

Annex 5. Governments' Views

Unlike industry and civil society, governments do not yet have a mechanism to respond collectively to global initiatives like the Extractive Industries Review (EIR). During the consultation process, the government perspective was not strongly represented. There were proportionately fewer government officials attending the regional consultation workshops—19 percent overall—and they mainly represented the viewpoints of ministries of Mining and Energy. Only a few papers were submitted from government, and with few exceptions, those that did come did not comment directly on the role of the World Bank Group (WBG) in extractive industries, let alone address the sector's impact on poverty alleviation and sustainable development. Because of the shortage of direct submissions, other sources, such as the Mines Ministries of the Americas and the World Mines Ministries Forum, were used to supplement what little came out of the workshops and informal discussions.

Governments are the main partner of the WBG and are the entry and focal point for most WBG programs. One of the Bank's most significant involvements is with structural adjustment, technical assistance, and capacity building programs, which are aimed directly at helping governments become more efficient and more effective. Usually, more than one government department may be engaged with the WBG in programs that are linked to the extractives sector. The official counterparts, and hence the initial contacts for the WBG—Finance, Planning, or Investment ministries—may often be the lead negotiating partner, with technical ministries such as Mining or Environment taking an executing role.¹ None of these counterpoint ministries engaged directly with the EIR, so an important perspective is missing from the discourse. Similarly, the perspective of Environment Departments is missing. So the picture is far from complete, especially in terms of a detailed outlook that takes into account poverty alleviation and sustainable development. Some of the most comprehensive inputs from government were provided directly to the EIR outside of the regional consultations. Submissions came from Canada, Chile, Peru, and the United Kingdom—each of which provided specific recommendations on the future role of the WBG in extractive industries.²

The Nature of Government

Government is unique among stakeholders in several ways. First and foremost, it has sovereignty over lands and natural resources within its domain.³ This makes it a powerful actor in the extractives sector, with the potential to control and manage resource development for better or for worse. Second, the administrative side of government can be subject to inefficiencies, political manipulation, and corruption, which can create grave distortions in how resources are managed and particularly the degree to which benefits are distributed and accounted for. Third, national governments usually have a seat in intergovernmental agencies and fora, such as the United Nations, where agreements, protocols, conventions, and codes of practice on social, economic, and environmental matters are negotiated. Once an international instrument is ratified, it comes into force and is binding on a signatory nation, which then is responsible for implementing and abiding by it.

The fundamental and unique responsibility of governments is to integrate the economic, environmental, and social factors in their country; protecting community rights; stipulating rights of land use, including a transparent ownership transfer of title, with dispute settlement systems for those weakest in society; setting emission levels of air and water; enforcing compensation; imposing and collecting taxes; and sharing revenues among other levels of government in their country.⁴ It is for government to decide whether if or how resource extraction can be integrated into other sectors of the economy, and to ensure that there are positive net benefits for all projects after all costs are calculated, including the evenly distributed costs. Governments cannot and will not abrogate these responsibilities, nor will they devolve them to others.

There is tremendous variation among countries in the style and capacity of their governments. Some countries, such as many of those in the North, have governance systems that have evolved slowly and effectively over time, whereas in some other countries, government political and administrative systems are still evolving, often rather rapidly, and have not yet been able to fully develop strong governance mechanisms. This may exacerbate a weak sense of nationhood among citizens of different ethnicities or regions, and where valuable extractive resources are involved, strong conflicts may arise. Moreover, “newer” countries often have neither sufficient expertise or experience nor the financial resources to be able to fund a fully functional governance system, greatly limiting their capacity to govern and deliver services properly.

The nature and capacity of government also changes within a country vertically and horizontally, from the national to the local level. There can be great differences between regions as well as from village to village. Extractive industries will often create great demands at the local level, while all or most of the revenues from the project flow to the national level. Local administrative systems are frequently not sufficiently endowed to deal with these demands. Moreover, demands for new or additional services start early, during the exploration or construction phases, well before any revenues start flowing.

General Views from Government

Governments believe that extractive industries contribute to sustainable development and poverty alleviation.⁵ (See, for example, Annex Box 5–1.) There has not been one dissenting voice from the government side. They view the development of these industries as an essential force for the greater good and welcome the revenues generated from taxes and fees, the foreign exchange earnings, and the multiplier effect in their economies.⁶ Extractive resources are often viewed as the only asset available for kick-starting their economies.

Revenues from extractive industries can be used for social development programs, for health and education, for infrastructure development, and for capacity building in governments to improve the way they govern and provide public services. Extractive industries can provide jobs, stimulate local economies and entrepreneurs in providing goods and services, improve the competencies of workers, and provide social and developmental services and facilities for their own work force and for local communities.⁷ They also can stimulate local economies

and entrepreneurs in providing goods and services. Extractive industries often provide the economic catalyzing factor to open up remote and underdeveloped regions in a country, enabling other development initiatives to piggyback on newly installed infrastructure, such as roads, water, and power.⁸

Annex Box 5–1. Extractives Policy and Sustainable Development

In its National Minerals Policy, the Government of the Philippines sets out the following :

Vision:

A minerals industry that is not only prosperous but also socially, economically and environmentally sustainable, with broad community and political support, while positively and progressively assisting in the Government’s program on poverty alleviation and contributing to the general economic well-being of the nation.

Sustainable Development Thrusts:

- The *protection and rehabilitation of the environment* shall be of foremost consideration in mineral resources development and shall be done in the most efficient, conscientious, and environmentally responsible manner using *Best Practice*.
- The utilization of minerals, particularly the benefits derived from mineral wealth, must redound to the *promotion of social and community stability*, giving emphasis to the respect for the needs, values, and decisions of communities and indigenous peoples.
- A sustained effective identification and rational use of nonrenewable mineral resources, anchored on sound development plans and designs and prioritization of strategic minerals, shall be pursued to ensure that the *preservation of options for future generations* shall not be compromised.
- A *competitive and prosperous minerals industry* that must be set in place to fuel sustainable economic growth, under a condition where mineral exploration, extraction, utilization, value adding, and recycling are done in the most effective manner, and in the context of an open and liberal global trade and investment framework.

Source: Mines and Geosciences Bureau, DENR, Republic of the Philippines, “Philippine Government Initiatives on the Sustainable Development of the Country’s Mineral Resources.”

Governments by and large recognize the economic, social, and environmental “costs” generated by extractive industries. These companies can make quite heavy demands on governments, in terms of providing services and establishing the enabling environment for business to function efficiently. Governments then have to manage the multiple and wide-ranging impacts of oil, gas, and mining projects on the economy, the social fabric, and the environment. Quite often governments, especially those in developing countries, have neither the existing capacity nor the resources to respond to these demands, and they frequently lack the experience and skills to negotiate from a position of strength with potential investors. Because of this, the role of the WBG becomes potentially vitally important to these countries in providing wise counsel, technical assistance, and financial support. The WBG also can use

its intergovernmental contacts, influence, convening powers, and expertise to help national governments balance divergent interests to ensure that extractive industries projects contribute to poverty alleviation and sustainable development.

During the EIR, governments identified some major issues they have to deal with when working with the extractives sector. These have been grouped according as economic, social, environmental, and governance issues.

Economic Issues

Economic Challenges

Governments face a number of challenges in managing economic factors related to extractive industries. They are responsible for deciding and setting macroeconomic and fiscal policies that encourage inward and domestic investment in the sector. They have the ability to shape the investment environment through import duties, taxation, royalty rates, and special incentives.⁹ At the same time, they are charged with maximizing benefits from extractive industries and seeing to an equitable distribution of the benefits to all levels of society, especially to local communities most directly affected by extractive operations. (See Annex Box 5–2.) Very often the fiscal mechanisms are not in place to allow this to happen, nor is there the capacity at the local level to foster social and economic development.¹⁰

Annex Box 5–2. Improving the Local Management of Mineral Wealth: The Philippines Experience

The national wealth-sharing scheme in the Philippines was initiated in the mid- to the late 1990s as a financial incentive for local government units (LGUs) to support new development projects, including mining projects. It recognized the important role of LGUs in supporting the catalytic role played by mining projects for community development in rural areas, and it gave LGUs a central position, as well as the resources, to facilitate more equitable and sustainable development in the areas surrounding mining operations.

The national government fostered a multistakeholder approach in which national government, LGUs, the mining contractor, and civil society organizations work together to address the multiplicity of issues that arise in developing a mining prospect. A revenue sharing mechanism has been put in place which distributes funds in a balanced and broad way at national, local, and community levels, ensuring that no “enclave” development takes place. There are social and environmental programs that anticipate and prevent negative social and environmental impacts and that involve the public throughout the project life cycle.

The following approaches have been incorporated to ensure maximum social responsibility:

- *Social profiling during exploration*: provides a mechanism for mutual education and familiarization between communities and the mining company.
- *Social impact assessment prior to mine development*: provides individuals, community

ramifications of a proposed mining project.

- *Social development and management program during the operating life of the mine*: an adaptive tool for developing, implementing, managing, and monitoring/auditing community programs and projects.
- *Social plan as part of the mine closure process*: designed to minimize the impacts of mine closure on employees, dependants, and communities.

Source: Adapted from Horacio C. Ramos and Manuel A. Banaag. *Challenges and Initiatives in Improving the Local Management of Mineral Wealth*. Paper presented during World Bank workshop, 10–11 June 2002, Washington, D.C.

Managing Extractive Revenues

Revenues from the extractives sector tend to be volatile, due to the cyclical nature of global commodity prices. Managing these revenue swings is one of government's most difficult challenges and was an oft-repeated concern raised during the EIR.¹¹ Governments have been completely silent on this issue. The distribution and use of revenues to benefit the population of a country equitably requires specific policies and a suitable legal and regulatory framework, as well as an efficient fiscal management system (see Annex Box 5–3), all of which seldom exists in the poorer countries. The internal capacity of both the political system and the administrative system often has to be strengthened, and this is where governments seek external assistance from the WBG in building their capacity to manage better.

Annex Box 5–3. Revenue Management in Botswana: How to Avoid the “Dutch Disease”

The diamond boom in Botswana, which began in 1965, was due to the discovery and development of large amounts of high-quality diamonds, not a price increase. From 1966 to 1989, Botswana's annual gross domestic product growth rate of 8.5 percent was the highest in the world. From 1990 to 1999, at 2.5 percent, it was second to Sudan in sub-Saharan Africa. In the 1980s, its manufacturing production even doubled, with manufacturing employment growing to the point where it was three times the size of mining employment. There was a significant rise in construction prices in the late 1980s, but there was no spillover of inflation to the rest of the economy or the foreign exchange rate.

Why hasn't Botswana been affected by Dutch disease? The reasons are not difficult to find. First, a large part of the windfall was put in foreign savings and only used when the absorptive capacity of the economy was deemed sufficient. Government spending policy paid close attention to two constraints: the availability of skilled workers and the future recurrent costs of development spending in relation to revenue forecasts. Second, very close attention was paid to the foreign exchange rate. On one hand, via management of the windfall savings, it was not allowed to appreciate widely. On the other hand, to help manage inflationary pressures caused by the boom, appreciation of Botswana's *pula* was allowed periodically. Third, the government never went on an investment-spending spree, except for a brief period in the late 1980s. When revenues from

quickly. Domestic credit growth was cut dramatically, interest rates were increased, wages and salaries were frozen, and the *pula* was devalued by 10 percent. The policies were generally successful and the drop in GDP was only 2.4 percent despite a 16 percent drop in total export revenues and a 43 percent drop in diamond revenues.

Source: Gary McMahon (1997), “The Natural Resource Curse: Myth or Reality,” Economic Development Institute, World Bank, Washington, D.C., unpublished paper.

Structural Reform

WBG and International Monetary Fund (IMF) structural adjustment programs are intended to help governments become more efficient in how they manage the economy. There has been increasing pressure on governments to step away from direct involvement in the private sector and to concentrate on their public service responsibilities. Under structural reform, they have to face institutional reform as well as industrial reform, with the latter driven by Bank demands for privatization of state-owned enterprises. The ability to manage the impacts of these processes is often very limited, especially the social dislocation from privatization.

An example of a different government perspective on structural reform is Algeria, where the government has asked the WBG to help them separate the policy, regulatory, and commercial functions of SONATRACH, the state oil company. They expect this will ensure a more appropriate relationship between the government and the company.

Achieving “Balanced” Economic Development

Another common concern of governments is how to foster industrial development where there is a balance between large transnational companies, state-owned enterprises, and smaller in-country businesses (see Annex Box 5–4), as well as a balance between national, regional, and local development. The ideal is balanced development in all sectors of the economy. One government complaint about the WBG is that the policy reforms promoted often are not concerned about this kind of “balanced” development.¹² Some governments would like to retain as much wealth as possible and generate more employment from value-added and semi-finished extractives products, and they seek WBG support to foster relevant research and development.¹³ However, this is an area that has not received much support from the WBG.

Annex Box 5–4. Small and Medium-Scale Enterprise Support in Chile

Small and medium-scale enterprises (SMEs) in Chile sell their ores and concentrates only to ENAMI, the National Mining Enterprise. This enables them to participate in international markets and receive a fair price for their products. The combined mineral sales of SMEs exceed \$620 million per year, and because of their economic linkages in terms of

or medium scale, support and fostering of this sector has become a State policy.

ENAMI is State-owned. It consists of two smelters and one refinery, five concentration plants, and 14 mining offices for purchasing ores and concentrates, and it provides technical and financial assistance. The company also engages in businesses with large producers in order to fully use their smelting facilities and to develop mining projects of various kinds in their mining properties.

The fostering instruments that ENAMI applies to support SMEs are:

- a risk capital fund to reduce the risks entailed in exploring for new ore reserves;
- developing competitive capabilities through training;
- credits and loans for mining development, including productivity improvements;
- access to international markets for copper produced by small-scale miners; and
- mechanisms to support and mitigate low price cycles for small-scale miners.

Source: Chilean Ministry of Mining electronic communique provided by Advisory Group member Wanda Hoskin, September 2003.

Social Issues

Addressing the Social Dimension

Extractive industries create pressure on governments at all levels to address the social dimension of development, including social services and infrastructure, occupational safety and health standards for these industries, and mobilization of resources to regulate, inspect, and monitor compliance with standards.¹⁴ Central governments are having to reassess their policies, strategies, and programs, as well as their role and responsibility in providing social services and social infrastructure. Local governments have to take on new responsibilities, providing community development support services, as well as beef up their services and facilities for health and education. Training programs are needed to equip the work force that will be employed in these industries; some of this training is provided by extractive industries, but most governments feel they have a long-term responsibility for this.¹⁵

The voice of government is conspicuously absent on issues of human rights, including conflicts over land rights and land use, indigenous peoples and free and informed consent, the imposed use of military forces to provide security for extractive industries, fair compensation for lost land, access to resources and livelihoods, and incidents of human rights abuses. Some governments, on paper at least, embrace a more progressive approach to certain human rights, such as the Government of the Philippines, which in the National Minerals Policy states “free and prior consent in ancestral domain areas recognizes the rights of indigenous groups to their lands and requires the provision of adequate mechanisms and compensation if their land is developed for mining.”¹⁶ In the EIR regional consultations, government representatives did take part where issues related to human rights were raised, discussed, and endorsed, so in

effect there was a *de facto* endorsement of human rights recommendations agreed on by the larger group.

Supporting Multistakeholder Processes

Beyond their standard role, governments are learning to take on new functions, such as facilitating multistakeholder interactions in processes leading up to the establishment of extractive industries.¹⁷ (See Annex Box 5–5.) This facilitative role is being stressed more often, especially as governments become more active in supporting community development. Governments see themselves more and more as providers of information and a link for those in need to resources for technical and financial assistance.¹⁸

Annex Box 5–5. Papua New Guinea Mining Development Forum

The Papua New Guinea government recognized that involvement and participation of all levels of stakeholders in the decisionmaking process was essential to ensure sustainable outcomes, and it included a provision within the Mining Act of 1992 requiring the government to involve all major stakeholder groups in a Mining Development Forum prior to granting a Special Mining Lease. The forum’s purpose is to ensure that the genuine needs and aspirations of the various land-owning clans and their provincial and local governments are accommodated prior to formal development approval being granted by the government.

The first use of the Mining Development Forum was with the Porgera mine development in 1989, and it subsequently has been used for the development of the Lihir mine and the Ramu nickel project. This same agreement has now been included in an “organic law” in Papua New Guinea, meaning that all new Acts of Parliament will be required to incorporate such consultation provisions prior to granting a development license.

Source: Graeme Hancock, *Mining and Sustainable Development: Is it a Contradiction in Terms?* World Bank Project Unit, Department of Mining, Papua New Guinea.

Facilitating Community Development

Governments acknowledge having to focus more on community development, and they are becoming increasingly concerned with diversifying livelihoods to avert the economic and social disruption that occurs when an extractive operation closes.¹⁹ Governments recognize that capacity building is essential for sustainable community development, but their capability to provide these essentially new services is severely limited, especially at the local level. One of the other major concerns is providing local communities with direct benefits and compensation from extractives operations. Some governments mandate industry to provide a direct portion of their revenues to a community development fund that is managed by the community cooperatively.²⁰ Governments need to establish mechanisms like this for compensation and benefit-sharing, along with a complementary regulatory and policy framework.²¹

As described earlier, many governments recognize that they have to get better at dividing revenue between central authorities and the local authorities in regions affected by development of extractive industries.²² It simply does not work if all the revenue is controlled and spent centrally, as this deprives local authorities of the resources they need to deal with very real challenges and to take advantage of the development opportunities.

Ensuring Occupational Safety and Health

Governments are responsible for setting policy, standards, and regulations to ensure that workers in extractive industries are working in conditions that are not threatening or damaging to their health and safety. Most governments have these standards, and many are signatories to, among others, International Labour Organization Convention 176 on safety and health in mines.²³ In the Philippines, this was the first occupational health and safety convention ratified by the government. Governments view health and safety as a shared responsibility between industry, workers, and government.²⁴ Trade unions, companies, and government jointly are responsible for training. Governments have to monitor health and safety conditions closely and enforce the consequences of noncompliance.

Promoting Artisanal and Small-scale Mining

Artisanal and small-scale mining (ASM) has been discussed by governments in intergovernmental fora since at least 1978, when the United Nations Institute for Training and Research held a conference on the Future of Small-scale Mining.²⁵ The conference called on support for many of the issues still being discussed today—formalizing the sector through legislation, providing technical support for improving the safety and efficiency of mining operations, providing outlets for processing and marketing, and facilitating access to training and financial services. Since then there has been a lot of discussion on the issues (see Annex Box 5–6) but very little action, in part because few resources have been mobilized to implement activities. Governments are aware of the problems, and perhaps also the opportunities, associated with ASM, but they need new approaches as well as financial and technical assistance from international agencies like the WBG to address this matter.

Annex Box 5–6. Policy Design for Small-scale Mining

Economic Commission for Africa's Report 2002 discussed the need to develop a mining policy that recognizes small-scale mining as a potential economic sector with clear identification of constraints and potential. International development agencies need to be involved in the consultation in mining policy design, which should be done in a participatory manner with different stakeholders.

The development of this sector in a country has to start at the policy level. It is necessary to enact a policy that recognizes small-scale mining as a distinct sector, notes its different categories, and proposes objectives and strategies to address the constraints that affect the sector. These include technical issues such as

and socioeconomic and institutional matters, such as institutional capacity, regulatory procedures, assistance programs, access to finance, marketing, and other relevant issues. Issues related to gender imbalances, child labor, integration of the sector into the national economy, relations between small- and large-scale operators, and strategies for addressing them should also form part of the mining policy.

Source: E. Bugnosen, “Results of a Literature Search on Stakeholders’ Views on Small-Scale Mining,” July 2003.

Some countries, such as Papua New Guinea, have long ago formalized and integrated ASM into their economy and legal structure.²⁶ ASM is a vibrant economic activity there and brings enormous benefits to local populations as well as the State treasury. The government provides training, social services, and a supportive fiscal and regulatory environment for local miners, with the result that the sector is safe, healthy, and stable and generates an above average wage to workers. Other countries, such as Chile, focus more on the marketing chain to ensure a stable outlet and price for small-scale miners.²⁷

Most recently, governments and development agencies want to link ASM into an overall national strategy for rural and community development (see Annex Box 5–7); the same issues are in common—poverty alleviation, livelihood diversification, provision of basic social services, and improvement of environmental management.²⁸ ASM also has a very high involvement of women, up to 50 percent in some countries.²⁹ In many countries ASM is illegal, however, and the State is often hesitant to take action because it is a very difficult sector to control, with individual ASM operations often spread out over a wide area or with massive immigration of outsiders.³⁰

Governments are increasingly recognizing that ASM in many countries is primarily driven by poverty and that they have a responsibility to bring ASM into the formal sector in order to reduce the vulnerability of poor people and to create better opportunities for sustainable development in the sector.³¹ Accordingly, they want the WBG to expand its support to the ASM sector and to provide them with the means to develop the policies and strategies, the legal and regulatory mechanisms, the fiscal management mechanisms, and the social support and environmental control mechanisms.³²

Annex Box 5–7. U.K. Government Viewpoint on Artisanal and Small-scale Mining

The U.K. Government’s Department for International Development (DFID) suggests that:

The WBG, in conjunction with other groups, needs to develop a strategy to address how the artisanal and small-scale sector can be integrated into work on the formal sector. This should

that facilitate progress from artisanal to more formalized, legal small-scale operations in which fundamental rights and titles can be observed and protected, environmental and social management is introduced and revenues are collected and reinvested in more sustainable practices and livelihoods.

The key areas of policy action should be to reduce the vulnerability of those engaged directly and indirectly in artisanal mining, strengthen their fundamental rights, enhance their capacity to better manage the resources upon which they depend, enhance government control over their industry and the consequential loss in revenue, increase transparency over the revenue payments and receipts and the award of various types of licenses, and promote SME development.

Artisanal mining is a means to an end. It should lead ultimately to more sustainable pursuits within a rural development framework. A strategy for artisanal mining needs to be reflected in relevant country assistance and Indigenous alleviation strategies.

DFID would like to see the current WBG-hosted coordinating body, Communities and Small-scale Mining (CASM), strengthened financially and provided with increased expertise so that it becomes more strategic and adopts an overall plan. CASM should also ensure the involvement of more development agencies and developing-country governments in the process.

Source: DFID (2003). “The UK Government’s Submission to the World Bank’s Extractive Industries Review.”

Several governments are interested in initiating pilot projects with Bank support on mining cooperatives.³³ And at the EIR Asia Pacific consultation workshop, one of the collective recommendations was that the Bank must beef up CASM and initiate ASM pilot projects in each of its five global regions.

Environmental Issues

Command and Control

The environmental impact of extractive industries can be damaging and long-lasting, so governments are entrusted with regulating these industries to minimize any lasting imprint on the environment. Communities and businesses expect governments to create policy and a regulatory framework and to have the means to enforce compliance over the life of a project in order to control and minimize these environmental effects, including waste and tailings disposal; pollution control of soils, air, and water; reclamation of sites after closure; abandoned or orphaned mines; and emergency and disaster planning and action.

Annex Box 5–8. CAMMA’s Mining and Environment Principles

- *Management and institutions in mining and environment:* Countries are facing environmental management problems in implementing the different institutional systems that regulate relations between mining and the environment. Problems arise due to the overlapping of responsibilities in related public agencies and to less than ideal communications among them. This is observed or reflected on national, federal, provincial, and other levels. As a result, the roles of the environment and the mining authorities in the development of mining projects need to be restructured and reoriented. This may mean the creation of mechanisms for harmonization, coordination or restructuring, depending upon the economic and political situation in each country.
- *Land use:* The development of mining is affected by the absence or lack of clarity of institutional policy on land use. This often means that for ecological reasons, large areas are excluded from mining activities (ecological reserves, protected wildlife areas, indigenous communities), with the corresponding harm to the economy caused by the failure to tap mineral wealth that can contribute to development. We do not have enough information on the soil and subsoil to establish a scientific foundation that can be used to determine use priorities.
- *Mining environmental liabilities:* In the past, mining has been the cause of environmental damage (physically unstable tailings deposits, mine openings that leach acids, etc.) that currently pollutes rivers and surface water sources, and in some cases is a hazard to the health of surrounding communities. The landscape in old mining areas has also been adversely affected.
- *Handling and transportation of hazardous materials:* Countries are concerned that mining activities frequently entail the handling and transportation of hazardous substances in the form of inputs or by-products. Improper handling of such substances can cause accidents with serious consequences for the environment and public health, and lead to incalculable damage.

Source: Mines Ministries of the Americas (2001). "Minerals, Metals and Sustainable Development."

At the Third Summit of the Americas in April 2001, government leaders committed their countries to "promote the development of environmentally sound exploitation and management of minerals and metals, recognizing the importance of the social and economic dimensions of the activities of the mining sector, and support the work of regional and international fora in this area."³⁴ Later in 2001, Ministers who belong to the Mines Ministries of the Americas (CAMMA) signed a Declaration on Minerals, Metals and Sustainable Development in preparation for the 2002 World Summit in Johannesburg. (See Annex Box 5–8.)

Project Life-cycle Management

In some parts of the world, there is a significant legacy of improperly closed, abandoned, or orphaned mines. Governments seldom have the financial or technical resources to clean up this legacy, and some governments consider it essentially the responsibility of the operator to manage their operations in an environmentally responsible manner and to pay the costs for damage to or for rehabilitation of the environment.³⁵ Other governments suggest that new partnerships and financing need to be found.³⁶ Still others would like the WBG to focus more resources on reclamation and transformation of degraded closed or abandoned sites and to help convert them into productive areas, using, for instance, agroforestry techniques where appropriate.³⁷

Governments in some regions are demonstrating the political will to improve mine closure systems in order to protect the environment, recognizing the distinctive characteristics of small, medium, and large-scale mines. Ministries in the Americas are developing regulatory standards, identifying financing mechanisms, and promoting community awareness and participation in related processes.³⁸ They also have started an information exchange mechanism between themselves and are developing a network of scientific and technological cooperation.

Mine Wastes and Tailings Management

Although normally there are provisions for controlling and regulating disposal of wastes and tailings in a country's mining code and regulatory framework, the matter of wastes and tailings management received little open comment from government in the consultations.³⁹ The Government of the Philippines in the National Minerals Policy states: "All tailings management systems shall be rehabilitated to a physically and chemically stable state without permanent need for human intervention. Deep sea tailings placement (DSTP) was adopted as a tailings management option. It can be used when significant on-land constraints are present (e.g., poor geotechnical conditions, earthquake prone areas), and when environmental studies can show that DSTP will result in the least environmental and social impacts."⁴⁰

They also use the "polluter pays principle," plus penalties for unauthorized release or disposal of tailings. The Philippines Government perspective is that "any decision on sustainable development must take into consideration not only the potential impacts on the ecological environment of a mining development, but also the sustainability of the social and economic environment and the risks to present and future generations inherent in each alternative development strategy."⁴¹

Artisanal and small-scale mining is viewed as particularly problematic, with widespread environmental damage resulting from the uncontrolled soil upheaval and use of toxic substances such as mercury.⁴² Governments would like to control this sector much more effectively in order to contain and mitigate the negative impacts to the environment.⁴³ They face a daunting challenge in cleaning up the legacy from ASM.

Conflict Management

Governments frequently face conflicts over social and environmental matters related to EIs. There also can be conflicting interests between mining departments and other agencies responsible for environmental protection and forestry.⁴⁴ This is reflected on the ground when there is conflict over the use of public lands for an extractive activity, or, for instance, for some form of customary use such as farming or hunting. As the sovereign authority, governments are mandated to resolve such conflicts through appropriate mechanisms. The most common vehicle is the legal system, which may involve negotiation or arbitration. Few governments have formal grievance mechanisms, whereby individuals or groups can lay complaints or seek restitution for injury, damage, or loss arising from extractive activities.

A common conflict within government is when the mining department is also responsible for setting environmental policies and regulations and for overseeing compliance.⁴⁵ CAMMA's suggestion to avoid this conflict is to "promote official mechanisms for inter-agency coordination between mining and environmental authorities with the purpose of defining, implementing, reviewing and applying public policies on mining and the environment."⁴⁶

Renewable Energy

Developing-country governments have not been outspoken about renewable energy and low carbon growth, especially when they are themselves heavily dependant upon fossil fuels, either for their own energy needs or for export trade. The desire to exploit fossil fuels, especially soft coal deposits, may generate conflicts between countries wanting to generate energy or revenue fairly quickly by tapping into these resources and other countries and lending or development agencies wanting to limit the release of greenhouse gases. Some governments have called for more research on renewable energy.⁴⁷

During discussions about the minerals sector, there was little mention of this issue. However, governments are engaging with the WBG to explore energy efficiency and renewables, using the Global Environment Facility. Recently, the government of Morocco started three projects with the World Bank involving renewable energy and energy efficiency.⁴⁸

Governance Issues

The Responsibility of Government

Throughout the EIR process, governance was consistently and universally pointed out as a major barrier to achieving the twin goals of poverty alleviation and sustainable development. (See Annex Box 5–9.) Governments have been quiet on the key enabling components of good governance—transparency, equity, participation, accountability, and absence of corruption. But they were identified as being most responsible for the quality of governance.

Governments, however, are concerned about this, as indicated by their frequent requests to the WBG and other agencies for help in improving efficiency and effectiveness. When assistance is received it often is directed toward improving their policy and regulatory frameworks. For instance in Ghana, the International Development Association (IDA) provided a credit to: "Enhance the capacity of the mining sector institutions—i.e., the Ministry of Mines, the

Minerals Commission, the Geological Survey Department and the Mines Department—to carry out their functions of policy formulation, encouraging and regulating investments in the mining sector in an environmentally sound manner; and support the use of techniques and mechanisms that will improve the productivity, financial viability, and reduce environmental impact of small-scale mining operations.”⁴⁹

And the Uganda government authorities at the EIR regional consultation in Maputo suggested that the WBG should help them establish clear mining policies, updated legislation, and fair and competitive fiscal terms.

Annex Box 5–9. Pre-Conditions for Development in Any Country

The country has:

- Transparent cadastral and legal systems.
- Transparent land registries and mining recorders.
- Transparent legal redress and dispute settlement.
- Transparent ownership of title.

Hence the country has:

- Conditions for the private sector to function.
- Ability for government to impose and collect taxes.
- Ability to fine-tune taxation systems.
- Ability to share revenues among governments.

Source: Adapted from Ministry of Natural Resources Canada, “Government Approaches to Mineral Policy, Taxation and Transparency,” presentation to EIR, 5 March 2003.

Creating the Right Enabling Environment

A sound regulatory framework is a basic requirement for an extractives project to function properly and for there to be a reasonably predictable working environment. A government must have sound policies and a good legal framework to regulate the operations of extractive companies. This is not only to make sure they comply with standards and regulations, but also to provide a stable enabling environment for companies to operate in. Governments strive for the best balance between public and private sector involvement that will encourage and sustain investment.

Governments also need to have appropriate strategies and a development planning framework that integrates all relevant sectors, including power, natural resources, agriculture, transportation, human resources, and social welfare on a regional level (provincial or state).⁵⁰ An example of this is Morocco, where the design and management of the mining sector is integrated into a national development planning process.⁵¹

Transparency and Accountability

During the EIR, there was no individual comment from governments on the near-universal recommendation that they need to be more transparent in their reporting on revenue flows, although government representatives were involved actively in small group and plenary discussions during the regional workshops. These sessions produced very clear recommendations on what to do to achieve transparency within government.

More recently, some governments are participating actively in a U.K.-spearheaded Extractive Industries Transparency Initiative, which aims to “improve transparency over payments and revenues in the extractives sector based on a statement of principles and agreed joint action by governments, companies, civil society, international organisations, investors and other interested stakeholders.”⁵² This initiative will pilot the use of new reporting guidelines in volunteer countries, beginning possibly in Azerbaijan, Ghana, Indonesia, Nigeria, Timor-Leste, and Trinidad and Tobago.⁵³

Managing Information and Communication

For governments to be fully accountable to the electorate, they also must be transparent with their other communications. This again is being recognized by many governments, especially with the advent of new computer-based information and communication technologies, which potentially make it easier for governments to be in close touch with their constituencies. Governments are also under pressure from civil society and the private sector to provide more up-to-date and accurate information and to open up two-way channels for active communication and dialogue. Several governments expressed concern over the poor understanding and level of awareness that the public has about the extractives sector and wanted help in launching public information campaigns.⁵⁴

Modern information management systems are of great interest to governments. In mining and energy departments, one of the most common requests to the WBG is to upgrade the geological data base through field surveys, database development, geographic information system mapping, and software and hardware systems.⁵⁵ Governments see several benefits from this: first, it will enable them to plan land use more effectively and, second, it will provide potential investors and other interested parties with accurate information on the mineral resources in the country.⁵⁶ A well-defined inventory of mineral and other natural resources, such as forestry, provides government with a useful tool for deciding how to balance economic development with other values, such as biodiversity conservation.⁵⁷

Opening up and maintaining information flows between local government and local communities is also essential.⁵⁸ Local and regional governments are obliged to ensure that locals are well informed about the status of nearby extractives projects, which requires a more intensive level of engagement from government authorities.

Participation

Governments are now often obliged to consult with and facilitate participation among multiple stakeholder groups throughout the life of extractives projects.⁵⁹ It is particularly critical to get this right before a project begins. Failure to allow for all the necessary inputs

beforehand leads to real and significant failure later, after the project starts to be implemented or when it is up and running. Inadequate participation from communities, civil society organizations, and indigenous peoples is perhaps one of the main reasons why projects fail to achieve positive social, environmental, and economic impacts. Governments at all levels can play a pivotal role in facilitating full involvement from these grassroots groups, and some governments are beginning to appreciate the involvement of civil society in projects.⁶⁰ At least one government official did, however, express concern about the WBG fostering “parallel institutions” to government by favoring civil society organizations.⁶¹

Governments have a key responsibility to see that balanced inputs are received from all sectors and that outputs achieve the objectives set by stakeholders. To maintain an unbiased perspective on compliance, some governments advocate using multistakeholder groups to monitor extractives operations.⁶² Participation is also essential in formalizing the ASM sector and in other community development activities.⁶³

Some governments perceive the WBG as a powerful convener of multistakeholder interests and want the institution to use this capacity on their behalf.⁶⁴ This point was raised repeatedly in the EIR consultation workshops. Governments also want the WBG to provide technical assistance and capacity building for government agencies, especially regional-level governments, in order for them to learn how to manage participatory processes such as pre-project impact assessments and community-based planning and management.

Local Governments

In countries with emerging and transition economies, local governments—province, district, sub-district—face a number of difficult challenges, not least of which is a desperate lack of resources, especially at the district and sub-district levels. Because they are one or more steps removed from the center, these levels are not involved in key program and budget decisions that directly affect their work. This leaves them significantly disempowered. If extractive industries are to catalyze sustainable development at the local level, this cannot be done without a stronger involvement from local governments. Indeed, the inadequacies of local governments may be at the heart of why it is so difficult to achieve poverty alleviation and so hard to keep development on a sustainable path.

Local government representatives did not have a direct voice during the EIR consultation; other voices that spoke on their behalf, however, acknowledging the critical role they have to play in the struggle for poverty alleviation and sustainable development. These are some of the main issues and constraints that local governments face in dealing with demands in the context of extractive industries:

- One of the main constraints is a lack of expertise and resources for responding to local development demands; central government organizations usually receive the bulk of technical assistance and material support, leaving little for building capacity at local levels.
- The influx of people, the demand for infrastructure and services, and other changes may come very quickly when an extractive project is developed. It likely will overwhelm the

capacity of local government, especially those located in remote rural areas of developing countries, where local government usually has limited capacity to deal with these kinds of changes and demands.

- When all the revenue from a project goes to national government, that revenue is often not shared equitably with local government. This results in local government facing enormous new challenges without sufficient resources to confront them.
- Even when revenue does get shared with local government, it is not usually available until the project is operational, which may be five years or more after all the construction and disruption of local life takes place. This leaves local government seriously under-resourced for dealing with the critical upfront demands from both industry and civil society.
- During the life of the project, the contribution to the local economy from an extractives project may fluctuate considerably as commodity prices go up and down. Employment will fluctuate, as will demands for housing, schools, water, electricity, transportation, health care, police protection and other things. At the same time, the revenues available to local government may also fluctuate wildly. Usually they tend to decrease when the demand for social spending increases—low commodity prices lead to low tax payments just when there is increased unemployment.
- Where there has been no planning for the social, environmental, and economic aspects of closure, the consequences of this planning failure may all land on local government just at a time when revenues from the project fall to zero. If the national economy is also highly mineral-dependent, this may also coincide with a crisis in national finance as well.
- Local government are often absent from processes such as the EIR, which means that discussions take place, recommendations are made, decisions are taken, and directives are given with little or no input from those working at the critical interface with communities and populations most likely to be affected by extractive projects.

Role of the World Bank Group

During the course of the EIR, governments made comments on the involvement and role of the WBG in the extractives sector. Some of these comments were delivered verbally during EIR events and some came in the form of written submissions at EIR events or directly to the EIR Secretariat.

WBG Safeguard Policies

Individual governments have not commented in detail on each WBG Safeguard Policy, but they have through their actions in their countries and through participation in intraregional and international fora acknowledged and promoted the importance of safeguards, especially to protect important environmental values.

Governments in general have endorsed the continuation of the WBG's involvement in creating an appropriate "enabling environment" in countries; one important element in this is the regulatory environment that encompasses safeguards. The U.K. government stated that "the nature of the extractives sector puts it at the heart of WB safeguard policies and their implementation."⁶⁵ The statement also referred to the WBG's safeguards as the benchmark used by many others in their project work and noted that the WBG policies and guidelines "have helped put environmental and social considerations on a par with economic and technical considerations in project planning." It is further suggested that the Safeguard Policies provide civil society with a platform and that the WBG has an important role in convening multistakeholder engagement and participation in this area.

One recommendation from the U.K. government is to move beyond the project-specific application and use the safeguards more strategically in order to influence policy and better manage overall development opportunities, so that countries can assess whether or not exploiting extractive resources is the best way for them to move toward sustainable development.

Structural Reform

On the question of structural reform, direct inputs from governments were rather minimal. On the whole, however, they do articulate the need for introducing efficiencies into the economy and improving the running of public administration. Governments also stress the need to make transitions and transformations slowly and carefully in order to maintain balance and minimize social disruption.⁶⁶ In planning and implementing structural reform, governments depend heavily on the WBG for advice and technical and financial assistance. However, they would like to see the roles of the IMF and the WBG harmonized in order to avoid overlap and conflicting advice.⁶⁷ One key role that the Bank uniquely can provide is to help governments coordinate and integrate their macroeconomic and fiscal policies with their country policies.

Governments would like the Bank to encourage a well-rounded economy, with space for a range of businesses—small, medium, and large.⁶⁸ They feel that large-scale and transnational companies should not dominate to the exclusion of other smaller players, and that promotion of the SMEs needs particular support from the WBG. In transition economies, governments would like the Bank to help foster "joint venture" relationships and to provide oversight and financing for the entire life cycle of the enterprise, with particular attention to fostering management skills.⁶⁹

It is widely acknowledged that the WBG can help support public-sector institutional reform by refocusing the state from its role as an economic actor to a facilitator and manager of social and economic development processes. The WBG should help the government define policy and stimulate and catalyze private-sector investment. Investment support for infrastructure development, a precondition for private investment, is seen as an important priority for Bank financing. Overall, the Bank can help create the base conditions for development by supporting countries achieving international standards in fiscal structure and management capacity.⁷⁰

In summary, governments believe that the WBG can be catalytic by bringing in other donors and funders and can support developing the regulatory environment, generating scientific data, developing infrastructure, and fostering SMEs.

Technical Assistance for Capacity Development

As a major recipient of technical assistance from the WBG, governments mainly in developing countries are highly dependent for this support in developing their internal capacity to establish suitable economic and fiscal strategies and policies; set sectoral policy and regulatory frameworks; control, manage, and mitigate the social, environmental, and economic impacts of extractive industries; train and educate the work force required; develop the essential management and supervisory skills; and develop and operate appropriate information and communication management systems.

Ideally, these governments would prefer financial support for capacity development to be provided in the form of grants, as there is no immediate financial return from these investments. They also want to be sure that technical advice and expertise is adapted suitably to the local context, so that it is directly applicable to in-country conditions.

Governments want the WBG to use its convening power to facilitate the development of regional cooperation and networks for exchanging information and experience and for developing shared infrastructure between countries, such as pipelines or power grids.⁷¹

Recommendations for the WBG

The following recommendations for the WBG have been synthesized from the inputs from governments during the consultation process.

- *Help governments reap maximum economic benefit through macro and fiscal policy advice.*⁷² Governments need assistance in integrating micro- and macroeconomic policies and in integrating and coordinating inputs from IMF and WBG.⁷³ Governments also asked for policy advice on resource development that would encourage economic diversification—for instance, developing a vibrant inputs sector, value-added processing, job creation, and human capital accumulation.⁷⁴
- *Help countries assess whether or not exploiting their resources should be considered the best option among alternatives.*⁷⁵ Several governments want WBG assistance in carrying out land use assessments to determine the best use of natural resources, help in conducting geological surveys to attract investment, and assistance in determining the net benefits of any project, taking into account the full costs, including environmental protection and social costs.⁷⁶
- *Help set up national and regional planning processes.*⁷⁷ Multisectoral and participatory planning processes are needed to frame the setting for extractive industries development. The WBG could encourage governments to see specific project development as one element in a regional development plan, using the project to develop, for example,

infrastructure that will become part of the foundation for sustainable development in that area.⁷⁸ In moving ahead with extractive sector development, governments need advice in order to negotiate the best deals with companies.⁷⁹

- *Use extractive industry interventions to promote countrywide institutional and policy framework reforms* by adopting a systematic approach that is not tied to the concerns of individual projects. Institutional reform should result in the efficient organization of various government agencies, with clearly delineated responsibilities.⁸⁰ Policy reform should address the need for clear policies and updated legislation.⁸¹ This assistance should be recognized as a nonproductive investment and ought to be given through grants rather than loans.
- *Focus on building good governance and the capacity of the State.*⁸² The WBG should make good governance a conditionality and use it as a pillar on which all its work is based. The WBG should avoid making civil society a form of “parallel government,” thereby undermining the authority of the State. Instead, assistance and training must be provided in establishing open channels of dialogue between government and civil society.⁸³
- *Provide oversight and financing for the full life-cycle of a project*—in particular, support capacity development for good life-cycle project management and find mechanisms to ensure that government at all levels has adequate financial and human resources to meet demands and needs at the beginning of the project cycle.⁸⁴
- *Provide capacity building for local counterparts to improve project governance.* The WBG should help remove bureaucratic bottlenecks in extractive project implementation by training local government counterparts in WBG procurement guidelines prior to the start of a project and by involving participating agencies at the early stages of project formulation and design.⁸⁵ Government capacity in project implementation, monitoring, and enforcement should be reinforced—for example, through technical assistance for environmental impact assessments.⁸⁶ Technical assistance should also include good practices for health and safety in large and small-scale mining.⁸⁷
- *Help build community capacity jointly with local stakeholders, working closely with both nongovernmental organizations and businesses.*⁸⁸ Communities should be allowed to reap maximum benefit from projects through education and job creation.⁸⁹ They should be assisted further in exploring economic alternatives from the outset of a project, with the aim to build sustainable livelihoods, avoiding social conflict and the phenomenon of “ghost towns” after project closure.⁹⁰
- *Help build local institutional capacity for regional development*—building on partnerships with local organizations to develop their social capital and establishing strategic alliances with relevant parties, especially extractive companies.⁹¹
- *Help undertake pilot projects to address specific issues of concern in the short term*—for example, regional pilot projects to integrate artisanal and small-scale mining into the

formal sector by addressing the policy, legislative, and regulatory requirements as well as exploring practical, community-based needs on the ground.⁹²

- *Assist in developing a comprehensive approach to development, management, and regulation of artisanal and small-scale mining.* Assistance must be country-context-specific, people-centered, and integrated within the Country Assistance Strategy and the Poverty Reduction Strategy Paper so it can be an integral part of rural development policies and programs.⁹³ It should improve social welfare and health conditions and minimize environmental impacts; support the use of technologies that will be affordable and appropriate and that will improve productivity and financial viability; help governments develop appropriate legislation and institutional capacity to regulate the sector; and link micro- and macro-policies.⁹⁴ Reclamation of degraded areas must be addressed.⁹⁵
- *Require an environmental impact assessment with full public participation and prior informed consent for all new extractive industries development.*⁹⁶
- *Clean up the legacy of the past.* Governments requested WBG assistance in reclaiming contaminated sites, including ASM sites, to make them productive for agroforestry and other appropriate uses.⁹⁷ For future projects, the WBG should promote effective and sustainable land reclamation from the outset and require proper disposal of extractive industry waste (such as mine tailings and drilling “mud”).⁹⁸
- *Address global environmental sustainability.* Promote energy efficiency, conduct research in renewable energy, and encourage recycling.⁹⁹ Incentives should be provided for companies to comply with environmental and social regulations, such as making public those companies that comply with environmental regulation as well as publishing the cost of such compliance.¹⁰⁰
- *Help develop standards and guidelines to assure good environmental and social practices.* Government officials should be trained in such standards.¹⁰¹ The WBG should encourage industry associations to require member companies to comply with standards, achieve certification, and establish good relations with local people.¹⁰²
- *Maintain open lines of communication and establish trust between participating institutions and WBG supervision teams.*¹⁰³ In its work, the WBG should appreciate local limitations, as practiced in the IDA Equal Partnership approach. The WBG should ensure that all WBG studies include clear implementation plans for recommendations.¹⁰⁴
- *Reform WBG incentive mechanisms.* The WBG staff incentive framework should be reformed to encourage staff to consider the relative development impact of extractive industries versus alternate opportunities.

Notes

- ¹ There are some notable exceptions to this, such as Chile (where the Mining Ministry is considered the most important economic department), Peru, and South Africa.
- ² Natural Resources Canada 2003a, DFID 2003a.
- ³ Walde 2003.
- ⁴ Natural Resources Canada 2003a.
- ⁵ Peru Ministry of Energy and Mines official letter to EIR, September 2003; Tuhumwire 2003; Darimani 2003.
- ⁶ Chappuis 2002, Government of Indonesia 2003.
- ⁷ Tuhumwire 2003.
- ⁸ Government of Canada 2003.
- ⁹ It has been suggested that the Bank has a key role to play in assisting developing countries in this area. See DFID 2003a.
- ¹⁰ Hancock n.d.
- ¹¹ Heilbrunn 2002, ECON Centre for Economic Analysis 2002, Auty 1997.
- ¹² Russian submission to EIR Consultation Workshop in Budapest.
- ¹³ Minister of Energy and Mines, Burundi; Ministry of Mines, Geology and Environment, Republic of Guinea, EIR session at the WMMF in Toronto, March 2002.
- ¹⁴ CAMMA 2002.
- ¹⁵ CAMMA 2002, pp. 22-23.
- ¹⁶ Mines and Geosciences Bureau n.d.
- ¹⁷ WBG 2003a.
- ¹⁸ CAMMA 2002.
- ¹⁹ Sirila 2002, Darimani 2003, Government of Indonesia 2003, CAMMA 2002.
- ²⁰ Mines and Geosciences Bureau n.d.
- ²¹ WBG 2003a.
- ²² Mines and Geosciences Bureau n.d.
- ²³ Mines and Geosciences Bureau n.d., CAMMA 2002.
- ²⁴ CAMMA 2002.
- ²⁵ Bugnosen 2003a.
- ²⁶ Neale 2003.
- ²⁷ Government of Chile, Chile's fostering of small and medium mining. Private communication, Wanda Hoskin, September 2003.
- ²⁸ Neale 2003.
- ²⁹ United Nations 2002aa.
- ³⁰ ICG 2001.
- ³¹ CAMMA 2002, Ministry of Solid Minerals Development 2002.
- ³² DFID 2003a.
- ³³ Ministry of Solid Minerals Development 2002; Murangari 2003.
- ³⁴ CAMMA 2002.
- ³⁵ Government of Indonesia 2003.
- ³⁶ Chilean Copper Commission and UNEP 2001.
- ³⁷ Darimani 2003.
- ³⁸ CAMMA 2002.
- ³⁹ Darimani 2003.
- ⁴⁰ Cited in Hancock n.d.
- ⁴¹ Cited in Hancock n.d.
- ⁴² Murangari 2003.
- ⁴³ Ministry of Solid Minerals Development 2002, Murangari 2003, Suryantoro 2002, CAMMA 2002.

- ⁴⁴ Suryantoro 2002, CAMMA 2002.
- ⁴⁵ Brewer 2003, Darimani 2003.
- ⁴⁶ CAMMA 2002.
- ⁴⁷ CAMMA 2002.
- ⁴⁸ WBG 2003c.
- ⁴⁹ Darimani 2003.
- ⁵⁰ EIR Bali consultation workshop, April 2003.
- ⁵¹ Minister of Energy and Mines 2003.
- ⁵² DFID 2003a.
- ⁵³ For more information, see <http://www.dfid.org>.
- ⁵⁴ Mines and Geosciences Bureau n.d.
- ⁵⁵ Himata 2003. .
- ⁵⁶ Tuhumwire 2003, Darimani 2003.
- ⁵⁷ In Indonesia there is a conflict between the Mining Law and Forestry Law regarding open pit mining in so-called *Hutan Lindung*, forest protection areas. Many of these “protected” areas have already been heavily logged, and quite a number of companies were granted rights to explore for and exploit mineral resources using open pit methods prior to promulgation of the new forestry law.
- ⁵⁸ Castro 2002.
- ⁵⁹ WBG 2003a.
- ⁶⁰ Minister of Energy and Mines, Peru, Official letter to EIR, September 2003.
- ⁶¹ WBG 2003c.
- ⁶² Mines and Geosciences Bureau n.d.
- ⁶³ Neale 2003.
- ⁶⁴ WBG 2003c.
- ⁶⁵ DFID 2003a.
- ⁶⁶ WBG 2003c.
- ⁶⁷ Natural Resources Canada 2003a.
- ⁶⁸ Mines and Geosciences Bureau n.d.
- ⁶⁹ WMMF 2002.
- ⁷⁰ WMMF 2002.
- ⁷¹ CAMMA 2002, Minister of Energy and Mines 2003.
- ⁷² Brewer 2003.
- ⁷³ Natural Resources Canada 2003a.
- ⁷⁴ Natural Resources Canada 2003a; Minister of Energy and Mines, Burundi; Ministry of Mines, Geology and Environment, Republic of Guinea, EIR session at the WMMF in Toronto, March 2002; Natural Resources Canada 2003b; Darimani 2003.
- ⁷⁵ Brewer 2003.
- ⁷⁶ Tuhumwire 2003, Darimani 2003, Natural Resources Canada 2003a.
- ⁷⁷ Russian representative – discussion of WBG presentation. Government submission to Budapest workshop.
- ⁷⁸ Natural Resources Canada 2003a.
- ⁷⁹ WBG 2003c.
- ⁸⁰ Tuhumwire 2003, Brewer 2003.
- ⁸¹ Darimani 2003.
- ⁸² Gweth 2003, Natural Resources Canada 2003a.
- ⁸³ Castro 2002.
- ⁸⁴ Minister of Energy and Mines, Burundi; Ministry of Mines, Geology and Environment, Republic of Guinea, EIR session at the WMMF in Toronto, March 2002.
- ⁸⁵ Afenu 2003.

- ⁸⁶ Government of Indonesia 2003.
- ⁸⁷ Afenu 2003.
- ⁸⁸ Castro 2002.
- ⁸⁹ Government of Indonesia 2003.
- ⁹⁰ Afenu 2003.
- ⁹¹ Castro 2002.
- ⁹² Natural Resources Canada 2003a.
- ⁹³ Bugnosen 2003a.
- ⁹⁴ Razafimandimby 2003, Afenu 2003, Bugnosen 2003a, 2003b.
- ⁹⁵ Afenu 2003.
- ⁹⁶ Government of Indonesia 2003.
- ⁹⁷ Government of Indonesia 2003.
- ⁹⁸ Government of Indonesia 2003.
- ⁹⁹ Natural Resources Canada 1995.
- ¹⁰⁰ Afenu 2003, Government of Indonesia 2003.
- ¹⁰¹ Government of Indonesia 2003.
- ¹⁰² Government of Indonesia 2003.
- ¹⁰³ Afenu 2003.
- ¹⁰⁴ Afenu 2003.