
MINING: PARTNERSHIPS FOR DEVELOPMENT

TOOLKIT



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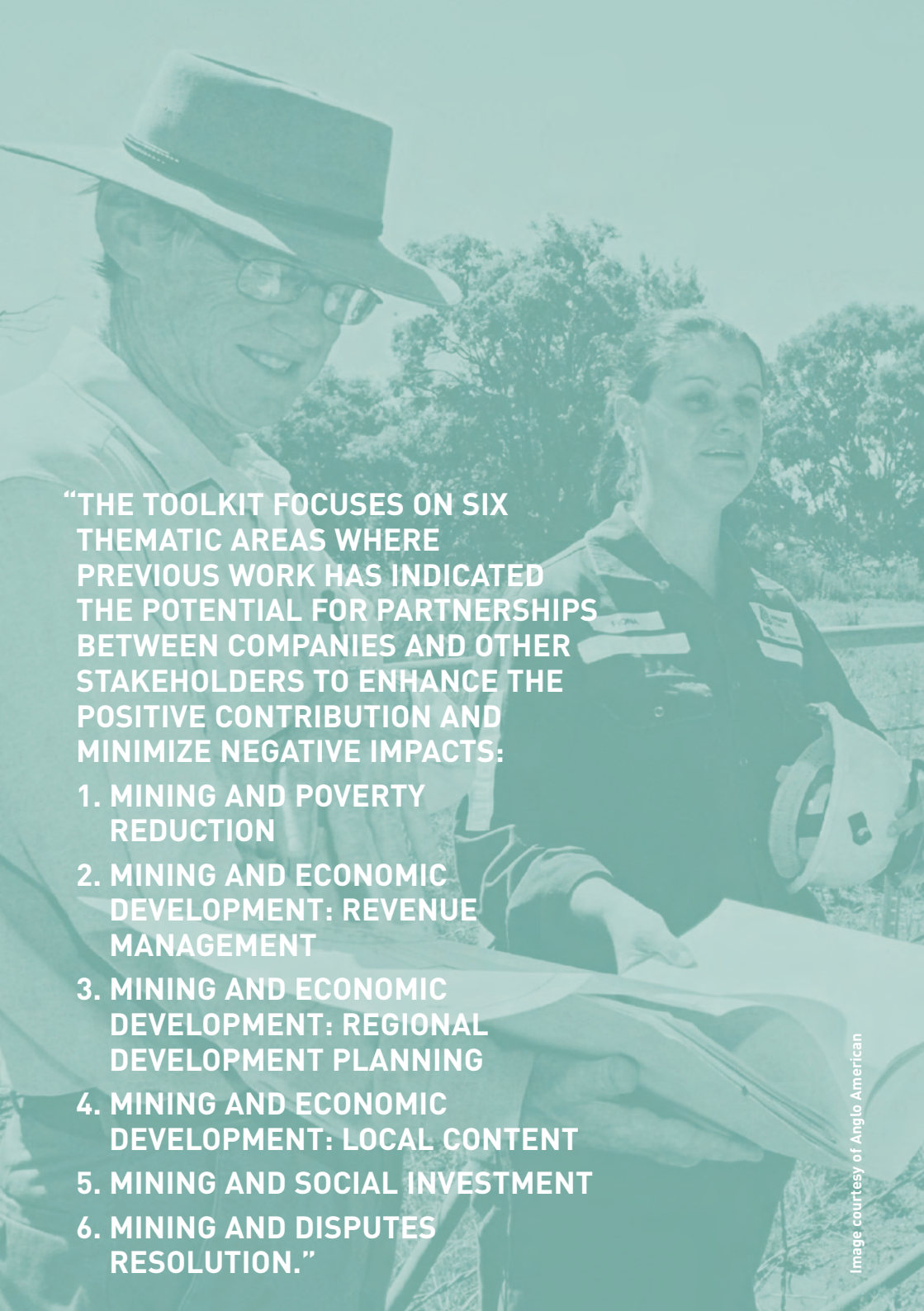
This toolkit has been developed by the International Council on Mining and Metals (ICMM). It is the third version of a toolkit originally published as the *Resource Endowment Toolkit* in April 2006 in collaboration with UNCTAD and the World Bank Group.

Toolkit CD

There are a number of worksheet and database templates to help you complete each of the modules in the toolkit. Wherever you see this symbol there is a template available to help you complete the activity described. All the templates are available on the ICMM website at www.icmm.com/mpdtoolkit.



CD versions of the toolkit are available on request
– email us at info@icmm.com.

A photograph of two people outdoors. On the left, a man wearing a wide-brimmed hat, glasses, and a light-colored shirt is smiling and looking towards the right. On the right, a woman wearing a dark high-visibility vest over a dark shirt is looking at a large document or map held by the man. The background shows trees and a clear sky. The entire image has a light teal overlay.


“THE TOOLKIT FOCUSES ON SIX THEMATIC AREAS WHERE PREVIOUS WORK HAS INDICATED THE POTENTIAL FOR PARTNERSHIPS BETWEEN COMPANIES AND OTHER STAKEHOLDERS TO ENHANCE THE POSITIVE CONTRIBUTION AND MINIMIZE NEGATIVE IMPACTS:

- 1. MINING AND POVERTY REDUCTION**
- 2. MINING AND ECONOMIC DEVELOPMENT: REVENUE MANAGEMENT**
- 3. MINING AND ECONOMIC DEVELOPMENT: REGIONAL DEVELOPMENT PLANNING**
- 4. MINING AND ECONOMIC DEVELOPMENT: LOCAL CONTENT**
- 5. MINING AND SOCIAL INVESTMENT**
- 6. MINING AND DISPUTES RESOLUTION.”**

Introduction
Using the toolkit

TOOLKIT
GUIDE



A woman and a young child, both wearing traditional Peruvian hats and shawls, are looking at a computer monitor. The woman is in the foreground, looking towards the screen. The child is behind her, also looking at the screen. The background is a wall covered with various educational posters and diagrams, including one that says "INGO" and another that says "VICIAL". The entire image has a warm, reddish-orange tint.

**“I WOULD LIKE TO COMMEND
THE INITIATIVE THAT LED
TO THIS SEMINAL STUDY
WHICH DEMONSTRATES
THAT NATURAL RESOURCE
ENDOWMENT, ECONOMIC
DEVELOPMENT AND SOCIAL
ADVANCEMENT CAN AND
SHOULD BE COMPLEMENTARY
CONCEPTS.”***

* Glodomiro Sanchez Mejia, Ex-Minister of Energy and Mines, Peru

Introduction



The Mining: Partnerships for Development Toolkit provides useful methodology for evaluating the positive and negative economic and social effects of mining at the local, regional and national levels in mining countries. These methods will be of relevance in particular to the increasing numbers of lower and middle income economies that have high levels of mineral dependence.

It can be used by mining companies, mine managers and any other organizations and agencies that have an interest in the relationship between mining and social and economic development outcomes. These will include host-country governments, development agencies and development-oriented non-governmental organizations (NGOs). Experience has shown that applications of the toolkit are more effective if organized in partnership with both mining companies and other stakeholders.

The application of the toolkit allows users to develop an improved understanding of what issues, policies and practices may be helping or preventing host communities, regions or the country from benefiting more fully from mining. However, its use does represent a significant commitment of time and resources, and users are advised to tailor their expectations of the likely benefits to the level of resources that they are able to commit.

The toolkit provides a common analytical framework that helps to ensure that comparisons can be made of mining's contributions and impacts across different countries. It has been tested in five countries since 2005 – Chile, Ghana, Peru, Tanzania and the Lao PDR. ICMM is actively seeking more countries to participate in future applications of the toolkit so that the evidence base can be further extended.

Introduction

continued

About Mining: Partnerships for Development

ICMM's Mining: Partnerships for Development initiative focuses on enhancing mining's economic and social contribution. It supports the formal commitment made by ICMM member companies to actively support or help foster multi-stakeholder development-focused partnerships in countries where they are active.

Mining is economically critical for millions of the world's poorest people with some 50 countries being significantly dependent on mining. Yet mineral wealth does not always mean positive economic growth – the so-called "resource curse" theory.

In 2004, ICMM began the Resource Endowment initiative in collaboration with UNCTAD and the World Bank Group. It developed a substantial body of research on why some countries have avoided the "resource curse" and developed practical recommendations for companies, governments and civil society. It was overseen by an independent international advisory group including the Head of the UN Global Compact and a former Prime Minister of Senegal.

The Resource Endowment initiative showed that the "resource curse" is not inevitable. Mining investments can drive economic growth and reduce poverty nationally and locally. However, companies alone cannot unlock the development benefits from mining – governance is key and multi-stakeholder partnerships can help fill capacity gaps.

The findings were based on the application of ICMM's *Resource Endowment Toolkit* (April 2006) in four countries – Chile, Ghana, Peru and Tanzania. The toolkit has been now been revised, extended and re-published as the *Mining: Partnerships for Development Toolkit*.

The new version of the toolkit responds to a clear need in different parts of the world for a more systematic and objective way to quantify and agree ways to enhance mining's economic and social contribution. It is currently being applied in a number of countries and can be used by mine managers and those interested in promoting economic and social development (host governments, development agencies and development-focused NGOs).

For more information on how to participate in this work, visit www.icmm.com/mpd or email us at info@icmm.com.

Introduction

continued

Guidelines for toolkit users

The toolkit is designed to be used on a collaborative basis with a range of key stakeholders. Experience has shown that the insights gained and the potential subsequent development of new partnership ideas are enhanced by a broad engagement with the work by other parties and especially governments, local communities, development agencies and some specialized NGOs.

The early applications of the toolkit have been led by mining companies. However, the lead can be taken by a party other than a mining company. In such cases, active engagement with some of the mine operations in the country will be needed in order to gain access to the mine-specific data that is not in the public domain.

The outcomes from implementing the toolkit will typically be a country case study and one or more workshops to communicate the findings of the country case study. Depending on your needs, you may not find it necessary to develop an entire country case study.

The toolkit comprises a series of eight modules and an addendum on taxation. It has been designed to be simple without placing an excessive demand on time or cost, and, as far as possible, to be implemented with in-country resources. Some of the more technically complex methods of identifying “impact” (such as local-level cost-benefit analysis) are therefore not included.¹

You will need to decide which modules to implement as part of the design process for your project (see Figure 1). The modules can be implemented individually or in combination but there are advantages in attempting as full an implementation as your available resources allow.

Each of the eight modules includes worked examples or explanations of how to gather the necessary data and analyze and present the findings. Most modules also include annexes that provide specific details or further elaboration on some part of the process (e.g. guidelines for field interviews, how to measure employment impacts or how to organize a workshop).

¹ For further guidance, see a *Guide to Cost-Benefit Analysis of Major Projects*, available at <http://ec.europa.eu>, and the DAC Guidelines and Reference Series on Applying Strategic Environmental Assessment, available at www.oecd.org.

Figure 1: The eight modules of the toolkit

MODULE ONE: Mining and the host country
Preparing an overview of the country's geography, population, settlement, land use, economy and recent history with an emphasis on characteristics that influence or are influenced by the economic and social impact of mining: economic performance, political stability, quality of governance, dependence on mining, and poverty and human development.
MODULE TWO: The participating mining operation and its economic and social initiatives and partners
Developing a profile of the participating mining operation(s) and the local communities in which they operate. This should include a profiling of any partnerships already set up by the mining operation(s) for economic and social development across the six partnership themes.
MODULE THREE: Measuring the mining industry's contribution to the host country
Understanding how the host country's broad-based economic growth (of incomes, GDP, exports etc) and social development have changed in the period during which mining has assumed a significant relative importance.
MODULE FOUR: The proximate aspects of governance that help or hinder mining's economic and social performance
Identifying elements of the host country's quality of governance and macroeconomic management that could affect the economic and social benefits of mining. The term "proximate" is used to distinguish this from the more detailed probing on political economy processes in module seven.
MODULE FIVE: Measuring the participating mine's positive and negative contributions to local communities
Measuring in detail the participating mine's economic and social impacts (employment, procurement of locally supplied goods and services, training, social and infrastructure provision, net impact) at the local level.
MODULE SIX: Analyzing the life cycle impact of the participating mine on the host country's macroeconomic aggregates
Analyzing the participating mine's contributions to GDP, government revenues, and balance of payments over the life cycle of the mine, looking forward to include the likely impacts of future expected operations and well as those of the present and recent past.
MODULE SEVEN: Impact of mining on governance
Examining the direct and indirect influence of mining on governance structures, institutions and policy choices at different levels of government (national, regional and local).
MODULE EIGHT: Communicating your findings
Preparing the country case study (or mining sector issues paper) and encouraging dissemination of and debate about its findings via a workshop.
TOOLKIT ADDENDUM: Guiding principles regarding minerals taxation
Understanding the appropriate fiscal framework for mining including the importance of an equitable allocation of rents and transparent reporting according to EITI standards and engaging with governments to promote stable tax systems with minimal complexity.

Introduction

continued

Modules one to six can be implemented individually, as a set of two or more modules or in full and can be implemented in the order you choose. Module seven – whose value relies on an understanding of what has happened in the country over the period since mining started – will be much more informative if you have at least done module four and, ideally, modules two, three, five and six as well.

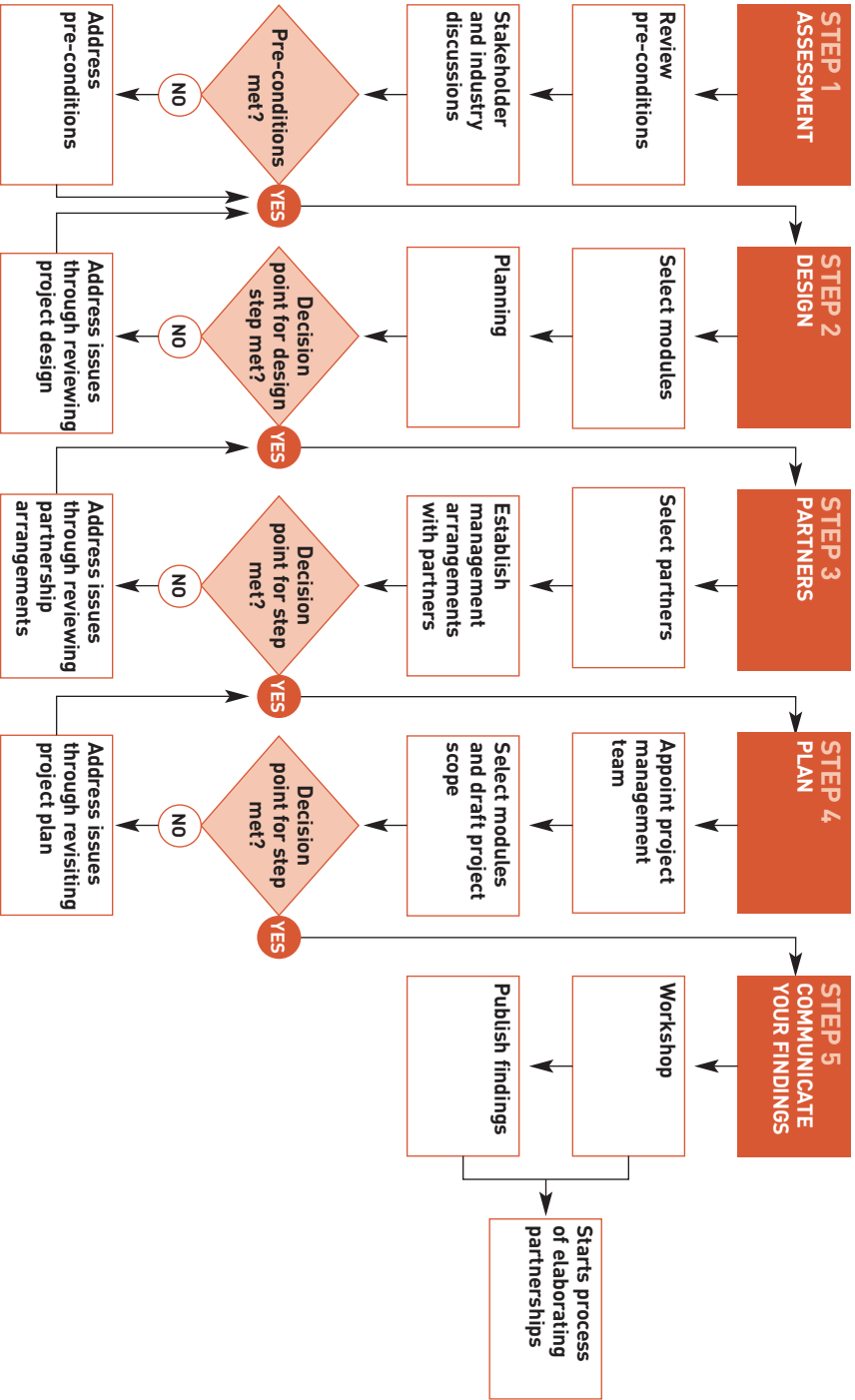
Module eight – Communicating your findings – is the one module that should be applied by all toolkit users. Implementing modules one to seven will provide the evidence needed to prepare a comprehensive country case study. However, even if you only apply a selection of modules, you should aim to produce a shorter mining sector issues paper.

The addendum to the toolkit looks specifically at the issue of mineral taxation because the fiscal stance towards mining is so vital both to the sustainability of mining in any country and to its broader economic and social development. That fiscal stance is often contentious and not well understood. In some circumstances, you may decide to launch a specific study into the issue in parallel with your work on the toolkit.

The toolkit is not a substitute for the environmental and social impact studies that most mining companies undertake before beginning a new mining development.² Neither does it seek to replace the often intensive consultation processes with stakeholders that are involved in carrying out such studies. If, however, for your purposes these additional activities and methods are required, then the studies can be commissioned in parallel to implementing the toolkit.

2 ICMM's *Good Practice Guidance for Mining and Biodiversity* (2006) provides tools and practical considerations for assessing the environmental and social impacts of mining on biodiversity, available at www.icmm.com.

Illustrative flow chart to set out key steps in using the toolkit – with exit criteria for each step





STEP 1: Assessment

Ask yourself the following questions before you decide to use the toolkit:

1. *Are there current issues in your country that the toolkit is suited to help you understand?* For example:
 - Is there a preoccupation among stakeholders about narrow definitions of “benefit sharing”?
 - Does the discussion of tax revenues dominate the agenda?
 - Is there a sense that not enough jobs have been created or that traditional livelihoods have been damaged?
 - Are there any potential opportunities to better integrate the mine into the broader economy that are being missed?
 - Are the needs of different stakeholders really understood and addressed?

If yes, then focus your scope on the corresponding modules of the toolkit.

2. *Will the toolkit results have broad, rather than narrow application?* For example, the toolkit is not equipped to quantify or analyze problems of an environmental nature; neither is it designed to add new light on issues such as forced resettlement or displaced livelihoods. These are specialized areas, and appropriate reference sources are provided. However, where these issues have already been subject to an economic or social impact assessment, then the application of the toolkit can certainly embrace the key results from these.

3. *Is there sufficient commitment in government, among companies and other organizations in your country?*

The effective implementation of the toolkit requires commitment – to data access and collection, to the subsequent dissemination of the country case study or other findings, and to frank discussions on conclusions and priorities for action across the six partnership themes. If this commitment is missing then you should probably focus efforts first on building the necessary commitment.

4. *Are there adequate financial and personnel resources to manage the process and undertake the analysis in-country?* A competent team of local economic and financial analysts and survey specialists will be needed, supplemented in all cases by assistance from designated points of contact in the mining companies and other stakeholder organizations. Additional external assistance may be requested in some cases from ICMM and similar international sources to help guide the early stage design of the work and the presentation of results. The services of a competent political economist would also be of value in most country cases.

Using the toolkit

continued

STEP 2: Design

Follow these steps to determine the scope of work you want to accomplish via your use of the toolkit:

1. Determine what you want to accomplish with the findings of the toolkit work and how they will be used and select modules accordingly. If you are only looking for a narrow set of specific insights – e.g. about the use of mineral revenues or about local employment – then you need work only with a selection of the eight modules.
2. Try to involve more than one mine in the process, as that will provide more information sources for the required mine-specific data and allow differences between mines to be identified and assessed. While the toolkit can be applied to just one mine, the value of implementing the toolkit increases with the number of mines involved.

The involvement of multiple mines clearly means that the evidence base created will be much more representative of the industry as a whole and less likely to suffer from any biases associated with using just a single mine. The buy-in of senior management from participating mining companies, and where possible any chamber of mines (national and/or regional mining association), is therefore essential to ensure co-operation both with other mines and with any independent research organization that is commissioned to implement the toolkit. Thus, in most cases where the toolkit uses the term “a mine”, “a mining company”, or “a mining project”, the term is intended to encompass the plural as well as the singular.

3. Prepare an initial action plan for disseminating the findings. This should include some form of face-to-face meetings with those other parties who would ideally be involved in helping you to assemble the necessary information or who would be likely to be interested in the findings.

Using the toolkit

continued

STEP 3: Partners

Based on your goal(s), identify one or more partners with whom you would like to work. If you represent a mining company, you might choose to work closely with key departments of the government or with an NGO or an international donor that is likely to have a shared interest in your chosen goals. If you represent an NGO or government department, you will need at least one mining company to work with you, because much of the required data to fully implement the toolkit is available only from the corporate data files. Partners need to have some shared common objectives but they need not be in full agreement about the key hypotheses that they expect the toolkit to verify. To the extent possible all partners should engage in the work with open minds and allow the evidence as it accumulates to tell its own story.

Hold an early meeting (or meetings) or workshop(s) with your chosen partner(s) to agree on the goals and the methods for conducting the work and to review the toolkit scope of work. This may require expanding or contracting the original goal, but keep it focused on the modules of the toolkit.

STEP 4: Plan

Follow these steps to develop a project plan:

1. Appoint a project management team with representatives from each partner organization. Agree on a governance system for the partnership and how to allocate roles and responsibilities for the work.
2. Decide which modules will or can be implemented in-house and which will or may require a contract with an external research organization. Different modules can be delegated to different individuals in your team. Much of the toolkit research is desk-based, but consultations with communities and meetings with providers of data (particularly data from the participating mining operations) will also be required, particularly in carrying out modules five and six. There is guidance within each module to help you decide the best course of action.
3. Write a brief that covers the scope of work for each module including reference to the modules you wish to implement via a contract with third party organizations. The brief should reference the complete toolkit.
4. For the sake of credibility and value, you should adopt an objective and broad perspective on the scope of the investigation, the questions to be asked of interviewees and the representation of their views.
5. Select a research organization(s) with the interests, skills and capacity to implement the required toolkit modules that cannot be done in-house in a credible and unbiased manner. Seek advice from ICMM if you have questions on this matter.

Using the toolkit

continued

6. Identify supplementary data sources for your research. The toolkit relies fairly heavily on data from mining companies' operations, but it also explains how to combine these with and interpret data from public sources, such as the International Monetary Fund (IMF), the United Nations Development Programme (UNDP), and the World Bank, as well as from the mining industry itself. Non-mining sources will cover a range of issues, such as revenue payments to governments, governance, and household poverty. The toolkit seeks a balanced approach to data collection by ensuring that assessments can be undertaken even when the available economic and social data cannot support more sophisticated quantitative analysis.
7. Decide on the type of written output you plan to produce and plan the inputs and instructions to researchers accordingly. For example, if you have decided to write a full country case study, you will need a report that can bring together the evidence from modules one to seven inclusive. The information and analysis wherever possible should be organized around the six partnership themes.
8. Whether in a workshop, in your written country case study report, or in a shorter mining issues paper, try at an early stage to identify key issues. For example, your evidence base should normally establish the rationale for partnerships based on one or more of the six partnership themes. But the details of how such partnerships might be formed – and what their scope would be – will need to be developed through the research activity.

STEP 5: Communicate your findings

The five country case studies to date have shown that workshops are far better than remote methods (such as printed reports or web sites) for disseminating toolkit findings, encouraging debate, and engaging partners. However, the printed reports or web sites do provide a valuable complementary resource in all cases. For both workshops and written reports, it is important to avoid overly technical language so that a wide audience can understand the main aspects of the debates.

You are encouraged to use workshops and to seek attendance by as many relevant business, government and civil society stakeholders as are able or willing to take part. Workshops can add diversity of opinion (and balance of views), encourage the shared ownership of non-contentious information (and give focus to debate) and promote an understanding of mutual interests (and motivate prospective partners to action). However, they do add greatly to the time and costs of preparation, especially in cases where some important stakeholders may show resistance to participation and need to be encouraged to do so.

Mining and the host country

ANNEX 1
Example of a country
profile (Guinea)

MODULE ONE



“POLITICS, ECONOMICS, AND GOVERNANCE ARE ALL LIKELY TO HAVE A BEARING ON THE CONDUCT OF THE MINING PROJECT AND ITS ECONOMIC AND SOCIAL CONTRIBUTION.”



Mining and the host country



Purpose

Module one sets the country context for the benefit of subsequent modules of the toolkit. It provides an overview of the characteristics of the host country that might illustrate how the political economy has evolved to the present day and how that, in turn, may influence or be influenced by mining.

The overview will provide an insight into the host country's economy, governance and current issues and may reveal new partnership opportunities, all of which will be useful in other modules in this toolkit. Whether you are planning to write a country case study or shorter report that draws on only a few of the modules, you will probably want to write some background material to set the context. Module one provides the framework for organizing this information.

Gathering the data

Set the context with a brief description of the host country's geography, physiography, broad climatic and vegetation zones, and natural resources; population, settlement and land use; demographics (population, ethnicity, education, health); economy, politics, recent history, bordering countries and geopolitical context. Address these general characteristics to the extent necessary to set the mining industry in context, with your focus on the main characteristics that influence or are influenced by the economic and social impacts of mining, including:

- the economic base: land, water, living and mineral resources;
- economic performance (past and present);
- mining past and present in the country and its environmental, economic and social impacts;
- quality of governance;³
- political stability; and
- poverty and human development, including human rights.

These characteristics will or could have a bearing on how mines are planned, built, operated and judged.

³ "Governance consists of the traditions and institutions by which authority in a country is exercised. This includes the process by which governments are selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them." [Source: <http://info.worldbank.org/governance/wgi/index.asp>.]

Mining and the host country

continued

Data sources might include:

- BBC News country profiles (http://news.bbc.co.uk/2/hi/country_profiles/default.stm);
- US Central Intelligence Agency World Factbook (www.cia.gov/library/publications/the-world-factbook);
- IMF Staff Reports under Article IV (www.imf.org);
- World Bank's Country Briefs available under "Highlights" on each country's page (www.worldbank.org/countries);
- World Bank's aggregate and individual governance indicators for six dimensions of governance (<http://info.worldbank.org/governance/wgi/index.asp>);
- United Nations Development Programme's Human Development Report statistics, including the human development index (<http://hdr.undp.org/en/statistics>);
- Bertelsmann Foundation's Country Reports (www.bertelsmann-transformation-index.de/en/bti/country-reports);
- World Health Organization's country profiles for countries that are members of the United Nations (www.who.int/countries/en);
- United Nations Statistics Division of the Department of Economic and Social Affairs country profiles (<http://data.un.org/CountryProfile.aspx>); and
- Organisation for Economic Co-operation and Development information by country or topic under "Browse" (www.oecd.org).

You may also elect to pursue themes uncovered from these broad sources (e.g., gender politics and activism) through other sources, such as the national press of the host country.

How to present your findings

Module one should present a discursive country description of two to three pages. Differences between countries preclude the definition of any standard pro-forma structure, so you should exercise your country knowledge and judgment.

Annex 1 provides an example. The four country case studies prepared under the ICMM's Resource Endowment initiative provide further, more complete examples of module one content and structure.⁴

⁴ www.icmm.com/page/1409/resource-endowment-initiative.

Example of a country profile (Guinea)

Example description of country context (Guinea)

Environment, resources, land use and settlement

At 245,800 km², Guinea is roughly the size of the United Kingdom and slightly smaller than the U.S. state of Oregon. There are 300 km of coastline and a total land border of 3,400 km. Its neighbours are Côte d'Ivoire (Ivory Coast), Guinea-Bissau, Liberia, Mali, Senegal and Sierra Leone. The country is divided into four main regions: the Basse-Coté lowlands, populated mainly by the Susu ethnic group; the cooler, mountainous Fouta Djallon that runs roughly north-south through the middle of the country, populated by Peuls; the Sahelian Haute-Guinea to the northeast, populated by Malinké; and the forested jungle regions in the southeast, with several ethnic groups.

Upper Guinea and Middle Guinea remain the country's poorest regions. This situation is the direct result of the influx of refugees received since the outbreak of hostilities in Liberia and in Sierra Leone, as well as the rebel attacks in 2001. This has damaged the environment, destroyed considerable socio-economic infrastructure and caused enormous losses in household assets (livestock and plantations). In addition, industrial and toxic solid waste (biologically contaminated waste from hospitals, laboratories, slaughterhouses and mining enclaves) is generally thrown into the natural environment, watercourses or the sea, receiving the same treatment as other waste.⁵

Guinea has abundant natural resources, including 25% or more of the world's known bauxite reserves. Guinea also has diamonds, gold, and other metals. Bauxite and alumina are currently the only major exports. Other industries include processing plants for beer, juices, soft drinks and tobacco. Agriculture employs 80% of the nation's labour force.

continued

⁵ International Monetary Fund, January 2008, IMF Country Report No. 08/7.

Example of a country profile (Guinea)

continued

Economic performance (past and present)

Guinea is a low-income country of huge mineral wealth. However, the per-capita GDP in 2010 of US\$395 (current prices) compares poorly even with the sub-Saharan African average. In 2007 Guinea ranked 170 out of 182 countries on the UNDP 2007/08 human development index (HDI).⁶ Growth rose slightly in 2006-08, primarily due to increases in global demand and commodity prices on world markets, but the standard of living fell. The Guinea franc depreciated sharply as the prices for basic necessities like food and fuel rose beyond the reach of many Guineans.⁷

Quality of governance

From 1996 to 2007, Guinea scored low on all six measurable dimensions of governance in both absolute terms and relative to the averages set by sub-Saharan Africa.⁸ Poor governance provides one explanation for poor growth, and the 2008 Country Report of the Bertelsmann Foundation found a number of specific factors to support this view.⁹

Political stability

The Guinea economy has performed poorly after independence from France in 1954. The macroeconomic problems following the early Sekou-Toure years lingered uncorrected by only lacklustre structural adjustment in the mid-1980s and early 1990s; and civil unrest was quite common, even at that stage. By 2006, worsening economic performance and stalled reforms led to more general strikes; and these, in turn, led eventually to the new Government of Consensus in March 2007 headed by Prime Minister Lansana Kouyaté. This promised much; but in May 2008, the new Prime Minister was dismissed by the President, Lansana Conté. Further military and civil unrest has since ensued around various issues, including a large hike in petroleum prices.¹⁰

continued

6 UNDP Human Development Report (2009).

7 The CIA World Factbook, Guinea, retrieved 28 October 2010.

8 Worldwide Governance Indicators project (<http://info.worldbank.org/governance/wgi/index.asp>).

9 Bertelsmann Stiftung, *BTI 2010 – Guinea Country Report*. Gütersloh: Bertelsmann Stiftung, 2009.

10 International Monetary Fund, January 2008, IMF Country Report No. 08/7.

Example of a country profile (Guinea)

continued

Mining past and present

Mineral production, particularly of bauxite and alumina, has been central to Guinea's economic development since independence. The UNCTAD 2007 World Investment Report shows Guinea's economy to be the most mining dependent in the world, with an average ratio of mineral to total exports of 89.8% over the period 2000 to 2004.¹¹ This dependence is the more remarkable because the growth of the mining sector in the overall economy has in fact been slower than the growth of overall GDP: the IMF Selected Issues Paper (January 2008) estimates that the GDP share of minerals fell from 85% of the total in the early 1990s to less than 70% by the period 2002 to 2005.¹²

The mining industry is playing an important role in the socio-economic development of the country. Mining is the most important export commodity and source of revenues for the Government, and agreements signed recently are likely to involve billions of dollars and consolidate the sector's position as the main source of foreign direct investment.¹³

Relative to the country's very low base, the regions least affected by poverty in Guinea are those where new mines and mineral transport and processing infrastructure are proposed or are being built. This may reflect the positive effects of earlier phases of mineral production in these locations. These regions have at least relatively better economic infrastructure and basic social service facilities and are relatively well endowed with natural resources. They are also quite close to the capital with its comparatively better educated and trained population.

continued

11 World Investment Report 2007
(www.unctad.org/en/docs/wir2007_en.pdf).

12 Guinea: Selected Issues and Statistical Appendix,
IMF Country Report No. 08/20
(www.imf.org/external/pubs/ft/scr/2008/cr0820.pdf).

13 Community Development Framework Study for the
Mining Sector in the Republic of Guinea, (2007).

Example of a country profile (Guinea)

continued

Poverty and human development

According to the UN Human Development Report (2006), 40% of the population live below the income poverty line. In 2008 the population was estimated at 10.28 million and expected to increase to more than 11 million during 2011.

After the implementation of the economic and structural reforms of 2003–06 veered off course, with a resultant drop in income of 0.6% per head, the economic slump was aggravated by the global financial crisis in 2007. Inflation rose to more than 22%, along with a depreciation of the currency of 18%. This was followed by deterioration in living standards, reflected in a rise in the poverty rate from 49% in 2002/03 to 53% in 2007/08.

In the face of these difficulties, Guinea launched reforms in 2007 under its second Poverty Reduction Strategy Paper (PRSP 2), supported by the Poverty Reduction and Growth Facility (PRGF) of the International Monetary Fund (IMF) and the intervention of other technical and financial partners. The reforms bore fruit in 2008, despite a difficult international context; and public and private investment rose by 14%. As a result, economic growth accelerated from 1.8% in 2007 to 4.9% in 2008, driven by the improvement in the terms of trade resulting from the surge in mineral raw material prices and the fall in the price of oil.¹⁴ However, a reduction in the proportion of people living below the income poverty line has yet to be seen.

14 African Economic Outlook: see www.africaneconomicoutlook.org/en/countries/west-africa/guinea/.

**The participating
mining operation
and its economic
and social initiatives
and partners**

ANNEX 2
**Six priority partnership
themes for socio-economic
programs**

MODULE
TWO





**“THE SIX THEMES CONSTITUTE
A BROADLY APPLICABLE
CATEGORIZATION OF MINING’S
ECONOMIC AND SOCIAL
CONTRIBUTION.”**

The participating mining operation and its economic and social initiatives and partners



Purpose

Module two provides a profile of the participating mining operation,¹⁵ of the main partnerships set up by the mining operation to bring economic and social development, and of the main initiatives undertaken to date.

Gathering the data

Module two requires two separate data-gathering steps:

- Step 1: profile of the participating mining operation and local communities; and
- Step 2: overview of the economic and social performance of the participating mining operation and its partnership arrangements and initiatives across the six priority partnership themes.

STEP 1: Profile of the participating mining operation and local communities

First, gather sufficient data to provide a brief, non-technical description of ownership, financing, investments, production levels, and environmental footprint of the mining operation. This is essentially the information on which the mining company has relied in its internal management decisions about project strategy, scope, design and operations. Much of this information will also have informed the decisions of regulators and financiers; and their respective roles in, and influence on the scope of, the project would be informative if available. The relevant documents will normally be available from a company's finance and environmental departments, annual report or website.

Aim to describe each mining operation and set its scale and scope in the host-country context. Issues to cover will typically include:

- ownership structure, including minority partners;
- physical location, including the area occupied by the mine and related infrastructure (such as a railroad or port) and its previous use;

¹⁵ As discussed in "Using the toolkit", participation by more than one mining operation in the implementation of the toolkit is strongly encouraged. However, for simplicity in presentation, the toolkit assumes just one mine, mining operation, or mining company is involved.

The participating mining operation and its economic and social initiatives and partners

continued

- development milestones, ore reserves, identified resources and projected mine life, regional mineralization, exploration potential and programs, and further development potential and factors;
- production, markets and customers;
- mining and waste management: open pit or underground, environmental properties of mine materials, water balance and waste management strategy, specific mine waste and tailing management arrangements, and zone of direct environmental impact;
- actual capital investments to date or planned and the likely level of the “staying-in-business” investments, including local and regional exploration to extend existing deposits or find new ones;
- similar information for other local mines (i.e., in the broad region of the mine under study); and
- recent or planned mine closures in that same area or nationally.

Second, gather information on the communities directly (and indirectly) affected by the operations of the mine. These will be either villages or towns near the mine or those along the main supply routes as these are most likely to be positively or negatively affected by the mine’s activities. The aim is to get an idea of the number, size and proximity of villages in the area, as well as the key characteristics of those living in these communities.¹⁶ If possible, information

.....
 16 You may want to draw comparisons with the situation in the rest of the country; i.e., is there an evidence base for saying whether the communities in the mining area are ethnographically different, relatively better off, or more economically or socially deprived than the rest of the country?

on changes in the communities since mining started in the area would be helpful, although this information may be difficult to find.

National census statistics may be able to provide some basic information, such as population size in the communities or the main economic activities in the region. Any previous fieldwork and qualitative or quantitative research work conducted in the area will also be helpful. If no other information is available, the community section will need to rely on information from reports produced by the mining company. For example, social impact assessments, participation agreements, community development plans or community engagement plans.

Information on the affected communities should typically include:

- the number of villages or towns in the area, their proximity to the mine and the size of their populations;
- the languages spoken by communities, the main ethnic groups present (including whether there are any tensions between groups), major cultural characteristics that may impact upon the way the communities interact with the mines activities (e.g., nomadic lifestyles may mean that there are more disputes over the use of land in the area);
- the level and quality of infrastructure and services in the area (is the area relatively more or less well-serviced than other areas in the country?);
- poverty, unemployment levels and literacy levels of communities (if significantly different from the rest of the country); and

The participating mining operation and its economic and social initiatives and partners

continued

- the main economic activities of those living in the communities (including an outline of any artisanal mining activities in the area), information on how many people in the local community are dependent on mining activities for their livelihoods (and, if the data already exists, an outline of any changes in economic activity since the commencement of mining in the area).

STEP 2: Overview of economic and social performance of the participating mining operation across the six priority partnership themes

Step 2 describes the current activities and assesses the performance of the participating mining operation across the six priority partnership themes that the pilot applications of the toolkit have shown to cover the principal parameters of economic and social development:¹⁷

1. mining and poverty reduction;
2. mining and economic development: revenue management;
3. mining and economic development: regional development planning;
4. mining and economic development: local content;
5. mining and social investment; and
6. mining and disputes resolution.

These six themes are described in Annex 2.

A mining operation's net positive contribution to the six themes will, for the most part, require multiple partnerships between different mining companies and between mining companies and other organizations. Thus, Step 2 also develops

information about the economic and social partnerships the mining operation has established with government (local, regional or national), other mining operations or companies, donor organizations, non-government organizations, community organizations, and local communities.

Gather information to describe the policies, programs, and management and monitoring arrangements established by the mining operation to enhance the positive and mitigate the negative economic and social impacts of its project.¹⁸ Source documents will include project social impact assessment reports, community development agreements, and social and environmental monitoring reports. These will be available from the mining operation's external relations or community relations team. Wherever possible, you should reference relevant pre-project baseline data and any targets that have been set unilaterally or in agreement with the authorities. Other data sources include local-level social reports and other public reports on the initiatives of the mining operation and its partners. A starting point

¹⁷ The ICMM's Resource Endowment initiative identified six priority partnership themes (based on experience in Chile, Ghana, Peru and Tanzania), where partnerships between companies and others may help to enhance positive socio-economic outcomes and minimize adverse outcomes from mining. Experience has demonstrated that the six themes constitute a broadly applicable categorization of mining's economic and social contribution; and, where possible, you are encouraged to organize findings using these themes.

¹⁸ For further information on how resolving local-level concerns and grievances can mitigate negative socio-economic impacts, see ICMM's publication *Human Rights in the Mining & Metals Industry: Handling and Resolving Local Level Concerns and Grievances*, October 2009, available at www.icmm.com.

The participating mining operation and its economic and social initiatives and partners

continued

should be the project's community development agreement (if one exists).¹⁹

An initial list of partnerships can be derived from the participating mine and its partners' websites and social reports. These sources may list but not explain partnerships that have since failed; however, it is important to determine why the failure has occurred and to include the reason in the description of the failed partnership. Published sources may not have the answers, and the question may need to be pursued in interviews with stakeholders in module five, Step 1 (or now during module two if you feel that the issue warrants immediate attention).

As well, the views, and especially the critical views, of both partners and communities should be sought and included. Any independent evaluations of any programs would provide particularly relevant evidence. If documentary evidence is not available, then, as above, you will need to decide whether to leave interviews to module five or to undertake sufficient interviews now to flesh out your module two data.

The information should be broadly pursued and organized under the six partnership themes. Mining companies and partnership organizations will typically define, manage and communicate their economic and social impacts in their own terms. Therefore, you will need to translate their programs and policies into a common understanding of these six themes. For further guidance, see

19 To understand the issues, challenges and approaches to community development in the mining sector, see *Community Development Framework Study for the Mining Sector in the Republic of Guinea*, available at <http://commdev.org>.

ICMM's *Mapping in-country partnerships*, which describes a range of past and current partnership initiatives and organizes them under the six themes.²⁰

When identifying and describing partnerships, it will be the specific social or community development initiatives that first come to mind, such as malaria eradication, HIV/AIDS programs or support for local schools. Important as they are, however, they constitute just one element of a much broader contribution, which many people, including those within the mining company, often do not appreciate fully.²¹

In other words, it will always be the case that the main economic and social contributions of mining companies will emerge from their core business processes. These processes should not be difficult to describe: paying taxes; employing people; procuring goods and services; skills development; contributing to infrastructure development;²² and implementing environment, health and safety programs.²³

20 *Mapping in-country partnerships*, ICMM, February 2010, available at www.icmm.com.

21 See *Strategic Community Investments: A Quick Guide* (2010) produced by the International Finance Corporation and available on the CommDev website (<http://commdev.org>).

22 Infrastructure (such as roads, water supplies or power supplies) that has been developed by large mines can make important economic and social contributions, depending on the degree to which the infrastructure also meets the needs of and is made available to communities.

23 ICMM's *Good Practice Guidance on Health Impact Assessment* (2010), which sets out an overview of how mining and metals operations can affect the health and wellbeing of local communities and describes typical health impact assessment processes, is available at www.icmm.com.

The participating mining operation and its economic and social initiatives and partners

continued

For module two, therefore, be mindful of the participating mine's incidental, but often very substantial, positive influence via the implicit partnerships that are to be found in day-to-day commercial arrangements between the mine and local organizations.

This module of the toolkit does not require you to make value judgments about a company's future priorities: focus instead on an analysis of the success of current efforts in terms of the six themes.

Box 2.1, The Role (and Challenges) of Partnerships in the Economic and Social Contribution of Mining, is based on recent ICMM research²⁴ and discusses the potential value of partnerships in the mining sector.

How to present your findings

For Step 1 (the description of the mining operation and local communities), the aim is to describe the mine and local communities for a broad, non-technical audience. Numerical information – for example, ore reserves, production and mine life or statistics about the communities – can be inserted selectively into an otherwise generally discursive narrative about the mine and the affected communities.

For Step 2 (overview of economic and social performance), provide the mining operation's own view of its overall contribution to economic and social development and how this fits with the work of other organizations within and beyond government.

The economic and social contributions of mining operations arising from core business processes (such as paying tax and employing people) should be described in broad terms; they will be quantified in module five.

Provide narrative descriptions of any existing partnerships across the six priority partnership themes. Your resources may limit you to a simple listing and brief profiles of initiatives and partnerships. However, the application of the toolkit in Ghana has shown it to be worthwhile, if time and resources permit, to go a step further and develop a partnership database, which can be maintained and gradually updated over time. The database could be structured as indicated by the example partnership database in Annex 2, an interactive form of which is provided on the CD included with the toolkit. These same data – whether organized into a formal database or not – can be referred to in later modules, especially in module five.

²⁴ *Mapping in-country partnerships*, ICMM, February 2010, available at www.icmm.com.

The participating mining operation and its economic and social initiatives and partners

continued

Box 2.1 The role (and challenges) of partnerships in the economic and social contribution of mining

Mining companies are typically involved in a range of in-country partnerships. Modern mines are often located in remote, poorly governed areas; and partnerships are one way to stop a company's social programs from drifting into roles and responsibilities more typically found with government. Indeed, partnerships can go further and strengthen the capacity of existing social and government institutions to carry out these functions.

In similar vein, mining companies' participation in partnerships allows them to maximize their indirect economic and social contributions in situations in which it would be difficult, or even inappropriate, for a company to undertake the work alone. For example, partnerships reviewed for the ICMM report *Mapping in-country partnerships* included collaborating with the World Bank and the government of Madagascar on the development of port facilities, creating collaborative local and regional development planning structures in Latin America, resolving long-standing disputes in Colombia, building community health centers in South Africa, and even improving fishing livelihoods in Indonesia.

Notwithstanding these examples, ICMM's partnership research has also thrown up two constraints on their broader uptake in the mining sector.

The first is a lack of awareness of the potential benefits, and this issue is well illustrated by the difficulty of assessing the impacts of partnership. In other words, without understanding exactly how the quality of life has improved in a target community, how can a partnership claim to be effective? Making this assessment is not easy when data and analysis do not exist. It is precisely for this reason that we anticipate greater use of the toolkit and wider adoption of new metrics that look beyond the traditional categories of wealth or employment creation. A recent "business and development" seminar – organized by Business Action for Africa, the UK Department for International Development, and the Overseas Development Institute – featured several examples of new approaches to such assessments (see <http://businessfightspoverty.ning.com>).

The second constraint on partnerships is that they are hard to replicate. Successful projects respond to specific local circumstances, and it is not easy to identify the elements that worked well in one situation that are likely to be effective in another. Some organizations, including the International Finance Corporation, have addressed this issue by developing toolkits based on successful projects, such as the Mozlink supplier development partnership in Mozambique.

Six priority partnership themes for socio-economic programs

Summary

The Resource Endowment initiative (REI) studies of Chile, Ghana, Peru and Tanzania have provided the Mining: Partnerships for Development program with six “priority themes” around which partnerships between companies and others have demonstrable potential to improve the economic and social development status of communities. The six priority partnership themes are:

1. mining and poverty reduction;
2. mining and economic development: revenue management;
3. mining and economic development: regional development planning;
4. mining and economic development: local content;
5. mining and social investment; and
6. mining and disputes resolution.

The six themes will not only provide a coherent structure for a country case study, but also enable comparisons between different country case studies. You are therefore encouraged to organize findings around these six themes.

There are, however, no universally agreed definitions for these themes. In fact, different interpretations may have, in part, led to differences of opinion about mining’s actual and potential economic and social effects.

What follows, therefore, is general guidance on the issues that each theme covers. It has been based on interpretations by such organizations as the International Monetary Fund (IMF), the Organisation for Economic

Co-operation and Development (OECD) and the World Bank. You are encouraged to discuss the six themes during interviews with stakeholders in module five (or during interviews to supplement the module two information if necessary) and to develop and document operational definitions that suit the location and make sense to the people who live and work there.

The next section captures the relationships between the six partnership themes and the respective roles of potential partners. These relationships and the implicit interests and responsibilities of the partners lie at the core of the framework of Mining: Partnerships for Development.

For clarity, the six themes are discussed below one by one (even though they overlap and most partnerships will explicitly address two or more themes in the one program).

The annex concludes with an example partnership database organized around the six themes.

This annex should be read in conjunction with modules two and five of the toolkit.

Six priority partnership themes for socio-economic programs

continued

Conceptualizing the six themes

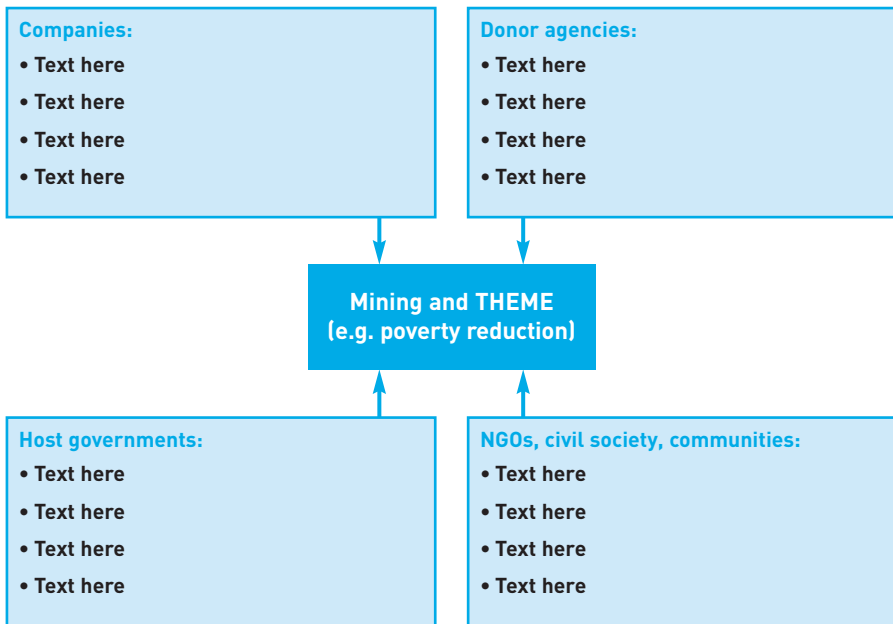
ICMM has developed the diagram, shown below, to help convey visually the roles and responsibilities of partner organizations for each of the six themes.

This diagram has proved to be a useful and relatively simple way to represent partnerships visually. The four outer boxes represent the four main partners involved in cross-sector collaboration. Indicative roles and responsibilities of the partners are listed

in the bullet points ('Text here'). The central box shows which of the six themes is being described, for example 'Mining and poverty reduction'. Note that while partner organizations have different roles and responsibilities, their efforts should all be aligned on this central challenge – the four organizations are not working in isolation.

In order to show how this diagram works in practice, this annex shows several illustrative versions, drawing on ICMM's work around the world.

Partnership diagram template



Six priority partnership themes for socio-economic programs

continued

Mining and poverty reduction

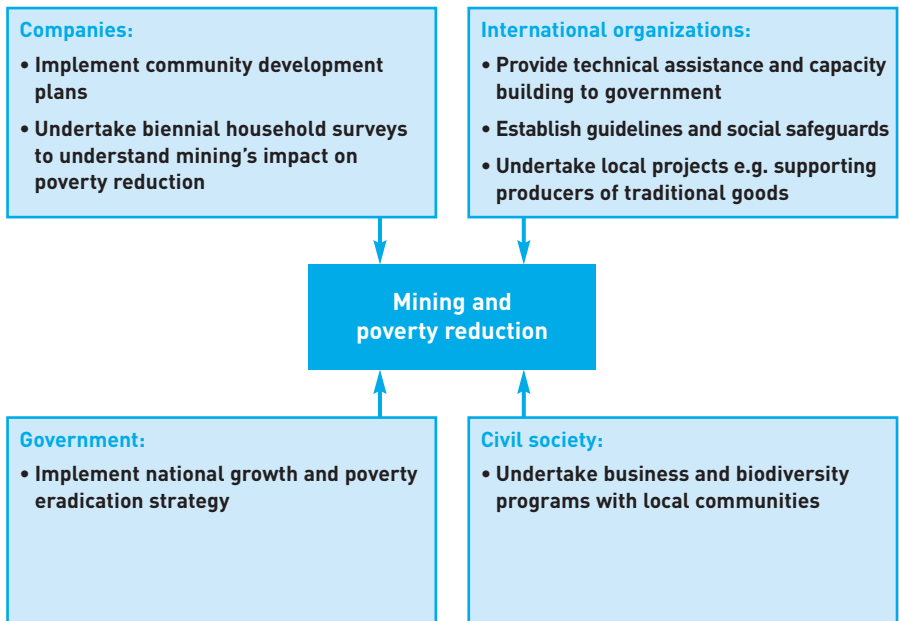
“Poverty reduction” refers to economic and social policies and programs that promote growth and reduce poverty in a community, a group of people, or a country. Such initiatives will be generally aligned – where possible (and where quantifiable) – with the UN’s Millennium Development Goals.²⁵ They may create jobs and micro-enterprises. Or they may increase access to basic goods and services for vulnerable and economically marginalized groups, such as women,

unemployed youth, indigenous communities, or small-scale miners. As well, poverty reduction will usually be a consequence of strategic social investments in other areas, such as health and education.

Large-scale mining often occurs in remote regions of developing countries, where subsistence agriculture may be the only other form of economic activity. Partnerships for agricultural improvement are therefore an important element of the mining and poverty reduction agenda.

Mining and poverty reduction partnership diagram

This diagram (a working version) comes from a mapping of partnerships in the Lao PDR



²⁵ www.un.org/millenniumgoals.

Six priority partnership themes for socio-economic programs

continued

Mining and economic development: revenue management

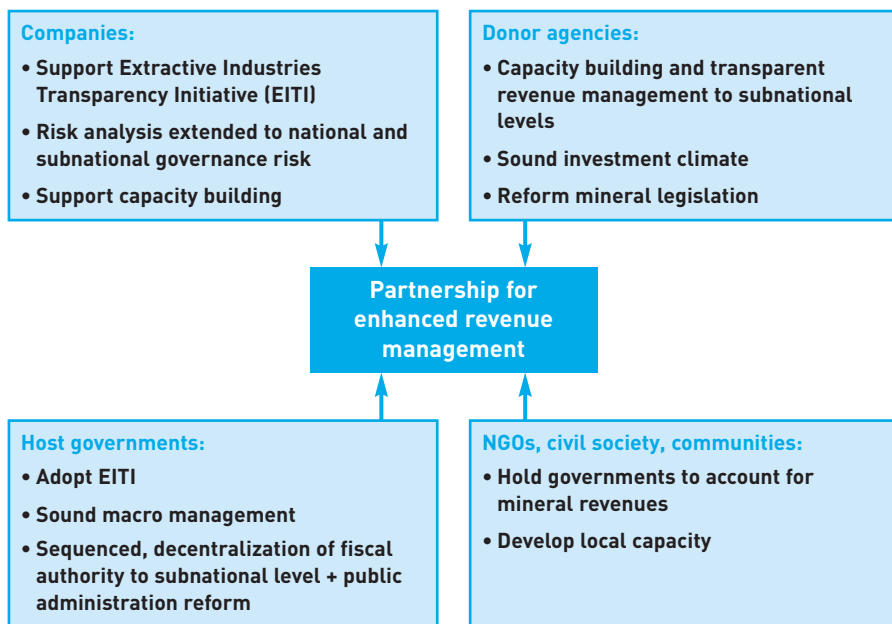
“Revenue management” is defined for the purposes of this toolkit as steps that companies can take to ensure effective use of revenue received from mining, particularly at a subnational level. This may involve support for government capacity building, technical assistance projects, or revenue transparency projects. The Extractive Industries Transparency Initiative (EITI)²⁶ is yielding a growing body of data on revenue

flows. In principle, the case for action in this area seems to be self-evident. In practice, however, there are political sensitivities of appearing to influence a host country’s decisions on public expenditure.

Nevertheless, it is useful to explore the issue during interviews with mining companies and other stakeholders because, either way, it is a widely held view that the issue of revenue management holds one of the keys to leveraging economic and social development from mineral wealth.

Mining and economic development: revenue management partnership diagram

This diagram is taken from a summary of findings from Chile, Ghana, Peru and Tanzania²⁷



²⁶ <http://eiti.org>.

²⁷ ICMM Spotlight series 03: Ways Forward (2006).

Six priority partnership themes for socio-economic programs

continued

Mining and economic development: regional development planning

“Regional development planning” can be defined as public planning that supports longer-term economic diversification at a subnational level. It is relevant to mining companies for three reasons. First, mining infrastructure investments can, in some circumstances, bring regional benefits if they can be planned and designed accordingly. Second, large mines can create cultures of dependency, leading to a post-closure economic void, unless efforts are made to diversify the local and regional economy. And third, the extension of mining based on exploration success will benefit from established infrastructure and appropriate planning provisions over areas known to be prospective for minerals.

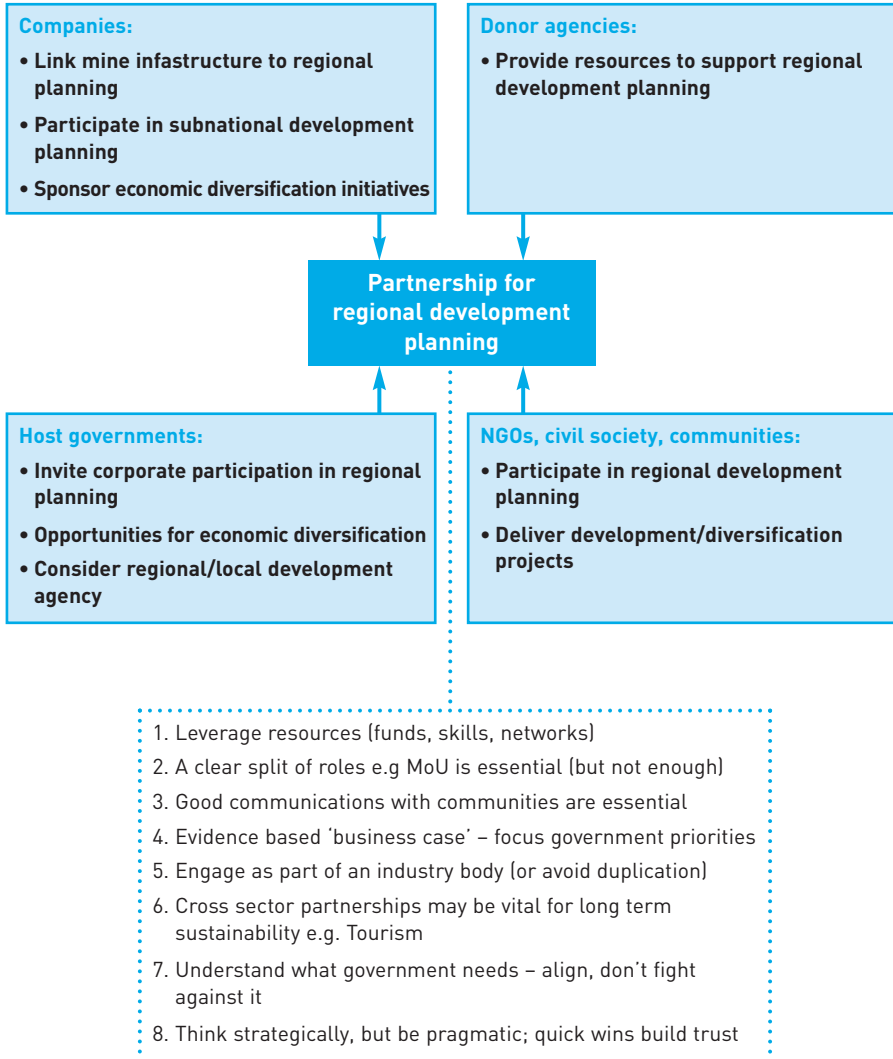
Mining companies may engage in regional development planning either as participants in a government- or donor-led process or as initiators of a collaborative, participatory and community-owned process.

The following diagram is taken from a summary of findings from Chile, Ghana, Peru and Tanzania. Each of the five boxes can be further elaborated. The pull-out box in the diagram on the following page shows an elaboration of the central box, drawing on input from a global workshop on partnerships for regional development planning, hosted by ICMM in October 2010.

Six priority partnership themes for socio-economic programs

continued

Mining and economic development: regional development planning diagram



Six priority partnership themes for socio-economic programs

continued

Mining and economic development: local content

“Local content” can be defined as the sourcing of labour, materials, goods and services from small businesses and communities close to a mine site. The exact geographical area constituting “local” will depend in large measure on what is available and on cost, but the meaning of “local” should in principle be discussed and agreed on a site-by-site basis with communities. From a mining company’s viewpoint, the cost or inconvenience of a broader definition of local content (rather than looking only at local employment or local procurement) needs to be balanced against the broader benefits that it will bring.

Partnerships to promote local content will often need to ensure that local labour, materials, goods and services meet the quality standards for companies. The theory and organizing principles for partnerships of this sort are not well defined and would be a useful focus of your research addressing this theme.²⁸

It is also possible to go into more detail on a specific subject area. For example local content covers a range of topics, including:

1. Forming clusters and establishing supplier development programs
2. Strengthening enabling environment for small business/micro-enterprise development
3. Providing access to finance for small businesses/micro-enterprises
4. Providing local employment and training opportunities

The following diagram looks at one of these aspects in detail, providing some examples underneath.

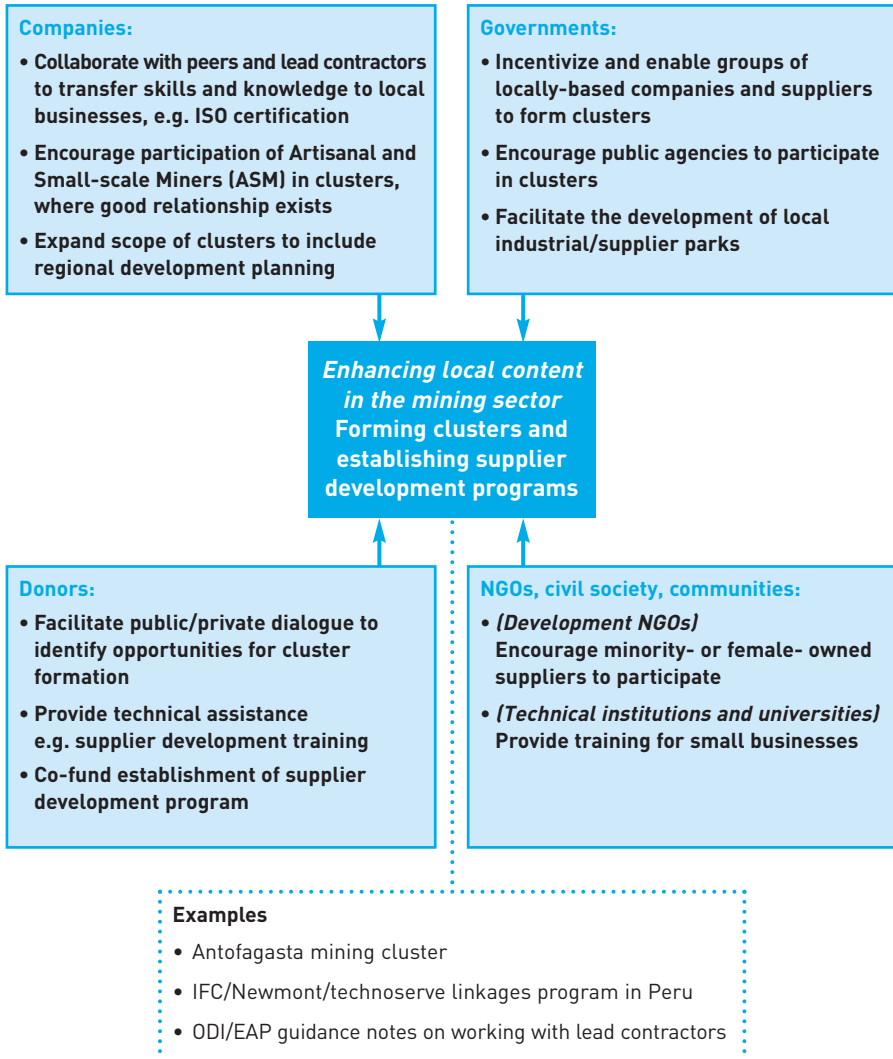
²⁸ See *Developing SMEs through Business Linkages: A manual for practitioners based on the MozLink mentorship experience in Mozambique*, available at <http://commdev.org>.

Six priority partnership themes for socio-economic programs

continued

ANNEX 2

Mining and economic development: local content partnership diagram



Six priority partnership themes for socio-economic programs

continued

Mining and social investment

“Social investment” can be defined as the provision and use of finance to generate economic and social returns in the local community, typically in health, education or housing.²⁹ Social investment by mining companies has traditionally been undertaken ad hoc or on a philanthropic basis. However, many mining companies now see that social investment is in their strategic interest. They are therefore starting to align their investments, where possible, with community

needs, with the long-term objectives of strengthening community self-reliance, building the capacity of local authorities to meet local needs, and reducing dependence on the company.

A narrow, philanthropic view persists in many countries of “social investment” as short-term, discretionary spending, rather than as the sum total of a mining company’s contribution to economic and social development. You should be sure to be clear on what your documentary sources and interviewees mean by the term.

Mining and social investment partnership diagram

This diagram (a working version) comes from a mapping of partnerships in the Lao PDR



²⁹ See *Strategic Community Investments: A Quick Guide* (2010) produced by the International Finance Corporation and available at <http://commdev.org>.

Six priority partnership themes for socio-economic programs

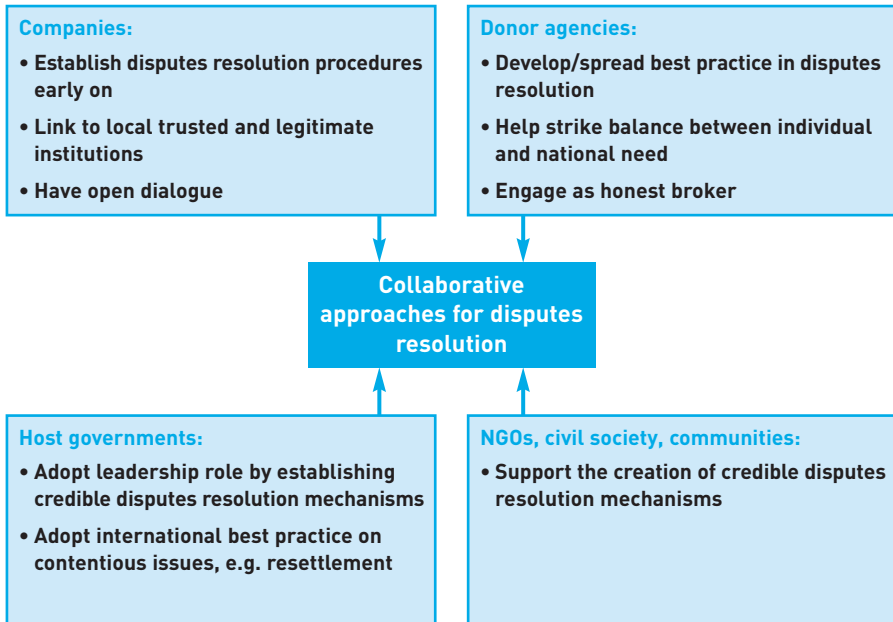
continued

Mining and disputes resolution

Mining will inevitably bring some negative impacts. “Disputes resolution” is a process to investigate complaints, resolve disputes, and settle grievances between communities and companies. It requires a reciprocal accountability for allegations, statements, and commitments and a process in which affected communities have confidence.

Mining and disputes resolution partnership diagram

This diagram is taken from a summary of findings from Chile, Ghana, Peru and Tanzania



Six priority partnership themes for socio-economic programs

continued

An example partnership database

Table A.2.1 is the Summary table from an example partnership database built from the experience of a number of large mining projects in Ghana using Microsoft Excel. Each cell of this particular Summary table provides a hyperlink to a more detailed table (which you can view using the electronic version of this database that is available at www.icmm.com/mpdtoolkit; examples are provided in **Table A.2.2: Table THREE, an interview table from the example partnership database** and **Table A.2.3: Table SEVEN, an initiatives table from the example partnership database**). A table of this type would still be useful as a simple listing of the mining operation's initiatives under the same headings, with a brief explanation of each. Or it might be extended to capture the parallel or complementary initiatives of, say, the government, of international donors or, indeed, of any of the other stakeholders that are listed in the rows of the matrix.

A database similar to the example can be gradually developed over time; it need not be treated as a one-off exercise. It will have value even if it can only be partly filled initially (as, indeed, is the case in the Ghana example in Table A.2.1). Its merit is that it shows that a mining operation's socio-economic initiatives are not stand-alone activities but take place in the context of broader initiatives in which other parties will have both a stake and responsibilities.

The same database can also hold stakeholder opinions as non-company reference points by which to evaluate the progress of an initiative. In Ghana, for example, the hyperlinked Tables ONE to SIX inclusive were assembled from structured field interviews with each of the stakeholders listed in the matrix. The results of the opinions could be presented as discursive text in the corresponding sections of the initiatives tables (Tables SEVEN to ELEVEN in the example).

However, since the two sets of data can be accessed by hyperlink from the single Summary table (as illustrated), the reader can view *both* the descriptions of particular socio-economic initiatives (see the example table in Table A.2.3) *and* the opinions about the initiatives from a variety of stakeholders. The structure of the example database also allows the researchers themselves to add their own comments and assessments to the opinion tables (see the final row of Table A.2.1 and of Table A.2.2).

Table A.2.1: Summary table for an example partnership database 

		ISSUES	ONE	TWO	THREE	FOUR	FIVE	SIX
Government – central and local	Opinions from interviews	Table ONE	Table TWO	Table THREE	Table FOUR	Table FIVE	Table SIX	
	Initiatives/actions	Table SEVEN	Table EIGHT	Table NINE				
	Opinions from interviews	Table ONE	Table TWO	Table THREE	Table FOUR	Table FIVE	Table SIX	
Mining companies	Initiatives/actions	Table SEVEN			Table TEN	Table ELEVEN		
	Opinions from interviews							
Donors	Opinions from interviews		Table EIGHT	Table NINE				
	Initiatives/actions							
NGOs	Opinions from interviews	Table ONE					Table SIX	
	Initiatives/actions							
Community organizations	Opinions from interviews					Table FIVE		
	Initiatives/actions							
Local communities	Opinions from interviews							
	Initiatives/actions							
Researcher's comments				Table THREE			Table SIX	

Measuring the
mining industry's
contribution to
the host country

MODULE

THREE



A woman wearing a wide-brimmed hat and traditional dark clothing with intricate patterns is sitting in a field of tall grass. She is smiling and holding a large woven basket filled with harvested crops. In the background, there are rolling hills and mountains under a clear sky. The entire image has a green color overlay.

**“HOW HAS ECONOMIC
GROWTH AND SOCIAL
DEVELOPMENT CHANGED
IN PERIODS OF MINING
EXPANSION?”**

Measuring the mining industry's contribution to the host country



MODULE THREE

Purpose

The purpose of module three is to understand how economic growth and social development have changed in the host country on a national level during periods when mining has assumed a greater or lesser relative importance. The correlations that appear may or may not point to cause and effect. They should at least, however, help to interpret other data, inform future refinements of data specifications, or encourage partnerships.

You should precede your commitment to module three by confirming that the mining industry is large enough to influence the broader economy (as was the case in Tanzania between 1999 and 2009, when five large new mines opened). If “yes”, then module three will be particularly relevant to the country case study or to a shorter paper on mining, especially if you aim to draw some comparisons with other countries in the ICMM series (Chile, Ghana, Peru, Tanzania and the Lao PDR).

On the other hand, you may decide that mining has occurred too recently or been too limited to represent more than a small element in the economy, in which case national-level contributions may not yet be visible in the economic data. In this case, module three may not be worth pursuing. This will be the case whether you are writing a country case study, limited issues paper that picks up a few of the modules, or shorter paper on mining.

Gathering the data

Measurement at the national level is undertaken and presented in two steps:

- Step 1: economic growth; and
- Step 2: poverty alleviation and related social investment.

STEP 1: Economic growth

For Step 1, you will need to gather data on the history of mining in the host country, such as the dates when significant mining activity began, grew, declined or ended, as well as data on economic growth. Data sources for mining history include government departments responsible for mineral exploration and mining, the databases of companies currently exploring in the country,³⁰ and country histories.

Economic growth should be measured by examining standard national income data on two variables:

- the growth rate of gross domestic product (GDP); and
- the growth rate of non-mineral GDP.

You can extract data on these variables from the World Bank's World Development Indicators (WDI) (available at www.worldbank.org). The data should cover as long a period as possible either side of

³⁰ Modern mining companies will always base their exploration programs on an understanding of the mineral geology of the country, starting with historic exploration data and, especially, the mining records that show them exactly what the most accessible areas have already yielded. Start with the company participating in the module two work, but also ask other mining companies currently exploring in the host country.

Measuring the mining industry's contribution to the host country

continued

the main episodes of mining. Short data periods can be supplemented if country-level data are available (for example, from the national central bank or statistics office).

The longest sets of GDP-per-capita time series have been developed by the late Professor Angus Maddison and colleagues at the Growth and Development Centre of the University of Groningen.³¹ These data cover almost every country in the world and can set recent growth in any economy in a time context of decades or even centuries. Be aware, however, the GDP indicator has pitfalls, as well as benefits (Box 3.1).

Box 3.1: Measuring development with gross domestic product – a warning!

The development of a country is too complex and multi-dimensional a process to be definitively tracked by a single indicator. The standard metric, GDP, offers simplicity and a useful starting point but has basic weaknesses. You cannot, for example, measure the production of all activities with equal precision, particularly in an economy where outputs like subsistence food production are never formally priced in a commercial market.

Similarly, GDP assumes that all outputs have a value equal to the price at which they are sold and so cannot, for example, fully represent the overall value of hospitals, schools, or public goods and services. Services delivered free to a family member likewise have a nominal value of zero. Nor can GDP measure positive or negative non-quantifiable effects, such as leisure time and environmental degradation.

You are therefore recommended to combine GDP with other social indicators into a composite measure of development, or the “quality of life”. The UNDP’s human development index (HDI) is the most well-known of such composite measures³² and takes account of more fundamental aspects of people’s lives, such as life expectancy and literacy, than the narrow, monetary scope of GDP.

³¹ Professor Maddison’s two-volume work, *The World Economy*, contains GDP-per-capita estimates for almost all countries of the world for many decades and, in some cases, centuries. It can be ordered in paperback or as an E-book (PDF format) from the OECD bookshop, online at www.oecdbookshop.org.

³² Available via the UNDP Human Development Report website at <http://hdr.undp.org/en/statistics>.

Measuring the mining industry's contribution to the host country

continued

STEP 2: Poverty alleviation and related social development

You will be able to measure poverty alleviation and related social development by the indicators established to monitor countries' progress towards the United Nations Development Programme's (UNDP's) Millennium Development Goals. The Millennium Development Goals website lists the eight goals broken down into 21 quantifiable targets that are measured by 60 indicators.³³ The relevant indicators are available for most countries from the UNDP and can be individually selected from a long list to create a customized set of data for one or more countries or regions that can then be downloaded as a Microsoft Excel file. (Go to <http://hdr.undp.org/en/>, select the tab "Countries", then the country of interest and then "Build Your Own Tables".)

Millennium Development Goals monitoring is relatively recent, and earlier data may be obtained from the World Bank's World Development Indicators.³⁴ As well, many lower-income countries now monitor their progress in these areas, for example, in specialized surveys, national census data, poverty reduction studies and sector surveys; and these data may be available from a country's national statistics office, from other government departments or from donors. Alternatively, you may find some data available on your country from the Multidimensional Poverty Index (MPI).³⁵

Intra-country comparisons of local or regional versus national socio-economic development trends is covered later in

33 The full list of goals, including targets within each goal, is available at www.undp.org/mdg/basics.shtml.

34 <http://data.worldbank.org/indicator>.

module five, but you may find that module three is a convenient opportunity to tap national and international sources for data at the levels of local and regional government. UNDP, for example, produces regional-level statistics for some countries.

There are limits to how much a normal mining operation can reduce local poverty directly: employment, for example, will typically not be large; the most expensive consumables will be imported; and most direct payments will go to the national government. However, the indirect potential to improve human welfare in the vicinity of a mine can be considerable, for example, if revenues from mining are put to good use at local (not just national) level. Module five addresses mining impacts at the local scale directly, but you should be alert to any evidence at the national level of local initiatives of government, as this will invariably be a focus of future critical scrutiny of toolkit results.³⁶

35 In addition, it is worth checking whether your country is one of 104 that have been the subject of analysis by the Oxford Poverty and Human Development Initiative and the UNDP Human Development Report, which in November 2010 launched the Multidimensional Poverty Index (MPI). This is an innovative new measure that gives a vivid "multidimensional" picture of people living in poverty by assessing the nature and intensity of poverty at the individual level in education, health outcomes, and standard of living. If you do use the MPI data in your study, please cite it as: Alkire, Sabina and Maria Emma Santos. 2010. Multidimensional Poverty Index: 2010 Data. Oxford Poverty and Human Development Initiative. Available at: www.ophi.org.uk/policy/multidimensional-poverty-index/.

36 The World Bank website provides information on a wide range of useful tools for conducting economic analysis in poverty and social impact analysis and a number of case studies (including information on the Democratic Republic of the Congo Poverty and Social Impact Analysis Mine Sector Reform).

Measuring the mining industry's contribution to the host country

continued

How to present your findings

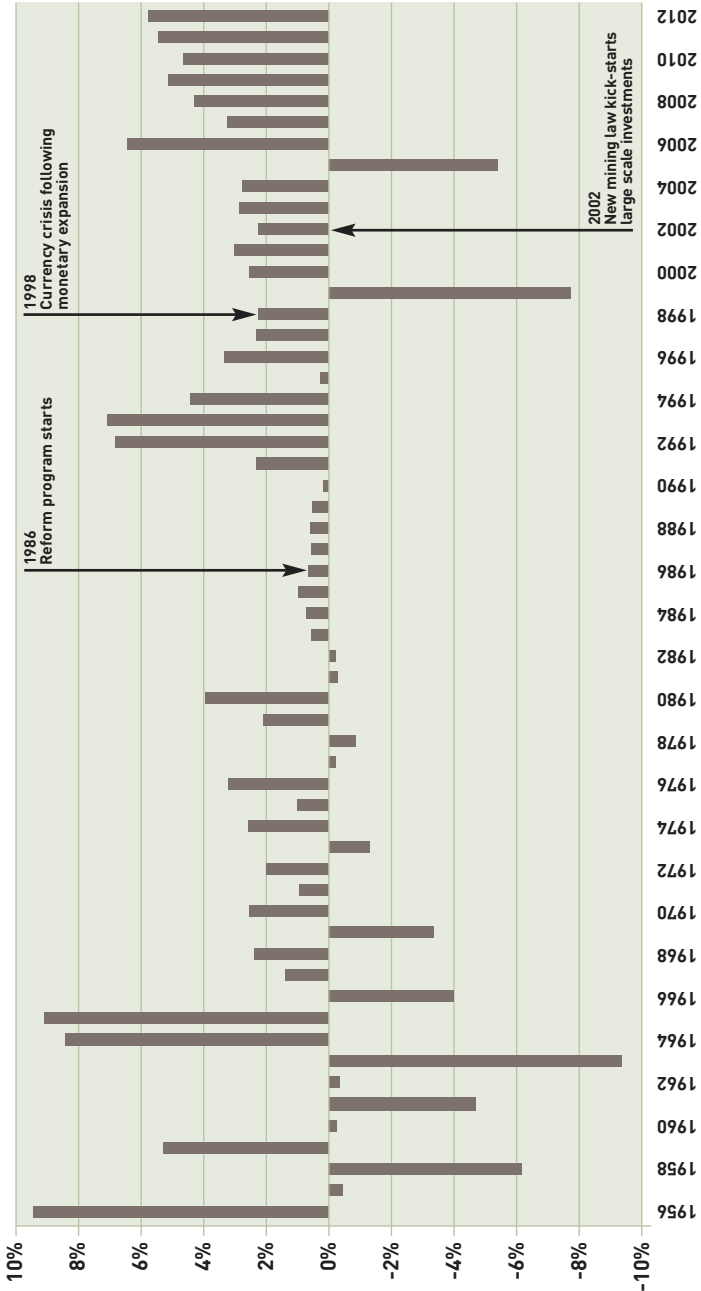
Generally, the data you gathered in Step 1 should be presented as graphs or tables with an accompanying narrative drawing attention to the main points illustrated by the graphs or listed in the tables. Figure 3.1 provides an example of how you might present the GDP information.

You should present information for Step 2 as graphs or tables with a brief explanatory narrative. (Box 3.2 illustrates the kind of conclusions that these data might support.) If you can, benchmark the host country against countries in the same geographical region or in the same World Bank income group.

The benefits of benchmarking by the human development index are apparent in Figure 3.2, which shows how GDP and the HDI can give different results for different countries. Angola, for example, has a large petroleum industry, investment in which will make a large contribution to GDP per capita. However, the Sao Tome and Principe example shows that a low GDP may have little bearing on the more complete indicators of "quality of life" measured by the HDI.

Azerbaijan (Table 3.1) provides another example of how the Human Development Report data available on the UNDP's website can be used to illustrate the widely diverging HDI scores in countries with similar levels of income measured by GDP.

Figure 3.1: Graphic example presenting growth rates of GDP per capita, 1956–2012



NOTE: Data from Professor Angus Maddison/University of Groningen and World Bank figures.

Measuring the mining industry's contribution to the host country

continued

Box 3.2: Findings on economic growth from four country case studies

The Chile, Ghana, Peru and Tanzania case studies all show a relationship between mining investment and sustained national economic improvement. In each case, the national government had laid the policy foundation for growth by a combination of macroeconomic stabilization and mineral legislation reform.

The case studies also show the role of mining companies in local projects, such as schools and hospitals. The social investment budgets were modest (for example, US\$5.6 million a year for Peru's US\$2.3 billion Antamina mine), but they were nonetheless locally significant. Meanwhile, the tax revenues from mining were potentially bringing growth and socio-economic development locally, as well as nationally.

For all these positive indicators, however, the striking finding has been of persistent local dissatisfaction, even in these relatively successful countries. Obviously, levels of poverty could always have fallen faster; but the root cause seems to have been more complex and, hence, more difficult to address than mere improvement in performance. Rather, companies were facing a vexing coincidence of local dissatisfaction and distrust during (and indeed in spite of) a general economic boom. This paradox fits research findings in many (and indeed not only) mining countries: growing horizontal inequality between rich and poor induces social tension and conflict even as general incomes rise.

The six most common specific problems found across the four case studies were:

- the adequacy and fairness of the tax regime for mining in the host country;
- the revenue allocation system, particularly when it constrains the efficient and effective use of public resources, including those generated by mining taxes and royalties;
- conflicts over land use and property rights;
- environmental damage and concerns;
- conflicts between large-scale and artisanal mining; and
- the problems associated with mine closure.

Source: ICMM *Spotlight Series 02: The Challenge* (2006).

Measuring the mining industry's contribution to the host country

continued

Figure 3.2: Human development index provides a useful accompaniment to narrow definitions of income as measured by GDP per capita



NOTE: The maximum value for the human development index is 1.0.

Source: Indicator table H of the UNDP Human Development Report 2009.

Table 3.1 : Example presentation of human development index data for Azerbaijan

HDI value-ranking (and value of index): maximum value = 1.0	Life expectancy at birth; ranking (and years)	Adult literacy rate (% ages 15 and above)	Combined gross enrolment ratio (%)	GDP per capita (PPP US\$)
1. Norway (0.971)	1. Japan (82.7)	1. Georgia (100.0)	1. Australia (114.2)	1. Liechtenstein (85,382)
84. Armenia (0.798)	99. Indonesia (70.5)	11. Russian Federation (99.5)	118. Albania (67.8)	82. Thailand (8,135)
86. Azerbaijan (0.787)	101. Azerbaijan (70.0)	13. Azerbaijan (99.5)	120. Azerbaijan (66.2)	84. Azerbaijan (7,851)
87. Thailand (0.783)	102. Egypt (69.9)	14. Armenia (99.5)	121. Syrian Arab Republic (65.7)	85. Peru (7,836)
182. Niger (0.340)	176. Afghanistan (43.6)	151. Mali (26.2)	177. Djibouti (25.5)	181. Congo (Democratic Republic) (298)

Source: UNDP, Human Development Report.

The proximate
aspects of
governance that
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ANNEX 3

Calculating and reporting
tax payments

MODULE

FOUR



A sepia-toned photograph of two young boys in school uniforms. The boy on the right is taller, wearing a white shirt and a dark tie with diagonal stripes, and has his arm around the shoulder of the shorter boy on the left. Both are smiling. They are standing in front of a modern building with a large, curved, glass-and-steel structure. The text is overlaid on the upper right portion of the image.

“IMPROVEMENTS IN GOVERNANCE, ALONG WITH REFORMED (AND MORE PREDICTABLE) MINERAL LEGISLATION AND SIGNIFICANTLY IMPROVED MACROECONOMIC MANAGEMENT, ARE THE THREE FACTORS UNDERPINNING MINING’S CONTRIBUTION TO ECONOMIC GROWTH AND POVERTY REDUCTION.”

The proximate aspects of governance that help or hinder mining's economic and social performance



MODULE FOUR

Purpose

Governance consists of the traditions and institutions by which authority in a country is exercised. This includes the process by which governments are selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them.³⁷

The purpose of module four is to identify and discuss *proximate* elements in the host country's governance that could affect, or have affected negatively or positively, the economic and social benefits of mining.³⁸ Such elements include good governance, a sound exchange rate policy, and good macroeconomic management. In contrast to proximate influences, *fundamental* influences include direct contributions to government revenues, gross domestic product (GDP), and the balance of payments. These are assessed in module six.

Understanding the main governance indicators at this point will help your analysis (for example, of national and regional differences) during subsequent modules of the toolkit (and especially module seven).

37 This definition of governance is from the World Bank's Worldwide Governance Indicators project website at <http://info.worldbank.org/governance/wgi/index.asp>.

38 A proximate cause is an event that is closest to, or immediately responsible for causing, some observed result. An example of a proximate cause is the argument often put forward in the "resource curse" debate that a large volume of minerals exports in a small economy can lead to an appreciating real exchange rate.

Gathering the data

Module four requires data about two of the proximate components of governance:

- Step 1: the quality of governance; and
- Step 2: the quality of macroeconomic management.

STEP 1: The quality of governance

The main purpose of this part of module four is to identify factors in governance that are potential pre-conditions to the size of the impacts that mining can or might have as identified in the other modules. A number of standard indicators provide a basis for doing this.

General governance indicators

The World Bank's Worldwide Governance Indicators project has reported governance indicators for 221 countries for the period 1996 to 2008.³⁹ You are recommended to make use of their six aggregate indicators:

- *Voice and Accountability*: the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, association, and the press;
- *Political Stability and Absence of Violence*: the likelihood that the government will be destabilized by unconstitutional or violent means, including terrorism;

39 The World Bank's Worldwide Governance Indicators reflect the grouping of several hundred individual variables measuring perceptions of governance drawn from 25 separate data sources and constructed by 18 different organizations into the six aggregate indicators of quality of governance.

The proximate aspects of governance that help or hinder mining's economic and social performance

continued

- **Government Effectiveness:** the quality of public services, the capacity of the civil service and its independence from political pressures, and the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies;
- **Regulatory Quality:** the ability of the government to formulate and implement sound policies and regulations that permit and promote private-sector development;
- **Rule of Law:** the extent to which agents have confidence in and abide by the rules of society, including the quality of contract enforcement, property rights (Box 4.1), the police, and the courts, as well as the likelihood of crime and violence; and
- **Control of Corruption:** the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites or private interests.

The first and fifth of the indicators together characterize human rights in a given country.⁴⁰

The detailed information underlying each of these six indicators is presented in a variety of forms (including times series in chart or table format). You should analyze these indicators in some detail for influences that are helping or hindering the host country's ability to convert mining wealth into broader economic and social development.

⁴⁰ For more information on this topic, see the ICMM publication *Human Rights in the Mining & Metals Industry: Overview, Management Approach and Issues*, 2009.

Try wherever possible (and especially with issues such as "government effectiveness" and "control of corruption") to differentiate the situation at national, regional and local levels.

The broad institutional aspects of governance structures that could be relevant to a country case study or shorter mining issues paper are:

- features of the political and administrative system;
- features of the legislature;
- federalism or devolution of powers; and
- electoral rules.

You might also draw on other indicators of governance, if appropriate, such as the State Fragility Index, which compares the effectiveness and legitimacy of political and economic systems across the world, or the Corruption Perceptions Index, which measures the perceived level of public-sector corruption in 180 countries and territories.⁴¹

You should be aware that the link between good governance and economic growth is notoriously hard to establish empirically, so these governance indicators by themselves are unlikely to lead you to fundamental or specific explanations for good or bad economic performance. Nonetheless, mining's potential contribution to broader

⁴¹ The State Fragility Index is included in each year's Global Report, available from the website of the Center for Systemic Peace (affiliated with the Center for Global Policy at George Mason University, USA) at www.systemicpeace.org; see Transparency International's website at www.transparency.org for the Corruption Perceptions Index.

The proximate aspects of governance that help or hinder mining's economic and social performance

continued

Box 4.1: Conflicts over property rights – findings from the initial four country case studies

Competition for land between agriculture and large-scale (especially surface) mining is a serious political and economic issue in countries where mineral deposits and mining infrastructure occupy land already settled or under productive use. This is the case in Ghana, Tanzania and Peru: the poorest families are typically subsistence agriculturalists or pastoralists, whose livelihoods and income have often improved little despite macroeconomic recovery (even in Ghana, where poverty reduction has been otherwise impressive). Of four case study countries, only Chile has shown broad-based improvement, not primarily through redistributive policies but rather through the creation of alternative employment opportunities.

Land use conflicts typically arise when local communities do not concur with central government decisions over the property rights granted to (foreign) mining companies. Such contention may arise because formal property rights are inconsistent with traditional claims (e.g., in communal farming areas) or simply because local community representatives have not been (sufficiently) involved in policy decisions that have affected "their" land. Weakly governed countries may use clumsy methods to enforce the resettlement of populations to which they have committed in their agreements with the mining companies.

The nature of land disputes varies. In Peru, property rights have been contested because people do not accept the political legitimacy of government policy decisions. In Ghana, NGOs have argued that many concessions in Wassa West (Western Region) and elsewhere are far too large (up to 150 km²) and that too many livelihoods and households (running into the thousands) have been unnecessarily affected. The recent mines in Tanzania have given rise to similar conflicts, and it seems that the social policies and community relations arrangements of mining companies were either absent at crucial times or simply unable to settle fundamental differences over land use rights.

Mineralization on the leases granted to large companies will also attract small-scale miners, with attendant problems, mainly of safety and security. These issues require clear and broadly accepted governance structures, decision-making processes and communication channels to balance different interests and achieve equitable but enforceable compromises. The Tanzania of the mid-1990s did not have the structures and arrangements to settle these issues; and the situation persisted into 2006, with eruptions of conflict between small-scale miners and large mines over access to prospective ground. The small-scale miners will often have no legal licenses to mine; but, when they have no other income, they understandably do not see why they are denied access to land that appears to be lying fallow.

The proximate aspects of governance that help or hinder mining's economic and social performance

continued

MODULE FOUR

economic and social development will be seriously compromised where public resources are misallocated by a political system that rejects freedom and entrenches political elites.

Remember, the main purpose of this part of module four is to identify factors in governance that are potential pre-conditions to the size of the impacts that mining can or might have as identified in the other modules. For this reason, we have included Annex 3 on the transparency of fiscal revenues and outlined how to go about collecting and presenting this data.

Governance indicators of greater relevance for mining

The main problems created for mining companies by governance weaknesses are delays to project approvals, the imposition of hidden costs in the form of bribes or other unproductive charges, and lengthy litigation over matters in dispute.

These problems can not only affect operability and profit, but also diminish the benefits from a company's socio-economic programs. Indeed, operability and profit are prime factors in a private company's decision to invest, without which issues of the benefits from a company's socio-economic programs become academic.

You are therefore encouraged to assemble indicators that refer most directly to the problems that a mining company (and its local business partners) may have doing business in the host country. These indicators might show high levels of centralized corruption, inappropriate use of force in imposing property rights, poor co-ordination

and lack of consistency between regional and national governments, or serious ethnic imbalance in the institutions charged with the equitable distributions of benefits.

In particular, examine the World Bank's annual Doing Business reports,⁴² which in 2010 ranked 183 economies both overall and against ten specific aspects of the conduct of business. This information can be easily assembled to complement the more general governance information from other sources.

There are, in addition, mineral development and conservation issues on which governments will have views not necessarily aligned with those of mining companies and investors (Box 4.2).

.....
⁴² Available from www.doingbusiness.org.

The proximate aspects of governance that help or hinder mining's economic and social performance

continued

Box 4.2: Mineral development policy

A mining company will decide to invest when a mineral deposit meets its rate-of-return targets and when the project has advantages over rival projects proposed either within the company itself or by competitors.

A government, on the other hand, will look at a mining investment proposal from a quite different perspective of the short- and long-term national interest. A government, therefore, will ask itself a correspondingly different range of questions, such as:

1. What is the economic value to the country of leaving the asset in the ground?
2. What are the costs and benefits of delaying extraction into the future (both in total and at the margin)?
3. Could the reserves be used more strategically for economic or industrial diversification or for more effective management of the timing of revenue flows?
4. Has the potential for extracting the reserves locally been fully investigated?
5. Is the country getting the best value with a particular investor as compared with a competitor?

NOTE: Further information on this issue and more from the Natural Resource Charter is available at www.naturalresourcecharter.org.

STEP 2: Macroeconomic management

Step 2 addresses a group of “proximate” influences on the economic and social benefits of a mine, which cluster under the term “macroeconomic management”. The data gathered during Step 2 should allow you to:

- assess the general quality of the host country's macroeconomic management and pinpoint the aspects that could either magnify or diminish the broad economic benefits of mining; and
- identify elements of the host country's macroeconomic policy, institutions and management structures that might reasonably be attributed to new mining activity or to the expansion of existing activity.

You will need to access data on economic indicators of the type used in International Monetary Fund (IMF) Article IV assessments (often referred to as Staff Reports (www.imf.org/countries)) and other standard assessments of a country's macroeconomic performance. Many of these indicators can be found in official publications of the ministry of finance or central bank. Others are discussed in IMF Article IV Staff Reports for individual countries.⁴³ The official country data and IMF reports should provide you with a reasonably complete picture of the host country's macroeconomic management. See Box 4.3 for a short explanation of the key macroeconomic aggregates to look out for in undertaking Step 2.

⁴³ Select the “Country Info” tab on the IMF's website at www.imf.org.

The proximate aspects of governance that help or hinder mining's economic and social performance

continued

Box 4.3: Macroeconomics

Macroeconomics is the study of the major economic totals (aggregates) of a country. It is concerned with questions involving the country's overall economic performance:

- Do people find it easy or difficult to find jobs?
- On average, are prices rising quickly, slowly, or not at all?
- How much total income is the country producing per year, and how rapidly is total income growing?
- Is the interest rate charged to borrow money high or low? Rising or falling?
- Is the government spending more than it collects in tax revenue?
- Is the country as a whole accumulating assets in other countries or is it becoming more indebted to them?
- What is the exchange rate for the currency? Will it rise or fall?

Source: Adapted from lecture notes by Professor Robert Marks, former head of the Economics Cluster at the Australian Graduate School of Management, available at www.agsm.edu.au/bobm/teaching/MM/lect01.pdf.

Evidence of macroeconomic instability includes a large current account deficit financed by short-term borrowing, high and rising levels of public debt, double-digit inflation rates, and stagnant or declining GDP. Macroeconomic instability hurts poor people disproportionately, and Box 4.4 outlines why this happens. By contrast, macroeconomic stability may be seen in current account and fiscal balances consistent with low and declining debt levels, inflation in the low single digits, and rising per-capita GDP and gross national income (GNI).

Once you have assembled and analyzed the general macroeconomic data, you should summarize the changes in the conduct of macroeconomic management that might reasonably be attributed to new mining activity or to the expansion of existing activity.⁴⁴ For example, increased volatility in government spending may reflect changing international prices for minerals. Sometimes this manifests itself in the need to resort to (inefficient) cash budgeting in times of tax revenue shortage. Similarly, increased government spending and more borrowing may point to an appreciating real exchange rate, which in turn has made interest payments on debt cheaper. On the other hand, the existence of a sovereign wealth fund

⁴⁴ There is no suggestion here that the approaches proposed can result in any formal and rigorous attribution of particular macroeconomic change to the presence or activity of the mining sector. More formal statistical approaches that also control for the effects of various other, non-mining influences are possible and are desirable. However, because these approaches are more resource intensive and technical, they do not fit easily with the philosophy of the toolkit, namely, that it can and should be used on a relatively small resource budget and by a variety of interested parties.

The proximate aspects of governance that help or hinder mining's economic and social performance

continued

Box 4.4: Macroeconomic instability hurts the poor

The low (and sometimes even negative) economic growth rates typical of macroeconomic instability can bring other problems that place a heavy burden on the poor. Inflation, for example, is a regressive and arbitrary tax, which is typically borne disproportionately by those in lower income brackets.

The reason for this is twofold. First, the poor tend to hold most of their financial assets in cash, rather than in interest-bearing assets. Second, the poor are generally less able than the better-off to protect the real value of their incomes and assets from inflation.

The simple consequence is that rising prices generally erode the real wages and assets of the poor more than those of the non-poor. Moreover, beyond certain thresholds, inflation also curbs output growth, which will affect even those among the poor who use money for economic transactions infrequently.

Source: Brian Ames, Ward Brown, Shanta Devarajan, and Alejandro Izquierdo (2002) "Macroeconomic Issues", ch. 12 in Jeni Klugman (ed.) *A Sourcebook for Poverty Reduction Strategies*, World Bank.

specifically to manage resource revenues may, in part, reflect a government's intention to protect the broader economy from an excessive appreciation of the real exchange rate.

You should also look for new fiscal policies that may reflect:

- central governments succumbing to pressure to decentralize fiscal systems so that the resource-rich regions receive some compensation for "their share"; or
- government attempts to protect a faltering non-minerals sector through greater direct support, including via trade protectionism.

The data should be assembled for as long a run of years as possible and certainly long enough to embrace the period of operation of the country's main mines. This is possible using data from the IMF's International Financial Statistics (IFS) department, available online for many years back to 1948. These data are available electronically via a subscription to IFS (available at www.imfstatistics.org/imf) or, for staff and researchers (and others) at any further education or higher education institution in the United Kingdom, at www.esds.ac.uk. Gaps in the data series may be able to be filled by reference to national sources, such as budget documents or other official publications of government. Remember that the main purpose of Step 2 is to show the elements in the country's macroeconomic circumstances that may have enhanced or diminished the overall economic and social impacts of mining.

The proximate aspects of governance that help or hinder mining's economic and social performance

continued

MODULE FOUR

If possible, try to collate and analyze this information around eight indicators:

- the fiscal deficit as a percentage of GDP – as a proxy for good revenue management;
- the trends and variability of total budgetary revenues – it is not always easy to obtain consistent long-run data on mineral royalties and taxes alone or the proportion of total revenue that they represent, but these should also be compiled where available. They will provide a broad indication of the consistency of fiscal policy. They can be supplemented by data about the variability of mineral prices;
- the non-mineral primary balance⁴⁵ – this is an important fiscal indicator for a resource-rich economy. Excluding mineral-related revenues, expenditures and net interest from the overall fiscal balance provides a good picture of the fiscal situation in the other sectors of the economy. The non-mineral primary balance can provide an analytically important insight into the fiscal effort and underlying fiscal policy stance of the government. It can therefore be a key input for fiscal sustainability and inter-temporal analysis;
- inflation – either the consumer price index or the wholesale price index or both where data permit (see Box 4.4 on how inflation has a disproportionately large effect on the poor);
- the trends and variability of the export revenues of the country, especially the part that can be associated with mineral exports – this will indicate how vulnerable the country is to mineral exports and the foreign revenues they earn. Alternatively look for changes over time in the months of import cover the country has;
- the real exchange rate – see Box 4.5;⁴⁶
- the trends and variability of the direct and portfolio capital flows (foreign direct investment) into the country, especially the variability that can be associated with mining investments – this provides an indication of whether the national economy (and specifically those tasked with smoothing the flows of foreign exchange) has to deal with the changing fortunes in mining; and
- the share of the private and public sectors in total credit allocations – a proxy indicator of the size of the state in the overall economy.

45 The non-mineral primary balance is computed as the difference between non-mineral revenue and expenditure (excluding interest receipts and interest payments), divided by non-mineral GDP. (Source: International Monetary Fund Public Information Notice No. 10/68.)

46 If data on the real exchange rate are not available from these sources, the real exchange rate can be computed by adjusting the movements of the nominal exchange rate for domestic inflation.

The proximate aspects of governance that help or hinder mining's economic and social performance

continued

Box 4.5: Importance of the real exchange rate

The introduction of large, natural resource-based export projects into a poor and relatively undiversified economy will lead to the creation of at least some new jobs and new productive possibilities, especially for those activities that can directly supply the new project. At the same time, however, these positive effects can easily be offset, in whole or in part, if a rise in the real exchange rate (RER) increases the cost to foreign buyers of existing (and future) internationally tradable products. An appreciating RER has two critical effects on the host economy:

- First, producers of cash crops are price takers on international markets, so an appreciating currency makes their products more expensive than competing products from other exporting countries. This, in turn, reduces the amount they can sell. For some farmers and businesses, this will directly affect their livelihoods unless they are able to find alternative goods or services for export or domestic markets. Over time, an appreciating RER will discourage non-mineral exports (see the much quoted example of “Dutch disease” below).
- Second, an appreciating RER makes imported goods relatively cheaper, which stimulates increased demand for imported goods and undermines the competitive position of locally produced goods in the domestic market.
- Third, when competition for labour increases the wage bill of employers outside the minerals industry, they often increase their wages, resulting in more expensive products and therefore less sales

“In the 1960s, the Netherlands experienced a vast increase in its wealth after [developing] large natural gas deposits in the North Sea. Unexpectedly, this ostensibly positive development had serious repercussions on important segments of the country's economy, as the Dutch guilder became stronger, making Dutch non-oil exports less competitive. This syndrome has come to be known as ‘Dutch disease’. Although the disease is generally associated with a natural resource discovery, it can occur from any development that results in a large inflow of foreign currency, including a sharp surge in natural resource prices, foreign assistance, and foreign direct investment.”

(Source: IMF's *Finance & Development*, March 2003, 40(1), “Back to Basics”, by Christine Ebrahim-Zadeh.)

The proximate aspects of governance that help or hinder mining's economic and social performance

continued

How to present your findings

Information from Step 1 should be presented as a description of those aspects of the host country's governance that could most affect:

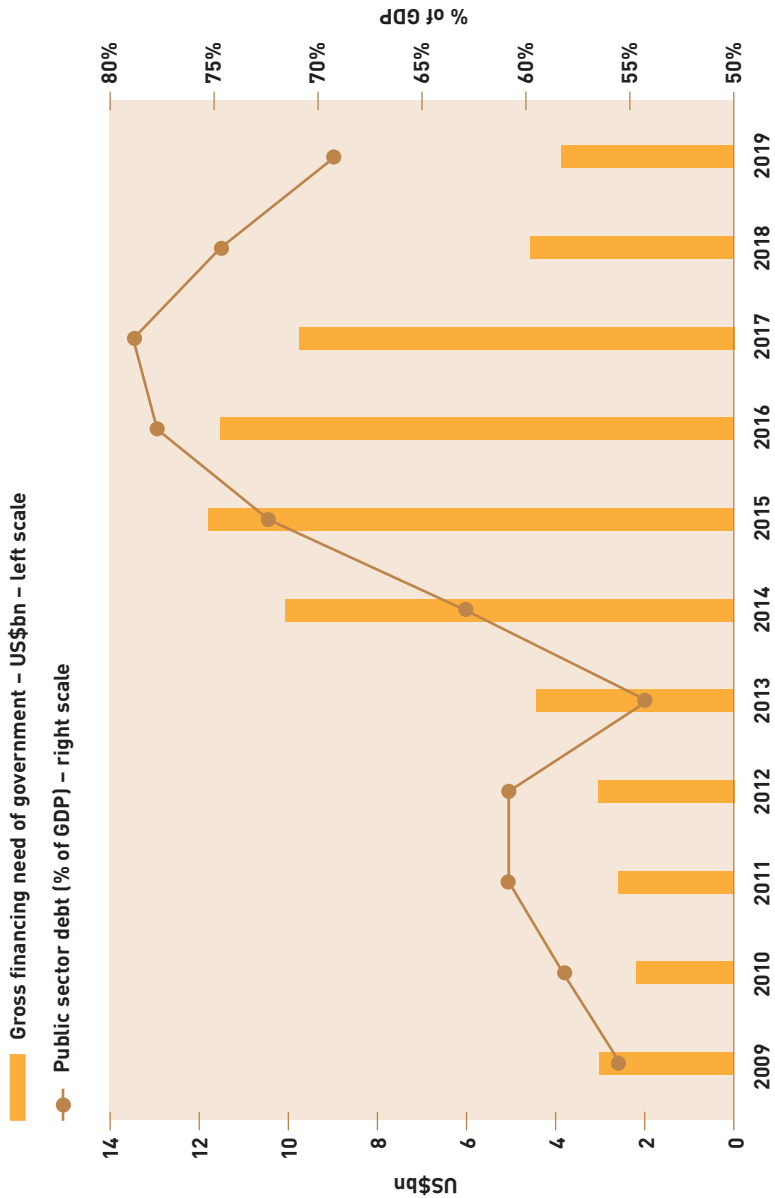
- mining in general;
- the broader benefits of mining revenues to government;
- mining companies' social programs; and
- the ability of mining companies' prospective business and non-business partners to operate.

Where you can, highlight trends over time (improvements and deterioration) and include comparisons with other countries, so as to place your findings in context. Highlight the indicators that are of particular relevance to mining for possible more detailed analysis during stakeholder interviews (for example, in module five) or by other means. Annex 3 shows how to collate fiscal revenues paid by mines in the formats provided by the Extractive Industries Transparency Initiative (EITI), and you may want to include this information in table format.

Describe your Step 2 findings on macroeconomic management on the basis of the eight macroeconomic indicators. Include numerical indicators in the text, where possible, as they can highlight major tendencies and policy shifts at certain points in time. Highlight improvements and deterioration over time and any particular aspects of macroeconomic management (or mismanagement) most likely to affect the economic and social impacts coming from investments in mining. An example of how to present data is shown in Figure 4.1, with the changing fortunes of the public-sector debt illustrated by the scale on the right (shown as a percentage of GDP).

Box 4.6 summarizes the findings of macroeconomic mismanagement from the four country case studies. However, do not be concerned if Step 2 does not yield a clear picture from which conclusions about the causes of sound management or otherwise can be drawn. The general purpose of Step 2 should be to identify major tendencies and changes in macroeconomic management that may be linked to mining.

Figure 4.1: Example to show how to present the financial situation of government 



Source: IMF.

The proximate aspects of governance that help or hinder mining's economic and social performance

continued

Box 4.6: Macroeconomic mismanagement – findings from the initial four country case studies

All four case study countries have shared the experience of severe macroeconomic mismanagement in recent decades. For extended periods, especially in the 1970s and 1980s, they all maintained seriously distorted macroeconomic and structural policies – the antithesis of the so-called “Washington Consensus” package. In the cases of both Chile and Ghana, these damaging macroeconomic and structural policies started to be corrected successfully only in the mid-1980s. In Peru and Tanzania, the correction had to wait until the 1990s. In three of the four cases, the correction of economic policies was presided over by political regimes that were seriously autocratic and in which abuses of basic human rights and other principles of good governance certainly featured as unpleasant accompaniments: Pinochet in Chile, Rawlings in Ghana and Fujimori in Peru.

The co-existence in the case study countries for some years of indicators of improving macroeconomic and structural policies with indicators of poor governance in other areas is an important part of the problem to be understood. Indeed, it is the sort of combination with which mining companies considering new overseas investments frequently need to contend. The mining companies are unlikely to be attracted to countries where economic policies are grotesquely distorted. But, once economic policies provide a minimal structure that allows a reasonable prospect of commercial success, then mining investment may occur, even when the normative quality and democratic legitimacy of governance is poor.

As some of the case studies demonstrated, new mining investment can be an important early source of private-sector activity in economies that are recovering from extreme economic malfunction. However, the four case studies also showed that macroeconomic success does not automatically guarantee trickle-down mechanisms that reduce poverty and inequality. Correcting macroeconomic policies is a necessary, but hardly a sufficient, condition for more broad-based social development. Equally, economic reforms at the central government level are no substitute for fundamental reforms and capacity building at the local and regional levels.

Calculating and reporting tax payments

This annex provides guidance on how to calculate the payments made to public authorities broken down primarily into the categories defined by the Extractive Industries Transparency Initiative (EITI).

The objective of the EITI is to strengthen governance by improving transparency and accountability in the mining, oil and gas, and forestry sectors. The EITI is a global standard that requires participating companies in the extractive industries to publish what they pay and participating governments to publish what they receive from the extractive industries. A working group comprising representatives from the government, companies and national civil society oversees the process.

All ICMM member companies are required to implement the ICMM Sustainable Development Framework. This includes commitments to implement 10 principles throughout their businesses, to report in line with the Global Reporting Initiative's (GRI) Sustainability Reporting Guidelines and Mining and Metals Sector Supplement, and to obtain independent external assurance that the ICMM commitments are being met (this framework is described in detail at www.icmm.com).

The ICMM principles of particular relevance to revenue transparency are:

- Principle 1: Implement and maintain ethical business practices and sound systems of corporate governance.
- Principle 10: Implement effective and transparent engagement, communication and independently verified reporting arrangements with stakeholders.

To this end, you should contact ICMM member companies to see if they have reported all material payments to the body assigned responsibility for reconciling payments provided by companies and revenue data provided by government according to the agreed national template. If they have collated and provided this detail then it should be easy to reproduce this data as per the EITI benefit streams shown in Table A.3.1. The EITI defines benefit streams as "any potential source of economic benefit that a host government receives from an extractive industry. They are not assumed to include indirect economic benefits, such as construction of infrastructure or employment of local personnel."⁴⁷

⁴⁷ *Extractive Industries Transparency Initiative Source book*, March 2005, p. 26. The source book can be downloaded from <http://eiti.org/document/sourcebook>.

Calculating and reporting tax payments

continued

ANNEX 3

The host countries that have committed to the EITI may already publish the benefit stream information, disaggregated at a company level, needed to complete this section in an EITI report (typically accessible from the host country's EITI website). If not, this information can often be accessed from the most recent financial reports (or on request from the accounts department of the company). If possible, also present these data for previous years (by looking at previous years' audited annual reports or company sustainability reports).

The following template (Table A.3.2) is based on a sample EITI reporting template for mining companies.⁴⁸ For each of the payments listed:

1. measure how much was paid for each type of payment in the most recent fiscal year; and
2. wherever possible indicate the amount of taxes paid to each level of government - that is, national, regional or local. Note that:
 - this varies significantly between each country; for instance, some countries will have a relatively streamlined approach with only one level of payment, while others may levy the same tax but at the local, regional and national levels; and
 - sometimes, a mine's national contributions eventually go to the local administrations; treat these as national-level contributions, unless the allocation of funds is known exactly (for example, half national and half local).

⁴⁸ See *Advancing the EITI in the Mining Sector: A consultation with stakeholders*, March 2005, available at www.eiti.org.

Table A.3.1: EITI Source Book listing of key benefits companies pay to host governments

Profits taxes	Taxes levied on the profits of a company's upstream activities.
Royalties	Royalty arrangements will differ between host government regimes. They can include a company's obligation to dispose of all production and pay over a proportion of the sales proceeds. On other occasions, the host government has a more direct interest in the underlying production and makes sales arrangements independently of the concession holder. These "royalties" are more akin to a host government's production entitlement.
Host government's production entitlement	This is the host government's share of the total production. This production entitlement can be transferred either directly to the host government or to the national state-owned company. In addition, this benefit stream can either be in kind and/or in cash.
National state owned company production entitlement	This is the national state-owned company's share of the total production. This production entitlement is derived from the national state-owned company's equity interest. This benefit stream can either be in kind and/or in cash.
Dividends	Dividends paid to the host government as shareholder of the national state-owned company in respect of shares and any profit distributions in respect of any form of capital other than debt or loan capital.
Bonuses (such as signature, discovery, production)	Payments related to bonuses for and in consideration of: <ul style="list-style-type: none"> • Awards, grants and transfers of the extraction rights; • Achievement of certain production levels or certain targets; and, • Discovery of additional mineral reserves/deposits.
License fees, rental fees, entry fees and other considerations for licenses and/or concessions	Payments to the host government and/or national state-owned company for: <ul style="list-style-type: none"> • Receiving and/or commencing exploration and/or for the retention of a license or concession (license/concession fees); • Performing exploration work and/or collecting data (entry fees). These are likely to be made in the preproduction phase; and, • leasing or renting the concession or license area.
Other significant benefits to host governments	These benefit streams include tax that is levied on the income, production or profits of companies. These exclude tax that is levied on consumption, such as value-added taxes, personal income taxes or sales taxes.

Source: Based on *Extractive Industries Transparency Initiative Source Book*, March 2005, p. 27.

Table A.3.2: Template for recording benefit streams the mine pays to its host governments 

Category	Value (US\$ or local currency)			
	Total	National	Regional	Local
1) EITI covered payments – ‘scope one’ benefit stream				
1a) Profit taxes				
1b) Royalties				
- in cash				
- in kind				
1c) License fees, rental fees, entry fees and other considerations for licenses/concessions				
1d) Signature bonuses and production bonuses				
1e) Dividends				
1f) Other payments to host governments, (including production entitlements and other royalty type arrangements)				

Measuring the participating mine's positive and negative contributions to local communities

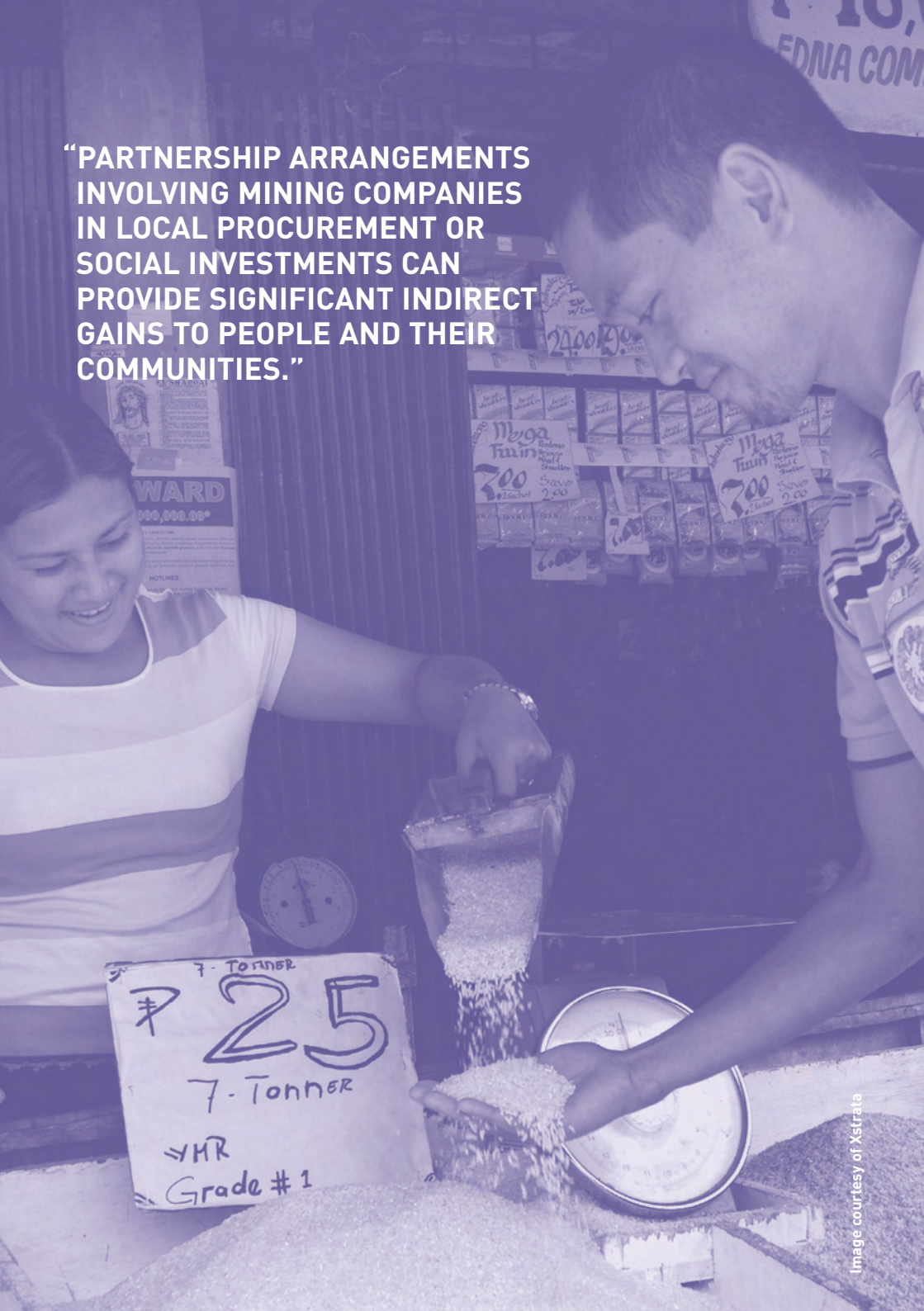
ANNEX 4
Guidelines for field interviews

ANNEX 5
Notes on calculating employment impacts

MODULE FIVE



“PARTNERSHIP ARRANGEMENTS INVOLVING MINING COMPANIES IN LOCAL PROCUREMENT OR SOCIAL INVESTMENTS CAN PROVIDE SIGNIFICANT INDIRECT GAINS TO PEOPLE AND THEIR COMMUNITIES.”



Measuring the participating mine's positive and negative contributions to local communities



MODULE FIVE

Purpose

The purpose of module five is to describe the economic and social impacts at project and local level of the mine participating in the assessment. The data should reflect standard indicators of human development and be broadly organized under the six partnership themes defined in Annex 2.

Module five addresses two critical premises of the toolkit: first, that the legitimacy of mining in low- and middle-income countries requires it to drive or catalyze broader economic and social development and, second, that mining can, in principle, achieve this.

Module five findings are about mining impacts at the local level and so will in large measure determine both the substance and the credibility of your country case study. You can expect them to be closely scrutinized.⁴⁹

⁴⁹ For an example of where the overall positive economic effects of a large gold mine in Mali fell short of the community's expectations, see "Social and Economic Impacts of the Syama Mine" by Seydou Keita, ch. 5 of *Tarnished Legacy: A Social and Environmental Analysis of Mali's Syama Goldmine*, available at www.oxfamamerica.org.

Gathering the data

Two major data sources for module five

Modern mining methods are capital intensive, and direct employment will not typically be large. In general, therefore, a mine that is able to substantially reduce poverty and improve human welfare at the local level will do so mainly by its indirect effects, in other words, by how its operational expenditure, social investment and payments to government translate into local procurement, local social investments, local workforce expenditure and productive local partnerships.

These *indirect*, local-scale impacts are inherently informal and not well documented; and it will take a thorough engagement with the local community to identify indirect effects and trace their consequences. Accordingly, Step 1 of module five provides for interviews of stakeholders and other informants. This can be time-consuming; and the results will be uneven and inconsistent and will reflect the memories and apprehensions of individuals. You will need to devote sufficient resources and effort to collecting, cross-checking and analyzing this information to the standard that subsequent scrutiny will demand. However, the responses gathered during the interviews will help to provide depth to the data gathered in the other data-gathering steps of module five.

Information on *direct* impacts, on the other hand, should be more accessible. Most mining companies conduct socio-economic surveys (whether legally required to or not); and formal environmental and social impact assessments (ESIAs) have, in recent years,

Measuring the participating mine's positive and negative contributions to local communities

continued

become a standard requirement of most governments and of lenders adopting the Equator Principles.⁵⁰ An ESIA typically will include a pre-project baseline and will establish a program to monitor operations impacts to validate the ESIA predictions and to test the objectives, focus and success of social initiatives. This sequence – from a pre-project ESIA through operations monitoring – should provide answers to many of the questions asked by module five. You are encouraged to go to some lengths to obtain the full sequence of a project's historical documentation, keeping in mind that early pre-development reports may precede the tenure of current mine staff, who may not know what is in the project's archives.

Older mines may not have established the pre-project baseline of environmental, land use, economic and social conditions that is now standard ESIA practice. However, most mining companies will address the ongoing issues of local communities, such as

resettlement, indigenous peoples initiatives, employment, procurement or business development, and will monitor the mine's impacts on society, the economy and the environment.⁵¹ As well, some companies will try to reconstruct a picture of life as it was before the mine; and, despite the problems of hindsight, the stakeholder interviews will go some way towards a belated, qualitative characterization of pre-project conditions against which mine-induced changes might be seen. If attempting this yourself, do not ignore historical documents from other fields, such as anthropology, cultural heritage, travel and natural history.

Either way, your first and best source of information for module five will be the socio-economic assessment reports carried out by the mining company or by other parties. Reading these reports before you undertake the steps involved in module five will also help you to identify potential issues to incorporate into your interviews, data gaps⁵² and where potential partnership activities could be strengthened.⁵³

50 These studies have various names: environmental and social impact assessment (ESIA), social impact assessment (SIA) or human rights impact assessment (HRIA). These studies will all, to some extent, address the economic and social changes brought about by projects. An HRIA may or may not be part of an ESIA, but it will be an important module five data source where available. An HRIA helps a company [1] gain a thorough understanding of the (potential) impact of corporate activities, [2] obtain a better understanding of the stakeholders' perspectives, and [3] discover ways to manage corporate impacts in a process that benefits all involved. For more information and practical tools, see www.aimforhumanrights.org and also the 2008 paper by John Gerard Ruggie, *Protect, Respect and Remedy: The United Nations Framework for Business and Human Rights*. For more information on what comprises Gender Impact Assessment (GIA) of mining projects, see www.oxfam.org.au or <http://empoweringcommunities.anu.edu.au>.

51 www.csr.m.uq.edu.au has more information on how to monitor and report the community impacts of mining (covering economic impacts and employment, community support and engagement processes, environmental and demographic impacts).

52 For sources of further information on how to conduct SIAs and stakeholder engagement, see the Bibliography in the ICMM/World Bank *Community Development Toolkit*, 2005, available at www.icmm.com.

53 ICMM's *Community Development Toolkit* provides 17 tools for use throughout the project cycle that cover the assessment, planning, management, and evaluation phases of community development, as well as stakeholder relationships.

Measuring the participating mine's positive and negative contributions to local communities

continued

Overview of the module five steps

It is recommended you conduct your data gathering and analysis using a number of steps outlined in this module. Wherever possible, you should aim to organize your findings around the six priority partnership themes. The following steps are not an exhaustive list, and they could fit under a number of the priority themes.

You should adapt the presentation of your findings under the six priority partnership themes accordingly:

- Step 1: Stakeholder interviews (Mining and poverty reduction);
- Step 2: Employment and dependents (Mining and economic development: local content);
- Step 3: Procurement of local goods and services (Mining and economic development: local content);
- Step 4: Human capital development and training (Mining and economic development: local content);
- Step 5: Social investment and infrastructure development (Mining and economic development: regional development planning); and
- Step 6: Comparing local and national economic and social development trends (Mining and poverty reduction).

STEP 1: Stakeholder interviews (Mining and poverty reduction)

Stakeholder interviews need structure and consistency so that local communities in different areas are asked similar questions, the answers to which can be compared. There will also be questions that are specific to each mining operation, so the topics and questions set out here are not definitive but a starting point for your stakeholder interviews.

Table 5.1 gives examples of community consultation questions, and Annex 4 gives guidelines for conducting field interviews.

In general, questions will be of two main types: those about the mining activity and its impacts in general and those explicitly about the mining company's economic and social activities. You will notice that the suggested questions in Table 5.1 will not be relevant to all respondents.

Table 5.1: Example questions for community consultation 

<p>1. Demographic and social change</p> <p>Have the community characteristics (e.g., gender, ethnicity, religion, language, culture, place of origin, residential location, age) changed over time because of the mine?</p> <p>Have there been positive impacts because of this change, such as more jobs, better services supported by a bigger population, or higher standards of living?</p> <p>Have there been negative impacts, such as communal tensions, conflict, crime levels, overcrowding, or excessive demands on local services?</p> <p>How has the mining company attempted to help manage these impacts to minimize the negative and maximize the positive?</p>	<p>Potential partnership theme</p> <p>Mining and poverty reduction</p> <p>Mining and poverty reduction</p> <p>Mining and disputes resolution</p> <p>Mining and disputes resolution</p>
<p>2. Health</p> <p>Has the health of the local community been affected (positively or negatively) by the mine?</p> <p>Is the impact positive (e.g., because of better environmental, health, and safety standards or the provision of health services for employees and the broader community)?</p> <p>Is the impact negative (e.g., because of pollution, poor safety practices, or the introduction of diseases by migrant workers)?</p> <p>How does health assistance provided by the mine compare with that provided by the government or by other companies or organizations?</p>	<p>Potential partnership theme</p> <p>Mining and poverty reduction</p> <p>Mining and social investment</p> <p>Mining and social investment</p> <p>Mining and social investment</p>
<p>3. Food Security</p> <p>Has the mine had any effects (positive or negative) on the availability and cost of the food supplies that you need? Have there been inflationary pressures in key food stuffs (or other basics, such as fuel)?</p> <p>Is the mining company monitoring the prices of basic goods (such as food) in the affected areas? Is it comparing this data with prices elsewhere?</p>	<p>Potential partnership theme</p> <p>Mining and economic development: local content</p> <p>Mining and disputes resolution</p>

continued

Table 5.1: Example questions for community consultation *continued*

<p>4. Community resources</p>	<p>Has the mine used or damaged resources that were previously important to the local community members to support their livelihoods?</p> <p>Have agricultural land or water resources or sites that were important for cultural purposes or local tourism been impacted by the mine?</p> <p>Have other communities not immediately adjacent to the mine been impacted by the knock-on effects of the mine on community resources?</p> <p>How has the mining company responded?</p>	<p>Potential partnership theme</p> <p>Mining and poverty reduction</p> <p>Mining and poverty reduction</p> <p>Mining and disputes resolution</p> <p>Mining and disputes resolution</p>
<p>5. Local infrastructure</p>	<p>What impact (positive and negative) has the mine had on local physical and social infrastructure?</p> <p>What has been the mine's impact on roads, railways, air transport or port facilities; leisure, sports and recreational infrastructure; schools, hospitals and clinics?</p> <p>What has been the mine's impact on the supply of electricity, fuels, water and waste water treatment facilities, solid waste management, telecommunications and postal services?</p> <p>Has the mine affected the community or the local authorities in terms of new requirements for infrastructure (e.g., for waste management)?</p> <p>What has been the mine's impact on infrastructure vis-à-vis local government provision?</p>	<p>Potential partnership theme</p> <p>Mining and economic development: regional development planning</p> <p>Mining and economic development: regional development planning</p> <p>Mining and economic development: regional development planning</p> <p>Mining and economic development: regional development planning</p> <p>Mining and economic development: regional development planning</p>
<p>6. Environmental and social nuisance</p>	<p>Are there positive or negative environmental or social nuisance impacts upon the local community, and are these impacts equitably distributed? What about communities not immediately adjacent to the mine?</p> <p>Are there any examples of positive or negative impacts on noise amenity, air quality, water quality, waste generation or waste management services?</p>	<p>Potential partnership theme</p> <p>Mining and poverty reduction</p> <p>Mining and disputes resolution</p>

continued

Table 5.1 : Example questions for community consultation *continued*

7. Local businesses	Potential partnership theme
Has the mine contributed to the development of local businesses?	Mining and economic development: local content
To what extent has the mine placed contracts with local businesses?	Mining and economic development: local content
How much has the mine spent in US\$ through local content execution plans? Do the mines have local content execution plans? Are these well known by stakeholders?	Mining and economic development: local content
To what extent has the mine shared skills, facilities or expertise to make local firms more competitive? Have they invested in the development of local businesses through social investment programs or helped regional, national or international development organizations to develop the local economy?	Mining and social investment
8. Benefiting from mining	Potential partnership theme
Are there any barriers that prevent the local community (or sections of it) from benefiting from the presence of mining operations?	Mining and poverty reduction
Are there real or perceived barriers, such as a lack of appropriate skills, inadequate infrastructure, management practices at the mine, access to capital?	Mining and poverty reduction
How has the mine responded?	Mining and poverty reduction
9. Relations with government	Potential partnership theme
What interaction does the mine have with government agencies at the local, regional or national level?	Mining and economic development: regional development planning
What is the impact of this interaction on both parties? How transparent do other members of the community consider these relationships?	Mining and economic development: regional development planning

Measuring the participating mine's positive and negative contributions to local communities

continued

The credibility of the interview results depends absolutely on questioning a range of stakeholders about both positive and – especially – negative impacts. The latter go not only to the objectivity of the process, but also to the discovery of weaknesses that can be remedied. A usually small minority of respondents will give you a vigorous account of their opinions; but shyness, reticence in the face of more forceful peers or simple natural courtesy will discourage many people from speaking frankly. Be prepared, therefore, to discuss people's views in some depth and across different groups, so your account is representative of the population as a whole.

For example, it will probably only be through interviewing different communities that you will be able to discover whether local inflationary pressures on food have arisen that can be attributed to the mine, what income opportunities have been displaced by the mine, or whether procurement policies have excluded certain local suppliers.

Prepare questions for the stakeholder interviews on the basis of the different areas of a mine's potential impact – social, economic and environmental. It may be that the people most impacted by the project are not those immediately adjacent to the mine.⁵⁴ For example, communities downstream from a mine or further down a mountainside may

find their agriculture, water sources, or fishing affected. (All of the four country case studies reported that competition for water was a contentious issue requiring greater attention in future studies.)

The responses should represent a range of attitudes and opinions, and you could take the following broad categories of interviewees as a starting point:

- community liaison panels and other community or civil society representatives (these should be representative of the local community in terms of gender, ethnicity, religion, language, culture, place of origin, residential location, age);
- development agencies active in the area, including domestic and international charities and NGOs;
- mine employees and their representatives (e.g., unions);
- suppliers to the mine;
- other local businesses (possibly via chambers of commerce);
- international financial institutions or bilateral aid agencies;
- local, regional and national government authorities across a range of agencies (not just the mining and development ministries); and
- health, education and other service providers.

54 See ch. 9, "Local Communities and Mines," in *Breaking New Ground: The Report of the Mining, Minerals and Sustainable Development Project*, and specifically the section "Gains and Losses at the Local Level – An Economic Perspective, A Social Perspective, A Cultural and Political Perspective and An Environmental Perspective", available at www.iied.org.

Measuring the participating mine's positive and negative contributions to local communities

continued

Some communities may have been directly displaced (physically or economically; see Box 5.1), others indirectly (for example, by pressure of in-migration and also by the economic and social consequences of environmental impacts; see Box 5.2).

Extend the scope of your interviewee list to cover both. Do not prejudge their status, but rather try to record their perceptions verbatim, then add a clearly separate and attributable comment if the situation warrants qualification.

Box 5.1: International Finance Corporation (IFC) handbook on resettlement

Displacement may be either physical or economic. *Physical displacement* is the actual physical relocation of people resulting in a loss of shelter, productive assets or access to productive assets (such as land, water and forests). *Economic displacement* results from an action that interrupts or eliminates people's access to productive assets without physically relocating the people themselves. The IFC's policy on resettlement applies in either situation. While land acquisition does not necessarily require the displacement of people occupying or using the land, it may have an effect on the living standards of people who depend on resources located in, on, or around that land. For example, a farming family may lose a portion of its land to a mining project without having to vacate its homestead. Nevertheless, the loss of even a portion of its land may reduce the overall productivity of that farm. This threat is magnified among agrarian populations of low- and middle-income countries where farm fields are typically small and often widely scattered.

Alternatively, land acquisition may restrict a community's access to resources held in common, including rangeland and pasture, non-timber forest resources (such as medicinal plants or construction and craft materials), woodlots for timber and fuel, or fishing grounds. Similarly, the acquisition of water resources by a project may entail neither land acquisition nor physical relocation but could, nonetheless, have negative effects on the livelihoods of people living in the project area. For example, the diversion of a river's flow for the generation of hydroelectric power may affect positively or negatively the livelihoods of downstream farmers who rely on minimum flows for irrigating crops. A coastal power plant or factory using ocean water for cooling purposes may affect fish habitats, thereby affecting the livelihoods of people who fish the coastal waters.

Source: Adapted from *Handbook for Preparing a Resettlement Action Plan*, p. 5, available at www.ifc.org. Another resource on the problems of mining-induced displacement and resettlement and the major risks it poses to societal sustainability can be found in *Avoiding New Poverty: Mining-Induced Displacement and Resettlement* available at <http://commdev.org/content/document/detail/1376/>.

Measuring the participating mine's positive and negative contributions to local communities

continued

The stakeholder interviews will contribute to an understanding of qualitative aspects of a mine's performance, such as:

- the scope of the existing stakeholder engagement undertaken by the mine;
- the responsiveness of the mine's management to community issues;
- the extent to which positive and negative impacts are distributed (or are perceived to be distributed) among different stakeholder groups;
- the economic and social make-up of the surrounding communities (household size and number of dependents);
- the approaches taken by the mine when engaging with or helping to develop the members of the community that work and those that do not;
- the nature of interactions between the mine and government agencies and the extent to which these may impact on the quality or quantity of public services;
- the quality of the mining company's responses to environmental concerns, including impacts with economic and social ramifications;
- whether stakeholders understand the mining company's exploration program and its role in the long-term future of mining in the region; and
- whether an adequately funded mine closure plan has been communicated to stakeholders and whether they have been consulted on economic diversification initiatives prior to mine closure.⁵⁵

STEP 2: Employment and dependents (Mining and economic development: local content)

Employment is one of the most visible economic impacts of mining in a community, and jobs are often eagerly sought by local people.⁵⁶ Employment depending directly or indirectly on the project will include jobs with the mining company itself, with on-site contractors, with other contractors, with suppliers and with the company's community social investment initiatives. The amount of employment will vary through the phases of the mine, from initial exploration through development drilling, engineering site investigations, construction, operations, decommissioning and rehabilitation. It will also vary according to the type of project infrastructure at a specific location. Types of jobs will range from the highly specialized to trades to unskilled labouring. Workers will be recruited locally, from elsewhere in the

55 Dealing with mine closure is such a large and complex task that it has not been addressed in this toolkit. Useful resources include an ICMM toolkit titled *Planning for Integrated Mine Closure*, which provides practical guidance on closing a mine in a sustainable manner, and the World Bank's *Guidelines for the Implementation of Financial Surety for Mine Closure*, by Meredith Sassoon, a working paper by the Oil, Gas, and Mining Policy Division.

56 In many mining areas, there may be competition for the mineral resources between large- and small-scale miners, with large mines often accused of taking jobs away from artisanal and small-scale miners (ASMs). This is discussed in the ICMM *Tanzania Country Case Study*, 2007, pp. 35–7, 39–41. It may be necessary to estimate whether ASM jobs have, indeed, been lost if this is an issue in a certain locality. Further information is available from the Communities and Small-Scale Mining (CASM) organization at www.artisanalmining.org. The ICMM document *Working Together: How large-scale mining can engage with artisanal and small-scale miners* brings together, for the first time, a number of practical approaches and tools for companies to engage with artisanal and small-scale miners.

Measuring the participating mine's positive and negative contributions to local communities

continued

Box 5.2: Economic and social consequences of environmental impacts

Mining projects, like all large-scale undertakings, have a range of impacts. The potential impacts of mining projects may be both positive and negative in nature. This applies to environmental impacts, as well as to economic and social impacts. Clearly, primary extractive activities, such as digging and blasting, are damaging to the environment. Other activities, such as fencing areas that then become (unofficial) sanctuaries for endangered wildlife, sealing roads to suppress traffic-induced dust, and constructing improved water supplies and solid waste management infrastructure, can all lead to improvements in the environmental conditions surrounding a mining project.

Mining companies are normally required to prepare environmental impact statements and to develop impact management plans. This is almost universally mandated, unlike SIAs, which are still comparatively in their infancy (and HRIAs even more so). It is not one of the central purposes of this toolkit to assess the technical aspects of the management of the environmental impacts of mining. This is typically done elsewhere (see ICMM Environment Work Program). However, it is important in the interests of comprehensiveness of toolkit applications to note that some environmental impacts have economic or social consequences. Frequently, the potential for negative impacts on their living environment can be of major concern to people living in the vicinity of a mining project. The major areas of concern you should be alert to include:

- noise and vibration – from traffic, blasting and machinery;
- dust – from excavation and transportation, causing air quality degradation;
- water – quality and quantity;
- pollution – chemical contamination of any aspect of the environment, especially croplands;
- traffic – safety, as well as noise issues;
- visual amenity – spoiling of landscapes; and
- effects on wildlife – all of the above could affect wildlife.

All of these impacts are expected to be mitigated, managed and rehabilitated, as far as possible, in any modern mining operation meeting international industry standards and certainly any project operating to Equator Principle and World Bank Group standards. Ideally, companies should utilize participatory monitoring and evaluation processes for all environmental impact programs, so that communities or their selected representatives may be fully involved in ensuring the maximum protection of the environment. Offsets – that is, positive initiatives to balance the negative environmental impacts that may be of a socio-economic nature, such as small enterprises and economic training initiatives – should also be part of the package.

Measuring the participating mine's positive and negative contributions to local communities

continued

host country, or from other countries. Localization brings costs and political benefits to mining companies, and training programs are standard practice. It is, however, a truism to say that such training could always, to the eyes of frustrated local people, be started earlier and raise skill levels higher.

This characteristic employment profile of a modern mine reflects operability imperatives: a mine needs to be efficient if it is to keep the competitive advantage on which the decision to build it was based. However, this employment profile will also create a number of issues for local people: the temporary nature of jobs that simply disappear when a particular project phase or task is completed; competition for jobs with outsiders; the resentment of a new pecking order based on job status; the health, law and order, food security and other social impacts of imported workers; conflict over status with job-seekers from elsewhere (if they are successful) and over land, resources and services (if they are not and remain as squatters); the disappointment of local businesses if their products cannot meet project specifications; and perceived ceilings to promotion. These issues will be compounded by usually unrealistic expectations when the project is proposed; a lack of understanding of operability imperatives; a sense of frustrated entitlement, when they, the local people, find themselves playing second fiddle to outsiders; and the paradox discussed in Box 3.2 of dissatisfaction rising even as material standards also rise.

A gap between the understanding and the expectation of local people lies at the heart of these specific issues. The employment profile of a typical mine is difficult to change without jeopardizing the operation; but these issues are predictable, and there remains a great deal of scope to anticipate and moderate the frustrations that arise. Social initiatives, such as training, are an obvious option; but all options will be better directed and scoped if the nature of the problem is quantified and then communicated to and understood by the local people.

The project's SIAs, ESIA's or HRIA's will probably have anticipated these issues; and it will be important to test the success of the mitigation measures during stakeholder interviews (see Step 1 above) and highlight where they are absent or deficient.⁵⁷

57 For further information on how companies manage community grievances, see the *Corporate Social Responsibility Initiative* at Harvard Kennedy School, available at www.hks.harvard.edu/m-rcbg/CSRI. Here, they describe an effective grievance mechanism as an essential addition for any responsible company to its tools for monitoring, auditing and stakeholder engagement. They provide a wealth of information for companies and their local stakeholders jointly to devise rights-compatible, effective grievance mechanisms that maximize the opportunities to achieve sustainable solutions to disputes.

Measuring the participating mine's positive and negative contributions to local communities

continued

Total direct, indirect and induced employment over time

Your first task in Step 2 is to calculate and present the total employment generated by the operation under the following three categories:⁵⁸

- direct employment by the operation (those staff that are on the payroll and any contractors permanently based on site);
- indirect employment in the region comprising:
 - off-site contractor employees working for the operation (i.e., those staff on the contractors' payrolls who are employed to fulfill contracts at the operation);
 - employees working at the operation's suppliers and at any contractor's suppliers or subcontractors whose employment is attributable to business generated by the operation; and
 - employment generated in the region by (community) social investment activities, including local business development, in which the mining operation is a participant; and
- induced or "multiplier" employment in local communities generated by the spending of direct and indirect employees, such as employment in local businesses and services (e.g., shops, transport and public services).

⁵⁸ The definition is based on the Anglo American *Socio-Economic Assessment Toolbox (SEAT)* and is reflected in the diagram in Annex 5.

Accurate estimates may only be possible for the current year, but attempts should be made to describe how employment has changed in the past and how it is expected to change in the future.⁵⁹ In addition to the employment changes over the period during which the participating mine has been operating, employment estimates should be sought for five to 10 years prior to the mine starting operations, and forecasts should be sought for employment in five and 10 years' time (even if these estimates are less accurate than those for the current year).

Mine construction typically generates far more employment than operations do. If major capital expenditure has occurred in recent years or is forecast to occur in five to 10 years (e.g., associated with "staying-in-business" capital expenditures), this should be noted; and, if known, the approximate number of temporary construction jobs that were or will be created should be included.

Data sources will most likely come from the mining company's records, but noticeable changes in employment may be recorded in national census or household budget surveys.

Detailed guidance on how to calculate each of these employment categories is provided in Annex 5.

⁵⁹ Owing to the receipt of additional taxes, the government may choose to provide additional government jobs at the local level or nationally. However, this will be a much harder metric to attribute to a specific mining activity, so we recommend you do not attempt to measure this additional "indirect" employment impact.

Measuring the participating mine's positive and negative contributions to local communities

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Characteristics of employees

Your second task in Step 2 is to gather information for the three categories of employment on the various characteristics of the people employed as discussed below. Historical data sources for these parameters again will largely come from the Human Resource departments of the mining company.

“Local” compared with national and expatriate employment

Many mines feature substantial inward commuting by the workforce. If the mining company does not hold data in a disaggregated format, you will have to estimate the number of jobs that are local.⁶⁰ The definition of “local” will vary markedly from country to country and from community to community. For example, in some densely populated areas where mobility is limited, “local” may refer to distances of just a few kilometres, whereas in remote areas where mobility is high (such as parts of Western Australia), “local” may cover communities many hundreds of kilometres away. You should define “local” to fit the mine’s context and could usefully ask the mining company’s community development team how the local community itself defines “local”.

.....
60 The definition of “local” should relate to where workers have their permanent home and their families. If workers have migrated to the defined local area with their families, they should be considered to be locals; if they commute to the mine from non-local areas and stay in mine hostels or other accommodation, they should not be considered to be locals.

You should be able to extract data on the employment of domestic (i.e., both local and national) and expatriate workers from the mining company’s records. Similarly, the wages and some of the benefits associated with that employment will be of interest to most readers of the country case study. Wherever possible, include these findings as they are an important indicator of domestic capacity and the company’s efforts to increase local content.

Social distribution of employment

If basic data on levels of employment can be disaggregated by gender, ethnicity, religion, language, culture, place of origin, residential location or age, then inferences can better be drawn about the effects of new cash employment within a previously subsistence or artisanal local economy. These effects may include a gender bias towards the employment of men that forces women to take on even more responsibility for growing staple food or cash crops for the family. Similarly, the proportion of employment going to different groups can create tension and conflict within communities. This, in turn, can be related back to particular features of the host country’s politics and governance (as identified in modules four and seven) or to the mining company’s policies and practices. Relevant groups could include:

- expatriate and host country workers;
- local and non-local host-country workers;
- males and females; and,
- ethnic, religious, language, age or cultural groups.

Measuring the participating mine's positive and negative contributions to local communities

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Dependents

The families of those employed directly or indirectly by the operation receive a tangible economic benefit, which should be recorded alongside any negative effects arising from the new social distribution of work (see above). The number of dependents can simply be calculated by multiplying the total number of employees by the average family size. However, note these three points:

1. The average family size can vary between different parts of the country. An estimate of this can be ascertained from a household or employee survey of a representative sample of workers.
2. You will need to avoid double-counting, for instance, part-time employees, who might also be counted as dependents.
3. If there is more than one income earner in the household, then the number of dependents counted should be proportionate to the contribution to household income from the mining project.

STEP 3: Procurement of local goods and services (Mining and economic development: local content)

Money spent by mining operations on procurement (purchasing and outsourcing) of goods and services from the domestic economy is normally large enough to boost substantially local production and the development of new industries. Therefore, any increase in local content is potentially of immense importance in improving the economic and social benefits of the mine at the local level. Examples of the sectors that can benefit in this way include utilities; construction; manufacturing; food supply; hotels, bars and restaurants; road, rail and air transport; and banking and insurance.

It may be that the mining company already collates metrics on the sourcing of labour, materials, goods and services from small businesses and communities close to a mine site because of regulatory requirements; and you should start your enquiries there. Another data source for this step is the mine's local content execution plan (see Box 5.3), if it has one.

You will need to gather data from the mining company or its suppliers on three aspects related to the purchase of local goods and services. These comprise:

1. a profile of the supply chain;
2. the value of domestic procurement; and
3. the social distribution of procurement expenditure.

Measuring the participating mine's positive and negative contributions to local communities

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Box 5.3: Partnerships for local content

Local content execution plans provide for the mining company and its subcontractors to engage local (and host-country) firms in their supply chains and are an important and increasingly standard part of mine planning.

To ensure economic opportunities are not lost in the design, feasibility, construction, commissioning and operational phases of a mine, technical or financial support is sometimes provided to local businesses to help them develop goods and services for the supply chain. It is the responsibility of the mine operator to ensure local content execution plans are cascaded down to all levels of activity (owner's team, contractors and direct employees) and are made available to the public.

To this end, some mine operators establish dedicated offices with teams of procurement staff close to the mine site to ensure local content execution plans are realized.

NOTE: Further information and practical examples of local content initiatives can be found in the January 2010 ICMM document *Mapping in-country partnerships*.

A profile of the supply chain

This information should be available from the procurement or accounts departments of the mine. You should aim for more than just one year's data. Try to collect data for as long a period as is possible so that it is representative of a number of project phases (exploration, construction, operation and mine closure). Develop the profile by seeking answers to the following questions:

- How many suppliers are there in total, both domestic and foreign? What is the level of the mining company's expenditure on the goods and services they provide?
- How many of these suppliers are based domestically (locally or in the host country)? Is it possible to say whether they are truly locally owned firms or merely local branches of suppliers based in another country?
- What goods and services do they provide?⁶¹

The value of domestic procurement

The mine's procurement department should, in the first instance, be able to provide these data. If it cannot, it may be possible to persuade suppliers of the importance of providing the relevant information. For these calculations, it will normally not be possible (or necessary) to contact all domestic suppliers; rely instead on a few of the larger ones, as this way you could capture a large

61 Note that "domestic" companies are often actually local branches of international suppliers, such as those for fuel, vehicles and explosives. They are locally incorporated for tax purposes and would certainly be employing local people, but they are not exactly "local" companies. However, the distinction between ownership structures (i.e., local or foreign subsidiaries) and the share of business that represents local "value added" is not always clear cut.

Measuring the participating mine's positive and negative contributions to local communities

continued

proportion of the local supply chain. Alternatively, seek out a sample that is representative in terms of type of supplier, geography, size of purchase, and skills required. Then:

- calculate the value of procurement purchased through these suppliers;
- multiply this up to estimate the total value of procurement sourced domestically (assuming that the sample is accurately representative of the domestic supply chain). For instance, if the value of procurement for a third of domestic suppliers was calculated, then multiply this value by three to get the total value of domestic procurement; and
- divide this value by total procurement (domestic and foreign) to estimate the percentage of total procurement that is domestic.

It would also be useful to estimate the proportion of local businesses that are not direct suppliers but who are also partly dependent upon the mine (e.g., because of employee retail or leisure spending). This estimation is best achieved through looking for secondary sources of information, such as small surveys of local businesses or discussions with representative groups. A local chamber of commerce or aid donor may have conducted a business linkages survey at some point in the past. Any negative impacts the mine has had on local businesses or commerce should also be recorded here.

Major new capital investments will also require procurement, but the value will be much greater than that of operational expenditure. Therefore, if there has been

recent capital investment (e.g., in the last five years) or if there is current or planned capital investment, describe the scale of the expenditure and where construction services and capital equipment has been or will be purchased. If data are available, use a similar process to that described above. If not, a more qualitative description of the investment should be provided, describing the value of the works, the number of people employed or to be employed, and the location of the construction and capital equipment suppliers.

The social distribution of procurement expenditure

When you quantify procurement, if at all possible try to identify which sections of the population are the providers and to what extent, disaggregated by ethnicity, religion, language, culture, place of origin, residential location and age. This may be able to be done by analyzing the types of companies providing the goods and services.

Time period

In analyzing the three aspects above, you should try to develop a picture of how procurement expenditure has changed and will continue to change over time. Therefore, in addition to data for the current year, try to get figures for the previous five to 10 years and estimates for the next five to 10 years. As with employment, more approximate estimates can be produced for these future years (based on existing long-term contracts) than for the current year if data are not available.

Table 5.2 is an example of a table you can use to organize some of the data from these three aspects.

Table 5.2: Example questionnaire on supplies purchased from the host economy 

Item	Approximate value (US\$/year)	Company/product	Location	Disadvantaged supplier (Y/N)	Comments and examples of initiatives
1. Mine-related services (bar, shop)	US\$100,000	Bar and Shop Inc.	On-site	No	Started just with shop but now has long-term contract for bar and shop
2. Camp food	US\$175,000	Fresh meat and vegetables	Surrounding villages	Yes	Bought through cooperative established by the mining company
3. Fuel	US\$2 million	State fuel company	National capital district	No	Long-term contract
4. Transport	US\$7 million	Logistics Inc.	National capital district	No	Competitively tendered contract
5.					

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STEP 4: Human capital development and training (Mining and economic development: local content)

Training will always be an important part of a mining company's local contribution and needs to be carefully and fully documented and broken down by the culture, place of origin, residential location, gender, ethnicity, age, language and religion of the trainees. The benefits of training can often be extended to or can spill over to the employees of suppliers and typically come in the form of vocational training (directly job-related). Training's value to society would often be assessed as greater than the costs incurred by the mining company itself: skills may be transferable from the trainees to family members or friends; and the people trained add to the human capital base of the host country, to the advantage both of present and future mining operations and of other sectors of the economy.

It is recommended you assemble the data shown in the Table 5.3.

In addition, try to profile how investment in human capital has changed over time and how it is expected to change, using five and 10 years from the past and into the future as reference points. In many mines, employment will have decreased because of productivity improvements, so note both the positive and negative implications.

STEP 5: Social investment and infrastructure development (Mining and economic development: regional development planning)

The objective of this step is to describe the mining company's social investment and infrastructure development initiatives. Such initiatives will always be needed in low- and middle-income countries. However, their form and extent will be influenced not only by the latent demand in the local community, but also by the fresh demand for which the new mine is responsible. For instance, the influx of outside workers and their families may have obliged the company to build or maintain schools, hospitals, clinics, police stations or public libraries. Mining companies that face these demands will struggle with the demarcation line between their reasonable responsibilities and those of the government to whom they pay taxes. Good intentions notwithstanding, the drift by the mining company into a quasi-government role brings difficulties. For example, governments will be tempted to leave social investment and infrastructure development to the company, which exposes the mine-assisted facilities to consistent underfunding in the long term. In addition, the company will be left with a responsibility for which it has no mandate or moral authority,⁶² and this will be compounded by the resentment of the formal agencies of government that become underfunded and marginalized. As a rule, mining companies should support local initiatives by forming partnerships with local government and community groups rather than supplanting them.⁶³

62 The moral hazard is most evident in the field of law and order, with numerous examples of companies being caught between practical necessity and the lack of moral authority to act on that necessity.

63 This is discussed in detail in the ICMM/World Bank *Community Development Toolkit*, pp. 8–10.

Table 5.3: Questionnaire on training activities undertaken 


Question	Metric (e.g. number of staff/hours, US\$)	Comment
Number of employees that received any employment-related training in the last financial year?		
Were these manual, professional, or technical staff?		
What type of training was undertaken in the last financial year, including very basic things if appropriate, such as literacy or health and safety?		
Amount of time dedicated to training in the last financial year for each type of training and, on average, across trainees?		
How much was spent on training in the last financial year?		
What were the resulting outcomes from the training provided?		
How many formal qualifications were achieved – academic, certificates for vocational training?		
Were there any measurable or observable increases in labour productivity?		
Reduced staff turnover?		
Improved safety performance?		
Reduced pollution incidents/emissions?		
Is there any anecdotal evidence of improvements in employee performance, evidence of promotions from previously disadvantaged groups?		

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For each area of social investment and infrastructure development, you should:

- describe the initiative;
- indicate the approximate cost (US\$ per year or initial investment cost). If these efforts are carried out in co-operation with government or other institutions (e.g., NGOs), you should note the portion of costs borne by the different partners;
- describe and quantify, where possible, other company contributions to the initiative, such as staff time and other in-kind support. If it is time dedicated by employees through a staff volunteering program, then calculate the equivalent wages earned for that amount of time; and
- note whether there is a perceived benefit of the investment by different groups.

Table 5.4: Questionnaire on social investment and infrastructure development  (this table is available at www.icmm.com/mpdtoolkit) provides a structure for collecting and presenting this information broken down into five categories. The table includes a broad cross-section of examples of different types of activities.⁶⁴ The list is not exhaustive, and additions should be made as needed. Many initiatives may not be documented or otherwise immediately evident, and you may need to consult widely within the mining operation to capture the full picture.

In your interviews in Step 1 with local community and government stakeholders,

they may have provided opinions about access to infrastructure. It will be important to record the end users' opinions on the success of the mining company's social investment and infrastructure development initiatives. Try to keep the infrastructure developed solely to meet the needs of the company separate from specifically social investment or common-user facilities. For example, a road within the concession area that is restricted to mining company vehicles will not provide the local community with any benefits.

In addition to the facts and figures that quantify the contribution, you should also inquire about more qualitative dimensions to social investment and infrastructure development expenditure:

- Identify the interactions between the company and employees, national government, local community leaders and other government representatives when determining what support to provide. For example, did the company plan physical infrastructure so it would also be of use to other local businesses and residents? Did it save funds that might otherwise have had to be committed by government by adopting a co-operative regional planning approach and avoiding duplication of efforts?
- Although it may be practically difficult to do this, provide if possible a brief assessment of which groups within the community may be benefiting most from the investment in terms of gender, ethnicity, religion, language, culture, place of origin, residential location, and age and whether or not the benefits are distributed equitably.

⁶⁴ Definitions differ, and some of these items may not be considered to be social investment in all countries.

Measuring the participating mine's positive and negative contributions to local communities

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STEP 6: Comparing local and national economic and social development trends (Mining and poverty reduction)

In many instances, the economic and social impact of mining operations at the local level can point in the opposite direction to national trends. Indeed, one would expect this to be the case where a very large mining investment is inserted into a formerly very poor local economy. It is, therefore, important in assessing local economic and social progress to make selective comparisons between local and national levels of development.

The majority of the indicators recommended for Step 6 come from the UNDP human development index (HDI)⁶⁵ and are linked with the Millennium Development Goals.

National-level indicators

For national-level indicators, definitions and data are typically available on the UNDP Human Development Reports website, and you should summarize them as outlined in Table 5.5.

Local-level indicators

No standard local-level indicators exist as yet for estimating economic and social development trends for the local economy – that is, for the area of influence of the mining operation. Often the closest approximation will be regional indicators. The extent to which these will reflect the circumstances at the local level is very much site specific. However, you may be able to assemble a characterization of the

development status of the local area from such sources as:

- country-level human development reports prepared by the UNDP or other agencies, which may have disaggregated data for regions, larger towns, or other administrative areas;
- reports from the local health commissioner, education department, or ministry of finance;
- reports from the mining company, such as social reports, SIAs, or HRIAs; and
- data on some Millennium Development Goal variables at the local level for those countries that have prepared poverty reduction strategy papers for the International Monetary Fund.

Try to use the same or similar indicators for the local-level indicators as you have used for the national-level indicators so that comparisons can be made easily (as shown in Table 5.5).

.....
⁶⁵ Annual Human Development Reports, which contain the HDI data, are available from <http://hdr.undp.org>.

Table 5.5: Human development indicators

Indicator	HDI reference*	National	Local
Human development index (value)	Table H		
Life expectancy at birth (years)	Table H		
Adult literacy rate (% aged 15 and above)	Table H		
Combined gross enrolment ratio in education (%)	Table H		
GDP per capita (PPP US\$)	Table H		
Life expectancy index	Table H		
Education index	Table H		
GDP per capita rank minus HDI rank	Table H		
Population not using improved water source (%)	I - 1		
Children under weight for age (%)	I - 1		
Ratio of estimated female to male earned income	K		
Unemployment	1-2		

* The references in the UNDP Human Development Reports (HDR) change from year to year. Table 5.5 is based on the 2009 HDR edition, which details national level indicators from A to N.

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continued

How to present your findings

The various individual impacts assembled and assessed in detail in the six steps of module five should allow you to present an overall economic and social net impact mainly at the local level (the macroeconomic impacts are covered in module six).

However, scoring and weighting performance across qualitatively different issues (where perceived success differs from individual to individual) is not straightforward and can be contentious. Therefore, this toolkit does not offer a formal "scorecard" that integrates performance over different issues. Rather, you should write a discursive summary of the main quantitative and qualitative findings, supported with graphs and tables, and identify the implications for the mining company's initiatives and partnerships.

Review all the findings gathered from the Step 1 stakeholder consultations, so as to ensure that your overall assessment of the net local impact gives a full account of all the positive and negative contributions of mining at the local level. If you managed to conduct the stakeholder interviews and consultations in a thorough manner, there should be a great deal of qualitative information with which to support or dispute some of the more quantitative findings. For example, discussions with stakeholders on physical or economic displacement and on the demographic and social changes that have arisen in the communities as a result of the mine, both positive and negative, will complement the data elicited from the mining company on social initiatives and infrastructure development or employment.

The employment data from Step 2 can be presented in a time series graph of both the employment numbers and the wage and salary numbers.

The main results from Step 3 can be laid out as in Table 5.2 accompanied by a discussion of the main features and issues of local procurement. Discuss the mine's specific initiatives designed to increase the levels of local procurement and whether these have been successful.

Step 4's findings can be presented in a table similar to Table 5.3 with a narrative discussion of the positive and negative implications of the operation's training activities.

Table 5.4 from Step 5 can form the talking point for the discussion about social investment and infrastructure development.

Using the data gathered in Step 6, you may be able to compare the economic and social development status at the national and local levels by calculating the ratio of the indicator values at the local level to the corresponding indicators at the national level. These ratios can be presented in a histogram (an example is provided in Figure 5.1).

Interpretation of the hypothetical results from Figure 5.1:

- If the value is greater than 1, this indicates the local level is performing better than the country as a whole on that particular socio-economic aspect.
- If the value is less than 1, then the local level is performing worse than the country as a whole on that particular socio-economic aspect.

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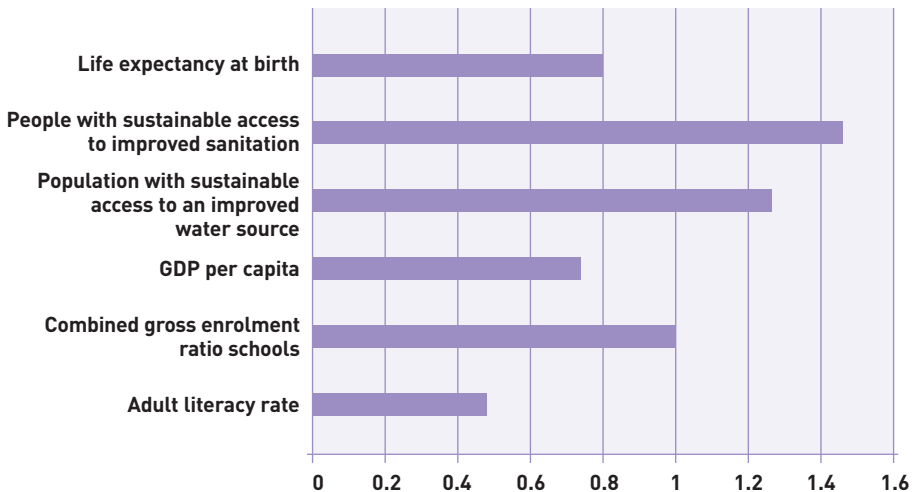
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Wherever possible, you should attempt to describe the net impacts (net benefits and costs) for different stakeholder groups. It is recommended that you organize this summary narrative around the six partnership themes:

- mining and poverty reduction;
- mining and economic development: revenue management;
- mining and economic development: regional development planning;
- mining and economic development: local content;
- mining and social investment; and
- mining and disputes resolution.

You should pay particular and frank attention to the strengths and weaknesses of the mining company's performance against these six themes, because the credibility of the assessment and properly directed priorities for future company or partnership initiatives both depend on it.

Figure 5.1: Comparing local with national socio-economic performance
(a score of "1" indicates equality of local with national performance)



Guidelines for field interviews

This guidance and the tools in this annex were designed by Environmental Resources Management (ERM)⁶⁶ to assist the consultants responsible for interviewing stakeholders about the socio-economic initiatives of the participating mining operation. The guidance has two steps: organizing inputs and organizing outputs. They should be read in conjunction with module five and used to plan the field work and to present the results (with tailoring as appropriate). It is also essential that all interviewers are fully trained before commencing work in the field and that an experienced survey supervisor is engaged to oversee the work both of the design and of the execution in the field.


STEP 1: Identifying and prioritizing interviewees

It is essential to select the appropriate stakeholders for interview if you are to obtain an accurate picture of the level of project knowledge, attitudes and opinions of local people. The text and table that follow provide guidelines about how to achieve this. In particular, the following considerations arise in making this selection:

- fully representing the different stakeholder groups (e.g., NGOs, governments);
- ensuring good representation from stakeholders who:
 - have relevance to the mining sector on one or more of the six partnership themes;

- have a broad level of understanding about local conditions and also have a senior position in their organization; and
 - are known to have good knowledge (and, perhaps, strong views) about particular issues locally but do not hold a major local office;
- achieving an appropriate geographical catchment area for the assessment, and ensuring a good balance of stakeholders within this (i.e., stakeholders close to mining activity as compared with those impacted by mining but located further away); and
 - giving a full account of the views of pro-mining, neutral and anti-mining stakeholders.

Once this initial assessment has been undertaken, prioritize the stakeholders within each group, especially if there are too many to interview in the timeframe. Focus on interviewing those of higher priority. Send your prioritization to the lead consultant for feedback prior to arranging meetings. Table A.4.1 is a guide to the type of information to be collected. You will need to use your own judgement in deciding the criteria for prioritizing these groups.

The guidance in **Table A.4.2: Information from interviews**  (this table is available at www.icmm.com/mpdtoolkit) on the type of information or perspective that each stakeholder group would be expected to provide will help you to plan your interviews and define the questions to be asked. In addition, Table A.4.2 information will help to refine or expand the example questions in Table 5.1.

66 www.erm.com.

Table A.4.1: Prioritizing interviewees 

Organization	Contact name and position	Relevance to mining and thematic issue	Geographical relevance	Pro-mining, Anti-mining or Neutral?	Priority
a) Local government					
b) Mining companies (and their employees)					
c) NGOs/donor agencies					
d) Other NGOs/Civil Society Groups as Representatives of Community Groups					
e) Local businesses, community groups and local people (where no available interviewees in d); ensure a representative range of interviewees or focus group representatives, including women)					

STEP 2: Presenting outputs from the interviews

Table A.4.3 is a template with which to capture stakeholder responses and structure them according to the six partnership themes. For each theme and organization or contact, you should aim to capture the following:

- background context – method and statistics;
- initiatives ongoing, with summary of impacts;
- opportunities for improvement; and
- remaining challenges to address in each theme in order to drive improvements.

Table A.4.3: Presenting results 

Organization/contact	Mining and poverty reduction	Mining and economic development: revenue management	Mining and economic development: regional development planning	Mining and economic development: local content	Mining and social investment	Mining and disputes resolution
a) Local government/authorities						
b) Mining companies						
c) Donor agencies						
d) NGOs						
e) Civil society groups as representatives of community groups						
f) Community groups						

NOTE: This table has a similar structure to Table A.2.1, the summary table for the example partnership database. Your findings from these interviews might help you further develop the partnership database suggested in module two and described in Annex 2.

Notes on calculating employment impacts

Annex 5 provides guidance on how to calculate the three categories of employment: direct, indirect, and multiplier or induced.

For all three of these definitions of employment (direct, indirect and induced) it will often be of interest to readers of this module's findings to know what proportion of indirect employment is retained "locally". So wherever possible ask or make an estimate of what proportion of jobs are created "locally" by the mine.

Calculating employment

All employment should be expressed as full-time equivalents for a year. A full-time job is one that occupies employees for 30 hours or more per week. Therefore, if the mine employs two part-time staff, each of whom works two full days per week throughout the year this is counted as one full-time equivalent position.

Direct employment

As shown in Figure A.5.1, direct jobs comprise the mining company's employees and permanent on-site contractors. The total is the number of individuals on the respective payrolls but expressed as full-time equivalent positions.

Where there are headquarters or other overhead staff employed within the host country, the proportion of these that relate to the mine should be included.

Indirect employment

Indirect employees are those who work off-site for the operation's suppliers and contractors and whose employment is dependent upon custom from the operation. (Indirect employment includes community service investment employment, but this is discussed in the next section as it is calculated in a different way.)

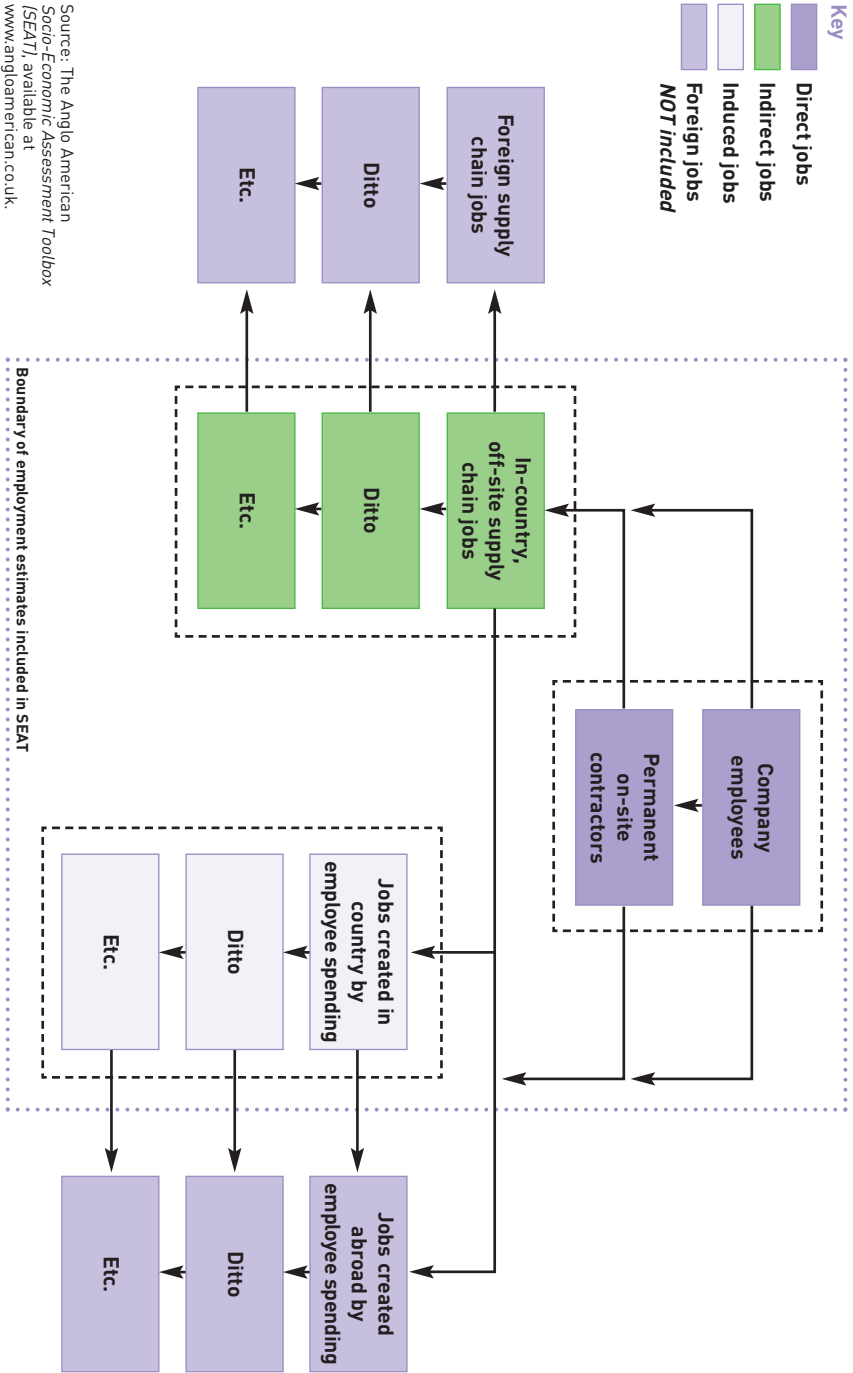
While not as accurate as those figures for direct employment, reasonable estimates as to indirect employment (particularly for full-time contract workers) may be available from the mining company's personnel or human resources department or from suppliers and contractors.

Employees of suppliers or contractors do not have to be permanently engaged in work for the operation for the employment to be counted. For example, a maintenance contractor who employs 100 full-time equivalent staff and who sells 10% of his or her output in a year to the operation would have had the equivalent of 10 full-time equivalent jobs created by the operation's custom. Again, this information should be available from the mine or from their suppliers and contractors.

If a portion of the work is subcontracted to other companies, similar calculations should be done for them.

Table A.5.1 summarizes how to calculate supplier and contractor employment. If the operation has major contractors or suppliers who themselves source a major part of their work from outside their companies, they can

Figure A.5.1: Types of employment



Source: The Anglo American Socio-Economic Assessment Toolbox (SEAT), available at www.angloamerican.co.uk.

Notes on calculating employment impacts

continued

also use this form. When collecting this information, a sampling approach should be adopted. A representative number of suppliers that comprise the majority of the operation's procurement expenditure should be contacted. The sample should be representative in terms of type of supplier, geography, size of purchase, and skills required. The information gathered should then be grossed up to reflect total expenditure. It is not necessary to contact all suppliers, as this would be very time consuming.

Indirect employment created by community social investment

Community social investment employment is a type of indirect employment, but it is calculated in a different way. Mining operations can affect society in a number of ways through the provision of social investment. For instance, they may build or maintain schools, hospitals, clinics, police stations and public libraries. This, in itself, can generate employment in the community. The mining operations may also be contributing to job creation schemes as a part of their social investment initiatives.

Identifying the number of full-time equivalent jobs attributable to employees (or, in the case of job creation schemes or other schemes that provide livelihoods, beneficiaries) of community social investment initiatives is a simple four-step process:

1. Identify the number of employees or beneficiaries of the initiative. This is the number of individuals who directly participate in the initiative (i.e., not including non-participating dependents).

2. Estimate or ask about the average percentage of their working day that is dedicated to supporting or working at the initiative.
3. Estimate the percentage of the operation's contribution to establishing and maintaining the initiative. This can include in-kind contributions (e.g., of land, materials or time). To ensure the answer is balanced, the operation should attempt to agree on this with other initiative partners, including beneficiaries.
4. Calculate full-time equivalent jobs using the following formula:
 - a. number of employees or beneficiaries, multiplied by
 - b. average percentage of incomes or employment derived from the initiative, multiplied by
 - c. the percentage of the mining operation's contribution to the initiative, equals
 - d. full-time equivalent jobs.

For example, if a local hospital had 200 employees who derived their entire livelihoods from working there full-time and if the mine was responsible for 50% of the support provided, the employment generated would be: 200 beneficiaries x 0.5 (mine contribution) = 100 full-time equivalent jobs.

Table A.5.2 provides a format for calculating and summarizing employment from community social investment.

Table A.5.1: Calculating indirect employment (excluding community social investment employment) 

Name of contractor/subcontractor/supplier	(a) Number of permanent on-site staff ⁽¹⁾ (includes contractors)	Number of off-site staff			(e) Total indirect employees (a + d)	(f) Percentage of employment that is local
		(b) Total number of employees in company ⁽¹⁾	(c) Percentage of business with the operation	(d) Total off-site employees (b x c)		
1.						
2.						
3.						
etc.						
Total						

NOTE: (1) Staff and employee numbers should be expressed as full-time equivalents.

Table A.5.2: Calculating an operation's contribution to indirect employment from community social investment 

Name of initiative	(a) Number of employees or beneficiaries from initiative	(b) Average percentage of employees' or beneficiaries' incomes derived from the initiative	(c) Mining operation's contribution to establishing initiative (%)	(d) Full-time equivalent jobs attributable to community social investment (a x b x c)	(e) Number of jobs that are local
1.					
2.					
3.					
4.					
5.					
6.					

Notes on calculating employment impacts

continued

Induced employment through employee spending (multipliers)

The spending of direct and indirect (including community social investment) employees generates induced employment in the local economy. This employment results from spending on housing; food; clothing; leisure activities; personal services, such as hairdressing and cleaning; business services, such as banking; transport; utilities; and public services, such as education and health care. As can be seen, while most spending is by employees themselves, the public sector may also provide some services on their behalf (for example, education).

It is possible to calculate accurately the multiplier effects on employment by using business surveys and economic modeling techniques such as input-output and computable general equilibrium (CGE) models.⁶⁷ However, these econometric techniques can be time and resource intensive;

⁶⁷ Note: Input-output tables describe the sale and purchase relationships between producers and consumers within an economy. The OECD Input-Output Tables are produced by illustrating flows between the sales and purchases (final and intermediate) of industry outputs but can also be produced by illustrating the sales and purchases (final and intermediate) of product outputs. For further information, see the OECD website where the latest set of OECD Input-Output Tables consists of 42 countries with data for years from around 2005. The Input-Output Tables can be accessed via OECD's data dissemination service OECD.STAT and as a suite of Microsoft Excel files. To access the full dataset, go to the themes "Industry and Services", "Structural Analysis (STAN) Databases" and "Input Output Database", at www.oecd.org. A good example of applying an input-output model for the mining sector (in Chile) can be found at www.unctad.org. For further information on CGE modeling, see *Computable General Equilibrium Models and Their Use in Economy-Wide Policy Analysis: Everything You Ever Wanted to Know [But Were Afraid to Ask]*, available at www.rrl.wvu.edu.

and, notwithstanding their simplicity and widespread use, such models have a number of limitations that need to be borne in mind when assessing the results. In particular:

- the structure of the model might not accurately reflect the economy, input technologies might change, or changes in relative prices may lead to substitutions between inputs; and
- there may be supply constraints in some domestic sectors or in the availability of certain kinds of labour. If so, then the multiplier effects obtained will be overestimates.

For the purposes of developing a country case study or a shorter mining issues paper, it is recommended you make use of robust multiplier estimates, wherever possible. However, in the absence of reliable data, crude approximations on induced employment effects of mining can be estimated from existing empirical studies. Two of these are discussed here. The first study estimated that, for every job created in a mine, a further 1.65 to 2.5 jobs are created elsewhere.⁶⁸ The second study estimated that, for every job created in a mine, a further 1.25 to 2.37 jobs are created elsewhere, the higher figure relating to "world-class mines".⁶⁹ These estimates accord with the authors' experience of undertaking socio-economic impact assessments using input-output and CGE models.

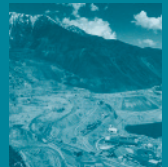
⁶⁸ This is based on the World Bank study *Large Mines and the Community*. If there is research that is more accurate that has been calculated for the operation or country (for example, as part of a socio-economic impact study), that should be used instead.

⁶⁹ Schodde and Hronsky, *The Role of World-Class Mines in Wealth Creation*, Society of Economic Geologists, Special Publication 12, 2006, pp. 71-90.

**Analyzing the
life cycle impact
of the participating
mine on the
host country's
macroeconomic
aggregates**

ANNEX 6
Template for collecting
life cycle data

MODULE
SIX



An aerial photograph of a large-scale mining operation, likely a copper mine, set in a rugged, mountainous landscape. The scene is dominated by a massive, terraced open-pit mine in the center-right, with a large body of water (tailings pond) adjacent to it. Numerous industrial buildings, processing plants, and infrastructure are scattered across the valley floor. The entire image is overlaid with a semi-transparent teal color filter. In the background, steep, rocky mountains rise under a sky with scattered white clouds. The overall tone is industrial and environmental.

**“LIFE CYCLE ANALYSIS ALLOWS
AN UNDERSTANDING OF WHAT
IS INVOLVED IN EXPLORING,
DEVELOPING AND OPERATING
A TYPICAL MINE, PARTICULARLY
IN ‘NEW’ MINING COUNTRIES.”**

Analyzing the life cycle impact of the participating mine on the host country's macroeconomic aggregates



Purpose

The purpose of module six is to analyze the impact of the participating mine on the host country's macroeconomic aggregates over the mine's life cycle, which typically follows a number of phases: exploration, feasibility, design, construction, operations, extensions and closure.

In addition to royalties and taxes, the investment of capital, financing and operational expenditures, community contributions, and mine closure provisions for works and performance bonds will all influence a host country's macroeconomic aggregates over the mine's life cycle. Moreover, these contributions can rise and fall dramatically over time, either in the normal and predictable course of a mine's life cycle or in response to external factors outside a company's control.

Your quantitative life cycle analysis will add hard numbers to the evidence base for constructive debate about fiscal policy in particular and about mining's economic and social contribution in general. In particular, this module recognizes explicitly that the mine's contribution to an economy can vary greatly from year to year over its life cycle and that debates in country are frequently reaching erroneous conclusions by failing to recognize this.

Gathering the data

Collecting all the data required to analyze the macroeconomic impacts over the mine's life cycle may seem like a daunting task. However, module six is worth the effort. The REI's report entitled *Mining in Tanzania – What Future Can We Expect?*, for example, was able to explain the life cycle macroeconomic contributions of mining to a lay audience and bring perspective to a politically heated debate especially about minerals taxation.

You will need to gather data about the mine and about the country's macroeconomic aggregates in the following categories for the period covered by the life cycle of the mine (starting with the first drilling program, even if this means estimating the expenditure by previous operators of the exploration licence):

- Step 1: the mine's annual production;
- Step 2: the mine's annual payments that contribute to gross domestic product (GDP) (i.e., the value-added of the mine) and gross national income (GNI), as well as data on levels and growth rates of the host-country's GDP and GNI;
- Step 3: the mine's annual contribution to government revenues and total annual government revenues; and
- Step 4: the mine's annual contribution to the balance of payments and the country's annual balance of payments.

Analyzing the life cycle impact of the participating mine on the host country's macroeconomic aggregates

continued

Using constant dollars and projecting future values

To enable meaningful comparisons from year to year over the mine's life cycle, the monetary amounts used in the analyses need to be comparable. This is done by converting current dollars (i.e., the actual dollar amount of income or expense at the time) into constant dollars (i.e., the actual dollar amount of income or expense at the time adjusted to a base year, usually the most recently completed financial year, to account for inflation or deflation).⁷⁰ Make sure you know which type of dollar, current or constant, is being used in the data you gather. US dollars are typically used in this type of exercise because they are the unit of currency in which many mining company accounts are likely to be collected. However, this is not essential; and an alternative international currency could be used if more appropriate. Some items may be better expressed in local currency terms for presentational purposes to local audiences (e.g., how big is the revenue contribution to the national budget) and then re-expressed in US dollar terms for the purposes of making comparisons.

In addition, if you cannot find a source that provides the data for the macroeconomic aggregates in US dollars, you will need to convert the macroeconomic aggregates from the host-country's currency into US dollars. You can do this by finding out the relevant exchange rate for that period from any number of websites.⁷¹

For projected values (such as future ore prices or future government revenue), make sure you indicate the assumptions on which these are based. In many cases, it may be preferable to indicate a range of values. Also, for government data, such as the future levels of total GDP, ensure that the national projections are also presented on a constant dollar basis.

Data on the mine

A template in which you can organize the required mine data is provided in Annex 6. A feasibility study for a new mine will be based on financial modeling of investment return, which enables the project scope to be optimized and informs the investment decision. A typical financial model will account for all major costs over a project's life cycle, from the development drilling required to upgrade resources to reserves through to the detailed design, construction, operation, and closure of the mine. These outgoings will include all the main payments that will affect the macroeconomic aggregates of the host country. Thus, the financial elements of the mine's feasibility study are an important potential source of data for module six. As well, the project will

⁷⁰ One quick constant-dollar converter for US dollar amounts is available from the U.S. Bureau of Labor Statistics at <http://data.bls.gov/cgi-bin/cpicalc.pl>.

⁷¹ For example, www.oanda.com. A number of websites also have historical exchange rate data that you may need if the baseline year you are using is some years in the past.

Analyzing the life cycle impact of the participating mine on the host country's macroeconomic aggregates

continued

have incurred the sunk costs of the early stages of exploration, engineering and feasibility analysis leading up to the decision to invest, for which company records will also exist (or, failing which, the records of previous operators or, if these are unavailable, estimates based on what is known of the scope of the early exploration work). Feasibility studies become dated, and in many cases you will do better to rely on a company's historical accounts and the forward projections based on the financial modeling that all companies regularly update.

In addition, these models can also simulate the consequences of probable but unpredictable future influences on expenditure and income, such as mineral prices, fuel costs and other mine consumables, which will all in turn affect a mine's performance and hence its contributions to the country's macroeconomic aggregates.⁷²

A mine may also have defined or be seeking resources outside the ore reserve parameters of the feasibility study or current mine plan for which future development scenarios and their macroeconomic impacts could also be modeled.

Financial models may contain commercially confidential information. However, experience with ICMM's REI has shown that the data they develop can be readily generalized to tell the story of a mine's likely life cycle macroeconomic impacts. The story will be credible, because projects are very sensitive to costs and companies go to some length to take them into full account.

The taxes, royalties and fees that mining companies pay to government take many forms and are often paid at national, regional and local levels. These will be documented in company records; and, provided the mining company is willing to share this information, they should be your main source of information. As well, most companies maintain up-to-date estimates of likely future payments. If companies are unable to share information, you may need to exclude this section, unless revenue data can be taken from other documents. Ideally, this would be the Extractive Industry Transparency Initiative (EITI) reports. However, the data is not always shown in a disaggregated form, company by company, nor has every country signed up to the EITI.⁷³ In writing up your findings, you should state your sources and, where there is only partial information, the reasons for this.

72 See ICMM's report *Mining in Tanzania – What future can we expect?* as an example of a life cycle approach to assessing the macroeconomic impacts of the mining sector, available at www.icmm.com.

73 See www.eiti.org where, as of October 2010, 23 countries have published EITI reports, bringing the total number of EITI reports to 52.

Analyzing the life cycle impact of the participating mine on the host country's macroeconomic aggregates

continued

MODULE SIX

The EITI reporting template in Annex 3 (Table A.3.2) or the life cycle data template in Annex 6 (see Item Six in Table A.6.1) provides a typical listing of taxes. You should aim to collect the data to this level of detail where possible (but you may need to qualify or generalize this information if it is commercially confidential or politically sensitive).

You should be aware that the data request that you make to mining companies will involve some overlap from one module to other modules (especially modules five and six). In the light of this, you are encouraged to plan carefully so that you can coordinate these requests in a manner that minimizes the workloads on the companies or indeed on any other stakeholders. It is noted also that time periods and the definitions of some apparently similar variables may alter between modules. The problems caused by this can also be limited by careful pre-planning of all data requests.

Data on the macroeconomic aggregates

Data on the host-country's macroeconomic aggregates (GDP, total government revenue, exports, imports, interest on international debt, dividends paid abroad, investment inflows and debt repayments) can be obtained from national statistical sources, from national public finance documents or from the IMF datasets as found, for example, in the IMF's routine staff reports on each member country (commonly referred to as Article IV Staff Reports).

Analyzing the life cycle impact of the participating mine on the host country's macroeconomic aggregates

continued

How to present your findings

It is recommended that you conduct your analysis and present the data under four headings:

- Step 1: production;
- Step 2: GDP (i.e., the value-added of the mine) and GNI: levels and growth rates;
- Step 3: government revenues; and
- Step 4: balance of payments.

Wherever possible you should calculate and present the forward-looking macroeconomic data alongside the historical data of the mine so as to capture the full contribution from the early years of the investment. You should aim to capture all the exploration, construction and operating periods.

STEP 1: Production

You should provide a summary of past and future mineral production by volume and by dollar value (see the template in Annex 6, Item One) as a time series graph that covers the entire period of the mine's life cycle.

The volume data will allow comparisons to be made between production levels to date and the forward-looking production levels, showing how the future pattern of production is likely to evolve. It will also allow future production-based payments to government (such as royalties) to be calculated.

The US dollar value data will merely indicate the size of the mining activity both in the past and prospectively into the future, including in most cases the size of its main export contribution to a country's balance of payments – in cases where all production is exported. This is crucial information for the policy debate in signalling whether the impacts currently being realized might be expected to rise or fall in future. It is often the case that governments in particular assume that a large mining activity once established in their country is there for the infinite future; this is frequently a wrong assumption.

Future metal prices are never certain: using a specific value will be both arguable and wrong, so you might want to adopt – or at least explain the implications of – a credible price range instead.

Analyzing the life cycle impact of the participating mine on the host country's macroeconomic aggregates

continued

STEP 2: GDP: levels and growth rates

Calculate the mine's contribution to GDP (i.e., the value-added) as the annual sum of:

- wages and salaries, including payments to expatriate workers and any benefits paid;
- profits before taxes, dividends and depreciation; and
- interest payments on debt.

These three elements correspond with standard UN "National Income" definitions and so will enable the GDP (value-added) contribution of the mine to be compared directly with national aggregate GDP. (This definition may differ slightly from the concept of "value-added from a mine" used by some mining companies.)

For each year of the mine's life cycle, extract the data from each section of the filled-in data templates that has figures for one or more of the three elements, then total the three elements for each year and present them as a time series graph in constant dollar terms. In the case of the *profit* element of GDP, you can normally assume that this will be the difference between Total Revenues and Total Operating Costs (OPEX). However, a side check should be made in cases where company reporting shows "other" costs that are not included in either OPEX or in taxes, dividends and depreciation charges. In addition, you should express

these data as percentages of the total GDP of the country in the year you have chosen to base the analysis in (see discussion above on "Using constant dollars and projecting future values"). This will probably be the latest year for which reliable national GDP data are available.

Some of the incomes created by the mine will leave the country: namely, the expatriate wages and benefits that are paid and spent outside the host country, the interest payments on international debt, and the dividends to non-resident shareholders. These payments can also be extracted, in part at least, from the completed data templates.⁷⁴ The totals of these external payments from GDP can then be deducted from the earlier GDP totals for each year to give a time series graph for the mine's contribution to GNI. The time series graph for mining's GNI contribution over the life cycle can be presented in the same way as that for mining's contribution to GDP (i.e., as a percentage of total GNI). (The concept of GNI is recommended over the similar concept of "retained value-added" because it conforms more closely to international convention.)

⁷⁴ In previous applications of the toolkit, data on wages and salaries paid to expatriates have been requested separately. It has then been assumed that the major part of this remuneration will actually be paid and/or spent abroad (perhaps 80% to 90%). This is admittedly a second-best approach to eliciting full information from such employees about how they receive and spend their remuneration: an approach that would call for impractically time-consuming surveys.

Analyzing the life cycle impact of the participating mine on the host country's macroeconomic aggregates

continued

STEP 3: Government revenues

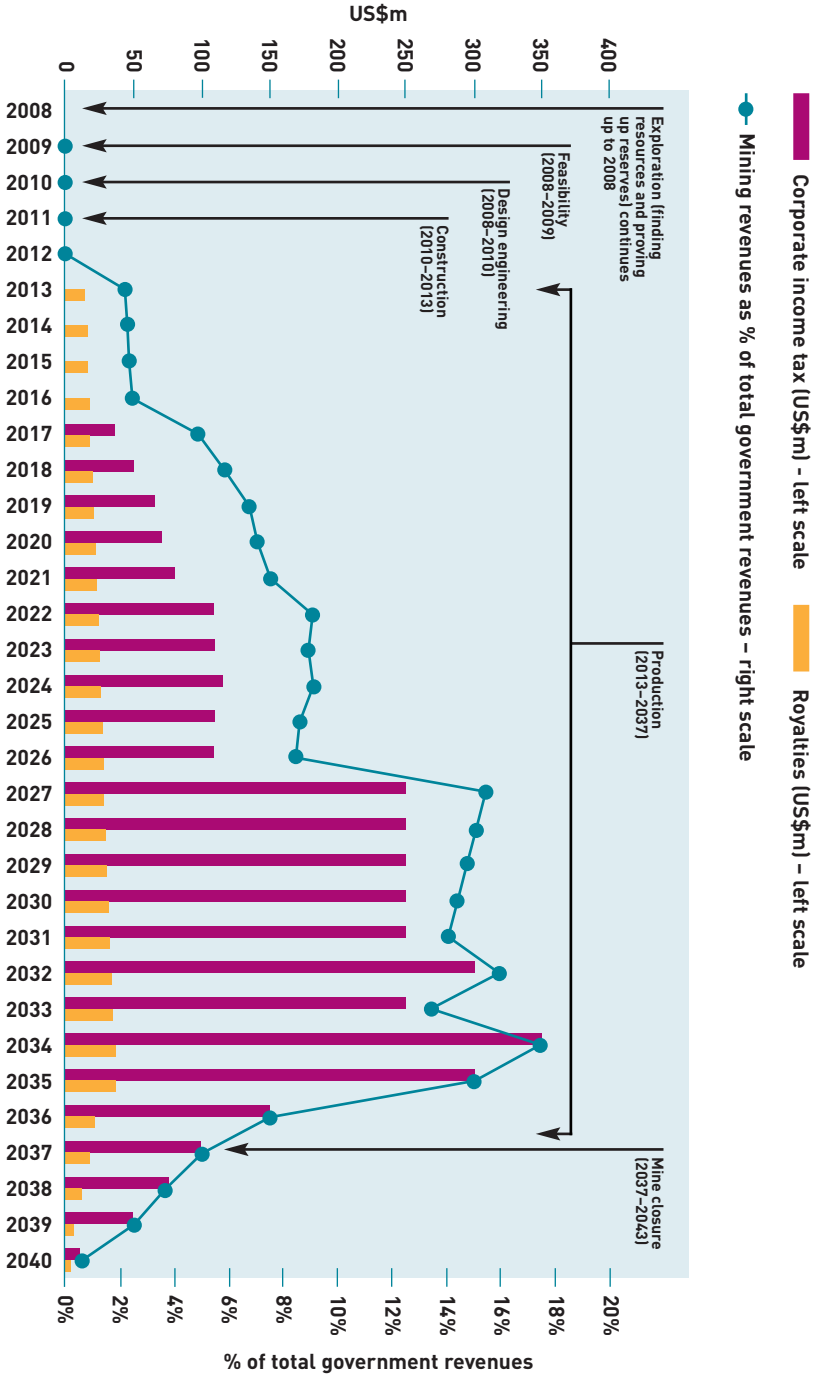
Construct and present a time series graph of taxes, royalties, levies and fees; and, if possible, show whether these are paid at national, regional or local level. Put payments by the mine participating in module six in the context of both historic and, if national projections are available (e.g., from IMF documents), future taxes and fees received or to be received by government from all sources.

The diagrams and figures that you use to present these data can be extremely informative about the large changes in payments to government over the mine's life cycle. The payment profiles for income- and profit-related taxes (such as corporate income tax) are particularly important, but taxes on production (such as royalties) and production inputs and services (such as import duties) should also be taken into account.

In the presentation of your findings, you should examine whether some tax instruments (such as royalties) have been used to ensure a minimum government revenue flow from the mine. For example, in the early years of the mine's operation, production- or value-based royalties may be the only significant revenue that the country receives from the mine because accelerated depreciation rates and the ability to carry forward losses have the effect of postponing revenue from corporate income tax to later years. You will need, therefore, to put the low government revenues of the early years in the context of the mine's total tax payments (Figure 6.1 is an example).

Taxation is always contentious and not always well understood. A close reading of the Addendum to the toolkit, Guiding Principles of Minerals Taxation, is recommended before you begin your presentation of the findings from Step 3.

Figure 6.1 : Example of how to present findings on corporate income tax and royalty payments over the project life cycle 



Analyzing the life cycle impact of the participating mine on the host country's macroeconomic aggregates

continued

STEP 4: Balance of payments

Use a similar time series graph to present the mine's contribution to the country's balance of payments,⁷⁵ based on a statistical analysis of the constituent parts:

1. balance of trade: exports minus imports;
2. balance on current account: balance of trade minus interest on international debt and dividends paid abroad;
3. balance on capital account: investment inflows to country (debt and equity) minus debt repayments; and
4. overall balance of payments: sum of balance on current account and balance on capital account.

You can extract these data, some in considerable detail, from the template in Annex 6 (Table A.6.1). However, the constituent parts of the mine's contribution will need to be drawn together to present an integrated picture of the mine's impact on the country's balance of payments.

Export data are straightforward and, for a mineral such as gold, will normally be more or less the same as the total value of the mine's production in any given year. However, you should make a note if not all of the output of the mine is exported and if some is sold domestically.

Imports have a more complex life cycle profile, with large quantities of specialized equipment likely to be imported in the early phases of the mine (exploration and construction) but

only small quantities thereafter. Ongoing imports of mine consumables may also reduce over time if local procurement sources arise.

The timing and amounts of interest payments to foreign debt financiers will be determined by the mine's loan agreements.

Dividends paid to foreign shareholders will reflect actual profit and company dividend policy and so cannot be easily quantified in advance.

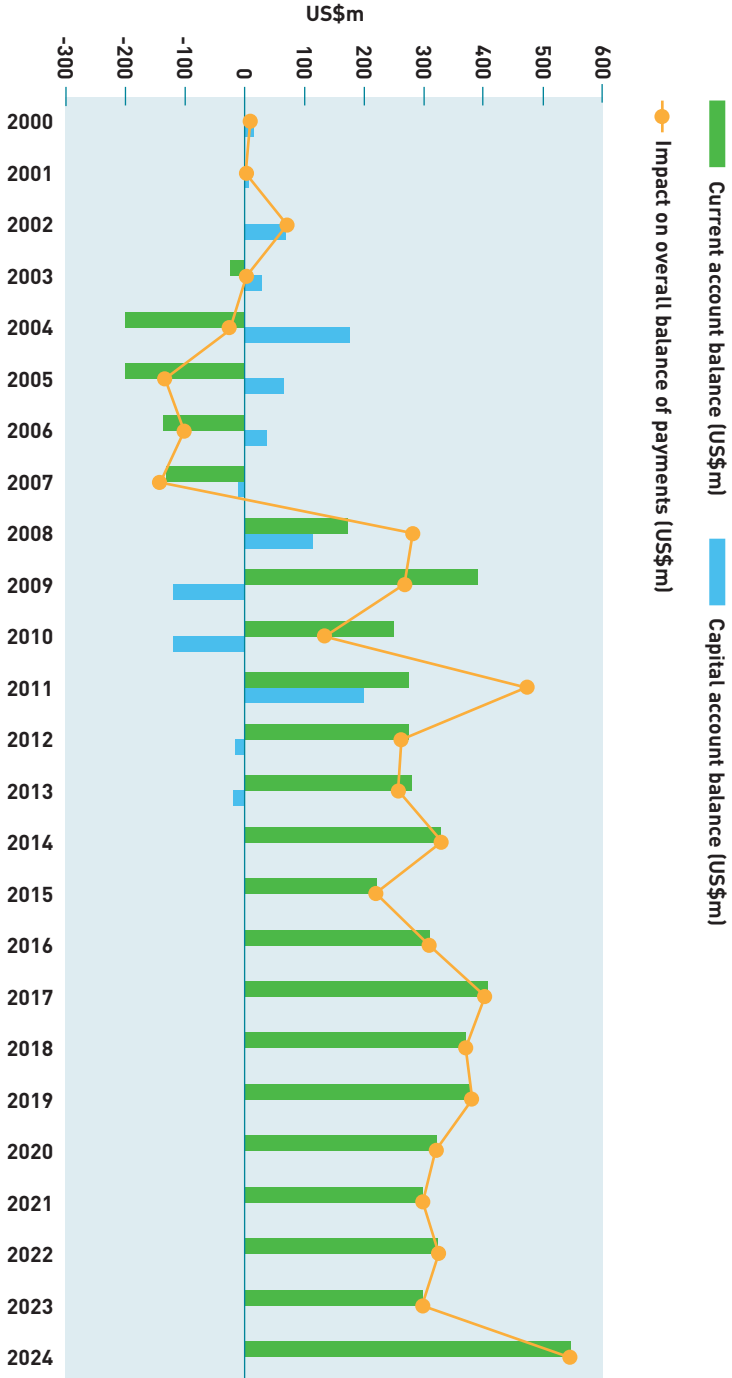
The drawdown of the capital funds to finance the project (the investment inflow) will typically offset the initial surge in imports.

When you present the data, first show how the constituent parts of the balance of payments – the mine's imports, exports, dividends, and net debt – vary over the mine's life cycle. Then present the overall balance of payments picture per the example in Figure 6.2. Controversies over mining's impact on developing economies often revolve around the selective use of balance of payments indicators. On their own, for example, large outflows for imports or to service debt will point to a deficit in the current account. However, this picture is incomplete: these outflows are balanced by the large capital inflows. As the example in Figure 6.2 shows, over the life of the project, the overall effect on the balance of payments can be largely positive.⁷⁶ Misleading arguments of this type are best addressed if you can present the complete picture of all four key balance of payments elements in one integrated figure.


⁷⁵ The balance of payments is a statistical statement that systematically summarizes, over a given period of time, all the transactions of an economy with the rest of the world.

⁷⁶ Because, at a national level, the current account and the capital account always add up to the total account, which is necessarily balanced, a deficit in the current account is always accompanied by an equal surplus in the capital account and vice versa.

Figure 6.2: Example of how to present findings on the balance of payments 



Template for collecting life cycle data

Table A.6.1: Template for collecting life cycle data  (this table is available at www.icmm.com/mpdtoolkit) will guide you to collect data that can be used to present a complete picture of the impact on a country's economic growth, future national income, balance of payments, employment, government revenue and a number of social problems.

Your request for data needs to strike a balance. On the one hand, you will want to minimize the work required by using concepts and aggregates that appear in standard company operating accounts and, thus, should be readily identifiable in any financial model. At the same time, however, you may need to aggregate data across different participating mining companies. Ask your respondents to fit their data to the format in Table A.6.1 as closely as possible. If they cannot reasonably achieve this fit, ask them to nonetheless provide all the data that they can (rather than summaries).

The template is intended to cover every year of the mine's life cycle. So start with the first pre-production costs and the drilling program and include the costs associated with the prefeasibility and feasibility studies and associated metallurgical, geotechnical and environmental investigations. If possible you should aim to include all years up to the anticipated closure date of the mine.

You should try to ensure the data is given to you in constant dollars as the aggregation will be easier if all revenues and costs are stated in constant-price terms (e.g., the prices of 2008). Please note that we have assumed the entire output is exported. However, if the product was sold domestically (even if only partially), you will need to reflect this in making revisions to the draft template provided on the CD.

You may find it easiest to work with the data if it is entered into Microsoft Excel or a similar spreadsheet application. The worksheet contained in the CD is in Microsoft Excel and is provided as a guide. As the data could be provided to you in any number of ways, it will be up to you to specify specific formulae and derive totals.



Template for collecting life cycle data

continued

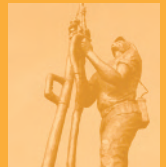
ANNEX 6

Impact of mining on governance

ANNEX 7

Detailed questions to help
assess the impact of mining
on governance

MODULE SEVEN



**“MINING ACTIVITIES
AFFECT INSTITUTIONS
AND POLICY CHOICES AT
NATIONAL, REGIONAL
AND LOCAL LEVELS.”**



Image courtesy of AngloGold Ashanti

Impact of mining on governance



Purpose

It is a general principle of the toolkit that you have the option to undertake one or more but not necessarily all of the modules. The exception is module seven. Because this module helps you pull together information found in earlier modules – so as to examine how mining operations influence decision-making, governance structures, institutions and policy choices at different levels of government – it is therefore dependent on earlier findings.

Module seven relies on an understanding of what has happened in the host country over the period during which mining has assumed a dominant economic and financial position in the country. Therefore, at a minimum, the value of module seven will be greatly increased if you have undertaken module four (examining the proximate aspects of governance that help or hinder this contribution).⁷⁷ Ideally, you will have also undertaken modules three (measuring the mining industry's economic and social contribution to the host country), five (measuring the participating mine's positive and negative economic and social contribution to local communities) and six (analyzing the life cycle impact of the participating mine on the host country's macroeconomic aggregates).

⁷⁷ As defined in module four, governance consists of the traditions and institutions by which authority in a country is exercised. This includes the process by which governments are selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them.

If by the start of module seven you have been able to build up a comprehensive picture of what has happened in the country since mining became more dominant you should already have (1) a good understanding of the participating mine's positive and negative impacts on economic and social development at local and national levels and (2) an idea of the influence governance has had on shaping this outcome.

With this two-way interaction in mind, module seven takes this analysis further by addressing perhaps the most subtle and elusive aspect of the toolkit scope: how are decisions on mining taken and how do they influence governance structures, institutions and policy choices at different levels of government?

At the mine level, it is generally assumed that the host country's political and institutional environment will operate in a more or less consistent manner, uninfluenced by the presence or absence of the mine. However, the evidence of ICMM's work to date is of a two-way interaction between mining and existing decision-making processes, governance structures and institutions. The economic and social importance of large-scale mining and minerals projects can render them politically powerful, thereby providing governments with clear incentives to accommodate mining investments. It is widely accepted that in any interaction or negotiation with host governments, for instance over investment incentives, mining firms are directly or indirectly shaping the country's decision-making and governance framework.

Impact of mining on governance

continued

In other words, the presence of a large extractive industry can lead governments and communities into decisions that they might not otherwise have made. It is this influence that may explain a number of the differences in economic and social performance between one resource-rich country and another.⁷⁸

The poor economic and social performance of many resource-rich countries suggests that many of these decisions – taken in response to changing circumstances arising from a large minerals investment – run against the host country’s long-term interests. For example, incentives to maintain a broad economic (or tax) base may be neglected (because of significant minerals taxes); the temptation to impose counterproductive taxes and duties may prove irresistible (to protect non-minerals sectors from deteriorating competitiveness due to an appreciating exchange rate); heavy-handed security may be imposed to protect an economically important mine from civil unrest; or opportunists might take advantage of new wealth to subvert traditional authority or to corrupt the rule of law.

On the other hand the influence could be positive. For example, the economic success of the mining industry may provide the rationale and political impetus for more effective and efficient government expenditure or for more robust macroeconomic and microeconomic policies.

Importantly, the influences of mining on decision-making, governance and institutions is context-specific and can be positive, negative or both. Often they will also be unintentional.

Despite difficulties in performing this assessment and the fact that mining companies have only a limited direct influence on a host country’s “governance” broadly defined, these influences definitely do matter. In particular, measuring the impact of the mining industry on decision-making, governance and institutions is necessary to:

- assess the social, economic and political risks of mining investments;
- identify the scope of mining companies’ corporate social responsibilities; and
- develop partnerships between companies, governments and communities to enhance the contribution of mining to the host country’s economic and social development.

⁷⁸ See Chapter 2 of *The Analytical Framework: Main report*, August 2006, particularly the discussion of Figures 4 and 5, available at www.icmm.com.

Impact of mining on governance

continued

Module four has examined the *proximate* elements of the country's governance that could affect, negatively or positively, the economic and social benefits of mining. Module seven completes the picture of a two-way relationship with an examination of the reciprocal, less tangible and qualitative impacts of mining on governance, so as to explain why the proximate factors (identified in module four) are what they are in the host country.

Gathering the data

Many researchers have put significant effort into searching for coherent and historically defensible explanations of the differences in economic and social outcomes between successful and less successful countries. ICMM's *Analytical Framework* draws from this large accumulated body of research.

There are five common features of efficient governance:

- strong states, administrative capacity, credible government commitments;
- limits to state strength;
- compatibility of formal and informal political institutions;
- formal economic institutions; and
- technical capacity.

These five high level conditions for effective governance need to emerge from some processes and sets of actions, and the list on the left side of Figure 7.1 identifies some of the key areas that the literature normally associates with those processes and actions. The arrows in the figure indicate the potentially rich interactive relationship between a major mining investment in a country and the performance of the governance system. These relationships are exemplified by the following questions:

- Is the legal and regulatory framework conducive to long-term investments, and how is it influenced by the presence of mining activity?

Impact of mining on governance

continued

MODULE SEVEN

- Does government have the capacity to formulate and implement macroeconomic, fiscal, social and industrial policies that are conducive to private sector development-both in the mining sector and in other main economic sectors-and that do not fundamentally threaten social cohesion and long-term effective development?
- How are crucial production inputs such as roads, ports and electricity affected by prevailing governance arrangements, and how does mining activity affect them?
- How is the economy's ability to accumulate human capital affected?
- Does the society and its government have the institutional and political capacity to cope with and adapt to external shocks to the mining and other economic sectors in ways that preserve rather than damage social cohesion?

The hypotheses are that (i) where governance structures, processes and institutions are efficient (as defined in the five high-level dimensions listed above), they enhance the direct and indirect effects of mining projects. But mining projects themselves have the potential to affect efficiency (positively or negatively) in some dimensions of governance, as shown in the left hand list of Figure 7.1; and (ii) where governance structures, processes and institutions are less efficient, or efficiency is deteriorating, they can undermine the direct and indirect effects of mining projects-or cause these effects to be negative.

In short "good governance" in all the main dimensions listed in Figure 7.1 will invariably enhance the direct effects of mining investments. In contrast, when there are weaknesses or gaps in the structure of governance, large-scale mining investments can still be a catalyst that helps to fill the gaps-again, the results should be positive. But we cannot rule out a third possibility: that there are cases of weak governance where mining projects may fail to create broader based economic and social benefits and where existing weaknesses may be compounded by mining activity.

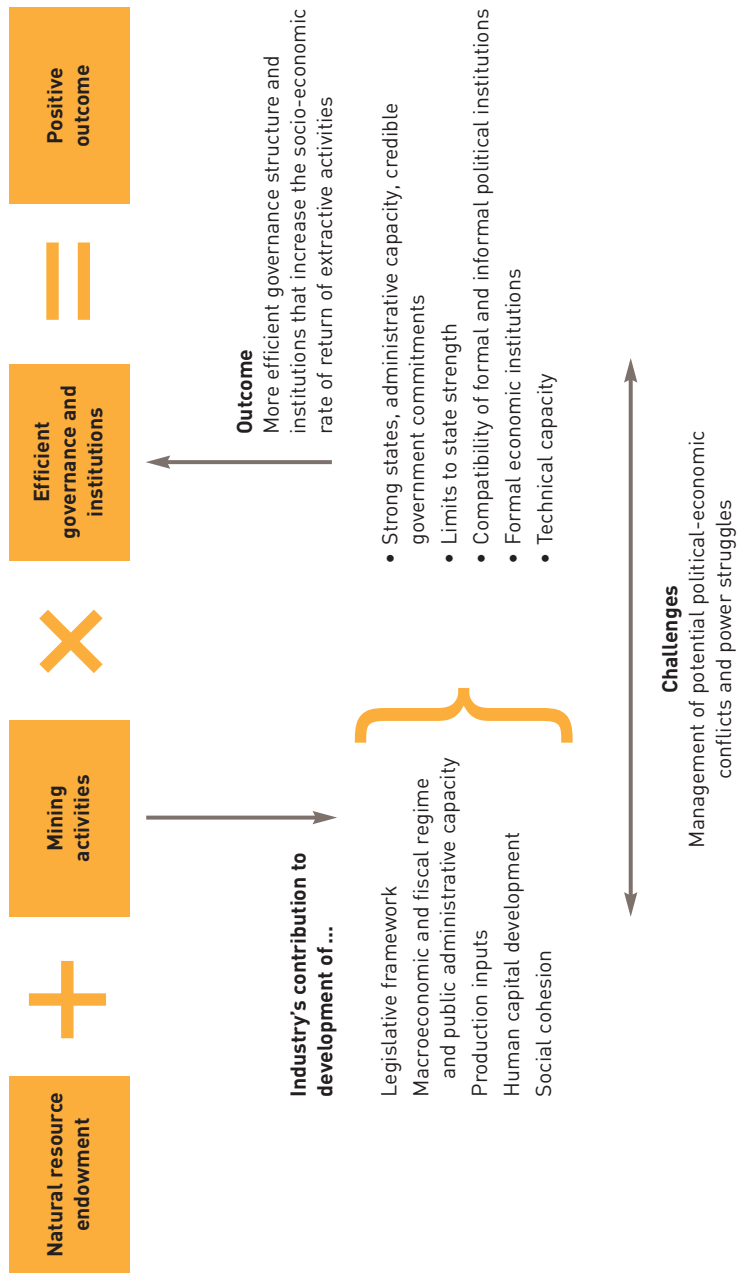
You should note that when you implement module seven only a limited subset of the issues can normally be examined in detail as many of them are complex and inter-related. A detailed assessment will typically require help from specialists in political economy, who should be directed to the detailed questions about each of the five policy domains in Annex 7.

Understanding why and how the mining sector impacts upon governance

In order to understand the internal functioning of the mining sector, a number of broad questions arise:

- Who are the key people, organizations and institutions in the political and governmental system whose actions carry influence on the mining sector; and what are their interests and incentives in light of the governance structures and institutions within which they are placed?
- How do government, companies, local communities and other stakeholders co-operate and co-ordinate?

Figure 7.1: What makes for effective governance



Impact of mining on governance

continued

- Is there a perception among stakeholders that, as a result of lobbying by mining companies, mining companies are able to exert influence on policy formation and implementation?
- Are specific administrative departments (e.g., in the legal or administrative system) thought to be better or worse in terms of corruption or bureaucratic inefficiency than others?
- What are the significant changes in governance structures, institutions and policy that have occurred over the past years or decades? What or who has initiated these changes? How these changes affect the current mining governance structures?
- What specific disagreements have companies faced with communities? How have they been settled?

The assumptions that underlie module seven are that the impacts of mining operations on governance are conditioned by four broad sets of factors:

- Contextual factors, including economic, historical, political and social issues.
- Institutional factors, including the set of formal regulations governing the mining sector as well as informal factors such as traditions, political culture and norms of behaviour.
- Individual agents' incentives and motivation, as well as the internal dynamics of policy communities, which affect the way decisions are taken.
- Implementation factors, including the capabilities of the government to

implement policies, the positive/negative reactions of stakeholders to policies and how their reactions affect the way policies are implemented.

Based on these assumptions, we propose a framework (Figure 7.2)⁷⁹ to give structure to the investigation of the complex processes of how mining investments contribute (or do not contribute) to better governance and institutions and to the host country's processes of development and change.

The relationships between the layers are as follows: at the centre of the process, we find different stakeholders, each of them with their own motivations and incentives structures. These structures are heavily conditioned by the formal and informal institutions surrounding them. These institutions, in turn, are conditioned by wider contextual factors. Stakeholders incentives are externally driven and therefore more easily modifiable than motivations, which are internally-driven.

The way in which tensions and conflicts between stakeholders are dealt with within the policy communities is important. It will be a decisive factor in determining how policy decisions are implemented and in turn the ultimate outcome of policies.⁸⁰

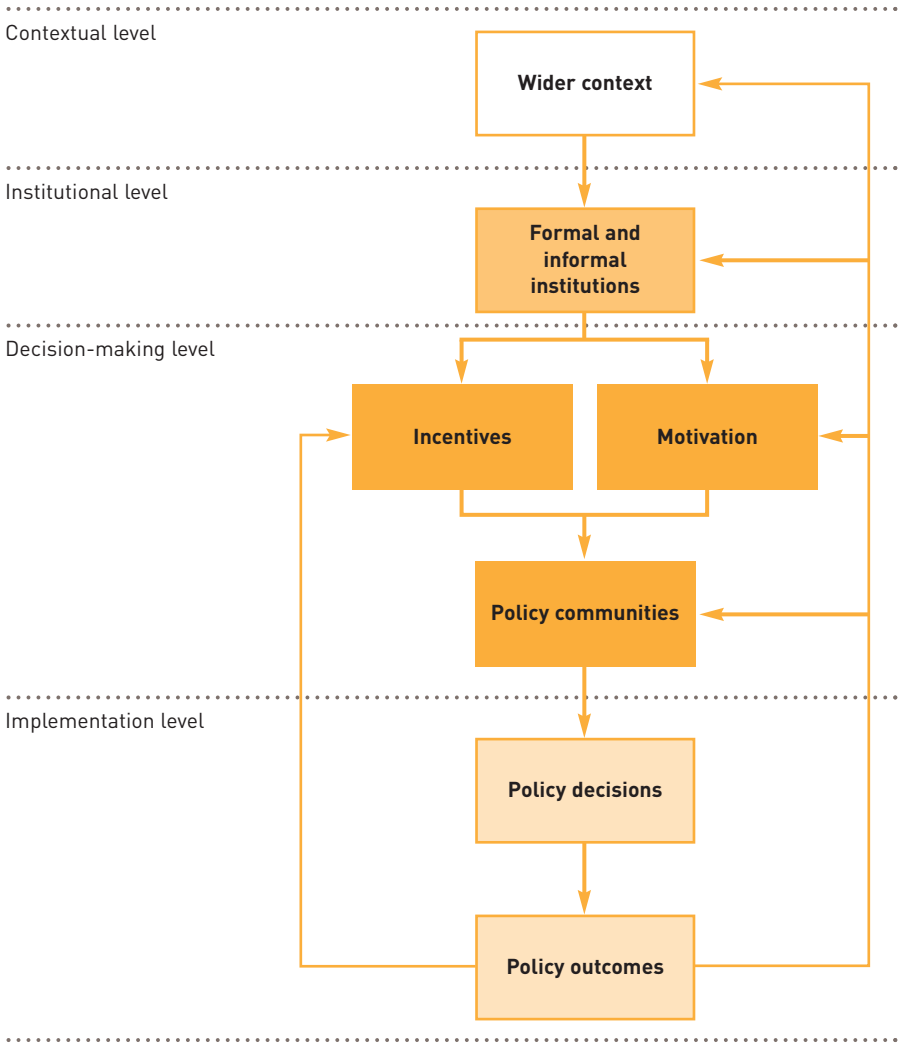
⁷⁹ More information on Political Economy Analysis and this analytical framework is available at www.opml.co.uk.

⁸⁰ One of the strengths of this analytical framework is its flexibility. However this should not rule out the use of other analytical approaches that can be used depending on the aims of the work. While institutional and stakeholder analyses is relatively common place, other approaches (i.e. alternatives and reactions analysis, windows of opportunity analysis, contextual analysis, entry point analysis) can also be used to explore other angles and perspectives.

Impact of mining on governance

continued

Figure 7.2: Understanding the linkages between governance and the mining sector



Impact of mining on governance

continued

Table 7.1 connects the analytical framework of Figure 7.2 (and specifically the final stage of policy outcomes) with five key “policy domains”. These five policy domains, which can and have been influenced by mining activity, comprise:

1. legal and regulatory framework;
2. fiscal regime, economic policies and public administrative capacity;
3. production inputs;
4. human capital development; and
5. social cohesion.

It is important to note that stakeholders involved in each of the five policy domains may vary. Therefore, an individual analysis of each of the five policy domains may be required as well as a wider analysis exploring the relationships between stakeholders across the different domains.

This overview of the five policy domains will guide your broad assessment of the impact of mining operations on governance structures, institutions and policy choices at different levels of government. Annex 7 contains a number of more detailed questions organized around these five policy domains. In answering these questions, pay attention to issues that:

1. might have influenced the assessment of the quality of a host country’s governance as identified in the descriptive work in module four;
2. have been or have the potential to be influenced by the activities of mining companies in collaborative or competitive arrangements with the host-country government (at different levels), private profit and non-profit organizations, local communities and perhaps donors;
3. illuminate what the interests of different stakeholder groups are and the resources at the disposal of these groups as they seek to achieve their aims; and
4. have shown up as significant factors in other country case studies, including those with evidence of poor performance.

Sources of the answers to these questions will include:

- general media commentary on the political and governance issue of particular concern in the country;
- academic assessments by political economists; and
- specialist reports on governance by donor organizations, such as the World Bank.

Table 7.1: The taxonomy: linking common features of efficient governance with the operational issues of the policy domains

	Legal and regulatory framework	Fiscal regime and economic policies and public administrative capacity	Production inputs	Human capital development	Social cohesion
Cross-cutting taxonomy of efficient governance	<ul style="list-style-type: none"> • Basic constitutional issues • General legal framework • Political system, institutional access points for different stakeholders • Regulatory framework for public-sector management and interface between public and private sectors • Property rights and the ability to enforce these in a peaceful manner • Sector-specific legislation • Issues of company legislation, ownership 	<ul style="list-style-type: none"> • Fiscal (revenue) regime: taxation, royalties, tax exemptions • Public expenditure management at different tiers of government (national, regional and local) • Non-conflicting accountability relationships between the electorate, the legislature and the executive and within the executive • Macroeconomic management: exchange rate regime, monetary policies • Public administrative system and capacity at different tiers of government (national, regional and local) 	<ul style="list-style-type: none"> • Infrastructure: national and regional policies, public-private partnership, cooperation arrangements at different tiers of government (municipalities, regional, national) • Utility provision: national and regional policies, public-private partnership, cooperation arrangements at different tiers of government (municipalities, regional, national) • Domestic markets: development of local suppliers and contractors (government policies, as well as company initiatives), capacity building, transaction costs 	<ul style="list-style-type: none"> • Development of social policy system • Development of health care systems • Education policy, including basic education, vocational training, higher education, continuous adult education • Broader human capital development issues (participation in decision-making) 	<ul style="list-style-type: none"> • Industrial/labour relations (including participation and shared ownership arrangements) • Community development, local organizational capacity • Stakeholder engagement, including consensus building and socio-economically effective management of conflicting interests
Strong and capable states, credible government commitments					
Limits to state strength, checks and balances against abuse of state power					
Compatibility of formal and informal institutions					
Legitimate formal economic institutions					
Technical capacity					

Source: Based on Table 9 of *The Analytical Framework: Main report*, August 2006, p. 49.

Impact of mining on governance

continued

How to present your findings

Present your findings as an analytical narrative that refers to the five policy domains (and associated questions) shown in Table 7.1 or Annex 7. In doing so, note that many of the questions in Annex 7 cut across the key features of efficient governance presented in the first column of Table 7.1. To illustrate, across from “strong and capable states”, you should insert your findings to the policy domain questions that help inform the question of whether the country you are analysing is “strong and capable”. Similarly, in the subsequent row you should put any findings from applying Annex 7 questions that help to provide the answer to whether there are “limits to state strength” in place, and so on.

Note on process

The two-way linkages between mining operations and governance structures, institutions and policy choices do not lend themselves to general models: the relationships are dynamic, and both the conflicting interests of stakeholders and the influence they might exert on policy choices are highly context-specific. Rather, the objective should be to understand how existing formal and informal interactions between the mining company and its stakeholders result in an influence on the host country’s governance framework, see Figure 7.1. This requires placing the company itself in its wider context and understanding the interests, resources and roles of government entities at different levels (e.g., national versus regional), communities and other stakeholders, as well as the evolving policy frameworks within companies themselves. This understanding, in turn, should explain why different stakeholders have been able (or unable) to collaborate across the five policy domains.

Detailed questions to help assess the impact of mining on governance

ANNEX

7

Module seven of the toolkit has described five policy domains that can be used to categorize the areas of a host country's governance that influence the magnitude and degree of the economic and social impact of mining. Boxes A.7.1 to A.7.5 give more detailed questions within these five policy domains. These questions are phrased in rather general terms and do not need to be strictly followed. They are a guide, and you should use the findings from modules one to six of the toolkit to concentrate on specific issues and to integrate themes within or between the five policy domains.

In any one country case study or mining issues paper, only a selection of the five policy domains will be explored in depth. It is recommended that an experienced political scientist be engaged to assist in finding answers to these more detailed questions.

Box A.7.1: The legal and regulatory framework

The questions for this first policy domain are aimed at establishing the broad legal and regulatory framework within which mining companies engage with government, communities and, perhaps, certain organized interest groups. The objective is to identify whom the broader legal and regulatory framework puts “in charge”, how predictable government actions are, and whether the given institutions and governance structures facilitate or undermine socio-economically beneficial collaboration and co-ordination between government, companies and communities. If module four flagged relatively poor performance under, for example, the “rule of law”, “government effectiveness” or “regulatory quality”, then the answers to these questions may reveal possible causes.

Questions

What political system does the constitution set out (i.e., presidential/parliamentary democracy, autocratic regime, centralized or decentralized system of government)? How are legislative, executive and judicial powers distributed across different levels of government (national, regional, local, municipality or village)?

How are citizens represented (electoral rules, party structures, party discipline)? How is political representation structured across different levels of governance (national, regional, local, municipality or village)?

What is the relationship between the legislature and the executive? Have legislative decisions been challenged by ad hoc executive decisions? Have executive powers been overriding legislative powers?

How is the executive or government administration structured across different tiers of governance? What decision-making powers do different levels of the executive branch have? How are lower levels of executive or administrative powers linked to lower levels of legislative powers?

What guides executive decision-making? How predictable are government’s decisions (at different levels) for the private sector in general and the mining industry in particular? How do senior officials at different government levels relate to the particular interest groups or elite groups and broader society?

How well are property rights and other rights enforced? What are the chances of, costs of, obstacles to defending one’s property rights successfully?

What experience do companies have with the legal regime, legal tradition, functioning of the judiciary? Does the respective legal regime impinge on a company’s risk assessment?

What laws, rules and regulations govern the conduct of private-sector business and, in particular, the mining industry? What requirements are in place?

What sector-specific legislation is in place (mineral laws, extraction rights, environmental requirements, labour laws, mitigation requirements, etc.), perhaps at different levels of government? Is this legislation applied even-handedly and consistently, or is it “flexible” or unpredictable?

Box A.7.2: Fiscal regime, economic policies and public administrative capacity

The questions for this second policy domain are aimed at: 1. establishing where fiscal authority lies for revenue collection and expenditure management; 2. inferring how the structure of the fiscal regime might impinge on different stakeholders' interests and incentives; 3. identifying in whose favour macroeconomic policy choices have worked; and 4. identifying the incentives that the public administrative system and policy processes provide for positive or negative collaboration between the public sector and the private sector.

Questions

What are the key tax and non-tax revenue items? How do revenues from mining operations relate to overall revenue collection?

At what levels of government are taxes and other revenue collected? Do lower levels of government have institutionalized rights to retain revenue? At what levels of government are revenue policies set?

How is revenue distributed across different levels of government (e.g., constitutionally set revenue-sharing formulas, centralized system of government spending)? Have there been social or intra-governmental tensions and conflicts over the sharing of revenue?

How significantly do revenues from extractive industries feature in the government budget?

Have there been major shifts in revenue policies in the past? If so, have these impacted upon extractive industry activities?

Has access to mineral revenues insulated government officials from pressure to engage in reforms?

For decentralized states or where social or intra-governmental conflicts and tensions over sharing of revenue have occurred, how do revenue collection powers link to political representation?

What agreements have been reached on tax and royalty payments between companies and government? With whom have these agreements been reached? Have these agreements been subject to renegotiations? How do country-specific agreements compare with agreements reached elsewhere by the same company(ies)?

How does the budget allocation process work? How transparent and comprehensive is the process? Which parts of the executive and the legislative branches are involved in the allocative decision-making process? Are there fixed rules that are adhered to?

What expenditure trends (over time) or patterns within any given year can be observed (look at Public Expenditure Reviews or other public finance diagnostics), and is there any inference to be drawn on the driving forces or political economy behind expenditure trends?

What is the general assessment of the public financial management system (look at Country Financial Accountability Assessment or other diagnostics)? To what extent do fiduciary risks exist?

Where are the weaknesses in the budget cycle? Is the approved budget a good indicator for actual spending? Has the public financial management system improved or deteriorated in recent years?

What role and power does the Supreme Audit Institution have? Are its reports meaningful and proof of the propriety of the handling of public funds? Do other accountability institutions function (e.g., public accounts committee)?

Have major macroeconomic policy shifts taken place, and who has initiated them?

What is known about the direct or indirect involvement of elite or interest groups in domestic policy-making processes at different tiers of government? Are there strong private-sector interest groups defending a particular status quo?

Box A.7.3: Production inputs

The questions in this third policy domain probe whether the existence of a mining industry has contributed to broader development of infrastructure and transportation systems or to the cost-efficient provision of utilities and of other industrial inputs (technological developments, banking industry) that help to diversify the economy. Spinoff benefits for other industrial sectors have historically been important in a number of countries that started with a high dependence on extractive industries but have since diversified into leading industrialized and emerging market economies. An inability of the mining industry to contribute to such spinoff effects may reflect specific government policies or constraints from other policy domains, such as the inability to establish the necessary fiscal and administrative capacity or the lack of an enabling regulatory framework.

Questions

Do mining companies and government co-ordinate on the development of basic infrastructure and transportation systems? What agreements have been reached in this respect?

Has mining investment influenced the development of basic infrastructure and transportation systems by the government? If so, who have been the beneficiaries beyond the immediate mining operation?

What impacts have mining operations had on the national road and transportation grids in relation to the administrative units of the host country?

Are there signs of any negative impacts linked to mining-related expansion of infrastructure and transportation systems (for example, neglect of other areas, undermining of social cohesion in the area, migration movements, imbalance in provision of other public goods and services)? If so, what are the reasons for such impacts (for example, lack of administrative capacity to cope with induced economic and social changes)?

What experience do companies have with the legal regime, legal tradition, functioning of the judiciary? Does the respective legal regime impinge on a company's risk assessment?

What regulatory frameworks govern the provision of utilities (public provision, public-private partnerships, partly private provisions)? What agreements have government (at which level) and companies reached? Have these agreements been upheld?

Are there benefits or opportunities for other private-sector activities and domestic consumption arising from the public or private provision of utilities for mining operations?

What other production inputs, excluding labour, can the domestic economy supply (for example, technology)? In turn, what production inputs are sourced from abroad?

Have there been technological or other spin-off effects on other industries (including the domestic banking sector) that are linked to the existence of a mining industry?

Box A.7.4: Human capital development

The questions in this fourth policy domain look at the extent to which the provision of social services by the mining industry complements or substitutes for provision by the different levels of government. A situation in which inadequate or skewed government provision prompts a company to step in to alleviate its employees' social risks is probably a sign of weak administrative capacity, financial constraints, or some other unwillingness or inability by the government to expand and pay for basic services. This, in turn, would point to the need for a company that is providing basic services also to contribute, over the medium term, to improving government capacity (or to developing an affordable private industry that provides such services).

Questions

What are the broad organizing principles of the social policy system (health, unemployment, pension, other social risks)? What proportion of people and what categories of people have access to this system. What entitlements do citizens have?

Are social services provided through a taxed-funded system, an insurance-based system or a combination of the two?

Who are the main providers of social services? What government providers are there, and at which level of government? What private-sector providers are there (for example, faith-based organizations)?

Does government actually provide the social services for which it formally takes responsibility? Is it capable of doing so? Is access egalitarian or skewed towards certain regions and areas (e.g., urban versus rural, coast versus hinterland)?

In addition to the social services that government provides, what social services do mining companies provide? Are mining companies supplementing or substituting for governmental provision of basic social services? If the latter, what are perceived to be the major reasons for government's inability or unwillingness to provide basic services?

Do companies and government collaborate in the provision of social services or with respect to inputs to the provision of social services (skills, training, capital investment)?

For the health care system in particular, what are the organizing principles of the national health care system in terms of providers, funding, access and rights to health care (tax-funded, insurance scheme, mixed schemes)?

Is project-level health care well integrated with the national health care system (either privately or publicly operated)?

For the education system, what are the organizing principles (for example, with respect to national curricula, educational rights and requirements, education policies, professional and vocational training schemes)?

Are skills acquired through employment in the mining industry transferable? Have mining companies encouraged or restrained the transferability of skills? What incentives guide the industry's behaviour in this respect?

Have there been any negative effects of the mining sector on other parts of the economy or society in terms of reducing the availability of skilled workers outside the mining sector (in effect, a "brain-drain")?

Does the national education system deliver the skills that the mining industry needs?

If not, how does the industry supply its labour demand?

Does the mining industry support the certification of skills and continuous education for staff? Is this in any way co-ordinated with national education policies? Are there any government regulations on certification and transferability of skills?

Box A.7.5: Social cohesion (community development and industrial relations)

The questions for this fifth and final policy domain relate to: 1. how mining investments affect the local and regional communities in which they are located; and 2. how industrial relations are conducted. Social cohesion and social conflict have been prominent, recurring and delicate issues during the establishment of mining in low- and middle-income countries. Thus, the manner in which both mining companies and governments relate to local and regional communities, and vice versa, is a critical factor in the broader economic and social impact of mining. You will need to identify the governance and institutional conditions under which conflicts can be moderated or avoided, and one of the first places to look will be the political and administrative capacity of lower levels of government (regions, districts and municipalities) and society (community organizations).

Questions

Have there been instances of social conflicts between mine management and the work force, between mining operations and communities, or between local or regional communities and higher levels of government indirectly or directly linked to mining activities?

What have been the issues of contention? Have these issues been resolved?

What factors have contributed to or undermined constructive solutions?

What is the nature of the formal relationship between the mining company and the local community? Who are the main local counterparts for the company, and how do these tie to official political representation and administrative jurisdiction?

What is the organizational capacity of local communities and interest groups? Do local or regional communities carry responsibility for jurisdiction, revenue collection and provision of some public goods and services (i.e., in decentralized states)? In both cases, how does this impact on local or regional relations between mining companies and communities?

Are there tensions between different levels of government and society?

Has mining-induced migration or commuting caused social changes that have caused or might cause social tensions and conflicts? If so, has government (at different levels) reacted to such changes? Has it shown the ability to deal with such effects, either positively (brokering and mitigating) or negatively (suppressing)?

Are there any civil society organizations at the local and regional level with whom the mining company engages?

Are there any tri-party arrangements for coping with negative mining impacts (social and environmental) between the company, governmental or public entities, and private citizen organizations?

Beyond those statutorily required, have mining companies institutionalized further channels of constructive labour or industrial relations with the workforce (this could range from additional channels of "voice" for the workforce to shared ownership arrangements)?

Communicating your findings

ANNEX 8

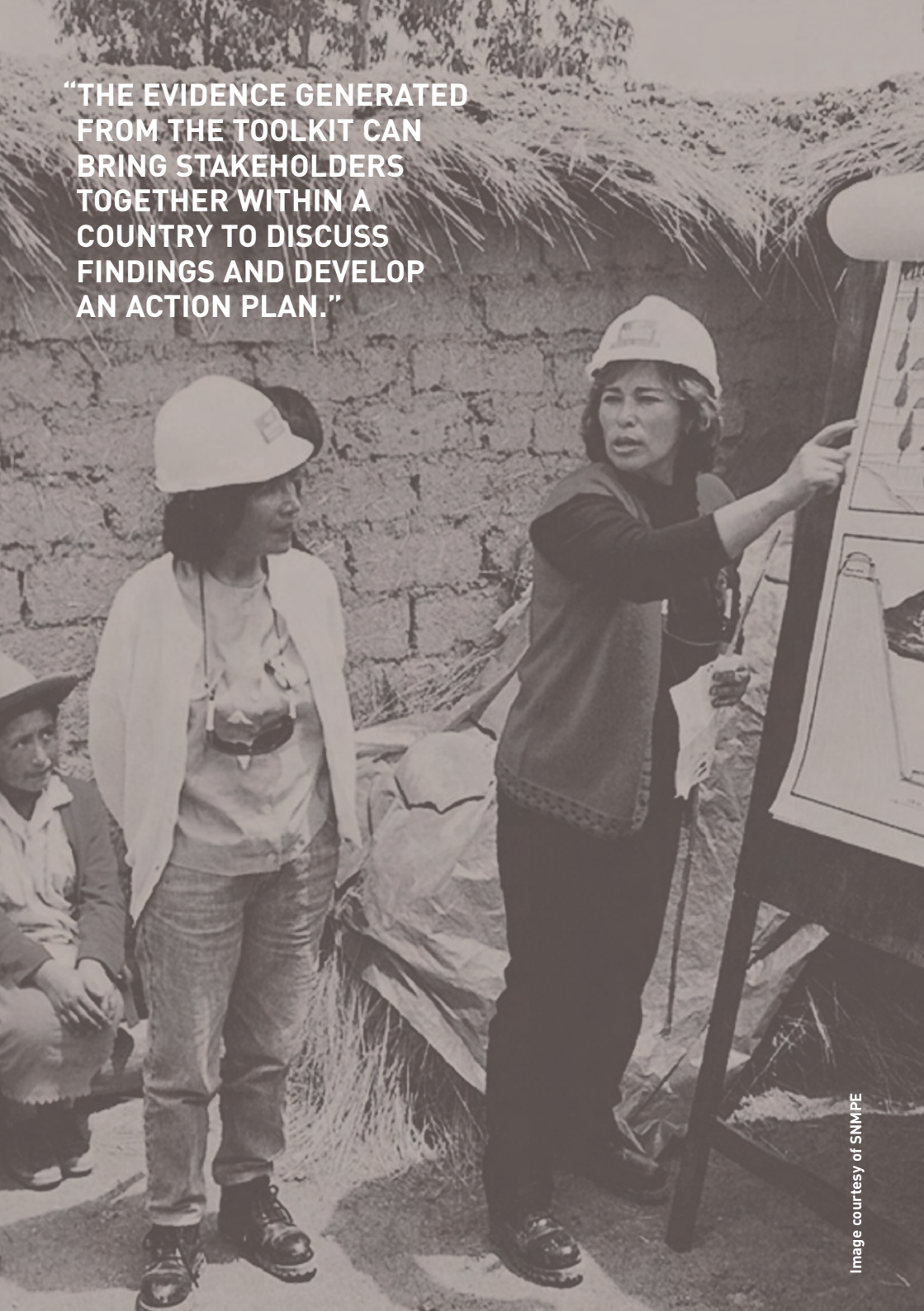
Workshop design tool to
present the country case
study or mining issues
paper

MODULE

EIGHT



“THE EVIDENCE GENERATED FROM THE TOOLKIT CAN BRING STAKEHOLDERS TOGETHER WITHIN A COUNTRY TO DISCUSS FINDINGS AND DEVELOP AN ACTION PLAN.”



Communicating your findings



Purpose

The purpose of module eight is to implement two methods of communicating your findings about the relationship between mining and economic and social development in the host country to an audience or audiences, with the aims of helping mining companies to better target their economic and social development initiatives and of encouraging partnerships between miners and other parties to help make these initiatives more effective.

Reviewing and distilling your findings

The volume of information you have gathered will be considerable and will contain surprises, contradictions and some answers. Unimplemented modules will leave gaps; and even if you have implemented all the modules, the findings will still leave open questions. However, it would be unusual if a review of your findings did not allow you to distill two or three main issues for which the case for action is evident. Such action might take the form of a partnership to promote economic and social development under one or more of the six partnership themes, or it might point to a specific line of further inquiry, or both. This review should also help you to identify audiences for your findings.

You might be helped in this task if you revisit your scoping exercise (see “Using the toolkit”), then examine your findings and ask yourself the following questions:

- What findings are relevant to the goal that you and your partners have set?
- What findings have raised additional issues that are relevant to the goal?
- What messages can you convey to an audience based on the findings?
- What new or revised partnerships might the findings support?
- What actions do your findings suggest that might improve the economic and social contribution of mining to the host country?
- Which findings might encourage partners to participate in a plan of action?
- Who might those partners be?

Communicating your findings

continued

You will have noticed by now that the recommended method of presenting your findings in the modules differs according to subject matter. For example:

- Module four says to organize the quality of governance around the six Worldwide Governance Indicators and to organize the macroeconomic impacts around eight key indicators;
- Module six says to use production, GDP and GNI levels and growth rates, government revenues, and balance of payments; and
- Module seven says to organize findings around five policy domains.

These different structures have been designed to suit the subject matter of each particular module. Ultimately, however, the data all address one or more of the six priority partnership themes of economic and social development, which, to recap, are:

- mining and poverty reduction;
- mining and economic development: revenue management;
- mining and economic development: regional development planning;
- mining economic development: local content;
- mining and social investment; and
- mining and disputes resolution.

Your review of the findings of individual modules should therefore identify the issues and relate them to these six themes.

How to present your findings

- Step 1: prepare a country case study to document your findings (or a short “mining issues” paper if you have decided to only address one or more of the modules); and
- Step 2: hold one or more workshops to present and discuss some or all of the findings.

STEP 1: Prepare a country case study (or short mining issues paper)

The partnerships contemplated by the toolkit between mining companies and governments, non-governmental organizations or local communities will centre on one or more of the six partnership themes. The focus of your country case study or short mining issues paper, therefore, must be to explain how your findings point to the specific partnership priorities that one or more of the six themes represents.

Take care to make clear the distinction between evidence, on the one hand, and opinion and conclusions, on the other. The data have been hard won; try not to expose matters of fact to misapprehension or rejection because they are intertwined with opinions or conclusions with which others might not agree.

In organizing the presentation of your findings (in a country case study or short mining issues paper), you should aim at a minimum to:

- summarize all the findings but elaborate on the findings that address the two or

Communicating your findings

continued

three major issues you have identified and propose policies or initiatives to address these issues;

- pull together any areas of work that have been left unanswered or implications that require addressing; and
- remind the readers that the inherent incompleteness of knowledge on any topic, including the ones addressed by the case study, is not an excuse for inaction and of the importance of the 80:20 rule (in other words, that 80% of the effects come from 20% of the causes and that this is why the two or three major issues are considered more important than the others).

A country case study of 15 to 20 pages will normally be sufficient and for a shorter mining issues paper perhaps only 5 to 10 pages. Use annexes and appendices to document your methods, data, calculations and analysis, but try to avoid producing a report that is too long (we have aimed for a total of 60 pages for a country case study).

STEP 2: Hold one or more workshops

The country case study or shorter mining issues paper is the documentary evidence of your work. However, the value of this work will not be realized unless it is disseminated and debated by the people that you will depend on to facilitate or take part in partnerships for economic and social development. The REi experience has been that a workshop format provides the right mix of information dissemination and debate by which to move from analysis to action.

Annex 8 sets out a six-week timeline for planning, preparing for and conducting a typical workshop, with activities week by week. Factors to consider are:

- *Invitees:* your invitees should as a minimum include the relevant government officials and (if they can be persuaded) ministers or their representatives, as well as members of any other organizations with which a partnership opportunity might exist.
- *Pre-workshop reading:* a good idea in theory, but may be a problem in practice if the findings are too controversial to release without the concurrent explanation that a live presentation in a workshop allows. Make this decision on the merits of your report and the sensitivities of your attendees.
- *Clarity between data and conclusions:* use the format of your workshop presentation to reinforce this distinction. Separate sessions might be needed, the first session to share and agree on matters of fact and the second, separate session to present and debate matters of interpretation and opinion.
- *Structure and focus* are in your hands. However, when designing the workshop sessions, bear in mind that you must reconcile or, at the least, acknowledge competing viewpoints and priorities. On the one hand, you want to make as much progress as possible to agreement on priorities and a platform for partnerships. On the other hand, attendees must have the chance to express and debate their views. Provide a structure for the former, but make sure there is plenty of time for the latter.
- *Two-way process:* members of a partnership might share a high-level goal but will certainly differ, sometime quite

Communicating your findings

continued

markedly, in other respects. A failure to air and reconcile these differences will undermine the case for common action. At the same time, the workshop must retain structure and focus, so a balance of both objectives will be needed.

- *The social dimension*: the act of bringing people together around a common set of interests is a necessary foundation for action. It is one thing to formally debate and agree on issues, but action on those issues requires mutual understanding. These relationships will form or not form depending on individuals. What the workshop organizer can do is create the circumstances that encourage the personal interaction out of which such relationships might develop.
- *The workshop proceedings*: the workshop proceedings will need to report fully and objectively, so that participants can accept that the proceedings are accurate as to the facts and as a true reflection of their views.
- *Remember the fundamentals*: at every point, bear in mind that the origins of this toolkit lay in polarized debate, largely uninformed by evidence, about whether or not mining was a help or a hindrance to economic and social development in low- and middle-income countries. This toolkit has, first and foremost, been designed to show you how to build an evidence base that can place this debate on a constructive footing.

The toolkit is designed to show you how to build the evidence base and to systematically present that analysis so as to improve the basis for construction engagement of different stakeholders.⁸¹ It can be employed

to guide systematic discussion of engagement and partnerships. However, it does not provide a menu of tools for building partnerships, which will need to be tailored to the specific local situation, your prospective partners and the evidence itself.

However, in the course of the workshop, you may well be expected to guide initial discussions on developing partnerships. Table 8.1 might help you with this: the left-hand column lists economic and social issues that may be similar to those raised by your toolkit findings, while the right-hand column provides examples of partnerships between companies, governments, donors and civil society that have addressed these issues at the local, regional or national levels. Some of these partnerships address fundamental and recurring issues and will have broad application. Others are specific to the circumstances. Either way, they should stimulate discussion of how the evidence base created by your country case study or mining issues paper might point to the opportunities of your particular circumstances.

Each example in the right-hand column has been categorized according to the partnership themes to which it responds. If further detail is required on these partnerships, the “profile number” refers to the partnerships profiled in the ICMM report *Mapping in-country partnerships* (February 2010 edition).

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81 For further information on using the findings from the toolkit for advocacy purposes, see *Advocacy in Action: A toolkit to support NGOs and CBOs responding to HIV/AIDS*, available at www.aidsalliance.org.

Table 8.1: Examples of economic and social issues that partnerships can address

Social or economic issue raised by evidence	Possible partnership solution
<p>"In-migration into mining regions has led to unemployment and fewer income-generating opportunities"</p>	<p>Implement a supplier development program to enable more local companies to compete for contracts from the mine (profile 14)⁸² (local content). Develop markets, provide business training and offer seed financing in the agricultural and tourism sectors (profiles 2, 3, 5, 6) (poverty reduction). Provide technical assistance to strengthen livelihoods in the fishing industry (profile 1) (poverty reduction/social investment).</p>
<p>"Women are becoming increasingly marginalized, and most of the jobs in the mining sector are for men"</p>	<p>Work with local women's groups to turn traditional skills into income-generating opportunities (profile 4) (poverty reduction).</p>
<p>"Corruption is a big problem in the extractive sector in our country"</p>	<p>Discuss with the government and civil society groups (such as Transparency International, the Revenue Watch Institute or the Open Budget Initiative) what activities could be undertaken to increase transparency and accountability in the receipt and spending of revenues. Would implementing the Extractive Industries Transparency Initiative be useful? (profile 7) (revenue management).</p>
<p>"The government is receiving a great deal of revenue from the mining companies, but there is insufficient legal and institutional capacity to use the revenue effectively"</p>	<p>Engage in dialogue and explore opportunities for technical assistance with the government or donors working in this area (profiles 8, 9) (revenue management).</p>
<p>"There is no transport infrastructure in the mining region, and anything that has been built only gets used by the company"</p>	<p>Establish a public-private partnership to build transport infrastructure, e.g., port facilities, rural roads (profiles 10, 24) (regional development planning/social investment).</p>
<p>"There is no economic diversification; the region is completely reliant on mining, and once the company leaves the area will collapse"</p>	<p>Build collaborative, locally owned development planning mechanisms (profiles 11, 12) (regional development planning); Build the capacity of non-mining business in the area (profile 16) (local content); Build local engineering and design capacity (profile 17) (local content).</p>

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 82 The profiles are in *Mapping in-country partnerships*, available at www.icmm.com.

continued

Table 8.1: Examples of economic and social issues that partnerships can address *continued*

Social or economic issue raised by evidence	Possible partnership solution
<p>“The local community knows there is a significant mineral deposit nearby but is worried that large-scale mining development will lead to social and environmental damage”</p> <p>“The law, company policy, donors or investors require that mining companies employ high numbers of local people and source locally, but there is not sufficient capacity in the area to meet this requirement”</p>	<p>Establish a local development forum prior to commencement of operations to ensure local views are heard and that the mine is established in a way that meets local development needs (profile 13) (regional development planning).</p> <p>Develop integrated approaches to local training, employment and procurement via socio-economic monitoring agreements with communities and government agencies (profile 15) (local content);</p> <p>Establish “linkage” programs between large companies and the local private sector to enable the transfer of skills, technology and experience (profiles 16, 18, 20) (local content);</p> <p>Collaboratively invest in the training of young people in mining regions, especially where several mining companies (or other large companies) are operating in the same region (profiles 19, 23) (local content/social investment).</p>
<p>“There is very limited health provision in the mining regions and HIV/AIDS is a particular problem”⁸³</p>	<p>Construct a community health centre in labour-supplying regions, set up collaboratively and handed over to the public sector once capacity becomes available (profiles 21, 25, 26) (social investment).</p>
<p>“The company is doing its best but the local community has a long-standing resentment against mining due to poor treatment in the past”</p>	<p>Develop a disputes resolution process in collaboration with respected independent third parties (profiles 27, 28, 29) (disputes resolution).</p>

83 For more information on communicable disease-related mortality and disability of relevance to the mining sector, see ICMC’s, *Good Practice Guidance on HIV/AIDS, Tuberculosis and Malaria*, available at www.icmm.com.

Workshop design tool to present the country case study or mining issues paper

Purpose

This annex explains out how to prepare and conduct a workshop to present your country case study or mining issues paper (the evidence). It should be read in conjunction with module eight and is based on the following assumptions:

- the workshop will last for one day;
- the preparation time will be six weeks;
- a cross-sector team of organizers has been identified as a result of the toolkit implementation process and an individual within this team has agreed to organize the workshop (the Co-ordinator); and
- funding for the workshop has been confirmed by the organizing team.

It concludes with a section on suggested messages to attract government attendees to the workshop.

Planning the workshop

Planning a workshop typically involves the following steps:

- Step 1: preparation: process and timing;
- Step 2: preparation: resource requirements;
- Step 3: preparation: workshop agenda; and
- Step 4: advice for the day of the workshop.

STEP 1: Preparation: process and timing

Six weeks in advance:

- Agree roles and responsibilities between members of the organizing team.
- Define broad objectives for the workshop; ask yourself “What would make this event a success?”
- Agree on an indicative audience profile and general numbers.
- Agree on a date for the workshop; prepare invitee list; and send out “save-the-date” invitations, explaining that the full agenda will follow separately.
- Once these action are finalized, prepare advertising materials to publicize the event and commission the preparation of presentational materials.

Workshop design tool to present the country case study or mining issues paper

continued

Five weeks in advance:

- Book a venue for the workshop; a neutral venue is best.
- Identify both a Chairperson and a Workshop Moderator. The latter needs to set a positive tone for the workshop and will summarize each session, keep the agenda on track and maintain a neutral stance throughout. This role is important, and you should search hard for someone with standing as an “honest broker”.
- Identify and discuss with your key speakers the context and objectives of the workshop, and agree who will present which findings from your report. Once you have agreed on the agenda, mail this to invitees as soon as possible. A reserve list of speakers will be useful in case any become unavailable.
- Contact government officials to secure their attendance at the workshop. It will be important to have a strong turnout from the government, preferably at regional, as well as national, levels. See “Suggested messages to attract government attendees to a workshop” below for suggested ways of attracting government attendees.

Four weeks in advance:

- Discuss your logistical requirements with the workshop venue (e.g., what room, a bigger alternative on standby if turnout is bigger than expected, audio visual equipment, catering).
- Follow up the written invitations with a phone call to invitees that have not yet replied, then close the registration, create a waiting list, and rearrange room size or location as necessary.
- Follow up with company, donor, or civil society speakers and ask for a short biography and a copy of their intended presentations. It is a good idea for the Co-ordinator to talk to them by phone to explain the context and objectives of the workshop and revise the presentations where necessary.

Three weeks in advance:

- Send out the finalized agenda to participants (invitees who have responded to date and the speakers); however, note that the precise details of the agenda could continue to be refined until fairly soon before the workshop depending on the availability of speakers.
- Continue to monitor acceptances to invitations and chase up those who have not replied.
- Visit the venue in person to finalize logistics (audio visual requirements, room layout, backup power supply).
- Review responses from speakers (including biographies and draft presentations) and follow up, if necessary, to ensure they have prepared their presentations and that these are in line with the workshop objectives.

Workshop design tool to present the country case study or mining issues paper

continued

Two weeks in advance:

- Send out background documentation to attendees, such as (if appropriate) a copy of the country case study or shorter mining issues paper.
- Keep track of and review biographies and draft presentations and follow up with speakers.
- Address any logistical issues not resolved in the previous week.
- Clear invitee waiting list if one exists.
- Arrange advance meetings with the most important of your attendees. The more advance meetings that can be undertaken, the more successful the workshop is likely to be, as it will help you to understand attendees' objectives and needs.

One week in advance:

- Meet with the most important of your attendees.
- Continue to monitor and follow up on speakers.
- Address any last-minute logistical issues, and maintain regular contact with the venue.

STEP 2: Preparation: resource requirements

The following resources will be required:

- logistical support from, for example, the Chamber of Mines or from an external agency, to send out invitations, agendas, and background documentation;
- venue hire: main meeting room plus "breakout rooms", if appropriate, including use of the venue's audio-visual or other workshop-support equipment;
- equipment hire: equipment (not provided by the venue) might include a podium in the main meeting room and audio visual equipment in one or more rooms (e.g., presentation screen, flip charts, microphones, and perhaps a video link for speakers unable to attend in person);
- food and drink for refreshment breaks and lunch;
- food and drink if a dinner or a reception following the workshop is also required; and
- where appropriate, travel and accommodation costs of key speakers.

Ensure the organizing team is kept up to date with progress.

Table A.8.1: Example workshop agenda 

Mining: Partnerships for Development Workshop, date and location		
Time	Activities	Notes (Annotated to explain the thinking behind each session)
08:30–09:00	Welcome and introduction by chairperson to workshop, expectations and ground rules	
09:00–10:00	Session 1 Presentation of key findings from Country Case Study	
10:00–10:15	<i>Break</i>	
10:15–12:00	Session 2 Nominate “breakout group”. Chair-persons to facilitate three Focus Groups to provide examples on: (1) Existing Practice; and, (2) Possible new Partnership Arrangements. Rapporteurs should report back discussion to main workshop.	
	Focus Group 1: Mining and Social and Economic Development Focus Group 2: Local Government Capacity and Mining Focus Group 3: Partnerships to Address Disputes Better	
12:00–13:00	<i>Lunch</i>	
13:00–14:30	Session 3 Developing an action plan (ideas from Focus Groups 1, 2 and 3). Each Focus Group from the morning will provide a spokesperson to present two or three actions emerging from the discussion.	
14:30–14:45	<i>Break</i>	
14:45–16:00	Session 4 Developing an action plan (distillation of priorities for follow-up) and Conclusions, close of workshop, and actions for “next steps”.	

Workshop design tool to present the country case study or mining issues paper

continued

STEP 3: Preparation: workshop agenda

As mentioned under Step 1, you will require a workshop agenda, which should be finalized and sent to invitees and speakers three weeks before the workshop. An example agenda is shown in Table A.8.1.

STEP 4: Advice for the day of the workshop

Put people at ease

The workshop may be the first time that a group of this nature has gathered in the same room, so it will be essential to put people at their ease. The pre-meetings with your most important attendees will help here. The Chairperson and Workshop Moderator can also set the right tone, including focusing people on developing an action plan to take up following discussions in the workshop so that it does not simply become a “talking shop”.

Set the “rules of engagement”

Make it clear that the negative impacts and missed opportunities of mining can be raised at any time during the day, but only in the context of the workshop objective, which is to explore possible collaborative initiatives to tackle these issues rather than apportion blame.

Make sure that people understand that the workshop is not intended to start from scratch, but to pursue in detail the main issues identified during the country case study or mining-issues paper. For example, if there is local resentment about the lack of mining jobs, one of the workshop “breakout groups” can look specifically at how employment and local content might be developed and the partnerships that this will need.

Try to arrange a progress meeting

At the end of the workshop, suggest that the group should meet again in a year to report and review the progress of partnerships on the initiatives proposed by the workshop.

Workshop design tool to present the country case study or mining issues paper

continued

ANNEX 8

Suggested messages to attract government attendees to a workshop

- We would like to invite you to attend a workshop to look at mining's economic and social contribution in your [specify country or region].
 - An ongoing, international research project, begun in 2004 and initially co-ordinated by ICMM and in collaboration with the World Bank and UNCTAD, has found that, under the right conditions, mining has the potential to make a significant economic and social contribution to host countries.
 - However, this contribution is neither inevitable nor automatic; and partnerships between companies, governments, donors and civil society at the local, regional and national levels are an effective way to maximize this contribution.
 - A number of socio-economic assessment tools have been implemented by an independent team of researchers [name the team if they are likely to be readily recognized as an unbiased source] to assess the current and potential economic and social contributions from mining. A [country case study or mining issues paper] has been completed that presents a number of findings that may interest you about the national-, regional- and local-level contributions of mining.
 - The workshop will first cover the main findings of the [study or paper] and then explore the potential for increasing mining's economic and social contribution via partnerships at local, regional and national levels.
- The basis for these partnerships has been the subject of research by ICMM and others in a number of countries. The results of this work suggest that there are six themes around which partnerships can be organized: mining and poverty reduction, mining and revenue management, mining and regional development planning, mining and local content, mining and social investment and mining and disputes resolution.
 - We are keen to attract a strong government representation at this workshop.
 - The workshop is based on similar events held in Chile, Ghana, Peru, Tanzania and the Lao PDR which led to concrete follow-up action.
 - The context and objectives will be explained fully at the workshop; and, in addition, we would be happy to provide you with a briefing in advance.

Guiding principles
regarding minerals
taxation

TOOLKIT
ADDENDUM



A person wearing a white hard hat and a dark safety vest stands in a rocky, scrubby landscape. In the background, a large, rugged mountain rises against a clear sky. The entire image is overlaid with a semi-transparent green filter.

**“THE REPORT IS A
LAUDABLY EVEN-HANDED
TREATMENT OF THE
MAJOR DEBATES IN
THE FIELD.”***

*Taken from a review at www.revenuewatch.org.

Image courtesy of Xstrata

Guiding principles regarding minerals taxation



Purpose

The purpose of this new section is to incorporate some additional points of guidance on minerals taxation issues emerging from a recent and more detailed study of the very extensive published literature on this subject. This study, which was also commissioned by ICMM, was finalized in May 2008 and can be downloaded from the ICMM website.⁸⁴

One conclusion of the 2008 ICMM study is that it is nearly impossible to propose a “recommended”, let alone an “ideal”, tax regime that could apply to all mineral producing countries. Neither is there any objective and scientific way to resolve the debate currently raging in many countries as to whether mineral companies pay too little or too much tax to governments. The existing literature – voluminous as it is – largely fails to direct us towards a single “correct” tax regime, and to the definition of the “most appropriate” tax bases and, thus, to a set of “correct” tax rates. Nonetheless, both mining companies and governments (national and local) should remain alert to the points that:

1. the structure of mineral taxation can directly affect the magnitude of mining’s social and economic impacts, especially in the longer run; and,
2. there are certain significant trade-offs, especially as between the short run and the long run.

The considerations about the design of an “acceptable” tax regime, which this section discusses, represent *guidance notes* on how to approach this, for both mining companies and others interested in assessing the impact of mining. The “guidance notes” are just that: they should not be read as statements about *best* or even *good* practice – merely as indications of tendencies that, if followed, may help to foster congenial working partnerships between mining companies and governments. Neither is there any suggestion that mining companies have any overriding influence over the shape of the tax regimes in the countries where they operate: typically, they are merely one among several influencing parties.

The taxation study analyzed a wide range of issues pertaining to the principles and practices for taxing mineral activities. However, it then utilized that analysis to distill a set of main observations. These ideas are reported below.

⁸⁴ The title is *Mineral Taxation Regimes: A review of issues and challenges in their design and application*.

Guiding principles regarding minerals taxation

continued

Transparency

Many of the in-country criticisms of mineral taxation systems have their origins in a lack of transparency about how much revenue is collected, and about how such revenue is used. It is, therefore, a basic first step to advise both the companies and governments to aspire to the highest level of openness about these matters that is practically achievable. The obvious entry point is full compliance with the reporting suggestions and formats of the EITI, which ICMM companies support.⁸⁵ Annex 3 to this toolkit describes the reporting formats that are recommended, and provides the link to the relevant EITI website where greater detail can be found. Even in those cases where there is not yet a formal country commitment to the EITI, the mining companies may wish to get ahead of the game by preparing their statistical information about tax payments to all tiers of government in accordance with EITI practice. Many companies value greater revenue transparency and, in Ghana, were making this data available through the Chamber of Mines a number of years before the EITI was formally launched.

Since many of the criticisms of the revenue aspects of mining begin and end at the local level affected by the mine concession, it is important to do everything possible to make local governments and communities aware of the tax and other revenues that the mining companies are actually providing to

government. In some countries, there may be a central government failure to ensure that a reasonable share of the revenues collected is made available for use at the local level. In one or two cases, this happens as a matter of official policy. However, efforts by the mining companies themselves to publicize the revenue contribution they make – even if this is mainly paid to central government – may still be helpful in inculcating a more positive local attitude to the companies.

Finally, the most difficult cases for the mining companies arise where there are known to be significant elements of incompetence or corruption in the governmental systems that collect, administer and spend the mineral tax revenues. This may result in revenue collections being (or appearing to be) minimal relative to the known level of mining production and total revenue generation. In cases such as this, the companies are advised not to take advantage of the poor quality of the tax administration – either illegally (by being party to corrupt practices) or legally (by negotiating tax agreements that are clearly too favourable relative to the known international benchmarks). The overwhelming evidence is that any tax regime not perceived to be “fair” by all parties is inherently unstable.

⁸⁵ See *Advancing the EITI in the Mining Sector: A consultation with stakeholders* available at <http://eiti.org/document/mining>

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continued

The level of taxation

The previous sub-section raises the question of what is the “correct” level of taxation, and how might the companies assess the “fairness” of the overall level of taxation to which they are subjected by their host governments. The various categories of different taxes that companies might be asked to pay in different countries are set down in some detail in Annex 3. However, how do we assess whether the *total* of these various impositions is reasonable and fair in the sense of capturing the realistic expectations of the main stakeholders?

Governments, for example, need the highest level of tax revenues they can raise.

However, they will normally refrain from seeking to collect the maximum possible level of short-term tax revenues because this would deter future mining investment and, so, actually lower the total tax take from mining in the longer term. The mining companies, by contrast, would like the lowest possible taxes, but would normally accept that excessively low taxes would eventually undermine their social license to operate. A balance between these competing stakeholder objectives has to be found.

The solution can be articulated by reference to the broad proposition that governments will be well advised to try to maximize revenue from mining over the *long run*. Translated into more practical terms, this suggests that fiscal regimes should be geared towards achieving a level of taxation that leaves companies with an adequate share of the resource rent, taking into account their incentives for continuing investment in the sector. In general, this speaks in favour of neutral and progressive

tax systems that are better at adjusting to changes in commodity prices, volumes and project operational conditions. In addition to volatile commodity prices, because of the long lives of most mining projects it is inevitable that, at some point, they will face challenging economic circumstances; having a tax regime that can adjust to this is normally an advantage. Even in the short term, if either party is doing too well out of the prevailing tax system then this indicates the system is likely to be unstable, with pressures building up in the longer term to redress the short-term imbalance.

From a practical perspective, determining this level of “stable” taxation over the entire life of a project can be extremely difficult. This is partly because it involves making assumptions about the future that may not hold in practice. If consent about what is a fair level of taxation has been determined at the outset based on a set of assumptions that later prove to be incorrect, then there should be a presumption in favour of a periodic and collaborative re-assessment of those assumptions in order that consent might remain stable over time. Companies might wish to note this shifts the emphasis somewhat away from debate about the actual level of the tax burden at any single point in time and towards the *process* through which consent is brought about and then sustained. The risks for a company investing in a country with no history of mining are entirely different from a well-established mineral rich country. Accordingly, there is a case for a new entrant to receive rewards that reflect higher risk. However, the same company investing in a new mine ten years after the initial investment should expect a different tax

Guiding principles regarding minerals taxation

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burden based on a changed risk/reward profile.

The recommendation that follows from the above is that:

1. companies are well advised to work in partnership with government and other stakeholders to promote overall neutral and progressive mineral taxation regimes; and,
2. companies are also well advised to work with others towards establishing institutionalized procedures that achieve and maintain multiparty consent on what is a “fair” level of taxation.

For the practical application of any fair sharing of the resource rent, governments, companies and, potentially, other stakeholders are also well advised to share and understand information about past, present and projected future performance of the sector, since this information is critical to achieving a shared understanding of the longer-term prognosis for the industry. In such collaboration, there is a clear role for broadly respected industry associations.

This observation about the need to seek a continuous process of reaching and maintaining consent does not render instruments such as stability clauses obsolete. However, they do require some change in the shared understanding of the purpose that such instruments serve. Stability of the level of taxation determined at one particular point in time need not be the same as stability in ensuring that fiscal terms support the economically efficient exploitation of resources and a fair sharing of the resource rent in the longer term.

Again, this speaks for formalizing collaborative arrangements that can maintain mutual agreement about how best to accommodate changing circumstances to balance continuously the various stakeholders’ interests.

The mix of fiscal instruments

The 2008 Mineral Taxation report has underlined an important proposition that, in lower-income mining countries, mineral taxation systems should involve as little complexity as possible, even if this violates some of the principles of optimum taxation. Two reasons support this proposition: first, simplicity in a tax system has its own merits, since this will make it easier both to calculate the amounts of tax that are due and to audit the amounts paid, whether nationally or with international support (e.g. via EITI-type audit arrangements). Second, and re-enforcing the first point, is the assertion that a standard problem in low-income mineral-dependent economies is that general administrative capacity – to collect taxes and conduct many other administrative functions – is often low. Companies are well advised to remain alert to the practical constraints that affect the operation of different tax regimes when they conduct their discussions about such matters with their host governments.

Simplicity, however, does not speak necessarily in favour of a permanent reliance on taxes that are easier to administer – typically, indirect taxes or taxes where the administrative burden can be shifted easily onto companies. The general advice to host governments is that they should commit to reducing, over time, their

Guiding principles regarding minerals taxation

continued

reliance on indirect taxes (especially unit or value-based royalties), and focus instead on increased reliance on income taxes. If the tax system of a country can gradually be moved in that direction, then this will also fit well with the interests of the companies. Fortunately, governments can also draw advantages from such a move, since the political economy of taxation supports the argument that direct tax instruments, based on profitability or some alternative definition of “income”, carry a greater revenue imperative.

The main challenge is there is no automaticity in achieving the transition from a low capacity and mainly indirect-tax-based system to a system based on greater reliance on direct taxes. A second challenge is that direct tax systems, being more sensitive to volume and price movements, may create greater volatility of public revenues. Governments are not necessarily, by themselves, able, to improve capacity; neither may they have sufficient initial incentives. Therefore, the guidance note to companies is to recognize this challenge in advance, and to be prepared to work with other relevant bodies (e.g. donor agencies) to stimulate such improvements. This is likely to include collaboration with those advising on and technically supporting governments in public sector and administrative reforms – that is, international and regional multilateral organizations. There is also a key role for such advisory organizations to help countries manage the greater volatility of direct taxes, and to ensure there is a stable flow of resources to support efficient public sector and administrative reforms.⁸⁶ The companies themselves may not be prime

movers in these efforts, but they should be prepared to operate in a collaborative and supportive manner as the changes are designed and implemented.

Working with others also includes the case for forming strategic alliances with domestic constituents with whom a common interest in better public sector performance is shared, either at the central or at a local level. Who to align with is a difficult and context specific question. Answers that can be generalized are yet to be developed by research on the political economy of taxation in natural resource rich countries.

Special tax regimes for mining?

Some host country governments have, in the past, relied quite heavily on special arrangements and bilaterally negotiated agreements with particular mining companies in order to secure investment and government revenue. Such practices are particularly prevalent in those host countries where the legal and regulatory framework for the sector is relatively poorly developed, and also in countries where mining revenues constitute a very large share of total government revenues and foreign exchange earnings. The key issue for the companies is whether, in the future, they should continue to seek such special deals – outside the mainstream taxation regimes of countries – even in those types of mining country where the practices have been prevalent thus far.

⁸⁶ Experience with such reforms in the past has shown that volatile revenue flows, including cash budgeting in times of revenue shortages, have very detrimental effects on the success of reform implementation and their long-term sustainability.

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The 2008 Mineral Taxation report concluded that the case for special tax regimes for mining is not clear-cut, even in those countries where the circumstances – low fiscal capacity – give them an obvious appeal. The counter arguments include the point that, in countries where administrative capacity is generally quite weak, the proliferation of different tax structures within the same country will run counter to the principle of keeping systems simple (as suggested in the previous point). In particular, special tax systems that create administrative multiplicity in countries with limited capacity may result in poor execution, relative to the theoretically “correct” revenue-take. This, in turn, can create its own problems for companies, including risks to the stability of the special tax regime because of government or other stakeholders’ dissatisfaction with the revenue outcome – that is, it can easily undermine the companies’ social license to operate. On balance, the evidence seems to indicate that civil society accepts the presence of mining activity more readily in those countries where mining companies are not seen to be treated too differently from other sectors.

So, the companies are encouraged to recognize that it is both feasible and politically preferable for mining companies to be subject to a country’s general tax system, incorporating a few mining-specific features that address some of its special characteristics (e.g. special allowances). Putting taxpayers on equal footings can provide greater certainty and stability, and increase the incentives for government to improve tax administration and fiscal policy-making more generally.⁸⁷ In line with the

reasoning of the political economy of taxation, greater commonality across a broader group of taxpayers should also increase opportunities for strategic alliances to support contractual taxation and revenue bargaining for better public services, and to reduce the pressures for coercive taxation of immobile assets as responses to short-term political pressures. An added advantage would also be that it makes it easier for companies to claim double taxation relief for taxes paid locally, when profits are repatriated offshore and potentially taxed again.

In summary, the recommendation here is for companies to support an industry preference for subjection, in principle, to a country’s generally applicable tax system. Again, there is a key role here for mining industry associations and their collaboration with other business/taxpayer associations. International and regional organizations, to the extent possible, should discourage governments from engaging in bilaterally negotiated agreements, and support the development of comprehensive legal, regular and fiscal regimes aligned and embedded in a country’s overall public administrative system.

⁸⁷ The REi case study on Chile supports this point. Chile, in general, does not treat the mining sector differently, with the exception of its profit-based royalty.

Guiding principles regarding minerals taxation

continued

Improving the benefits to local communities

Although mining's contribution to the total national tax-take is often the most important dimension of a country's benefits from resource extraction, the *allocation* of revenue between different tiers of government is attracting increased attention. While centralist tendencies still seem to be very common in many mining countries, there have been various moves towards increasing the degrees of fiscal decentralization.⁸⁸

Evidence for whether or not fiscal decentralization improves the benefits of mining to local communities is inconclusive. Further, the literature on public administration reforms suggests that the positive examples of developed countries with a decentralized set-up that have built state capacity "from below" are not really comparable with developing countries that have generally been more centralist and are now seeking to decentralize "from above". The literature on the political economy of taxation points out that countries that have traditionally been centralist in approach and are rapidly moving towards greater decentralization are inclined to increase coercive taxation. This is particularly the case if fiscal and other administrative capacities have not been developed to a reasonable standard *before* new responsibilities and funds are reassigned to the local level.

⁸⁸ In some countries, the perceived benefits arising from having jobs and economic opportunities provided by a mine are given as sufficient reason not to provide any special revenues for the region. Other countries, however, chose to return some proportion of mining revenues to the region to account for burdens imposed by the mine activity on the region.

In some country-specific cases that were reviewed for the 2008 Mineral Taxation study, regional, district and municipal authorities were seen to have certain designated responsibilities that were not matched, by either the funds or the human and technical capacity to carry out these responsibilities properly. This creates major practical problems for mining companies in such countries.

When mining companies are assessing their situation in relation to the broad nexus of national and local fiscal relationships, they may often find themselves playing the role of an extra layer of *quasi* local government – e.g. being expected to discharge local expenditure assignments that properly belong to the national or (possibly under-funded) local governments. In such cases, the impact on the long-term sustainability of the social sectors that the mining company expenditures support, as well as local development more generally, may remain inadequately assessed and under-funded in government plans. Furthermore, once the companies demonstrate their willingness to help with local social and economic development agendas, they risk the danger of becoming a *de facto* parallel local government. This is uncomfortable for the companies concerned and is often deeply resented by the local governments, who see their positions partly or wholly usurped. Where fiscal decentralization is introduced as a political strategy to address these underlying problems prospectively, there is still some danger the bigger picture may get lost, irrespective of the generosity of the resources provided by mining companies across various tiers of government.

Guiding principles regarding minerals taxation

continued

The tools described in Stage Five for detailing the social and infrastructure provision bestowed by a mine can be a powerful tool for demonstrating how roles and responsibilities of the mine vis-à-vis local governments may have become skewed.

The 2008 Mineral Taxation report concluded that the solutions to such problems must be country-specific but, even then, the practical experiences to date, as well as theoretical arguments, remain somewhat inconclusive. The only robust advice to the companies is not to overemphasize relations with either national government or subnational government entities. Improvements in administrative capacity at one level are unlikely to render long-term benefits to local communities if they are not complemented by equal improvements at the other level. For example, improved revenue management at the central level does not automatically improve the efficiency of public spending and public service provision at the local level. Judgments on these matters invariably require familiarity and understanding of the overall institutional structure and its potential bottlenecks.

The companies are encouraged to engage as fully as possible in the national debates on such matters. They may thereby be able to use the influence of their own expenditures to help achieve sustainable and sound systems of social and community development that clearly assign roles and responsibilities to all key players, and avoid the arbitrary allocation of such roles based on inertia.

**Acronyms and
glossary**

Referenced sources

**How was the toolkit
developed?**

The steering group

TOOLKIT
REFERENCES





Acronyms and glossary



AfDB African Development Bank.

CGE computable general equilibrium.

EIA environmental impact assessment.

EITI Extractive Industries Transparency Initiative.

ERM Environmental Resources Management.

ESIA environmental and social impact assessment.

GDP gross domestic product.

GNI gross national income.

HDI human development index of the UNDP.

HIV/AIDS human immunodeficiency virus/acquired immune deficiency syndrome.

HRIA human rights impact assessment.

ICMM International Council on Mining and Metals.

IFC International Finance Corporation.

IFS International Financial Statistics, a department of the International Monetary Fund.

IMF International Monetary Fund.

MDG Millennium Development Goals.

MPD Mining: Partnerships for Development.

NGO non-governmental organization.

OECD Organisation for Economic Co-operation and Development.

OPEX operating expenses (or costs).

OPM Oxford Policy Management.

REi Resource Endowment initiative.

RER real exchange rate.

SEAT Socio-Economic Assessment Toolkit.

SIA social impact assessment.

UNCTAD United Nations Conference on Trade and Development.

UNDP United Nations Development Programme.

US\$ United States dollar.

WDI World Development Indicators of the World Bank.

WGI Worldwide Governance Indicators of the World Bank.

Acronyms and glossary

continued

A

accountability obligation to demonstrate that work has been conducted in compliance with agreed rules and standards or to report fairly and accurately on performance results vis-à-vis mandated roles or plans.

advocacy the act of arguing on behalf of a particular issue, idea, or person. It is a means to communicate one's views for the purpose of policy and social change and can be achieved by contacting political representatives, organizing community meetings, distributing public education materials, participating in a public protest, or informing the media.

B

balance of payments a statistical statement that systematically summarizes, over a given period of time, all the transactions of an economy with the rest of the world.

baseline data information collected on key social, cultural, economic, environmental, or political conditions prior to a project being developed that can be used as a benchmark from which deviations and comparisons of expected losses and gains, as well as future actual losses and gains, can be measured.

C

capacity building actions taken to develop the ability of individuals, groups, institutions, or organizations to identify and solve development problems. A managed process of: (a) skill upgrading, both general and specific; (b) procedural improvement; and (c) organizational strengthening.

civil society the network of associations, social norms, and relationships that exists separately from government or market institutions. Civil society may include religious organizations, foundations, professional associations, labour unions, academic institutions, media, pressure groups, and environmental groups.

community development the process of increasing the strength and effectiveness of communities, improving people's quality of life, and enabling people to participate in decision-making and to achieve greater long-term control over their lives.

community profile a picture of a community that reflects the demographic, economic, human, social, visual, and natural resources, as well as the needs and assets of the community.

community a social group possessing shared beliefs and values, stable membership, and the expectation of continued interaction. It may be defined geographically (by political or resource boundaries) or socially (as a community of individuals with common interests).

Acronyms and glossary

continued

consultation a tool for managing two-way communication between project developers and stakeholders. The goal is to improve decision-making, reduce risk, and build understanding by actively involving individuals, groups, and organizations with a stake in the project. Their involvement can increase the project's long-term viability and enhance its benefits to locally affected people and other stakeholders.

cost-benefit analysis a process that weighs the total expected costs against the total expected benefits of one or more actions in order to choose the best or most profitable option. Benefits and costs are often expressed in money terms and are adjusted for the time value of money, so that all flows of benefits and flows of project costs over time (which tend to occur at different points in time) are expressed on a common basis in terms of their "present value".

E

economic displacement loss of income streams or means of livelihood resulting from land acquisition or obstructed access to resources (land, water, or forest) that result from the construction or operation of a project or its associated facilities.

empowerment increasing people's ability to participate in decision-making, i.e., their ability to negotiate with, influence, control, and hold accountable the institutions that affect their lives.

evaluation systematic investigation of the worth, value, merit, or quality of an object. It is an assessment of the operation or the outcomes of a program or policy compared with a set of explicit or implicit standards as a means of contributing to its improvement.

F

fiscal deficits the difference between the government's total expenditure and its total receipts (excluding borrowing). A fiscal deficit can be financed by borrowing from the central bank (deficit financing or money creation) or borrowing from the money market, which is mainly from banks. The elements of the fiscal deficit are: (a) the revenue deficit, which is the difference between the government's current expenditure and total current receipts and (b) capital expenditure.

fiscal policy a macroeconomic policy tool used by the government to regulate the total level of economic activity within a nation. Examples of fiscal policy include setting the level of government expenditures and the level of taxation.

fundamental influence (on a country's governance) an event that is directly responsible for causing some observed result.

Acronyms and glossary

continued

G

gender the socially constructed roles ascribed to males and females and the resulting socially determined relations. Gender roles are learned, change over time, and vary widely within and across cultures. Gender is a key variable in social analysis. It is important to understand the social, economic, political, and cultural forces that determine how men and women participate in, benefit from, and control project resources and activities.

governance the traditions and institutions by which authority in a country is exercised, including the process by which governments are selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them.

gross domestic product (GDP) the total market value of all final goods and services produced in a country in a given year, equal to total consumer, investment, and government spending plus the value of exports minus the value of imports.

gross national income (GNI) the total value of goods and services produced within a country (i.e., its gross domestic product) plus the income received from other countries (notably interest and dividends) minus the similar payments made to other countries.

I

impact any effect, whether anticipated or unanticipated, positive or negative, brought about by a development intervention.

indicator quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor.

involuntary resettlement the act or instance of settling or being settled in another place without the informed consent of the displaced persons or, if they give their consent, without having the power to refuse resettlement.

M

macroeconomic instability typically, a situation of high inflation, an overvalued currency, unemployment, unstable real exchange rate, balance of payment deficit, or fiscal deficit.

macroeconomics the field of economics that studies the behaviour of the aggregate economy and emphasizes the interactions in the economy as a whole. It deliberately simplifies the individual building blocks (of an economy) in order to retain a manageable analysis of the complete interaction of the economy. Macroeconomics examines economy-wide phenomena, such as changes in unemployment, national income, rates of growth, GDP, inflation, and price levels.

Acronyms and glossary

continued

monetary policy the regulation of the money supply and interest rates by a central bank, such as the Bank of England in the UK or the Federal Reserve Board in the US, in order to control inflation and stabilize currency. Monetary policy is one of the two ways government can impact the economy (the other is fiscal policy). By impacting the effective cost of money, a central bank can affect the amount of money that is spent by consumers and businesses.

monitoring and evaluation a management tool that provides managers with feedback on project effectiveness during implementation. This is important in enabling project managers to move away from prescriptive planning toward a more flexible planning approach that enables those in charge of projects to learn and adapt to changing conditions and experience on the ground.

N

non-governmental organization (NGO) a private organization that pursues activities to relieve suffering, promote the interests of the poor, protect the environment, provide basic social services, or undertake community development.

non-mineral primary balance the difference between non-mineral revenue and expenditure (excluding interest receipts and interest payments) divided by non-mineral gross domestic product.

O

objective an expression of an effect that a program is expected to achieve if completed successfully and according to plan. Objectives are often viewed as a hierarchy, beginning with strategic goals, purposes, outputs, and activities.

outcome an objective of a project or program, i.e., a longer term result aimed for at the end of a project or program.

P

participation a process through which stakeholders influence and share control over development initiatives and the decisions and resources that affect them. Participation can improve the quality, effectiveness, and sustainability of projects and can strengthen ownership and commitment of government and stakeholders.

partnership negotiated relationships that exist between two or more entities that have voluntarily entered into a legal or moral contract.

primary data qualitative or quantitative information that is newly collected to address a specific research objective. Primary data may include original information gathered from surveys, focus groups, independent observations, or test results.

proximate influence (on a country's governance) an event that is closest to, or immediately responsible for causing, some observed result.

Acronyms and glossary

continued

Q

qualitative survey research that is more subjective than quantitative research and that uses very different methods of collecting information, mainly a relatively small number of individual, in-depth interviews, and focus groups. Qualitative surveys are exploratory and open-ended and allow respondents greater freedom to influence the research scope and design. Qualitative research is often less costly than quantitative surveys and is extremely effective in understanding why people hold particular views and how they make judgments.

quantitative survey research concerned with measurement of objective, quantifiable, and statistically valid data. Simply put, it is about numbers. In quantitative surveys, a relatively large and scientifically calculated sample from a population is asked a set of closed questions to determine the frequency and percentage of their responses.

S

secondary data qualitative or quantitative information that has already been assembled, having been collected for some other purpose. Sources may include census reports, journal articles, technical or academic studies, and other publications.

stakeholder analysis a process that seeks to identify and describe the interests and relationships of all the stakeholders in a given project. It is a necessary precondition to participatory planning and project management.

stakeholders persons or groups who are affected by or can affect the outcome of a project. Stakeholders may be individuals, interest groups, government agencies, or corporate organizations. They may include politicians, commercial and industrial enterprises, labour unions, academics, religious groups, national social and environmental groups, public sector agencies, and the media.

sustainability the ability of an organization to secure and manage sufficient resources to enable it to fulfill its mission effectively and consistently, over time, without excessive dependence on a single source.

sustainable development development that meets the needs of the present without compromising the ability of future generations to meet their needs. Progress measured in social or economic terms is accomplished without irreversible environmental degradation or social disruption.

T

taxonomy a way of presenting or classifying information that provides a conceptual framework for discussion, analysis, or information retrieval.

transparency openness of, communication with or from, and accountability of public officials. When government meetings and key policy documents (such as budgets and financial statements) are readily available to the press and the public and when laws, rules, and decisions are open to discussion, they are described as transparent and there is less opportunity for public officials to abuse the system in their own interest.

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How was the toolkit developed?



From the outset of the Resource Endowment initiative (REi), there has been independent oversight of the toolkit. The pilot version was developed in 2005 as a result of collaboration between ICMM, the United Nations Conference on Trade and Development (UNCTAD) and the World Bank Group. Phase 1 of REi started with an extensive literature review, and a “coarse-sift” comparative analysis of the relative economic and social well-being of 33 countries with a high dependence on minerals. Initial findings were critiqued in a multi-stakeholder workshop that helped to shape a revised approach. In Phase 2 the toolkit was applied in Peru (with Chile as a comparator) and Ghana (with Tanzania as a comparator).

In each case, the resulting report has formed the basis of substantive and collaborative multi-stakeholder workshops and follow-up actions to obtain priorities for partnership around the six themes. A priority country-based focus was to have all government ministries engaged. For example, in Ghana in 2008 a stakeholder workshop identified a set of priority actions that then generated working discussions on the integration of mining districts explicitly into the proposed District Development Fund arrangements – a new harmonized public funding mechanism designed to channel adequate resources to regional authorities. In Tanzania, the life cycle analysis provided a useful addition to the debate on minerals policy reform at a contentious time. Phase 3 saw the completion of a review that looked at issues and challenges related to various minerals taxation regimes, a gap identified at a multi-stakeholder forum in June 2006 in Washington DC.

The trial period has provided strong confirmation there is a need for this toolkit. The challenge is to ensure that it can be implemented in the future with a reduced degree of reliance on the originating organizations, such as ICMM, and with a high degree of in-country ownership. This applies both to its implementation and in the dissemination of findings, workshops and other activities designed to develop partnerships around the evidence. The toolkit has therefore been revised to ensure that:

1. it is sufficiently robust, objective and accessible to be commissioned by any organization with an interest in mining’s social and economic contribution to development; and,
2. it can be implemented and disseminated in-country using locally available resources and at reasonable cost.

This toolkit contains several changes as a result of the experience to date. During 2008 a supplement was added on minerals taxation. This is now an Addendum to the toolkit, since it provides parallel advice on the thorny issue of taxation rather than an integrated set of additional tools. Two other new features are included in the current version: a database for analyzing information relating to the six areas of partnership (see Annex 2); and a tool to enable users to create forward-looking life cycle scenarios that can be compiled with the companies’ assistance. There is, in general, a poor understanding of the considerable time horizons involved in exploring, developing and operating a typical mine, and this forward-looking element has already proved to be a powerful medium for focusing debate about the potential contribution mining can make.

The steering group

The steering group

The toolkit revision was guided by a steering group comprising external organizations and ICMM member companies:

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Lecturer, Sociology, Anthropology and Economics Department, Egerton University, Njoro, Kenya; and

Ms Dafna Tapiero

Manager, CommDev, International Finance Corporation, Washington DC.

The group has provided extensive technical and editorial comments. Concerns expressed by the group included: clarity for the target audience; balance between a country case study as a goal in itself or as a tool for stakeholders to explore partnerships; direction regarding the focus of measuring positive or negative impacts of mining (such as social and economic impact of environmental degradation and physical or economic resettlement/displacement); instances of too technical or academic methodological explanations and instances that were not technical enough; explanation of why “governance” is important when measuring mining’s contribution; the “tools” needed for stakeholders to build partnerships; and a robust approach to identify “proximate” and “fundamental” influences from mining projects.

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Consulting team

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Editorial team

The toolkit was edited by Alastair Sharp-Paul and Liz Jacobsen (Coffey Environments).

