROUP

Ghana Mining Investment and Governance Review



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Abbreviations & Acronyms

ASM	Artisanal and Small-scale Mining
CSR	Corporate Social Responsibility
EITI	Extractive Industries Transparency Initiative
EPA	Environmental Protection Agency
ERP	Economic Recovery Program
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Mitigation and Management Plan
FDI	Foreign Direct Investment
FPIC	Free Prior Informed Consent
GDP	Gross Domestic Product
GRA	Ghana Revenue Authority
ICSID	International Center for Settlement of Investment Disputes
IMCDS	Mining Community Development Scheme
IMF	International Monetary Fund
MDF	Mineral Development Fund
MInGov	The Mining Investment and Governance Review
OASL	Office of the Administrator of Stool Lands
PEFA	Public Expenditure and Financial Accountability
PMMC	Precious Minerals Marketing Corporation
SAP	Structural Adjustment Programme
SOE	State Owned Enterprise
VPSHR	Voluntary Principles on Security and Human Rights

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This report presents data on mining investment and governance indicators for Ghana that are current as of **June 2016**. Scores for any of the indicators in the review may have changed since that date.



EXECUTIVE SUMMARY

The Ghana 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.

From the late 1980s and throughout the 1990s, mining policy and legal reforms in Africa were characterized by the drive to create an environment to attract private capital investment. Beginning with the passage of a mining law in 1986, Ghana was the first country in Africa to reform its mining sector. When the law was passed, it was considered the best in Africa and its fiscal components among the most liberal in the developing world. The law had a profound impact on the mining policies of other African countries such as Mali and Tanzania. In fact, Mali’s 1999 mining code was specifically modelled on the 1986 law of Ghana. As a result, Ghana’s mineral investment policy is considered perhaps the most successful in Africa.

After 20 years of operation of the 1986 law and against the backdrop of increased competition among developing countries to attract investment, it became evident that the 1986 law was outdated, especially with respect to how it dealt with the perceived and real risks associated with the mining industry globally. For instance, there was

widespread ministerial discretion in the granting, transfer and termination of mineral rights, a key factor that necessitated the enactment of a new law. Furthermore, there were no specific timeframes or periods within which the Minister responsible for mines was required to approve the various applications that could be made under the law. The 1986 law was therefore repealed in March 2006 by the current Minerals and Mining Act, 2016 (Act 703). The law aims to reposition Ghana as the most attractive destination for mining investment in Africa and to enhance the country’s competitiveness globally. For example, in a recent survey of the quality of governance in the oil, gas and mining sectors, Ghana was the highest ranked country among the 19 countries from Africa that were included in the 58 countries surveyed globally. Ghana is therefore considered a pioneer and reference for mineral policy reforms that have been successful in Africa.

The case of Ghana is also very interesting because, while the reforms in the 1980s did lead to a mining boom, civil society and key Ghanaian experts have raised a number of questions from the developmental perspective as to the real benefits to the local economy and more generally, Ghana’s ability to manage its mineral resources in a manner conducive to broad-based development. Ghana is therefore cited as a case study of a country where the successes etched out by mining law reform have not yet translated into broader economic benefits for the country and its people. Understanding the reasons for this disconnect is important in light of the long history of mining and several decades of policy and legal reforms.

Currently, the contribution of mining to Ghana’s economy is very significant as minerals have consistently contrib-

uted to at least a third of the total exports of Ghana within the last five years. The dominant mineral being produced is gold, with bauxite, manganese and diamonds forming a major part of total output. Ghana is the second producer of gold in Africa, after South Africa, and among the ten biggest producers in the world. Export statistics for Ghana show the sector has grown consistently during the last five years.

ASM is widely prevalent in Ghana. Ghana was perhaps one of the first countries in Africa to recognise and legalize ASM with the passage of the Small Scale Gold Mining Law in 1989. Gold and diamonds remain the major minerals that are mined by ASM operators. In 2014, ASM accounted for 34% of national gold output representing approximately 1.6 million ounces of gold, with exported gold and diamonds worth about \$2 billion.

The review’s key findings:

- **Performance across the minerals value chain is strong.** The management of the licensing and permitting process, operational phases of exploration and mining, and revenue collection have improved significantly in recent years. Some gaps exist, mostly regarding the use of paper-based applications and a lack of sector transparency especially with regard to the negotiation of Development/Investment and Stability Agreements and the publication or public disclosure of these agreements. For example, the final report and the Government’s position on the report of the seven-member Committee that was set up in January 2012 to review mining contracts among others has not been made public. The non-disclosure of mining contracts or agreements is happening at the time when oil and gas agreements have been published voluntarily on the website of Ghana’s Ministry of Petroleum and other countries within the sub region such as Sierra Leone, Liberia, Guinea have made their mining contracts public. It is expected that with the adoption of an online mining cadastre which was launched in August 2016, paper-based mineral rights applications will be replaced with a modern online mining cadastre. This will streamline application and approval procedures, improve mineral title management and the transferability of mineral rights. Ultimately, these are positive measures which should enhance the security of mineral tenure.

- **Ghana’s mining policy and laws have kept pace with the review of mining codes that has occurred throughout Africa** over the last three decades. Therefore the policies and laws that presently govern the mineral sector in Ghana are quite satisfactory. However, Ghana still requires significant reforms with regard to the negotiation of mining contracts, impact of mining in host communities, the use of mineral revenues, value addition, linkages with the rest of the economy and addressing the challenges of ASM if the sector is to grow sustainably. The Government is committed to undertaking a comprehensive review of the policy and legal framework for mining and has begun this task. For instance, in March 2016, the Mineral Development Fund Act was enacted. The objective of the fund is to provide financial resources for the direct benefit of a mining community, a holder of interest in land within a mining community, a traditional and local government authority within a mining community and institutions responsible for the development of mining.
- **The country’s environmental laws, with regards to mining, are not being effectively enforced.** The enforcement of the country’s environmental legal and regulatory framework is constrained by an acute lack of capacity. Unless this challenge is addressed, a significant expansion of the mineral sector would result in an increased risk of environmental degradation and a potential increase in social conflicts. There is almost no enforcement of environment and health and safety laws in the area of ASM.
- **Land access, including resettlement and compensation, requires a more inclusive process particularly with regards to communities impacted by mining operations.** The legal regime does recognise the principle of compensation when the landowner or lawful occupier’s rights are acknowledged for the purposes of mineral development. The owner must be compensated for any loss or damages that may be caused by the holder of the mineral right. Essentially, this serves to redress in financial terms the economic impacts of a lost opportunity caused by mining, which may happen through deprivation of use, damages to property and crops, among others. One central issue is that the compensation that the holders of mineral rights

have been paying over the years has ignored the nature of the land tenure system and rights of the various communities. For instance, the practice of compensating individual property owners or lawful occupiers in a country where most of the lands are communally held and livelihoods are land-dependent has negatively impacted community members. Similarly, in spite of the clear distinction between the ownership of minerals and the surface rights, the grant of a mineral right is effectively an award of a land right to the mineral right holder. As a result, the land that is the subject matter of the mineral right is removed from other community uses or rights.

Possible areas for action are identified in the review. A survey of priorities for stakeholder groups identifies the following areas and actions to improve governance:

- Create a stable fiscal framework for mining so that even when changes occur, it is predictable. This is particularly important for a country like Ghana which has a very long history of mining.
- Publish all contracts on the website of the Minerals Commission in addition to having them ratified by Parliament.
- Anchor community development initiatives in law. Specifically, make Community Development Agreements compulsory and develop regulations to guide their use.
- Develop a local content strategy for the mining sector. This should have participation by the industry and ensure that industry needs are met as well as government localization objectives.
- Provide and deepen the support to ASM operations especially in the area of land access, health and safety, marketing of minerals, equipment and finance.
- Create an accountable and transparent mechanism to ensure public access to all relevant government information and data on mining.
- Develop an integrated approach to land use management, which balances the competing interests of the various stakeholders and addresses the issues and conflicts pertaining to land access and mining especially with regard to ASM.
- Abolish or discourage the use of stability agreements or alternatively, develop a framework or procedures and conditions that will govern the granting of stability agreements in the mining sector in a manner that maximizes the flow of economic and social value to the country on a sustainable basis.
- Develop a model agreement to be used as a basis for mineral agreements to ensure that they significantly support Ghana's economic growth and development, in terms of providing better financial returns, more social investment, critical infrastructure and greater transparency in mining operations.



INTRODUCTION

The Ghana 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 Ghana. 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 Ghana 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 infra-

structure 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 Ghana MInGov report has one annex: The Ghana 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 Ghana that are current as of June 2016.



Mining is a century old industry in Ghana and constitutes the bigger share of the mining and quarrying sub-sector. Apart from gold which is the main mineral mined in Ghana, there are also significant activities in manganese, bauxite and diamond mining with possible future extraction of iron ore in Northern Ghana. Ghana plays host to

10 large scale mining firms which account for about 70% of all mineral output. ASM operators, numbering about 1 million, make up the difference of 30%.¹

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

Figure 1: Mining in Ghana at a Glance

Mining contribution to GDP	• Mining contributes 5% to Ghana’s GDP (2015) • Total Value of Mineral Production - \$3.94 billion (2014); \$3.39 billion (2015)	• Manganese – production of 1,353,486 tonnes (2014); manganese revenue \$91.2 million (2014) • Bauxite – production of 798,114 tonnes (2014); bauxite revenue \$36.26 million (2014)
Main minerals mined	• Gold - production of 2,850,585 ounces of gold (2015); leading mineral mined in Ghana; gold revenue \$3.32 billion (2015); accounts for 98% of Ghana’s mineral revenue (2014) • Diamond – an average of 500,000 carats of diamonds is produced from alluvial deposits; diamond revenue \$10.7 million (2014) and \$6.4 million (2015)	Mining Exports • Solid minerals exports constitute 40% of Ghana’s total exports (2014) • Total Mineral Exports - \$4.516 billion (2014) • 31% of export revenues attributable to mining (2015)

1 Wilson, M. L., Renne, E., Roncoli, C., Agyei-Baffour, P., and Tenkorang E. Y. (2015), Integrated Assessment of Artisanal and Small-Scale Gold Mining in Ghana – Part 3: Social Science and Economics. Int. J. Environ. Res. Public Health 2015, 12, 8133-8156; doi:10.3390/ijerph120708133

Mining contribution to national revenue	• Employment in the ASM sector about 1 million (estimated)
• 16% of total government revenue from the mining sector (2014) • 14.8% of all direct tax payments in Ghana are from the mining sector (2015) • Contributes 48% of Ghana’s total corporate tax earnings (2014)	Foreign Direct Investment • Over 50% of FDI in Ghana is related to the mining sector (2013) • FDI inflow into the mining sector amounted to about \$950 million (2014)
Employment in the mining sector	Local Procurement
• Employment in mining (formal sector) about 9,939 Ghanaians (2015) • Share of total labour force 1.6% (2014)	• 80% of inputs and consumables for the mining sector are locally produced (2014)

Assisted by the World Bank and the IMF, much attention was paid to Ghana’s mining sector in 1983 during the inception stages of the Economic Recovery Program (ERP), guided by the Structural Adjustment Programme (SAP). The policy orientation was to strengthen the value of the domestic currency through the promotion of exports and to increase foreign direct investment (FDI) inflow. Mining was identified as a sector that could champion this agenda. Policy designs and reforms in the mining sector have since echoed these objectives.

The first comprehensive mining law was the Minerals and Mining Law, 1986, PNDCL 153. The law and the subsequent efforts to regulate the Small Scale Gold mining sector in 1989 led to significant investment activity in the sector leading to an increase in gold production, as well as in bauxite and manganese. Subsequent legislation focused mainly on establishing key state institutions to govern the sector, most notably the establishment of the Minerals Commission in 1986 and the Precious Minerals Marketing Corporation (PMMC), and to improve the fiscal regime.

Competition and the pursuit of investments in most African countries informed amendments in the mining laws and regulations of Ghana. In 2006, the Minerals and Mining Law, 1986, PNDCL 153, was replaced with the Minerals and Mining Act (Act 703). With the important mandate of promoting FDI inflow into the country, the

amendment introduced stability clauses in Act 703, reduced the government carried interest in new mining companies to 10%, and also repealed the Additional Profit Tax Law, PNDCL 122 of 1985 in 2006. Act 703 was further amended in 2010 with the Minerals and Mining (Amendment) Act (794), to deepen local involvement in mining. The highlight of the fiscal provisions in Act (794) was the payment of a royalty rate of 5% across the sector, although stability agreements with some companies meant that it will not apply to them (the code allows for these agreement for up to fifteen (15) years). Unlike most mining jurisdictions in Africa, Ghana’s mining royalty is fixed for all minerals. Mining companies are historically exempt from import license tax or import levy, from mineral export duties including gold export levy, but are subject to a corporate income tax rate of 35%, withholding tax of 10% and a hard to enforce capital gains tax of 10%. Other innovations in the mining fiscal regime include the introduction of ring fencing for the mining sector. Through ring-fencing it is possible to limit spending on different activities or projects financed by the same tax payer. This is done by deducting the investment in a particular license, mine or oilfield from the revenues generated by the same resource.

The strong desire to further deepen local involvement in mining culminated in the latest piece of legislation in 2012, Minerals and Mining (General) Regulations (LI 2173), which requires mineral rights holders to procure

goods and services of Ghanaian origin to the maximum extent possible.

The governance of the sector in Ghana is the responsibility of the Ministry of Lands and Natural Resources. The ministry coordinates and advances sector policies through the Minerals Commission. Over the past 10 years, the sector has benefited from sound policy and regulatory interventions which compares well with best international practices. Ghana scored 63 overall on the NRGi Resource Governance Index and placed 15th out of 58 countries, which coincidentally is the best score for any African country. Transparency and disclosures in mining activities have also increased due to Ghana’s becoming an EITI member country in 2003. The mining code is fairly stable with minor fiscal revisions in 2010, 2013 and 2015. Government’s recent policy interventions in the sector have focused on streamlining small-scale mining operations and promoting responsible mining in Ghana to promote sustainable economic growth.

Ghana’s fiscal benefits from mining activities have been noticeable. Between 2003 and 2014 the sector contributed on average 16% to the overall domestic revenue and also led in royalty and corporate income tax payments.

The year 2012 highlighted the height of these benefits when Ghana received \$916 million and \$228 million in royalties and corporate income tax, representing approximately 16.9% and 4.2% of total tax revenues respectively.

Mining sector exports have been on a steady rise since 2003, peaking in 2012 due largely to the hike in gold prices experienced in 2012 and to the inflow of new foreign investments in the sector. Until the advent of oil and gas production, the majority of foreign exchange earnings derived from mining and FDI in the sector used to be the main source of foreign investment. This has been very beneficial in supporting the value of the local currency. Foreign investment in the sector has been steady at an average of US\$776 million between 2003 and 2012 with keen investor interest in gold production.

Ghana’s long history in mining and the setting up of training institutions solely for mining, has endowed the country with a large pool of skilled and semi-skilled labor from which new mining firms can draw to develop new fields and operate mines. Indeed, most of the mining companies in the West African sub-region rely on these experts to train, develop and operate mining fields in other countries.



OVERVIEW of MInGov FINDINGS

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

3.1 Introduction and Performance Summary

Findings of the Ghana MInGov are summarized in the “dashboard” of Figure 2. The dashboard gives an overview of performance of the mining sector in Ghana with

respect to governance, attractiveness for investment and broader impact of the sector on national development.²

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, by a bar. Results of performance per topic (cell) are color coded according to a scoring key of Very Low to Very High (see Scoring Key, Figure 2).

² 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: Ghana Country Dashboard

Theme	Extractive Industries Value Chain						
	Contracts, Licences and Exploration	Operations	Taxation and State Participation	Revenue Distribution and Management	Local Impact		
Policy, Legislation and Regulation	Rules for License Allocation and Geological Data Collection	Clarity and Harmonization of Sector Rules	Tax policy, Instruments and State Owned Enterprise Rules	Public Financial Management Regulation, Including Revenue Sharing	Policies to Mitigate Environmental and Social Impact		
Accountability and Inclusiveness	Openness, Transparency and Independence of Licensing Process	Accountability of Processes, Compensation, Resettlement and Artisanal and Smallscale Mining Voice	Mining Taxation and State Owned Enterprise Financial Management	Budget Transparency and Accountability, and Public Integrity	Human Rights, Employment Equity and Environmental Transparency		
Institutional Capacity and Effectiveness	Cadastre, Geodata, License and Tenure Management	Sector Management and Intragovernmental Coordination	Mining Tax Administration and State Owned Enterprise Governance	Budget Implementation and Macrofiscal Management Effectiveness	Community Consultation and Environmental and Social Impact Management		
Cross Cutting Themes							
Economic Environment	Business and Investment Environment	Mining Infrastructure	Diversity and Stability of National Revenues	Macro-economic Stability	National Growth and Savings	Skills and Human Capital Availability	Human Health
Political Environment	Expropriation Risk		Political Stability		Predictable Mining and Tax Policy		Control of Corruption
Sustainable Development	Development Planning		Local Supplier Development		Investment Promotion (Diversification)		Leveraging Infrastructure

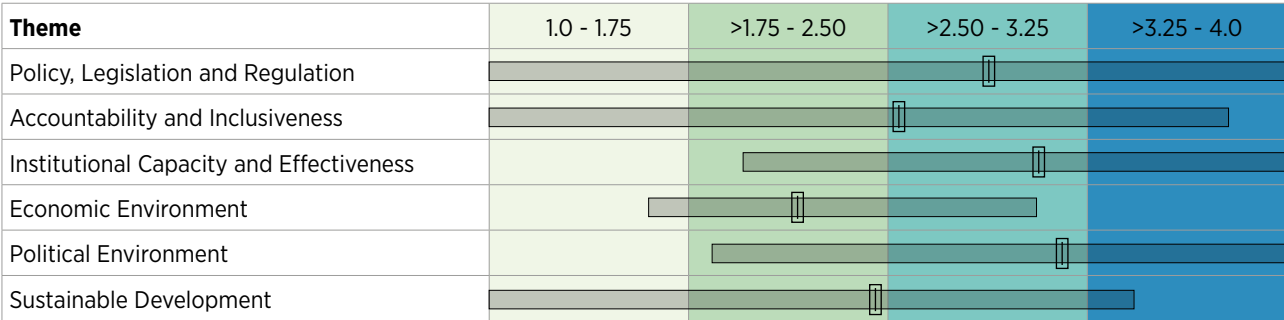
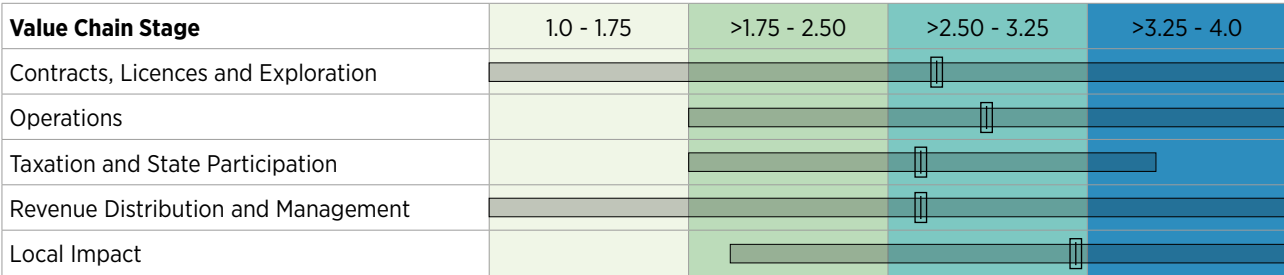
Mining Sector Importance	1.0 - 1.75	>1.75 - 2.50	>2.50 - 3.25	>3.25 - 4.0
Geological Prospectivity and Potential				
Foreign Direct Investment in Mining				
State Participation in Mining				
Significance of Mining Revenue				
Budget Share of Mining Revenues				
Employment and Economic Share of Mining				

Grey bars indicate the range of scores of indicators that support each value chain stage or theme. The represents the average of the indicators.

Scoring Key	Very low	Low	High	Very High	Not applicable or information not available
	1.0 - 1.75	>1.75 - 2.50	>2.50 - 3.25	>3.25 - 4.0	N/A

Figure 3: Performance by Value Chain Stage and Theme

A range of performance exists across the value chain stage and across themes.



Notes:

- Grey bars indicate the range of scores of indicators that support each value chain stage or theme. The represents the average of the indicators.
- The scale for performance is: Very low (1.0-1.75); Low (>1.75-2.50); High (>2.50-3.25); Very High (>3.25-4.0). A higher score corresponds to better governance and capacity.
- A list of indicators comprising the value chain stage and themes can be found in Table 1, Annex 1

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.³ Subsequent sections present detailed results for each value chain stage and theme.

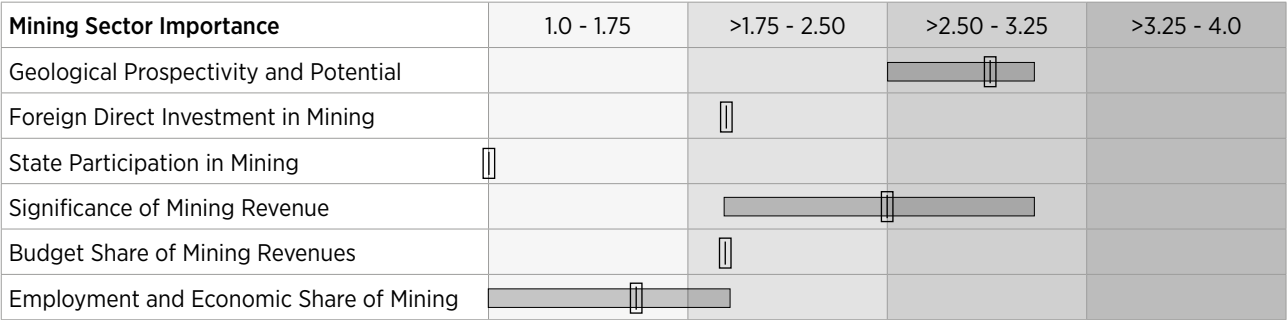
The performance of each value chain stage and theme is discussed in subsequent sections. However, general comments on value chain stage and theme performance are:

- All the value chain stages are within the high performance range, with the Local Impact stage of the value chain, scoring relatively higher than the other value chain stages. Overall, Ghana’s mining sector is performing satisfactorily across all value chain stages.

- Economic Environment and Sustainable Development respectively, are both within the low performance range. The weakness in the Economic Environment theme is an indication of the recent poor economic performance of the Ghanaian economy.
- Political Environment, scores slightly higher than the remaining themes within the high performance range – Policy, Legislation, and Regulation; Accountability and Inclusiveness; and Institutional Capacity and Effectiveness. This affirms Ghana’s stable democratic and political governance.

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

Figure 4: Mining Sector Importance



Grey bars indicate the range of scores of indicators that support each value chain stage or theme. The represents the average of the indicators.

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.⁴

Ghana’s mining sector plays an important role in the Ghanaian economy. The sector is Ghana’s leading tax payer and major contributor to domestic revenue, with 14.8% of total direct taxes from mining (2015). The sector is a key contributor to Ghana’s Foreign Direct Investment (FDI), with cumulated FDI inflows into the sector of \$8 billion between 2000 and 2014. In 2014, FDI inflows into the mining sector totaled US\$950 million. In 2015, mining accounted for 31% of total export earnings, making the sector the major contributor to Ghana’s balance of payments. The sector is estimated to employ about 9,939 Ghanaians of which 177, representing 2%, are expatriates (2015). Moreover, empirical evidence suggests that the number of indirect and induced jobs created by mining is about fifteen (15) times the number of direct employees (SRQ and ACET, 2015). The state

owns 10% free carried interest in mining activities but plays no active role in mining operations.

Currently, Ghana’s mining sector is faced with a number of challenges, most notably its fiscal tax regime, high utility and energy charges, and informal artisanal and small-scale mining operations. Despite Ghana being ranked the second highest gold producing country in Africa, the production of gold has dropped in recent years from 3,167,755 ounces of gold in 2014 to 2,850,585 ounces of gold in 2015. The sector’s contribution to national revenues is also projected to fall from \$1.74 billion in 2013 to \$1.01 billion by 2022 due to the low prices of gold on the world market, coupled with the decline in gold production levels.

3.4 Performance from a Value Chain Perspective

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

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.

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

Theme	Value Chain Stage 1. Contracts, Licenses and Exploration (2.71)	
	Topic	Underlying Indicators
Policy, Legislation and Regulation (2.91)	Rules for License Allocation and Geological Data Collection (3.14)	Clarity of Rules for License Allocation, Conversion and Transfer (3.55)
		Geological Data Collection Rules (4)
		Modern Mining Cadastre (1)
		License Approval and Review Timeframes (4)
Accountability and Inclusiveness (2.54)	Openness, Transparency and Independence of Licensing Process (2.13)	Openness and Transparency of Licensing Process (3.25)
		Independence of Licensing Authority (1)
Institutional Capacity and Effectiveness (3.03)	Cadastre, Geodata, License and Tenure Management (2.87)	Collecting Geological Information (3.07)
		State of Mapping and Geological Exploration (2)
		Mining Cadastre Effectiveness (2.78)
		Allocating Licenses Effectively (3.32)
		Transferability of Licenses (3.63)
		Managing Licenses Effectively (2.43)

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), where a higher score corresponds to better governance and capacity.

3.4.1 Contracts, Licenses and Exploration

Beginning with the passage of a mining law in 1986, Ghana was the first country in Africa to reform its mining sector. When the law was passed, it was considered the best in Africa and its fiscal components among the most liberal in the world – arguably surpassed only by those of Papua New Guinea.⁵ As a result, Ghana’s mineral investment policy is considered perhaps the most successful in Africa.⁶ The Minerals and Mining Act, 2006 (Act 703) which repealed the 1986 law and on which this

review is based has clear provisions on the licensing of mineral rights.⁷

There are clear qualifications and timelines for the granting and renewal of mineral rights. Mineral rights have to be processed within 90 days of receipt of the application by the Minerals Commission. Holders or applicants for mineral rights including any application to transfer or mortgage a mineral right are entitled to written reasons for any application that is rejected or terminated and have the right to challenge such decisions in the High

Court. In some cases, foreign investors may be referred to international arbitration, including for disputes related to the renewal, transfer and mortgage of mineral rights. Farm-ins, farm-outs and other lesser interests that may be created or carved out of a mineral right to third parties are allowed under the mining law and the mining regulations.

Additionally, the guidelines on work programmes and the submission of exploration reports require holders of reconnaissance and prospecting licences to submit quarterly reports on all the activities or operations that are to be carried out under their licences. The guidelines which have the force of law are enforced by the Minerals Commission and companies tend to comply with this requirement as they otherwise risk losing their mineral rights. This has contributed significantly to the collection, generation and availability of geological data, even in areas where the acreage or the block has been surrendered or relinquished as required by the mining law. These are the reasons why this indicator (Rules for License Allocation and Geological Data Collection) scores in the “very high” range.

Civil society and industry stakeholders consulted were very critical that the Minerals Commission of Ghana has over the years relied on paper-based applications. In spite of the clear timelines for the processing of applications, the use of the paper-based applications have more often than not resulted in delays in processing applications and poor mineral title management. This criticism comes at a time when countries like Tanzania and Kenya, whose mining laws were inspired by Ghana’s mining policies and laws, have adopted an online mining cadastre for the processing of all types of applications. It is therefore not surprising that the underlying indicators Modern Mining Cadastre and Managing Licences Effectively were rated poorly. It is however worth noting that in August, 2016 the Minerals Commission officially launched an online repository for public access where all data recorded in the mining cadastre pertaining to mineral rights and related revenues are published. This will streamline the application and approval process and improve mineral title management. It is expected that by April 2017, applicants, developers or investors can conduct full cartographic searches and apply online for mineral rights.

Several stakeholders expressed concerns that agreements that are granted to mining companies are not made public. Again, this criticism is coming at the time when other countries in Africa such as Liberia, Sierra Leone, Guinea, DRC, whose mining sector governance ranked lower than Ghana, have published, or plan to publish their mining contracts (Tanzania and Kenya).⁸ To date, these agreements are not available to the general public in Ghana. Interestingly, several oil and gas agreements have been voluntarily published on the website of the Ministry of Petroleum and some oil and gas companies operating in Ghana. Closely linked with the issue of the transparency of mining contracts is the concern of civil society that although these mining contracts (mining leases, stability, investment or development agreements) are approved by Parliament, the oversight role of Parliament in scrutinising these agreements is very weak. The members of Parliament usually do not have the expertise to be able to review these agreements. The public is not involved in the scrutiny of these agreements. Furthermore, civil society representatives argue that it appears the recommendations of the Minerals Commission are often overlooked in the negotiations of these agreements and cite the initial investment agreement between the Government of Ghana and Newmont Gold Ghana limited and the recently negotiated agreement between Ghana and Gold Fields Ghana Limited, as examples. Therefore, while the score for the licensing process is very high, concerns for the independence of the licensing authority and the lack of disclosure and public scrutiny of mining contracts affected the overall score of the Accountability and Inclusiveness theme.

Key follow-up actions to improve the performance of this stage of the value chain are:

- Abolish the current paper-based application process and ensure that the recently launched online mining cadastre is fully operational.
- Make all agreements granted to mining companies public at the website of the Minerals Commission. In particular, all mining leases, investment, mineral and stability agreements that have been ratified by Parliament.

5 Bonnie Campbell, ‘Introduction’ in Bonnie Campbell (ed), Regulating Mining in Africa: For Whose Benefit? (Nordiska Afrikainstitutet 2004) 7, 11.
6 Mirian Kene Omalu Armando Zamora, ‘Key Issues in Mining Policy: A Brief Comparative Survey as a Background Study on the Reform of Mining Law’, CEMLP Paper CP9/98 (Centre for Energy, Petroleum and Mineral Law and Policy, 1998) 3.
7 It is important to note the current mining law of Kenya (The Mining Act, 2016) was primarily based on the mining law of Ghana.

8 In a survey of the quality of governance in the oil, gas and mining sectors, Ghana was the highest ranked country among the 19 countries from Africa that were included in the 58 countries that were surveyed globally. For a more detailed analysis of the survey report, see Revenue Watch Institute, ‘Resource Governance Index’ (2013) 4–6 <http://www.resourcegovernance.org/sites/default/files/rji_2013_Eng.pdf>

- Legislative capacity with regard to understanding the complex nature of mining contracts and how they impact on mineral resource development and overall benefits to the country particularly for the members of the Committee on Mines and Energy is essential. It is recommended that the knowledge of the members of the Committee should be updated continuously. This can be done through regular workshops, expert advice, briefings, written analyses and notes.
- The Committee on Mines and Energy of Parliament which is responsible for reviewing these agreements before they are ratified by Parliament must invite comments or memoranda from the public and hold public hearings before these agreements are considered and ratified.

3.4.2 Operations

Mining operations normally require regular monitoring, detailed verification and thorough auditing practices to improve the quality of information on mining operations and in particular to ensure compliance with mining legislation, regulations, guidelines and contractual agreements and payment of tax. Effective management of operations is therefore important to reduce the risk of corruption, tax evasion and to increase transparency and accountability in the industry.

The Mining Act, 2006 together with the various mining regulations, provides very clear guidance over the operations phase. Additionally, there are no conflicting laws across government institutions regulating the sector. The mandates of the key mining sector institutions particularly the Minerals Commission, Ghana Revenue Authority and the Environmental Protection Agency are clear and the laws and rules governing operations are well harmonized. Thus, the topic of Clarity and Harmonization of Sector Rules that assesses these issues received a “very high” score.

Mining activity at the operations stage is managed primarily by the Minerals Commission. The Minerals Commission recommends to the Minister responsible for mining, the granting, transfer and termination of mineral rights. The Commission also inspects operations and monitors compliance with the terms of the mineral rights, health and safety operations of the holders. Two other key state agencies, the Ghana Revenue Authority and the Environmental Protection Agency, also play significant roles. The Authority is responsible for the collection of royalties and taxes and the Agency is in charge of the regulation of the environment.

The capacity of the Minerals Commission and Ghana Revenue Authority has improved over the years. Both CSOs and industry stakeholders have stated that the Commission will need to do more in the area of health and safety of mine operations. In the case of the Ghana Revenue Authority, it has set up two dedicated units within its Large Tax-payers Office for the extractive sector. These are the Mining and the Oil and Gas units. Staff from these two units have received considerable training in mineral and petroleum taxation. However, the Ghana Revenue Authority, a key stakeholder interviewed, noted that the authority will need to strengthen its capacity with regard to tax audit of mining companies with emphasis on cost verification, cost overstatement and profit stripping. The Authority also admitted that it needs to strengthen its capacity to be able to deal effectively with the monitoring and verification of capital expenditures, the loss of carry-over provisions, transfer price mechanisms and limits of expenses that may be considered deductible for tax purposes.

Aside from the issue of capacity, many stakeholders were of the view that although coordination amongst the Minerals Commission, Ghana Revenue Authority and the Environmental Protection Agency has improved, there is still more room for improvement, particularly between the Commission and the Agency in the area of the environment, health and safety. The improved institutional capacity and agency coordination entailed a “high” score for Sector Management and Intra-governmental Coordination.

For several decades, several thousands of Ghanaians have been mining gold, and until recently diamonds as an

informal activity. ASM operations were formally recognized in 1989.⁹ District Offices were established by the Minerals Commission in various ASM zones across the country although not all of them were operational. ASM miners may apply to the District Office of the Commission for a licence. The District Office among others is required to compile a register of prospective and ASM licence holders, supervise and monitor their operation and activities, advise and provide training facilities and assistance necessary for effective and efficient mining operations, and facilitate the formation of ASM associations, groups or cooperatives. Thus, the scores for the underlying indicators of Provision for ASM and ASM Voice Representation from most stakeholders are a reflection of the strong “de jure” regime for ASM. Nonetheless, most stakeholders are of the view that the actual support given to ASM is weak, especially in the area of land access and environmental, health and safety aspects of their operations. Most of the ASM miners currently work on lands that belong mainly to holders of large scale exploration and mining rights and are therefore working illegally. This has made it very difficult for their operations to be regulated, and even more difficult for any form of oversight in the payment of royalties and taxes and environment, health and safety. This clearly accounted for the average score for the underlying indicator of Support for ASM.

Transparency and Accountability are also strong anti-corruption tools. Lack of transparency is said to increase the risks of corruption and embezzlement and poor governance generally. Several countries, particularly in Africa, have adopted measures to disclose information relating to mining activities. Some of these measures are mandatory as they are embedded in legislation and others are voluntary. Stakeholders were unanimous in their view that for decades (although the adoption of EITI in 2007 has made data readily available on production volumes, taxes and revenues), the mining industry has lacked transparent and accountable processes, especially on the publication of data on the amount and the use of mineral royalties by local authorities in mining communities, identities of beneficial owners of mineral rights, and corresponding mineral concentrations (estimated value at market rates) of production volumes under each mineral right.

Table 2: Performance of the Operations Stage

Theme	Value Chain Stage 2. Operations (2.87)	
	Topic	Underlying Indicators
Policy, Legislation and Regulation (2.91)	Clarity and Harmonization of Sector Rules (2.67)	Clarity of Legislation, Rules and Timeframes (2.5)
		Harmonization of Legislation and Government Coordination (3.5)
		Provisions for Artisanal and Smallscale Mining (2)
Accountability and Inclusiveness (2.54)	Accountability of Processes, Compensation, Resettlement and Artisanal and Smallscale Mining Voice (2.77)	Access to Land, Compensation and Resettlement (2.82)
		Access and Accountability of Mining Legislation and Processes (1.75)
		Artisanal and Smallscale Mining Voice Representation (3.75)
Institutional Capacity and Effectiveness (3.03)	Sector Management and Intragovernmental Coordination (3.17)	Timeframes for Approvals (4)
		Intragovernmental Coordination (2.88)
		Support to Artisanal and Smallscale Mining (2.65)

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), where a higher score corresponds to better governance and capacity.

9 Small Scale Gold Mining Law, 1989 (Provisional National Defence Council Law 218) was promulgated to legalize ASM. The law was later repealed by the Mining Act, 2006 (Act 703). Act 703 also recognises ASM.

Additionally, citing the case of the appointment of a government team in 2012 to renegotiate all the mining contracts, civil society was of the view that contract renegotiations due to regime change or high metal prices are avoidable if contract provisions are transparent. This largely accounted for the very low score of the indicator of Access and Accountability of Mining Legislation and Processes.

Key follow-up actions to improve the performance of this stage of the value chain are:

- Improve the institutional capacity of the Minerals Commission regarding the monitoring and the enforcement of health and safety of mining operations.
- Provide access to information through a more transparent and accountable mechanism for reporting mining and mineral related activities including: (i) any payments however described and made to the government of a Member State or any of its agency, department or institution;(ii) any payments to communities and local governments that are made by, impacted or affected by mining operations; (iii) production volumes and corresponding mineral

concentrations (estimated value at market rates) under each mineral right; (iv) any annual reports on compliance by the holders of mineral rights with their obligations under the applicable law or agreements; (vi) identities of beneficial ownership of holders of mineral rights.

3.4.3 Taxation and State Participation

Taxation and State Participation, which is the third value chain stage, is ranked in the high performance category. The Ghana Revenue Authority is the principal government agency responsible for the collection of corporate taxes, mineral royalty, and capital gains tax in the mining sector.

The relative high score of Mining Tax Administration is an indication of Ghana’s relatively effective tax administration. The fiscal framework of the mining sector is elaborated in the Income Tax Act (2015), Act 896, (which repealed the Internal Revenue Act (592), 2000), the Value Added Tax (VAT) Act, and the Customs Act. The fiscal provisions within these Acts are enforced and strictly followed by the industry. The current fiscal framework defines the amount of taxes from the mining sector,

Table 3: Performance of the Taxation and State Participation Stage

Theme	Value Chain Stage 3. Taxation and State Participation (2.69)	
	Topic	Underlying Indicators
Policy, Legislation and Regulation (2.91)	Tax policy, Instruments and State Owned Enterprise Rules (3.25)	Tax Policy and Instruments (3)
		Rules for Auditing, Base Erosion and Profit Shifting (3.5)
		State Owned Enterprise Governance Rules (..)
Accountability and Inclusiveness (2.54)	Mining Taxation and State Owned Enterprise Financial Management (1.75)	Accountability of Mining Taxation (1.75)
		State-Owned Enterprise Financial Management (..)
Institutional Capacity and Effectiveness (3.03)	Mining Tax Administration and State Owned Enterprise Governance (3.06)	Mining Tax Administration (3.06)
		State-Owned Enterprise Governance (..)

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), where a higher score corresponds to better governance and capacity.

and provides incentive packages to attract investors into the sector.

State-Owned Enterprise Financial Management and State-Owned Enterprise Governance have an N/A score because of the non-existence of state-owned mining companies in Ghana. Rather, the government owns 10 percent free carried interest in the mining sector.

The Rules for Auditing, Base Erosion and Profit Shifting and Mining Tax Administration scores very highly. The high score for these indicators confirm Ghana’s strong institutional, governance, and legislative framework related to the mining sector. The fiscal and legislative framework which governs mining practices ensures mining companies adhere to and systematically conduct their tax, cost, and physical audits. Mining companies are also required to submit an audited statement of their financial reports prior to submitting their returns to the GRA. These rules are enforced and systematically adhered to by the mining companies. The high score of Institutional Capacity and Effectiveness also supports this.

3.4.4 Revenue Distribution and Management

Revenue Distribution and Management is ranked in the high performance category. Over the years, the contribution of Ghana’s mining sector to government revenues and to foreign exchange earnings has been significant, and at one time was the backbone of the economy besides cocoa.

Good governance in the management of mineral revenues in Ghana is an important requirement in ensuring that revenues deliver development to Ghanaians. This requires strong standards of transparency and accountability in the management of mineral resources. As a result, Ghana signed onto the Extractive Industries Transparency Initiative (EITI) in 2003 and was declared compliant in 2010 for mining activities. Transparency has also become an important requirement in ensuing public accountability and management of public expectations. This finds expression in the high score of the Budget Transparency and Accountability, and Public Integrity topic under the Accountability and Inclusiveness theme.

Ghana is considered an exemplary implementer of EITI and recognised for its strict implementation of the

Table 4: Performance of the Revenue Distribution and Management Stage

Theme	Value Chain Stage 4. Revenue Distribution and Management (2.64)	
	Topic	Underlying Indicators
Policy, Legislation and Regulation (2.91)	Public Financial Management Regulation, Including Revenue Sharing (2.5)	Public Financial Management and Revenue Sharing (4)
		Macrofiscal Management Rules and Stabilization (1)
Accountability and Inclusiveness (2.54)	Budget Transparency and Accountability, and Public Integrity (2.75)	Budget Transparency and Accountability (3)
		Public Investment Integrity (2.5)
Institutional Capacity and Effectiveness (3.03)	Budget Implementation and Macrofiscal Management Effectiveness. (2.67)	Budget Implementation (2.33)
		Large Scale Public Investment (3)
		Macrofiscal Management and Revenue Stabilization Effectiveness (..)

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), where a higher score corresponds to better governance and capacity.

recommendations of the Ghana EITI (GHEITI). The policy reforms that have been inspired by Ghana's EITI, include the development of guidelines for the utilization of mineral royalties at the sub-national level, and the review of the fiscal regime under which the mining industry operates.

Public Financial Management and Revenue Sharing scores very highly. Ghana's transparency agenda has involved the need for an open, transparent, and efficient system of revenue sharing with the local communities. Specifically, when and how it would be paid, and what it would be used for. Mining royalties are paid directly into the State Consolidated Fund, with the Ghana Revenue Authority (GRA) being the collector of such royalties. Sharing of the mineral revenues is backed by a specific legal requirement based on a Constitution revenue sharing formula.

Until March 2016, the mineral revenue sharing formula required 80 percent of all mineral royalties to go into the Consolidated Fund, while 10 percent was ceded to the Mineral Development Fund (MDF) and the remaining 10 percent to the Office of the Administrator of Stool Lands (OASL). The revenue disbursement to the MDF and the OASL are both designed in principle to develop the mining communities and to promote the development of the mining sector. The Administrator of Stool Lands retained 10 percent of the amount received to cover administrative expenses, while the remaining 90 percent was apportioned as follows: 55 percent to the District Assemblies, 25 percent to the Stools, and 20 percent to the Traditional Councils. The Controller and Accountant General's Department renders and publishes financial statements of the Consolidated Fund. As at first quarter 2015, Ghana's Consolidated Fund was worth GH¢39,181.34 million (equivalent to US\$ 9,919.33 million, using an exchange rate of 3.95).

Although the mode of revenue distribution appeared commendable, civil society organizations raised concerns about the lack of clarity in the sharing formula. In addition, there were issues raised about transparency and accountability with respect to the disbursement of royalties at the national level, and whether subnational governments were actually receiving all the revenues they are entitled to. For example, the 2013 EITI Ghana report indicated a lack of documentation on payment made by the OASL to the District Assemblies, traditional rulers, and stools.

To address these challenges, a new revenue sharing formula, stipulated in the Minerals Development Fund, Act (912), was passed in March 2016. Specifically, the MDF Act (912) is aimed at providing financial resources for the direct benefit of the mining communities, the traditional and local government authorities within the mining communities, and the institutions responsible for the development of mining. Under the MDF is the Mining Community Development Scheme (MCDS) with the objective of facilitating the socio-economic development of communities in which mining activities are undertaken. The sources of fund for the MCDS are mineral royalties paid to the GRA; monies that the Fund may receive from grants, donations, and voluntary contributions; and donations made by mining companies and other related organizations. As stipulated in the new MDF, 50 percent of the mineral royalties paid to the GRA go to the OASL; 20 percent are allocated to the MCDS; 4 percent supplement the mining operations of the Ministry of Lands and Natural Resources; 13 percent supplement the mining operations of the Minerals Commission; 8 percent supplement the mining operations of the Geological Survey Department (GSD); and 5 percent are allocated for research, training, and projects aimed at the promotion of sustainable development through mining of which at least 40 percent will go to the GSD. It is expected that the current revenue sharing formula, with clear rules and guidelines on the collection, management and use of mineral revenues, will further increase the high score of Ghana's Public Financial Management and Revenue Sharing mechanism and enhance transparency in the sector.

As noted above, Ghana over the years has operated an effective legal and fiscal regime, with significant reforms, with the main objective of attracting Foreign Direct Investment into the mining sector. The Minerals and Mining Laws, PNDC Law 153 (1986) and Act 703 (2006), with their subsequent amendments have exempted mining companies from payment of customs import duty on certain equipment included in the 'Mining List'. All items on the Mining List attract a concessionary levy of 5 percent, except plant, machinery, and equipment for which no customs duty is paid. The exemptions have also included tax free remittances for expatriate staff, and removal of the additional profits tax of 25 percent on profits over a certain level. Critics have however called for a removal of these exemptions, and advocated for greater transparency by mining companies.

In 2010 the Minerals and Mining Act (2006) was amended to change the royalty rate from the range of 3 to 6 percent to a fixed rate of 5 percent. However, under the terms of the stability agreements signed with some large mining companies, payment of the old royalty rates continued due to the Government's agreed set fiscal regime of 15 years – which included holding the gold royalty rate at 3 percent of total revenues irrespective of what changes Government makes to the law.

Stability agreements have been seen by some industry practitioners as a means of providing the stable fiscal regime necessary to make long-term financial commitments. Conversely, stability agreements have been widely criticised as a limitation on the country's sovereign rights to amend its laws. A report by Action Aid (2014) estimated that Ghana lost approximately \$90 million in 2011/2012 as a result of mining stability agreements. In addition, the Government is estimated to lose about \$26 million annually in mineral revenues due to the current stability agreement signed with Gold Fields Ghana Ltd in 2016. While only three mining companies – Newmont, AngloGold Ashanti, and Gold Fields – are operating with stability agreements, about 20 other mining companies do not have such stability agreements, making them vulnerable to immediate fiscal and policy changes. This means that changes to any aspect of the mining and tax laws will not apply to the mining companies operating with stability agreements. These weaknesses are reflected in the low score of Macroeconomic Management Rules and Stabilization. There is the need for Government to critically review its fiscal regimes and mining stability agreements, with the view to ensuring that Ghana benefits adequately and fairly from the gains in the mining sector.

Overall, issues of transparency and accountability, financial administration, and the macro fiscal rules have been significant in the management of Ghana's mineral revenues, and as much as possible, there have been conscious efforts on the part of government to follow them as a measure of good governance.

Key follow-up actions to improve the performance of this stage of the value chain are:

- The MDF Act which came into force in March 2016 has not been implemented yet. The law requires the appointment of a Board, an Administrator of the Fund and the setting up of a Secretariat to manage

the affairs of the fund. It is recommended that the Board and the Administrator should be appointed as soon as practicable.

3.4.5 Local Impact

Local Impact is the strongest performing among all the value chain stages.

The very high performance of the Human Rights, Employment Equity, and Environmental Transparency topic affirms Ghana's level of compliance to human rights due diligence frameworks, as well as employment requirements stipulated in the Minerals and Mining (General) Regulations, 2012 – LI 2173. The Minerals Commission is mandated to ensure mining companies comply with the employment equity rules in accordance with LI 2173.

The LI 2173 requires holders of mineral rights to hire a minimum proportion of local staff in various employment categories (subject to some exemptions), with the Minerals Commission working with mining companies to identify staff positions that can be filled by Ghanaians, local candidates who can be trained to replace foreign staff, a training program, and timing for local staff to replace foreign staff. The Regulation also requires that six years of the passage of the LI, mining lease holders' maximum expatriate staff numbers should not exceed 6 percent of the total senior and management staff of the holder. In addition, a comprehensive five-year plan to replace expatriates with Ghanaians, including training programs, is to be submitted to the Minerals Commission for review and approval. The Commission strictly enforces compliance of these regulations with steep sanctions imposed on non-compliant companies.

Mining companies are required to be compliant with all human rights issues especially on health and safety (as stipulated in the Health and Safety Regulations LI 2182). Mining companies in Ghana have also signed on to the UN Global Compact initiative by adhering to the ten principles of the Compact in the areas of Human Rights; Labour Rights; Environment; and Anti-Corruption. There are also human rights due diligence requirements on the part of mining companies, which are effectively carried out during the licensing process, and as part of the Environmental and Social Impact Assessments (ESIA) process. Ghana is a signatory to the VPSHR, with government in the process of developing a framework

Table 5: Performance of the Local Impact Stage

Theme	Value Chain Stage 5. Local Impact (3.22)	
	Topic	Underlying Indicators
Policy, Legislation and Regulation (2.91)	Policies to Mitigate Environmental and Social Impact (3)	Community Impact, Consultation and Corporate Social Responsibility (2)
		Rules for Environmental and Social Impact Management (3)
		Rules for Financial Sureties for Decommissioning (4)
Accountability and Inclusiveness (2.54)	Human Rights, Employment Equity and Environmental Transparency (3.3)	Human Rights and Employment Equity (3.34)
		Environmental and Social Impact Transparency (3.25)
Institutional Capacity and Effectiveness (3.03)	Community Consultation and Environmental and Social Impact Management (3.36)	Impact and Community Consultation (3.3)
		Environmental and Social Impact Management Effectiveness (3.28)
		Effectiveness of Sureties for Decommissioning (3.5)

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), where a higher score corresponds to better governance and capacity.

for its implementation. Mining companies are also in the process of developing frameworks internally to ensure effective implementation.

Policies to Mitigate Environmental and Social Impact scores high among the topics. This is indicative of the Environmental and Social Impact Assessments (ESIA) mining companies are mandated to produce prior to commencement of operations. According to the Environmental Assessment Regulations (LI 1652), mining companies are mandated to carry out ESIA’s before an environmental permit can be approved by the Environmental Protection Agency (EPA). This is strictly followed by the mining companies and enforced by the EPA. There are also 2 regulations which stipulate the timeframes of the ESIA process. For small scale mining, Regulations 73 of the EPA Act spells out 25 days from the submission of a complete application before approval of an ESIA. For large scale mining, Regulations 20 (1, 2) spells out 90 days from the date of receipt of a completed application before an ESIA is approved.

Mining companies are required to include a section in their ESIA’s on their plans to mitigate biodiversity impacts – specifically on flora and fauna. Regulations 23 of the LI 1652 and Regulation 14 (4) of the EPA Act require mining companies to set aside funds for reclamation, which is strictly enforced. Reclamation plans of mining companies are reviewed and approved by the EPA before posting. Mining companies are also required to sign a Reclamation Security Agreement with the EPA which stipulates the amount and the percentage of the bonds which are supposed to be cash or bank guaranteed. The amount to be posted is reviewed periodically and adjusted accordingly due to the progressive reclamation policy of the EPA. Currently there are about 19 such Agreements with the EPA. Twelve of these are current, while the other seven have yet to be reviewed.

Aside from the positive developments in the sector, there are significant environmental, health, and social costs of mining operations on the local mining communities. This is a reflection of the low score of the Community Impact, Consultation and Corporate Social Responsibility

indicator. The costs of mining operations have resulted in a series of public outcries against mining companies operating in Ghana whose investments pollute lands and water bodies, and have been a source of social conflicts around the mining communities.

The trend has however been changing over the past few years as mining companies are now taking up roles and responsibilities to manage the impacts of their operations in their host communities. Also, in a bid for host communities to benefit from the mining industry and to develop, the Ghana Chamber of Mines has adopted a Corporate Social Responsibility (CSR) policy where member companies set aside a minimum of \$1 out of every earning per ounce of gold and also 1 percent of their net profit to develop their communities. In addition to adhering to this policy, mining companies also voluntarily undertake community sustainable development projects – mainly in education, provision of portable water, electricity, health care, roads, as well as providing scholarship schemes – in their host communities, as a way of contributing to local development through their CSR policies.

The government has also been asked to take steps to develop a statutory framework which will incorporate Free Prior Informed Consent (FPIC) clauses into Ghana’s mining laws. The rationale is to equip mining-affected communities to protect their rights to ownership of land and rights to livelihood, thereby protecting mining communities from the violations and adverse impact of mining operations. The FPIC, which is a basic right for indigenous people, requires that mining-affected communities be adequately informed in a timely manner about development projects that affect them and be given the opportunity to approve (or reject) a project prior to the commencement of operations. Adherence to this framework may boost Ghana’s low score on the Community Impact, Consultation and Corporate Social Responsibility indicator.

Under Institutional Capacity and Effectiveness; Community Consultation and Environmental and Social Impact Management is the highest scoring topic. Community consultation is key to ensuring a fair and equitable distribution of benefits and ensuring that mining developments contribute positively to sustainable communities. Mining companies in Ghana have adopted a thorough and all-inclusive consultative approach, which brings together traditional rulers, community representatives, mining companies, NGO’s, and the media in the

host communities to discuss issues of mutual interest and of their needs and requirements. The community consultative process is binding on all mining companies currently operating in Ghana. Failure to interact and consult with communities results in community development projects that communities do not require and which the community does not feel it collectively owns.

At the national level, there has always been some consultation in the processing of mineral rights and management of mining operations as required under Section 13 of Act 703. During the processing of initial mineral rights, the public is consulted through a provision which requires a 21-day publication at the relevant District where the mining project will be carried out. Subsequently, before the commencement of the project, all stakeholders are engaged to negotiate for payments of compensations. In the case of a mining lease, various public hearings are held in and with the project affected communities by the Environmental Protection Agency, as required under LI 1652, to address expected impacts of the mining operations on the environment and others. As part of the FPIC framework, African governments are obliged under Resolution 224 of the African Commission on Human and People’s Rights, to ensure that all necessary measures are taken to ensure participation, including the free, prior and informed consent of communities in decision making related to laws regulating land and its usage and all forms of natural resource governance. In addition, specific standards relating to community consultation and participation is to be clearly defined and stipulated in the FPIC framework.

Both the Minerals Commission and Environmental Protection Agency (EPA) are sufficiently resourced to carry out their operations in the mining sector, with moderate human resource capacity. This is reflected in the high performance score of the Institutional Capacity and Effectiveness theme. There are however concerns that the EPA and the Minerals Commission do not enforce the rights of citizens in the mining areas, due to the numerous human rights violations, loss of livelihoods and the generational effect of mining activities. The institutions need to recognize these concerns and to further enhance their monitoring and enforcement capacity especially in the mining communities.

Key follow-up actions to improve the performance of this stage of the value chain are:

The mining law should be revised to:

- compel applicants for mineral rights to obtain free, prior, and informed consent of landowners and local communities before the commencement of mining operations;
- require consultations and negotiations on important decisions affecting local communities throughout the mining life cycle as current efforts are purely voluntary; and
- require companies to enter into community development agreements (currently companies are not under any obligation to do so) with impacted or affected communities when a mineral right is granted for the purpose of exploiting or mining a mineral.

3.5 Performance of Cross-cutting Themes

Performance of the cross-cutting themes is summarized in the matrix (Figure 2).¹⁰ 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. The overall performance of the Economic Environment theme scores low, with all but two topics scoring below average.

According to the WBG Doing Business Index, Ghana scored 114 out of 189 economies in 2016, a slight fall from its position of 112 in 2015. This is indicative of Ghana’s poor efforts in facilitating private sector-led growth and development. However, the Doing Business ranking indicated that although Ghana provided a less favourable business climate for some issues of high importance to the mining sector such as starting a business, accessing electricity, getting credit, other issues such as dealing with construction permits scored much worse. In fact, the widespread shortage of power for the past two years significantly increased the cost of the mining companies because most of them had to rely on diesel-powered generators.

Ghana’s Macroeconomic Stability indicator scores very low. This is confirmed in Ghana’s rank of 132 out of 138 economies (despite a marginal improvement from the 2015 rank of 136) under macroeconomic environment indicator in the 2016/2017 Global Competitiveness Report. ‘De facto’, since 2013, Ghana’s macroeconomic outlook has translated into general

discontent among Ghanaians, due to high utility and fuel prices, hikes in taxes, interest rates, and inflation, rising fiscal deficit and public debt levels, and a 3-year power crises which has resulted in significant job losses and productivity decline. With the mounting fiscal deficit and public debt, Ghana began fiscal consolidation in 2014, with the IMF approving a \$918 million Extended Credit Facility (ECF) to restore debt and macroeconomic stability. Ghana has since undergone three successful reviews under the ECF even if the outcomes arguably are yet to translate into the daily lives of citizens and improvements in the business environment.

Currently, implementation of the ECF program continues to be satisfactory due to sustained fiscal discipline with progress made in stabilizing the macro-economic situation. However Ghana’s economic outlook remains challenging. The IMF projects the Ghanaian economy to grow by 3.3 percent in 2016, which is below the 3.9 percent growth recorded in 2015, and the slowest growth rate since 1994. GDP growth is, however, expected to reach around 7.5 percent by 2018 according to the World Bank, assuming that the fiscal consolidation program remains on track and technical problems in the oil and gas sector are resolved.

One of the highest performing topics is Skills and Human Capital Availability, with a score of 2.86. This is due to Ghana’s long history in mining, and the setting up of training institutions – such as the University of Mines and Technology, and the University of Energy and Natural Resources – solely for mining. This has endowed the country with a large pool of skilled and semi-skilled labor from which new mining firms can

draw to develop new fields and operate mines. Indeed, most of the mining companies in the West African sub-region rely on these experts to train, develop and operate mining fields in other countries.

3.5.2 Political Environment

Political Environment is the highest performing cross-cutting theme. Ghana is considered one of the most stable countries in West Africa since its transition to multi-party democracy in 1992. Ghana has had six major free and fair elections over the past 20 years and two peaceful transfers of power and government. These indicators mark Ghana out as a political success story.

Ghana’s Political Stability indicator scores very high. In the 2015 Worldwide Governance Indicators, the World Bank ranked Ghana’s political stability and absence of violence and terrorism in the 50th percentile rank, which was an improvement from its 2010 percentile rank of 47.39 percent. Over the years, Ghana has emerged, compared to its neighbours, as one of the countries where elections are well managed, and electoral differences resolved by the judiciary, instead of military and armed groups.

While corruption is an issue in many African countries, Control of Corruption in Ghana ranked very high among all the topics and indicators. Ghana’s percentile rank of 53.37 percent with regards to the control of corruption was relatively better as compared to regional peers in the Worldwide Governance Indicators. Currently, Ghana has been ranked the seventh least corrupt country in Africa according to the 2015 Corruption Perception Index.

Table 6: Economic Environment Performance

Cross-Cutting Theme	Topic (and indicator)						
Economic Environment (2.17)	Business and Investment Environment (2.44)	Mining Infrastructure (1.8)	Diversity and Stability of National Revenues (1.75)	Macro-economic Stability (1.67)	National Growth and Savings (3)	Skills and Human Capital Availability (2.86)	Human Health (1.67)

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 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), where a higher score corresponds to better governance and capacity.

10 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).

Table 7: Political Environment Performance

Cross-Cutting Theme	Topic (and indicator)			
Political Environment (3.1)	Expropriation Risk (3.17)	Political Stability (3.33)	Predictable Mining and Tax Policy (1.9)	Control of Corruption (4)

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 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), where a higher score corresponds to better governance and capacity.

Ahead of the 2016 general elections, there is the need for collaborative efforts on the part of the government, political parties, civil society organizations, private sector, and individuals to contain any potential widespread of electoral violence that could taint Ghana’s position as an exemplar of peace for other democracies.

Predictable Mining and Tax Policy is the lowest scoring topic and indicator. This is an indication of the frequent mining fiscal regime amendments, particularly with regards to royalty changes, and income tax changes over the past few years. With regards to income tax, recent Income Tax Law (2015) Act (896) and the Income Tax Amendment 2016 Act (907) were amended and passed with limited industry and stakeholder consultation especially with the key institutions they are intended for. The outcome is the perception of arbitrariness and uncertainties on the part of the private sector who bear the incidence of these tax laws.

3.5.3 Sustainable Development

Overall, Ghana scored low with regards to Sustainable Development among the cross-cutting themes. This shows that government has not effectively integrated mining into national development planning and the local economies to support its development priorities.

Development Planning is the lowest performing topic among the indicators. Development planning in Ghana, although motivated by the desire to achieve broad economic growth and development, has not delivered the desired economic transformation necessary to improve the welfare of Ghanaians and the Ghanaian economy. Although 80% of

goods and services in the mining sector are sourced locally which is quite high and indicative of good linkages, there is still more to be done to develop the mining sector sustainably, including the consideration of local refinement.

Ghana has made efforts to build the management and technical capacity of local suppliers in the mining supply chain and to increase their participation in the industry. The National Supplier Development Program (NSDP) was also developed following an MoU signed by the proponents (IFC, Minerals Commission and Ghana Chamber of Mines) in 2011. Its main aim was to address the key challenges facing local SMEs in order to enable them assess procurement opportunities and to capture some of the significant economic benefits produced by the mining industry.

In March 2012, the Parliament of Ghana adopted a Legislative Instrument (LI 2173) titled Minerals and Mining (General) Regulations, 2012 that prescribed additional requirements with respect to recruitment, procurement of local products, exportation or sale or disposal of minerals as well as other general provisions, all in relation to the conduct of mining operations in the country. The purpose of LI 2173 was "to give meaning" to aspects of the mining law passed six years earlier as well as to enable the sector to increase local participation in mining value chain and, therefore, improve benefits from the mining sector that accrue to local entities. The regulations have become the main legal framework within which Ghana is implementing her version of Local Content and Value Addition (LCVA) in the mining sector. Barely a year following the passage of the regulations, the Minerals Commission published the maiden procurement list with eight items (all of them mining consumables) that the LI requires of mining companies to "procure in Ghana" and with preference for

those manufactured or produced locally. The outcome of these recent efforts by government is indicative in the high score of the Local Supplier Development indicator.

Despite the efforts made by government to increase local content and support the local industries, some local suppliers have lamented they are unable to obtain contracts with mining companies. This is largely as a result of the high standards demanded of the local suppliers by the mining companies. Some local suppliers contend that those standards require time as well as support both from the government and MOG companies in order to meet. A more aggressive approach has been proposed by local suppliers, if government aims at sustainably increasing linkages between the mining industry on the one hand and local economic activities and economic entities on the other hand, as a basis for building local mining services support industry.¹¹ For example procurement processes that offer two per cent price advantage for suppliers with the highest level of Ghanaian participation must be broadened and deepened to ensure that some contracts are reserved solely for businesses that are either majority owned by Ghanaians or in which Ghanaians have substantial ownership, as pertains in the oil and gas sector.

Key follow-up actions to improve the performance of this stage of the value chain are:

- Encourage Public-Private Sector Partnerships: Provide a legislative framework for PPP with regard to mining related infrastructure, especially transportation and energy.
- Increase mining linkages downstream: Further strengthen the support to the development of local suppliers of goods and services in the mining industry; include investment incentives as part of the package to encourage mining companies to procure locally.

3.6 Special Topic: Artisanal and Small-scale Mining

3.6.1 The Importance of ASM

Artisanal and small-scale mining (ASM) is one of the most complex economic sectors in Ghana. Often referred to as ‘galamsey’ when discussing unlicensed operations in the country, ASM has existed historically in Ghana for many hundreds, if not one thousand years. Yet, the sector remains largely informal with the majority of miners operating without a license. Though exact figures are difficult to determine due to the complexity and dynamic nature of activities, ASM is an important livelihood activity in rural areas providing a direct source of employment to approximately one million people and as many as 4.5 million more in associated industries and local markets.^{12, 13} Due to its low barriers to entry, ASM is an important poverty reduction activity that is capable of wealth creation. The government also has a significant vested interest in the sector due to its high earning potential and contribution to the national economy. In 2014, ASM accounted for 35% of national gold production representing approximately 1.5 million ounces of gold, with exported gold and diamonds worth about \$2 billion.¹⁴ In addition, diamonds produced by artisanal miners generated about \$10.7 million in 2014 representing approximately 203,606 carats of diamonds.

3.6.2 The Challenges of ASM

However, despite the importance of ASM to job creation and the mineral exports of the country, the sector is often associated with negative environmental and social impacts. These range from poor health and safety, and illness associated with hazardous working conditions and the unregulated burning and use of mercury in gold amalgamation, to increases in infectious diseases, school dropouts, criminality, and the use of narcotics in some ASM communities. Furthermore, ASM activ-

Table 8: Sustainable Development Performance

Cross-Cutting Theme	Topic (and indicator)			
Sustainable Development (2.45)	Development Planning (1)	Local Supplier Development (3.41)	Investment Promotion (Diversification) (3.4)	Leveraging Infrastructure (2)

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 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), where a higher score corresponds to better governance and capacity.

11 Source: Sentiments from stakeholders during the field work/interview phase of the project

12 Wilson, M. L., Renne, E., Roncoli, C., Agyei-Baffour, P., and Tenkorang E. Y. (2015), Integrated Assessment of Artisanal and Small-Scale Gold Mining in Ghana – Part 3: Social Science and Economics. Int. J. Environ. Res. Public Health 2015, 12, 8133-8156; doi:10.3390/ijerph120708133

13 McQuilken, J., and Hilson, G., (2016). Artisanal and small-scale mining in Ghana. Evidence to inform an ‘action dialogue’. International Institute for Environment and Development (IIED), London.

14 Ministry of Finance (2015), Ghana Extractive Industries Transparency Initiative Report, 2014. Ministry of Finance. https://eiti.org/sites/default/files/migrated_files/2014_mining_reconciliation_report.pdf

ities contribute to the degradation and destruction of forests, farmland, and water bodies due to land clearance, sedimentation of streams and rivers, and pollution. There is the perception that much of these negative impacts stem from weak, and at times inappropriate governance that is failing to monitor and enforce the relevant environmental laws and mining regulations, and better support impoverished miners to meet such regulations and improve their operations. Equally, they are failing to prevent and remove foreigners operating illegally in ASM activities, and in particular the influx of illegal Chinese miners into ASM over recent years.

In certain areas ASM activities pose significant challenges to large scale mining operations. Informal operators may illegally encroach on large scale concessions, leading to conflicts over land use, rights, and access between local communities, small-scale miners and large scale mining companies. These challenges raise important questions concerning the awarding of extensive concessions to large scale mines, the need for uneconomical and underutilized land to be shed off and allocated for ASM activities, and, more broadly, concerning the overall future sustainability of Ghana's mining sector. Indeed, it is Ghana's ASM sector that may hold a greater prospect for more inclusive economic growth than large scale operations due to the far greater numbers of people it employs, and the much longer time it takes to exploit less extensive, near surface deposits that ASM activities usually focus on.

3.6.3 ASM Governance Framework

The current ASM governance framework in Ghana commenced with the 1986 Minerals and Mining Law (PNDC Law 153) that aimed to “modernize” and “liberalize” the mining sector.¹⁵ Three further laws were then subsequently passed in 1989: The Mercury Law (PNDC Law 217), which repealed the 1933 ban on the use of mercury, the Small-Scale Gold Mining Law (PNDC Law 218), that aimed to legalize and formalize the ASM sector, and the establishment of the Precious Minerals Marketing Corporation (created under the PMMC Law, that is PNDC Law 219) which was tasked with the responsibility of

buying gold from the ASM sector. In 2006, PNDC Law 153 (amended in 1994) and PNDC Law 218 were repealed by the 2006 Minerals and Mining Act (ACT 703) which has a sub-section on ASM.

However, despite the revised Minerals and Mining Act, 2006 the current governance framework of the ASM sector has not yet been successful in formalizing activities. There a number of different perspectives as to why this may be, with commonly cited reasons including the overly complex and bureaucratic licensing regime, the need to geologically prospect, identify, and demarcate areas of high value deposits for ASM activities, the continued high rates of unemployment and lack of alternative livelihood options in rural communities, the lack of financial products available for small-scale miners to enable them to fund the license and land acquisition processes, and the need for greater technical support to help improve the efficiency and environmental and social impact of operations.¹⁴ It is also noted that in certain instances operators do not willingly comply with the law and as such greater monitoring and enforcement as well as education regarding the laws and regulations is needed to formalize the sector.

One high-profile policy response in recent years was the establishment of an Inter-Ministerial Task Force in May 2013, which aimed to ‘bring sanity into the [artisanal and small-scale] mining sector’. The Task Force was essentially a military operation and resulted in the deportation of 4,592 illegal Chinese miners (of which 1,568 were arrested), 51 Ghanaians being arrested, and the seizure of 40 vehicles, 85 earth moving equipment, and 49 weapons.¹⁶ Although the Task Force aim at prosecuting all miners who were operating illegally, it mainly focused on foreigners involved directly and therefore illegally, in ASM, though reports indicated that it was not completely successful, due to issues of corruption at the local level.¹⁷

In addition to the Task Force, in 2014 the Minerals and Mining (Amendment) Law was passed which increased the penalties for operating illegally and provided the Minister for Lands and Natural Resources the executive power to confiscate mining equipment.

Most recently a number of initiatives have focused on trying to formalize and improve the sector. In November 2015 the Minerals Commission published the ‘Artisanal and Small Scale Mining (ASM) Framework’¹⁸ which is based on extensive consultations with communities, government, and experts and outlines an eight year implementation plan for improving ASM in Ghana. In January 2016 a workshop in the Western Region brought together a range of ASM and non-ASM stakeholders including national and local government, civil society, large scale mining companies, and small-scale miners, to discuss how to move forwards with formalizing the sector and develop a broad strategy for effecting change.¹⁴ And, in March 2016, the Minerals Commission considered reclassifying ASM licensing categories (previously one category) into Artisanal, Small-Scale, and Medium Scale and tailoring the environmental management guidelines and licensing process accordingly in order to make it easier for prospective miners to acquire mineral rights. The promotion of such frameworks and additional projects aimed at supporting and formalizing ASM in Ghana are important tools for rural and community development. Additional initiatives also include the development of an online mining cadastre and computerized licensing and administration system, technical training programs developed by the University of Mines and Technology and designed solely for artisanal and small-scale miners, and, the development of a National Action Plan on Artisanal and small-scale gold mining planned as part of the Minamata Convention on Mercury which Ghana has signaled it will ratify.¹⁴ Further developing and implanting such initiatives will help the government to realize the potential of its ASM sector by decreasing the negative environmental and social impacts and increasing mineral revenues to support the provision of public goods, such as housing, education and health facilities in mining communities.

3.6.4 Future Direction

Going forward the government should also aim at strengthening the ASM department of the Minerals Commission at the district and community levels. Currently there are nine district centers that miners must go to in order to apply for a license. Increasing the number and improving the extension services on offer at existing centers can help to formalize ASM as well as help with monitoring and supporting the implementation of ongoing and future formalization initiatives.

The impact of ASM activities on the environment can be managed with the introduction of responsible mining techniques through the scale up and development of new public and/or private sector initiatives. Large scale mining companies and private sector institutions with an interest in ASM should enhance the complementary skills of ASM miners by training them in environmentally sound and sustainable mining methods, labour saving and safe technologies, the technical know-how requirements of the sector, as well as best practices in mining to enable them to compete effectively in the sector. The support should also include the provision of protective mining clothing and equipment to ensure the health and safety of miners in their mining operations.

Above all, one of the greatest issues facing artisanal and small-scale miners in Ghana is access to land with deposits that are of sufficient ore grades. Therefore, a final future direction that is advocated here, is for the Ministry of Lands and Natural Resources and the Minerals Commission to explore the possibility of designating lands not suitable for large scale exploration or mining to be reserved exclusively for ASM operations.

¹⁵ Hillson, G. (2004), Structural Adjustment in Ghana: Assessing the Impacts of Mining Sector Reform. In *Africa Today*, vol. 51, No. 2, pp. 53-77

¹⁶ <http://www.ghanatrade.gov.gh/Trade-News/task-force-on-small-scale-mining-completes-report.html>

¹⁷ Crawford, G. and Botchway, G. (2016), Conflict, Collusion and Corruption in Small Scale Gold Mining in Ghana: Chinese Miners and the State. Colloquium Paper No. 48, Global Governance/Politics, Climate Justice and Agrarian/Social Justice: Linkages and Challenges, An International colloquium.

¹⁸ Minerals Commission (2015). Artisanal and Small Scale Mining (ASM) Framework: Accessed January 2017: <http://www.mofep.gov.gh/sites/default/files/reports/ASM%20FRAMEWORK.pdf>

Table 9: Performance of the Artisanal and Small-scale Mining Sector

Value Chain Stage & Theme	Topic	Indicator	Question	Answer Score	Answer Interpretation	Data Source
Contracts, Licenses and Exploration; Policy, Legislation and Regulation	Clarity and Harmonization of Sector Rules	Provision for ASM	Is there a regulation in place that allows the formalization of artisanal and small-scale miners? (76)	1.00	Good practice not in place	Primary
			Is artisanal and small-scale mining legally recognized in the mining law or regulations? (77)	4.00	Good practice in place	Primary
			Do the laws and regulations allow for artisanal/small-scale and industrial mining activities to coexist? (78)	1.00	Good practice not in place	Primary
			Are there laws and regulations to settle disputes between ASM and other mining activities? (79)	1.00	Good practice not in place	Primary
Operations; Accountability and Inclusiveness	Accountability of Processes, Compensation, Resettlement and ASM Voice	ASM Voice Representation	Is there a non-state association that represents artisanal and small scale miners? (89)	4.00	Good practice in place	Primary
			In practice, do artisanal and small-scale miner associations participate in the monitoring, advocacy, and enforcement of their property rights? (90)	3.50	Meeting its 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 dealing with ASM? (97)	1.00	Good practice not in place	Primary
			Is support provided by government to artisanal and small scale miners concerning technical or business skills? (98)	4.00	Good practice in place	Primary
			Is the government effectively tackling disputes between ASM and other mining activities? (99)	2.25	Working towards meeting its own goal, but less than half way	In-country interview
			In practice, are there instances of coexistence of ASM and industrial mining activities? (100)	1.75	Not meeting its own goal	In-country interview

Table 9: Performance of the Artisanal and Small-scale Mining Sector (continued)

Value Chain Stage & Theme	Topic	Indicator	Question	Answer Score	Answer Interpretation	Data Source
Operations; Institutional Capacity and Effectiveness	Sector Management and Intragovernment Coordination	Support to ASM	In practice, are artisanal and small-scale miners legally allowed to operate? (101)	4.00	Meeting its own goal	In-country interview
			In practice, is artisanal and small-scale mining taking place under formalized procedures? (102)	2.88	More than half way to 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	Does the government have a simplified tax collection system for ASM? (111)	1.00	Good practice not in place	Primary
Local Impact; Policy, Legislation and Regulation	Policies to Mitigate Environmental and Social Impact	Rules for Environment and Social Impact Management	In the laws and regulations, is there a simplified environmental permit or impact assessment for artisanal and small-scale miners? (189)	1.00	Good practice not in place	Primary
Local Impact; Institutional Capacity and Effectiveness	Community Consultation and Environmental and Social Impact Effectiveness	Environmental and Social Impact Effectiveness	In practice, is the government monitoring compliance with environmental requirements for artisanal and small-scale miners? (220)	1.90	Working towards meeting its own goal, but less than half way	In-country interview



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 and reforms of the mining sector in Ghana, 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 2.¹⁹

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

- **All three stakeholder groups have identified Policies to Mitigate Environmental and Social Impact and Human Rights, Employment Equity and Environmental Transparency as top.** In spite of the high performance, the strong concern among stakeholders is indicative of the premium that is put on environmental governance.

- Additionally, stakeholders from Government and CSO highlighted accountability of the processes especially in relation to **Licensing, Compensation, Resettlement** and **Artisanal and Small Scale Mining Voice** as top priority areas that required major reforms. For example, in spite of the fact that regulations have been developed to operationalize the calculation and payment of compensation to landowners or lawful occupiers whose surface rights are impacted by mining operations, there are still challenges with regard to the amount that is paid especially for crops. When it comes to artisanal and small scale mining, land access is still a huge problem as most of the over a million miners are working informally. The problem has been compounded by the the difficulty in regulating the environmental, health and safety aspects of artisanal mining coupled with the widespread encroachment on lands that have been granted to companies mainly for large scale exploration or mining. For instance, as recently as May, 2016, AngloGold Ashanti (Ghana) Limited has taken the Government of Ghana to international arbitration accusing the government of failing to protect its concession or mining area from illegal artisanal miners.²⁰ This is a clear indication that government needs to re-think its policies and strategies on artisanal mining.

- Government and CSOs have seven overlapping priorities (figure 5). Both stakeholder groups have called for better mineral title management. CSOs in particular are concerned about the absence of a functional online mining cadastre. This concern relates to the lack of transparency in the application process due to the use of paper-based applications. Additionally, CSOs highlighted the fact that although Ghana is fairly well explored, there is no public information (at the website of the Ministry of Lands and Natural Resources and/or the Minerals Commission) with regard to what geological data is available.
- When it comes to the sector’s tax management, industry stakeholders recognise that more attention needs to be given to the development of a stable and predictable fiscal regime. Industry respondents especially highlighted the fact that within the last five years, several changes have been made to the fiscal regime and cited the introduction of a new

royalty rate in 2010, changes to the fiscal regime in 2012 and the new Income Tax Act, 2015 (Act 896). In particular, industry emphasized that these constant changes took place against the backdrop of only three mining companies having stability agreements with regard to their mining leases.

- Both CSOs and government give priority to Openness, Transparency and Independence of Licensing Process and Rules for License Allocation and Geological Data Collection, highlighting the importance of robust processes and administrative capacity. Respondents from CSOs especially highlighted the need to improve transparency with regard to how decisions are made in the allocation or grant of mineral rights.
- Interestingly, government representatives were the only ones that gave priority to political stability and control of corruption.

¹⁹ 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).

²⁰ AngloGold Ashanti (Ghana) Limited v. Republic of Ghana (ICSID Case No. ARB/16/15).

Figure 5: Stakeholder Prioritisation, All Stakeholders

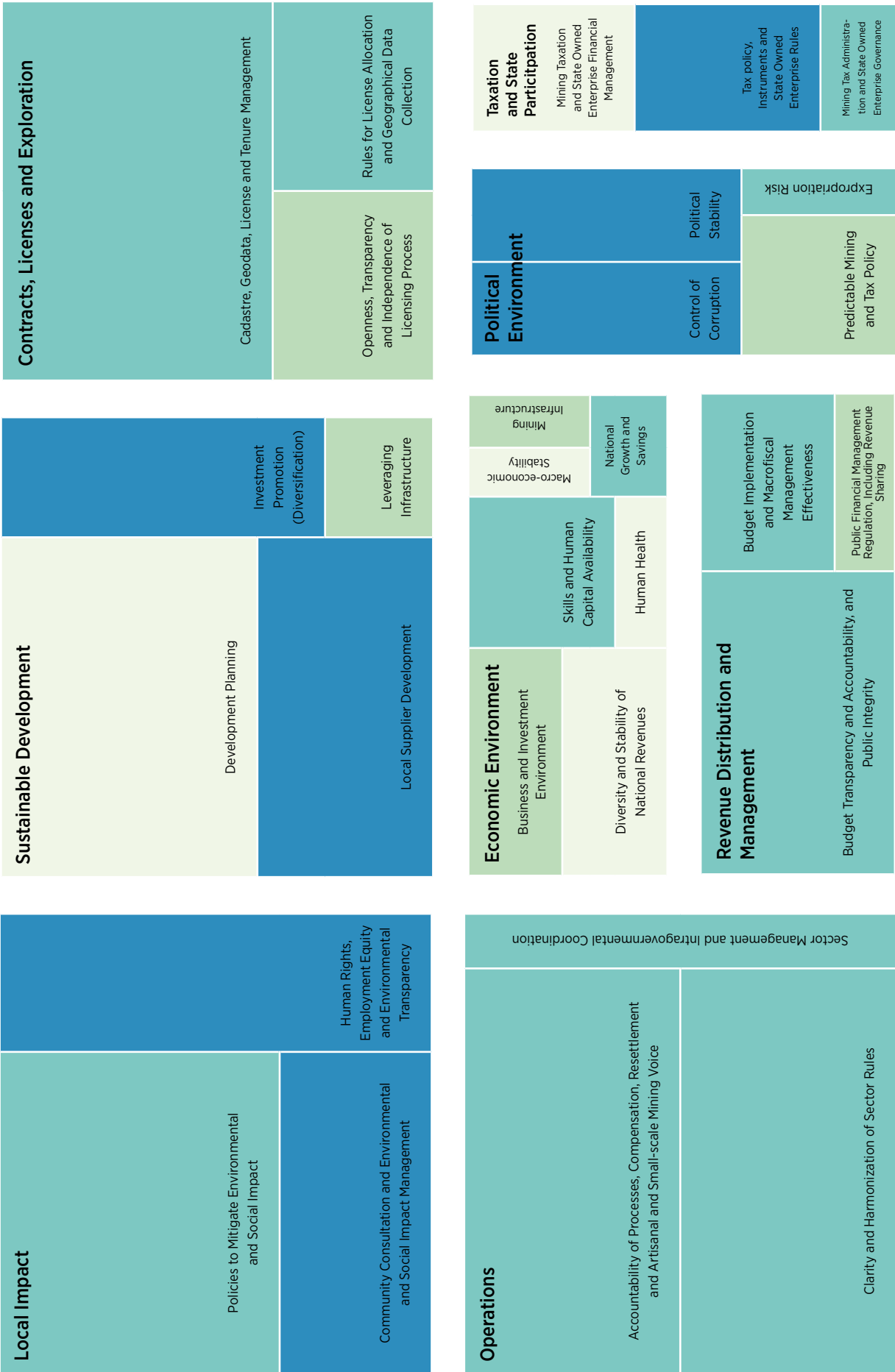
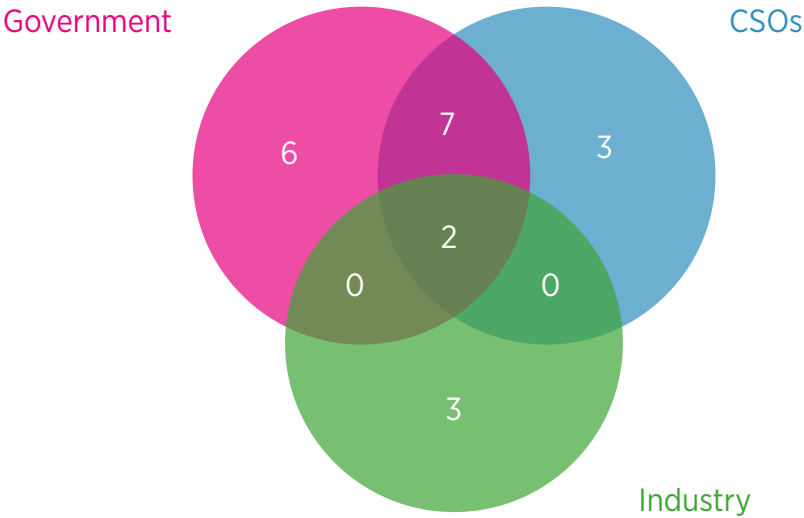


Figure 6: Overlap between Stakeholder-selected Priorities

Intersection of Stakeholders	No. of Shared Priorities	Topics (Shared Priorities)
CSOs Government Industry	2	■ Policies to Mitigate Environmental and Social Impact ■ Human Rights, Employment Equity and Environmental Transparency
CSOs Government	7	■ Cadastre, Geodata, License and Tenure Management ■ Local Supplier Development ■ Accountability of Processes, Compensation, Resettlement and Artisanal and Smallscale Mining Voice ■ Tax policy, Instruments and State Owned Enterprise Rules ■ Clarity and Harmonization of Sector Rules ■ Development Planning ■ Budget Transparency and Accountability, and Public Integrity
Government	6	■ Community Consultation and Environmental and Social Impact Management ■ Political Stability ■ Openness, Transparency and Independence of Licensing Process ■ Investment Promotion (Diversification) ■ Mining Taxation and State Owned Enterprise Financial Management ■ Control of Corruption
CSOs	3	■ Rules for License Allocation and Geological Data Collection ■ Budget Implementation and Macroeconomic Management Effectiveness ■ Skills and Human Capital Availability
Industry	3	■ Predictable Mining and Tax Policy ■ Business and Investment Environment ■ Diversity and Stability of National Revenues





CONCLUSIONS AND ACTION POINTS

5.1 Conclusions

Ghana was the first country in Africa to reform its mining sector. The reforms which commenced in the mid-1980s are often referred to as the “first generation” of mining policy and law reforms which took place in Africa within the last three decades. While the reforms led to a revamp of the sector and significant foreign investments, some analysts have argued that the country has not benefitted from mining.

Therefore, Ghana is usually cited as a case study of where the successes etched out by mining policy and law reforms have not yet translated into broader economic benefits or development for the country and its people. In particular, the last commodity super cycle fueled national pressures to ensure more benefits for the host country. As a result, Ghana like a number of mineral-rich African countries has reviewed the mining code and the contracts that were signed with mining companies. The purpose of the review was essentially to increase the Governments’ share of the benefits from mining. For instance, on 16 November 2011, the Minister of Finance imposed new taxes on the mining industry. The taxes were approved by Ghana’s Parliament and they came into effect on March 9, 2012 (with the exception of a proposed 10% windfall tax).

Additionally, a seven-member government committee was set up to review and re-negotiate any part of a stability agreement that has been signed between Ghana and a mining company that is not in the best interest of the country, prepare a framework or procedures and conditions that will govern the granting of stability agree-

ments in the mining sector in a manner that maximizes the flow of economic and social value to the country on a sustainable basis and finally, redesign existing mining agreements and/or draft new agreements, where necessary, to ensure that they significantly support Ghana’s economic growth and development, in terms of providing better financial returns, more social investment, critical infrastructure and greater transparency in mining operations.

It is also worth noting, Ghana offers some of the most comprehensive protections or guarantees to mining investors. These assurances and guarantees are embodied in the mining law itself, in contractual stability agreements or clauses, investment treaties or special dispute resolution mechanisms.

Ghana has historically shown itself willing to enter into stability provisions that cover not only fiscal matters but could be interpreted broadly to include any issue. For instance, section 48 of the new mining law, which deals with stability agreements, does not explicitly carve out any exceptions for environmental, health and safety regulation or other important public policy matters. As a result, in a case where the imposition of new environmental obligations increases the business costs associated with a mining right that is covered by a stability agreement, the holder of that right could either reject or claim compensation for the imposition of the new obligations by relying on the wide meaning of section 48(1)(a). This potentially insulates investors from any new environmental obligations or requirements, because the text of the clause supports a reasonable interpretation that compliance is not required.

While the report indicates a strong performance of the overall governance framework for the mining sector, transparency and accountability of the sector is weak, especially with regard to public access to investment, development, stability agreements that have been signed and ratified by the legislature. Transparency enhances access to information which is a pre-condition for public scrutiny of government action and for the participation of the citizens in decision making.

In spite of its significant contribution to mineral revenues, ASM still faces significant challenges. The key challenges include land access, taxation, and environmental, health and safety.

The following are areas where governance of the mining sector require major reforms:

- There is the need for the Government and in particular the Ministry responsible for mining and the Minerals Commission to re-examine all the strategies that have been used to formalize ASM to date. This will include land access for existing illegal miners and prospective applicants, a mechanism to tax ASM operators, enforcement of regulations including environment, health and safety rules or guidelines and provision of financial support to the ASM.
- The Government must publish all mining contracts.
- Government must subject all mining contracts to public review and scrutiny before they are ratified by Parliament.

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 of mining governance.

- The valuation for the payment of compensation for the disturbance or damages to property by mining companies particularly to crops must be revised by the Land Valuation Division of the Lands Commission to reflect the actual losses that are incurred by farmers.

- Address the problem of widespread encroachment particularly on lands that have already been licensed for mineral activities, the Ministry of Land and Natural Resources, Minerals Commission and the Geological Survey Authority must identify specific areas to be demarcated solely to be licensed for ASM.
- The stabilization agreements that may be granted to mining companies under section 48 of the mining law are intended to ensure operational stability. In other words, the design apart from deterring arbitrary behaviour on the part of government is also to prevent changes in the share of revenues irrespective of market price, costs and the like. However, this has not achieved the desired result as shown by the contract reviews and renegotiations that were announced by the government in 2012. Therefore, there is the need to rethink the underlying reasons for the stability agreements. The government should therefore build into these agreements, a framework for adjusting rent sharing when significant changes in costs or revenues occur especially during periods of high commodity prices.
- There are still challenges with regard to environmental protection, health and safety of mining operations. The Minerals Commission will have to increase its capacity in the area of health and safety of mining operations while the EPA will need to bolster its capacity on environmental management of mining operations.

Cross Cutting Themes:

- Encourage Public-Private Sector Partnerships: Provide a legislative framework for PPP with regard to mining related infrastructure, especially transportation and energy.
- Increase mining linkages downstream: Provide greater support to the development of local suppliers of goods and services in the mining industry; include investment incentives as part of the package to encourage mining companies to procure locally.

ANNEX 1

THE GHANA MInGov DATA COMPENDIUM

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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
A2.1 Clarity of legislation, rules and timeframes			3	0	0	
A2.2 Harmonization of legislation and government coordination			3	0	0	
2. Operations	A. Policy, Legislation and Regulation	A2, Clarity and harmonization of sector rules	A2.3 Provisions for artisanal and smallscale mining	4	0	0
			B2.1, Access to land, compensation and resettlement	3	0	2
			B2.2 Access and accountability of mining legislation and processes	2	0	2
	B. Accountability and Inclusiveness	B2, Accountability of processes, compensation resettlement and artisanal and small scale mining voice	B2.3 Artisanal and small-scale mining voice representation	1	0	1

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

VALUE CHAIN STAGE (5)	THEME (7)	TOPIC (36)	INDICATOR (64)	INFORMATION SOURCE : 314 Questions		
				Primary (132)	Secondary (61)	In-country Interview (121)
2. Operations	C. Institutional Capacity and Effectiveness	C2, Sector management and intra-governmental coordination	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
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	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
	B. Accountability and Inclusiveness	B3, Mining taxation and state owned enterprise financial management	B3.1, Accountability of mining taxation	2	0	2
			B3.2, State owned enterprise financial management	3	0	2
	C. Institutional Capacity and Effectiveness	C3, Mining tax administration and state owned enterprise governance	C3.1, Mining tax administration	2	1	13
C3.2, State owned enterprise governance			1	0	4	
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	3	0	1
			A4.2, A4.2 Macroeconomic management rules and stabilization	1	0	0
	B. Accountability and Inclusiveness	B4, Budget transparency and accountability, and public integrity	B4.1, Budget transparency and accountability	0	1	0
			B4.2, Public investment integrity	4	0	1
	C. Institutional Capacity and Effectiveness	C4, Budget implementation and macrofiscal management effectiveness	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

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, 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

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

VALUE CHAIN STAGE (5)	THEME (7)	TOPIC (36)	INDICATOR (64)	INFORMATION SOURCE : 314 Questions		
				Primary (132)	Secondary (61)	In-country Interview (121)
N.A.	D. Economic Environment	D6, Skills and human capital	D6.1, Skills and human capital	1	6	0
		D7, Human health	D7.1, Human health	0	3	0
N.A.	E. Political Environment	E1, Expropriation risk	E1.1, Expropriation risk	2	4	0
		E2, Political stability	E2.1, Political stability	0	3	0
		E3, Predictable mining and tax policy	E3.1, Predictable mining and tax policy	1	0	2
		E4, Control of corruption	E4.1, Control of corruption	0	1	0
		F1, Development planning	F1.1, Development planning	5	0	5
N.A.	F. Sustainable Development	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
N.A.	A. Policy, Legislation and Regulation	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

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

VALUE CHAIN STAGE (5)	THEME (7)	TOPIC (36)	INDICATOR (64)	INFORMATION SOURCE : 314 Questions		
				Primary (132)	Secondary (61)	In-country Interview (121)
N.A.	A. Policy, Legislation and Regulation	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

Themes		Max	Min	Average
A	Policy, Legislation and Regulation	3.25	2.50	2.91
B	Accountability and Inclusiveness	3.30	1.75	2.54
C	Institutional Capacity and Effectiveness	3.36	2.67	3.03
D	Economic Environment	3.00	1.67	2.17
E	Political Environment	4.00	1.90	3.10
F	Sustainable Development	3.41	1.00	2.45
M	Mining Sector Importance	2.83	1.00	1.97

Table 3: Value Chain Stage Scores

Value Chain		Max	Min	Average
1	Contracts, Licenses and Exploration	3.14	2.13	2.71
2	Operations	3.17	2.67	2.62
3	Taxation and State Participation	3.25	1.75	2.69
4	Revenue Distribution and Management	2.75	2.50	2.64
5	Local Impact	3.36	3.00	3.22

Table 4: Topic Scores

Value Chain Stage	Topic	Max	Min	Avg.
Contracts, Licenses and Exploration	Rules for License Allocation and Geological Data Collection	4.00	1.00	3.14
	Openness, Transparency and Independence of Licensing Process	3.25	1.00	2.13
	Cadastre, Geodata, License and Tenure Management	3.63	2.00	2.87
Operations	Clarity and Harmonization of Sector Rules	3.50	2.00	2.67
	Accountability of Processes, Compensation, Resettlement and Artisanal and Smallscale Mining Voice	3.75	1.75	2.77
	Sector Management and Intragovernmental Coordination	4.00	2.65	3.17
Taxation and State Participation	Tax policy, Instruments and State Owned Enterprise Rules	3.50	3.00	3.25
	Mining Taxation and State Owned Enterprise Financial Management	1.75	1.75	1.75
	Mining Tax Administration and State Owned Enterprise Governance	3.06	3.06	3.06
Revenue Distribution and Management	Public Financial Management Regulation, Including Revenue Sharing	4.00	1.00	2.50
	Budget Transparency and Accountability, and Public Integrity	3.00	2.50	2.75
	Budget Implementation and Macroeconomic Management Effectiveness	3.00	2.33	2.67
Local Impact	Policies to Mitigate Environmental and Social Impact	4.00	2.00	3.00
	Human Rights, Employment Equity and Environmental Transparency	3.34	3.25	3.30
	Community Consultation and Environmental and Social Impact Management	3.50	3.28	3.36
Cross-cutting themes				
Economic Environment	Business and Investment Environment	2.44	2.44	2.44
	Mining Infrastructure	1.80	1.80	1.80
	Diversity and Stability of National Revenues	1.75	1.75	1.75
	Macroeconomic Stability	1.67	1.67	1.67
	National Growth and Savings	3.00	3.00	3.00
	Skills and Human Capital Availability	2.86	2.86	2.86
	Human Health	1.67	1.67	1.67
Political Environment	Expropriation Risk	3.17	3.17	3.17
	Political Stability	3.33	3.33	3.33
	Predictable Mining and Tax Policy	1.90	1.90	1.90
	Control of Corruption	4.00	4.00	4.00
Sustainable Development	Development Planning	1.00	1.00	1.00
	Local Supplier Development	3.41	3.41	3.41
	Investment Promotion (Diversification)	3.40	3.40	3.40
	Leveraging Infrastructure	2.00	2.00	2.00
Mining Sector Importance	Geological Prospectivity and Potential	2.83	2.83	2.83
	Foreign Direct Investment in Mining	2.00	2.00	2.00
	State Participation in Mining	1.00	1.00	1.00
	Significance of Mining Revenues	2.50	2.50	2.50
	Budget Share of Mining Revenues	2.00	2.00	2.00
	Economic and Employment Share of Mining	1.50	1.50	1.50

Figure 1: Topic Scores

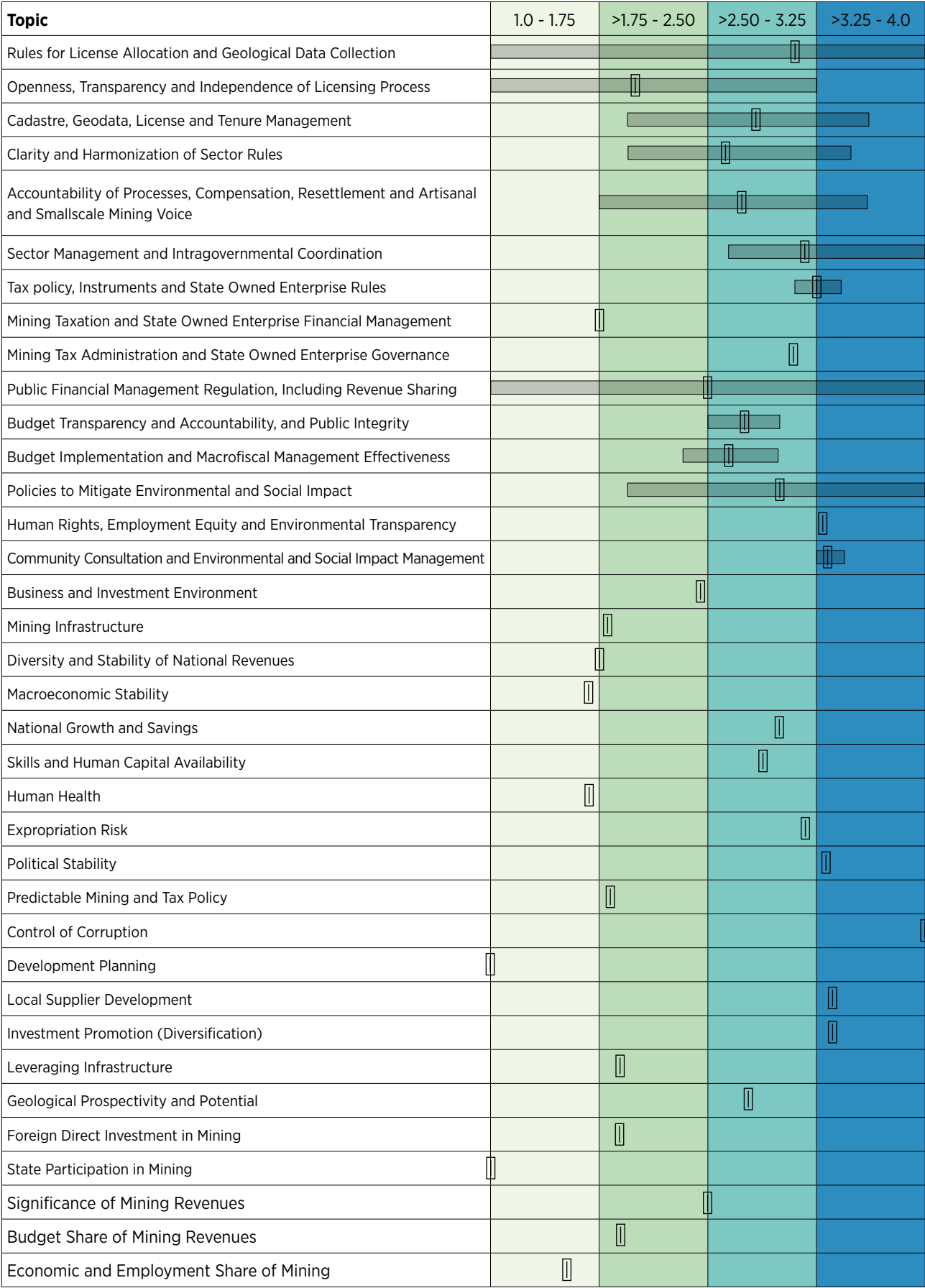


Table 5: Indicator Scores

Theme	Value Chain Stage	Topic	L5	Indicator	Max	Min	Avg.
Policy, Legislation and Regulation	Contracts, Licenses and Exploration	Rules for License Allocation and Geological Data Collection	A1.1	Clarity of Rules for License Allocation, Conversion and Transfer	4.00	..	3.55
			A1.2	Geological Data Collection Rules	4.00	4.00	4.00
			A1.3	Modern Mining Cadastre	1.00	1.00	1.00
			A1.4	License Approval and Review Timeframes	4.00	4.00	4.00
Accountability and Inclusiveness	Operations	Openness, Transparency and Independence of Licensing Process	B1.1	Openness and Transparency of Licensing Process	4.00	1.00	3.25
			B1.2	Independence of Licensing Authority	1.00	1.00	1.00
			C1.1	Collecting Geological Information	4.00	1.00	3.07
			C1.2	State of Mapping and Geological Exploration	4.00	1.00	2.00
Institutional Capacity and Effectiveness	Operations	Cadastre, Geodata, License and Tenure Management	C1.3	Mining Cadastre Effectiveness	4.00	1.00	2.78
			C1.4	Allocating Licenses Effectively	4.00	2.50	3.32
			C1.5	Transferability of Licenses	4.00	3.25	3.63
			C1.6	Managing Licenses Effectively	4.00	1.50	2.43
Policy, Legislation and Regulation	Operations	Clarity and Harmonization of Sector Rules	A2.1	Clarity of Legislation, Rules and Timeframes	4.00	1.00	2.50
			A2.2	Harmonization of Legislation and Government Coordination	4.00	2.50	3.50
			A2.3	Provisions for Artisanal and Smallscale Mining	4.00	1.00	2.00
			B2.1	Access to Land, Compensation and Resettlement	4.00	1.00	2.82
Accountability and Inclusiveness	Operations	Accountability of Processes, Compensation, Resettlement and Artisanal and Smallscale Mining Voice	B2.2	Access and Accountability of Mining Legislation and Processes	4.00	1.00	1.75
			B2.3	Artisanal and Smallscale Mining Voice Representation	4.00	3.50	3.75
			C2.1	Timeframes for Approvals	4.00	4.00	4.00
			C2.2	Intragovernmental Coordination	4.00	1.00	2.88
Institutional Capacity and Effectiveness	Operations	Sector Management and Intragovernmental Coordination	C2.3	Support to Artisanal and Smallscale Mining	4.00	1.00	2.65

Table 5: Indicator Scores (continued)

Theme	Value Chain Stage	Topic	L5	Indicator	Max	Min	Avg.
Policy, Legislation and Regulation	Taxation and State Participation	Tax policy, Instruments and State Owned Enterprise Rules	A3.1	Tax Policy and Instruments	4.00	1.00	3.00
			A3.2	Rules for Auditing, Base Erosion and Profit Shifting	4.00	1.00	3.50
			A3.3	State Owned Enterprise Governance Rules	..	..	..
Accountability and Inclusiveness	Taxation and State Participation	Mining Taxation and State Owned Enterprise Financial Management	B3.1	Accountability of Mining Taxation	4.00	1.00	1.75
			B3.2	State-Owned Enterprise Financial Management	..	..	..
			C3.1	Mining Tax Administration	4.00	1.00	3.06
Institutional Capacity and Effectiveness	Taxation and State Participation	Mining Tax Administration and State Owned Enterprise Governance	C3.2	State-Owned Enterprise Governance	..	..	..
			A4.1	Public Financial Management and Revenue Sharing	4.00	4.00	4.00
			A4.2	Macroeconomic Management Rules and Stabilization	1.00	1.00	1.00
Policy, Legislation and Regulation	Revenue Distribution and Management	Budget Transparency and Accountability, and Public Integrity	B4.1	Budget Transparency and Accountability	3.00	3.00	3.00
			B4.2	Public Investment Integrity	4.00	1.00	2.50
		Budget Implementation and Macroeconomic Management Effectiveness	C4.1	Budget Implementation	3.00	1.00	2.33
			C4.2	Large Scale Public Investment	4.00	1.00	3.00
		Policies to Mitigate Environmental and Social Impact	C4.3	Macroeconomic Management and Revenue Stabilization Effectiveness	..	..	..
			A5.1	Community Impact, Consultation and Corporate Social Responsibility	4.00	1.00	2.00
Accountability and Inclusiveness	Local Impact	Human Rights, Employment Equity and Environmental Transparency	A5.2	Rules for Environmental and Social Impact Management	4.00	1.00	3.00
			A5.3	Rules for Financial Sureties for Decommissioning	4.00	4.00	4.00
			B5.1	Human Rights and Employment Equity	4.00	1.75	3.34
Institutional Capacity and Effectiveness	Local Impact	Community Consultation and Environmental and Social Impact Management	B5.2	Environmental and Social Impact Transparency	4.00	2.50	3.25
			C5.1	Impact and Community Consultation	4.00	2.71	3.30
			C5.2	Environmental and Social Impact Management Effectiveness	4.00	1.90	3.28
			C5.3	Effectiveness of Sureties for Decommissioning	3.50	3.50	3.50

Value Chain Stage	L5	Indicator	Max	Min	Avg.
Economic Environment	D1.1	Business and Investment Environment	4.00	1.00	2.44
	D2.1	Mining Infrastructure	2.00	1.00	1.80
	D3.1	Diversity and Stability of National Revenues	2.50	1.00	1.75
	D4.1	Macroeconomic Stability	3.00	1.00	1.67
	D5.1	National Growth and Savings	4.00	2.00	3.00
	D6.1	Skills and Human Capital Availability	4.00	2.00	2.86
	D7.1	Human Health	2.00	1.00	1.67
Political Environment	E1.1	Expropriation Risk	4.00	2.00	3.17
	E2.1	Political Stability	4.00	3.00	3.33
	E3.1	Predictable Mining and Tax Policy	2.80	1.00	1.90
	E4.1	Control of Corruption	4.00	4.00	4.00
Sustainable Development	F1.1	Development Planning	1.00	1.00	1.00
	F2.1	Local Supplier Development	4.00	2.00	3.41
	F3.1	Investment Promotion (Diversification)	4.00	1.00	3.40
	F4.1	Leveraging Infrastructure	4.00	1.00	2.00
Mining Sector Importance	M1.1	Geological Prospectivity and Potential	3.00	2.50	2.83
	M2.1	Foreign Direct Investment in Mining	2.00	2.00	2.00
	M3.1	State Participation in Mining	1.00	1.00	1.00
	M4.1	Significance of Mining Revenues	3.00	2.00	2.50
	M5.1	Budget Share of Mining Revenues	2.00	2.00	2.00
	M6.1	Economic and Employment Share of Mining	2.00	1.00	1.50

Figure 2: Indicator Scores



Figure 3: Stakeholder Prioritisation, Government

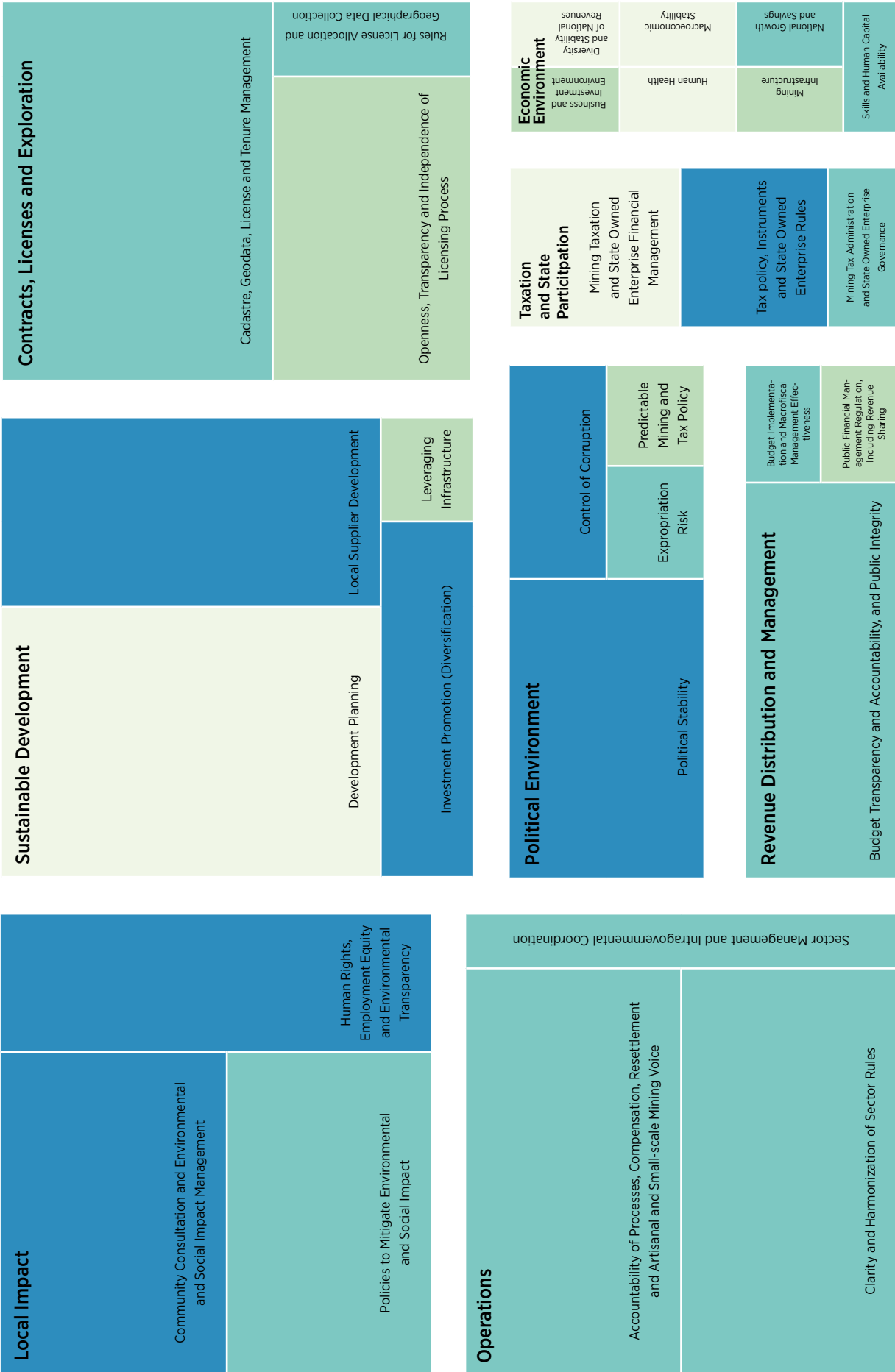


Figure 4: Stakeholder Prioritisation, CSO

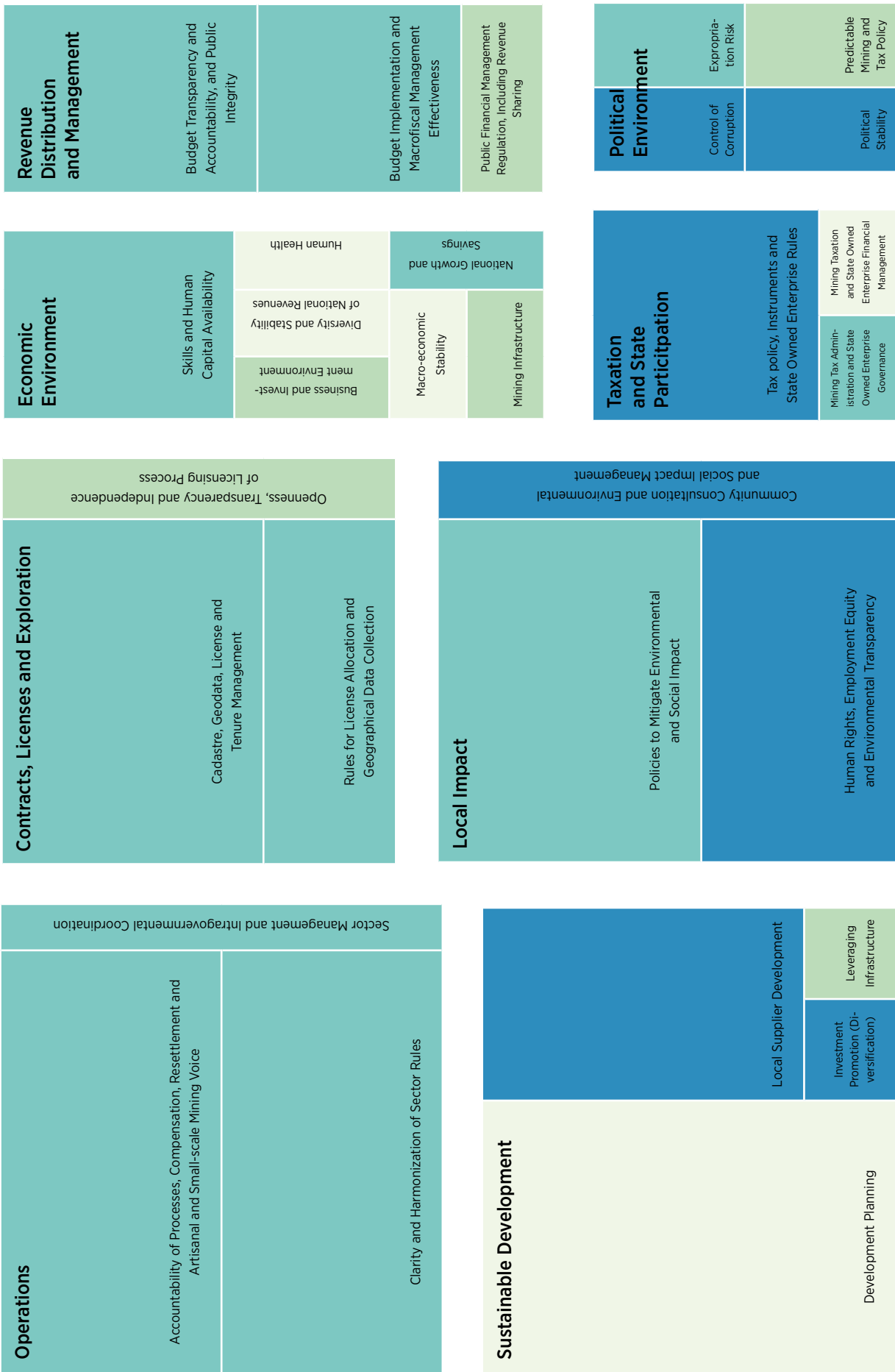


Figure 5: Stakeholder Prioritisation, Industry

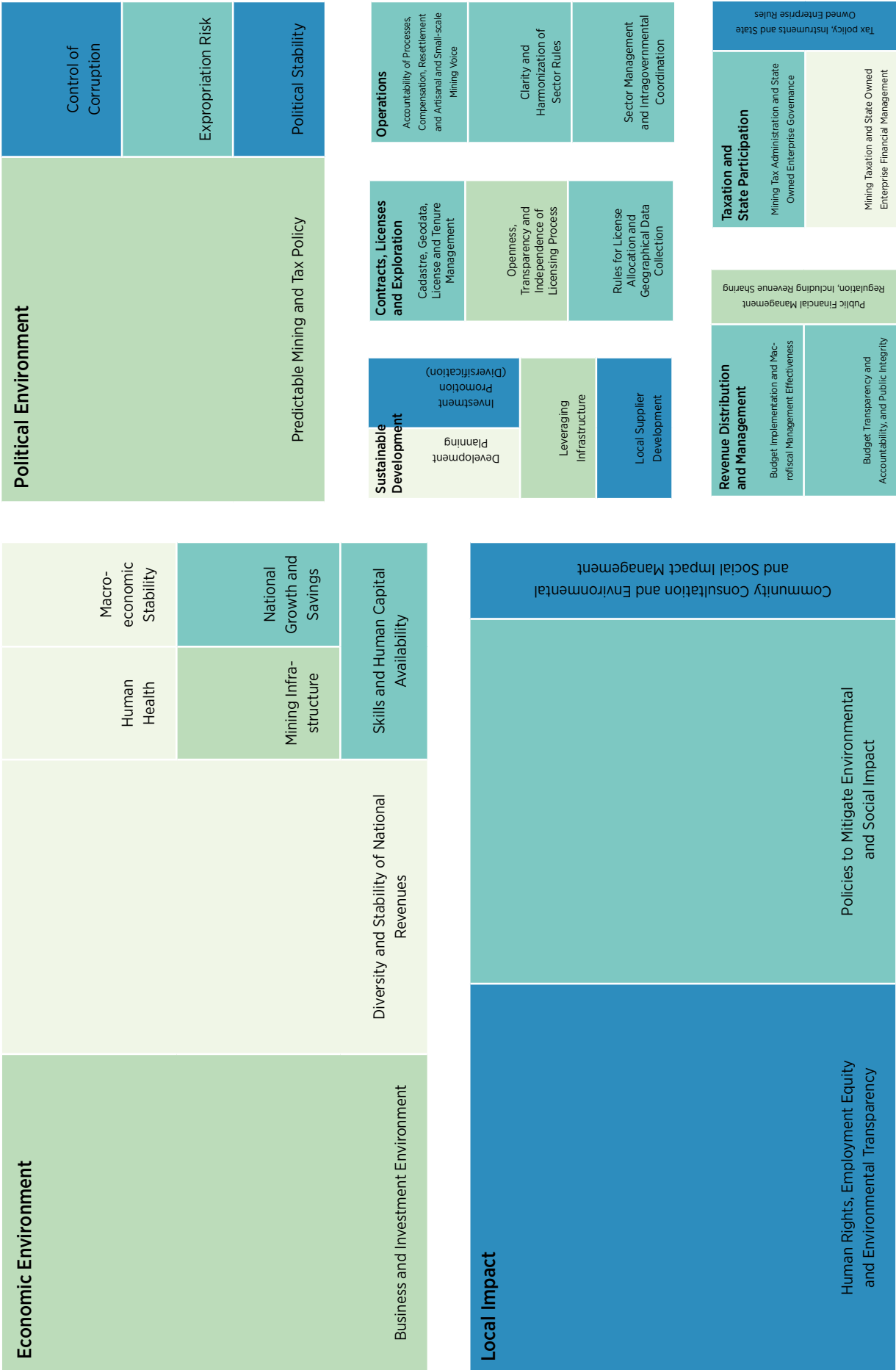


Table 6: Question Scores

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
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
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
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 partially in place	2.5
5	To what extent are exceptions to the First Come, First Served principle allowed?	Primary	Good practice not in place	1
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
7	According to the law, to what extent do license holders have the freedom to transfer their licenses to eligible companies	Primary	Good practice in place	4
8	To what extent are sanctions for non-performance by companies regarding licenses prescribed in the regulations?	Primary	Good practice in place	4
9	To what extent are mining contracts allowed to be used to supersede the provisions of prevailing laws?	Primary	Good practice in place	4
10	To what extent is it defined in law which government body negotiates and approves mine development agreements?	Primary	Good practice in place	4
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
A1.3 Modern Mining Cadastre				
12	Is the establishment and operation of a mining cadastre provided for in the law?	Primary	Good practice not in place	1

Table 6: Question Scores (continued)

Question Number	Question	Data Source	Interpretation	Score
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
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 in place	4
16	To what extent is the timeframe for approval of exploration work programs set out in regulations?	Primary	Good practice in place	4
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
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
19	To what extent does the legislation detail a transparent process for license cancellations?	Primary	Good practice in place	4
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	4
21	To what extent are mining contracts required to be made publicly available in the law?	Primary	Good practice in place	4
22	To what extent are mining contracts made publicly available?	In-country Interview	Not meeting its own goal	1
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
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	Not meeting its own goal	1

Question Number	Question	Data Source	Interpretation	Score
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
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 not in place	1
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
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	Meeting its own goal	3.5
30	To what extent does the Geological Survey Department (GSD) or similar organization collect geological information in an accessible library?	In-country Interview	Meeting its own goal	4
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
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	Data not available or not applicable	..
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	Data not available or not applicable	..
34	To what extent is the Geological Survey Department (GSD) or similar organization staffed with well-trained professionals?	In-country Interview	Meeting its own goal	4
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

Table 6: Question Scores (continued)

Question Number	Question	Data Source	Interpretation	Score
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
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 in place	4
39	What proportion of the country is covered at scale of 1:250,000 or similar (e.g. 1:200 000)?	Primary	Good practice not in place	1
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 not in place	1
41	Quality of geological database - Fraser Institute	Secondary	Higher 50%-75%	3
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	Working to-wards meeting its own goal, but less than half way	2
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
44	To what extent is the topographic map for the cadastre compatible with GPS systems?	In-country Interview	Meeting its own goal	3.625
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
46	To what degree is the mining cadastre up-to-date?	In-country Interview	Working to-wards meeting its own goal, but less than half way	2
47	To what extent is the mining cadastre used to support the management of licenses?	In-country Interview	More than half way towards meeting its own goal	3.25
48	To what extent does the cadastre system ensure that license information (including boundaries) cannot be tampered with?	In-country Interview	More than half way towards meeting its own goal	2.875

Question Number	Question	Data Source	Interpretation	Score
49	To what extent is the computerized cadastre system operating without major technical problems?	In-country Interview	Working to-wards meeting its own goal, but less than half way	2.5
50	If there is a decentralized cadastre system in place, to what extent is there a clearance requirement from central office?	Primary	Good practice in place	4
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	Working to-wards meeting its own goal, but less than half way	2.5
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	Meeting its own goal	4
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
54	To what extent are limits to discretionary power in the award of exploration licenses followed?	In-country Interview	Meeting its own goal	4
55	To what extent are limits to discretionary powers in the award of mining licenses followed?	In-country Interview	More than half way towards meeting its own goal	3.25
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 to-wards meeting its own goal, but less than half way	2.5
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	3
58	To what extent do license cancellations or denied applications result in appeals?	In-country Interview	Working to-wards meeting its own goal, but less than half way	2.5
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

Table 6: Question Scores (continued)

Question Number	Question	Data Source	Interpretation	Score
C1.6 Managing Licenses Effectively				
61	To what extent are the legislated timeframes for license application and allocation followed?	In-country Interview	Working towards meeting its own goal, but less than half way	2.5
62	To what extent is the cadastre system mostly free of long-standing pending applications?	In-country Interview	Working towards meeting its own goal, but less than half way	2.5
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
64	To what extent are the sanctions regarding licenses for non-performance by companies enforced?	In-country Interview	Not meeting its own goal	1.5
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
66	To what extent is the timeframe for the approval of exploration work programs followed?	In-country Interview	Working towards meeting its own goal, but less than half way	1.9
67	To what extent is the unit managing the monitoring of licenses staffed appropriately to perform its duties?	In-country Interview	Working towards meeting its own goal, but less than half way	2
68	To what extent is the unit managing the monitoring of licenses receiving an adequate operational budget to perform its duties?	In-country Interview	More than half way towards meeting its own goal	3
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
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
72	To what extent is the timeframe for the approval of extensions of mining operations set out in the regulations?	Primary	Good practice in place	4

Question Number	Question	Data Source	Interpretation	Score
A2.2 Harmonization of Legislation and Government Coordination				
73	To what extent is mining sector legislation consistent with other relevant legislation?	Primary	Working to-wards meeting its own goal, but less than half way	2.5
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 in place	4
75	How clearly does mining or other legislation assign roles and responsibilities between government ministries/agencies in the mining sector?	Primary	Good practice in place	4
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 not in place	1
77	To what extent is artisanal and small-scale mining legally recognized in the mining law or regulations?	Primary	Good practice in place	4
78	To what extent do the laws and regulations allow for artisanal and small-scale and industrial mining activities to coexist?	Primary	Good practice not in place	1
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
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 in place	4
81	Is there an established procedure following Equator Principles for the resettlement of communities displaced by mining activities?	Primary	Good practice not in place	1
82	To what extent does the government enforce the legal requirements to resettle communities affected by mining activities?	In-country Interview	Working to-wards meeting its own goal, but less than half way	2

Table 6: Question Scores (continued)

Question Number	Question	Data Source	Interpretation	Score
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 in place	4
84	To what extent does the government enforce the legal requirements of mining companies to compensate people affected by mining activities?	In-country Interview	More than half way towards meeting its own goal	2.8
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 not in place	1
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	Not meeting its own goal	1
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 not in place	1
88	To what extent is this independent domestic appeal process able to challenge decisions by mining authorities?	In-country Interview	Meeting its own goal	4
B2.3 Artisanal and Small-scale Mining Voice Representation				
89	Is there a non-state association that represents artisanal and small-scale miners?	Primary	Good practice in place	4
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	Meeting its own goal	3.5
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	Meeting its own goal	4
92	To what extent is the timeframe for the approval of an extension of a mining operations followed	In-country Interview	Meeting its own goal	4

Question Number	Question	Data Source	Interpretation	Score
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	Meeting its own goal	4
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 in place	4
95	To what extent is there regular sharing of information between government agencies that have regulatory responsibilities for the mining sector?	In-country Interview	Working to-wards meeting its own goal, but less than half way	2.5
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
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
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
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	Working to-wards meeting its own goal, but less than half way	2.25
100	In practice, are there instances of coexistence of ASM and industrial mining activities?	In-country Interview	Not meeting its own goal	1.75
101	To what extent are artisanal and small-scale miners legally allowed to operate?	In-country Interview	Meeting its own goal	4
102	To what extent is artisanal and small-scale mining taking place under formalized procedures?	In-country Interview	More than half way towards meeting its own goal	2.875

Table 6: Question Scores (continued)

Question Number	Question	Data Source	Interpretation	Score
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
104	To what extent are taxes from mining required by law to be placed in the national treasury?	Primary	Good practice in place	4
105	Does the legislation prescribe rates, formulas and bases for the main elements of the fiscal regime?	Primary	Good practice in place	4
106	To what extent are there well-defined provisions for the renegotiation or review of fiscal terms?	Primary	Good practice in place	4
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
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
109	To what extent does the mining fiscal regime include progressive fiscal instruments?	Primary	Good practice not in place	1
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
111	Does the government have a simplified tax collection system for ASM?	Primary	Good practice not in place	1
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
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
114	To what extent are there clear documentation requirements to demonstrate compliance with transfer pricing rules?	Primary	Good practice in place	4
115	To what extent are there clear procedures for using advanced pricing agreements to limit transfer pricing?	Primary	Good practice not in place	1

Question Number	Question	Data Source	Interpretation	Score
116	Is there an annual disclosure requirement for related party transactions?	Primary	Good practice in place	4
117	To what extent do the legal provisions limit the risk from thin capitalization?	Primary	Good practice in place	4
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	Data not available or not applicable	..
119	Where the mining SOE engages in quasi-fiscal activities, to what extent are the roles and responsibilities of the SOE to provide sub-sidies or social expenditures (quasi-fiscal activities) clearly set out?	Primary	Data not available or not applicable	..
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	Not meeting its own goal	1
121	Does the country disclose through EITI or another disclosure process, details of mining revenues?	Primary	Good practice in place	4
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	1
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	Not meeting its own goal	1
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	Data not available or not applicable	..
125	To what extent do mining sector SOEs publish annual financial reports?	In-country Interview	Data not available or not applicable	..
126	Are mining SOEs subject by law to annual audits by an independent external auditor?	Primary	Data not available or not applicable	..
127	In practice, are annual audits of mining SOEs undertaken by an independent external auditor?	In-country Interview	Data not available or not applicable	..
128	Do mining SOEs have to follow internationally recognized accounting standards?	Primary	Data not available or not applicable	..

Table 6: Question Scores (continued)

Question Number	Question	Data Source	Interpretation	Score
C. C3	Institutional Capacity and Effectiveness 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
130	To what extent are the bases on which taxes are levied subject to disputes between companies and government?	In-country Interview	Meeting its own goal	4
131	To what extent, are tax, cost or physical audits of mining companies conducted systematically?	In-country Interview	Working to-wards meeting its own goal, but less than half way	2.5
132	To what extent are the timing of physical audits and cost audits of mining companies coordinated?	In-country Interview	Not meeting its own goal	1
133	To what extent are transfer pricing rules enforced in practice?	In-country Interview	Data not available or not applicable	..
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	Data not available or not applicable	..
135	To what extent are the advanced pricing rules followed for regularly occurring transactions?	In-country Interview	Meeting its own goal	4
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
138	To what extent is the unit specialized in taxation of natural resources/mining staffed appropriately to carry out its activities?	In-country Interview	Data not available or not applicable	..
139	To what extent, is the unit specialized in natural resources/mining receiving appropriate funding to carry out its mandate?	In-country Interview	Not meeting its own goal	1
140	Effectiveness in the collection of tax payments—Public Expenditure and Financial Accounting (PEFA) indicator	Secondary	Higher 50%-75%	3

Question Number	Question	Data Source	Interpretation	Score
141	In practice, are taxes and payments only collected by the mandated agencies?	In-country Interview	Meeting its own goal	4
142	In practice, are taxes from mining only placed in the national treasury?	In-country Interview	Data not available or not applicable	..
143	To what extent are the fiscal terms in the law followed?	In-country Interview	Data not available or not applicable	..
144	To what extent are the terms for investment incentives in the law followed?	In-country Interview	Data not available or not applicable	..
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	Data not available or not applicable	..
146	Is there an internal audit department within mining SOEs?	Primary	Data not available or not applicable	..
147	In practice, does the internal audit department of mining SOEs review the effectiveness of internal controls annually?	In-country Interview	Data not available or not applicable	..
148	To what extent do mining SOEs follow the role (including any subsidies or social expenditures) set out for them?	In-country Interview	Data not available or not applicable	..
149	To what extent, are mining SOEs or state equity partners honoring their financial obligations?	In-country Interview	Data not available or not applicable	..
4.	Revenue Distribution and Management			
A. A4	Policy, Legislation and Regulation 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 in place	4
151	Are ministries required to undertake procurement plans for infrastructure projects according to the laws and regulation?	Primary	Good practice in place	4
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 in place	4

Table 6: Question Scores (continued)

Question Number	Question	Data Source	Interpretation	Score
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 macroeconomic rules in place to stabilize the budget?	Primary	Good practice not in place	1
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	Higher 50%-75%	3
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 not in place	1
157	Are public investment projects required to be evaluated after completion by an independent auditor according to the laws and regulation?	Primary	Good practice in place	4
158	To what extent are completed public investment projects evaluated by an independent auditor?	In-country Interview	Meeting its own goal	4
159	Are the assets and liabilities of mining sector SOEs included in the public sector balance as reported by the Ministry of Finance?	Primary	Data not available or not applicable	..
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	Good practice not in place	1
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	Lowest 25%	1
162	Control of expenditures—PEFA indicator	Secondary	Data not available or not applicable	..
163	To what extent do subnational governments receive their budget allocations in a full and timely manner?	In-country Interview	Data not available or not applicable	..
164	Robust budget classification system—PEFA indicator	Secondary	Low 25%-50%	2
165	Comprehensiveness of information included in budget documentation - PEFA indicator	Secondary	Low 25%-50%	2

Question Number	Question	Data Source	Interpretation	Score
166	Extent of unreported extra-budgetary expenditure - PEFA indicator	Secondary	Higher 50%-75%	3
167	Multi-year perspective in fiscal planning - PEFA indicator	Secondary	Higher 50%-75%	3
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	Higher 50%-75%	3
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	Data not available or not applicable	..
171	To what extent does the government use a formal cost benefit appraisal process for public investment project proposals?	In-country Interview	Data not available or not applicable	..
172	To what extent are the project appraisals of public investment projects undertaken by an external agency or expert?	In-country Interview	Data not available or not applicable	..
173	To what extent do ministries prepare procurement plans for major public investment projects in key sectors?	In-country Interview	Meeting its own goal	4
174	To what extent are there regular cost over-runs on major public investment projects in key sectors?	In-country Interview	Meeting its own goal	4
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	Not meeting its own goal	1
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	Data not available or not applicable	..
177	To what extent does the government follow its macroeconomic rules?	In-country Interview	Data not available or not applicable	..

Table 6: Question Scores (continued)

Question Number	Question	Data Source	Interpretation	Score
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 in place	4
179	In the law, to what extent are community development agreements required for mining operations?	Primary	Good practice not in place	1
180	Is there a national policy on corporate social responsibility (CSR) that applies to mining?	Primary	Good practice not in place	1
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 in place	4
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 not in place	1
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
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 in place	4
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 in place	4
186	In the law, are there requirements in place on managing the environmental and social impact of closure of mine sites?	Primary	Good practice in place	4
187	Is there a policy or regulation that protects biodiversity on a mine site?	Primary	Good practice in place	4
188	Is there a regulation that enables biodiversity off-setting for a mine site?	Primary	Good practice not in place	1
189	In the law and regulations, is there a simplified environmental permit or impact assessment for artisanal and small-scale mining?	Primary	Good practice not in place	1

Question Number	Question	Data Source	Interpretation	Score
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 in place	4
191	Is an agency independent from the mining authorities responsible for environmental protection and rehabilitation?	Primary	Good practice in place	4
192	In the law, is there a grievance and complaints mechanism defined in the environmental regulations?	Primary	Good practice in place	4
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
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 in place	4
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	Data not available or not applicable	..
196	Is the government a signatory to the Voluntary Principles on Security and Human Rights (VPSHR)?	Primary	Good practice in place	4
197	In practice, if government is a signatory to the VPSHR, to what extent is it monitoring VPSHR implementation?	In-country Interview	Not meeting its own goal	1.75
198	In practice, does the government require companies to carry out human rights due diligence as part of the licensing process?	In-country Interview	Working towards meeting its own goal, but less than half way	2.5
199	Is there an independent Human Rights Commission?	Primary	Good practice in place	4
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	2.5
201	To what extent is the Human Rights Commission receiving an adequate budget to facilitate a grievance and complaint mechanism?	In-country Interview	Data not available or not applicable	..
202	Are there adequate government rules to promote employment equity?	Primary	Good practice in place	4

Table 6: Question Scores (continued)

Question Number	Question	Data Source	Interpretation	Score
203	To what extent is an institution mandated to ensure consistent compliance with employment equity rules?	In-country Interview	Meeting its own goal	4
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
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	Working towards meeting its own goal, but less than half way	2.5
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	More than half way towards meeting its own goal	2
208	To what extent are comprehensive community development agreements negotiated prior to mining operations?	In-country Interview	More than half way towards meeting its own goal	3
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
210	To what extent are operating mining companies setting aside funds for mine closure?	In-country Interview	Meeting its own goal	4
211	To what extent do government and mining companies collaborate in the planning and implementation of CSR activities?	In-country Interview	More than half way towards meeting its own goal	2.8
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	Working to-wards meeting its own goal, but less than half way	2.5

Question Number	Question	Data Source	Interpretation	Score
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	Working towards meeting its own goal, but less than half way	2.5
214	To what extent are environmental requirements enforced systematically through inspections and penalties for non-compliance?	In-country Interview	Meeting its own goal	4
215	To what extent is a grievance and complaints mechanism used to challenge decisions by the agency monitoring environmental regulation?	In-country Interview	Meeting its own goal	4
216	To what extent are company plans to manage and mitigate the social and environmental impacts of operations reviewed by government?	In-country Interview	Meeting its own goal	4
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	Meeting its own goal	3.75
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	Meeting its own goal	3.5
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	Meeting its own goal	3.4
220	To what extent is the government monitoring compliance with environmental requirements for artisanal and small-scale miners?	In-country Interview	Working towards meeting its own goal, but less than half way	1.9
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	Meeting its own goal	3.5
D. Economic Environment				
D1 Business and Investment Environment				
D1.1 Impact and Community Consultation				
222	Starting a business – Doing Business indicators	Secondary	Low 25%-50%	2
223	Dealing with construction permits – Doing Business indicators	Secondary	Low 25%-50%	2

Table 6: Question Scores (continued)

Question Number	Question	Data Source	Interpretation	Score
224	Getting credit – Doing Business indicators	Secondary	Top 75%+	4
225	Enforcing contracts – Doing Business indicators	Secondary	Low 25%-50%	2
226	How would you rate the level of efficiency of customs procedures (related to the entry and exit of merchandise)? – WEF GCI	Secondary	Low 25%-50%	2
227	How burdensome is it for businesses to comply with governmental administrative requirements (e.g., permits, regulations, reporting)? – WEF GCI	Secondary	Higher 50%-75%	3
228	Perceptions index measuring effectiveness of civil law system – World Justice Project (WJP)	Secondary	Top 75%+	4
229	Average number of procedures required to start a foreign subsidiary – World Bank Investing Across Borders	Secondary	Low 25%-50%	2
230	Average number of days required to start a foreign subsidiary – World Bank Investing Across Borders	Secondary	Lowest 25%	1
D2. Mining Infrastructure				
D2.1 Mining Infrastructure				
231	Quality of roads – WEF GCI	Secondary	Low 25%-50%	2
232	Logistics Performance Index – World Bank	Secondary	Low 25%-50%	2
233	Extent of infrastructure (for example transport, telephony, and energy) – WEF GCI	Secondary	Lowest 25%	1
234	Quality of the railroad system – WEF GCI	Secondary	Low 25%-50%	2
235	Quality of port facilities, or port accessibility in case of landlocked country – WEF GCI	Secondary	Low 25%-50%	2
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	2.5
237	237. Variation of domestic revenues in real terms over 5 years – IMF WEO	Secondary	Lowest 25%	1
D4. Macroeconomic Stability				
D4.1 Macroeconomic Stability				
238	Five-year cumulative inflation – IMF WEO	Secondary	Lowest 25%	1

Question Number	Question	Data Source	Interpretation	Score
239	Credit rating – Standard and Poor’s	Secondary	Lowest 25%	1
240	Five-year average total debt service to gross national income (GNI) – World Bank WDI	Secondary	Higher 50%-75%	3
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
242	Five-year total average debt to GDP – IMF WEO	Secondary	Low 25%-50%	2
243	Five-year average adjusted net savings – World Bank WDI	Secondary	Higher 50%-75%	3
D6. Skills and Human Capital Availability				
D6.1 Skills and Human Capital Availability				
244	Perception of the availability of labor/skills – Fraser	Secondary	Top 75%+	4
245	Gross tertiary education enrolment rate – WEF GCI	Secondary	Low 25%-50%	2
246	Quality of math and science education – WEF GCI	Secondary	Higher 50%-75%	3
247	Attraction and retention of talented nationals – WEF GCI	Secondary	Higher 50%-75%	3
248	Is there a post-secondary school, college or university providing curriculum for mining sector development?	Primary	Good practice in place	4
249	Mean years of schooling – Human Development Index	Secondary	Low 25%-50%	2
250	Expected years of schooling – Human Development Index	Secondary	Low 25%-50%	2
D7. Human Health				
D7.1 Human Health				
251	Life expectancy at birth – Human Development Index	Secondary	Lowest 25%	1
252	Death caused by communicable diseases and maternal, prenatal, and nutrition conditions (percentage of total) – WB WDI	Secondary	Low 25%-50%	2
253	Prevalence of Human Immunodeficiency Virus (HIV) - WB WDI	Secondary	Low 25%-50%	2

Table 6: Question Scores (continued)

Question Number	Question	Data Source	Interpretation	Score
E.	Political Environment			
E1	Expropriation Risk			
E1.1	Expropriation Risk			
254	Transfer and convertibility risk, force majeure - OECD country risk classification	Secondary	Low 25%-50%	2
255	Expropriation risk – Delcredere DuCroire	Secondary	Higher 50%-75%	3
256	Protection of property rights, including financial assets – WEF GCI	Secondary	Higher 50%-75%	3
257	Is the country signatory to the International Center for the Settlement of Investment Disputes (ICSID) Convention?	Primary	Good practice in place	4
258	Does the country provide in its domestic law for the international arbitration of foreign investment disputes?	Primary	Good practice in place	4
259	Protecting investors – Doing Business indicators	Secondary	Higher 50%-75%	3
E2.	Political Stability			
E2.1	Political Stability			
260	Political stability – WGI	Secondary	Higher 50%-75%	3
261	Order and security (control of crime, civil conflict, and violence) – WJP	Secondary	Higher 50%-75%	3
262	Security Situation (includes physical security due to the threat of attack by terrorists, criminals, guerrilla groups, etc.) – Fraser Institute	Secondary	Top 75%+	4
E3.	Predictable Mining and Tax Policy			
E3.1	Predictable Mining and Tax Policy			
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
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	More than half way towards meeting its own goal	2.8

Question Number	Question	Data Source	Interpretation	Score
E4.	Control of Corruption			
E4.1	Control of Corruption			
266	Control of corruption – WGI	Secondary	Top 75%+	4
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 not in place	1
268	Does the current multi-year national development plan have a section on the mining sector as a driver for development?	Primary	Good practice not in place	1
269	Is the multi-year national development plan on track to meet its targets?	In-country Interview	Data not available or not applicable	..
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	Data not available or not applicable	..
271	Does the country undertake spatial development plans that leverage mining and investment locations?	Primary	Good practice not in place	1
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 not in place	1
274	To what extent, did an informed and meaningful national consultation take place during the preparation of the national development plan?	In-country Interview	Data not available or not applicable	..
275	Is the mining development policy publicly available?	Primary	Good practice not in place	1
276	To what extent did an informed and meaningful national consultation take place during the preparation of the mining development policy?	In-country Interview	Data not available or not applicable	..

Table 6: Question Scores (continued)

Question Number	Question	Data Source	Interpretation	Score
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 in place	4
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	Working to-wards meeting its own goal, but less than half way	2.125
279	To what extent do local content regulations for goods and services within the mining value chain target specific value pools?	Primary	Good practice in place	4
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	Meeting its own goal	4
281	Do local content regulations within the mining value chain have clear timeframes?	Primary	Good practice in place	4
282	To what extent is there support for companies in attaining local content targets?	In-country Interview	Meeting its own goal	4
283	Is there within government an enforcement mechanism for local content regulations?	Primary	Good practice in place	4
284	In practice, is there a designated institution monitoring the progress of local content policy implementation?	In-country Interview	Meeting its own goal	4
285	Quality of local suppliers for the mining sector – WEF GCI	Secondary	Low 25%-50%	2
286	Number of local suppliers – WEF GCI	Secondary	Low 25%-50%	2
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
288	Are there no or low tariff (or non-tariff barriers) on raw material exports?	Primary	Good practice not in place	1

Question Number	Question	Data Source	Interpretation	Score
289	Is there an Investment Promotion Agency?	Primary	Good practice in place	4
290	To what extent is the investment promotion agency adequately staffed to fulfill its mandate?	In-country Interview	Meeting its own goal	4
291	To what extent is the investment promotion agency receiving adequate funding to fulfill its mandate?	In-country Interview	Meeting its own goal	4
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
293	Are there examples of shared infrastructure in the transport sector related to resource extraction?	In-country Interview	Not meeting its own goal	1
294	To what extent do regulations allow for sharing of energy infrastructure?	Primary	Good practice in place	4
295	Are there examples of shared infrastructure in the energy sector?	In-country Interview	Not meeting its own goal	1
296	Is there a law that encourages the private financing of infrastructure?	Primary	Good practice in place	4
297	Is a governmental unit responsible for negotiating the private finance of infrastructure?	Primary	Good practice not in place	1
M. Mining Sector Importance				
M1 Geological Prospectivity and Potential				
M1.1 Geological Prospectivity and Potential				
298	Mineral resource wealth – World Bank	Secondary	Data not available or not applicable	2.5
299	Best Practices Mineral Potential Index – Fraser Institute	Secondary	Higher 50%-75%	3
300	Exploration spending relative to production value – ICMM / SNL Metals & Mining	Secondary	Higher 50%-75%	3

Table 6: Question Scores (continued)

Question Number	Question	Data Source	Interpretation	Score
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	Low 25%-50%	2
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 not in place	1
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	Good practice not in place	1
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	Higher 50%-75%	3
307	Government revenues from mining as a percentage of total GDP—IMF/National statistics	Secondary	Low 25%-50%	2
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	Low 25%-50%	2
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	..

Question Number	Question	Data Source	Interpretation	Score
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	Low 25%-50%	2
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	Lowest 25%	1



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