

MINES AND GEOSCIENCES BUREAU
Accomplishment Report
CY 2004

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Table of contents

I. HIGHLIGHTS OF ACCOMPLISHMENTS	1
A. PROMOTION OF INVESTMENTS IN MINERAL RESOURCE - REVITALIZATION OF THE MINERALS INDUSTRY.....	1
1. EXECUTIVE ORDER NO. 270, AS AMENDED, AND THE MINERALS ACTION PLAN.....	1
2. DEVELOPMENT OF MINING PROJECTS.....	2
3. POLICY INITIATIVES AND REFORMS.....	2
4. APPROVED MINERAL PRODUCTION SHARING AGREEMENTS (MPSAs), MINERAL PROCESSING PERMIT (MPP) AND EXPLORATION PERMITS.....	3
5. ONE-STOP SHOP COMMITTEE.....	4
B. MINE ENVIRONMENTAL PROTECTION AND REHABILITATION.....	4
1. MINING ENVIRONMENT AND PROTECTION PROGRAM.....	4
2. Resolution of Mining Issues.....	4
Marcopper tailings incident.....	4
De Oro Gold Rush Site.....	5
Compressor Mining in Paracale, Camarines Norte.....	5
C. MINE COMMUNITY DEVELOPMENT.....	6
1. SOCIAL DEVELOPMENT AND MANAGEMENT PROGRAMS (SDMPs).....	6
2. TECHNICAL ASSISTANCE TO SSM COMMUNITIES.....	6
D. APPLICATION OF GEOSCIENCES AND MINING/PROCESSING TECHNOLOGIES.....	6
1. GEOHAZARDS.....	6
2. GROUNDWATER ASSESSMENT.....	8
3. GEOLOGICAL ASSESSMENT OF SOLID WASTE DISPOSAL.....	9
4. QUADRANGLE GEOLOGIC MAPPING.....	9
5. MARINE AND COASTAL GEOLOGICAL RESOURCE ASSESSMENT.....	9
6. MINERAL RESERVATION PROJECTS.....	9
7. RESEARCH AND DEVELOPMENT.....	10
Strategic Minerals/Quarry Resources towards the Development of Downstream Industries.....	10
Value-adding of indigenous minerals.....	11
E. ADVOCACY AND INFORMATION, EDUCATION AND COMMUNICATION CAMPAIGNS.....	11
II OTHERS	12
INTERNATIONAL AND NATIONAL LINKAGES.....	12
1. CCOP.....	12
SPECIAL PROJECTS.....	12
1. RP-KOREA MINERAL EXPLORATION PROJECT.....	12
2. UNDP.....	12

I. Highlights of accomplishments

A. Promotion of Investments in Mineral Resource - Revitalization of the Minerals industry

On 27 January 2004, the Supreme Court declared as unconstitutional certain provisions of the Mining Act, in particular provisions allowing the 100 percent participation of foreigners to the large-scale exploration, development and utilization of the country's mineral resources. Further, the High Court also ruled as illegal the Financial or Technical Assistance Agreement (FTAA) signed by the Government with Western Mining Corp. Philippines.

The Government, through the Office of the Solicitor General, appealed the decision, citing the possible investments that the country may lose from the exploration, development and utilization of the country's mineral resources.

In a complete turnaround, on December 1, 2004, the Supreme Court reversed its earlier decision and ruled as constitutional provisions allowing foreign-owned corporations to engage in the large-scale mining operations in the country. The decision was welcomed by the business community, in particular the mining sector both local and foreign, since this will pave the way for the full revitalization of the minerals industry to boost the country's economy, and alleviate poverty.

1. EXECUTIVE ORDER NO. 270, AS AMENDED, AND THE MINERALS ACTION PLAN

After a nine-month engagement process initiated by DENR-MGB in 2003 involving various stakeholders as part of the social preparations for the Administration's revitalization program for the minerals industry, the President issued Executive Order No. 270, The National Policy Agenda on Revitalizing Mining in the Philippines, on January 16, 2004, with amendments on April 20, 2004. The EO contained 12 guiding principles which were identified as points of convergence among the different and sometimes opposing views of industry groups, local government units, civil society, indigenous peoples and other sectors. Further, the EO mandated the DENR to formulate a Minerals Action Plan (MAP), which was aimed at resolving the concerns/issues for the full revitalization of the minerals industry.

Guided by EO 270, the DENR, in cooperation with other agencies, undertook the formulation of the MAP in five months of extensive workshops and consultation. The MAP was subjected to consultations with the minerals industry, professional group and academe, civil society and the media in April and May 2004. The MAP consisting of 57 strategies and 126 activities that will address the problems of the minerals industry, was submitted to the President for approval in June 2004. On September 13, 2004, the Office of the President, through Executive Secretary

Eduardo R. Ermita issued Memorandum Circular No. 67 directing all heads of departments, chiefs of bureaus and offices/instrumentalities of the national and local governments and other concerned, to operationalize the Minerals Action Plan for mineral resources development.

2. DEVELOPMENT OF MINING PROJECTS

Pursuant to the 10-point agenda of President Arroyo and the revitalization of the minerals industry, the DENR-MGB has identified 23 mining projects to be developed in the next six years. Figure ____ shows a map of the 23 priority projects.

Of the 23 projects, the following were operated/developed for the current reporting period:

1. **Palawan HPP Project** – a US\$180-million nickel mining project of Coral Bay Nickel Mining Corp., which will generate US \$ 53 million foreign exchange and expected to employ some 1,000 construction workers.
2. **Rapu-Rapu Polymetallic Project** – a US\$42-million gold-silver-copper-zinc mining project of Lafayette Phils., Inc. in Rapu Rapu Island, Albay, which will generate US\$41 million foreign exchange and US\$0.82 million in taxes and expected to employ 274 during commercial production.
3. **Canatuan Gold Expansion Project** – a US\$7-million gold mining project of TVI Resources Development Phils., which is expected to generate US\$10 million dollars in foreign exchange and directly employ 300 people during commercial operation.

In addition to the 23 flagship mining projects, there were forty-one (41) exploration projects considered as small to medium-scale projects. As of end 2004, these projects were still waiting to comply with their specific project requirement such as approved Feasibility Study, ECC, and LGU endorsement, and additional NCIP requirements, among others.

4. POLICY INITIATIVES AND REFORMS

As part of the revitalization of the minerals industry and other priority concerns of the MGB-DENR, the following policies were issued/ approved:

- **Executive Order No. 270.** The National Policy Agenda on Revitalizing Mining in the Philippines.
- **Executive Order No. 270–A.** Amending certain provisions of Executive Order No. 270.
- **Department Administrative Order No. 2004–54.** Amendments to DENR Administrative Order No. 96–40, The Revised Implementing Rules and Regulations of the Philippine Mining Act of 1995, as amended.

- **Department Administrative Order No. 2004-33.** Amendments to DENR Administrative Order No. 2002-04, otherwise known as the Rules and Regulations Governing the Issuance of Permits for Treasure Hunting, Shipwreck/Sunken Vessel Recovery and Disposition of Recovered Treasures/Valuable Cargoes, Including Hoarded Hidden Treasures.
- **Memorandum Order No. 2004-09.** Simplification of Procedures in the Issuance of Mining Contracts and Permits.
- **Memorandum Order No. 2004-10.** Procedural Guidelines in the Evaluation of Mining Project Feasibility and Applications for Mineral Processing Permits and Mineral Agreements in the Development or Operating Period.
- **Memorandum Order No. 2004-12.** Providing for a System of Monitoring of Mineral Agreements and of Maximizing Resource Potentials of Mineral Lands.

The MGB-DENR also endorsed five (5) draft position papers on the following concerns:

- The functional relationship between the MGB Regional Director and the DENR Regional Executive Director.
- Proposed amendments to DAO No. 96-40, as amended, and DAO No. 99-56.
- Suspension of Issuance of Quarry Permits by the Local Government Units (LGUs) and Reverting the Function of Issuing Said Permits to the MGB.
- Possibility of Issuing Mining Permit if Proof of Consultation Comes from One (1) Sanggunian Only.
- A legislative measure that would propose alternative ways to convert mining areas that have closed its operation, or have reached the limits of its metallic mineral reserve.

5. APPROVED MINERAL PRODUCTION SHARING AGREEMENTS (MPSAs), MINERAL PROCESSING PERMIT (MPP) AND EXPLORATION PERMITS

As part of the revitalization of the minerals industry, a total of 30 responsible mining projects were allowed by the DENR-MGB through the various mining permits. Of these, 19 were Mineral Production Sharing Agreements (MPSAs), five (5) Mineral Processing Permits (MPP), six (6) Exploration Permits and Temporary Exploration Permits. The permits granted covered an aggregate area of 38,640.1 hectares.

The approval of these permits led to creation of jobs, revenues to the government through taxes, duties and fees, protection of the disturbed land through the environmental protection measures, creation of livelihood opportunities through the Social Development and Management Program, among others. Table _____ shows the macroeconomic benefits derived from mining.

6. ONE-STOP SHOP COMMITTEE

The DENR Secretary issued Special Order No. 2004-116 constituting the One-Stop Shop Committees (OSSC) in all the 15 regional offices of the DENR-MGB pursuant to Section 2 of DENR Memorandum Order No. 2003-08. The OSSC shall be responsible for the issuance of Area Status and Clearance for mining applications pursuant to the provisions of the Philippine Mining Act of 1995 and its implementing rules and regulations. The operation of the OSSC was expected to reduce by three to six months the processing time for mining applications. Its establishment was one of the major reforms under the revitalization of the minerals industry program.

The DENR-MGB Regional Director chairs the regional OSSC with the Regional Technical Directors of DENR's Forest Management Service, Land Management Service, and Protected Areas and Wildlife Service as members.

The OSSC was established in all 15 regional offices of the MGB serving the clientele in the approval or denial of requests of mining applicants for Area Status and Clearance. During the period covered, the OSSCs in various regions have started developing master maps for all land classifications/uses/status of their respective regions and the necessary databases in support of its functions.

B. Mine Environmental Protection and Rehabilitation

1. MINING ENVIRONMENT AND PROTECTION PROGRAM

As part of the environmental programs of mining companies, five (5) Environmental Protection and Enhancement Programs (EPEP) were approved with an aggregate cost of PhP390,901,532.40. This brings to PhP14,361,914,432.40 the total amount of EPEP from 66 mining companies.

The Mine Wastes and Tailings Fund (MWTF) collection for 2004 was PhP998,912.39. As of end 2004, the MWTF totaled PhP 25,003,942.11.

During this period, around 1,301 hectares were covered with reforestation of mining companies. Under the 2003-2004 Adopt-a-Mountain, Adopt-a-Mining Forest Program (AMAMFP), mining companies planted 450,669 seedlings on over 177.41 hectares of land with a survival rate of 79.50 percent. Such new plantation brought total surviving trees under the AMAMF program to 8,940,589 trees with survival rate of 80.80% covering 4,537.612 hectares.

On the other hand, forty-nine (49) river systems covering 442 hectares of areas affected by operating/abandoned mines were assessed for water quality.

2. Resolution of Mining Issues

Marcopper tailings incident

In March 2004, MGB assessed/reviewed the USGS Team's plans for monitoring and new data gathering as part of the Phase II "Environmental, Human, Health Risk and Monitoring Plan". The final report of the independent team of scientists that conducted the 18-month environmental and health study was formally forwarded by the provincial government of Marinduque to the DENR-MGB in October 2004.

The DENR facilitated the release of the final payment prior to the submission of the final report in the last quarter of 2004. A technical working group has been organized to review the various options for rehabilitation of the area. DENR has started working on the release of the funds for the rehabilitation.

De Oro Gold Rush Site

The first half of 2004 witnessed the start of another gold rush in De Oro, Sitio Golden Valley, Compostela Valley. It was the subject of numerous television and newspaper features, which attracted more than 6,000 people. The sudden upsurge of miners into the area threatened the lives of the miners and environment resulting from the uncontrolled cutting of trees by the miners for use as tunnel support and materials for the shanties established.

DENR-MGB Region XI stopped all mining activities at the De Oro gold rush area due to cracks found atop some of the tunnels. The MGB said mining activities in these tunnels posed risks as landslide may occur

Based on its experience with Diwalwal, MGB-DENR in collaboration with other agencies such as the Office of the Presidential Assistant for Mindanao, PNP, AFP and other government agencies proactively implemented specific measures geared toward the rationalization of the small-scale mining operations in the area.

Compressor Mining in Paracale, Camarines Norte

It has been reported that compressor mining was being done by subsistence small scale miners in the gold districts of Camarines Norte posing grave danger not only to the lives and health of the miners but also to nearby residents and the environment in view of the use of mercury and cyanide, soil erosion and siltation. Compressor mining is a crude method of mining alluvial gold with the use of iron bar, pick and shovel where a miner descends into a mud-filled vertical excavation aided by mouth-gripped plastic hose connected to a gasoline-powered compressor machine on the surface.

DENR Secretary Elisea G. Gozun has given illegal compressor miners in the municipalities of Paracale and Jose Panganiban, both in Camarines Norte, three (3) months to wind up their operations and pledged PhP500,000 as seed capital for alternative livelihood projects for the affected small-scale miners. During the public consultation on the issue, the miners have expressed willingness to stop their operation on condition that they are given alternative sources of income.

At the same time, the Secretary also directed the local officials of MGB to review all mining claims in the province and cleanse idle mining claims. Consultations and

dialogue were held to identify possible alternative livelihood projects in barangays where compressor mining was present.

In August 2004, the amount of P500,000.00 has been allotted by the DENR for an alternative livelihood project for compressor miners in Paracale, Camarines Norte. As of end 2004, the amount has not yet to be downloaded to the beneficiaries pending the establishment of people's organizations (PO's) that will administer their identified livelihood project. The Municipal Local Government of Paracale facilitated the registration of the PO's with Securities and Exchange Commission (SEC).

C. Mine Community Development

1. SOCIAL DEVELOPMENT AND MANAGEMENT PROGRAMS (SDMPs)

Social Development Management Program (SDMP) is a comprehensive five-year plan of a Contractor/Permit Holder/Lessee authorized to conduct mining and milling operations toward the sustained improvement in the living standards of the host and neighboring communities. The institutionalization of SDMP in mining projects is geared toward creating a responsible, self-reliant and resource-based communities capable of developing and implementing activities in a manner consistent with the principle of people empowerment. The SDMP is a tool for the development and implementation of community programs/activities in consultation and partnership with the host and neighboring communities.

For the year 2004, 10 five-year SDMPs of mining companies have been approved by MGB-Central Office totaling about PhP 33.7 million with target beneficiaries of 33 barangays constituting more than 147,552 people. The programs included construction/establishment of infrastructure projects such as roads, bridges, and buildings; the establishment of livelihood opportunities; and projects on education and health, and other basic social services for the communities.

2. TECHNICAL ASSISTANCE TO SSM COMMUNITIES

Safety training manuals were prepared and disseminated to mining cooperatives/service contractors in Diwalwal for continued education of small-scale miners on the safety aspect of working in underground tunnels. A total of 3,969 participants benefited from the safety trainings conducted to the various mining cooperatives. The trainings covered underground safety orientation, plant and safety orientation, and first-aid training.

D. Application of Geosciences and Mining/Processing Technologies

1. GEOHAZARDS

In view of its geographic and geologic setting, the country is very much susceptible to various types of natural/geological hazards: earthquakes, volcanic eruption, landslides, flooding, tsunami, liquefaction, ground subsidence, storm surges, coastal erosion, and several others. Such occurrences have resulted in unnecessary loss of lives and properties, not to mention the very significant and precious resources of both the national and local government that have to be spent in subsequent relief

and rehabilitation efforts. The more prudent and effective way of dealing with these various hazards is the proactive stance of avoidance and preparedness.

In a proactive effort to avert or reduce the negative impacts of natural disasters, the DENR-MGB has intensified the program on Geohazard Mapping to identify areas in the country most likely to be affected by natural hazards (landslides, floods, flashfloods, subsidence, etc.) and as such are most vulnerable and at risk. The DENR-MGB believes that the impact of the program in terms of number of lives saved and property damages reduced would translate to billions in the long run. This is not to mention the savings the government will achieve considering such meager resources that could have otherwise been used for disaster relief and remediation.

The Geohazards Mapping Program was aimed at generating geohazards maps that would indicate the various areas in the country that are prone to specific natural disasters. The maps were then provided to various decision makers, with adequate information and education on how these are to be interpreted and utilized in their land-use planning and disaster-preparedness programs.

The Geohazards Mapping Program of the MGB became of national interest in the aftermath of the flooding and landslide incidents in Panaon Island, Leyte in December 2003. The MGB took the initiative to undertake a more detailed geohazard assessment of the area, and thereafter, identified relocation sites in Barangays San Francisco and Pinut-an in coordination with the concerned local government units.

Following the orders of the President, the MGB collaborated with NAMRIA, PHIVOLCS, and the Department of Agriculture-Bureau of Soils and Water Management to generate 1:250,000 geohazard maps for Regions V, VIII and XIII. The final maps, in digital form, were finalized by the end of February and formally submitted by NAMRIA to Malacañan in February 2004.

To be able to more specifically pinpoint potential hazardous areas, it is necessary that larger-scale maps are generated. In this regard, the MGB produced two scales of maps: 1:50,000 maps for regional planning and 1:10,000 maps for detailed warnings and disaster preparedness.

On the 1:50,000 scale, nine (9) maps covering an area of approximately 400 square kilometers were generated for the following areas: Panaon Island, Eastern Rizal, Naga City, Legaspi City, Surigao City, Northern Davao City, Gingoog City, Misamis Oriental, and Tagum City.

On a 1:10,000 scale, fifteen (15) areas were covered: four (4) areas in Panaon Island; Morong in Rizal; Antipolo City; Southern part of Surigao City; San Francisco in Surigao; southern and southwestern part of Davao City; Lower Hijo River area; South-central part of Gingoog City; central part of Naga City, central part of Legaspi City, and central part of Balincasag in Misamis Oriental.

Coastal geohazards assessment was conducted along the coastlines of northwest Luzon, considered as one of the most populated and developed coastal area in the Philippines.

Lecture-Seminars were then conducted in Liloan in Southern Leyte, Naga City, Tagum City and Antipolo City wherein the concerned local government and other disaster management officials were informed on their proper use. The maps were then turned over to the concerned officials for their reference and use. In these various undertakings, the UNDP-DENR ENR-Shell Program provided the MGB with the much needed financial and equipment support.

To further beef up its information campaign, the MGB collaborated with the JICA-NET program to develop a geohazard video compact disk module on the various types of natural hazards and how to properly respond to the risks and threats. The project has completed the video production and produced 3,000 copies of the VCD which are now being prepared for dissemination to various municipalities and barangays.

Finally, the year-end saw the very active participation of the DENR-MGB in the calamity areas in Quezon, Nueva Ecija, Isabela and disaster preparedness efforts in the Bicol region. Rapid geohazard assessment were immediately conducted in the affected areas and relocation sites were immediately identified.

DENR-MGB coordinated and mobilized mining companies nationwide in the rescue operations that saved the lives of some residents in Real and Infanta. Mining companies also conducted relief operations by providing medicines, food supplies and also contributed in the rehabilitation of the area.

Technical support and advisory assistance is still on-going with the various local government concerned, thru active coordination with the National Disaster Coordinating Council.

In order to ensure suitability of project sites for development, all proponents of housing projects and other infrastructure and land development projects were required to undertake Engineering Geological and Geohazards Assessment (EGGA) as per DAO 2000-28 as an additional requirement for the issuance of an Environmental Compliance Certificate (ECC). The Bureau conducted and prepared 22 (EGGA) reports, 459 Geohazards Identification Report and 118 Geological Site Scoping Reports requested by project developers and proponents.

2. GROUNDWATER ASSESSMENT

A total of 37,520 hectares were covered by groundwater surveys to identify possible source of groundwater in order to support the future needs of communities for domestic and agricultural uses. The surveys were done in coordination with the local government units, which provided technical support. A number of existing wells were tested for their physical properties.

Spring and groundwater resources were assessed in: Narvacan, Ilocos Sur; Tuguegarao City; Tarlac City; Quirino; Buenavista; Marinduque; Carcar and Aloguinsan in Cebu; in Diplahan, Zamboanga; and in the Surigao Mineral Reservation area. Initial data gathering and research have already been undertaken for the hydrogeologic surveys that could lead to tapping of potential water reservoir.

3. GEOLOGICAL ASSESSMENT OF SOLID WASTE DISPOSAL

Technical assistance were rendered to local government units and concerned agencies in the identification and suitability of possible solid waste disposal and landfill sites through geological assessment and site characterization. For this period, a total of 124 existing and proposed solid waste disposal sites and landfill areas were assessed if they will be favorable for development.

4. QUADRANGLE GEOLOGIC MAPPING

MGB produced six (6) geological maps and conducted reconnaissance and detailed survey nationwide totaling 100,412 and 48,000 hectares, respectively, boosting its existing geological database. This served as additional geological data for identifying and assessing existing geohazards, delineating extent of identified mineral deposits, and exploring for new metallic and non-metallic prospects.

5. MARINE AND COASTAL GEOLOGICAL RESOURCE ASSESSMENT

For the period under review, MGB-DENR embarked on various activities relating to the study of offshore mineral resource occurrences and regulation of seabed quarrying. Inspection/verification of BREDCO Reclamation project in Bacolod City was initiated. Results of the site visit verified the ongoing status of the reclamation project as well as provided an estimate of the volume of dredge fill materials that have been utilized for the project. The government stands to gain additional revenues in the form of taxes, fees and duties.

The MGB covered a total of 10,400 hectares for marine placer mineral resource exploration recognizing promising depositional sites for placer gold and other equally important minerals in offshore Malimono, Surigao del Norte.

As part of MGB's commitment in the country's bid to fulfill the United Nations Convention on the Law of the Sea (UNCLOS) requirement for the Extended Continental Shelf, two (2) MGB personnel participated in the hydrographic and geophysical survey of Benham Rise Plateau. A total of 59,476 hectares of bathymetric and gravity data were acquired.

6. MINERAL RESERVATION PROJECTS

In light of the recognition of the present administration of the mining industry for the growth and sustenance of the economy, the DENR-MGB has undertaken projects that will establish new mineral reservation areas. Potential mineral commodities in seven areas were identified: Calcium Carbonate in Aklan; Gypsum deposit in Agusan del Sur; Semi-Precious Gemstones in Antique; Zeolite/Bentonite in Tarlac;

Marble of Romblon; Nickel-Cobalt in Northern Palawan; and Iron deposits in Camarines Sur. All these were deemed strategic but currently have insufficient information and as such further studies were needed for a conclusive resource analysis in support of the Bureau's intention to declare these areas as mineral reservations.

Where social acceptability is a concern, coordination with the local government executives were conducted. Technical presentation of the national government's intention to establish a mineral reservation in their respective municipalities were conducted in the Province of Antique for semi-precious gemstones and calcium carbonate; in Sibagat for Gypsum; in Panganiban and Paracale for Iron; and in Tarlac for zeolite, in order to start the information campaign and socio-economic profiling.

To support the technical studies needed to establish a mineral reservation area in Nabas, Aklan, the following were conducted: 60 meters of calcium carbonate diamond drilling; geological reconnaissance survey covering 3,000 hectares; semi-detailed survey of more than 6,000 hectares, and collected more than 300 rock samples for analysis.

MGB Regions with existing mineral reservations continued their search for other viable mineral commodities within their respective reservations:

- ?? MGB-Region 1 surveyed and tested for potential marketable silica deposit within the Feldspar Mineral Reservation.
- ?? MGB Region 5 conducted ground survey to conduct preliminary volume and quality assessment of mottled clays present inside the Siruma White Clay Mineral Reservation.
- ?? MGB Region 8 continued their geologic survey of the Bauxite Mineral Reservation in search of other viable commodities other than bauxite.

Overall, these researches covered approximately 1,500 hectares. A Geographical Information System database was also upgraded to keep pace with the advancement of information and technology that included attendance to workshops/seminars/trainings/conferences for GIS users, resource modeling and multi-media presentation software.

7. RESEARCH AND DEVELOPMENT

Strategic Minerals/Quarry Resources towards the Development of Downstream Industries

DENR-MGB conducted preliminary mineral commodity profiling of six (6) mineral commodities namely: nickel, chromite, iron, limestone, marble, and ceramics materials, which were selected because of their strategic importance to the country's economy and to the world mineral industry. Thirteen (13) mining projects which

were evaluated and documented for their technical and economic aspects, served as case studies under the different commodities.

Commodity profiling summarizes existing resource information on known occurrences, identifies information deficiencies and studies needs for conclusive resource and reserve analysis. The Mineral Commodity Profile will serve to provide entrepreneurs with geological, technical and economic background data to assist in identifying commercial and R&D opportunity areas in the mining industry, and in making mineral property assessments for commercial development.

Value-adding of indigenous minerals

In pursuit of finding the beneficial use and for the creation of wealth from indigenous minerals, several research studies and metallurgical testing were conducted for value-adding of minerals into more competitive products. These were:

- Beneficiation of the Siruma (siliceous) clay minerals from Siruma Mineral Reservation in Camarines Sur for the production of silica powder, fillers, raw materials for making of sodium silicate and silica gel.
- Beneficiation and characterization of the Bukidnon diatomite prospects were investigated using a combination of air-classification, acid-leaching and calcinations to produce commercial grade of diatomite.
- Development of a laboratory-scale beneficiation process applicable for bentonite/zeolite minerals in Tarlac for oil bleaching.
- Small-Scale Mining Development Program in Region II particularly in small-scale mining areas in Barangay Runruno, Quezon, and in Nueva Vizcaya. The project provided lectures and trainings to the operators to improve their operational processes and eventually improve their gold recoveries at optimum parameters.

E. Advocacy and Information, Education and Communication campaigns

In support to the nationwide consultations for the Executive Order 270 and 270-A and the drafting of the Mineral Action Plan, the MGB conducted Information, Communication and Education (IEC) campaigns through attendance in various fora and seminars. Multi-sectoral groups from the mining industry, academe, government agencies and the civil society participated in the activities.

Various geological, geo-environmental, geophysical and other thematic maps along with the accompanying technical reports produced were made in GIS and other electronic format for efficient storage and prompt and convenient retrieval.

II OTHERS

INTERNATIONAL AND NATIONAL LINKAGES

1. CCOP

The DENR-MGB has regularly maintained communication and coordination with CCOP regarding on-going and future projects under the minerals, groundwater, energy, coastal zone and geohazards, and geodata management programs. Filipino personnel successfully participated in the following CCOP workshops/seminars:

- ?? 2nd Workshop on the CCOP-USGS Mineral Resource Assessment Project was held in Bangkok, Thailand
- ?? Final Workshop of DCGM-IV Project was held in Tsukuba Japan,
- ?? 2nd Workshop of CCOP-KIGAM Landslide Hazard Analysis Project held in KIGAM, Daejeon, Korea. A Korean expert also visited the Philippines to conduct training on computer-aided techniques for landslide hazards analysis related to the project.
- ?? Training Course on Goal-Oriented Project Planning conducted in Bangkok, Thailand.
- ?? Series of workshops and experts visits in Cambodia, China, Philippines and Indonesia in connection with the Petroleum Policy and Management Project.

Involvement and participation of the Philippine Government in CCOP work programs and projects was highlighted through the official representation in CCO Steering Committees and Annual Sessions.

SPECIAL PROJECTS

1. RP-KOREA MINERAL EXPLORATION PROJECT

MGB personnel went to an official trip to Korea in connection with the report preparation of the results of the survey and planning of future programs of the RP-Korea Mineral Exploration Project.

Report of the results of the survey during the period 30 July to 2 September 2003 was completed on March 2004.

The third phase of the project was conducted on 28 June until 6 August 2004. The work included drilling, trenching of the Masgad Gold prospect and detailed geological and geochemical survey of the Gacepan-Hanagdong prospect.

The expanded Memorandum of Understanding between the DENR and the Korea Resources Corporation was signed on June, 30 2004 that aimed to implement a joint scientific investigation of mineralized areas in the country.

2. UNDP

The UNDP-sponsored MGB Geohazards Mapping Program started with a technical conference on standardization of geohazard map production. A two-volume document was produced for this purpose and now serves as the MGB Manual on Geohazard Map Production.

The 1:50,000-scale Geohazard map of Panaon Island was the first map to be produced under the project. This was followed by the production of 1:10,000 scale detailed geohazard maps of four (4) sites in the island identifying the dangerous grounds for landslides where signs have been put up to warn the local populace.

The Tugbok Quadrangle in Davao City, Anao-aon and Taganaan quadrangles near Surigao City were subsequently mapped at 1: 50,000 scale. These maps were displayed in a DENR- sponsored disaster management symposium at the SEAMEO convention hall in Quezon City.