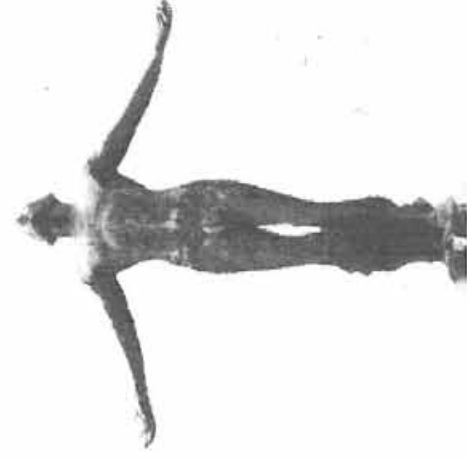


**THE CHALLENGES
AND PROSPECTS
OF SUSTAINABLE MINING
IN THE PHILIPPINES**


**Diliman
Governance
Forum**



**Working Paper Series No. 8
2008**

The Challenges and Prospects of Sustainable Mining in the Philippines

**16th
Diliman Governance Forum**



**"The Challenges
and Prospects
of Sustainable Mining
in the Philippines"**


**11 October 2006
1:00 - 5:00pm**

**NCPAG Assembly Hall
University of the Philippines**

Special Guest:
Mr. Wigberto E. Tañada
Executive Director
Fair Trade Association

Resource Speaker:
Mr. Artemio F. Disini
Chairman
Chamber of Mines of the Philippines

Panel Discussants:
Atty. Marvic Mario Victor F. Leonen
Executive Director
Legal Rights and Natural Resources Center-
Kasama sa Kalikasan (LRC-KSK)
Engr. Rodolfo L. Velasco, Jr.
Mines and Geoscience Bureau - DENR



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Working Paper Series No. 8

**National College of Public Administration and Governance
University of the Philippines
March 2008**

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University of the Philippines

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FOREWORD

The Diliman Governance Forum (DGF) is a continuing effort of the National College of Public Administration and Governance (NCPAG), University of the Philippines (UP) to initiate collective action for public administration reforms and better governance. Spinning off from the Policy Issues Forum conducted by the College in the past, the DGF has tackled various policy concerns, such as, reengineering government, fiscal crisis, geo-informatics, electoral reforms and youth leaders of the past and present. The 16th in a series was held on 11 October 2006 from 1 p.m. to 5 p.m. at the NCPAG Assembly Hall, Diliman, Quezon City. Its thematic focus was on "The Challenges and Prospects of Sustainable Mining in the Philippines."

A lot has been said about sustainability in mining. Mining companies in their statements say that they are engaged in sustainable and environment friendly practices. On the other side of the spectrum, there are the disgruntled communities who in some way or another are affected—negatively, by the mining industry.

Furthermore, mining is said to increase the country's income through mineral exports. Mining is also said to create new jobs. As the government would say, "for each mining job, four to ten allied jobs are created". The people in the country was said to be the major beneficiaries of the Philippine mining industry.

There, however are costs. These may be in terms of environmental degradation, displacement of communities, pollution, and destruction of lives and livelihoods.

These are very difficult matters to balance. Which outweighs what? Are the benefits worth the costs? Are the costs minuscule compared to the benefits—potential or material?

To shed light to the relevant policy questions, the UP NCPAG in partnership with the Fair Trade Alliance (FTA) organized the forum. Generally, it aims to provide a venue for a continuing discourse, dialogue, dissemination of ideas, interactions and consultations with relevant publics on policy issues, reform initiatives, and recommendations of the Fostering Democratic Governance (FDG) programme. Specifically, it seeks to:

- Provide understanding of the concepts and complications of sustainable mining
- Analyze which factors, actors or conditions may facilitate or hinder sustainable mining
- Recommend what can be done to address the challenges of sustainable mining, and
- To make the mining industry really sustainable in the Philippines

This working paper contains the highlights of the forum. Specifically, it includes the presentation of Resource Persons, and the reactions from the leaders and experts from the civil society, business and government organizations. It also contains discussions on certain mining issues and the recommendations of the participants on the next steps to address the challenges and issues related to mining in the Philippines

We hope that this Working Paper could help raise our level of understanding of this important governance issue and inform us of advocacies and little steps we can take to make the processes and arrangement in international trade more beneficial to the disadvantaged sectors.

We would like to acknowledge with gratitude the efforts of our partners in co-sponsoring this DGF—the United Nations Development Programme (UNDP), and the Fair Trade Alliance (FTA)—and our team in organizing and completing this Working Paper.

MARIA FE V. MENDOZA
PGF Director

ALEX B. BRILLANTES, JR.
Dean, UP NCPAG

WELCOME REMARKS AND INTRODUCTION OF SPEAKERS

Dr. Ma. Fe V. Mendoza

In behalf of UP-NCPAG and Dean Alex B. Brillantes, Jr., I welcome you to the 16th Dilliman Governance Forum (DGF), with the theme, "The Challenges and prospects of Sustainable Mining in the Philippines." The DGF, under the Philippine Governance Forum (PGF) project of the College, is a continuing effort of U.P.-NCPAG to initiate collective action for public administration reforms and better governance. It has tackled various policy issue concerns such as reengineering government, fiscal crisis, geo-informatics, electoral reforms, youth leaders of the past and present, Metro Manila governance, combating corruption, the Millennium Development Goals, the impeachment of President Gloria Arroyo, assessment of local governance in the Philippines, the Bangsa Moro issue, and most recently, trade on human terms.

The specific aims of this 16th DGF are to: a) provide understanding of the concept and complications of sustainable mining; b) debate on whether sustainable mining is an impossible or attainable development dream; c) analyze which factors, actors or conditions may facilitate or hinder sustainable mining; and d) recommend what can be done to address the challenges of sustainable mining. "Sustainable mining" here does not mean sustained extraction of the minerals of the earth. Rather, it means "responsible mining to lead to the sustainable use of natural resources so that future generations may also enjoy the gifts of Nature."

As earlier mentioned, the 16th DGF is dovetailed to the Philippine Governance Forum, which aims to provide a regular and bigger venue for a continuing consultation, discourse, dialogue, dissemination, exchange of ideas, interaction and consultation with relevant publics, on the activities, interventions, results and policy issues, concerns, reform initiatives, and recommendations of the Fostering Democratic Governance (FDG) programme approved for implementation between 2005 and 2009 by the Government of the Philippines and the United Nations Development Programme for the realization of the Millennium Development Goals, and United Nations Conventions and Summits.

We hope to have a more critical discussion of the topic at hand, with the lead participation of our experts and concerned stakeholders which include officers from the Department of Environment and Natural Resources (DENR) and the civil society organizations, among them, Engineer Glen Marcelo Noble, Chief of the Mineral Economics, Information, and Public Division of the DENR; Engineer Rodolfo Velasco, Jr., Mining engineer of the Mines and Geo-Sciences Bureau of the DENR; Director Rolando Peña, Regional Director of the DENR; and Atty. Rhia Muhi, pitching in for Atty. Marvic Leonen, Executive Director of the Legal Rights and Natural Resources Center-Kasama sa Kalikasan (LRC-KSK).

INSPIRATIONAL SPEECH*Rep. Nereus H. Acosta*

Mining should include the social cost and community heritage issues. Is there such a thing as sustainable mining? Maybe it is better to reflect on the use of the words "sustainable mining," which is an oxymoron. We should be more careful on the use of such words.

Also, the discussion on mining should be deeper. There should be an intelligent, rational and truly enlightening discussion on the issue.

The Department of Environment and Natural Resources (DENR) has a split personality. On one hand, it protects the environment; on the other hand, it also exploits the natural resources. But what usually wins is development exploitation. This is a challenge that needs to be addressed

SUSTAINABLE DEVELOPMENT THROUGH RESPONSIBLE MINING*Engr. Rodolfo L. Velasco, Jr.***The Principles of Sustainable Mining**

The application of sustainable development to renewable resources, in terms of "meeting the needs of present generation without compromising the ability of the future generations to meet their own needs," can be clearly illustrated in the case of forest resources. The government by strictly implementing selective logging and a logging ban in ecologically fragile areas ensures the maintenance and availability of forest resources.

If we apply the idea of sustainable development to the mineral resources, which are considered non-renewable resources, sustainability means that the mineral stocks should not decline nor be depleted. However, the use of minerals, at any positive rate of exploitation will eventually lead to exhaustion of this finite resource. This is a reality even if it is acknowledged that the mineral resources of the earth are naturally replenished over geologic time scales, long enough that we can say "not in our life time." Therefore, wise utilization should be the basis for mineral resources to be sustainable for the future generation.

Republic Act No. 7942, the Philippine Mining Act of 1995 and Department Administrative Order No. 96-40, its revised Implementing Rules and Regulations (IRR), are considered as the primary investment vehicle in the country's effort to revitalize the mining industry. Enshrined are the principles of sustainable mining and a new regime of mining that is both pro-people and pro-environment in sustaining wealth creation and improved quality of life.

The principles of sustainable mining operate under the following conditions:

- 1) Mining is a temporary land use for the creation of wealth, leading to an optimum land use in post mining stage as a consequence of progressive and engineered mine rehabilitation works done in cycle with mining operations.

The concept of land use planning should be considered in future rehabilitation and decommissioning plans to establish a land use capability that is functional and proximate to the land use prior to the disturbance of the area, unless other more beneficial land uses are predetermined and agreed upon in, consultation with local communities and the Local Government Units.

- 2) Mining activities must always be guided by current best practices in environmental management committed to reducing the impacts of mining while efficiently and effectively protecting the environment.

Best practices in mining means using the best available technologies, meeting the requirements of environmental quality standards, implementing proactive planning and research, doing independent evaluation of environmental performance leading to self-regulation and transparency in the operations.

- 3) The wealth accruing to the Government and the communities as a result of mining operation should also lead to other wealth-generating opportunities for the people and to other environment-responsible endeavors.

This principle emphasizes the fact that mining is not an end in itself and the benefits from it should be properly utilized as a means of creating other wealth-generating employment and livelihood activities for the improvement of the quality of life of the people and the enhancement of the environment.

- 4) Mining activities shall be undertaken with due and equal regard for economic and environmental considerations, as well as for health, social and cultural concerns.

Mining operations purely for economic gains is no longer acceptable. In so doing, a dictum is being adopted that says "projects that cannot absorb the environmental and social cost of modern mining shall not be allowed to proceed."

- 5) Conservation of minerals is effected not only through technological efficiencies of mining operations but also through the recycling of mineral-based products, to effectively lengthen the usable life of mineral commodities.

This principle means not only the improvement of the technology for mining and mineral recovery to avoid wastage of the mineral resource but also for re-cycling technologies to reduce the demand and pressures for mineral extraction.

Operationalizing the Principles of Sustainable Development in Mining

Cognizant of the need for conservation strategies and as a response to the environment and development issues, the government has formulated projects, programs, and rules and regulations to tackle the multiple dimensions associated with sustainable development.

1. Mineral Reservations

The mineral reservations in the Philippines was established to enable the government to further promote the wise and efficient disposition, development, extraction, utilization and conservation of minerals in order to maximize national benefits for the present and future generations.

This mineral reservation system allows the government to have direct control in the development and extraction of the mineral resources in reservation areas. It authorizes the government to negotiate with private entities for the exploration and development of the minerals found therein, in return for greater royalties. In addition to the revenues that accrue to the government, the system eliminates unscrupulous idle-sitting on mineral lands by closing such areas to mining locations and leases, thus discouraging opportunistic claimants. It also prevents overlapping of claims which drags disposition and development of mineral resources and results in greater administrative costs to the government. It accelerates exploration and development of mineral lands either by direct government exploration initiatives or by any interested entity. It reduces bureaucratic tape in the processing of application for mining rights. The system promotes the implementation of more effective conservation and judicious utilization of mineral resources by ensuring that mining operations are handled by most competent and responsible entities.

To date, eight inland mineralized areas and all offshore areas of the archipelago have been established as mineral reservations through various proclamations, orders and decrees. These are the following:

- Ilocos Norte Feldspar Mineral Reservation
- Zambales Chromite Mineral Reservation
- Siruma White Clay Mineral Reservation in Camarines Sur
- Samar Bauxite Mineral Reservation
- Surigao Mineral Reservation
- Zamboanga Mineral Reservation
- Biak-Na-Bato Mineral Reservation in Bulacan
- Diwalwal Mineral Reservation in Compostela Valley
- Offshore Mineral Reservation in all offshore areas within the Philippine territorial limits.

2. Mining Contracts/Agreements/Permits

The two major mining contracts granted to mining proponents are the Financial or Technical Assistance Agreement (FTAA) and the Mineral Production Sharing Agreement (MPSA). The objective of these mining rights is to provide an equitable sharing among the Philippine Government (national and local), the communities and the investors of the benefits derived from the mineral resources to ensure the sustainable development of the mining industry.

a. Financial or Technical Assistance Agreements (FTAA)

This is a 25-year contract that allows the entry of up to 100% foreign owned corporations, which possess the qualifications set forth in the Mining Act. It requires a minimum investment commitment of US\$50 million for infrastructure and mine development. The contractor in this agreement can hold up to 81,000 hectares for exploration and a maximum of 5,000 hectares for commercial production.

The formulation of the FTAA fiscal regime is based on the principle that the government expects (from the mining industry) real contributions to the economic growth and general welfare of the country while the contractor expects a reasonable return in its investment. After recovery of its initial investment, the contractor is then expected to pay the usual taxes and fees charged to a mining business and an additional share from the mining operations based on a negotiated scheme. The basic structure of an FTAA fiscal regime is represented by the following equation: FTAA Fiscal Contribution = Basic Share + Additional Share.

All taxes paid by the contractor during the term of the agreement comprise the basic government share. The additional government share is negotiated by the government and the contractor taking into consideration the following: capital investment in the project, risk involved, contribution of the project to the economy, contribution of the project to community and local government, technical complexity of the project, and other factors that will provide for a fair and equitable sharing between the government and the contractor.

b. Mineral Production Sharing Agreement (MPSA)

This is a 25-year contract granted exclusively to Filipino-owned corporations (i.e. maximum of 40% is foreign-owned) for an exploration of a maximum of 16,200 hectares and subsequently for the commercial production of a maximum of 5,000 hectares of mineral land.

The fiscal contribution from an MPSA takes the form of a basic government share, which includes normal taxes and fees paid by the contractor. Briefly, it can be represented by the following equation: MPSA Fiscal Contribution = Basic Government Share + Normal Taxes and Fees.

c. Forms of Mining Permits

To have a direct charge in the administration and disposition of mineral lands and mineral resources, the government issues permits to mining proponents to explore and operate mineral lands. These permits are the following:

- c.1) Exploration Permit (EP) – a permit that grants the proponent the right to conduct exploration work for all minerals within a specified area.
- c.2) Quarry Permit (QP) – a mining permit for the extraction and removal of quarry resources on privately-owned lands and/or public lands for building and construction materials.
- c.3) Sand and Gravel (SAG) Permit – a mining permit for the extraction and removal of sand and gravel or other loose or unconsolidated materials. The types of SAG permit are commercial SAG permit, industrial SAG permit, exclusive SAG permit, government gratuitous permit and private gratuitous permit.
- c.4) Small-Scale Mining Permit – a permit to explore, develop and utilize small-scale mineral deposits in areas 20 hectares or less. Permits are issued by the Provincial Governor or City Mayor. These include guano permit, gemstone gathering permit and pebble gathering permit.
- c.5) Mineral Processing Permit – permit granted for the milling, beneficiation, leaching, smelting, cyanidation, calcinations or upgrading of ores, minerals, rocks, mill tailings, mine waste and/or other metallurgical by-products or by similar means to convert the same into marketable products.

3. People's Small-Scale Mining Program

Republic Act No. 7076, known as "People's Small-Scale Mining Act of 1991," is a policy of the state to promote, develop, protect and rationalize viable small scale mining activities for the generation of more employment opportunities. It provides for an equitable sharing of the nation's wealth and natural resources. It provides for the creation of a People's Small-Scale Mining Program designed to achieve an orderly, systematic and rational scheme for the small-scale mining development and utilization of mineral resources in order to address the social, economic, technical and environmental problems connected with small-scale mining activities. It also includes such features as identification, segregation and reservation of certain mineral lands as people's small-scale mining areas, encouragement on the formation of cooperatives, generation of ancillary livelihood activities and efficient collection of government revenue.

Small-scale mining areas are less than 20 hectares with a capitalization of not more than P10 million during the term of the permit and its renewal. It is projected to provide livelihood to millions of small-scale miners in rural areas, thus, alleviating their social and economic conditions.

Environmental Protection and Enhancement Requirements and Programs

The IRR of the Mining Act of 1995 provides for life-of-mine environmental protection and at the same time ensures that adequate funds are available for their implementation.

Programs for environmental protection during exploration, extraction and decommissioning stages with minimum expenditure requirements are now integral to the mining operations in the Philippines. These are the following:

- **Certificate of Environmental Management and Community Relations Record (CEMCRR)** – Part of the mandatory requirements for a mining company applying for a mining tenement is a CEMCRR. It is a proof of the company's satisfactory relationship with local communities and the environmental and social acceptability of its resource management strategies in the past. Mining companies with no previous mining ventures are exempted from the issuance of a CEMCRR and, instead, a Certificate of Exemption is issued.
- **Environmental Work Program (EnWP) for Exploration** – This details the environmental impact control and rehabilitation measures associated with exploration activities, including the costs (at least 10% of the exploration expenditures) to ensure that sufficient financial resources are available to meet the commitments in the EnWP. It shall include, among others, the environmental protection and enhancement strategies, post-exploration and use potential for disturbed lands, monitoring and reporting mechanisms. It shall also contain a public information component to educate the community about the project and to serve as a venue to address community concerns.
- **Environmental Protection and Enhancement Program (EPEP)** – This is the operational link between the environmental management provisions of the revised IRR of the Mining Act and the conditions stipulated in the ECC. It details the methods and procedures that the company will use in attaining its environmental protection and management objectives. It also provides the description of the Mine Environmental Protection and Enhancement Office (MEPEO). MEPEOs shall be established in each operating mine to ensure attainment and implementation of the company's environmental management and protection objectives through the EPEP.
- **Final Mine Rehabilitation/Decommissioning Plan (FMRDP)** – This shall be integrated in the EPEP submitted by the contractors/permit holders. It should identify the activities and research required to address on-going rehabilitation and should consider all mine scenarios, i.e.,

planned closure, temporary closure and sudden or unplanned closure. It shall also contain cost estimates for the implementation of the FMRDP, taking into consideration expected inflation, technological advances, and the unique circumstances faced by the mining operation.

5. Social Development and Management Program (SDMP)

The SDMP is a tool for the development and implementation of community programs and projects, in consultation and in partnership with the host and neighboring communities in a mining area. Its objective is to create responsible, self-reliant and resource-based communities capable of developing, implementing and managing community development programs in a manner, consistent with the principle of sustainable development. The contractor/permit holder/lessee shall allot annually a minimum of one per cent (1%) of the direct mining and milling cost, 90% of which shall be for the SDMP and 10% is for the development of mining technology and geosciences.

6. Mine Safety and Health

Safety First! This is the first slogan an employee in any mining operation must learn, a proof of the importance placed by the industry to the safety of its mineworkers. Mine safety and health is a shared responsibility. The employer (mining company) must provide ways and means (training and personal protective equipment) for a safe work place; workers should learn how to perform their work safely; and government should be responsible for the development of regulations on safe working conditions. Mining companies are required to submit a Safety and Health Program (SHP) that elaborates the occupational safety and health, and emergency response programs that the company will implement during the operating life of the mine.

Conclusion

The compatibility of sustainable development and mineral development is always questioned by anti-mining groups and the local communities affected by mining operation. Mineral development has the connotation of non-renewability and the common notion is minerals are finite and once mined cannot be renewed. From the above premises the following factors have to be considered to attain sustainable development in mining:

- 1) The physical sustainability of mining includes geological knowledge, technology, and economics. Minerals cannot be considered wealth unless known and geological knowledge allows the discovery of mineral deposits and, therefore, increases or replaces minerals that have been

transformed to productive use. Developments in mining technology have lowered production costs and made it possible for the processing of low grade deposits which were not considered ore previously and the mining of deeply buried deposits. The world has a large inventory of known mineral deposits not economically mineable today and future technological developments will turn these deposits into mines.

- 2) Protection and rehabilitation of the environment must use best practices and be focused on the life-of-mine management of the environment and the safety and health impacts associated in every stage of a mining operation.
- 3) Promotion of social and community stability respecting the needs, values and decisions of the local and indigenous communities; fair-sharing of the benefits through direct employment and community services to health, education, recreation, etc.; participatory governance and cooperation among stakeholders; and support for local development initiatives.
- 4) Preservation of options for future generations using appropriate management strategies for the optimal use of mineral resources with minimal environmental and social impacts; maximum economic benefits through prioritization of minerals for extraction where the country has comparative advantage (gold, copper, nickel, chromite); efficiency in the use of mineral by reduction and substitution (use of non-mineral products, if possible), and reuse and recycling of mineral products and metals (metals derived from minerals are elements which are indestructible form of matter and do not lose their mechanical and metallurgical properties and therefore, can be recycled repeatedly). This also refers to the need to preserve certain areas with unique ecological and socio-cultural significance by harmonizing the policies on mining and biodiversity.
- 5) Competitiveness of the minerals industry. The government shall ensure the formulation of clear and well-defined policies that are necessary to balance the need to attract direct foreign investments without compromising the concerns of national patrimony/sovereignty, the demands for sustainability and the realities of economic and social development. The harmonization of the Philippine Mining Act of 1995 with the Fisheries Code, the Indigenous People's Rights Act, the Forestry Code, the National Integrated Protected Areas System, the Local Government Code, other environmental laws, and the proposed Land Use Code should be prioritized.

Having achieved sustainable development, the mining industry must:

- Be dominated by new-generation, world-class mines that can absorb the social, cultural, and environmental costs through the application of best practices in mining operation and at the same time contributing to the economic development of the country in terms of foreign exchange earnings, government revenues, and countryside development.
- Accept multinational corporations that are committed to environmental management and social concerns. The entry of these companies will introduce modern technology in mining. Their experience in modern exploration techniques will benefit the country in discovering new world-class mineral deposits and mining will be conducted using the latest and modern equipment in mineral extraction. In other words, better approaches to manage environmental protection and social development of modern mining will be implemented.
- Be committed to retrofit old mines. Old existing mines and quarries that either stop or temporarily stop operation shall undergo retrofitting to keep pace with modern mining techniques. Those that cannot follow will be bound to undergo decommissioning and rehabilitation and eventual phasing out.
- Be socially-accepted. By developing partnership with stakeholders and by demonstrating a track record of good corporate practice, the minerals industry can gain the trust of the community, the public in general, and even its most ardent critics.
- Be self-regulating. This entails the industry's commitment and adherence to the terms of sustainable development and best practices in mining operation.
- Consider adding values to the community. Since mineral products are the building blocks of modern society, the industry must aim to export not only raw mineral products or raw materials but finished products vital to everyday life. In other words, they must also help develop other downstream industries along the way.

A DECADE OF THE MINING ACT: HOW THE RULES HAVE CHANGED

Engr. Rolando Peña

The Philippine Mining Act (RA 7942) was enacted in March 1995 and since then, the Implementing Rules and Regulations (IRR) have gone through several rounds of amendments.

DENR Administrative Orders Amending the IRRs

DAO 96-40 – The initial version of the IRR of the Mining Act was Department Administrative Order (DAO) 95-23 dated August 15, 1995. In the wake of the Marcopper Incident at Marinduque, a serious effort was undertaken to take a look at the IRR and improve it. Public hearings were conducted in Metro Manila, Cebu, Davao, and Baguio and based on the results of the hearings, a new IRR was drafted. The draft went through several discussion-meetings until it was finalized and issued as DAO 96-40.

Much of the text of the first IRR (**DAO 95-23**) was retained in the new IRR, but the order of topics was changed in a few places and the environmental provisions were further refined.

DAO 99-57 – The next round of amendments mainly concerned the chapters on Exploration Permit, Mineral Agreement, Financial Technical Assistance Agreement (FTAA), and Quarry Operations, in other words, matters relating to permits and mining operations.

DAO 2000-61 – The following year, the provision on final mining area for quarry operations was amended, allowing only smaller mining areas for quarries.

DAO 2000-99 – In the same year, Sections 134 to 136 of Chapter 14 on the Development of Mining Communities were amended. The requirement for a Social Development and Management Program (SDMP) was introduced here, necessitating additional provisions numbered as Sections 136-A to 136-E.

DAO 2003-46 – More wide-ranging amendments were instituted, covering provisions on Mineral Reservations, Exploration Permit, Mineral Agreements, FTAA, Quarry Operations, Small Scale Mining, Mineral Processing Permit, Transport of Minerals, Mine Safety and Health, Environmental Protection, Contingent Liability and Rehabilitation Fund (CLRF), and the Termination of Mineral Agreements.

DAO 2004-54 – Further amendments in the IRR as set forth in this DAO refer to provisions on Mineral Agreement, FTAA, Development of Mining Communities,

Mine Safety and Health, and CLRF. A notable amendment in this DAO is the provision on institutionalizing public awareness and education on mining and geosciences as a component of the development of mining communities.

DAO 2005-07 – This set of amendments concerns mainly additional provisions (Sections 187-A to 187-F) regarding the Final Mine Rehabilitation and Decommissioning Plan (FMR/DP) and the fund for the purpose.

DAO 2005-15 – The amendments in this DAO provide for Exploration Permit (EP) or FTAA as the initial mode of entry in the conduct of mineral exploration.

How the Rules Have Changed

Chapter III: Mineral Reservations and Government Reservations

Authorization for Qualified Government Corporation to Undertake Mining Operations in Mineral and Government Reservations – Section 11 was amended by DAO 2003-46 allowing a qualified government corporation/entity to enter into a Memorandum of Agreement with the DENR authorizing the said corporation to explore, develop and/or utilize the mineral resources within mineral and government reservations. This was occasioned by the creation of the Natural Resources Mining and Development Corporation as authorized through a Memorandum from the Office of the President in April 2003.

Chapter IV: Scope of Application

Consent Not Required for Sand and Gravel Permit Applications from FTAA, MA or EP Applicants – Section 15 b. 3 was amended by DAO 99-57 whereby sand and gravel permit applications are not anymore required to obtain consent from FTAA, EP or Mineral Agreement (MA) applicant except for MA or EP applications covering sand, gravel and/or alluvial gold.

Chapter V: Exploration Permit

Provisions in Chapter V (Exploration Permit) have been amended through DAO 99-57, DAO 2003-46, and DAO 2005-15. The substantive amendments are discussed below.

Mineral Exploration as a Mode of Entry – In DAO 96-40, mineral exploration may be conducted by obtaining an EP or a MA. Following the cancellation process initiated by the Secretary in relation to idle tenements in February 2005, DAO 2005-15 was issued stipulating Exploration Permit as the initial mode of entry for the conduct of exploration, subject to the provisions of Chapter VII on FTAA on the conduct of exploration.

Chapter VII: On the Conduct of Exploration

Maximum Term of EP – DAO 96-40 allows a maximum period of six years for EP. However, DAO 99-57 allowed a maximum of six years and eight years, respectively, for non-metallic and metallic mineral exploration. This was reduced to four and six years, respectively, by DAO 2005-15. The conduct of feasibility study and filing of declaration of mining project feasibility shall be undertaken during the term of the EP. In case of failure to declare the mining feasibility within the term of the maximum term of the EP, a further renewal of the EP for another two years may be granted for the purpose of preparing or completing the feasibility study and filing of the declaration of mining project feasibility and pertinent MA or FTAA application.

Transfer or Assignment of EPA – An additional provision (Section 19-A) as provided in DAO 99-57 allows the transfer or assignment of EPA, provided such transfer or assignment shall be subject to eligibility requirements and shall not be allowed in cases involving speculation.

Conversion of EP to MA or FTAA – DAO 99-57 added a provision (Section 23-A) allowing the EP to be converted to a MA or FTAA, subject to compliance to mandatory requirements. This provision was deleted by DAO 2005-15.

Approval of Exploration Permit – DAO 2005-15 stipulates that if all the mandatory and other requirements have been complied with and the EP is still awaiting approval five months after its date of filing, the EP, upon submission of an affidavit by the applicant attesting to their full compliance with all the pertinent requirements, shall be deemed approved and the Director shall issue the EP within five working days from receipt of said affidavit, for registration and release.

Chapter VI: Mineral Agreements

Amendments to provisions in Chapter VI (Mineral Agreements) were instituted through DAO 99-57, DAO 2003-46, DAO 2004-54, and DAO 2005-15. The salient amendments include the following:

Mandatory Requirements for MA Applications – Certain provisions in the section dealing with mandatory requirements for MA application have been deleted. More importantly, three items have been added, namely:

- ✦ Three-year development/utilization work program
- ✦ Mining project feasibility
- ✦ Complete and final exploration report pertaining to the area.

These requirements are contingent on the results of exploration work undertaken within the period allowed by the EP.

Conversion of MA Application into EPA – A new provision allowing the conversion of MA application into an EP application was appended as Section 40-A by DAO 99-57. This was renumbered as Section 41 by DAO 2005-15.

Non-Issuance of Temporary EP – Section 42 of DAO 96-40 allowing for the issuance of Temporary Exploration Permit while awaiting the approval of application for Mineral Agreement was amended by DAO 99-57 and later entirely deleted by DAO 2005-15. (The original Section 41 was renumbered as Section 42.)

Approval of Mineral Agreement – After evaluation of the MA application and endorsement of the same to the Secretary, the application shall be deemed approved if not acted upon by the Secretary within 30 calendar days from official receipt of the application. Within five days thereafter, the Secretary shall then sign all the pertinent documents for the approval of the application. This provision was added to Section 42 (originally Section 41) by DAO 2005-15.

Issuance of Special Permit – The provision for the issuance of Special Permit was amended by DAO 99-57 to read as follows:

An applicant for Mineral Agreement whose application is valid and existing, has been granted an Area Status and Clearance, NCIP Precondition Certification and endorsement from the concerned Sanggunian, and has no pending mining dispute/conflict as certified by the concerned Panel of Arbitrators/Mines Adjudication Board, may file an application for Special Mines Permit with the Bureau/concerned Regional Office. A Special Mines Permit (SMP) may be issued by the Director upon clearance by the Secretary. The SMP shall be for a period of one (1) year renewable once: Provided, That the SMP may be further renewed depending upon the nature of the deposit, the propriety of the mining operation, the environmental and community relations track record of the applicant, faithful compliance with the terms and conditions of the SMP and diligence of the applicant in pursuing the Mineral Agreement application, subject to the approval of the Secretary.

In cases where public welfare so requires, the Secretary may, after verification and evaluation of the Bureau, grant other form/s of Special Mines Permit so as to address the specific conditions in the area concerned. (The items on the conditions and requirements are retained).

Originally, those which may file applications for SMP were identified by DAO 96-40 as holders of lease contracts which are about to expire and Quarry Permit Licenses with pending MA applications.

Chapter VII: Financial or Technical Assistance Agreement (FTAA)

Evaluation of Mining Project Feasibility Study – A provision was injected by DAO 2004-54 into Section 52 identifying the parameters for strict consideration in the evaluation, namely, the expected life of mine, grade management, mining sequence, conservation measures and the capability of the project to pay the Government Share and absorb the environmental and social costs. It was further stipulated that there shall be a provision guaranteeing the payment of the Government Share notwithstanding the grant of any incentives by other government agency(ies); that the mine should have a profitable operating life of more than ten (10) years, to ensure the collection of the Government Share, given a maximum five (5) -year cost recovery period.

Mandatory Requirements for FTAA Applications – The mandatory requirements for FTAA, (Section 53) was amended by DAO 99-57 and DAO 2004-54 and further amended by DAO 2005-15. In support of the application for approval of the declaration of mining project feasibility, the following are now required as provided for in DAO 2005-15:

- d.1. Mining Project Feasibility Study
2. Three-Year Development/Utilization Work Program
3. Proof of technical competence, including, among others, curricula vitae and track records in mining operations and environmental management of the technical personnel who shall undertake the activities in accordance with the submitted Development/Utilization Work Program, and
4. Proof of financial capability to undertake the activities pursuant to the Development/Utilization Work Program, such as latest audited financial statement and where applicable, Annual Report for the preceding year, credit line(s), bank guarantee(s) and/or similar negotiable instruments.

The approved survey plan, ECC, Environmental Protection and Enhancement Program and Social Development and Management Program shall be required from the FTAA Contractor after acceptance of the application but prior to its approval.

Further, upon filing of the application, the requirements in DAO 96-40 numbered 5, 6, 8, 10, and 11 are no longer necessary.

Terms and Conditions of an FTAA – Additional stipulations in the terms and conditions of an FTAA include:

- ac. *A stipulation that a financing institution that has granted a loan to the Contractor for the mining project shall have the authority to designate its assignee of the FTAA in case of the Contractor's default from such loan:*

Provided, That the assignee is a Qualified Person and the assignment shall be subject to prior approval by the President; (DAO 2003-46)

- ae. *A stipulation that the Contractor in the case of a juridical entity shall annually submit a copy of its Securities and Exchange Commission-received General Information Sheet; (DAO 2005-15)*
- af. *A stipulation that the Contractor shall comply with the required consultation with Project presentation to the Sanggunian concerned prior to the implementation of the Exploration Work Program and endorsement of the project by the same Sanggunian prior to the commencement of the development and/or utilization activities pursuant to the pertinent provisions of RA No. 7160 or The Local Government Code of 1991; (DAO 2005-15)*

Chapter VIII: Quarry Operations

Final Mining Area – For a large scale quarry operations under an MA, stipulations for the final mining area were added to Section 69 (General Provisions) by DAO 99-57 and later amended by DAO 2000-61 and DAO 2003- 456, to read as follows:

For sand and gravel, including lahar	Individual	— 20 Hectares
	Corporation/ Partnership/ Association/ Cooperative	— 50 Hectares
For marble granite, and/or construction aggregates	Individual	— 81 Hectares
	Corporation/ Partnership/ Association/ Cooperative	— 243 Hectares
For cement raw materials such as limestone, shale and silica	Individual	— 486 Hectares
	Corporation/ Partnership/ Association/ Cooperative	— 1458 Hectares

Final mining area means the contract area or portion(s) thereof for development and actual quarrying/mining operation including sites for support/ancillary facilities.

Chapter IX: Small Scale Mining

Requirements for SSMP Applications – In DAO 96-40, Section 103 (General Provisions) only referred to the filing of applications through the PMRB for areas outside Mineral Reservations and through MGB for areas within Mineral Reservations. This was amended by DAO 2003-46 and DAO 2005-15 to include mandatory requirements for acceptance of SSMP applications and requirements for renewal of the SSMP Permit. The ECC, EPEP, and approved survey plan are also required from the applicant after acceptance of the application but prior to its approval.

Chapter XI: Mineral Processing Permits

Approval of Mineral Processing Permits – The approving authority for issuance of MPP was amended by DAO 2003-46 and further amended by DAO 2004-54.

Secretary	>500M pesos project cost
MGB Director	>200M pesos- 500M pesos project cost
Regional Director	200M pesos or less project cost

In the Feasibility Study there shall be a provision guaranteeing the payment of the Government Share notwithstanding the grant of any incentives by other government agency(ies)

Temporary Permit to Operate – The provision on the issuance of Temporary Permit to Operate for 30 days was deleted by DAO 2003-46.

Chapter XII: Transport of Minerals/Mineral Products.

Inclusion of By-Products, Including Gold Bullion – As amended by DAO 2003-46, Ore Transport Permit (OTP) is required not only for minerals and mineral products but also for by-products, including gold bullion.

Samples for Assay and Pilot Testing – For ore samples exceeding two (2) metric tons to be transported exclusively for assay and pilot tests purposes, DAO 2003-46 stipulates that an OTP shall be issued by the Regional Director concerned for a limited amount based on the type of ore, metallurgical tests to be undertaken and other justifiable reasons as determined by the Regional Office concerned.

Basis of Arrests and Confiscations/Seizures – As amended by DAO 99-57, it shall be the primary responsibility of the Permittee, Contractor, or Permit Holder to police the permit/contract area from any illegal mining operations.

Filing of Complaint - To conform with the above stipulation, DAO 99-57 also amended Section 122 authorizing Permittee, Contractor, Permit Holder and/or

other duly deputized personnel to file the complaint with the proper court for violation of Section 103 of the Act (Theft of Minerals).

Chapter XIV: Development of Mining Communities, Sciences, and Mining Technology

Provision for Social Development Management Program (SDMP) – In line with the development of mining communities, provisions regarding the requirements for a Social Development Management Program (SDMP) were added by DAO 2000-99, which were amended by DAO 2004-54. These new sections are numbered 136-A to 136-E. Pertinent sections of this chapter were also amended to incorporate SDMP in the provisions.

Provision for IEC Programs and Activities – The spate of anti-mining issues especially since the Marcopper incident in 1996 has prompted the MGB to give due importance to Information, Education and Communication (IEC) programs and activities and enjoin mining companies to do the same. Thus, Section 134 was amended by DAO 2004-54 to include the institutionalization of public awareness and education in mining and geosciences. These programs and activities are now recognized as credited activities or expenditures in enhancing

the development of the host and neighboring communities as part of the 10% of the 1 % of direct mining and milling costs.

Chapter XV: Mine Safety and Health

Adoption of DAO 2000-98 (Mine Safety and Health Standards) – Pertinent provisions in the Chapter were amended by DAO 2004-54 whereby the old Mine Safety and Health Standards stipulated in MAO No. MRD-51 was replaced by DAO 2000-98, the Mine Safety and Health Standards being implemented presently.

Revocation of Accreditation of Service Contractors – All Certificates of Accreditation issued to Service Contractors by the Bureau and its Regional Offices were revoked by DAO 2004-54. Henceforth all Service Contractors may provide services in mining operations without undergoing the accreditation process, subject to compliance with applicable laws, rules, and regulations.

Amendments to Requirements of Safety and Health Program – Section 144 was amended by DAO 2004-54 whereby the standard operating procedures for mining and milling operations were deleted and two additional items were added, namely: 1) leadership and administration; and 2) organizational rules. The rest of the original items were retained.

Chapter XVI: Environmental Protection

Requirement for Certificate of Environmental Management and Community Relations Record – A new section (Section 167-A) was added by DAO 2003-46 requiring applicants of MA, FTAA, Quarry or Commercial/Industrial Sand and Gravel Permits, and Mineral Processing Permits to obtain a Certificate of Environmental Management and Community Relations Record. This stipulation amends provisions in pertinent sections of the IRR with respect to mandatory requirements of the above applications.

Chapter XVIII: Contingent Liability and Rehabilitation Fund

Guidelines on the Final Mine Rehabilitation/ Decommissioning Plan – Guidelines for the implementation of the Final Mine Rehabilitation/ Decommissioning Plan (FMR/DP) is provided by DAO 2005-07 as Sections 187-A to 187-F. Pertinent provisions relating to these guidelines such as the provision for the FMR/DP fund and compliance with the FMR/DP were amended, respectively, such as Sections 180, 182, 188, 193, 196, and 197.

Monitoring Trust Fund increased to P150,000 – As amended by DAO 2005-

07, the Monitoring Trust Fund has been increased to no less than P150,000 to cover maintenance and of the operating expenses of the monitoring and evaluation. The fund may be increased when national interest and public welfare so require.

Chapter XXIV: Cancellation, Revocation and Termination of Mining Permits, MA or FTAA

Grounds Expanded – The grounds for cancellation, revocation, and termination of a mining permit, MA or FTAA were expanded by DAO 2003-46 to include the following:

- Failure to perform all other obligations, including abandonment of the permits or agreements; and
- Violation of existing laws, policies, and rules and regulations.

Government to Undertake Mining Operations – Upon cancellation or termination of a mining permit/MA/ FTAA, the mining area covered shall be open to mining applications. However, as amended by DAO 2003-46, mining operations may be undertaken by Government through one of its agencies or through a qualified independent Contractor. In the latter case, the contract shall be awarded to the highest bidder in a public bidding.

Summary and Conclusion

The Philippine Mining Act has been with us for a little over a decade. In the course of implementing its rules and regulations, we have realized that there is

much room for improvement and these are reflected in the amendments to its IRR. The participation of the Bureau in various fora and dialogues with stakeholders has allowed us to take cognizance of relevant issues. In this respect, the public hearings occasioned by the preparation of a Minerals Action Plan have contributed in streamlining and improving the implementation of the Mining Act.

The last amendments to the IRR as discussed above are not the end of the process of improving the rules and regulations. We continue to learn and listen, and to engage in fruitful dialogue with stakeholders to better pave the way for the revitalization of the mineral industry in the context of responsible mining.

MINING AND SUSTAINABLE DEVELOPMENT

Engr. Glen Marcelo Noble

First of all, I would like to thank the organizers for this forum. I would be speaking in behalf of the DENR. The Undersecretary is in Congress today for the budget deliberations. Please bear with me.

Responsible mining for sustainable development, the government believes, is how mining should be conducted in the country. Mining should be done responsibly and it should promote development.

I would first present a brief background on the country's mineral potential. Then I would discuss the benefits, the effects and ways to solve mining issues and problems.

The Philippines has currently 1.4 % mining operations covered by permits in its mineral land distribution. This is only around 440,000 hectares. The 1.4% covers Mineral Production Sharing Agreements (MPSA), Financial or Technical Assistance Agreements (FTAA), approved exploration permits, etc. The country has around 30 million hectares in total land area and 30% or around 9 million hectares have minerals potential. If these resources can be tapped and developed, we can be one of the largest producers of these minerals.

Before, the Philippines is the 3rd largest copper producer in Asia, and 6th in the world. However, when the mines closed, we were not even in the 10%.

Currently, we have prioritized 23 Mineral Development Projects. These include the large-scale mining operations as well as the medium- scale operations. This is in support of the President's 10 point agenda crafted way back 2004-2005. If these projects go into full swing, we will have gross value of 90.8 million dollars, Foreign Direct Investments (FDI) amounting to 6.5 million dollars and a lot more.

Right now, out of these projects, five or six are already on full swing, meaning they are already operating and producing mineral ores. Two are in final construction stage; six are in the final feasibility stage and the others are in the exploration or pre-feasibility study.

In terms of responsible mining, it would be beneficial if we first establish a definition of the phrase "responsible mining". What is responsible mining? It is given flesh in Executive Order 270 or the National Policy Agenda on Revitalizing Mining in the Philippines. It is a tool for enhancing economic growth and at the same time, it adheres to international standards of mining principles, adheres

to justice and sensitivity of the culture of the Filipino people, and it respects the sovereignty of the Filipinos.

This means that it follows the Brundtland statement and it follows the three over-arching principles of sustainable development—economic growth, environmental protection and social equity. Sustainable development is like a stool with three feet wherein the three overarching principles support the whole concept of sustainable development. If one of these legs is removed, it will not stand. It will not be sustainable in the simplest sense. Another way of looking at it is the way these three should be balanced. Sustainable development is actually balancing the three: having economic growth and at the same time protecting the environment and promoting social equity.

Let us next define what responsible mining is. Responsible mining did not just come out of nowhere. We are using different principles from the United Nations (UN). According to UN, responsible mining requires good environmental stewardship in all mining activities from exploration, processing, decommissioning and reclamation. The World Summit for Sustainable Development (WSSD) states that responsible mining includes actions at all levels to support efforts to address the environmental, economic, health, and social impacts and benefits of mining, with the enhancement of the participation of stakeholders and foster sustainable mining practices. Conservation International (CI) puts it also in a similar manner. They say that mining may be appropriate if implemented with the best practices and technologies available in a manner that contributes to local conservation and community development initiatives.

The UN also has three parameters or guidelines on what responsible mining is. These are the economic, environmental and social.

The UN guidelines acknowledge the importance of mining to the social, economic, and material needs of society. Everything we use in our daily lives comes from mining—our cars, cell phones, laptops, etc. The rings that we use to adorn ourselves do not just pop out of the blue. These are mined. In addition to that, unnecessary environmental regulations that act as barriers to trade and investments must be avoided. Furthermore, tax incentives must be given for pollution reduction. These things as said by UN should be followed in order for mining to spur economic growth.

Every mining investor or company must adopt the following environmental guidelines. They must have environmental and economic consideration in the decision-making process. Before setting up mining operations, they must have environmental impact assessments, risk analysis and risk management plans.

EO 270 provides for the framework on how responsible mining should be exercised in the Philippines. It is very similar to the guidelines presented by the UN.

As for the concept of equitable sharing, it says that the mining company should not be the only one that benefits from the mining operations. Benefits are divided among the government—local and national government, the host community, indigenous peoples (IP), affected communities, and of course the mining company who have invested a lot. The EO 270 underwent a lot of reforms. There had been 14 regional consultations. EO 270 is the point of convergence of the different consultations. Mineral Action Plans are sets of strategies, activities and programs that will address the issues that are contentious to the formulation of EO 270.

EO 270 provides a set of activities that will implement responsible mining in the country. These are:

1. Conserve mineral resources

The Philippines will not only be exporters of raw mineral products. Downstream industries such as mineral processing must be developed.

2. Promote use of efficient technologies.

This should be done in order to prevent/mitigate the negative impacts of mining. The appropriate technologies like anti-pollution devices, waste reduction processes, etc. must be tapped in order to lessen the environmental impacts of mining.

3. Look at possible environmental impacts before the operations.

No mining project goes into operation without the scrutiny of the DENR except on exploration projects. Exploration projects are exempted from the Environmental Compliance Certificates (ECC). Environmental Work Programs (EWP) was placed in exchange for the ECC. This is a set of programs that will respond to the impacts of exploration activities, where theoretically, nothing is really damaged. They just get samples from their prospect area. They then rehabilitate it afterwards.

During the mine life we have the Environmental Protection and Enhancement Program (EPEP). Before we give the ECC, we make sure that the mining company has an environmental work program. The EPEP then further ensures that mining companies and mining operations are done with utmost care so as not to endanger the environment and the people living in or near the mines. These EPEPs will now serve as answers to the conditionalities stated in the ECCs. Examples of these EPEPs are reforestation, slope stabilization, control of waste dumps, etc.

We have also a multi-stakeholder approach to monitoring, composed of the company, the government, the communities, the IPs involved and NGOs. These entities are all part of monitoring the mining project.

Now that you have an environmental work program, EPEP, how will these be funded? We have the Contingent Liability and Rehabilitation Fund (CLRf). Prior to granting mining rights, there should be sufficient funds to mitigate social and environmental impacts. This is answered by the CLRf. This fund is deposited in government depository banks and these funds cannot be withdrawn by just anyone. There has to be an approval by a multi-stakeholder committee. As of now, there are some 233.8 million pesos in the bank.

Aside from the aforementioned requirements, mining companies should have rehabilitation programs. Rehabilitating the mines involves the use of either the vegetative methods—planting trees, grasses etc., or engineering methods—use of netting or other techniques that require the use of non-indigenous processes and materials.

There should also be safe management, storage and disposal of hazardous wastes. Prior to mining operations, we also make sure that the companies involved have the facilities and equipment for safe management, storage and disposal of hazardous wastes.

Of course there are mines which really are problematic. The Mining Act however provides the necessary actions on how to solve these problems. It states that there has to be an implementation of remediation measures. The dried up tailings pond of Maricalum causes dust pollution. As a remediation mechanism, we have planted talahib, sugarcane cuttings and other flora in order for the dust to settle and be controlled.

We have also employed the services of the United States Geological Services (USGS) in the study of the Marcopper mines in Marinduque. The USGS recommended based on their findings that the integrity of the structures have to be ensured; neutralize and rehabilitate waste dump sites to prevent acid generation; clean up remaining tailings in rivers and ensure safe storage; and there is also a need to conduct further study on health concerns. As of now, the DENR has directed Marcopper to implement the USGS recommendations immediately.

DENR also regularly monitors active and inactive mines. We compel the permit holders to continue proper care and maintenance for their other inactive mines. The old mining laws did not provide for adequate requirements for mine rehabilitations. Luckily, the new mining law has provisions regarding mine rehabilitation. The dirty seven, this is the name we have given for the seven most problematic mines. These are the Basay Copper Mine, Bagacay Pyrite Mine, Thanksgiving Gold Mine, Black Mountain Copper Mine, Consolidated Mine,

Palawan Quicksilver Mine, Boneng-Lobo Copper Mine. To solve these problems, the DENR compels the permit holders to remediate/rehabilitate these mines. There are also plans to undertake a clean-up of these mines within 2005, with Bagacay Mines as the priority. We are also trying to conduct assessment for the rehabilitation and redevelopment options for these closed mines.

To prevent future abandonment of mines, the company must submit a Mine Decommissioning Plan (MDP) five years before the expected closure. This is explicitly stated in the Mining Act. The MDP will ensure the smooth transition from active mining operations to eventually closed mines. The MDP is done in consultation with stakeholders. The MDP must minimize the social impacts to the LGUs, employees and those that are dependent to the mine operations. It should also provide for a plan to transform the affected areas to alternative and final land use. There should also be monitoring and the presence of a maintenance fund for the next ten years after mine closure.

The Bulawan gold project in Negros Occidental is now reforested, thanks to the MDP. A crushing plant and wastewater facilities have been transformed into a clubhouse and a swimming pool.

To protect biodiversity, the NIPAS and Mining Act expressly prohibit mining in protected areas and virgin forests. There is also a need to determine appropriate land use and incorporate biodiversity concerns through valuation tools. As of now, the DENR is developing valuation tools in consultation with other stakeholders.

On the social aspect of mining, House Bill 1445 filed by Rep. Domogan ensures the timely remittance of LGU share from mining operations by providing for direct remittance to LGU.

There are benefits of mining. This is particularly true to the LGUs concerned and the host communities. They come in the form of local taxes and fees, the 40% excise tax payments. In 2003, the excise tax payments amounted to 156 million pesos. 62.5 million pesos went to the LGUs. There are also mandatory contributions covered by SDMP projects as stated in the Mining Act. Aside from this, there are also direct financial contributions given by mining companies. These are voluntary though. They give the seed money or initial capital for livelihood programs. They also give donations to various socio-economic and cultural activities.

If the mining operation covers areas where there are IPs, the mining company has to pay them royalties. At least 1% of gross output has to be paid. This is just the minimum, and this is subject to negotiation with the IPs involved.

Mining companies also put up social development projects. There are dress-making and weaving facilities put up in Philex Mining in Benguet. Tractors and

poultry farms were given or put up by Rio Tuba Nickel Mining Corp in Palawan. Medical missions, school construction and other programs are also being sponsored. South Western Cement Corporation in Malabuyoc, Cebu built new houses for affected residents even prior to the mining operations.

To ensure the protection of IPs and indigenous cultural communities, the Free Prior and Informed Consent (FPIC) must be secured from the IPs concerned. This is stated in the Mining Act and the IPRA. Furthermore, the culture and traditions of IPs must be respected and preserved.

Stakeholders are also empowered to actively participate in the decision making. Of course, they should have a say in these matters since they are also affected and concerned. The DENR has conducted Corporate Social Responsibility (CSR) trainings for stakeholders in pilot regions. As of now, the trainor's training has already been completed. The DENR has a new requirement prior to mining operations. This is the provision for a regular funding mechanism for IEC.

Small-scale miners are also not left out of the picture. The capability of small-scale miners to address environmental and social concerns and standards has to be strengthened. The amendments on RA 7076 and PD 1899 through the Magna Carta for Small Scale Miners enhance the protection of rights and it provides for new benefits to them. As of now, the proposal for these amendments is being formulated by the DENR. There is also an ongoing training and capability building program for small-scale miners on technologies, health and environmental measures.

To end, let me quote "The apprehensions and fears can only be quelled with the collective effort of ensuring that we promote and advance sustainable development. The three pillars of economic development, social responsibility and protection of the environment are the binding principles for a harmonious and progressive community".

THE CURRENT STATE OF MINING IN THE PHILIPPINES: An Assessment of the Mining Act

Atty. Rhia Muhi

The presentations of the speakers from the DENR and Mines and Geo-Sciences Bureau have been comprehensive, though technical. My presentation this afternoon would be in layman's term so that it would be easier for me to explain and easier for you to grasp. Aside from the legal aspect of the Mining Act, I would also touch on the policy, economic, environmental and social aspects of mining.

Rep. Acosta stated earlier that the DENR has a schizophrenic character. That poses a problem. Because of the current set-up of the department, this causes land conflicts, thus distrust in the government. DENR is like Dr. Jekyll and Mr. Hyde. Knowing that they exhibit such qualities, would you fully trust that person? In this case, would you really trust the DENR considering that they have schizophrenic nature?

Secondly, the DENR issues land tenure instruments like IFMA, CBFMA, etc. On one hand they issue these instruments in mining potential areas; on the other hand there are also countless issues being faced by those in the mining areas due to these tenure instruments. Given the current push of the government for mining development, this causes distrust on the part of the people affected. So we cannot really blame the communities if they are distrustful on the sincerity of the government regarding these social development projects.

Thirdly, the government is pointing out that mining is a pillar to alleviate poverty. They claim that there are lots of investments pouring in. They claim that there are lots of potential investors in this field. But if we look at the gross value added of mining and quarrying versus the poverty incidence in the provinces which have hosted mining, you can see that there is really no direct correlation. There has been no hard evidence that shows that if there is a mining operations going on in a community, then the community also prospers. In fact, some communities have become poorer. Although there are infrastructures erected, the quality of these infrastructures may be questionable. For whom these infrastructures really are? The roads built are not really for the community. They are for the mining operation. These do not necessarily answer the poverty issues in the community and the country.

The government also claims that mining provides employment. But in a study, it was shown that the employment being provided by mining is approximately 100,000 annually from 200-2005. It only constitutes 0.3683% percent. This is not even 1% of the total employment, wherein agriculture is 36.65% and services, 48.5%. These own the bulk of employment share. We know that the Philippines

is an agricultural community. Being an agricultural country providing 36.65% of total employment, then why not develop employment in agriculture instead of concentrating in an industry that provides not even 1% of the total employment? We should also know that mining companies only hire contractual employees. These are not steady employments. Furthermore, the jobs that are required are very specific, meaning, they are very highly technical. Do you think that a farmer or an IP would be allowed to drive a 2 million dollar-truck? Of course not. The mining companies need not give the keys of their heavy equipment to Filipino drivers in order for them to comply with the employment requirements of the Mining Act. What then are the employment benefits of mining?

Like stated earlier, the Mining Act allows the full participation of 100% owned foreign corporations in an industry which should be reserved to the Filipinos. In the La Bugal case, the constitutionality of the Mining Act was challenged. One of the points that the justices raised was that the Philippines cannot by itself carry the burden of continuing with mining projects. We cannot afford to do mining operations alone. As Prof. Leonen has lectured in one of his classes in the UP College of Law, he said that mining is cost intensive. This means that in order to operate a mine, 256 million pesos would be needed or at least 500 million pesos would be needed to fully operate a mine. Yet, we see in headlines of newspapers that the government has promised 1 billion pesos to fight insurgency. This shows that the government has money. It is just a question of priorities.

Incentives given to mining corporations are to the disadvantage of the state, local government units and communities. Earlier, we were shown the taxes and the income and shares that would go to the LGUs and the national government. We should think however of who are the ones not paying their taxes? Right now, under Sections 80 and 81 of the Mining Act, the share of the government is only the excise tax. Regarding the FTAA's, this is debatable still, if only taxes are given to the government. Or do they really have a higher income share? Under the constitution, mineral reserves are owned by the Philippines, the state. As owner of something, for example, if you invest your possession, you would of course want to get profits. The state however, only receives the excise tax, which are taxes on business. Everybody who owns a business pay excise tax, so this is not a business share. Even the Congress agrees that excise taxes are only excise taxes in the simplest sense and that every business pays an excise tax. We should remember that mineral resources are non-renewable. They are exhaustible, but what are we getting out of these? When the government says that the source of income of the government from these resources is only through taxes, then, we are losing in these deals.

The mining companies however, have lots of incentives. They have fiscal and non-fiscal incentives as stated under the Omnibus Investment Code. Tax holidays, incentives for pollution control devices, etc. On that regard, why would we give them reward for using pollution control devices? Isn't it that they are the

ones causing pollution and it is but their obligation to mitigate these pollutions? Why are we rewarding them? There are also income tax carried for losses. Explorations may go on for eight years. After the exploration period, you have a net carry over loss, meaning you only have to pay after you have already earned your losses. You will only pay when the company already is having profits which would take another five to ten years. The figures that we see with regard to expected income are not really given at the moment. Investment guarantees are also given in the form of repatriation of investments, remittances of earnings, foreign loans or contracts, freedom from expropriation and requisition of investments.

Earlier, we have seen and heard the discussion on downstream industries. But looking at it deeper, the current mining framework does not maximize the full potential of the mining industry. Why? The current mining framework is only focused on the extraction of mines—exploration, mine development, washing, grading etc. After the minerals are processed, we then export them as raw materials. Smelting, incorporation and other things done to the raw minerals take place in other countries because we do not have industries to do those here. We cannot afford those industries here. Due to this set-up, there is very little value added to the mineral resources we export. Though laptops, cellphones, and micro-chips need mineral resources, we do not make these products. What is worse is that we have to re-purchase the end product at a much higher price. This results in an export-oriented, import-dependent economy that does not maximize the full potential of the mineral reserves.

This is the most important part of the minerals policy or the mining framework. Mineral extraction affects the people, the communities within the mining site. What does the Mining Act provide? It provides auxiliary rights. This now covers the legal aspect of my presentation. Auxiliary rights include water rights. This means that in the development of a mining site, priority is given to the mining operation. Just imagine how much water a mining operation needs. Instead of giving water to farm irrigations, priority is given to the mining operation. It also provides for easement. This means that they have the right of way. For example, if your house is in the mining site, or if your farm is there, you need to move.

The Local Government Code Section 26 and 27, provides for the consultation with NGOs, PO, business and local government units. It also provides for the consent of the community for every project that will affect the social, environmental and economic aspects of the community. The DENR issued an Administrative Order which says that in order to acquire consent, the company only needs the approval of two out of the three levels of the LGU. We must remember that the three levels are the provincial, municipal and the Barangay. The company only needs the approval of two of these components in order for the company to engage in extractive industries. The question here is that, there is a law that states that all LGUs concerned should give its consent, but you also have an administrative order that says that you only need two? In legalese,

this is also saying that it is amending the LGC by limiting the power of the three components of the LGU. Based on our experiences and the documents we have studied, we have MPSAs and other mining agreements wherein the consent of all those LGUs are not present. This causes conflict and it weakens community rights.

The Mining Act violates due process. Article 3 Section 1 of the Constitution states that "nobody shall be deprived of life, liberty and property without due process of law and equal protection of laws". Section 76 of the Mining Act states that "no private person may deny entry of any mining company". This means that under the powers of government—taxation, police power and eminent domain, the Mining Act now provides taking of private property. In the recent case of *Desama vs. Gozun*, the court affirmed that Section 76 indeed is a taking provision. To illustrate it, let us take this example. In Parañaque, there is gold underneath the streets of Parañaque. If it is under BF Homes in Parañaque, what now happens? The owners of the houses, the lots in BF Homes will now have to relocate. They will now have to leave their homes because the state owns the mineral resources under those houses. The government will not take the title of the property. It remains as the property of the respective owner. However, because a mineral permit has a life span of 25 years, renewable for another 25 years, making 50 years total, then the productive use of your house is absolutely zero. This is still debatable, but I can assure you that you can not live in your house anymore. Section 76 or the IRR does not also provide the procedure by which you can take private property. There are several conditions wherein expropriation may take place. It should be shown first that the taking is for public purpose or for public interest. The debate here is that is mining the public interest?

In the regulations, they cited PD 512 as the basis of the compensation for damages. The damages stated or provided for in this law are damages after entry, when some of us know that before you have to take property you have to pay first just compensation. Under the Mining Act and the IRR, companies have to pay only after the damages and they have pegged the price based on PD 512. PD 512 was passed by Marcos and it lays down the basis for just compensation, meaning the market value, the assessor's value and other valuation tools. But the basic point of expropriation is that when the government wants to expropriate something, it has to go to court, which is the proper venue for determining just compensation. A law cannot in itself peg the value of a property. It can suggest and provide guidelines. If the owner of the property feels that the compensation by the government is not just, the court has a basis to have a hearing or proceedings for just compensation.

There is no clear policy on determining the financial capability of a mining corporation. Under the law, one of the safeguards provided by the Mining Act is that the mining corporation should prove that it has the financial and technical capability to undergo the mining operation. However, how do we classify and detect financial and technical capability. I had the experience of seeing a

Securities and Exchange Commission paper, a financial statement, wherein the MGB had given the permission to a mining company to explore in an area despite the company having a measly 263, 000 pesos in their bank accounts. That is only their cash asset. How much does it take to explore? I don't know the exact amount needed but I am sure that 263,000 pesos is not enough. The point is, if you have an industry that will gain billions of profits, then we might as well put a higher ceiling for the initial investments. We have companies which have been given the right to explore and exploit a non-renewable resource at 263,000 pesos and we are talking about 81,000 hectares to 341,000 hectares of land. Under the CARP, you are only given 3 hectares per CLOA. For an 81,000 hectare mining area, you can have 27,000 beneficiaries. That is how big it is. Imagine how preposterous it is when you give 341,000 hectares for a measly 263,000 pesos. Equipment costs millions and billions of pesos and yet we have allowed a company to operate with a meager budget of 263,000 pesos? Most of the times, mining companies just apply for the prior rights to a mining site. They are waiting for investors who would be willing to pay or invest for a higher price in their claim. But while they are waiting for these investments, no entity can enter that land that is already applied for since the company already has prior rights to that land.

Under the current framework, mining is a continuing threat to the dwindling natural resources of the country. We all know what happened to Rapu-Rapu. We all know that we have only 12% virgin forests or even lower. We are all concerned on how to sustain these resources when we are already overpopulated; when statistically all of us already own less than a hectare of our land.

A lot of people are uneasy with giving IPs thousand of thousands of hectares of land. But our government or their policy gives mining companies thousands, tens of thousands, or even hundreds of thousand hectares of land in a very easy way. In an open pit mining method for example, an average annually of 16 million metric tons of ore are extracted but they have to move 50 million metric tons of top soil. The sad thing is that there are no rehabilitation activities of open pit mines that have become sustainable or environmentally suitable for human living. An average of 650 thousand tons of mine tailings still find their way to rivers, lakes and irrigation canals everyday.

Earlier, we have been talking about abandoned mines. The gentleman from the DENR showed us seven abandoned mines but as per the count of Haribon, there are 220 abandoned mines mostly in the upper north of the country. Though it is a positive step that there are already two mines rehabilitated, what happens to the 218 other abandoned mines? We cannot move forward if we have not dealt with the things in the past. The Mining Act gives priority to abandoned mines. However after ten years since its passing, the government has yet to enact effective and efficient measures to solve the problems of hundreds of abandoned mines.

The DENR stated earlier that there is 233.8 million pesos in the CLRF for the rehabilitation fund. The Marinduque calamity alone reached 168 million pesos for rehabilitation. That is just one mine and the DENR has to replenish the emergency fund just to meet the consequences of the mining spill. If they spent 160-180 million pesos for the rehabilitation of Marinduque over a period of nine months, what then happens to the long term effects? As of now, Boac River is dead. What happens to the communities that are dependent to that river? Has the government really enacted measures to compensate those communities directly affected? The 160-180 Million pesos is only for those people who have proven that that is the amount they have lost. What happens to the long term negative effect of this catastrophe? They only put the cost of the calamity at that time. They did not put in the future costs, the loss of many years of productivity.

The government lacks the resources to properly implement the laws accordingly. This means they lack the manpower, technical resource and financial capacity. The DENR is not the actor alone. There are also agencies that come into play. There is the National Commission for the Indigenous Peoples (NCIP). Why the NCIP? Because IPs commonly live in mineral rich areas. The NCIP puts a human face into these mining operations since they deal with the people affected. The NCIP has issued the 2006 Free Prior and Informed Consent (FPIC) guidelines which further watered down the FPIC process. Some companies have capitalized on poverty. They say that they will give money now, a means of instant gratification. There was this company that limited the discussion with the community on the exploration process only, when in fact their permit was for mining activities. If they are really sincere in explaining their activities to the communities, then they should not lie about it. They should disclose their true intentions. There must be transparency. With the new FPIC guidelines, the community has the burden of explaining why they should not want the mining operation. The mining company wants their lands, but the burden is on the community. This is clearly stated in the IPRA that FPIC simply means the right to say yes or no, as long as it is free, no use of intimidation or threat, prior meaning before the approval of any projects, informed, they know everything both the good and the bad and consent to it.

There are also cases of corruption. The government has failed to be accountable and hold the mining corporations as accountable. What happened to Marcopper? They left after the accident. The community had to run after them to get what is due to them. They have to go to Canada, the US to get what is due to them. What is happening now to La Fayette? They were given a 60 day trial? How can the people trust an agency that is publicly favoring companies at the expense of communities? Mining documents and activities have not been transparent. I went to a conference and a lady speaker said that if there is a boundary conflict between region 1 and 2—the location of the mine site, they will go to MGB region 1 ask for the documents, but the agency says that it is with region 2. They are treated like a volleyball. There is also the order issued by the DENR that not all documents can be issued for security reasons.

The Mining Act also provides that there are documents which are not going to be publicly available to anyone.

Mining areas have been highly militarized. There is the very visible presence of military groups, para-military or military especially in territories that were opposed to mining. Under the Mining Act and investment laws, the government has the mandate to protect the mining operations against any untoward incidents or occurrences. They have the duty to protect the corporations, but at what cost? If the voices of the opposition is so loud, the government should first protect its communities, it should protect the people first and not its investments. There is a middle ground between investments and people's rights, but if push comes to shove, then rights should be over and above.

There has been limited access for justice for the marginalized communities. Do you know how much it is to photocopy a document in the offices of these agencies? It is 2 pesos. Our organization has spent thousands of pesos by reproducing public documents. If you have an IP community who barely earns a hundred pesos a day, who lives in the mountains and the government agency is in the city, although the law provides for legal procedures, how do you expect the farmer without any help to go to the city and photocopy the documents? How can they assert their rights if in that aspect alone—reproducing public documents, they are already losing? You barely see concerned government agencies teaching upland communities to empower them. There is also a lack of people in the legal profession to defend community rights.

I would like to clarify that we are not anti-mining. In fact we are pushing for an alternative mining bill. We do accept that we do need mining. But we have to develop first the downstream industries. We have to reconcile the past, the present and the future. We cannot push aside past and present occurrences and move on. We should deal with the past first since this is the primary reason that led us to this opposition. It was the past that made the people distrustful.

OPEN FORUM

The following are the summaries of discussions during the open forum.

On the DENR. For natural resources, police and permit-granting should be separated. Otherwise, the DENR Secretary will have conflict in managing the organization. There are two bills pending in Congress that create two environmental agencies. But, it seems that nobody is looking at it.

On small-scale mining. The case of Mt. Diwalwal shows that there is total chaos even if there was no foreign investment.

On the issue of anti-mining. It is difficult to say that one is anti-mining, since mines are very important. The benefits of mining should be recognized. However, it is also important to see if the policy is pro-poor. How far are we going to push for mining? The question is on the framework and the provisions and policies that are not pro-people. It could be amended or done away with.

On processing minerals. It is better if a local industry is built to process the minerals in the country rather than exporting it. This is a good idea. However, post-mining downstream industries do not enjoy full support, hence, no industry has been put up yet. During the time of then President Marcos, there was a grand plan for the iron and steel industry. However, policies changed and when Marcos left, everything was all watered down.

On capability building. It is the responsibility of local governments to train their constituents and prepare them to operate mining equipments. Local government units (LGUs) which train their people should be commended. The government should implement more capacity-building activities. Education is also still lacking. Moreover, there is no technology to transfer. On the issue whether the key to equipments should be given to locals, it was stated that it is just a question of trust.

On the issue of employment. It has only been two years and you do not see the effect of mining on employment in just two years. It is unfair to say that mining has not contributed to development. However, the employment that mining creates is temporary. Lives, communities and resources are what we are talking about in mining.

On the amount of share that goes to the LGUs. If it is only the *barangay* where a mining company exists, then that *barangay* is entitled to a share of about 30-40%.

On the policy of granting mining permits. Local laws should not contradict national laws. Resolutions do not have any effect unless they become ordinances. There should be transparency in the LGUs because they are responsible to inform the people about projects and where they will take place.

SYNTHESIS/ CHALLENGES AND LESSONS LEARNED ON THE FORUM ON SUSTAINABLE MINING

Dr. Maria Fe V. Mendoza

The mining industry is a highly extractive industry as was presented in the papers and discussions of the speakers. In order to obtain the minerals from the ground, forests have to be cleared, tons of earth have to be moved, and these still have to be treated with various toxic chemicals in order to extract a small amount of minerals.

One of the challenges that faces the mining industry and other actors concerned, i.e, the indigenous peoples, mining communities and the government is how to make the mining industry responsible in the sense that the earth is not overly extracted.

Next is that there is a need to impose or there is a need for the mining industry to adhere, observe, and promote best practices in mining. This has to be done in order to give a certain safeguard or protection to the environment. In addition, this may help lessen the adverse impacts of mining on ecological balance.

In addition, to help conserve the environment and to ensure that minerals extracted are re- used and that their utility is maximized, downstream industries have to developed. These downstream industries will process and convert the minerals into usable products such as steel for car production, chips for computers, and others. This will not only help maximize the use of the minerals but will also help spur economic activity, growth and development by providing jobs and technological advancements particularly in the host communities.

In order to foster a balanced growth and in order to distribute the wealth generated by the mining industry, there should be a sharing of its social and economic benefits equitably.

The host communities should be vigilant at all times, protecting their rights and helping conserve the natural resources. On the part of the government, the regulators must use creative, and effective measures in protecting the environment and that they should implement more effectively regulatory safeguards already in place.

PHOTO DOCUMENTATION



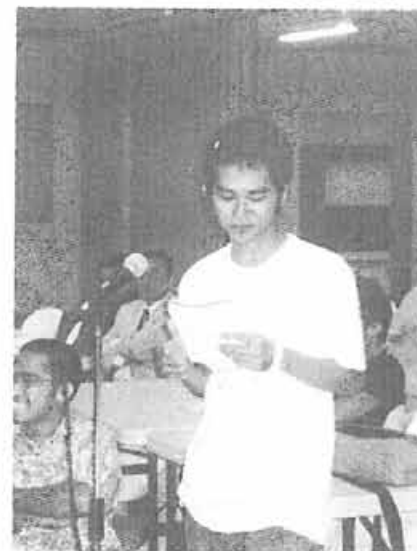
The half-day affair was attended by more than 150 participants. Members of the academe, policy-makers, government agencies and NGOs took part in the activity.



The resource persons: Atty. Rhia Muhi, Engr. Glen Noble, Engr. Rolando Peña and Engr. Rodolfo Velasco Jr.



The Speakers together with Dr. Maria Fe Mendoza, PGF Director; Dean Alex Brillantes; and Dr. Ebinezor Florano, the Forum Officer.



The presentations given by the resource persons were met with different reactions from the audience. Disagreements, suggestions, and alternatives were pointed out during the open forum.



The resource persons were given plaques of appreciation, tokens and publications of the College.



The members of the organizing team.



PRIMER

Compiled by Mr. Allan Grand A. Sobrepeña

"The Challenges and Prospects of Sustainable Mining in the Philippines"

I. Introduction on Sustainable Mining

- A. Definitions of Sustainable Mining
- B. Characteristics of Sustainable Mining in General
- C. Parties affected/ involved in Sustainable Mining

II. Sustainable Mining: The Case of the Philippines

- A. Backgrounder
- B. Current trends and practices in mining
- C. Benefits that can be derived from mining
- D. Negative effects of Mining to the population and community

III. Roles of Stakeholders

- A. Roles of the government in sustainable mining
- B. Roles of civil society group, NGOs and POs
- C. Roles of the business/ mining sector

IV. Possible Alternatives

- A. Adoption of Best Practices in Mining
- B. Setting up of mechanisms for a more holistic and tangible participation by concerned parties
- C. Adoption of international frameworks and standards
- D. Others

V. Summary and Conclusion

I. Introduction on Sustainable Mining

A. Definition

- **The Brundtland Commission** defines "sustainability, as the ability of the current generation to meet their own needs without compromising the ability of the future generations to meet their own needs".

This definition places much importance on the ability of the future generation to provide resources for themselves. This also implies that the present generation is obliged to put into consideration and think of the welfare and needs of the future generations. The future generations should be included in the present's decision-making.

- Sustainability is also defined as a "participatory process that creates and pursues a vision of community that respects and makes prudent use of all its resources- natural, human, human- created, social, cultural, scientific, etc". It ensures that the present generation enjoys a high degree of economic security, being able to realize democracy and popular participation in the control of their respective communities, while maintaining the integrity of the ecological systems, and while assuming responsibility to future generations to provide them with the where-with-all for their visions, hoping that they have the wisdom and intelligence to use what is provided in an appropriate manner".¹
- Dr. Patrick Moore, a former advocate for Greenpeace poses a seemingly similar definition. "Sustainability is not finding the ideal state that will last forever. It is about managing through the inevitable change so as to satisfy present day environmental, economic and social priorities while not foreclosing the options of future generations to do the same".
- There are three overarching goals of sustainability in general. They are economic prosperity; environmental health; and social equity.

These definitions of sustainability provides for a long-term view on sustainability in general. It puts stress and emphasis on the ability of the future generations to have access and utilize what the current generations are enjoying

Furthermore, these definitions did not call for preservation of natural resources per se; rather it asks for a more responsible and sustainable use of these.

B. Characteristics of Sustainable Mining in General

- Sustainable mining can be characterized as one wherein the "benefits derived from the extraction of minerals is continuously reinvested in other sustainable undertakings and in community support such as health services, education, cultures promotion, etc."²
- This means that profits derived from the mining industries be channeled or used in developmental programmes or projects whose beneficiaries would be the future generation. Furthermore, the "minerals industry can contribute to sustainable development for as long as mineral resources development is undertaken with the primary objective of maximizing environmental, economic and social benefits".³
- John Strongman, a Mining Advisor of the World Bank Group provides five key elements to sustainable mining development. He says that for mining to be sustainable, it has to be **financially viable; environmentally sound; socially responsible; implemented with sound governance; and it must bring lasting benefits especially to local communities**. This is very important if the mining company really wants to help in the effective and lasting poverty reduction and economic development at the local and regional levels.⁴
- In Australia, the Ecologically Sustainable Development Working Group on Mining has defined sustainable development for the mining sector as:

"...ensuring that the mineral raw materials needs of society are met, without compromising the ability either of future societies to meet their needs, or of the natural environment to sustain indefinitely the quality of environmental services (such as climate systems), biological diversity and ecological integrity". From the 'Ecologically Sustainable Development Working Group (ESDWG), Final Report - Mining', Australian Government Publishing Service, November 1991.
- In Canada, Natural Resources Canada (NRCAN) has defined sustainable development for the mining sector as:

"...finding, extracting, producing, adding-value to, using, re-using, recycling and, when necessary, disposing of mineral and metal products in the most efficient, competitive and environmentally responsible manner possible. NRCAN recognizes that these activities must be carried out in consultation with, and respecting the needs and values of, other resource users and maintaining or improving environmental quality for present and future generations."

- In the Philippines, the minerals industry, through RA 7942 or the Philippine Mining Act of 1995 adheres to the Brundtland Commission's definition of sustainable development. Furthermore, it is envisioned that the minerals industry

"shall alleviate rather than depress the economic conditions in the countryside; increase rather than decrease our mineral base through continuing mineral exploration; enhance rather than degrade the environment by managing the impacts of mining activities and the rehabilitation of mining affected lands to a productive state after mining and lengthen, through recycling and substitution, the usable life of mineral resources".⁵

- Mining, in addition, plays different roles in sustainable development.
 - It creates new wealth in terms of jobs and employment opportunities; government income in terms of taxes and it [may] serve[s] as a mechanism for economic development.
 - It serves as a provider for mineral-based resources to meet the society's basic material and energy needs and demands.
 - It has proven itself to be an indispensable tool for the advancement of civilization.

C. Actors Involved

The issues on the sustainability of mining may be considered to be disputed on by four major actors: (1) Government; (2) Mining Firms; (3) Community living in or near the extraction site, e.g., the indigenous peoples; and (4) Non-governmental organizations and civil society organizations

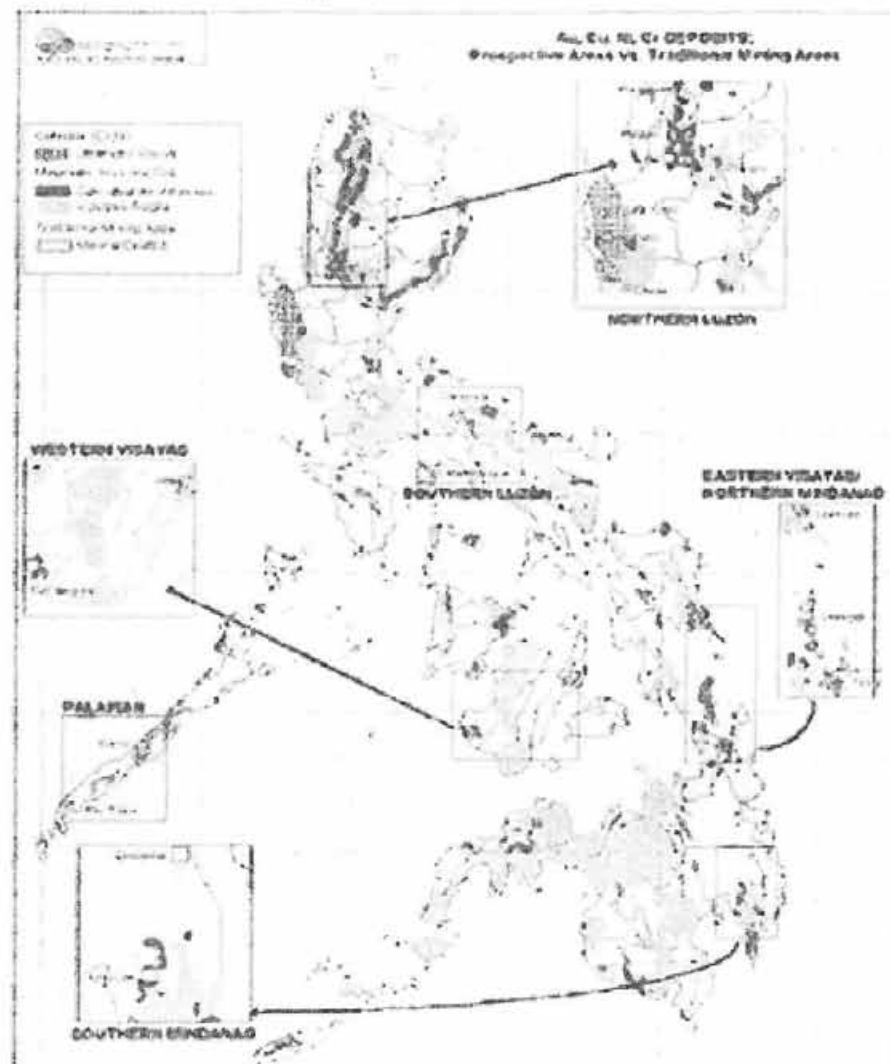
II. "Sustainable Mining": The Philippine Case

A. Background

- Mining in the Philippines is governed by the implementing rules and regulations (IRR) of RA 7942, more commonly called as the Philippine Mining Act of 1995. The Supreme Court ruling on the constitutionality of the Mining Act of 1995 has put a closure [legally] on this issue. Or has it?
- Senator Sergio Osmeña filed Senate Bill 295, which seeks to repeal RA 7942 in order to prevent large-scale mining companies to inflict further damage on the environment. Similarly, lawyers representing local/indigenous people still continue their legal battles by filing motion for reconsideration on the constitutionality of the Supreme Court ruling of December 2004.

- With the release of the Supreme Court ruling, came Executive Order 270, which placed mining as a flagship developmental program of the Arroyo administration. There was a policy shift from the previous passive stance—tolerance of mining, to a more active one—the promotion and placing of mining as one of the flagship programs for economic development.

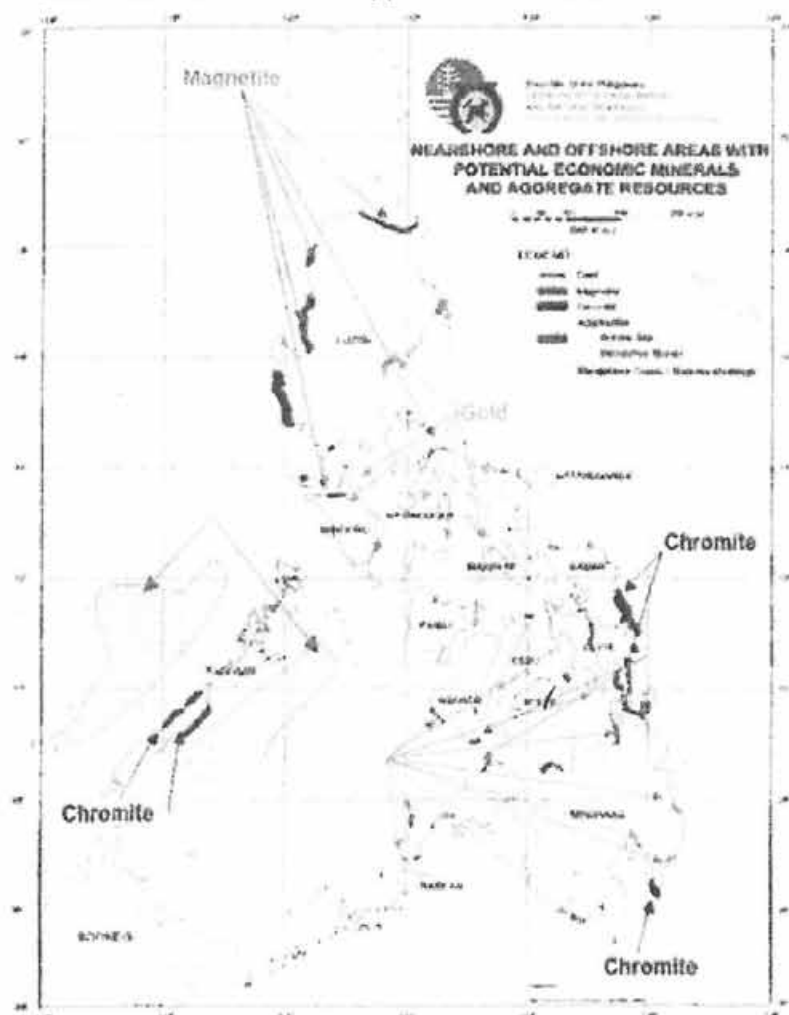
Areas in the Philippines with Potential for Metallic Mineralization



Source: Mines and Geosciences Bureau, DENR.

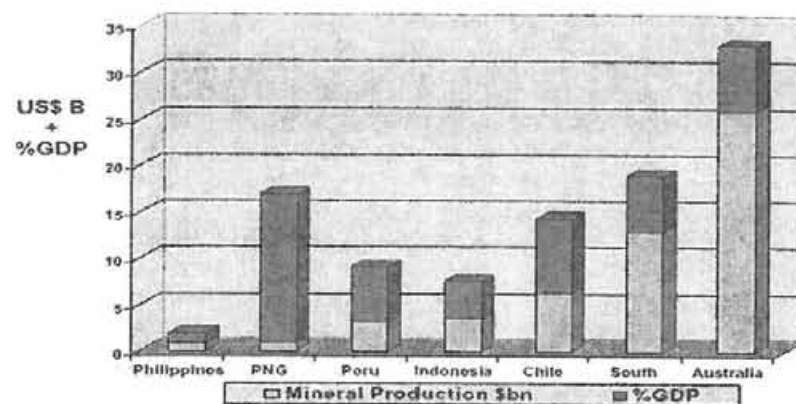
- The Philippines is a well-endowed country in terms of mineral resources. With its long history and experience in mining, it has demonstrated its very rich potential for copper, gold, nickel, chromite and other metallic minerals through the commercial operation of numerous mines. It is also abundant in non-metallic and industrial minerals such as marble, limestone, clay, feldspar, rock aggregates, dolomite, guano, and other quarry resources. In terms of endowment (minerals resources per unit area), the Philippines ranks 3rd in the world for gold, 4th for copper, 5th for nickel, 6th for chromite.

Offshore Areas In The Philippine With Potential For Minerals



Source: Mines and Geosciences Bureau, DENR

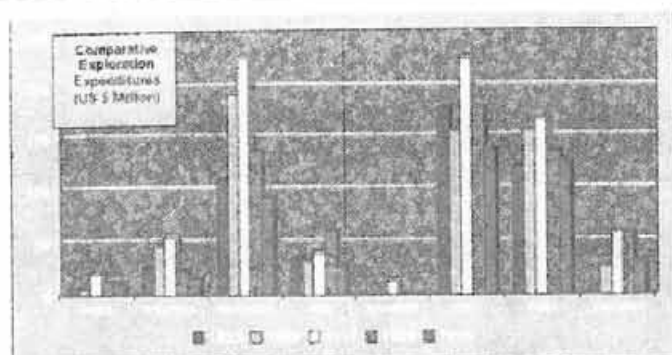
- The offshore area is another potential domain for mineral wealth of the country. The Philippine offshore area including the Exclusive Economic Zone (EEZ) covers a wide span of about 2.2 million square kilometers. By law, it is classified as a mineral reservation area by virtue of the 1987 Constitution. It is known to be potentially rich in placer minerals such as gold, chromite, magnetite and silica; polymetallic sulphide deposits containing gold, copper, cobalt, and other minerals; manganese nodules and encrustations with associated copper, gold, zinc, cobalt.



Source: Mines and Geosciences Bureau, DENR

Value of Mineral Production and GP

- The Philippine minerals industry is currently an industry below US\$ 1 Billion in annual sales (Figure 1) similar to Malaysia and Papua New Guinea, but lagging behind Indonesia (US\$ 3.6 Billion), Chile (US\$ 13 Billion) and Western Australia (US\$ 26 Billion). To make them useful to the economy, the rich mineral resources of the Philippines have to be explored and developed into commercial mines. However, there are not much local funds available for exploration investments.



Source: Mines and Geosciences Bureau, DENR

Comparative Exploration Expenditures (In US \$ Million)

- Over the past decade, and despite stiff competition with other countries for exploration funds, the Philippines has progressively expanded in exploration resulting in the discovery of a new generation of world-class high-profit potential deposits of gold and copper (about 1.5% copper equivalent) such as the Tampakan Copper Deposit, Far Southeast Copper Deposit, Boyungan Copper Prospect and many others. These deposits can be differentiated from previous discoveries which are low-grade and shallow-seated. They are relatively higher in value hence they can better absorb the social and environmental costs of mining.

B. Current Trends and Practices of Mining in the Philippines

There are three major modes of mining rights granted to mining companies: Exploration Permit (EP), Mineral Production Sharing Agreement (MPSA) and Financial or Technical Assistance Agreements (FTAA).

Major Modes of Mining Rights in the Philippine Mining Act of 1995

- Co-Production Agreement (CA)** – an agreement between the Government and the Contractor wherein the Government shall provide inputs to the mining operations other than the mineral resources.
- Joint Venture Agreement (JVA)** – an agreement where the Government and the Contractor organize a joint venture company with both parties having equity shares. Aside from earnings in equity, the Government shall be entitled to a share in the gross output.

- Financial or Technical Assistance Agreements (FTAA)** – a mining contract for large-scale exploration, development and utilization of minerals which allows up to 100% foreign equity participation/ownership.
- Sand and Gravel Permits** – are issued for the extraction, removal and disposition of sand and gravel and other loose or unconsolidated materials. Permits with areas not exceeding 5 hectares are issued by the Provincial Governor/City Mayor while those exceeding 5 hectares but not more than 20 hectares are issued by the MGB Regional Director. A Sand and Gravel Permit has a term of 5 years and renewable for like terms.
- Quarry Resources Permits** – In accordance with the Local Government Code of 1991, mining permits with areas not more than 5 hectares have been devolved to the Provincial Governor or the City Mayor for approval upon recommendation of the Provincial/City Mining Regulatory Board. These include the Quarry Permit, Guano Permit, Gratuitous Permit and Gemstone Gathering Permit.
- Small-Scale Mining Permits** – In consonance with the Local Government Code and RA No. 7076, small-scale mining permits are approved and issued by the City Mayor/Provincial Governor, upon recommendation of the Provincial/City Mining Regulatory Board.
- Mineral Processing Permit** – a permit granting the right to process minerals. It is issued by the DENR Secretary with a term of 5 years and renewable for like terms.
- Ore Transport Permit** – no minerals, mineral products and by-products shall be transported unless accompanied by an Ore Transport Permit. The OTP is issued by the MGB Regional Director concerned.
- The granting of mining rights are subject to certain qualifications and selection criteria.
 - **Qualified Person** – The Mining Act and its IRR specifically state that a mining permit or contract can only be granted to a **Qualified Person**, meaning, one must possess, among others, proofs of financial and technical capability as well as a satisfactory environmental management and community relation track record.
 - **Land Use Priorities** – Areas classified as closed to mining are automatically excluded from mining applications while applied areas in conflict with other land uses and not covered by the required area clearance are automatically excluded. Thus, the applied area is either reduced or in some cases, denied; and

- **Economic Feasibility** – It is not automatic that a mining contractor shall proceed immediately to development and commercial operation after it has completed exploration. The Mining Project Feasibility Study shall consider market, financial and technical factors relevant to the project as well as all the minimum expenditures for social and environmental.

TYPE OF MINING RIGHT	MAXIMUM AREA (hectares)	TERM	QUALIFIED PERSON	BENEFIT SHARING
Exploration Permit	32,000 onshore 81,000 offshore	2 years; renewable to a maximum of 8 years.	Individuals or Filipino or foreign corporations	none (research data collection)
Mineral Production Sharing Agreement	16,200 onshore 40,500 offshore	25 years; renewable for a like period	Individuals or Filipino corporations	40% company; 60% Govt.
Financial or Technical Assistance Agreement	81,000 onshore 324,000 offshore	25 years; renewable for a like period	Filipino or foreign corporations	40% company; 60% Govt. (to start after recovery of initial pre-operating expenses)

Source: Mines and Geosciences Bureau, DENR.

How Mining is conducted in the Philippines:

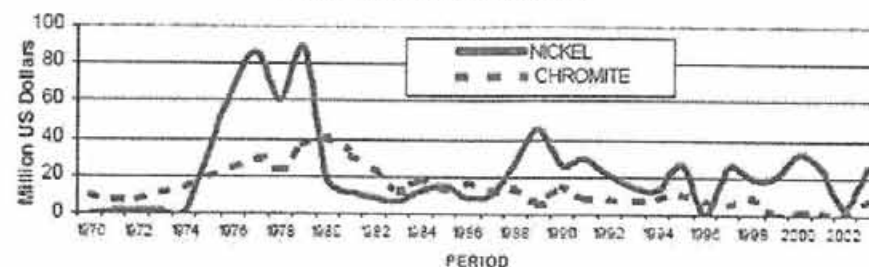
- Mining is a temporary land use for the creation of wealth, leading to an optimum land use in post-mining stage as consequence of progressive and engineered mine rehabilitation works done in cycle with mining operations;
- Mining activities must always be guided by current Best Practices in environmental management committed to reducing the impacts of mining while efficiently and effectively protecting the environment.
- Mining activities shall be undertaken with due and equal regard for economic and environmental considerations, as well as for health, safety, social and cultural concerns.
- Conservation of minerals is effected not only through technological efficiencies of mining operations but also through the recycling of mineral-based products, to effectively lengthen the usable life of mineral commodities.
- The granting of mining rights shall harmonize existing activities, policies and programs of the Government that directly or indirectly promote self-reliance, development and resource management. Activities, policies and programs that promote community-based, community-oriented and procedural development shall be encouraged, consistent with the principles of people empowerment and grassroots development.

C. Benefits Derived from Mining

1. Economic Benefits

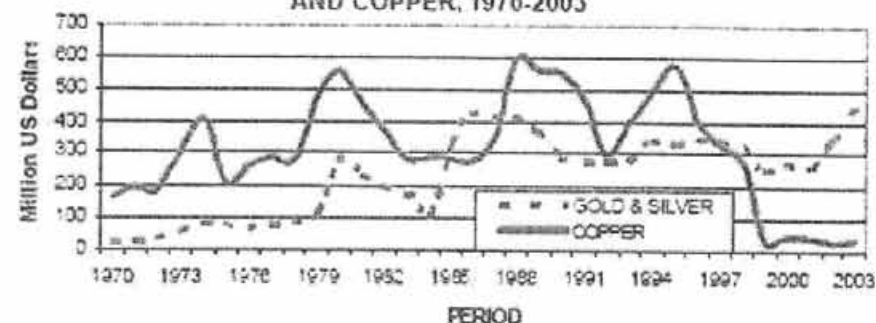
• Minerals Trading

EXPORT VALUES OF NICKEL AND CHROMITE, 1970-2003



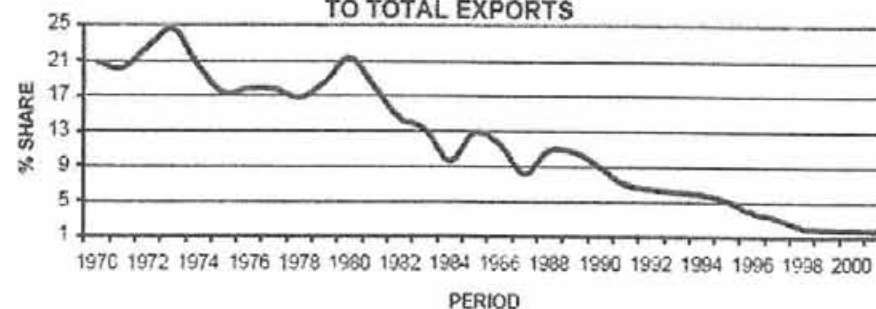
Source: Mines and Geosciences Bureau, DENR.

EXPORT VALUES OF GOLD & SILVER AND COPPER, 1970-2003



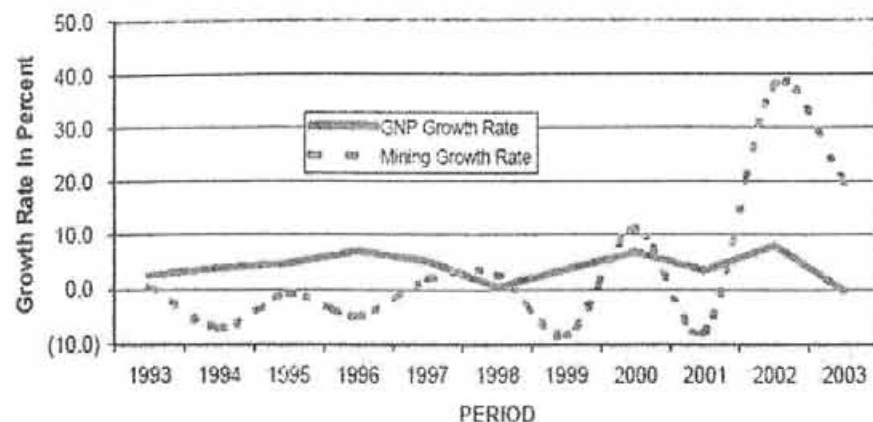
Source: Mines and Geosciences Bureau, DENR.

SHARE OF MINERAL EXPORTS TO TOTAL EXPORTS



Source: Mines and Geosciences Bureau, DENR.

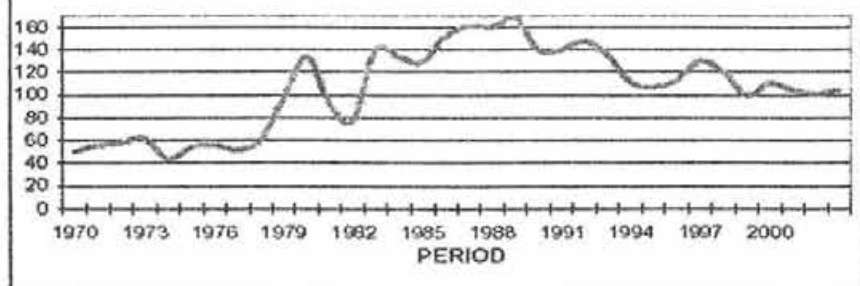
GNP AND MINING VALUE-ADDED GROWTH RATES, 1993-2003



Source: Mines and Geosciences Bureau, DENR.

• Job Creation/ employment opportunities

Mining is said to be not an employment intensive industry. This is attributed to its being dependent on large machineries especially for the big mining corporations. There are, however, still significant employment opportunities in mining. Local employment in the mining industry has been increasing in number since the revitalization of the mining industry. Furthermore, if its multiplier effect is taken into consideration, for every job generated in mining, four other jobs are also created outside it.

EMPLOYMENT IN MINING, 1970-2003
(In Thousands)

Source: Mines and Geosciences Bureau, DENR.

Employed Persons by Major Industry Group
January 2003 -October 2004
(in thousands)

Industry Group	Oct 2004	Jul 2004	Apr 2004	Jan 2004	Oct 2003	Jul 2003	Apr 2003	Jan 2003
Mining and Quarrying	96	114	138	123	101	112	105	99

Source: Mines and Geosciences Bureau, DENR.

Employed Persons by Major Industry Group
January 2004 -April 2006
(in thousands)

Industry Group	Apr 2006	Jan 2006	Oct 2005	Jul 2005	Apr 2005	Jan 2005
Agriculture	11,420	11,834	12,175	11,990	10,992	11,359
Agriculture, Hunting and Forestry	9,992	10,428	10,767	10,595	9,629	9,949
Fishing	1,427	1,405	1,407	1,395	1,363	1,410
Industry	5,236	4,882	4,886	4,999	5,236	4,977
Mining and Quarrying	174	120	116	111	135	129
Manufacturing	3,177	2,977	3,046	3,068	3,201	2,995
Electricity, Gas and Water	145	133	108	111	119	128

Source: Mines and Geosciences Bureau, DENR.

• Increase in National and Local Government Income [in terms of taxes]

- Income tax – 32% of taxable income or minimum of 3% of sales
- Value-added tax – 10% of value added
- Royalty on mineral reservation – 5% of gross output of minerals
- Capital gains tax – 10 to 20% of value
- Customs duties – rate is set by the Tariff & Customs Code
- Tax on interest payments of foreign loans – 15% of interest
- Tax on foreign stockholders dividends – 15% of dividend
- Documentary stamp tax – rate depends on transaction
- Other national taxes & fees
- Business tax – Rates vary among local governments
- Real property tax – 2% of the fair market value of the property based on an assessment level set by the local government during the year (plus a 1% special education levy)
- Registration fees – Rates depend on type and varies among local governments
- Occupation fees – P 50.00 per hectare per year. For mineral reservation areas, P 100.00 per hectare per year
- Community tax – Maximum of P 10,500.00 per year
- Other local taxes – Rate and type varies among local government

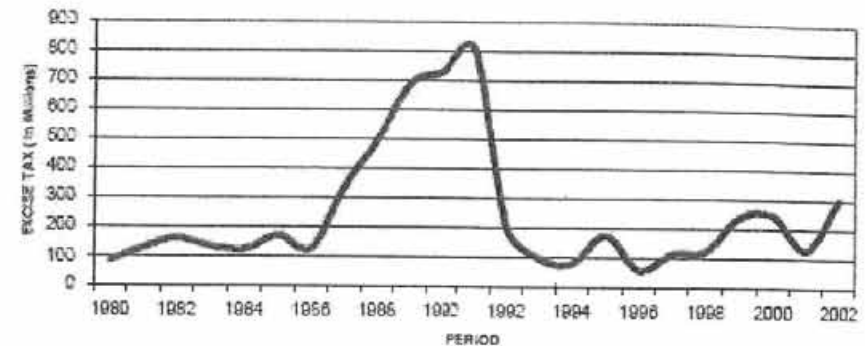
• Indirect taxes

- Fuel taxes
- Payments and fringe benefits of Filipinos directly employed
- Expenditures for development of host communities and for the development of geosciences and mining technology
- Withholding taxes on payroll, royalty payments to claim owners and surface owners and royalty payments for technology transfer

• Payments to certain individuals or groups

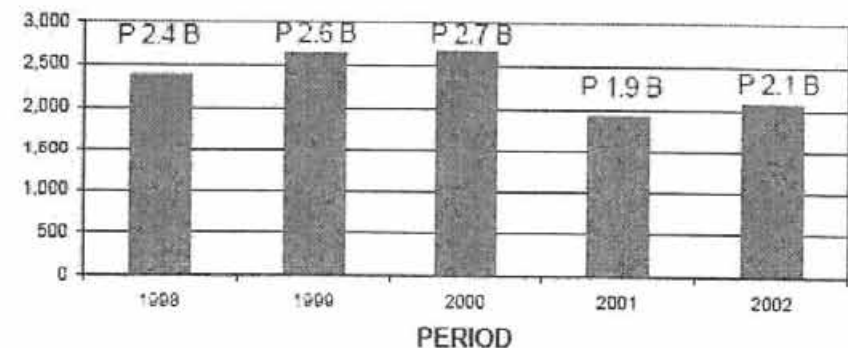
- Special allowance as defined by the Mining Act – one-time payment to surface / claim owners for the transition from PD 463 and EO 279 to the effectivity of the Mining Act
- Royalties to indigenous cultural communities – 1% of the gross output of minerals

EXCISE TAX ON MINERALS, 1980-2003



Source: Mines and Geosciences Bureau, DENR.

ESTIMATED TAXES & FEES FROM MINING

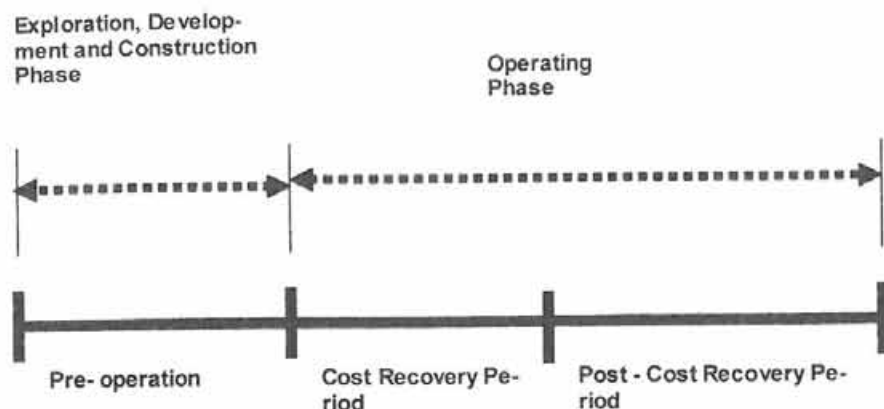


Source: Mines and Geosciences Bureau, DENR.

• Infrastructure development

It is said that the local mining communities are the ones who will greatly benefit from infrastructure development in mining projects. In order for the mining companies to efficiently extract and transport extracted minerals, they would have to create or improve road conditions in the area. Furthermore, the creation of health facilities, recreational facilities and other infrastructures for the companies' employees, can also be accessed by the affected local communities.

PHASES OF MINING PROJECT WHERE FINANCIAL BENEFITS ARE ENJOYED BY COMMUNITIES AND GOVERNMENT



Benefits Enjoyed

- Exploration expenditures
- Development and consultation expenditures
- Foreign exchange receipts
- Social infrastructure
- Development of geoscience/mine technology
- Employment
- Indirect taxes and fees

Benefits Foregone

- National taxes and fees

Benefits Enjoyed

- Foreign exchange benefits
- Social infrastructure
- Development of geoscience/mine technology
- Employment
- Local taxes and fees
- Indirect taxes and fees

Benefits Foregone

- National taxes and fees
- Additional government share

Benefits Enjoyed

- Foreign exchange receipts
- Social infrastructure
- Development of geoscience/mine technology
- Employment
- National taxes and fees
- Additional government share
- Local taxes and fees
- Indirect taxes and fees

Source: Mines and Geosciences Bureau, DENR.

ECONOMIC CONTRIBUTIONS OF THE MINERALS SECTOR (FY 2003)

<i>Production Value</i>	P 41.5 Billion or 19% increase from CY 2002
<i>Value Added Contributions</i>	P18.0 Billion or 1.6% Philippine GDP or 1.52% of Philippine GNP (CY 2003)
<i>Exports</i>	US\$638 Million or 1.8% of total Philippine exports
<i>Paid-up Investments</i>	P367 Million (CY 2002)
<i>Employment</i>	104, 000
<i>Wages and Benefits</i>	P4 to P5 Billion
<i>Taxes and Fees Estimate</i>	P 2.1 Billion (CY 2002)
<i>Multiplier Effect</i>	For each mining job 4 to 10 allied jobs upstream or dwnstream created

Source: Mines and Geosciences Bureau, DENR.

D. Negative effects of Mining to the society in general, and to the community in particular

- ❖ The negative effects of mining can be sub-divided into categories: **economic, environmental, and socio-cultural.**

Economic

- ❖ Contrary to claims that mining is a main driver for growth and industrialization, it was documented that the extraction and exploitation of minerals may lead or be the "cause of a lower-than-expected level in the economic growth of a country. Furthermore, natural resource exploitation can exacerbate conflict, corruption, weak governance and poverty. While investments in mining poured in, with an increase in more than 50% between 1995 and 2001, with equivalents of \$980 million to \$1.5 billion, mine production was still higher twenty years ago."⁶ It was even found out that countries who depended solely in their mineral industries are faring worse now than in the past.
- ❖ The inability of the mining industries to create jobs is also another reason why it is not a good driver for development. The increasing mechanization and improvements in the methods of mining brought about the decline in the use of manual labor in mining.
- ❖ Another issue being raised is the displacement of individuals who are engaged in farming, fishing and other local forms of employment. With the onset of mining operations, they are deprived of their former livelihood. Worse is that once the mines have stopped operating, they have nowhere to go

back to. This is because the farmlands and fishing areas are polluted. This displacement alone is one of the reasons why mining was said to be detrimental to development.

- ❖ Infrastructure development that was earlier considered as a positive effect of mining also has negative dimensions to it. Infrastructure development can bring certain problems:
 - Projects are very often heavily subsidized by the government and this causes the diversion of funds from other areas
 - The facilities are often under the control of the mining firm and more often than not, local people are denied access to these
 - The infrastructures created last only as long as the mining companies last
 - The existing infrastructures can be destroyed by the mining companies themselves
 - The improvements in transportation [roads, bridges, pavements] can encourage unregulated migration, resulting in land-grabbing from local communities and uncontrolled deforestation⁷

Environmental

- ❖ Mining is a highly extractive industry. Tons of earth have to be moved, treated and processed in order to get a small quantity of the mineral. Because of this, mountains and hills have been quarried and were destroyed. Furthermore, for cases wherein mineral deposits are found in mountains, forests have to be cleared first before mining operations can commence.
- ❖ In order to extract the minerals, in the ores, certain chemicals are being used. Cyanide, and mercury are the most often used chemicals. These chemicals are highly dangerous and toxic.
- ❖ A practice of mining companies in order to cut and defray costs is to improperly dispose of their waste. This has caused siltation and further destruction of farmlands. Also, the dumping of wastes in the sea or other river systems in or near the mining area causes pollution.
- ❖ There is also a channeling that takes place in water reservoirs. Water reserves are being used to clean mineral ores. For cases where there is water scarcity, this reserved water instead of being used by farmers for irrigation, is channeled for use of mining operations.
- ❖ After mines have stopped operation, what are usually left behind are grim images and landscapes of abandoned mine sites. Old mines can become reservoir of acidic mine water. So, even after the mining company has stopped its operation, mines may still be a cause of environmental hazards.

ENVIRONMENTAL IMPACTS OF MINERAL EXTRACTION	
ACTIVITY	POTENTIAL IMPACTS
Excavation and Ore Removal	<ul style="list-style-type: none"> • Destruction of plant and animal habitat, human settlements and other surface features • Land subsidence (underground mining) • Increased erosion; silting of lakes and streams • Waste generation (overburden) • Acid drainage (if ore or overburden contains sulfur compounds) and metal contamination of lakes, streams and groundwater
Ore Concentration	<ul style="list-style-type: none"> • Waste generation (mine tailings) • Organic chemical contamination (tailings often residues of chemicals in concentrators) • Acid drainage and metal contamination
Smelting/ Refining	<ul style="list-style-type: none"> • Air pollution (substances emitted can include sulfur dioxide, arsenic, lead, cadmium and other toxic substances) • Waste generation (slag) • Impacts of producing energy (most of the energy used in extracting minerals goes into smelting and refining)

Original Source: Goudie, Andrew, *The Human Impact on the Environment* (1993).

Socio-Cultural

- ❖ There is an increasing tendency of mining companies to by-pass the indigenous peoples in their mining decisions. At times, the free prior and informed consent principle is not taken into consideration. Mining operations often lead to direct assaults on the cultures of the indigenous peoples. Although there are legislations and laws clearly stating that there is a need to consider the welfare of any indigenous community. At times, the actions of mining corporations are opposing those that are in the Indigenous People's Rights Act.
- ❖ There are also certain nuisances in the implementation of the free prior and informed consent principle. At times, indigenous peoples are taken advantage of when it comes to this provision. Christian Aid and PIPLinks have documented instances and cases where this principle is said to be violated by mining corporations.
- ❖ In relation to the issue of indigenous peoples, their cultures are under assault. They are tied to their land, and removing them from their domains is taking something very important to them, not just because of its economic value, but also because of the age-old traditions and customs tied to it.

- ❖ In cases where there is resistance by the indigenous peoples concerned, they are being dealt with using the government's own instrumentalities—the police and the military. This further gives them or causes them insecurity.
- ❖ The increase in military presence in mining areas is also a cause for concern among many local inhabitants, both indigenous and not. There is always a looming threat making them unable to exert and push for the exercise of their rights.
- ❖ In Theodore Downing's study, he cites the World Bank's findings that "involuntary resettlement under development projects, if unmitigated, often gives rise to severe economic, social and environmental risks: productive systems are dismantled; people face impoverishment when their productive assets or income sources are lost; people are relocated to environments where their productive skills may be less applicable and the competition for resources greater; community institutions and social networks are weakened; kin groups are dispersed; and cultural identity, traditional authority, and the potential for mutual help are diminished or lost".⁸

SOCIAL, ECONOMIC, AND CULTURAL IMPACTS OF LARGE-SCALE MINING	
POTENTIAL IMPACT	AFFECTED SECTOR(S)
Communities and their sectors directly dependent on natural resources	<ul style="list-style-type: none"> • Farming Sector • Forestry Sector • Fisheries Sector • Small-Scale Mining Sector • Indigenous Peoples
Social and cultural repercussions of integrating the offices and operational units of a corporation owned and managed by people from urban centers as well as its labor force	<ul style="list-style-type: none"> • Host Communities and adjacent ones • Indigenous Peoples
Forced or involuntary relocation and many forms of social disruption caused by mining projects	<ul style="list-style-type: none"> • Host Communities and adjacent ones • Indigenous Peoples
Threatened indigenous political systems of indigenous communities as the management of their traditional domains are effectively turned over to the mining contractor	<ul style="list-style-type: none"> • Indigenous communities
Commercial mining operations impact on ancestral domain rights – mining interests enjoy unrestricted access & exploitation rights over mineral resources found in ancestral domain areas	<ul style="list-style-type: none"> • Indigenous communities

Original Source: Goudie, Andrew, *The Human Impact on the Environment* (1993).

III. Roles of Stakeholders

A. Government's Role

- ❖ The government's primary role is to balance things up. How can it tap the resources and revenues that the minerals sector can give, while at the same time, minimizing or removing the economic, socio-cultural and environmental costs tied to it? This role may seem to be difficult, but then again, it is the government's duty in the first place. It should act as the bridge linking the business community on one hand and the involved local people on the other.
- ❖ The government also plays a very important role in sustainable development. The government has the power and authority to make relevant laws. Because of this authority it may set the atmosphere in order for sustainability in mining to take place. Furthermore, it has the power to impose sanctions to those who do not follow state laws.
- ❖ Section 8 of the Philippine Mining Act of 1995 states that the Department of Environment and Natural Resources "shall be the primary government agency responsible for the conservation, management, development, and proper use of the State's mineral resources including those in reservations, watershed areas, and lands of the public domain."
- ❖ Sec. 67 of the Act further gives the government greater power. "The mines regional director shall, in consultation with the Environmental Management Bureau, forthwith or within such time as specified in his order, require the contractor to remedy any practice connected with mining or quarrying operations, which is not in accordance with safety and anti-pollution laws and regulations, which is not in accordance with safety and anti-pollution laws and regulations. In case of imminent danger to life or property, the mines regional director may summarily suspend the mining or quarrying operations until the danger is removed, or appropriate measures are taken by the contractor or permittee".
- ❖ The Executive Order 270 given by Pres. Gloria Arroyo made sustainability as a guiding principle of the Minerals Action Plan. It highlights protection of the environment, safeguard of the ecological integrity of areas affected by mining including biodiversity and small-island ecosystem, multiple land use and sustainable utilization of minerals.

B. Civil Society Roles

- ❖ Civil society's role basically is to serve as watchdogs guarding whether the government and the mining sector are doing their share of promoting and observing sustainability in mining. They serve as interest aggregators and

articulators demanding for tangible and effective mining policies that could lead to sustainability.

C. Mining Sector Roles

- ❖ The basic role that the mining sector should observe are the laws and rules spelled out in their agreements with the government and the other parties involved in mining i.e. indigenous peoples, mining communities, etc.
- ❖ To practice or promote sustainability for the mining sector, mining companies ought to police their own ranks, observing at least the minimum standard, if the best mining practice cannot be followed.
- ❖ The mining sector plays also a role in promoting development in the mining community. As such, it has the obligation to provide for alternatives to whatever damage or inconvenience it produces to the people in the community.
- ❖ The Mining industry has a potential role for poverty alleviation. Mining often constitutes a high percentage of foreign direct investments in developing countries.⁹ These investments if channeled properly to developmental projects may help the people directly or indirectly.
- ❖ Respect cultures, customs, and values of individuals and groups whose livelihoods may be affected by exploration, mining, and processing.
- ❖ Recognize local communities and other affected organizations and engage with them in an open, transparent, and effective process of consultation and communication, from exploration through production to closure.
- ❖ Assess the social, cultural, environmental, and economic impacts of proposed activities and engage with local communities and other affected organizations in the design of community development strategies.
- ❖ Contribute to and participate in the social, economic, and institutional development of the communities where operations are located, and encourage the establishment of sustainable local and regional business activities.
- ❖ Reduce to acceptable levels the adverse environmental and social impacts on communities of activities related to exploration, extraction, and closure of mining and processing facilities.
- ❖ Respect the authority of national and regional governments—take into account their development objectives, contribute information related to

mining and metals processing activities, and support the sharing of the economic benefits generated by operations.

IV. Recommendations*

Recommendations for the Government

- ❖ The presence of indigenous populations should be assumed unless proven and independently verified otherwise. Where indigenous people occupy an area, the full recognition of their rights should be given priority over negotiation with outside bodies over those rights.
- ❖ Companies and the government should respect the structure of decision-making, and the leaders of the community recognized by the legitimate local population and by neighboring communities.
- ❖ Where a mining proponent exists, clear procedures for public notification should be followed. Information about the project and consultation period should be posted widely and made available in local languages.
- ❖ Adequate time should be allowed to determine local opinion. This should be sufficient to allow for information dissemination and discussion – say six months.
- ❖ Information sharing and consultation with a community or indigenous people should be conducted and concluded in public, in an accessible place within the affected area.
- ❖ Where companies are found to have deliberately divided communities, this should be considered a basis for the denial or cancellation of a license.
- ❖ A local decision to reject mining should stand for a significant minimum period determined by all relevant stakeholders concerned. This would reduce the threat of persistent harassment.
- ❖ The deployment of military or paramilitary forces in an area prior to or during consultation should be minimized.
- ❖ To ensure that these provisions are satisfactorily complied with, a monitoring body which enjoys the confidence of all parties – especially the affected community – should report independently on the process.
- ❖ Any legal contests to the granting of a Certificate of Ancestral Domain Title should be secondary and should not cause the displacement of the indigenous community while the suit is pending.

- ❖ Government should decisively investigate and prosecute any reported human rights violations. As the UN Commission on Human Rights has no power to prosecute, a specific government agency should be given the power to do so in a permanent, rather than merely an ad-hoc, manner.
- ❖ The government should ensure that Strategic Lawsuits Against Public Participation – SLAPP Suits – lodged against community members opposing the entry of mining are quickly disposed of by the lower courts.
- ❖ It must ensure that environmentally critical areas – especially watershed areas – are closed to mining.
- ❖ It must ensure that food security is prioritized. Agricultural and fishing resources from which the community directly sources its food should be protected.

Investment Promotion**

- ❖ The government should encourage increased transparency and reporting of CSR practices of firms operating in the Philippines.
- ❖ The BOI may also consider presenting information regarding the CSR's enabling environment to potential investors.
- ❖ The government should keep a watching brief on the Extractive Industry Transparency Initiative.
- ❖ The government may wish to consider the merits of a new initiative from the Global Reporting Initiative which seeks to encourage greater public sector reporting.

For the Local Government

Stakeholders dialogue-Social Acceptance of mining projects*

- ❖ LGUs need to strengthen public communication and consultation procedures in all phases of mining stages.
- ❖ As a bridge between the community and the company, LGUs should develop standards to improve the method and quality of feedbacking information to all stakeholders concerned.
- ❖ LGUs should increase partnership agreements with mining companies during the Environmental Impact Assessment process.

Local Planning**

- ❖ LGUs should incorporate and integrate mining development plans in the development plans of local government units, if applicable.
- ❖ LGUs should have enhanced capacity in land-use planning, zoning and mapping technologies through cross-fertilization and the transfer of best practices in environmental and social management of mining projects.

Recommendations to the mining industry

- ❖ Companies should support improved regulation at both national and international level. Companies that operate ethically will benefit from minimum standards that prevent other companies undercutting them by following poor practice.
- ❖ The mining industry cannot disown its historical responsibilities. Communities live with the consequence of mining many years after a mining company has gone. Where mining has negatively and adversely affected the communities, those responsible should make full reparations.
- ❖ As a matter of policy, mining companies should desist from the use of paramilitary troops.
- ❖ Mining companies should recognize and respect the right to free, prior informed consent and the right of communities to say "no" to a mining project.
- ❖ Companies should operate to the same standards in other countries as they do in their home countries, except where host countries have higher standards – these should be respected. Home country governments should enforce these standards.

Others

International law should ensure that minimum environmental and social standards are made binding for all companies. This will prevent host countries lowering standards to attract investment.

There needs to be a radical shift in the investment regulation advice given to all developing countries. The international community, including the World Bank, is pressuring countries to reduce pro-poor regulations on foreign investment, such as legal requirements that foreign companies source goods and labor locally and reinvest a significant proportion of their profits. Individual countries find it very hard to resist this global trend.

International norms exist regarding minimum labor, environmental and human rights standards. The international community should develop these norms into binding laws with effective monitoring and sanctions imposed on offending companies. The development of effective and credible monitoring is a vital component of such a regime. Free-trade agreements sometimes include clauses that make the lowest national standard the norm, but the opposite – the highest national standards – should apply. National and local governments should have the right to impose even higher environmental and social standards if they wish.

Influential organizations, such as the World Bank and other donors, should stop putting pressure on client countries to attract investment by reducing protective regulation and offering incentives, thus encouraging a race-to-the-bottom. Rather they should persuade developing-country governments that without certain conditions in place, investment in mining and similar sectors will not lead to poverty alleviation, as the EIR indicates.

ENDNOTES:

¹ A. Warhurst. Sustainability indicators and sustainability performance management. March 2002. No. 43. p. 12.

² Statement of the Mines and Geosciences Bureau. DENR. www.mgb.gov.ph

³ Statement of the Mines and Geosciences Bureau. DENR. www.mgb.gov.ph

⁴ John Strongman. Sustainable Mining Development: From Concept to Action: A presentation made in the mining and the community II. Madang, Papua New Guinea. September 2002.

⁵ Statement of the Mines and Geosciences Bureau. DENR. www.mgb.gov.ph

⁶ Christian Aid and PIPLinks. Breaking promises, making profits: Mining in the Philippines. December 2004.

⁷ Christian Aid and PIPLinks. December 2004.

⁸ Theodore E. Downing. Avoiding new poverty: Mining-displacement and resettlement. (58). April 2002. IIED and WBCSD.

⁹ Striking a better balance. Annex #3. Industry's views. Vol 3. Extractive Industries Review Reports. World Bank.

* Taken from "Breaking promises, making profits. Christian AID and PIPLinks Report. December 2004.

** taken from "Strengthening Developing Country Government's Engagement with Corporate Social Responsibility. Colin Hubo, Julia Lewis, Michael Warner. January 2004.

REFERENCES:

Strongman, John. (September 2002). *Sustainable Mining Development: From Concept to Action*. A presentation made on Mining and the Community II. Madang, Papua New Guinea.

http://www.natural-resources.org/minerals/cd/docs/twb/Sust_Mining_Devt.pdf
Last accessed 9 October 2006

Hubo, Colin, et. al. (January 2004). *Strengthening Developing Country Government's Engagement with Corporate Social Responsibility*. World Bank.

http://siteresources.worldbank.org/INT/PSD/Resources/Philippines/Philippines_CSRFinalReport.pdf. Last accessed 9 October 2006

Breaking promises, making profits: Mining in the Philippines. (December 2004). A ChristianAID and PIPLinks Report.

www.piplinks.org/development_issues/philippines_report.pdf last accessed 9 October 2006

"Large- scale mining: Its environmental, social, economic, and cultural impacts in the Philippines". (June 2005) Community and habitat monograph series number 2. PRRM- CBIS.

<http://www.prrm.org/gmo2/mining.pdf> last accessed 9 October 2006

Warhurst, A. (March 2002). Sustainability indicators and sustainability performance management. Mining, minerals and sustainable development. (43).

http://www.iied.org/mmsd/mmsd_pdfs/finance_02_warhurst.PDF last accessed 9 October 2006

Downing, T. E. et. al. (April 2002). Indigenous peoples and mining encounters: Strategies and tactics. MMSD.(57).

Risk Asia Consulting Inc. (June 2006). Fool's gold: the false economic promises of the Lafayette mining in Rapu- Rapu. Greenpeace Southeast Asia.

<http://www.greenpeace.org/seasia/en/press/reports/fool-s-gold-the-false-economi> last accessed 9 October 2006.

Striking a better balance. Annex #3. Industry's views. Vol 3. Extractive Industries Review Reports. World Bank.

http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/ETOGMC_0,,contentMDK:20306686~menuPK:592071~pagePK:148956~piPK:216618~theSitePK:336930,00.html last accessed 9 October 2006

Labor and employment prospects in Philippine mining under the policies of industry revitalization, sustainable development and decent work. (February 2006). A think paper for the mining sector prepared for the 2006 National Manpower Summit. Institute for Labor Studies. Department of Labor and Employment.

<http://www.dole.gov.ph/nationalsummit/Mining%20Think%20Paper.pdf> last accessed 9 October 2006

Whiteman, G. and K. Mamen. (2002). Meaningful Consultation and Participation in the mining sector? A review of the consultation and participation of indigenous peoples within the international mining sector. North- South Institute.

http://www.nsi-ins.ca/english/pdf/lit_rev/lit_rev_ex_sum_eng.pdf last accessed 9 October 2006.

www.mgb.gov.ph last accessed 9 October 2006.