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16th Diliman Governance Forum

THE CHALLENGES AND PROSPECTS OF SUSTAINABLE MINING IN THE PHILIPPINES

11 October 2006
Assembly Hall
National College of Public Administration And Governance

Aide Memoire on the
16th DILIMAN GOVERNANCE FORUM on

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

11 October 2006, Wednesday, 1:00 pm- 5:00 pm
Assembly Hall, National College of Public Administration
University of the Philippines, Diliman, Quezon City

A. Introduction

Much 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?

B. Objectives

To shed light to these relevant policy questions, the UP National College of Public Administration and Governance organized this forum. Generally, the forum 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

C. Intended Outputs

At the end of the day, the forum on Sustainable Mining hopes to have helped raise the level of understanding of the relevant publics on the issues, lessons and complications of sustainable mining. The lessons that will be learned from this forum may be used to further enhance interactions between the concerned actors— the government, the people and the mining industry.

D. Programme

The programme of activities was as follows:

TIME	ACTIVITIES
1:00 – 1:30 pm	**Registration**
1:30 – 2:00 pm	**Film Showing**
2:00 – 2: 30 pm	**Opening Ceremonies** **Invocation** **National Anthem** **Opening Remarks** **Dr. Alex B. Brillantes Jr.** Dean, UP NCPAG Overview of the Philippine Governance Forum and Introduction of Speakers **Ms. Mars Mendoza** Fair Trade Alliance (FTA)
3:00 – 3:20 pm	**Usec. Demetrio L. Ignacio** Undersecretary Planning, Policy Research and Legislative Affair Department of Environment and Natural Resources (DENR)
3: 20 – 3:40 pm	**Engr. Rodolfo Velasco Jr.** Mines and Geosciences Bureau Department of Environment and Natural Resources (DENR)
3:40– 4:00 pm	**Atty. Marvic F. Leonen** Executive Director Legal Rights and Natural Resources Center- Kasama sa Kalikasan Vice President, UP and Professor, UP College of Law

4:00 – 4:15 pm	**Break/ Intermission**
4:15 – 4:45 pm	**Open Forum**
4:45 – 5:00 pm	**Synthesis** Dr. Ma. Fe V. Mendoza Project Coordinator, PGF Professor, UP NCPAG **Closing**
	Master of Ceremonies/ Moderator: **Dr. Ebinezer R. Florano** Forum Officer, PGF **Professor, UP NCPAG**

E. Participants

Some 160+ stakeholders from the business sector, civil society organizations, government, FDG partners, academe, donor community, media, indigenous peoples, and other sectors were invited to seriously commit themselves in this forum in order to help make mining in the Philippines sustainable.

F. Organizers

This forum on sustainable mining is organized under the GOP- UNDP Fostering Democratic Governance Programme, Philippine Governance Forum and is subscribed under the Diliman Governance Forum, by the National College of Public Administration and Governance, University of the Philippines, Fair Trade Alliance (FTA) and the United Nations Development Programme (UNDP).

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S P E A K E R S

ENGR. GLEN MARCELO NOBLE is Chief of the Mineral Economics, Information, and Public Division of the Department of Environment and Natural Resources (DENR). Engr. Noble has a degree in Metallurgical Engineering.

ENGR. RODOLFO VELASCO, JR. is Mining Engineer of the Mines and Geosciences Bureau (MGB) of the DENR. Engr. Velasco obtained a Diploma in Urban and Regional Planning from the University of the Philippines-School of Urban and Regional Planning (UP SURP) (2003). He has a bachelor's degree in Mining Engineering from the Mapua Institute of Technology (1977).

ENGR. ROLANDO PEÑA is Regional Director of the DENR. He is also Head of the Mining Investments Assistance Center.

ATTY. RHIA MUHI is a staff lawyer of the Legal Rights and Natural Resources Center – *Kasama sa Kalikasan* (LRNRC-KsK). Before working for LRNRC-KsK, Atty. Muhi was University Legal Counsel of the University of the Philippines-Diliman (2005), and Court Attorney of the Court of Appeals in Manila (2004-2005). She obtained her bachelor's degree in Law from U.P. Diliman (1999).

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WELCOME REMARKS AND INTRODUCTION OF SPEAKERS

Dr. Ma. Fe V. Mendoza

In behalf of UP-NCPAG Dean Alex B. Brillantes, Jr., Dr. Ma. Fe V. Mendoza welcomed the participants to the 16th DGF. Dr. Mendoza informed them that the DGF 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, impeachment of Pres. Gloria Arroyo, assessment of local governance in the Philippines, the Bangsa Moro issue, and most recently, trade on human terms.

According to Dr. Mendoza, the specific aims of the 16th DGF are to: provide understanding of the concept and complications of sustainable mining; debate on whether sustainable mining is an impossible or attainable development dream; analyze which factors, actors or conditions may facilitate or hinder sustainable mining; and recommend what can be done to address the challenges of sustainable mining.

The 16th DGF is dovetailed to the Philippine Governance Forum (PGF) which aims to provide a regular and bigger venue for a continuing consultation, discourse, dialogue, dissemination, exchange of ideas, interaction and consultation with the relevant publics on the activities, interventions, results and policy issues, concerns, reform initiatives, and recommendations of the 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.

Dr. Mendoza introduced the speakers, namely: Engineers Glen Marcelo Noble and Rodolfo Velasco, Jr., Director Rolando Peña, and Atty. Rhia Muhi.[1] But before their turns, Dr. Mendoza invited Rep. Nereus Acosta, who volunteered to give a short speech, to come up the stage to address the audience.

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[1] Engr. Noble and Atty. Muhi were not able to prepare papers for the forum. However, their PowerPoint presentations are attached in Annexes A and B.

INSPIRATIONAL SPEECH

Rep. Nereus H. Acosta

Mining should include the social cost and social heritage issues. Is there such a thing as sustainable mining? Maybe it is better to stop the use of the words “sustainable mining. The title of the forum which says “challenges and prospects” also gives the impression that we should really mine. We should be more careful on the use of words.

It is better to look at mining and the socials costs and community heritage. 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

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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 the selective logging and a logging ban in ecologically fragile areas ensure 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:

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.

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.

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.

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 modem mining shall not be allowed to proceed."

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, there are eight (8) inland mineralized areas and all offshore areas of the archipelago that 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 (2) 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 real contributions to the economic growth and general welfare of the country while the contractor expects a reasonable return N 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 kinds of SAG permit are commercial SAG permit, industrial SAG permit, exclusive SAG permit, government gratuitous permit and private gratuitous permit.
c4 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 formulation 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 ~10 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 provide for life-of-mine environmental protection and at the same time ensuring 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 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:

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.

Protection and rehabilitation of the environment using best practices and focused on the life-of-mine management of the environment and safety and health impacts associated to every stage of a mining operation.

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,

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.

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 and implementing better approaches to manage environmental protection and social development of modern mining.

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 and the public in general, 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.

Be value-added. 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.

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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 final 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 (6) years and eight (8) years, respectively, for non-metallic and metallic mineral exploration. This was reduced to four (4) and six (6) 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 (2) 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 the 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 Governemnt 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 (3)- 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, 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 grave. induding 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 DAD 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 DAD 2003-46 and further amended by DAD 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 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 was 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, FTAAs, 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 team, which may be increased when national interest and public welfare so require.

Chapter XXIV: Cancellation, Revocation and Termination of Mining Permit/Mineral Agreement/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, under the permits or agreements; and
Violation of existing laws, policies, and rules and regulations.

Government to Undertake Mining Operations – Upon cancellation/revocation or termination of a mining permit/MA/ FTAA, the mining area covered thereby 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 ay for the revitalization of the mineral industry in the context of responsible lining.

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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 creates 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, mining does 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 its 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. It is only the *barangay* where a mining company exists that 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.

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Challenges and Lessons Learned on the Forum on Sustainable Mining

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 has to be moved, and these still have to be treated with various toxic chemicals in order to extract a small amount of the mineral.

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 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 mineral 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.

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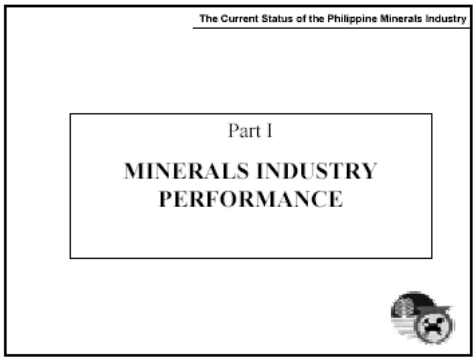
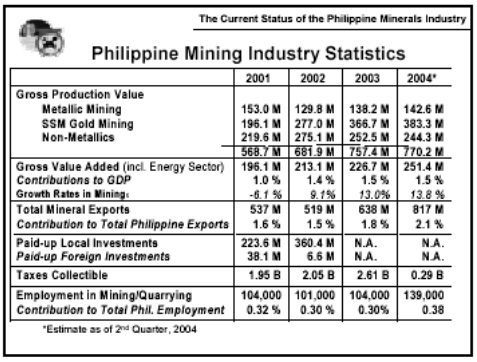
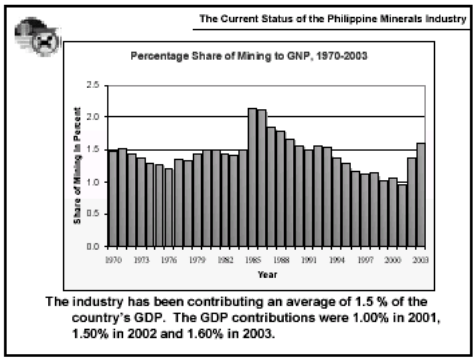
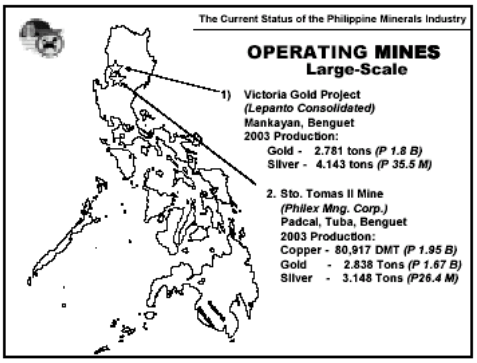
Annex A
"The Current Status of the Philippines Mineral Industry"
Engr. Rolando Peña

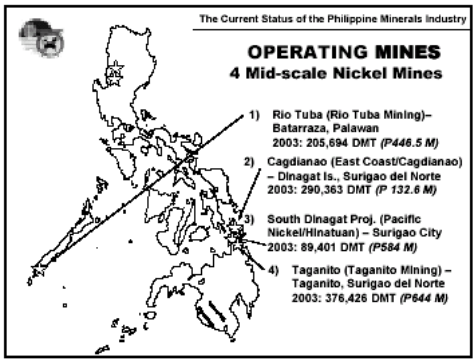




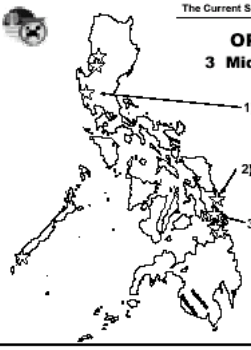
	2001	2002	2003	2004*
Gross Production Value				
Metallic Mining	153.0 M	129.8 M	138.2 M	142.6 M
SSM Gold Mining	196.1 M	277.0 M	366.7 M	383.3 M
Non-Metallics	219.6 M	275.1 M	252.5 M	244.3 M
	568.7 M	681.9 M	757.4 M	770.2 M
Gross Value Added (incl. Energy Sector)	196.1 M	213.1 M	226.7 M	251.4 M
Contributions to GDP	1.0 %	1.4 %	1.5 %	1.5 %
Growth Rates in Mining	*-6.1 %*	*9.1%*	*13.0%*	*13.8 %*
Total Mineral Exports	537 M	519 M	638 M	817 M
Contribution to Total Philippine Exports	1.6 %	1.5 %	1.8 %	2.1 %
Paid-up Local Investments	223.6 M	360.4 M	N.A.	N.A.
Paid-up Foreign Investments	38.1 M	6.6 M	N.A.	N.A.
Taxes Collectible	1.95 B	2.05 B	2.61 B	0.29 B
Employment in Mining/Quarrying	104,000	101,000	104,000	139,000
Contribution to Total Phil. Employment	0.32 %	0.30 %	0.30%	0.38







OPERATING MINES
3 Mid-Scale Chromite Mines

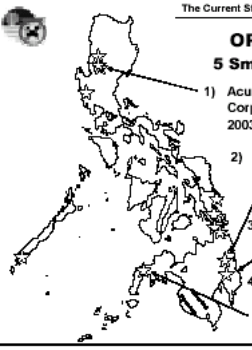


1) Masinloc (Benguet Corp.) – Masinloc, Zambales
2003: 13,219 DMT *(P 96.0 M)*

2) Homonhon (Heritage) – Homonhom Is., Samar
2003: 20,559 DMT *(P 21.9 M)*

3) Omasdang Proj (Crau Minerals – Loreto, Dinagat Is.
(Temporary suspended operations)

OPERATING MINES
5 Small-Scale Gold mines



1) Acupan Contract Mining (Benguet Corp) – Itogon, Benguet
2003: Gold - 56 Kg *(P 35.1 M)*
Silver - 8 kg *(P 0.67 M)*

2) Banahaw Mining (Philsaga) – Agusan del Norte
2003: Gold 547 Kg *(P 342.2 M)*
Silver 45 Kg *(P 0.27 M)*

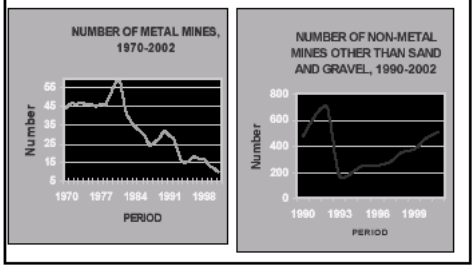
3) Diwalwal (NRMDC) – Monkayo, Davao del Norte
2003: 41 Kg *(P 24.5 M)*

4) Canatuan (TVI) – Zamboanga del Norte
2003: Gold 96 Kg *(P 62.3 M)*
Silver 2.23 Tons *(P 19.4 M)*

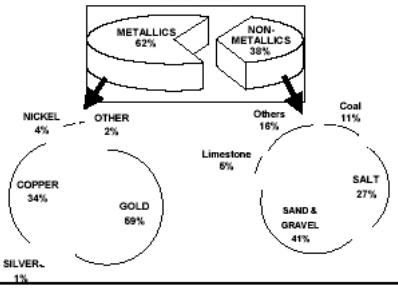
OTHER OPERATING MINES

- 16 cement plants and quarries
- 80 small to medium-scale limestone quarries 90 rock aggregate quarries and crushing plant
- 245 sand and gravel quarries with industrial permits
- 9 slaked lime producers
- 22 small to medium-scale marble quarries; and
- More than 2,000 quarries and small-scale mines of various commodities

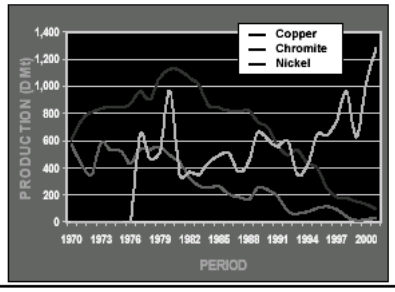
HISTORICAL VARIATIONS OF THE NUMBER OF MINES IN THE PHILIPPINES

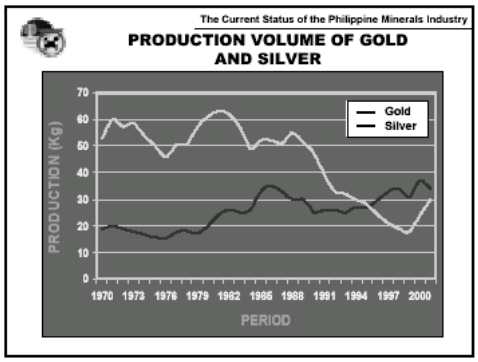


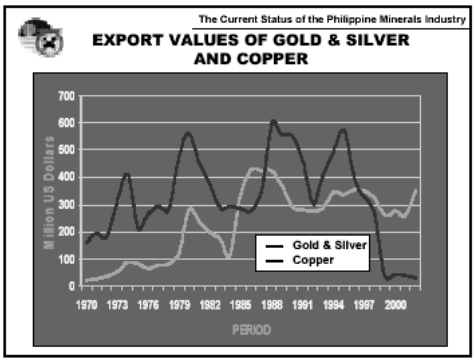
MINERAL PRODUCTION VALUE, 1979-2002

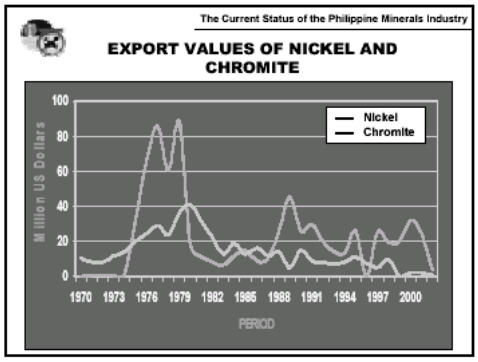


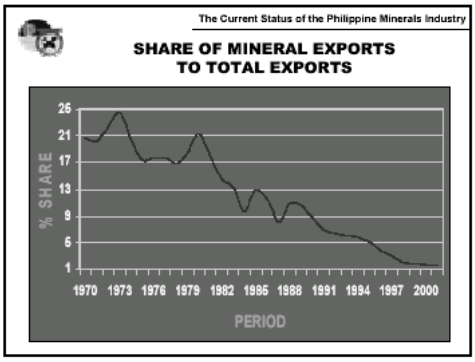
PRODUCTION VOLUME OF COPPER, CHROMITE AND NICKEL



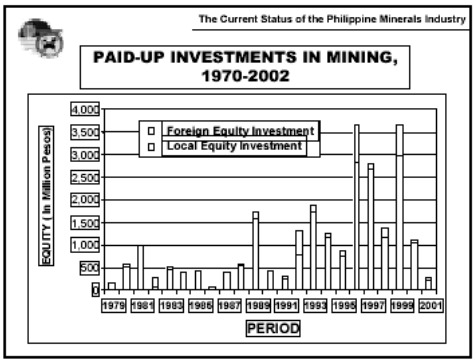

The Current Status of the Philippine Minerals Industry
PRODUCTION VOLUME OF GOLD AND SILVER
PRODUCTION (Kg)
Gold
Silver
PERIOD


The Current Status of the Philippine Minerals Industry
EXPORT VALUES OF GOLD & SILVER AND COPPER
Million US Dollars
Gold & Silver
Copper
PERIOD

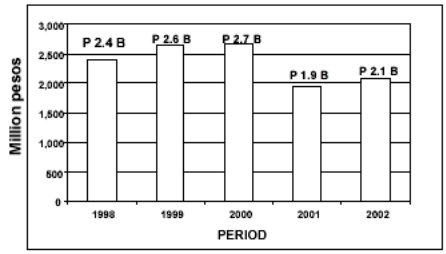

The Current Status of the Philippine Minerals Industry
EXPORT VALUES OF NICKEL AND CHROMITE
Million US Dollars
Nickel
Chromite
PERIOD


The Current Status of the Philippine Minerals Industry
SHARE OF MINERAL EXPORTS TO TOTAL EXPORTS
% SHARE
PERIOD

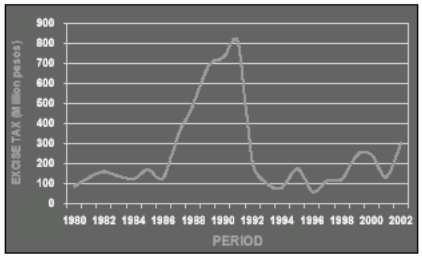

The Current Status of the Philippine Minerals Industry
EMPLOYMENT IN MINING, 1970-2002 (In Thousands)
Number employed (x 1000)
PERIOD


The Current Status of the Philippine Minerals Industry
PAID-UP INVESTMENTS IN MINING, 1970-2002
EQUITY (In Million Pesos)
Foreign Equity Investment
Local Equity Investment
PERIOD

ESTIMATED TAXES & FEES FROM MINING



EXCISE TAX ON MINERALS, 1980-2002



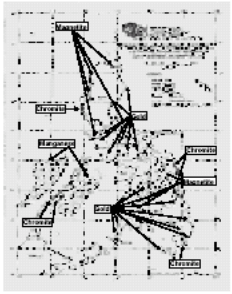
MINE DEVELOPMENT AND EXPLORATION PROJECTS

Mineral resources potential.... *1*

Onshore:

- Only 1.4% of Phil. land area (30 million hectares) is covered by mining permits
- 9 million hectares more of potential sites for metallic minerals
- 5 million hectares for non-metallic minerals
- Resources valued at roughly US$ 90 Billion for 23 projects representing 10% of possible total resource.

Mineral resources potential.... *2*



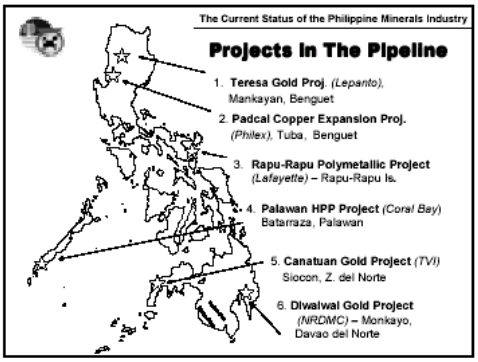
Offshore:

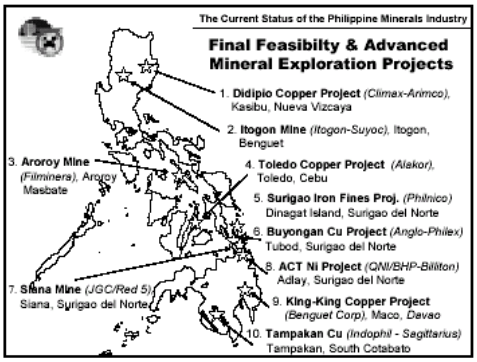
- Within Exclusive Economic Zone (EEZ) of 2.2 million km²
- Potential minerals:
  - Marine sand & gravel and decorative stones
  - Manganese nodules w/copper, gold, zinc & cobalt

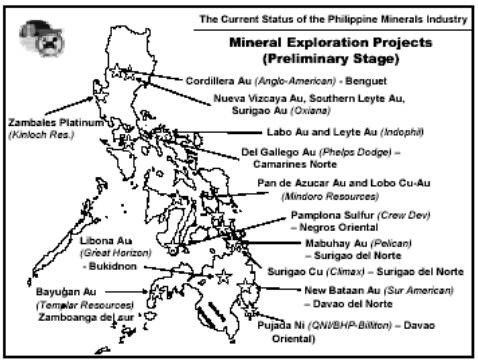
Number of Mining Rights Issued by National Government

TYPE OF MINING RIGHT	NUMBER	AREA
Mineral Production Sharing Agreements (MPSA)	206	340,537 has.
Exploration Permits (EP)	13	54,177 has.
Financial or Technical Assistance Agreements (FTAA)	2	51,955 has.
Lease Contracts/Patents	310	67,199 has.
TOTAL *(As of 30 June 2004)*	531	513,868has.

The total area covered by these existing mining rights is 1.5% of the total land area of the Philippines.







NEW OPERATING MINES

PROJECT/ COMPANY/ LOCATION	STATUS	
1. South Dinagat Nickel Project	Location: Dinagat, Surigao del Norte MPSA: Pacific Nickel Operator: Hinatuan Mining	Started operations on March 2003 Started shipment of Nickel ore in August 2003 valued at P 71 M
2. Canatuan Gold Proj.	Location: Canatuan, Zamboanga del Norte MPSA: TVI Resources	Plant attained 100 TPD capacity by end of 2003 On-going expansion for a 250 Tons/Day operations.
3. Diwalwal Direct State Dev't Project	Location: Monkayo, Davao del Norte Manual production at 100 tons per day	Manual production @ 100 TPD. Total Gov't share as of 22 Dec. 2003 at 52.9 kgs. Valued at PhP 31.97 M.

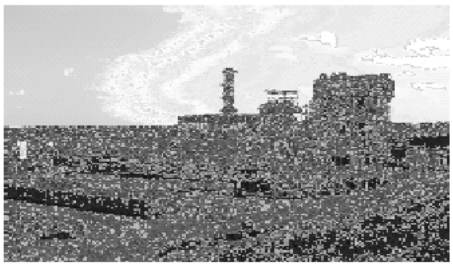
UPDATES ON SOME ON-GOING DEVELOPMENT PROJECTS

A. RIO TUBA NICKEL PROCESSING PLANT

- **A US$ 180-million High-Pressure Acid Leach (HPAL) nickel processing plant in Bataraza, Palawan by Coral Bay Nickel Corporation *(a joint-venture company between Sumitomo Mining Corp., Mitsui Co., Ltd. and Nissho Iwai Corp. of Japan and Rio Tuba Nickel Mining Corp. of the Phil.)***
- **Currently on-going debugging/trial operations. Scheduled full operation by end of 2004.**
- **Low-grade Nickel ores to be supplied by Rio Tuba Nickel, with sufficient ore reserves good for 20-years of operations.**
- **Projected to bring in Gross Revenues of US$ 53 Million/Year with employment generation of 250 direct employees and about 1,000 indirect employees.**

CORAL BAY NICKEL PROJECT
Bataraza, Palawan

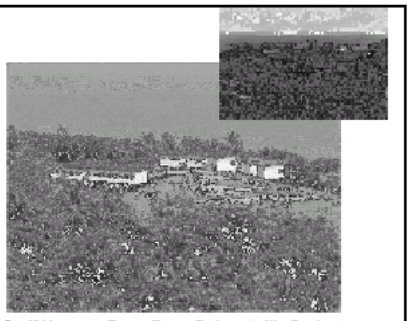
PALAWAN NICKEL PROJECT
High-Pressure Acid Leach (HPAL) Plant



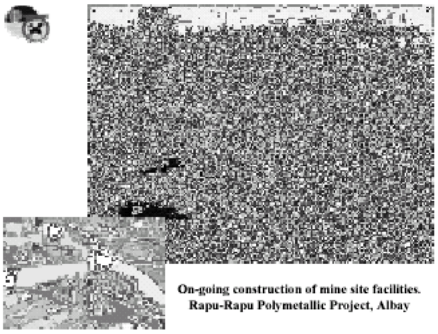
UPDATES ON SOME ON-GOING DEVELOPMENT PROJECTS

B. RAPU-RAPU POLYMETALLIC PROJECT
(Lafayette Mining, Ltd. of Australia)

- **A US$ 42 million gold-silver-copper-zinc project of Lafayette Philippines, Inc. in Rapu Rapu Island, Albay which will generate an annual US$ 48 million in foreign exchange and US$ 7 million in taxes. It is expected to employ 420 regular employees.**
- **It has secured all necessary government permits and on-going construction and development of mine and plant facilities.**
- **Planned mining operations to commence in 1st Quarter 2005 with Gross Sales of US$ 64 Million/Year**



Staff Houses, Rapu-Rapu Polymetallic Project, Rapu-Rapu Island, Albay



On-going construction of mine site facilities. Rapu-Rapu Polymetallic Project, Albay

UPDATES ON SOME ON-GOING DEVELOPMENT PROJECTS

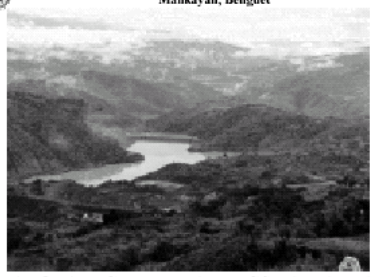
TERESA GOLD PROJECT
(Lepanto Consolidated Mining Corp.)

- **A US$ 80 million gold-silver project of Lepanto Consolidated in Mankayan, Benguet with a projected mine life of 7 years and annual gross revenues of US$ 60 Million;**
- **Construction and development currently on-going, with some initial production since April 2004**

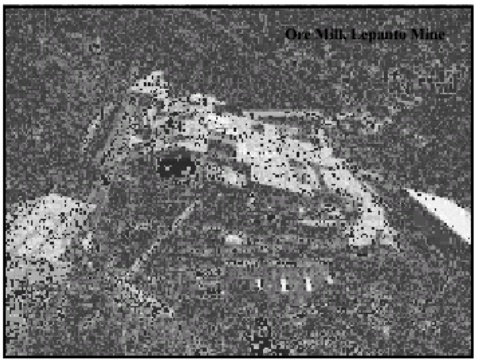
CANATUAN GOLD PROJECT
(TVI Inc.)

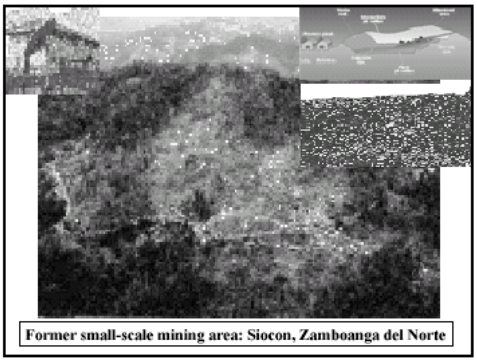
- **A US$ 7.4 Million gold-silver project in Siocon, Zamboanga del Norte envisioned to transform the former small-scale mining area into a medium-scale modern mine with estimated annual gross sales of US$ 50 Million/Year;**
- **Currently expanding milling capacity from 100 Tons/Day to 250 Tons/Day by October 2004, and to 800 Tons/Day by 2005.**

TERESA GOLD PROJECT
Mankayan, Benguet



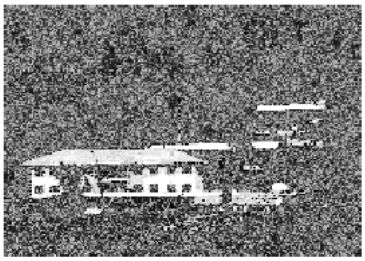
PANORAMIC VIEW, TAILINGS DAM AREA

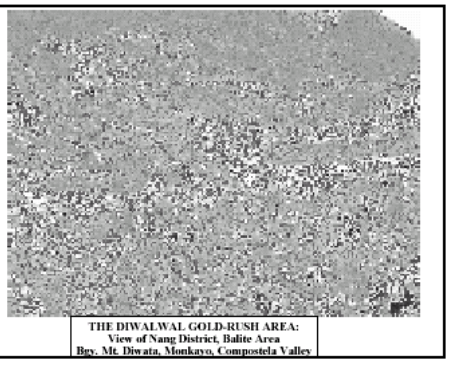




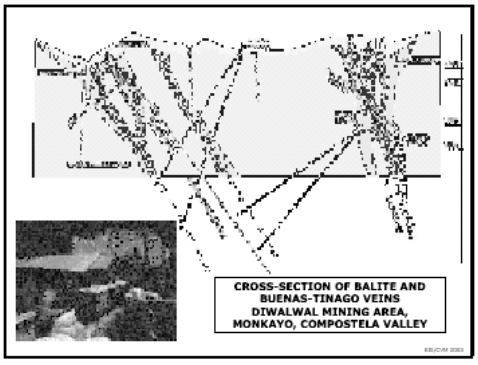
Former small-scale mining area: Siocon, Zamboanga del Norte

STAFF HOUSES AND WAREHOUSE FACILITIES,
TVI'S CANATUAN GOLD PROJECT





THE DIWALWAL GOLD-RUSH AREA:
View of Nang District, Balite Area
Bgy. Mt. Diwata, Monkayo, Compostela Valley



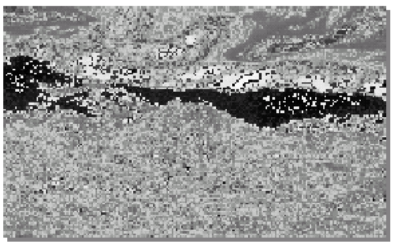
CROSS-SECTION OF BALITE AND
BUENAS-TINAGO VEINS
DIWALWAL MINING AREA,
MONKAYO, COMPOSTELA VALLEY

UPDATES ON SOME ON-GOING DEVELOPMENT PROJECTS

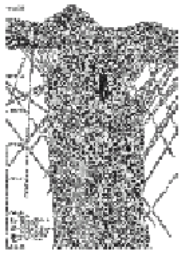
E. DIDIPIO COPPER-GOLD PROJECT
(Climax Mining Co., Ltd. of Australia)

- **A US$ 133 million copper-gold mining project located in Kasibu, Nueva Vizcaya projected to produce 181,000 ounces gold-equivalent valued at US$ 69 million per year.**
- **It has already spent a total of PhP 3 Billion in exploration expenditures, including PhP 10 Million in occupation fees paid to local governments.**
- **A new feasibility and mine plan and design is now being completed for submission to and approval by the government.**
- **A legal problem has recently arisen with the filing of a case with the Supreme Court questioning the constitutionality/legality of the 100% foreign-owned Financial and Technical Assistance Agreement (FTAA) signed with the government in 1995.**

DIDIPIO COPPER-GOLD PROJECT
Kasibu, Nueva Vizcaya



Dinkidi Resources#



Resource * Category	Tonnes (000)	(g/t) Au eq	(g/t) Au	(%) Cu
Measured	75,868	1.45	0.88	0.42
Indicated	36,604	1.58	1.15	0.33
Inferred	8,456	1.43	1.06	0.28
Total	**120,928**	**1.49**	**0.97**	**0.39**

Contained Gold	3,770,000 oz
Contained Copper	470,000 tonnes
Contained Gold An Equivalent	5,790,000 oz

***Cut-off 0.5 g/t Au Eq**

#1998 estimate based on:
Gold Price US$330/OZ
Copper Price US$0.95/lb

UPDATES ON SOME ON-GOING MAJOR EXPLORATION PROJECTS

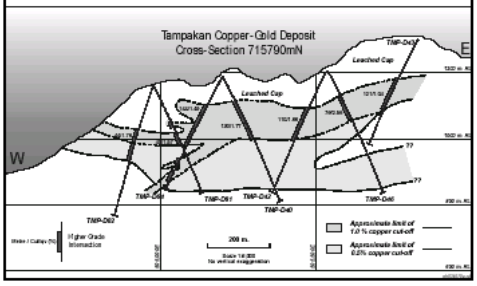
A. TAMPAKAN COPPER PROJECT, *South Cotabato*

- **A joint-venture project among Sagittarius Mines, Inc. and Indophil Resources of Australia *(A consortia of* Lion Selection, JP Morgan & HSBC);**
- **Current mineral resource figures of copper and gold with estimated value of US$ 23 Billion;**
- **Estimated capital investment requirement of US$ 1 Billion;**
- **Currently finalizing technical and bankable feasibility studies**

B. MASBATE GOLD PROJECT, *Aroroy, Masbate*

- **A US$ 26 Million project of Filminera Resources Corp., a joint venture between Thistle Mining *(Canada)*, President Mines *(S. Africa)*, & local investors, involving rehabilitation of old Atlas mine;**
- **On-going final bankable feasibility study of a possible 138,500 oz/yr.**

TAMPAKAN HIGH GRADE CROSS SECTION



AROROY GOLD PROJECT
Aroroy, Masbate
(Filminera Resources)

UPDATES ON SOME ON-GOING MAJOR EXPLORATION PROJECTS

C. BOYUNGAN COPPER-GOLD COPPER PROJECT

- A joint-venture copper-gold exploration in Surigao del Norte, byAnglo-American *(U.K.)* Philex Gold Phils., Inc.
- Initial mineral resource estimate of 15 Million ounces of copper-gold, with export potentials of more than US$ 500 million per year.

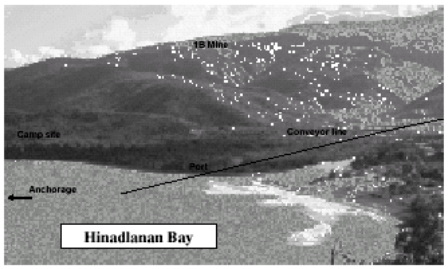
D. ADLAI-CADIANAO-TANDAWA (ACT) NICKEL PROJECT

- A US$ 15 Million Nickel prject in Surigao del Norte owned by Case Mining and Devt Corp and CTP Construction and Mining Corporation, w/ Operating Agreement with BHP/Queensland Nickel Ltd. of Australia.
- ECC granted. Final feasibility study and mine plan design being completed with construction scheduled in early 2005 and full production by 2006..
- Projected mine life of 17 years with est. gross sales of US$ 8 M/Year.

Panoramic View of the Philex-Boyongan Copper Project, Tubod-Mainit area, Surigao del Norte

View looking north

QNI/BHP ADLAY Nickel Project Claver, Surigao del Norte



UPDATES ON SOME ON-GOING MAJOR EXPLORATION PROJECTS

E. SIANA GOLD PROJECT, *Surigao del Norte*

- A gold exploration project of Greenstone Resources, Inc. and Red 5 Limited of Australia;
- Existing ore reserves of 825,000 ounces gold from previous mining operations;
- Additional drilling activities on-going.

F. CANATUAN GOLD COPPER PROJECT, *Siocon, Zamboanga del Norte*

- A US$ 3 million copper-gold-silver mining project of TVI Resources Development of Canada, with a potential to generate an annual US$ 4 million per year in foreign exchange
- Currently operating an 80-tons/day pilot plant to process ore tailings from small scale mining activities in the area.

LIST OF FOREIGN MINING COMPANIES CURRENTLY ACTIVE IN MINERALS EXPLORATION

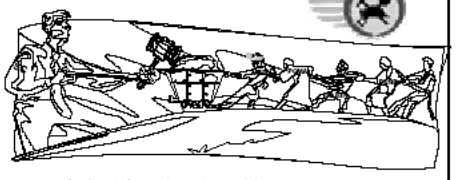
Company	*Project*	*Activities*
1. Anglo-American Exploration Pty. Ltd. *(London, England)*	Boyungan Copper – Gold Project *(Surigao del Norte)*	Drilling activities; Initial feasibility studies; Metallurgical ore testing
2. Indophil Resources/ MIM *(Australia)*	Tampakan Copper-Gold Project *(South Cotabato)*	Initial mineral reserves valued at $23 B; Feasibility Study
3. Queensland Nickel Ltd./BHP-Billiton *(Australia)*	Surigao Nickel Proj. Pujada Nickel Proj. *(Davao Or.)*	Feasibility Study Geological Mapping
4. Phelps Dodge Exploration Corp. *(U.S.)*	Camarines Proj. *(Camarines Sur)*	Drilling activities; Scanning other project areas

LIST OF FOREIGN MINING COMPANIES CURRENTLY ACTIVE IN MINERALS EXPLORATION

Company	*Project*	*Activities*
5. Red 5 Resources N.L. *(Australia)*	Siana Gold Proj. *(Surigao del Norte)*	Drilling activities; Feasibility Studies
6. Mindoro Resources, Ltd. (MRL) *(Canada)*	Lobo Copper Proj. Pan de Azucar *(Batangas & Iloilo)*	Initial drilling activities Geological surveys
7. Thistle Mining *(Canada)*	Aroroy Gold Proj. *(Masbate)*	Feasibility Study and mine-plan design
8. Climax Mining Ltd. *(Australia)*	Surigao Copper Proj. *(Surigao del Norte)*	Initial drilling activities Geological surveys

LIST OF FOREIGN MINING COMPANIES CURRENTLY ACTIVE IN MINERALS EXPLORATION

Company	*Project*	*Activities*
9. Kinloch Resources Inc *(Australia)*	Zambales Nickel-Platinum Proj. *(Zambales)*	Initial drilling activities Geological surveys
10. Crew Dev't. Corp. *(UK/Norway)*	Mindoro Nickel Negros Sulfur Proj. *(Negros Oriental)*	Drilling activities Pre-feasibility studies
11. Oxiana Resources *(Australia)*	Gold Exploration Projs. in *N. Vizcaya, Leyte and Surigao del Norte*	Geological surveys Preparation for drilling activities
12. Sur American Gold *(Australia)*	New Bataan Cu Prj. *(Davao del Norte)*	Initial drilling activities Geological surveys



For further information, please visit us at:

URL: www.mgb.gov.ph

Or contact us at: central@mgb.gov.ph

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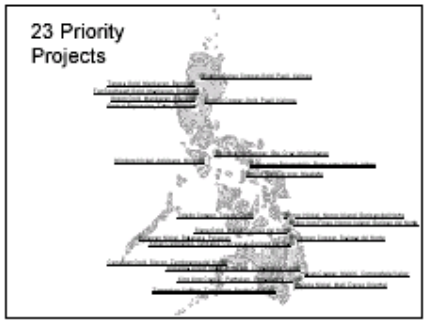
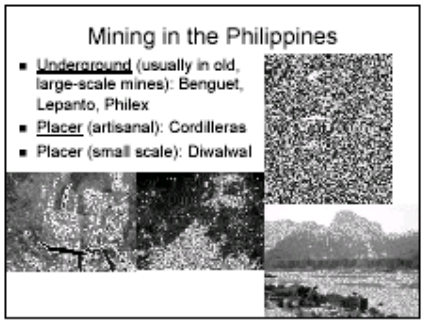
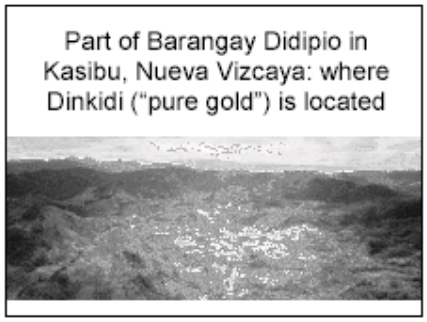
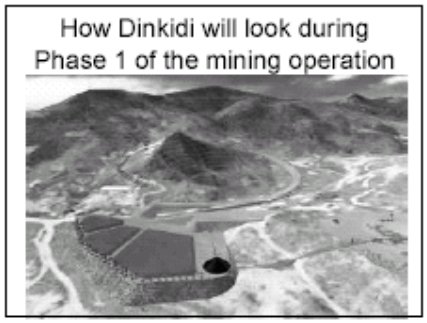
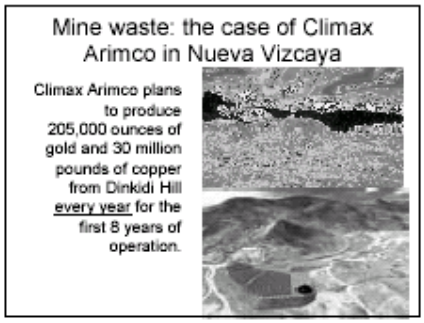
Annex B
"Philippine Mines"
Atty. Rhia Muhi



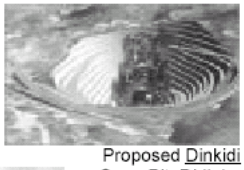








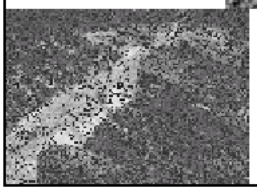
Open-Pit Mining in the Philippines



Lafayette in Rapu-Rapu Albay. A cyanide spill occurred here on Oct. 11 & 31,

Proposed Dinkidi Open Pit, Didipio, Kasibu, N.V. In July 2005, the Kasibu municipal council voted against mining. In August 2005, the provincial board overturned

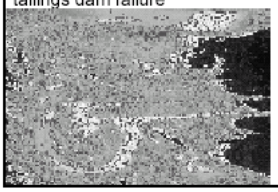
Canatuan Gold Siocon, Zamboanga del Norte



Canatuan Gold, Zamboanga del Norte. The mining company has successfully divided the indigenous Subanon over mining in the IP sacred Mt. Canatuan.

Open-Pit Mining in the Philippines

Marcopper, Marinduque. A major tailings dam failure



Tailings dams

CANATUAN in Zamboanga (gold)

KASHIPUR LAKE in India (aluminum)

ANTAMINA in Peru (copper)

Major tailings dam disasters in the Philippines

2002: DIZON COPPER SILVER MINES, SAN MARCELINO, ZAMBALES – overflow and spillway failure of 2 abandoned tailings dams after heavy rains: (Aug 27) tailings spilled into Mapanuepe Lake then into Sto. Tomas River; (Sept 11) low-lying villages flooded with mine waste; 250 families evacuated

April 26, 1999: MANILA MINING CORP., PLACER, SURIGAO DEL NORTE (gold) – 700,000 m^3 cyanide tailings spilled from damaged concrete pipe of tailings pond "due to excessive rains;" 17 homes buried, 51 has of rice land

Major tailings dam disasters in the Philippines

March 24, 1996: PLACER DOME INC., MARCOPPER, MARINDUQUE (copper) – 3 million m^3 of tailings released from storage pit through old drainage tunnel; 1,200 residents evacuated, 18 km of river filled with tailings

August 9, 1999: ATLAS. TOLEDO, CEBU (copper) – pressure in clogged drainage in an open pit loosened accumulated silt, releasing approx. 5.7 million m^3 of acidic water into the nearby river (Sapang Daku) and into the open

Major tailings dam disasters in the Philippines

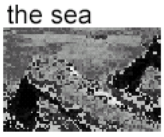
- December 8, 1995: PHILEX MINING CORP. (BULAWAN PROJECT), NEGROS OCCIDENTAL (gold) – failure of decant tower of pond exerted by impounded tailings
- September 2, 1995: MANILA MINING CORP., PLACER, SURIGAO DEL NORTE (gold) – tailings pond #5 collapsed "due to heavier than normal rainfall, wave action and tectonic movement," releasing 50,000 m^3 of tailings; 12 people killed, coastal pollution
- June 26, 1993: ITOGON-SUYOC MINES – overtopping at the height of a typhoon that clogged the dam's penstock and diversion tunnel

Major tailings dam disasters in the Philippines

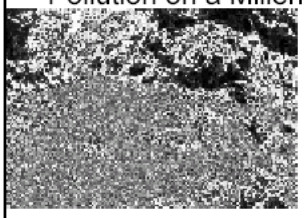
- January 1992: PHILEX MINING CORP., PADCAL, BENGUET (copper) – wall of tailings pond collapsed due to "weakened dam structure caused by 1990 earthquake," 80 M metric tons of tailings released
- October 17, 1986: LEPANTO CONSOLIDATED (gold) – tailings pond collapsed due to weakened dam embankment caused by additional loading
- November 8, 1982; MARINDUQUE MINING AND INDUSTRIAL CORP., SIPALAY, NEGROS OCCIDENTAL – dam failure due to slippage of foundation on clayey soil; 28 million metric tons of tailings released; resulted in widespread inundation of agricultural land up to 1.5 m high

Tailings dumped into the sea Marcopper-style

1971-1986: PLACER DOME AND MARCOPPER MINING – shallow marine disposal of 200 million metric tons into Calancan Bay, resulting in an area deposition of 80 has.



ACID MINE DRAINAGE: Pollution on a Millennial Scale



The Mogpog River, Marinduque Island. The red/orange color and Oxfam's scientific studies indicate acid mine drainage and contamination by heavy metals (Oxfam)

Acid mine drainage (AMD), or acid rock drainage, is the acidic water that drains out of above-ground or under-ground coal and metal mines. It may form inside the mine or several kilometers downstream.

ACID MINE DRAINAGE: Pollution on a Millennial Scale

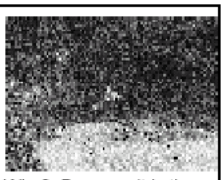
AMD can occur during mining operations or LONG AFTER A MINE HAS BEEN ABANDONED.

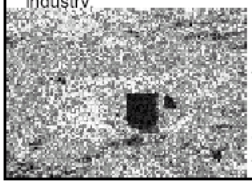
AMD impacts stream and river ecosystems by increasing acidity, depleting oxygen, and releasing heavy metals, such as aluminum, iron, manganese, and zinc.

Bags of mine waste tailings decomposing in the Boac River in March 2004 (Oxfam)

ACID MINE DRAINAGE

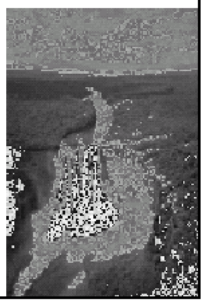
Acid mine drainage is one of the best-kept secrets of the mining industry.



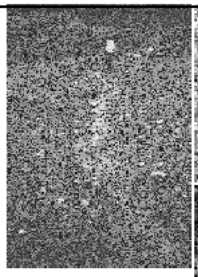


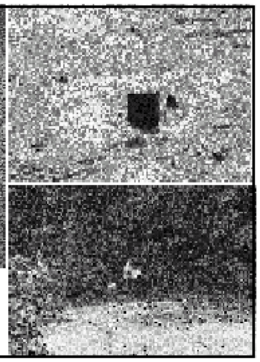
Why? Because it is the MOST DIFFICULT PROBLEM to solve. In fact, the industry has not yet found an effective solution to this problem which persists well into the future.

Impacts of ACID MINE DRAINAGE



AMD harms aquatic life by increasing turbidity. The suspended solids in AMD reduce the amount of light that can penetrate the water, thus affecting photosynthesis by aquatic plants and visibility for aquatic animals.

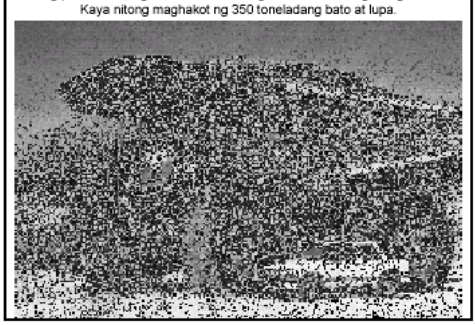




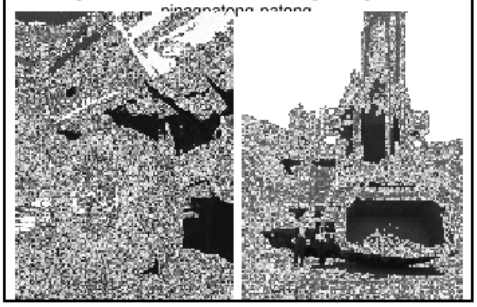
Turquoise indicates copper leaching;
red and yellow indicate iron sulfide

Cyanide and Gold

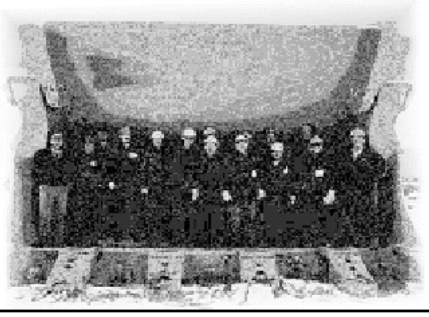
Ang pinakamaliking haul truck sa buong mundo sa tabi ng isang kotse.
Kaya nitong maghakot ng 350 toneladang bato at lupa.

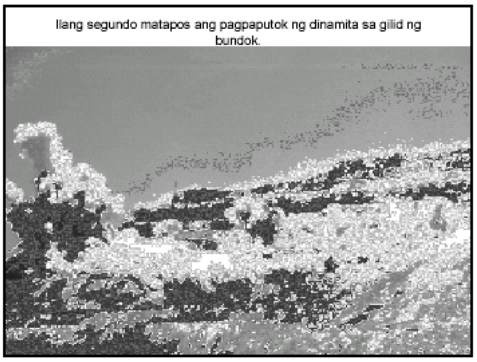


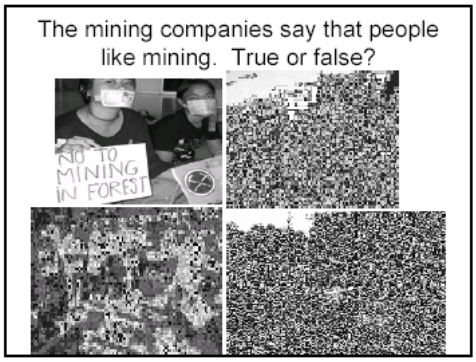
Ka kaliwa, driver sa tabi ng hauler truck. Sa kanan, isang electric shovel na kasintaas ng 4 na giraffe na



Ganito kalaki ang bucket ng electric shovel. Ilang tao ang kasya rito?

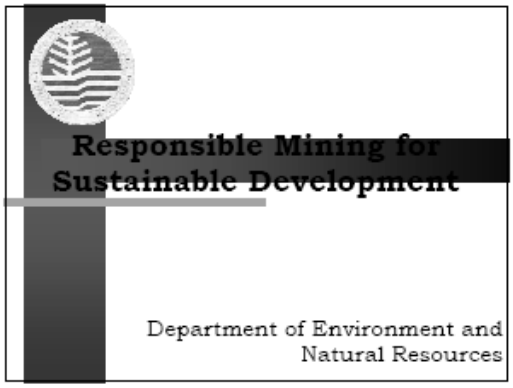


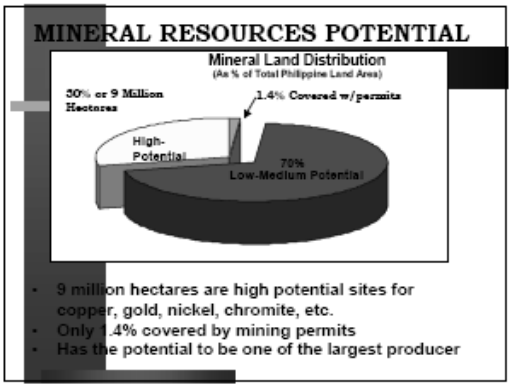

Ilang segundo matapos ang pagpaputok ng dinamita sa gilid ng bundok.

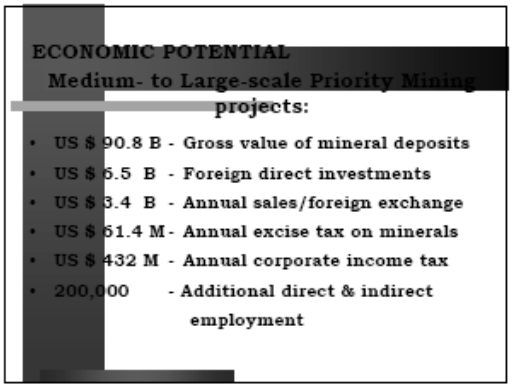

The mining companies say that people like mining. True or false?
NO TO MINING IN FOREST

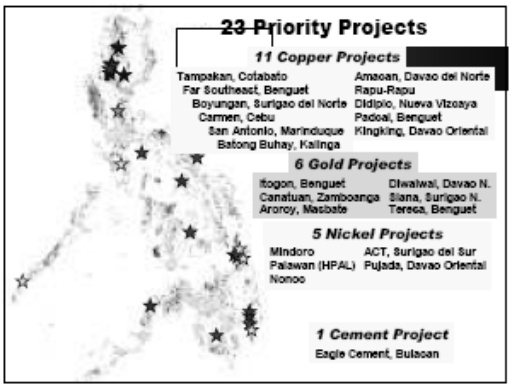
Annex C:

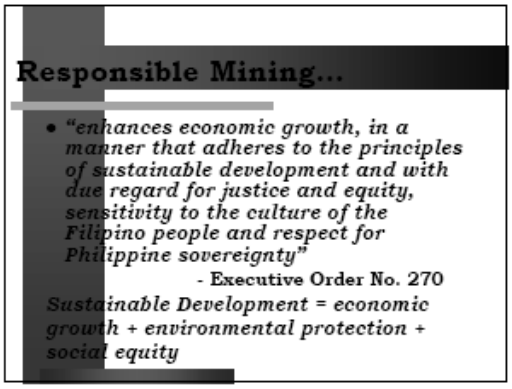
"Responsible Mining for Sustainable Development"
Engr. Glen Noble











Responsible Mining…

- *"…require good environmental stewardship in all activities, from exploration and processing to decommissioning and reclamation."* — United Nations*
- *"…includes actions at all levels to: support efforts to address the environmental, economic, health & social impacts & benefits of mining; enhance the participation of stakeholders; and foster sustainable mining practices… "* — WSSD**

Note:
*Mining and Environment Guidelines - Berlin 1991
**Paragraph 48 of WSSD Plan of Implementation

Responsible Mining…

- *"…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. "*

- Conservation International

Note:
Lightening the Lode: A Guide to Responsible Large-Scale Mining
by Amy Rosenfeld Sweeting and Andrea P. Clark
Conservation International, 2000

Parameters of Responsible Mining UN Guidelines

ECONOMIC

- Mining important to social, economic & material needs of society
- Avoid unnecessary environmental regulations that act as barriers to trade and investments
- Tax incentives for pollution reduction

Parameters of Responsible Mining UN Guidelines

ENVIRONMENTAL

- Environmental & economic considerations in the decision-making process
- Environmental impact assessments, risk analysis and risk management
- Best practices and environmentally sound technologies
- Environmental accountability
- Funding to improve environmental performance
- Clear environmental standards

Parameters of Responsible Mining UN Guidelines

SOCIAL

- Dialogues with stakeholders
- Social impact assessments

Economic Principles for Responsible Mining (EO 270)

- Critical role of investments
- Clear, stable & predictable investment & regulatory policies


Union Cement
La Union


Rio Tuba Nickel Processing Plant
Palawan

- Value-adding
- Promotion of small-scale mining as a formal sector
- Use of efficient technologies

Environmental Principles for Responsible Mining (EO 270)


Tampakan Exploration


Environmental Monitoring at Marcopper

- Protection of the environment
- Safeguarding the ecological integrity of areas affected by mining
- Multiple land use & sustainable utilization of minerals
- Remediation & rehabilitation of abandoned mines

Social Principles for Responsible Mining (EO 270)

- Equitable sharing of economic & social benefits
- Sustained IEC campaign & respect for the rights of IPs & communities
- Continuous & meaningful consultations with stakeholders


Padcal Mine, Benguet


Stakeholders training at Canatuan, Siocon

9-MONTH ENGAGEMENT PROCESS

14 Regional Consultations

3 Island-Cluster Workshops (Luzon, Visayas, Mindanao) (297 participants from key stakeholder groups)

3 Local Mine Visits

International Mine Visits to Canada, Australia & Peru

National Mining Conference (236 participants)

E.O. NO. 270 = POINTS OF CONVERGENCE

Executive Order No. 270

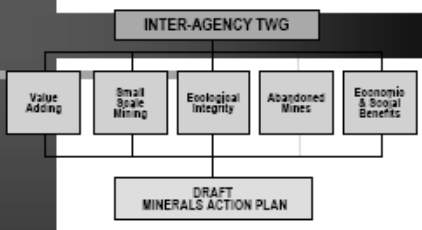
- Issued on 16 January 2004, with amendments on 20 April 2004 (containing stronger emphasis on IPs rights)
- Calls for formulation of Minerals Action Plan


Regional Mining Workshop Baguio

National Mining Conference December 2004

Minerals Action Plan

- Inter-agency formulation in consultation with industries and NGOs
- Contains 57 strategies & 126 activities to address the problems of mining
- Approved by the President thru MC No. 67 issued on 13 Sept. 2004



AGENCIES:

DENR, DTI, BOI, NEDA, DOST, NAPC, NCIP, DILG, DBM, DOF-BIR, LEAGUES, NRDC, PMS

More than 30 meetings over 5 months

Implementing Responsible Mining in the Philippines

ECONOMIC: Resource Management

- To promote rational use of mineral resources
  - Implement comprehensive mineral exploration program (DENR/EO 270)
    - Produced 1:50,000 geologic maps covering 40% of entire country
    - Inputs to geohazard maps

ECONOMIC: Resource Management

- To promote rational land use:
  - Support National Land Use Act
    - Authored by Cong. De Venecia, Fua, Acosta, Solis & Rosales
    - To be endorsed by LEDAC to Congress

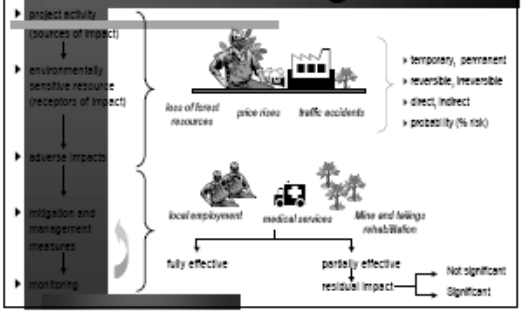
ECONOMIC: Resource Management

- To conserve mineral resources & ensure optimum use of mineral products
  - Develop downstream industries & promote value-adding, e.g. jewelry making, gold wires for semicon (EO 270)
    - Discussions with DTI/BOI and DOST ongoing
  - Promote use of efficient technologies, e.g. efficient gold recovery processes (EO 270)
    - Discussions with DOST ongoing

ENVIRONMENT

- To prevent/mitigate the negative impacts of mining
  - Identify possible impacts/measures on environment & biodiversity before operations (Mining Act/Phil. EIA Law)
    - Impacts & mitigating measures identified in Environmental Impact Assessment of mining company & Environmental Compliance Certificate (ECC) issued by DENR prior to mining operation

Environmental Impact Assessment & Management



ENVIRONMENT

- To ensure environmental protection upon operation & during the life of the mine
  - Environmental work program for exploration projects (Mining Act)
  - Protection and enhancement of environment during mine life through EPEP (Mining Act/ EO 270)
    - Reforestation/slope stabilization/control of waste dumps/watershed dev't/water conservation required in all mining projects
    - Multi-stakeholder approach to monitoring
    - Total EPEP budget = PhP14.3B (mining sector commitment)

ENVIRONMENT

- To ensure environmental protection upon operation & during the life of the mine
  - Sufficient funding to mitigate social and environmental impacts through the Contingent Liability and Rehabilitation Fund (CLRF)
    - Deposited in government depository banks under company's name but can only be withdrawn with approval of multi-stakeholder committee
    - Total Deposited = P 233.8 Million
    - Multi-stakeholder approach to monitoring

CLRF MANAGEMENT

CENTRAL OFFICE

CLRF STEERING COMMITTEE

MGB – Chair	Bureau of Soils and Water Management
EMB	Bureau of Plant and Industry
LMB	Bureau of Fisheries and Aquatic Resources
FMB	National Irrigation Administration

> Approves EPEP, payment of claims for compensation for damages, etc.

REGIONAL OFFICE

MINE REHABILITATION FUND COMMITTEE

MGB-RO/DENR-RO/ LGU/ NGO/PO/Church or Civic Org/ Mining Company

MULTIPARTITE MONITORING TEAM

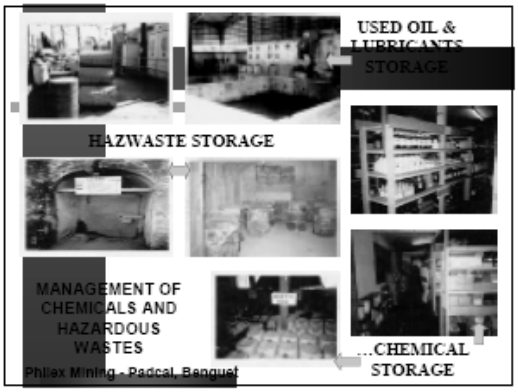
MGB-RO Company NGO
DENR-RO ICC/IP

ENVIRONMENT

Progressive Rehabilitation at Cagdianao Mining Corp, Surigao del Norte

Slope Stabilization at Atlas Mines, Cebu

Philex Mines
Padcal, Benguet



ENVIRONMENT

- To address environmental issues in existing/inactive problematic mines
  - Implement remediation measures (Mining Act/EO 270)
    - Dried up tailings pond of Maricalum planted with talahib, sugarcane cuttings and ipil-ipil to arrest dust pollution

Maricalum

Sipalay, Negros Occidental

MARICALUM TODAY

Marcopper

Boac, Marinduque

- Options for rehabilitation of Marcopper recently identified by USGS-led Team (funded from President's Social Fund):
  - Ensure integrity of certain infrastructure (e.g. silt dams, drainage tunnel
  - Neutralize and rehabilitate waste-dump sites to prevent acid generation
  - Clean-up remaining tailings in rivers and ensure safe storage
  - Conduct further study on health concerns

Status: Marcopper directed by DENR to immediately implement USGS recommendations

ENVIRONMENT

- To compel permit holders to continue proper care & maintenance for other inactive mines

Batong Buhay Gold Mine	–	Kalinga
Amacan Copper Project	–	Davao del Norte
Atok Gold Mine	–	Benguet
Barlo Copper Mine	–	Pangasinan
Itogon-Suyoc Gold Mines	–	Benguet
Manila Mining Copper Mine	–	Surigao del Norte
Philex Sibutad Gold Mine	–	Zamboanga del Norte
Phil. Iron Mines	–	Camarines Norte
United Paragon Gold Mine	–	Camarines Norte
Vulcan Gold Mine	–	Isabela
Hinatuan Chromite Mine	–	Eastern Samar

Status : DENR regularly monitoring these mines

ENVIRONMENT

- To address 7 abandoned mines:

(Responsible parties cannot be identified or are not financially/technically capable to undertake complete rehabilitation of mine sites)

Basay Copper Mine	–	Negros Oriental
Bagacay Pyrite Mine	–	Western Samar
Thanksgiving Gold Mine	–	Benguet
Black Mountain Cu Mine	–	Benguet
Consolidated Mine	–	Marinduque
Palawan Quick Silver Mine	–	Puerto Princesa
Boneng-Lobo Copper Mine	–	Benguet

- Old mining laws did not provide adequate requirements for mine rehabilitation
- 2 abandoned mines under the Privatization Mgmt. Office

Abandoned Mines in Pre-Mining Act Regime

BAGACAY MINES

ENVIRONMENT

ACTION PLAN FOR ABANDONED MINES

- Compel permit holders to undertake remediation/rehabilitation
- PMO and DENR will enter into a MOA by February 2005 to jointly address the 2 abandoned mines (Bagacay, Basay)
- Undertake clean-up of mines within 2005 (Priority: Bagacay) and conduct assessment for rehabilitation/redevelopment options (other uses)

ENVIRONMENT

- To prevent future abandonment
  - Approval of Mine Decommissioning Plan (MDP) 5 years before expected closure (Mining Act)
    - MDP ensures smooth transition from active mining operations to eventual closure
      - Formulated in consultation with stakeholders
      - Minimize social impact of mine closure on the community, LGU, employees, and dependents
      - Will transform the affected areas to alternative and final land use
      - Will ensure monitoring and maintenance fund for the next 10 years after mine closure

MINE DECOMMISSIONING

Bulawan Gold Project's reforested area in Sipalay, Negros Occidental

Mining is a temporary land-use

After: Crushing plant & wastewater facilities converted into a clubhouse and swimming pool

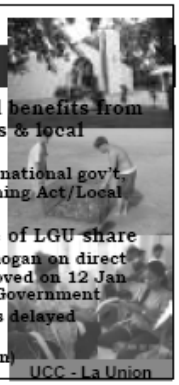
ENVIRONMENT

- To protect biodiversity
  - Mining in old-growth, virgin & mossy forests & other proclaimed protected areas (Mining Act/NIPAS)
    - Mining activities not permitted in protected areas and virgin forests.

ENVIRONMENT

- To protect biodiversity
  - Determine appropriate land use and incorporate biodiversity concerns through valuation tools (EO 270)
    - Valuation tools being developed by DENR in consultation with other stakeholders
    - For cost-benefit analysis

SOCIAL



- To ensure economic & social benefits from mining for host communities & local governments
  - Shares from mining accrue to national gov't, LGUs, Communities & IPs (Mining Act/Local Government Code)
- To ensure timely remittance of LGU share
  - House Bill 1445 by Cong. Domogan on direct remittance of LGU share approved on 12 Jan 2005 by Committee on Local Government
  - Endorsed by LEDAC to address delayed remittance
  - (Interim: Special GAA provision)

UCC - La Union

Benefits to Communities & Local Governments

- Share from the taxes and fees paid by contractors (Local Government Code)
  - Local taxes and fees
  - 40% of excise tax payment
  - 2003 excise tax : P156 M (P 62.5 M to LGUs)
    - US$ 24.5Million out of US$ 61.4 Million annual excise tax from 23 mining projects

Benefits to Communities & Local Governments

- Contributions covered by SDMP projects (Mining Act)
  - At least 1% of total annual mining & milling costs
  - Total private sector commitment of P 222 M from 27 approved SDMPs
- Direct financial contributions (voluntary)
  - Seed money for livelihood programs
  - Donations to various socio-economic and cultural activities

Thrust: To ensure sustainability of communities after mine closure

Benefits to Communities & Local Governments

- Royalty payments to IPs (Mining Act)
  - At least 1% of gross output (subject to negotiation with IPs)

SOCIAL DEV'T PROJECTS

Philex Mining – Padcal, Benguet

SOCIAL DEV'T PROJECTS


Rio Tuba Nickel Mining Corp. - Palawan

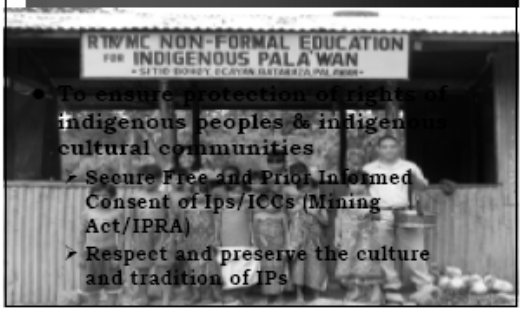
SOCIAL DEV'T PROJECTS



Taganito Mining, Surigao del Norte

South Western Cement Corp. (Malabuyoc, Cebu) built new houses for affected residents prior to mining operations.

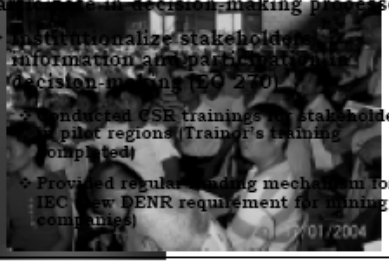
SOCIAL



- To ensure protection of rights of indigenous peoples & indigenous cultural communities
  - Secure Free and Prior Informed Consent of Ips/ICCs (Mining Act/IPRA)
  - Respect and preserve the culture and tradition of IPs

SOCIAL

- To empower stakeholders to effectively participate in decision-making processes
  - Institutionalize stakeholders' information and participation in decision-making (EO 270)
    - Conducted CSR trainings for stakeholders in pilot regions (Trainor's training completed)
    - Provided regular funding mechanism for IEC (new DENR requirement for mining companies)



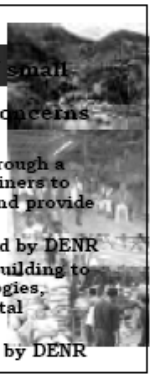
STAKEHOLDER CONSULTATION PROCESSES (Mandated)	Pre-Exploration	Exploration	Feasibility	Construction	Operation	Mine Closure
Declaration of Mineral Reservation / Minahang Bayan	■					
Consent of landowner, etc. prior to entry (Mining Act)		■				
FPIC of ICCs/IPs (Mining Act / IPRA)		■				
Prior consent of small-scale miners (Mining Act)		■				
LGU endorsement (Mining Act / Local Gov't. Code)		■				
EIA consultation (PD 1586 / LGC)		■	■			
Environmental and social monitoring (Mining Act / LGC)				■	■	■
SDMP formulation / implementation (Mining Act)				■	■	■
Mine Rehabilitation Plan formulation (Mining Act)					■	■

SOCIAL

- To strengthen capability of small scale miners to address environmental and social concerns and standards
  - Amend RA 7076 & PD 1899 through a Magna Carta for Small Scale Miners to enhance protection of rights and provide new benefits

    Status: Proposal being formulated by DENR
  - Conduct trainings/capability building to small scale miners on technologies, safety, health and environmental measures

    Status: Ongoing implementation by DENR



"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 the protection of the environment are the binding principles for a harmonious and progressive community."

THANK YOU

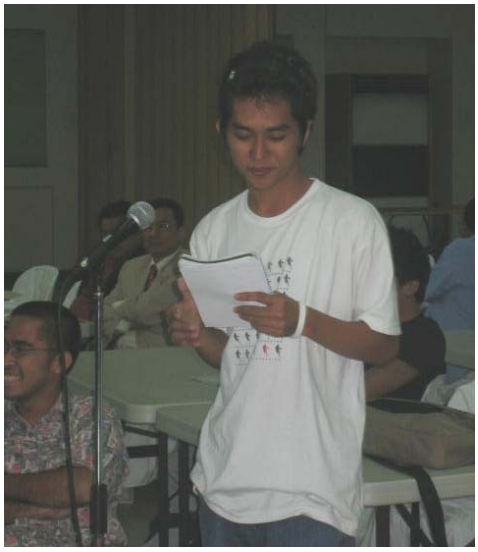
Department of Environment and Natural Resources

Annex C
PHOTO DOCUMENTATION

Some 200 participants, representing the different sectors, took part in the half day affair.

The panel of experts for the 16th Diliman Governance Forum. L-R: Atty. Rhia Muhi, Engr. Glen Noble, Engr. Rolando Peña and Engr. Rodolfo Velasco Jr.

The resource persons together with the organizers.



OPEN FORUM

Members of the audience ask the panel enlightening questions and also practical insights.

Annex D
O R G A N I Z E R S

Dr. Ma. Fe V. Mendoza
Philippine Governance Forum Project Coordinator

Dr. Ebinezer R. Florano
Forum Officer

Allan Grand Sobrepeña
Technical Staff

Julita M. Sanchez
Finance/Administrative Officer

Juvy Lizette M. Gervacio
Documentor

Eugene Antonio Dig
Prejean Prieto
Ushers

UP NCPAG Administrative Staff
Administrative Staff

S P O N S O R S

United Nations Development Programme (UNDP)-Philippines

and

U.P. National College of Public Administration and Governance