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Sustainable Development in The Philippine Minerals Industry: A Baseline Study

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SUSTAINABLE DEVELOPMENT IN THE PHILIPPINE MINERALS INDUSTRY: A BASELINE STUDY

by

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I. EXECUTIVE SUMMARY

The Philippines is a country well endowed with metallic and non-metallic mineral resources. A long, well-established tradition of mining, pre-dating the arrival of the Spaniards in the 15th century, gave the country a place of prominence in the global minerals industry and was, for many years, among the world's Top Ten producers of gold, copper, nickel, and chromite – the four major metallic mineral produced in the country. The last two decades, however, have seen a serious decline in the industry's leadership role as the industry grappled with a host of internal and external problems.

The Philippines was, for many years, among the world's Top Ten producers of gold, copper, nickel and chromite but over the last two decades has been grappling with a host of internal and external problems.

In the past two decades, the growth of the industry has been seriously impeded by low foreign investments owing to political instability and the 60:40 limitations on foreign ownership; excessive taxation; high operating and production costs; labor, energy and peace and order problems; a period of soft metal prices and a series of natural calamities, among others. Of recent, the challenge to the constitutionality of the Mining Act, filed by a non-governmental organization (NGO) in 1997 and still undecided in the Supreme Court after five years, created a climate of uncertainty unacceptable to most prospective foreign investors in the highly capital intensive mining industry. Production expansion in the Asia-Pacific (Australia, Papua New Guinea and Indonesia) also contributed to the situation.

The approval of the long-awaited new Mining Act in 1995, meant to resuscitate the ailing industry, breathed hopes of the industry's impending resurgence and was met with enthusiasm by both local and foreign mining investors – at least twenty (20) foreign mining

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companies established offices in the country to explore for minerals and/or to jointly develop known mineral deposits with Filipino mining companies.

The Mining Act and its implementing rules and regulations addressed the gaps in previous mining laws by transforming the environmental and social responsibilities of mining companies as major cost centers. Minimum expenditures of : at least ten (10%) percent of a mining project's capital costs for environment-related expenses during the development/construction stage; 3 to 5% for progressive/annual rehabilitation programs and at least one (1%) percent of the annual direct mining and milling costs during the operating life of the mine for social/community development; and the final mine rehabilitation and social management plans as part of the mine closure process. Mining projects within ancestral domain lands must also shell out a minimum of one (1%) percent of the gross revenue as royalty to indigenous peoples (IPs). Exploration companies, on the other hand, are encouraged to allocate at least 10% of the total project cost for environmental management, community assistance and public information and education.

The Philippine Mining Act of 1995 addressed the gaps in previous mining laws by transforming environmental and social responsibilities of mining companies as major cost centers.

Yet, not long after, the Act became a magnet for NGOs and the central focus of opposition in view of provisions allowing wholly-owned foreign mining companies to operate mines in the country, notwithstanding, the benefit sharing scheme where 60% accrues to the Philippines and the strong environmental and social provisions. Critics of the industry fostered the perception that the Act is a tacit permission for foreign companies to plunder the national patrimony at the expense of the environment and the Filipino people. Past and recent environmental incidents (e.g., Marcopper and Manila Mining) and reports of displacement or resistance by communities and indigenous peoples somehow gave credence to these perceptions and resulted in repeated calls by civil society organizations, non-government organizations and the Catholic Church for the repeal of the Mining Act, including a ban on large-scale mining, especially, open pit mining. Ironically, industry critics are silent on the issue of environmentally damaging and hazardous mining practices of illegal small scale miners.

The local mining industry, for its part, has been hard pressed in exerting maximum efforts to meet current regulations as well as societal expectations. Given the industry's precarious situation, however, progress toward this end has been slow.

The Government, on the other hand, is itself faced with the accusations that it is in collusion with the industry and is not doing enough to punish erring mining companies. On the other side, the Government is being accused by the industry of being an "anti-mining NGO" for the excessively prescriptive and complex nature of current mining regulations as well as the lengthy and tedious period needed to perfect a mining contract.

Overcoming these artificial hindrances to the future of mining in the Philippines demands the integration of new paradigms, a culture of change, on how mineral resources development should proceed – one that equally considers the varying aspirations of the

government, the communities, the mining industry, the NGO/civil society sector and other stakeholders.

A recent initiative by the government is the drafting of a *National Minerals Policy* to define sustainable development in the context of the Philippine minerals industry, taking in consideration the unique economic, socio-cultural and environmental concerns of the various stakeholders. The underlying objective is to prove: that mining can be a desirable development option for the country and in the empowerment of communities as it has been a cornerstone in the economic success and development of many industrialized nations; that reputable mining companies want to do the right thing for society and the environment; and that the so-called *third sector* can be factual and reasonable than emotional.

2. MINING AND THE PHILIPPINE ECONOMY

The mining industry of the Philippines has long been dominated by large scale local mines producing gold, copper, nickel and chromite. Gold mining, which prospered in the 20s and the 30s and copper, which experienced a rush in the 50s and the 60s, remain as the two most important metallic mineral produce. Nickel became an important metallic mineral product in the 70s with the opening of two nickel mines – the Nonoc mine and its Surigao Nickel Refinery and the Rio-tuba nickel mine in Palawan, which exports beneficiated nickel ore to Japan. Chromite mining is basically a monopoly of two – one producing metallurgical chromite and the other, refractory chromite. The Philippines was also a significant producer of iron in the 60s. The discovery, however, of high grade iron deposits in Australia and the exhaustion of high grade local lump iron ores eventually led to the demise of this industry sub-sector.

The decade of the 70s is considered as the “*busiest for the mining industry as old dormant gold mines were reopened, new gold projects developed, existing copper mines expanded and new copper projects undertaken. The deluge of activities seemed to be part investment, part speculative or just “follow the trend” ventures. An interplay of various factors held favorable promise for the mining industry – one, the brilliant performance of copper and other metals in the world market, the presidential declaration that mining would be “the industry of the 70s” and finally, the stock market boom*”⁵. In 1980, about forty-five (45) operating mines were contributing over 21% to total Philippine exports. Then the progressive decline of the Philippine mining industry started during this decade.

During this period, the Government extended support to the industry. The Mineral Policy Program of East – West Center (Hawaii)⁶ noted that “*with the increasing distress in the mining sector during the 70s and the early 80s...the government implemented a number of schemes which impacted on the mining industry*”. This includes “*the elimination of export taxes and premium duties for copper in 1975 by virtue of Executive Order No. 450; Presidential Decree No. 1070 “Authorizing*

⁵ Lopez, Salvador P. *Isles of Gold: A History of Philippine Mining* (book commissioned by the Chamber of Mines of the Philippines). Oxford University Press (421 pages).1992. pages 264 and 265.

⁶ Mineral Policy Program, East – West Center (Hawaii). *The Philippine Mineral Sector to 2010: Policy and Recommendations* (Asian Development Bank Philippine Mineral Sector Study, draft final report). September 1994.

the Grant of Assistance to Primary Gold Producers” in 1997 and Letter of Instruction No. 1416 of 1984 which suspended all duties, taxes and charges for “distressed” copper producers, which as of December 1985, the amount of deferred taxes from four major mining companies amounted to approximately PhP980 million”. Unfortunately, the Study concluded that “to a large extent, all these actions were designed to maintain what was largely a failing mining industry”.

The Study also noted the industry debt structure which, between 1978 and 1983, reached a total of \$964 million and resulted “*in both the development of marginal mining operations and to create a debt structure which impacts the industry to the present time*”.

Over a period of two decades, copper production dropped by a staggering 90% and chromite production in 2000 was only 5% of those two decades ago. The drop in copper production can be traced to the closure of the Atlas mine, once Asia’s largest producing copper mine, in 1994 due to financial difficulties; Marcopper mine in 1996 due to the infamous tailings spill accident; Dizon mine in 1998 after a pit slide caused by a typhoon; Maricalum mine in 2001 in view of operational and financial problems and the shift by Manila Mining and Lepanto Mining to gold.

Gold production increased owing to production from the Diwalwal area in Mindanao and other gold rush areas. Since the mid-90s, production from these gold rush areas has accounted for about 50% of total Philippine gold production.

In addition to Rio Tuba mine, the number of nickel mines during the last two decades increased with the opening of the Taganito (1990) and Cagdianao (2000) nickel mines in Surigao province. Old mainstays, Hinatuan and Rio-tuba mines, on the other hand, are a few years away from closure. Mining operation in another, the Manicani mine in Samar province, remains suspended together with the Nonoc mine and its refinery, closed since 1986.

The industry’s share in the GDP and exports are now just above 1% largely on the account of decreasing production summarized below. Employment statistics showed an average of 120,000 people is directly employed by the mining (and quarrying) industry.

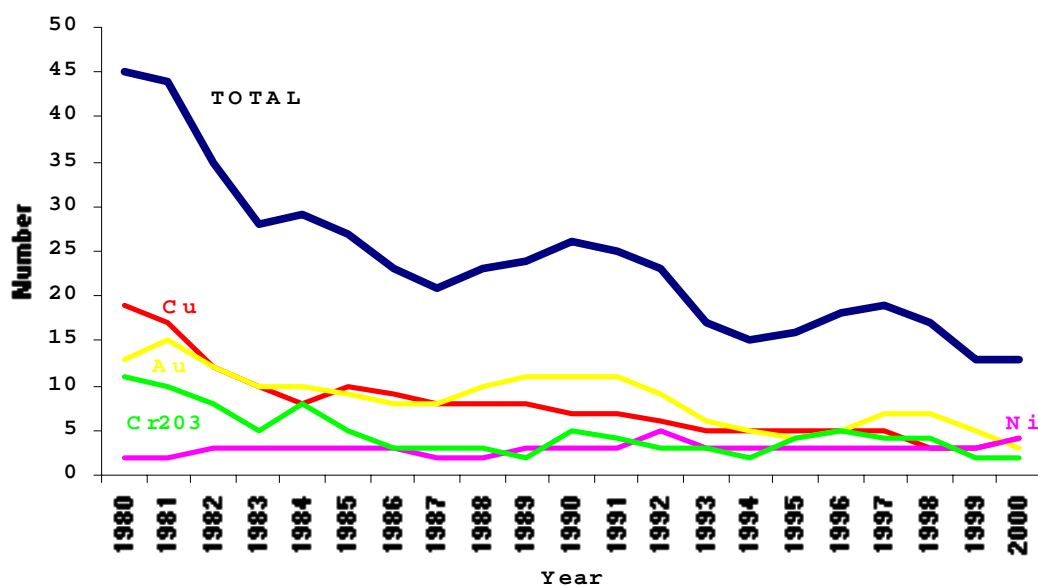
Between 1998 and September 200, the mining industry contributed to Government coffers a total of PhP4.5 billion in national and local taxes.

During the period 1998 to September 2000, the industry contributed a total of PhP4.5 billion in both national and local taxes⁷. And notwithstanding the industry’s decline over the last two decade, the industry contributed over \$240 million in excise tax. The recent decrease is partly a result of Republic Act No. 7729, Excise Tax Act of 1994, which reduced the previous 5% excise tax on mineral products to a fixed rate of 2% after the fifth year of the effectivity of the Act and the closure of several mines.

⁷ Canlas, Dante B, Socio-Economic Planning Secretary and National Economic and Development Authority Secretary General. *The Philippine Mining Industry in the National Development Framework*. Paper presented during Mining Philippines 2001 Conference and Exhibition, Mandaluyong City, Philippines. November 21 and 22, 2001.

The succeeding tables and figures show mining-related economic indicators.

Figure No. 1: Number of Operating Metallic Mines in the Philippines (1980 – 2000)



(Source: Mineral News Service, Mines and Geosciences Bureau)

Table No. 1: Metallic Mineral Production and Production Value (1980 – 2000)

YEAR	Metallic Mineral Production				Mineral Production Value (PhP '000)		
	Copper ('000 MT)	Gold ('000 Kgs.)	Nickel ('000 MT)	Chromite ('000 MT)	Value of Metallic Minerals	Total Production Value	% Share of Metallic Minerals
1980	1,124	20	965	496	9,778	12,821	76.26%
1981	1,120	24	345	439	8,335	11,879	70.17%
1982	1,061	26	369	321	7,142	11,302	63.19%
1983	1,009	25	350	267	8,860	13,726	64.55%
1984	860	26	441	256	10,806	17,522	61.67%
1985	841	33	484	271	14,392	20,987	68.58%
1986	825	35	505	206	14,727	18,273	80.60%
1987	818	33	368	188	16,153	19,506	82.81%
1988	824	30	445	166	17,637	22,380	78.81%
1989	744	30	658	253	17,342	23,229	74.66%
1990	698	25	608	243	16,392	22,369	73.28%
1991	572	26	557	190	17,045	24,067	70.82%
1992	492	26	594	84	14,672	24,664	59.49%
1993	526	25	347	63	14,757	23,439	62.96%
1994	431	27	421	76	15,126	24,586	61.52%
1995	399	27	647	103	15,225	28,000	54.38%
1996	257	30	640	119	14,080	31,079	45.30%
1997	188	33	741	98	13,593	33,079	41.09%
1998	178	34	960	42	16,423	36,829	44.59%
1999	151	31	625	17	13,606	30,867	44.08%
2000	130	37	1,023	21	17,788	30,531	58.26%

(Source: Mineral News Service, Mines and Geosciences Bureau)

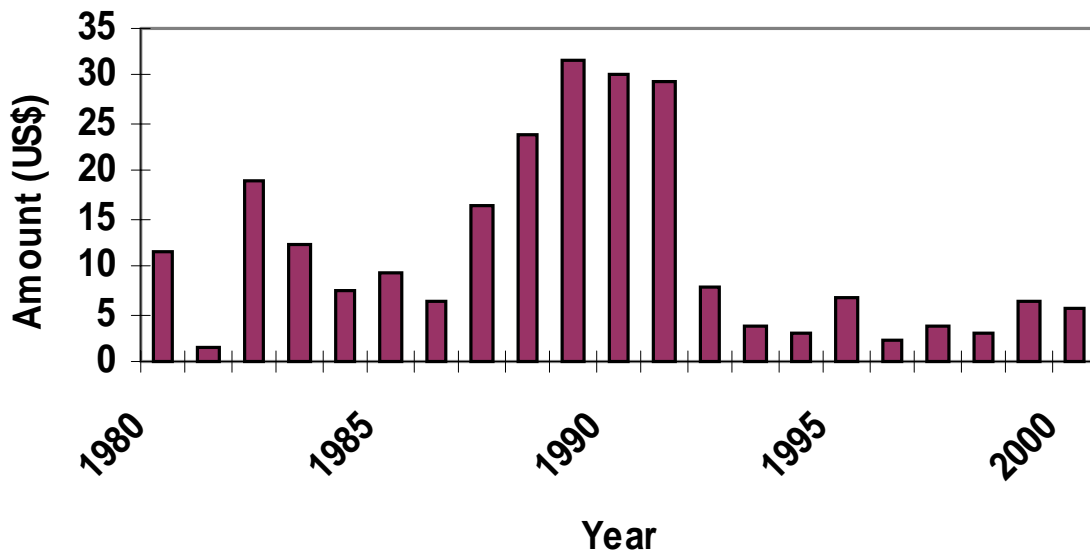
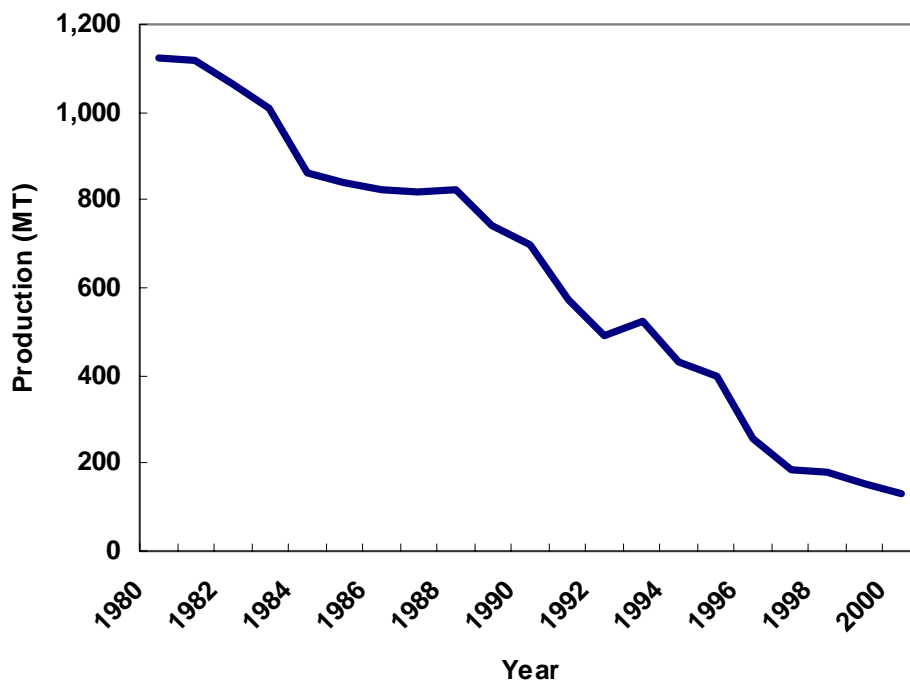


Figure No. 2: Excise Tax Derived from Mining (1980 – 2000)
 (Source: Bureau of Internal Revenue)

Figure No. 3: Philippine Copper Production (1980 – 2000)



(Source: Mineral News Service, Mines and Geosciences Bureau)
 Figure No. 4: Philippine Gold Production (1980 – 2000)

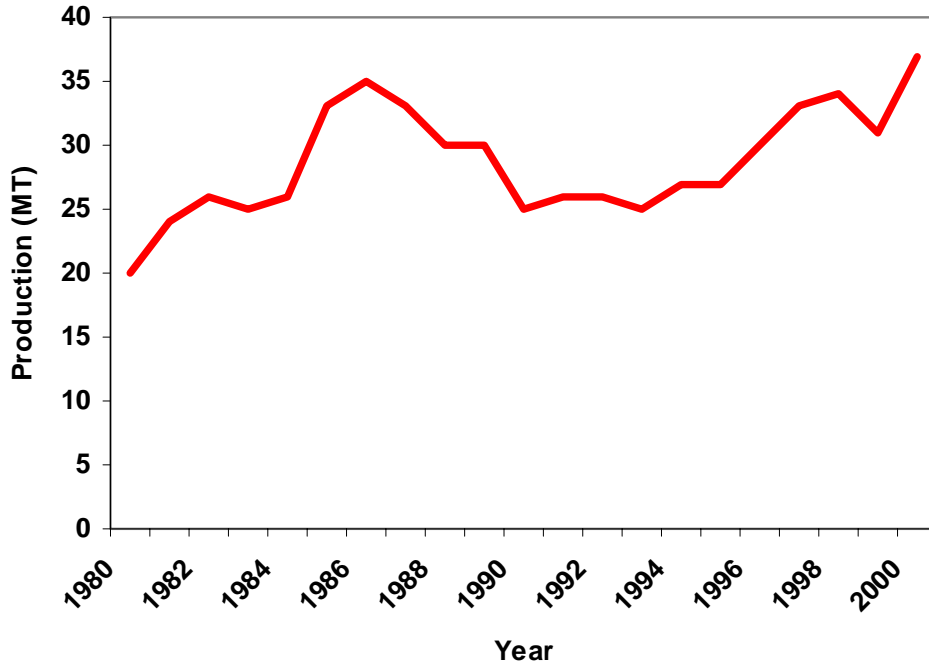
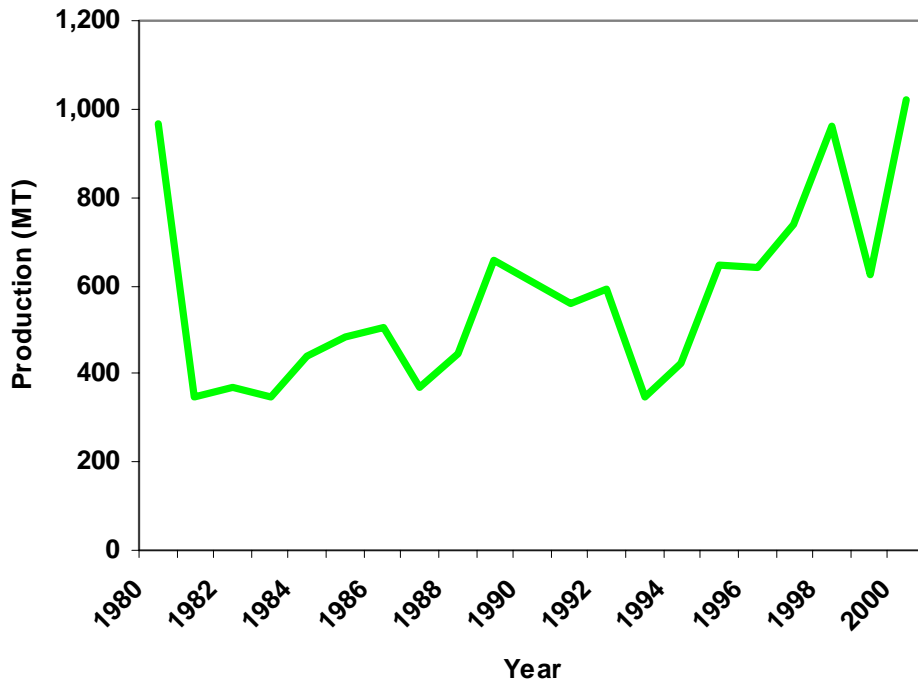
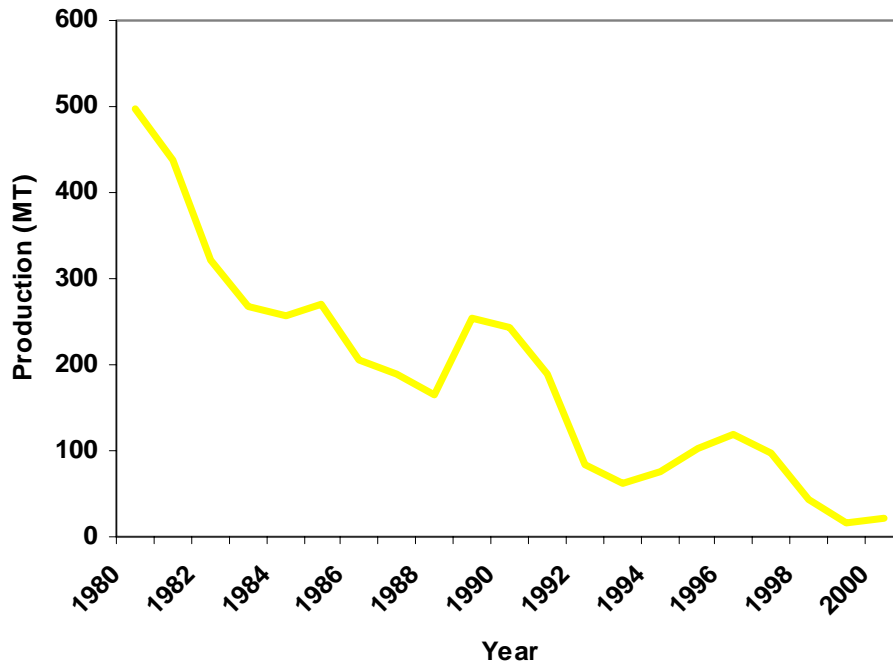


Figure No. 5: Philippine Nickel Production (1980 – 2000)



(Source: Mineral News Service, Mines and Geosciences Bureau)

Figure No. 6: Philippine Chromite Production (1980 – 2000)



(Source: Mineral News Service, Mines and Geosciences Bureau)

Table No. 2: Share of Mining in the Gross National Product (GNP), Gross Domestic Product (GDP) and Total Exports (1970 – 2000).

YEAR	MINING AND GNP (PhP '000)			MINING AND GDP (PhP '000)			MINERAL EXPORTS (US\$ '000)		
	Gross National Product (GNP)	Gross Value Added (GVA) in Mining	% Share of Mining GVA	Gross Domestic Product (GDP)	GVA in Mining	% Share of Mining GVA	Total Philippine Exports	Total Mineral Exports	% Share of Mineral Exports
1970	336,797	4,955	1.47%	343,163	4,955	1.44%	1,062,000	220,503	20.76%
1971	357,699	5,395	1.51%	361,792	5,395	1.49%	1,136,000	228,628	20.13%
1972	377,715	5,409	1.43%	381,499	5,409	1.42%	1,106,000	248,607	22.48%
1973	414,602	5,668	1.37%	415,525	5,668	1.36%	1,886,000	463,193	24.56%
1974	432,048	5,544	1.28%	430,313	5,544	1.29%	2,725,000	555,124	20.37%
1975	453,094	5,738	1.27%	454,264	5,738	1.26%	2,294,000	397,483	17.33%
1976	490,074	5,886	1.20%	494,262	5,886	1.19%	2,574,000	458,985	17.83%
1977	518,440	7,065	1.36%	521,952	7,065	1.35%	3,151,000	558,278	17.72%
1978	546,777	7,318	1.34%	548,947	7,318	1.33%	3,425,000	575,991	16.82%
1979	581,712	8,249	1.42%	579,910	8,249	1.42%	4,601,000	851,000	18.50%
1980	608,600	9,128	1.50%	609,768	9,128	1.50%	5,787,788	1,234,786	21.33%
1981	628,325	9,350	1.49%	630,642	9,350	1.48%	5,722,157	1,025,489	17.92%
1982	646,186	9,165	1.42%	653,467	9,165	1.40%	5,020,593	727,000	14.48%
1983	655,483	9,244	1.41%	665,717	9,244	1.39%	5,005,291	660,000	13.19%
1984	598,340	8,959	1.50%	616,962	8,959	1.45%	5,390,646	516,054	9.57%
1985	556,074	11,893	2.14%	571,883	11,893	2.08%	4,628,954	594,000	12.83%
1986	579,175	12,313	2.12%	591,423	12,313	2.08%	4,841,781	557,000	11.50%
1987	608,729	11,232	1.84%	616,923	11,232	1.82%	5,721,238	462,000	8.08%
1988	652,293	11,704	1.79%	658,581	11,704	1.78%	7,074,190	764,000	10.80%
1989	689,127	11,389	1.65%	699,448	11,389	1.63%	7,820,713	829,000	10.60%
1990	714,325	11,091	1.55%	720,690	11,091	1.54%	8,186,027	723,000	8.83%
1991	716,216	10,770	1.50%	716,522	10,770	1.50%	8,839,514	610,000	6.90%
1992	737,139	11,495	1.56%	718,941	11,495	1.60%	9,824,314	627,000	6.38%
1993	756,293	11,571	1.53%	733,097	11,571	1.58%	11,374,805	686,000	6.03%
1994	786,218	10,763	1.37%	766,450	10,763	1.40%	13,483,000	780,000	5.79%
1995	825,164	10,681	1.29%	802,866	10,681	1.33%	17,447,000	893,000	5.12%
1996	884,226	10,166	1.15%	849,121	10,166	1.20%	20,543,000	772,000	3.76%
1997	930,658	10,338	1.11%	893,151	10,338	1.16%	25,228,000	764,000	3.03%
1998	934,386	10,624	1.13%	887,905	10,529	1.18%	29,496,000	592,000	2.01%
1999	968,556	9,736	1.00%	919,382	9,736	1.06%	35,037,000	645,000	1.84%
2000	1,009,351	10,580	1.05%	953,582	10,580	1.11%	3,729,700	650,000	1.24%

(Sources: National Statistics Coordination Board and Bangko Sentral ng Pilipinas)

Table No. 3: Employment in the Mining and Quarrying Sector (1970 – 2000)**

YEAR	EMPLOYMENT ('000)		
	Total Employment	Employment in Mining and Quarrying	% Share of Mining and Quarrying
1970	11,358	51	0.45%
1971	12,584	56	0.45%
1972	13,217	58	0.44%
1973	13,262	62	0.47%
1974	14,479	44	0.30%
1975	14,517	54	0.37%
1976	15,427	56	0.36%
1977	14,334	52	0.36%
1978	16,101	61	0.38%
1979	16,544	96	0.58%
1980	17,154	130	0.76%
1981	17,810	91	0.51%
1982	18,614	78	0.42%
1983	19,366	141	0.73%
1984	19,368	133	0.69%
1985	20,327	129	0.63%
1986	20,926	152	0.73%
1987	20,854	161	0.77%
1988	21,205	160	0.75%
1989	21,908	168	0.77%
1990	21,900	139	0.63%
1991	22,915	140	0.61%
1992	23,696	147	0.62%
1993	24,382	135	0.55%
1994	25,032	111	0.44%
1995	25,676	107	0.42%
1996	27,186	113	0.42%
1997	27,715	129	0.47%
1998	27,911	119	0.43%
1999	29,644	100	0.34%
2000	31,830	110	0.34%

(Source: Department of Labor and Employment)

(** - Based on a nationwide survey by the Mines and Geosciences Bureau, the current number of small scale miners is about 200,000. Actual figures, however, maybe higher)

3. PROJECTED MINING INVESTMENTS AND ECONOMIC BENEFITS FROM MINING

As the lead government agency mandated with the management and promotion of the mining industry, the Mines and Geosciences Bureau (MGB) created financial models to project future investments and benefits from mining. These projections are part of the mining sector input to the country's Medium Term Philippine Development Plan (MTPDP), 2001 - 2004.

Projected Mining Investments and Economic Benefits⁸

I. Projected Mining Investments

Based on known exploration projects in the country and assuming a favorable economic scenario in the international minerals market, a projection was made to predict the possible volume of investment in the minerals industry during the next two decades.

Projected Mining Investment (In Million US\$)							
Deposit	0 – 5 yrs.		5 - 10 yrs.		10 - 20 yrs.		TOTAL
	FTAA	MPSA	FTAA	MPSA	FTAA	MPSA	
Copper/Gold – Large	0	0	600	150	600	150	1,500
Copper/Gold – Small	0	30	0	30	0	30	90
Gold – Large	0	120	0	120	0	60	300
Gold – Small	0	25	0	75	120	75	295
Nickel – Large	0	50	0	0	0	0	50
Nickel – Small	0	0	0	20	0	20	40
Chromite	0	0	0	10	0	10	20
Total ...	0	225	600	405	720	345	2,295

Estimated Gross Output from Projected Mining Projects, 2001-2006						
	2001	2002	2003	2004	2005	2006
A. Existing Large Scale Metallic Mines	9,493	9,301	8,548	8,811	8,673	8,682
B. Existing Small Scale Metallic Mines	7,601	7,601	7,601	7,601	7,601	7,601
C. Existing Non-metallic Mines	13,000	13,000	13,000	13,000	13,000	13,000
D. Prospective FTAA Projects	0	0	3,500	22,920	22,920	22,920
E. Prospective MPSA Projects	42	4,011	5,017	48,942	50,869	50,875
• Total (Optimistic Scenario)	30,136	33,913	37,666	101,275	103,063	103,078
• Total (Pessimistic Scenario)	30,136	33,913	34,166	78,355	80,143	80,158
• No. of Large Operating Mines (Optimistic)	12	11	15	19	19	19
• No. of Large Operating Mines (Pessimistic)	12	11	14	17	17	17

⁸ Adapted from *The Philippine Minerals Industry Profile*. Mines and Geosciences Bureau. www.mines-denr.ph.

2. Projected Benefits from One "World Class" Mine

Ultimately, with the full, unconstrained implementation of the Mining Act of 1995, the government foresees to set a "lean but mean" mineral industry with about ten (10) world class mining operations which will be able to provide our expected economic benefits. With this setting, the government anticipates to generate about \$400 million annual contribution to foreign exchange, an amount equivalent to the remittances of our Overseas Filipino Workers (OFW).

A financial model of one "world class" copper-gold mine with a projected milling rate of 25 million tonnes per year and a projected commercial life of 20 years would generate an average of over US\$100 million per year in taxes and other benefits to the community.

The government maintains high hopes for such scenario when no Filipino mother and father will have to work in Saudi, Singapore and London only to find a living - a task that it positively entrusts to the mining industry.

Potential Financial Benefits to be Derived from One World Class Mine in the Philippines		
	Annual Average	Life of Mine
Foreign Exchange Earnings thru Exports Sales		
Income Tax	US \$ 66.70 Million	US \$ 951 Million
Excise Tax	US \$ 7.52 Million	US \$ 120 Million
Custom Duties	US \$ 0.18 Million	US \$ 3 Million
Tax on Dividends to Foreign Loans	-	-
Tax on Dividends to Foreign Stockholders	US \$ 2.79 Million	US \$ 48 Million
Business Tax	US \$ 0.70 Million	US \$ 14 Million
Real Property Tax	US \$ 0.30 Million	US \$ 46 Million
Community Tax	-	-
Occupation Fees	US \$ 0.01 Million	US \$ 1 Million
Government Income from Indirect Taxes		
Fuel	US \$ 1.02 Million	US \$ 20 Million
Tax on Payroll	US \$ 1.43 Million	US \$ 25 Million
VAT on Purchase of Local Goods/Services	-	-
Government Income from Additional Share	US \$ 21.30 Million	US \$ 111 Million
Payment to Other Filipino in the Form of:		
Royalty to Claimowners	US \$ 7.052 Million	US \$ 150 Million
Royalty to Indigenous Peoples	US \$ 3.76 Million	US \$ 75 Million
Salaries and Wages	US \$ 14.30 Million	US \$ 246 Million
Direct Foreign Investment	-	US \$ 740 Million
Development of the Host and Neighboring Communities	US \$ 0.90 Million	US \$ 18 Million
Development of Mining Technology and Geosciences	US \$ 0.30 Million	US \$ 6 Million

Brimo⁹ supported government projection when he discussed the experience of several mineral producing countries and the mining industry's impact to their economy:

⁹ Brimo, Gerard H. President, Philex Mining Corporation. *A Case for Mining – Making a Difference*. Philippine Daily Inquirer. July 23, 2001.

“From 1996 to 1998, mineralized countries such as Indonesia, Chile and Peru saw exploration expenditures surged to a total of around \$500 million. In Indonesia, mining contributes 6% to the GDP, \$12 billion to exports and almost \$600 million to the Government’s tax revenue.

In Chile, mining contributes 10 percent to GDP, \$8 billion in exports, and about \$700 million in taxes. In Australia, mining accounts for a staggering 20 percent of GDP and \$47 billion in exports”.

As well, he cited the potential benefits of five (5) “world-class” copper-gold deposits to the Philippine economy:

“\$4 billion in investments, generating \$2 billion in annual exports and PhP21 billion in annual taxes over a period of 25- to 35-years or more, and providing direct and indirect employment to 10,000 to 25,000 of our people, respectively (much higher if the multiplier effect is factored in);

A minimum \$1 billion in annual expenditures for environmental protection measures and a minimum PhP150 million in annual community development projects, part of the rather stringent environmental and social prescriptions of the 1995 Mining Act.

Occupying about 25, 000 hectares of land (insignificant compared to the country’s total 30 million hectares) in the boondocks where most of the deposits (if you can find them) are located, spurring regional development by the infrastructure and ancillary enterprises that will be established – indeed, the best example of countryside development that one can find”.

“Another five medium-sized operations could probably add 50 percent more to these figures. The potential of the industry is indeed significant and can make quite a difference in the country, let alone to the area where the operations will be located”.

Five “world class” mines can bring \$4 billion in investments...\$2 billion in annual exports and PhP21 billion in annual taxes...10,000 to 25,000 direct and indirect employment...\$1 billion in annual expenditures for environmental protection and a minimum of PhP150 million in annual community development projects.

- Gerard H. Brimo

4. MINERAL RESOURCES DEVELOPMENT LEGISLATION, RULES AND REGULATIONS

The earliest record of regulated mining activities in the Philippines dates back to 1846 when the concept of *jura regalia* or Regalian Doctrine was introduced and instituted by the King of Spain through Decrees of the Superior Civil Government of 29 January 1846. Prior to this Decree, mining activities were regulated through specific *cedularios* and *expedientes* (rules and regulations).

On the other hand, American mining policy in the Philippines was anchored initially on the organic act known as the Philippine Bill of 1902 which guided early American exploration activities and later, by Commonwealth Act No. 137 or the Mining Act of 1936. This Act was patterned after the Federal Mining Act of 1872 of the United States and incorporated most of the features of Philippine Bill of 1902. Among others, this Act introduced the patent system, the exclusion of private lands from exploration and occupation, the rights of claimants over concessions and the systems for the recording of claims and in the settlement of disputes.

After over four decades and with the expiration of the Laurel-Langley Agreement in 1974 which gave parity rights to Americans, the first “modern” mining law in the Philippines – Presidential Decree No. 463, the Mineral Resources Development Decree of 1974 – was promulgated by then President Ferdinand E. Marcos.

4.1 Presidential Decree No. 463 (PD 463) or the Mineral Resources Development Decree of 1974

PD 463 introduced the concept of 25-year mining leases and service contracts and was hailed as a “*transition from passive to active, from historic to relatively modernized system of administration and disposition of mineral lands*”¹⁰. PD 463 is the first mining law in the Philippines that contained provisions on how to deal with the environmental and social aspects of mining operations.

This law was implemented through a series of Mines Administrative Orders, collectively called the *Consolidated Mines Administrative Orders*, which clarified specific provisions of the law. The implementation of PD 463 was also supplemented by several Presidential Decrees, among which, are (1) PD 1251 that imposed a fee of PhP0.05 and PhP0.10 per metric ton of mine waste and mill tailings, respectively, on operating mines. The collected amount accrues to a trust fund which is utilized for the compensation of damages to lands or people impacted by mine wastes and tailings and (2) PD No. 1198 requiring that “*to the fullest extent possible, restore, rehabilitate, and return the lands, rivers, and the natural environment subject thereof (mining, quarrying, etc.) or affected thereby to their original conditions as of before such operations or activities*”.

¹⁰ Lopez, SP (1992). page 280.

The major environmental and social obligations under PD 463 include the allotment of 10% of the annual work obligation for the “*protection and enhancement of the environment*”; the allocation of ½ of 1% of the budgeted operating cost for socio-economic development and the posting of a performance bond for every hectare of active mining area to be utilized for mine rehabilitation.

4.2 Executive Order No. 279 (1989)

The 1987 Philippines Constitution, in Section 2 of Article XII thereof, provided the basis for the State’s main policy framework on the exploration, development and utilization of mineral resources. Enacted primarily as a transition law pending approval of the mining law then under review in the Philippine Congress, EO 279 ushered the shift from the leasehold system under PD 463 to production sharing agreement, co-production, joint venture and financial or technical assistance agreements with foreign owned corporations. This EO was implemented through a series of administrative orders and among others, contained provisions for progressive rehabilitation, environmental protection and industrial health as well as the development of mining communities and geosciences and mining technology.

This constitutionality of this interim law was challenged (Miners Association of the Philippines vs. Secretary of the Department of Environment and Natural Resources) in 1990 but was upheld as constitutional by the Philippine Supreme Court.

The First Generation FTAAAs were granted under this interim law.

4.3 Republic Act No. 7942 or the Philippine Mining Act of 1995 (1995)

Recognizing the tremendous opportunity for growth, policy makers initiated the development of a contemporary mining policy that is comparable to established mining countries. Initially called the *Mineral Resources Development Act of 1988*, the proposed mining policy was meant to achieve two primary tasks: (1) to re-vitalize the ailing Philippine mining industry by providing fiscal reforms and incentives and (2) to maintain a viable inventory of mineral reserves to sustain the industry through the fresh infusion of capital through direct foreign investments to finance mineral exploration and/or development activities. The consolidation of three bills in the Philippine Congress was subsequently enacted on March 03, 1995 as Republic Act No. 7942, the Philippine Act of 1995.

Table No. 4 : Major Modes of Mining Rights under the Philippine Mining Act of 1995

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

Among the most progressive features of this Act are (1) the built-in protection for the indigenous peoples (IP) through the *prior informed consent* requirement, one of, if not the only mining law in the world that contains such; (2) life-of-mine environmental and social provisions comparable to those found in other established countries; (3) a competitive fiscal regime and (4) equitable sharing of the benefits of mining among the major stakeholders – the national and local government, the community/ies and the mining company.

The first implementing rules and regulations (DENR Administrative Order No. 95 – 23, 1995) which took effect on September 1995, was amended in December 1996, largely as a result of the Marcopper incident. The revised implementing rules and regulations or DENR Administrative Order No. 96 – 40 (DAO 96 – 40) that took effect in 1997 contained strengthened environmental and social provisions with mandatory minimum expenditure/financial commitments.

DAO 96 – 40 also enshrined the principles of *Sustainable Mining*, which states, in Section 3 (Governing Principles) thereof, that:

“Mineral resources exploration, development, utilization and conservation shall be governed by the principles of sustainable mining, which provides that the use of mineral wealth shall be pro-environment and pro-people in sustaining wealth creation and improved quality of life under the following conditions:

- 1. Mining is a temporary land use for the creation of wealth which leads to an optimum land use in the post-mining stage as a result of progressive and engineered rehabilitation work done in cycle with mining operations;*

Box No. 1 - Factors Controlling the Grant of Mining Rights under the Philippine Mining Act of 1995

Applications for mining rights cover approximately 12.2 million hectares or 40.65% of the country's total land area. The general perception is that areas applied for by mining companies will be automatically subjected to widespread environmental damage with resulting displacement of communities and social alteration. However, it must be clarified that mining applications do not necessarily mature into mining rights and the grant of mining rights is controlled by the following factors:

(1) Qualified Person - The Mining Act and its IRR specifically state that a mining permit or contract can only be granted to a **Qualified Person**, meaning, one must possess, among others, proof of financial and technical capability as well as a satisfactory environmental management and community relations track record. Legally organized Filipino corporations may apply for an MPSA, FTAA or EP for as long as they meet the criteria for a Qualified Person. Foreign corporations, on the other hand, can apply for an EP, FTAA or Mineral Processing Permit. In a Mineral Agreement, foreign participation is limited to a maximum of 40% equity;

(2) Land Use Priorities – Areas classified as closed to mining (e.g. critical watersheds, protected areas, national parks) are automatically excluded from mining applications while applied areas in conflict with other land uses and not covered by the required area clearance are automatically excluded. Thus, the applied area is either reduced or in some cases, denied; and

(3) Economic Feasibility – It is not automatic that a mining contractor shall proceed immediately to development and commercial operation after it has completed exploration.

Should the Mining Contractor be fortunate enough to delineate a mineral deposit during the exploration period, the Contractor must prepare and submit for approval a Mining Project Feasibility Study.

The Mining Project Feasibility Study shall consider all socio-economic, market, financial and technical factors relevant to the project as well as all the minimum expenditures for social and environmental commitments provided under the revised IRR.

Impositions for *environmental protection* (at least 10% of the initial capital expenditures for environment-related expenditures; at least 3% to 5% of annual direct mining and milling costs for environmental management during the life-of-the-mine and financial warranties to cover final mine rehabilitation) and *social commitments* (at least 1% of the annual operating costs for the development of the community and mining technology and geosciences and at least 1% of the gross annual revenues as royalty to Indigenous Peoples, if any + just compensation for surface occupants/landowners) are guarantees that the mining contractor will meet its environmental protection and enhancement and social objectives over the life-of-the-mine.

In essence, mining projects that cannot absorb the environmental and social costs of modern mining shall not be allowed to proceed.

Adapted from *A Response to the Issues Raised Against Mining* (v3.2), Mines and Geosciences Bureau. April 2001.

2. *Mining activities must always be guided by current best practice in environmental management committed to reducing the impacts and effectively and efficiently protecting the environment;*
3. *The wealth accruing to the Government and communities as a result of mining should also lead to other wealth-generating opportunities for the people and to other environment-related endeavors;*
4. *Mining activities shall be undertaken with due and equal emphasis on economic and environmental considerations, as well as for health, safety, social and cultural concerns; and*

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

In essence, current regulations mandate mining companies to: “**(1)** *rehabilitate land disturbed by mining activities to a physically and chemically stable and self-sustaining ecosystem based on a final land use more productive or proximate the original land use as agreed with the communities and local governments;* **(2)** *establish safety and health management systems and ensure continual improvement of safety and health performance based on a risk management approach;* **(3)** *contribute to the establishment of sustainable/alternative livelihood opportunities/skills for the host and neighboring communities during and after the operation of the mine; and* **(4)** *equitably share the economic benefits derived from mining among the major stakeholders – national and local government, communities and the mining company. The overriding objective is to guarantee that future environmental conditions are not compromised and social stability is maintained and that no financial liability is absorbed either by the Government or by the community”¹¹.*

Programs for Environmental Protection and Enhancement Programs (EPEP) and Final Mine Rehabilitation/ Decommissioning Plan (FMR/DP) are now integral to mining operations in the Philippines. Expenditure commitments for environmental and social responsibilities were mandated such as 10% of capital expenditures for initial environment-related expenses and 3 to 5% of direct mining and milling costs for annual environmental programs. The 1% of the annual direct mining and milling costs, meanwhile, would be utilized to implement the Social Development and Management Program (SDMP) for the development of the host and neighboring communities and development of mining technology and sciences. An additional 1% of the gross output is given if the mining project is located in ancestral domain lands and shall be utilized for the socio-economic well-being of the concerned indigenous peoples group (IP).

Prescribed Environmental and Social Expenditures under current regulations:

- ***10% of initial capital expenditures for environment-related expenses;***
- ***3 to 5% for annual environmental programs;***
- ***1% of annual direct mining and milling costs for community development;***
- ***1% of gross revenue as royalty to indigenous peoples, if any.***

Table No. 5 is the matrix of environmental, social and mine safety provisions in past and current mining laws, rules and regulations.

¹¹ Ramos, Horacio C. Director, Mines and Geosciences Bureau (MGB). *Our Journey to the Future. unpublished and undated policy paper.*

Table No. 5: Matrix of Mine Safety and Health, Social and Environmental Provisions of Past and Present Mining Laws, Rules and Regulations

	PD 463 (1974)	DAO 57 (1989)	DAO 95 – 23 (1995)	DAO 96 – 40 (1996)
ENVIRONMENTAL	<ul style="list-style-type: none"> • Study of the environmental impact and effect of mining activities on the ecology of the area during and after operation as part of the Annual Work Program • Presidential Decree No. 1586, which formally established the Environmental Impact Statement system. • Long term plan for the protection and enhancement of the environment equivalent to 10% of the total Annual Work Obligations. 	<ul style="list-style-type: none"> • Initial Environmental Examination during exploration • Environmental Impact Statement (EIS) as basis for Environmental Compliance Certificate (ECC) • Plan for Environmental Protection and Industrial Safety • Progressive Rehabilitation 	<ul style="list-style-type: none"> • Environmental Management and Socio-cultural Relations Track Record • Environmental Work Program (EnWP) • same • Environmental Protection and Enhancement Program (EPEP) based on ECC conditions. The EPEP will set out the life-of-mine env'tal protection, enhancement and rehab. commitments. • Progressive rehabilitation through an Annual Environmental Protection and 	<ul style="list-style-type: none"> • Renamed Environmental Management and Community Relations Record (EMCRR) • EnWP retained with at least 10% of total cost for environmental related expenses • same • same • AEPEP retained at a cost equivalent to at least 3 to 5% of the annual direct

	<ul style="list-style-type: none"> Establishment of an Environmental Protection and Enhancement Unit Presidential Decree No. 1251 (1977) imposed a fee of PhP0.05 and PhP0.10 per ton of mine waste and mill tailings, respectively. Regional Investigation and Assessment Team 	<ul style="list-style-type: none"> same same 	<p>Enhancement Program (AEPEP) which is based from the EPEP</p> <ul style="list-style-type: none"> Establishment of the Mine Rehabilitation Fund (MRF) as an environmental deposit to ensure satisfactory compliance with the EPEP and AEPEP. Divided into the Monitoring Trust Fund (MTF) maintained at PhP50,000 and the Rehabilitation Cash Fund (RCF) maintained at 10% of the total cost to implement the EPEP or PhP5 million, whichever is lower. Establishment of a Mine Environment Executive Office (MEEEO) same same 	<p>mining and milling costs</p> <ul style="list-style-type: none"> Establishment of the Contingent Liability and Rehabilitation Fund (CLRF) incorporating the MRF and the Mine Waste and Tailings Fee Reserve Fund (MWTRF). The MRF remains divided into the RCF and the MTF. An Environmental Trust Fund (ETF) also established to pay for damages other than those caused by mine wastes and tailings (e.g., blasting). Renamed as the Mine Environmental Protection and Enhancement Office (MEPEO) same same
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	<p>(RIAT) to investigate and assess claims for compensation for damages</p> <ul style="list-style-type: none"> • Pollution from mine waste and mill tailings penalized with a fine or imprisonment of not more than 6 years or both • Presidential Decree No. 1198 (1977) required that “to the fullest extent possible, restore, rehabilitate, and return the lands, rivers, and the natural environment subject thereof (mining, quarrying, etc.) or affected thereby to their <i>original conditions</i> as of before such operations or activities”. • Provisions requiring that “completely mined out areas shall be rehabilitated before abandonment for possible development into agricultural, industrial, commercial or residential purposes” • Performance bond for every hectare or fraction thereof for mine 		<ul style="list-style-type: none"> • Final Mine Rehabilitation/Decommissioning Plan to be submitted five (5) years before decommissioning with financial requirements 	<ul style="list-style-type: none"> • Penalty per metric ton for unauthorized discharge of mill tailings • Final Mine Rehabilitation/Decommissioning Plan including financial requirements up to a post-decommissioning period of ten years.
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	rehabilitation		<ul style="list-style-type: none"> • Incentives for pollution control devices • Mines Environmental Award (MEA) • Environmental Monitoring and Audit through a Multipartite Monitoring Team (MMT) 	<ul style="list-style-type: none"> • Same • Philippine Mineral Industry Environmental Award (PMIEA) • same
SOCIAL	<ul style="list-style-type: none"> • The Annual Work Program shall also include ½ of 1% of the budgeted operating cost for socio-economic development 	<ul style="list-style-type: none"> • Development of Host and Neighboring Communities • Development of Geosciences and Mineral Technology • Recognition of Indigenous Cultural Communities 	<ul style="list-style-type: none"> • Development of Mining Communities, Sciences and Mining Technology • Prior consent from ICC and negotiated royalty 	<ul style="list-style-type: none"> • Dev't of Mining Communities, Sciences and Mining Tech. retained with a mandated allocation of 1% of the annual direct mining and milling cost • Prior <i>informed</i> consent of the ICC with royalty placed at a minimum of 1% of gross output
MINE SAFETY AND HEALTH	<ul style="list-style-type: none"> • Mine Safety, Health and Sanitation 		<ul style="list-style-type: none"> • Mine Safety and Health is covered by a separate rules and regulations. A Safety and Health Program (SHP) is required from operating mines. 	<ul style="list-style-type: none"> • Mine Safety and Health Standards with SHP and Emergency Response Program

NOTES:

- Presidential Decree No. 463 was implemented by a series of Mines Administrative Orders collectively known as the Consolidated Mines Administrative Order (CMAO)
- DENR Administrative Order No. 57, Series of 1989 was the rules and regulations implementing Executive Order No. 279
- DENR Administrative Order No. 95 – 23 was the *first* rules and regulations implementing Republic Act No. 7942 or the Philippine Mining Act of 1995
- DENR Administrative Order No. 96 – 40 is the *revised* rules and regulations implementing RA 7942

5. ENVIRONMENTAL LAWS, RULES AND REGULATIONS RELEVANT TO MINING IN THE PHILIPPINES

One of the earliest pieces of environmental legislation in the Philippines was *Republic Act No. 3931 of 1964 (Pollution Control Law)* which established the National Water and Air Pollution Commission (NWAPC) and declared the “national policy to maintain reasonable standards of purity for the waters and air of this country with their utilization for domestic, agricultural, industrial and other legitimate purposes”. This law defined *pollution* as:

“(The) alteration of the physical, chemical, and/or biological properties of water and/or atmospheric air of the Philippines, or any discharge of any liquid, gaseous, or solid substance into any of the waters and/or atmospheric air of the country as will or is likely to create or render such waters and/or atmospheric air harmful or detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate uses, or to livestock, wild animals, birds, fish or other aquatic life”.

RA 3931 was later revised by *Presidential Decree No. 984 (PD 984)*, which is commonly referred to as the *National Pollution Control Decree of 1976*. This law also renamed the NWAPC as the National Pollution Control Commission (NPCC) but retained much of its power (setting of pollution standards, technical/scientific research to in support of its mandate, the issuance of permits and authorizations and the power to decide pollution-related cases). It also defined *industrial waste* as:

“(A)ny liquid, gaseous, or solid matter, or other waste substance or a combination thereof resulting...from the development, processing or recovery of any natural resources which may cause or tend to cause pollution, or contribute to the pollution of the water, air and land resources of the Philippines”.

The succeeding environmental legislation: *Presidential Decree No. 1151*, the Philippine Environmental Policy and *Presidential Decree No. 1152*, the Philippine Environmental Code, both enacted in 1977, are considered as the foundation of modern day environmental laws in the Philippines. PD 1151 recognized the right of the people to a healthy environment and required the preparation of Environmental Impact Statements for every action, project or undertaking which significantly affects the quality of the environment. PD 1152, on the other hand, provided specific standards and regulations on air quality management, water quality management, land use management, natural resources management and conservation. PD 1152 also contained the first direct reference to mining, in Section 19 (Enforcement and Coordination) thereof, and stated that:

“The production, utilization, storage and distribution of hazardous, toxic and other substances such as radioactive materials, heavy metals, pesticides, fertilizers, and oils, and disposal, discharge and dumping of untreated wastewater, mine-tailings and other substances that may pollute any body of water of the Philippines resulting from normal operations of industries, water-borne sources, and other human activities, as well as those resulting from accidental spills and discharges shall be regulated by appropriate agencies pursuant to their respective charters and enabling legislations”.

The Philippine Environmental Impact Statement (EIS) system was formally established under *Presidential Decree No. 1586 (The Philippine Environmental Impact Statement (EIS) System)*. Under the system, mining (and quarrying) projects are classified as “*environmentally critical projects*”, hence, need an Environmental Compliance Certificate (ECC) prior to the development and operational stage. Excluded from the coverage of the System are:

- Environmentally critical projects (including mining projects) which have been operational prior to 1982, except when their operations are being expanded in terms of production capacity; stopped for more than two continuous years and/or modified the technology/production method utilized;
- Projects that discharge minimal amount of wastes and that the management of such wastes is easy, has a capitalization of not more than ₱ 500,000, employs not more than 20 persons and is of national interest or tied up with international commitments; and
- Pursuant to Section 70 of the Philippine Mining Act of 1995, exploration projects are exempted from the Environmental Compliance Certificate requirement.

The EIS prepared by the company is subjected to (1) *procedural review* to determine completeness of information and compliance with prescribed format and (2) *substantive review* by a multi-disciplinary EIA Review Committee (EIARC) composed of experts from technical and scientific fields relevant to the project. *Public participation* and *social acceptability*¹² are integral in the substantive review. This process can lead to either the denial of the EIS or the issuance of an ECC. The denial of the ECC, however, does not preclude the submission of a new EIS document for the project.

In most recently issued ECCs for mining projects, the pertinent provisions of the Mining Act and DAO 96 – 40 on social, environmental and mine safety and health have been incorporated as part of the conditionalities. Any violation of any conditionalities in the ECC can mean suspension or revocation of the ECC issued, in addition to possible penalties.

The ECC conditionalities subsequently become the basis for the EPEP required under mining regulations.

¹² The Procedural Manual for the EIS System issued by the Environmental Management Bureau, Department of Environment and Natural Resources (1999) states that *public participation* is meant to *give citizens the opportunity to influence major decisions that affect them and to enable citizens to take responsibility for environmental protection and management through active involvement in decision-making*. It also defined *social acceptability* as *the result of a process that is mutually agreed upon by the DENR, the stakeholders and the proponent to ensure that the concerns of stakeholders, including affected communities, are fully considered and/or resolved in the decision-making process for granting or denying the issuance of an ECC*.

Table No. 6: Non-comprehensive list of environmental laws, rules and regulation relevant to mining.

1. Presidential Decree No. 3931 (June 18, 1964)	Created the National Water and Air Pollution Control Commission
2. Presidential Decree No. 984 (18 August 1976)	The "Pollution Control Law of 1976" declaring as a national policy the prevention, abatement and control pollution of water, air and land for the more effective utilization of the country's resources.
3. Presidential Decree No. 979 (18 August 1976)	Revision of Presidential Decree No. 600 governing prevention and control of Marine Pollution.
4. Presidential Decree No. 1067 (31 December 1976)	Instituted a Water Code, thereby revising and consolidating the laws governing ownership, appropriation, utilization, exploitation, development, conservation and protection of water resources.
5. Presidential Decree No. 1121 (April 18, 1977)	Created the National Environmental Protection Council
6. Presidential Decree No. 1151 (June 6, 1977)	The "Philippine Environment Policy"; Recognizes compulsory submission of "Environmental Impact Assessment" studies.
7. Presidential Decree No. 1152 (June 6, 1977)	The "Philippine Environmental Code".
8. Presidential Decree No. 1586 (June 11, 1978)	Provided the adoption and implementation of the legal framework of the EIA provided under PD 1151.
9. Guidelines on the implementation of Section 56 of PD 1152	Rules and regulations on tax incentives for the installation, utilization and operation of pollution control facilities pursuant to PD No. 984 and its implementing rules.
10. Presidential Proclamation No. 2146 (December 12, 1981)	Proclaiming certain areas and types of projects as Environmentally Critical (which includes mining) and within the scope of Environmental Impact Statement System established under PD 1586.
11. Letter of Instruction No. 1179 (December 14, 1981)	Instructing all appropriate ministries and their attached agencies regarding the issuance of an Environmental Compliance Certificate (ECC) as a precondition to commencement of any activity or project.
12. National Environmental Protection Council Office Circular No. 3, Series of 1984 (November)	Technical definitions and scope of the Environmentally Critical Projects and Areas enumerated in Proclamation 2146.
13. Department of Environment and Natural Resources (DENR) Administrative Order No. 52, series of 1989	Rules and regulations on the participation of non-governmental organizations in the DENR programs, particularly in natural resources development, conservation, management and protection and the enforcement of laws, rules and regulations for the sustainable development of the country's remaining natural resources for the benefit and enjoyment of present and future generations of Filipinos.
14. Republic Act (RA) No. 6969 (October 26, 1990)	An Act to control toxic substances and hazardous and nuclear wastes, providing penalties for violations.
15. DENR Administrative Order No. 34 (20 March 1990), series of 1990	Revised Water Usage and Classification/Water Quality Criteria.
16. DENR Administrative Order No. 35, series of 1990	Revised Effluent Regulations of 1990.

17. DENR Administrative Order No. 21, series of 1992	Amending the revised rules and regulations implementing PD 1586 (Environmental Impact System).
18. DENR Administrative Order No. 29, series of 1992	General rules and regulations of RA 6969 to cover importation, manufacture, processing, handling, storage, transportation, sale, distribution, use and disposal of all unregulated chemical substances and mixtures in the Philippines, including the entry, even in transit, as well as the keeping and storage and disposal of hazardous and nuclear waste into the country for whatever purpose.
19. DENR Administrative Order No. 14, Series of 1993	Revised Air Quality Criteria
20. DENR Administrative Order No. 96 – 37	Revising DAO 21, Series of 1992, to further strengthen the implementation of the EIS System
21. Republic Act No. 8749 (June 23, 1999)	The Philippine Clean Air Act of 1999

6. THE REVISED IMPLEMENTING RULES AND REGULATIONS: FOCUS ON ENVIRONMENTAL AND SOCIAL PROVISIONS

The strong focus on the environmental, safety and health and social obligations of mining companies, from exploration, development to post-rehabilitation management, are all part of the holistic approach that will pave the way for a responsible mining industry.

Figure 6 shows the ideal management framework under current mining law, rules and regulations.

6.1 Certificate of Environmental Management and Community Relations Record (CEMCRR)

A *Certificate of Environmental Management and Community Relations Record (CEMCRR)*, part of the mandatory requirements for mining applications, is a proof of the company's satisfactory relationship with local communities and the social and environmental acceptability of its resource management strategies in the past, if any. In case of exploration/mining companies with no previous mining ventures/projects, a Certificate of Exemption (CoE) is instead issued.

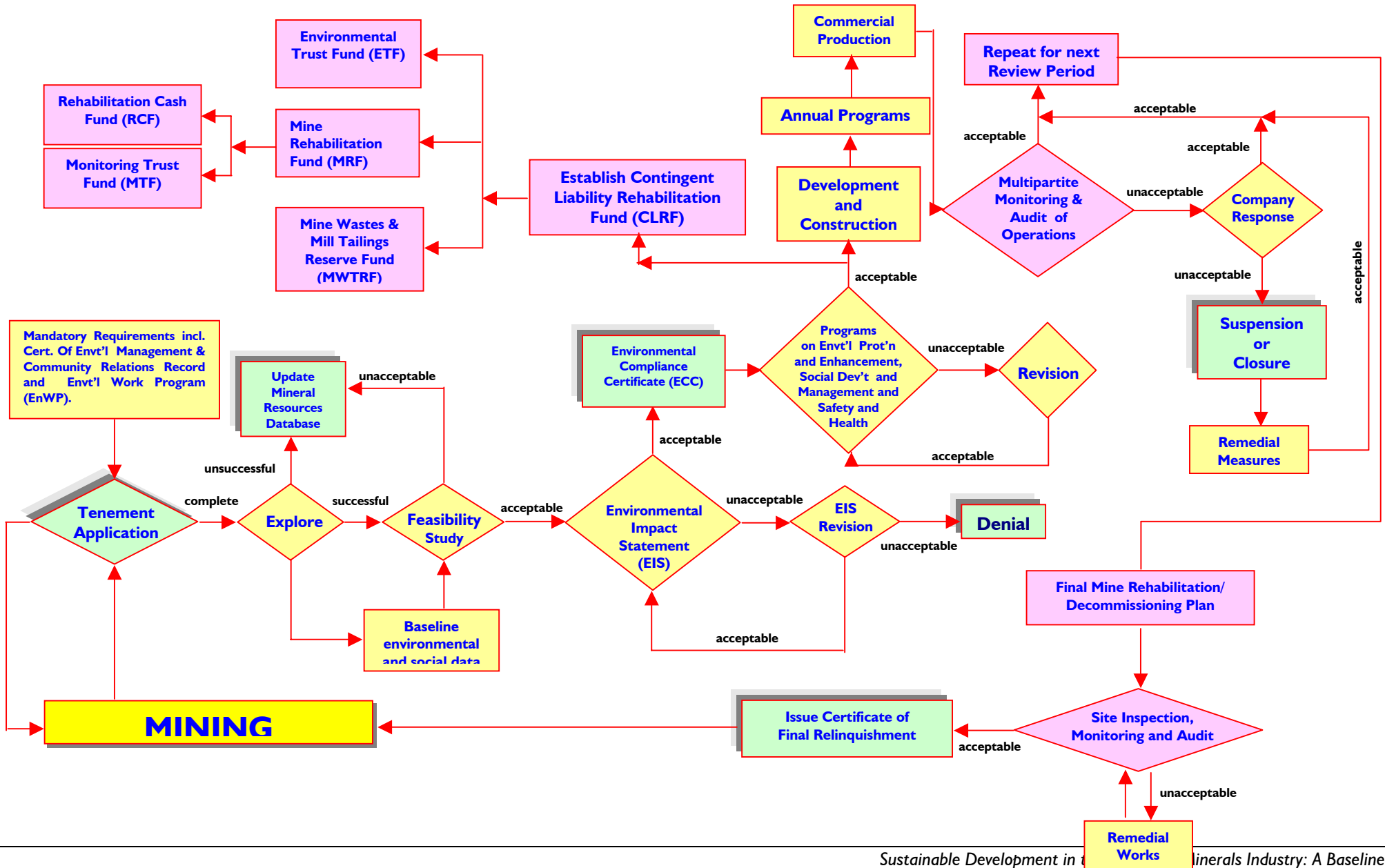
6.2 Work Programs

6.2.1 Environmental Work Program (EnWP)

The Environmental Work Program (EnWP) for Exploration details the environmental impact control and rehabilitation measures associated with exploration activities, including the costs (at least 10% of exploration expenditures) to ensure that sufficient financial resources are available to meet the environmental commitments in the EnWP. The EnWP shall include, among others, the environmental protection and enhancement strategies, post – exploration land 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. Research and development and technology transfer are also encouraged, especially for projects located near environmentally sensitive areas.

Figure No. 7 - Ideal Management Framework under existing mining law, rules and regulations (Banaag 2000).



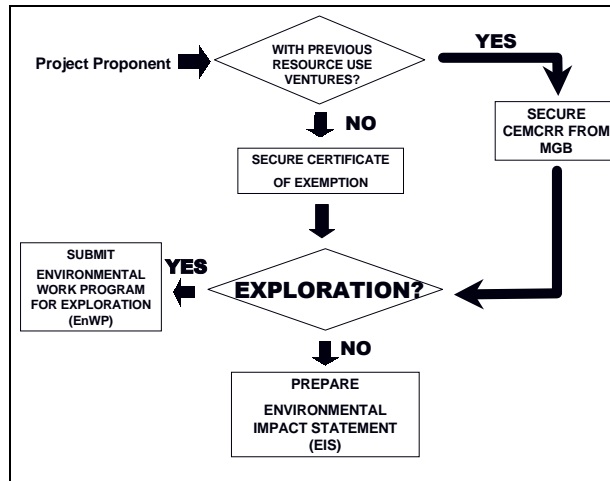


Figure No. 8 – Simplified Flow Diagram on when to Acquire a CEMCRR or when to Proceed to an EIS.

6.2.2 Environmental Protection and Enhancement Program (EPEP)

The EPEP is the operational link between the environmental management provisions of the revised IRR and the conditions under the ECC. It details the methods and procedures the company will use in attaining its environmental protection and management objectives. It also provides a description of the expected impacts of the mine and sets out the life-of-mine environmental protection and enhancement strategies based on best practice in environmental management in mining. It includes a statement on the post-mining land use potential for various kinds of disturbed lands such as mine pits, waste dumps, and tailings impounding structures.

Once the EPEP is approved, a Certificate of Approval (CoA) is given to the company.

The execution of a Memorandum of Agreement (MOA) with major stakeholders, especially the local government units, formally establishes the Contingent Liability and Rehabilitation Fund (CLRF). The MOA will strengthen the company's commitment to implement the EPEP. An Environmental Trust Fund (ETF), while not provided in the regulations, is established through the MOA. The ETF will be utilized to compensate for damages other than those caused by mine wastes and tailings, e.g., as a result of blasting activities.

The EPEP is expected to be integrated into the company's Environmental Management System (EMS).

Anchored on the EPEP, the company prepares an Annual EPEP which details the short-term environmental management objectives that would be implemented by the mining company. Among others, it shall include programs on revegetation/reforestation and slope stabilization of disturbed areas, waste and tailings disposal areas, watershed development and water conservation and socioeconomic development.

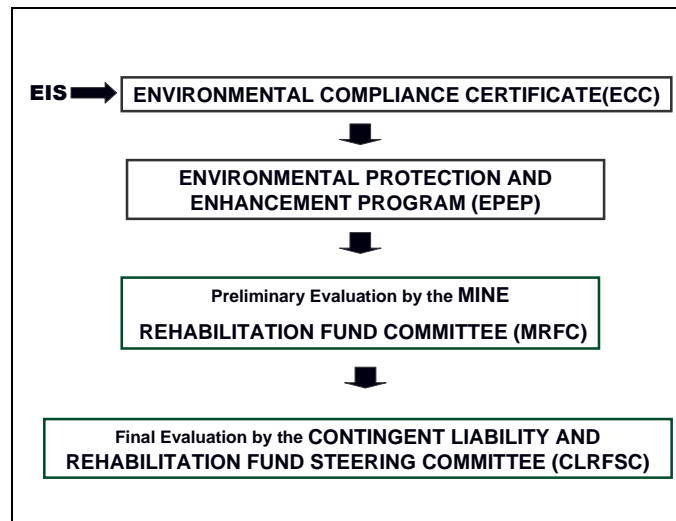


Figure No. 9 – The EPEP Evaluation Process.

6.2.3 Final Mine Rehabilitation/Decommissioning Plan (FMR/DP)

The FMRDP ensures a smooth transition from active mining operations to eventual closure. It must be submitted five (5) years before the expected mine closure. The Plan, done in consultation with the communities and local governments and approved by the Government, shall include (1) a *social plan* aimed at minimizing the social impact of the closure of the mine to the community, the local government and the employees and their dependents and (2) a *mine rehabilitation plan* that will quickly and cost-effectively transform mine-affected lands to a physically and chemically stable and self-sustaining ecosystem that approximates the original land use or to a pre-agreed productive alternative land use that is suitable and acceptable to the community.

A financial plan for a post-decommissioning period of ten (10) years is integral to the FMR/DP.

6.3 Financial Assurances and Mechanisms

6.3.1 The Contingent Liability and Rehabilitation Fund (CLRF)

The *Contingent Liability and Rehabilitation Fund (CLRF)* is the primary financial mechanism for mine rehabilitation and multi-partite monitoring through the *Mine Rehabilitation Fund (MRF)* and damage compensation through the *Mine Wastes and Tailings Reserve Fund (MWTRF)*.

The MRF is established and maintained by each operating mine as a reasonable environmental deposit to ensure the availability of funds for the satisfactory compliance of the commitments under the EPEP. The MRF is used for the regular monitoring of mining operations, physical rehabilitation of mining affected areas as well as for research on the technical and preventive aspects of rehabilitation.

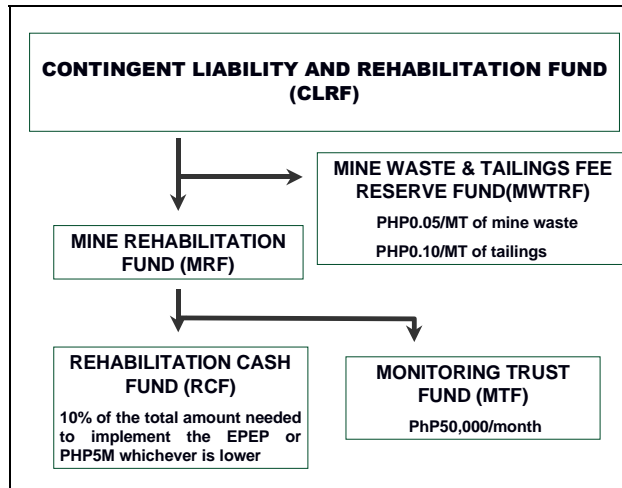


Figure No. 10 – Financial Assurances under the CLRF.

Under the MRF are the *Monitoring Trust Fund (MTF)* and the *Rehabilitation Cash Fund (RCF)*. The MTF is meant to cover the travel and laboratory expenses incurred by the *Multi-partite Monitoring Team (MMT)* and is set at an amount not lower than PhP50,000 (approx. US\$1,000). The RCF, meanwhile, is established to implement the rehabilitation activities under the EPEP and is placed at an amount equivalent to 10% of the total amount to implement the EPEP or PhP5 million (approx. US\$100,000), whichever is lower. The MTF and RCF function in such a way that the company periodically adds money to replace the utilized amount in order to maintain the prescribed minimum.

The MWTRF is utilized for the compensation of damages resulting from mine wastes and tailings and is derived from the PhP0.05 and PhP0.10 collected from mining companies for every ton of mine waste and mill tailings, respectively, generated by the mine. The ETF, meanwhile, is pegged at a minimum of PhP50,000.

6.3.2 Fund Management

The various funds previously mentioned are managed by a *Mine Rehabilitation Fund Committee (MRFC)* created by the MGB Regional Director for each mining projects. The MRFC is chaired by the Regional Director with representatives from the mining company, the local government, the Environmental Management Bureau (EMB) and an NGO active in the area. The validation of claims for compensation for damages is vested to a *Regional Investigation and Assessment Team (RIAT)* composed of the MGB Regional Office, the affected person/claimant and representatives from government agencies whose expertise are deemed necessary.

The MRFC and the RIAT are both under the supervision of the *Contingent Liability and Rehabilitation Fund – Steering Committee (CLRF – SC)* created at the MGB Central Office and chaired by the MGB Director with representatives from seven (7) other government agencies. The CLRF – SC provides the policies and directions for the MRFC and the RIAT; deliberates and approves the EPEP; approves the payment of claims for

compensation for damages; and when necessary, on its own or through a private entity, conduct specific scientific/technical studies to assist in decision-making.

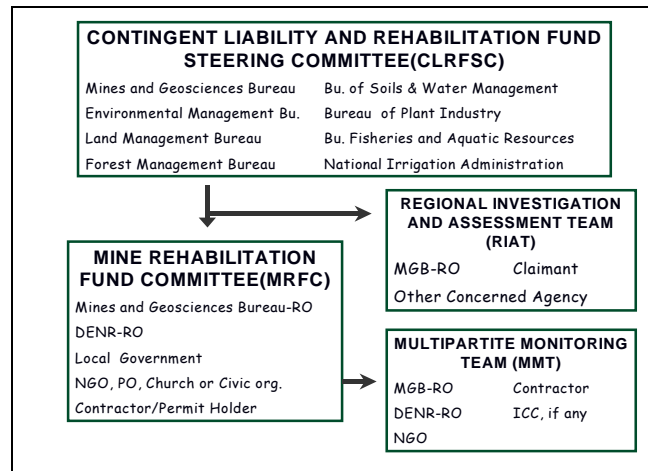


Figure No. 11 – The Relationship and Composition of the CLRF, the MRFC, the RIAT and the MMT.

6.3.3 Environmental Monitoring and Audit

Environmental monitoring and audit of a mining operation is undertaken either through:

- *Self Audit* by the Mine Environmental Protection and Enhancement Office (MEPEO) established in each mining operation;
- *Independent Audits* by a third party, in order to identify environmental risks affecting the mining operations and to serve as basis for the development of an effective environmental management system; and
- *Environmental Monitoring* of the company's compliance to the ECC and the approved EPEP through quarterly environmental monitoring by a Multipartite Monitoring Team (MMT) composed of representatives of MGB and DENR regional offices, the mining contractor, an NGO and IP, if any.

6.4 Mine Safety and Health

The ratification by the Philippine Senate of ILO Convention No. 176 (1995), *Safety and Health Conditions in Mines* on December 08, 1997 is considered as an important landmark in the struggle of Philippine miners for safer and healthier working conditions. The ratification capped a three-year campaign by the National Mines and Allied Workers' Union (NAMAWU). Convention 176 is the first OSH-related Convention to be ratified by the Philippines¹³.

Consequently, pertinent provisions of the Convention were integrated in DENR A. O. 2000 - 99, the *Mine Safety and Health Standards of 2000*. Among which are: (1) that safety and

¹³ Szal, Richard, Dr., Director, International Labor Organization (ILO) Manila. *The Role of ILO in Mining in the Philippines*, paper presented during the *Can Responsible Mineral Development be an Answer to the Economic Crisis?* Conference, Hotel Intercontinental, Manila, Philippines. November 17 and 18, 1998.

health be a priority in the design, operation and maintenance of mines; (2) a right-to-know provision requiring the government or the employer to provide workers with information on any workplace health and safety hazards; (3) the right of worker’s representatives to take part in investigations, to be involved in the development of safety policies and procedures to monitor safety and health practices and to seek independent advice and (4) the right of mineworkers to “remove themselves from any location of the mine when circumstances arise which appear with reasonable justification to pose serious danger to their safety and health”, among others.

The Mine Safety and Health Standards of 2000 also require, among others, the submission of an annual Safety and Health Program (SHP) and Emergency Response Program (ERP).

6.5 Social Development and Management Program (SDMP)

The Philippine Mining Act of 1995 in one of its governing principles clearly states “*the grant(ing) of mining rights shall harmonize existing activities, policies and programs of the government that directly/indirectly promote self-reliance, development and resource management. Activities, policies and programs that promote community-based, community- oriented and processual development shall be encouraged, consistent with the principles of people empowerment and grassroots development.*” This is consistent with the current Government emphasis on holistic development, that is, economic growth *and human development.*

Consistent thereof, DAO 96 – 40 mandated that “*contractor/permit holder/lessee shall assist in the development of the host and neighboring communities to promote the general welfare of the inhabitants living therein. A minimum of one (1%) percent of the direct mining and milling costs shall be allotted annually for the development of mining community, mining technology and geosciences*”.

Box No. 2 – Social Acceptability of Mining Projects

Social acceptability for mining projects in the Philippines is anchored on: (1) DENR A.O. No. 96-40, the revised implementing rules and regulations of Republic Act No. 7942, the Philippine Mining Act of 1995 and (2) DENR A.O. No. 96-37 revising DENR A.O. No. 21, Series of 1992, to Further Strengthen the Implementation of the Environmental Impact Statement (EIS) System.

Specifically, the regulations require the following:

A. DENR A.O. No. 96 – 40: Consistent with the desire to maintain social harmony as early as the application stage, the revised IRR provided for community consultation by mandating the submission/conduct of the following: (a) Area Clearance/s; (b) Publication, Posting and Radio Announcement; (c) a Certificate of Environmental Management and Community Relations Record (CEMCRR); (d) Prior approval by the *Sanggunian* (Local Council) and (e) Prior Informed Consent in case of ancestral lands/domains.

The Area Clearance is designed to identify other land uses within the applied area and their exclusion if necessary. The publication, posting and radio announcement requirement, on the other hand, notifies the public of the existence of the tenement application and is aimed at identifying persons or entities with *valid* interests or claims within the applied area. Should there be any, opposing parties are encouraged to enter into amicable settlement or if not, resolution through the Panel of Arbitrators tasked to resolve mining cases.

The CEMCRR, meanwhile, is a proof of the company's relationship with the local community/ies and the social and environmental acceptability of its resource management strategies in the past, if any.

To ensure that local government units are properly informed about the project and to facilitate the process by which the community shall reach an informed decision on the acceptability of the project, mining contractors proceeding to the development/extraction stage are required to secure prior approval and endorsement from any two (2) of the concerned *Sanggunian* (Council) (*Panlalawigan* (Provincial), *Bayan* (Municipal) or *Barangay* (Community)) in support of the project. While in the case of exploration projects, proof of consultation or project presentation with any two (2) of the concerned *Sanggunians* shall be required.

In either case, the proof of prior approval, endorsement, consultation and/or project presentation shall be in the form of a formal Resolution or Certification passed by the concerned *Sanggunian*.

The free and prior informed consent required for areas within ancestral lands ensures that the rights of Indigenous People's to their land is properly recognized and that they are actively involved in the decision making process; and

B. DENR A.O. No. 96-37: Social acceptability under the EIS system is not a simple "yes" or "no" vote for the project where the majority wins. Rather it is a resolution of all valid concerns through a series of dialogues, information, and negotiation among stakeholders, especially with the people living in the surrounding communities. The absence of opposition/s to the proposed project does not mean that the project is socially acceptable and conversely, the existence of opposition/s does not mean that the project is not socially acceptable.

If the project is deemed socially and environmentally acceptable, an Environmental Compliance Certificate (ECC) will be issued to the project proponent containing conditions which will require the preparation and implementation of management plans for identified social and environmental concerns.

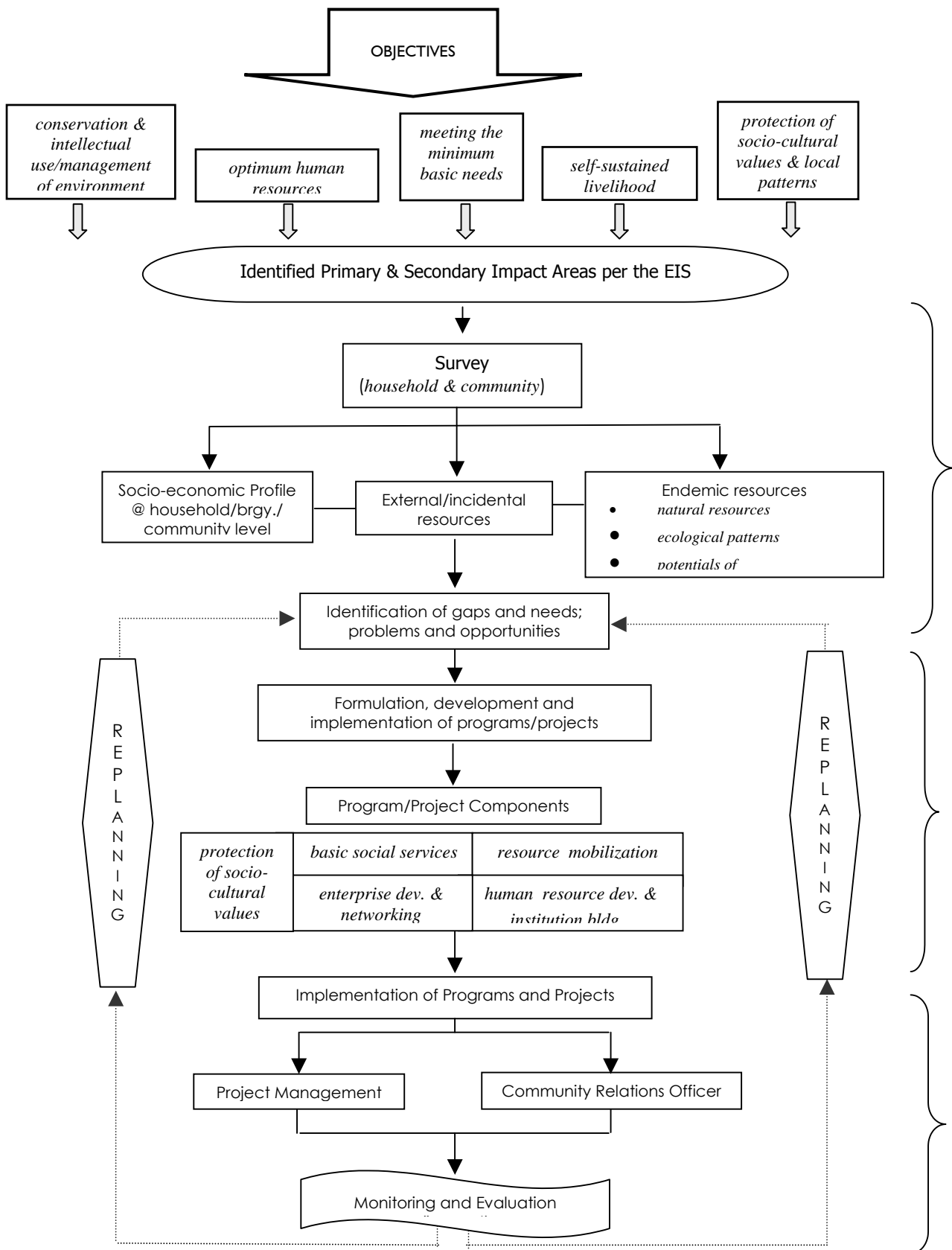
The mechanism for the implementation of the *Social Development and Management Program (SDMP) for Mining Projects* is governed by DENR Administrative Order No. 2000 - 99.

The SDMP is considered as the primary tool for the development and implementation of community programs and projects in consultation and in partnership with the host and neighboring mining communities. 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 principles of people empowerment and sustainable development. The one percent (1%) of the direct mining and milling costs allocated for the purpose is divided at ninety percent (90%) of the one percent (1%) to implement the SDMP and the remaining ten percent (10%) for the development of mining technology and geo-sciences.

The SDMP covers five-year periods in the life of the mine and can be shortened dependent on the progress of the implementation of the various community development programs or to meet the changing needs and demands of the communities.

Figure No. 12 shows the Social Development and Management Program Framework.

Figure No. 12 – The Social Development and Management Framework.



7. ISSUES CONFRONTING THE LOCAL MINING INDUSTRY

7.1 Good Governance and Lack of Government Support

Under the Medium Term Philippine Development Plan (MTPDP) 2001 – 2004, good governance and the rule of law was adopted as one of the four pillars of the current Administration's economic policy.

“Good and effective governance is recognized as vital to winning the battle against poverty. This rests on a sound moral foundation, a philosophy of transparency, and an ethic of effective implementation. The politics of personality and patronage will be replaced with a new politics of party programs. Underpinning this is a process of consultation and empowerment that will provide a foundation for true reforms. Leadership by example is imperative.

The (Arroyo) Administration is committed to simple, fair, transparent, and predictable rules to reduce the cost of investing in the country. To reduce red tape in the national government, all government agencies will implement measures within 12 months to reduce by 50% the number of signatures required for their service. Regulatory reforms needed to safeguard and protect consumer welfare as well as institutional reforms that will heighten accountability and serve the public interest shall be put in place”¹⁴.

Nevertheless, the President is “expected to deliver results with a people so divided and an economy in slump and will be addressing the Philippines not as one nation but a society of self-opinionated groups. Philippine society is described as a society engulfed in a war of every man against every man...in a state of incessant rebellion from members of a nation that is not a nation”...she also has to contend with “the empowered civil society components (that) want to call the shots on Cabinet appointments, social policy, political alliances of the President and even on the legislative agenda. If they don't get their demands, they threaten to break away from the People Power coalition and go back to the streets”¹⁵;

Critically, the main issue is corruption, the antithesis of good governance. Corruption, “not only in government but in practically all spheres has been correctly identified as a major factor responsible for the country's economic and social stagnation – the preferred term for the country's backwardness”¹⁶. “Corruption hinders growth partly because it discourages those who are in a position to promote it from participating actively in economic and social undertakings. (It) discriminates hard work and competition. It inhibits investment activity and makes doing business more costly...it drains government coffers of resources that should have gone to basic social services and to alleviating the plight of the poor”¹⁷.

Deterring, preventing and combating corruption as outlined in the “Anti-corruption Action Plan for Asia and Pacific”, a legally nonbinding document drafted by a working group of 13

¹⁴ Canlas. *ibid*.

¹⁵ Soliven, Preciosa S. quoting Armando Doronilla, columnist of the Philippine Daily Inquirer. *A Point of Awareness – Are we near the promised land?*. Philippine Star newspaper. December 6, 2001

¹⁶ Teodoro, Luis. *Vantage Point – What's missing is political will*. Today newspaper. December 04, 2001.

¹⁷ Espiritu, Edgardo B. *Transparency, accountability and the fight against corruption*. Philippine Star newspaper. November 26, 2001.

Asia-Pacific countries, the ADB, the OECD, the Pacific Basin Economic Council, the UNDP, the World Bank and Transparency International in November 2001, has three “pillars”¹⁸:

- **“Developing effective and transparent systems for public service”.** This entails the development of transparent systems of hiring and promotion as an antidote to the patronage, nepotism and favoritism; the adoption of systems of public service that are transparent and open to public scrutiny; and the abolition of “overlapping, ambiguous or excessive regulations” that provide opportunities for corruption in government and regulatory bodies. Integral herein is the provision of adequate compensation for government employees;
- **“Strengthening antibribery actions and promoting integrity in business operations”** that urges the government to take action through laws that would sanction the bribery of public officials...and strengthen legal means to prosecute offenders; and
- **“Supporting active public involvement”** recognizes the need for citizen participation in anticorruption efforts.

The conclusion was “...that most of the above conditions exist in corruption-burdened Philippines...the mass media as well as civil society do monitor government operations and regularly expose wrongdoing...what is missing? ...the political will to root out corruption was identified as the missing but absolutely necessary ingredient that can’t be integrated in the plan”.

Wallace¹⁹ noted that “(a) decision by the administration to support the revival of the mining industry would certainly be opposed by environmentalist groups. In dealing with these groups, the government must distinguish between legitimate environmental issues and opposition that stems from emotions or ideological reasons. Or worse, “financial considerations” (we have sufficient anecdotal stories to know that a number of local politicians have opposed mining ventures until they are paid)(emphasis supplied)”.

During the *Philippine Mining Industry Rehabilitation Workshop – The Mining Industry: Boon or Bane to National Economic Development* organized by the professional organizations on mining, geology and metallurgy last October 2001– the Government was criticized for (1) *the absence of clear support to the mining industry* and (2) *the lack of credibility of the Department of Environment and Natural Resources and the Mines and Geosciences Bureau.*

Quoting Dr. Rudy Obial²⁰, a mining and geology consultant:

“The national government has “no clear level of support with regards to the mining industry despite Arroyo’s (continued) calls for more investors” to invest and boost the economic development of the country.

¹⁸ Teodoro (2001). *ibid.*

¹⁹ Wallace, Peter. *Mining policy as an investment and anti-poverty strategy.* The Manila Times newspaper. October 29, 2001.

²⁰ in “GMA’s apathy to mining is hurting the industry”. Sun Star (Baguio City) newspaper, October 22, 2001.

The mineral industry cannot develop under a strong regulatory regime. Six years after the passage of the New Mining Act of 1995, no application for Financial and Technical Assistance Agreement (FTAA) has been approved (due to strict requirements of the law), investors have already left the country. The two companies whose FTAA's were approved prior to the Mining Act have (even) relinquished their stake after 10 years of staying in the country and having high hopes.

The Department of Environment and Natural Resources and its Mines and Geosciences Bureau "suffer from credibility problems and is (DENR) the mice of the mineral industry".

During the same Workshop, the Board of Investments (BoI) Governor, Jose Antonio Leviste²¹, was similarly quoted as saying:

"We are in a pathetic situation where the country has one of the highest grades of mineral resources but nobody is exploiting it. We are a rich country pretending to be poor. (Since) it is not politically-wise for GMA to declare a national policy on mining, the government should (at least) allow one or two mining firms that can comply with "environmental laws" to invest and operate in the country".

The Environmental and Social Science for Change (ESSC), an environmental NGO, also questioned the government's credibility to monitor mining operations and stated that:

"We have the potential to environmentally monitor extraction, but parallel to this is the need to build up the ability, transparency and accountability. We seriously question government's commitment and ability to implement monitoring, given the present administration's lack of responsibility and accountability. Once a mining operation gets underway, the community must be able to monitor what is going on, be kept informed of developments, and be made aware of any dangers. This responsibility is largely in the hands of the government agencies that must be credible to be effective"²².

Foreign investors bewailed the lack of government support to the local mining industry. The general feeling is – *they simply responded to the invitation of the Philippine Government to invest in the country but were left on their own when they came.* This lack of government support has significantly diminished investor interest.

In a position paper by the Australian New Zealand Chamber of Commerce (ANZCHAM)²³, the following were enumerated as among the problems confronting the Philippine Mining Industry:

- **Level of Government Support** – there is no strong clear message of Government support;

²¹ in "BoI underscores pathetic state of mining industry". Sun Star (Baguio City) newspaper, October 23, 2001.

²² Environmental and Social Science for Change (ESSC). *Mining Revisited: Can an Understanding of Perspectives Help?*. Emiluz Printing Industries (110 pages). 1999.

²³ Australian and New Zealand Chamber of Commerce (ANZCHAM) looks at the Philippine Mining Industry in *Journal on Environment, Energy and Minerals*, Volume III No. 6, 2000.

- **Local Government Unit Acceptance** – The Industry needs strong National Government leadership to participate with LGUs in assisting investors to meet requirements and present balanced views;
- **Environmental Conservatism** – The industry needs to showcase new “world best practice” mines. The government must strategically support remaining development proposals as examples of future practices;
- **Clear Title and Access to Ground** – Prolonged delays (in acquiring area clearances and consent involving many government and non-government agencies) have been a reason why many companies are leaving the Philippines and are a major deterrent in the growth of the industry;
- **The Fiscal Regime for Foreign Mining Companies** – An acceptable agreement (on the FTAA Fiscal Regime taking more favorable consideration of the investor, who is supplying all the finance and taking all the risk) is needed that must allow for an equitable sharing between the government and the investing company;
- **Supreme Court Challenge to the Mining Act** – investors will not make these high-risk investments with the current uncertainty (of the unresolved Supreme Court case on the constitutionality of the Mining Act filed in 1997);
- **IPRA Law** - Uncertainty will continue until this matter is resolved and it is determined who owns the mineral resources of the Philippines; and
- **Protection of Due Process** – International investors remain worried that additional non due-process requirements (e.g., the current unresolved COMELEC (Commission on Election) issue involving the use of “peoples initiative” to nullify an agreement forged with the local community by a mining company) continue to be promoted causing uncertainty.

Foreign investors bewailed that: they simply responded to the invitation of the Philippine government to invest in the country but were left on their when they came.

Of recent, with the view of boosting domestic economy, the Government held a National Socio-Economic Summit last December 10, 2001 to “lay the foundation for a more progressive future”. The Summit was founded on the “shared vision of a peaceful and prosperous Philippines where poverty shall have been significantly reduced within a decade as espoused in the Medium Term Philippine Development Plan, 2001 – 2004 and the President’s State of the Nation Address of 2001”. During the said Summit, Senate President Franklin M. Drilon presented the *Legislative Agenda of the Senate of the Philippines* where under I. *Legislation to Encourage the Private Sector to Create Jobs (E. Support and Development of the Mining Industry)*, two bills – Senate Bill Nos. 244 and 1843 were identified. SB No. 244, however, is not the kind of support the local mining industry needs in this difficult times since it calls for the repeal of the Mining Act of 1995!²⁴.

7.2 Decreasing Foreign Investments and Exploration Activities in the Local Mining Industry

²⁴ see the National Socio-Economic Pact of 2001: “Crafting Progressive Legislation”, speech of Senate President Franklin M. Drilon and Annex I – Legislative Agenda of the Senate of the Philippines (www.neda.gov.ph). Also the List of Pending Senate Bills (www.senate.gov.ph).

The Philippines is considered as an under explored country and given its high mineral endowment ranking, especially in copper and gold, renewed interest could lead to the discovery of world-class mineral deposits. Tapping these vast potential resources, however, requires investments from both local and foreign sources in order to encourage exploration and later development consistent with the proper stewardship of mineral resources.

The initial influx of foreign investors, through the pre-Philippine Mining Act of 1995 Financial or Technical Assistance Agreements (FTAA), led to the discovery by Western Mining Corporation (WMC) and Climax Arimco Mining Corporation (CAMC) of the Tampakan and Dinkidi copper-gold deposits, respectively.

The Fraser Institute (www.fraserinstitute.ca), however, in its *Annual Survey of Mining Companies 2001/2002*, concluded that “attractive geology is not enough to guarantee mining investment”²⁵.

The Survey was based on the response of 162 participating companies (132 junior mining companies, 30 senior mining companies) representing a combined total of US\$782 million in international exploration in year 2000. Mining jurisdictions were rated based on policy attractiveness and mineral attractiveness. Based on the results, three indices – the *mineral policy index* (60%) which rates a region’s attractiveness for new investment based on geology; the *policy potential index* (40%) which measures the effects of government policies such as regulation and land use on attracting new exploration; and an *overall investment attractiveness index* which considers both mineral potential and policy factors, were created.

Out of the maximum 100 points, the Philippines only received 25 (33 for policy potential and 20 for mineral potential) in the overall investment attractiveness index, in a tie with Nova Scotia at 41st/42nd place of the 45 mining jurisdictions considered. The 20 points for mineral potential is a surprising contradiction to the long held belief of the country’s high mineral/geological prospectivity.

The low rating for the policy potential, however, is not surprising in view of difficulties in acquiring the required clearances from various government agencies and local governments eventually resulting in the delayed approval of mining rights applications.

In the Fraser Institute’s Annual Survey of Mining Companies 2001/2002, the Philippines was in a tie for the 41st/42nd place among the 45 mining jurisdictions considered. The 20 points for mineral potential is a surprising contradiction to the long held belief of the country’s high mineral/geological prospectivity.

As shown by records of the Board of Investments (BoI) “approval in mining investments increased ten-fold from PhP400 million in 1988 to more than PhP4 billion in 1990. Investments fell drastically in 1991 due to about PhP700 million and rose significantly in 1992 attaining a peak of about PhP2.7 billion in 1994. This again went

²⁵ The Fraser Institute. “Ontario and Quebec top international rankings”, press release (www.fraserinstitute.ca/media/media_releases/2001/20011218.html).

down in 1995 rising to PhP3.2 billion in 1997. In 2000, the BoI approved a measly PhP450 million in mining investments”²⁶.

Several reasons were offered for this erratic investment behavior in the mining sector: (1) that “the peaks experienced in 1990 and 1994 may be due to the imminent passage of the Mining Bill”; (2) “the year 1995 saw the Bill passed, but due to various issues raised on the law, i.e., its

“The presence of non-governmental organizations, environmental requirements and socio-cultural issues restricted the amount of foreign

constitutionality, the IPRA law, among others which remain unresolved up to this time, the foreign investors appeared to be on a wait-and-see attitude”; and (3) “the upbeat look between 1996 and 1998 might be attributed to certain aggressive initiatives by the DENR/MGB in pushing for the full implementation of the Mining Act. However,

foreign investors appeared to have lost its patience and finally decided to go somewhere else where the mining regime is less cumbersome. This explains the worst investment performance for the industry starting 1999”²⁷.

A study by the Metal Mining Agency of Japan²⁸ also revealed that “the presence of non-government organizations (NGOs), environmental requirements and socio-cultural issues restricted the amount of foreign investment coming to the country”. Also cited as a reason was the approval of the Indigenous Peoples Rights Act (IPRA) in 1997, among the most contentious provisions of which, was on the ownership of the mineral wealth of the country.

Exploration expenditures, estimated in 1996 – 1997 at “(according to MGB) US\$120 million”²⁹, “dropped to US\$22.6 million (\$11.1 for gold and \$11.6 million for copper)”³⁰ in 1998 and in 1998 – 1999, to “less than US\$12 million”³¹. According to the Australian and New Zealand Chamber of Commerce (ANZCHAM), “programmes totaling \$US 200 million per annum were committed for exploration and three to four major mines were in the advanced planning stage with potential investments exceeding US\$2 billion. The companies were here with the funds, but, because of frustrating delays, most of the

“The development of currently known gold and copper deposits...could generate \$3.2 billion worth of investments over the next five years...\$1.2 billion in export earnings; and tax revenues of PhP21 billion annually, of which 12 billion would go directly to local government units”.

- Philippine Mineral Exploration Association, 2000.

²⁶ Leviste, Jose Antonio C. Governor, Board of Investments (BoI). *Investment Incentives for the Mining Industry*. Mining Philippines 2001 Conference and Exhibition, Mandaluyong City, Philippines. November 21 and 22, 2001.

²⁷ Leviste. *ibid*.

²⁸ Craig, Feebrey A. Senior Geologist, Metal Mining Agency of Japan. *Corporate Views Regarding Exploration in the ASEAN Region, 1997 – 1998*. August 1999.

²⁹ Mindanao Association of Mineral Industries (MINA). *Commercialization of the Exploration and Development Sectors of the Philippine Minerals Industry*. October 1999.

³⁰ Feebrey. *ibid*.

³¹ MINA. *ibid*.

*companies have now left and have spent their funds elsewhere*³².

ANZCHAM added that the Philippines could benefit from the experience of countries like Chile, Peru which *“are both Catholic countries with a large poor rural community as well as indigenous people, but have been able to obtain a untied approach to the development of responsible mining”*³³.

The Philippine Mineral Exploration Association (PMEA), the association of foreign exploration companies, meanwhile, estimated that *“the development of currently known gold and copper deposits (i.e., excluding the potential of new ore bodies to be found) could generate \$3.2 billion worth of investments over the next 5 years; \$1.2 billion of export earnings within 5 years; and tax revenues of P21 billion annually, of which 12 billion would go directly to local government units”*³⁴.

In the case of Western Mining Corporation’s Tampakan Copper Project, it is said that *“the Philippines lost the opportunity to earn some US\$1 billion a year for the next 20 years of the Tampakan’s projected mine life...the loss of a WMC-developed project (also) means the loss of an early showcase of the best technology and best environment practice in the development and operation of a world class mine”*³⁵.

*“Faced with the legal uncertainty and a generally hostile environment, the bulk of the foreign mining firms has now either left or is taking a wait-and-see attitude. The development of the country’s mineral resources has, once again, been badly set back. ...(S)ince the passage of the new mining law (in 1995), at most only around 100 million was invested and that has since dropped substantially. Only a few hardy foreign firms are still here doing work”*³⁶.

However, the exit of foreign mining companies from the Philippines should not be purely blamed on the uncertainties facing the local industry but also to *“the slashing of exploration budgets and staffing levels of many mining companies (both major and junior) and to substantial restructuring, through mergers and acquisitions, of major mining houses. Exploration activities worldwide have decreased dramatically as a consequence of the adjustments and reorganizations which the mineral industry has recently experienced. Despite this universal cutback, it is judged that the Philippines have suffered more than any other areas, with current level of exploration at a worryingly low level”*³⁷.

Nevertheless, the Philippine Mining Act of 1995 is now considered as *“the only economic liberalization measure that has failed to benefit the economy”*³⁸.

³² Australian and New Zealand Chamber of Commerce (ANZCHAM) looks at the Philippine Mining Industry in Journal on Environment, Energy and Minerals, Volume III No. 6, 2000.

³³ e – mail dated December 02, 2001 of Mr. Chris Ward, Executive Director, ANZCHAM.

³⁴ AYC Consultants, Inc. Mining Policy as an Investment and Anti-Poverty Strategy. October 2001.

³⁵ Exploration: Junior Explorers in Rapu-rapu, Picking Someone Your Size, Journal on Environment, Energy and Minerals, Volume III Number 3, 2000.

³⁶ Brimo (2001). *ibid*.

³⁷ McKibben, Paul J. Beauty Lies in the Eyes of the Beholder (Guest Editorial). Journal on Environment, Energy and Mineral, Volume III No. 6, 2000.

³⁸ AYC Consultants (2001). *ibid*.

Table No. 7: Foreign Mining Companies that Closed their Philippine Operations between 1997 – 1999.

- Western Mining Corporation
- Rio Tinto Exploration Phils.
- Newmont Phils. Inc.
- Normandy Asia Phils. Inc.
- Barrick Gold Phils Inc.
- MIM Phils. Corp.
- Placer Pacific Inc.
- Newcrest
- Golden Cycle Phils Inc.
- Echo Bay
- BHP

(Sources: Chamber of Mines of the Philippines and MINA)

Corpuz³⁹, however, pointed out that:

“Foreign mining companies and the CMP (Chamber of Mines of the Philippines) have the nasty habit of making tantrums whenever the government wants to issue policies which they “perceive” would affect the benefits they currently enjoy under the Philippine Mining Act of 1995. They are always on the look-out, fending off any effort that would “diminish” what they have fought for many years”.

“Their usual threat: to withdraw their mining applications and investments from the Philippines and move to other countries where governments could offer them more. This threat was made when the government revised the mining law’s Implementing Rules and Regulations (IRR) because of the Marcopper spill, when the IPRA was being deliberated upon, when the pro-forma was still being finalized and taking a long time, and lately, when President Estrada stated that the government would repeal the Philippine Mining Act of 1995”.

Corpuz noted that from 1996 to 1999, mining applications increased - FTAAAs (from 70 in 1996, 129 in 1997, 143 in 1998 and 152 in 1999); MPSAs (from 1,454 in 1996 to 2,045 in 1998 to 2,642 in 1999) and EPs (from 486 in 1998 to 655 in 1999). He concluded that *“these data show that every year, applications keep coming in. These could also show that threats made by the CMP were just a lot of bluff”.*

He concluded that:

“If ever mining companies left, it was for two reasons.

First, the government has started to process the different mining applications to determine if there are overlaps in applications. And secondly, mining companies have already done preliminary exploration work to find out if the mineral lands they are applying for have substantial ore deposits and if they can be mined economically.

The government has started the process of elimination and ultimately, it is either the big foreign mining companies or their proxies or local partners whose mineral applications will be favored”.

³⁹ Corpuz, Catalino L. Jr. Mine Watch Asia Pacific. *National Situation: The Mining Industry in the Philippines*. Paper written in October 1999 and posted at www.mineandcommunities.org.

Brimo (2001), meanwhile, lamented that:

“...in such a relatively short period of time, there have been significant discoveries – Western Mining’s Tampakan deposit in Cotabato; Climax Arimco’s Dinkidi in Nueva Vizcaya, and the most recent Boyongan discovery in Surigao del Norte by Anglo-American in partnership with a local mining company, Philex Mining – proof, if it was ever needed, that the Philippines has vast mineral resources.

A few others are in various stages of exploration or about to start development: Lafayette’s Rapu-rapu project, Crew Minerals nickel project in Mindoro, and TVI’s Canatuan project in Zamboanga. Will these deposits ever see the light of the day and contribute to the development of our country? If the various anti-mining groups of all colors and stripes have their way, the answer would be “no”.

Does that make sense? Has any other country not pursued development of their mineral resources by local or foreign capital or whoever can provide the necessary funds? Are we going to deprive ourselves of whatever options we have to spur the development of our economy and get as much of our people above the poverty line?”

McKibben (2000) gave his opinion on how to regain investor confidence:

“There is a current lack of international investor confidence in the Philippine Mineral Industry. For things to turn around, this confidence has to be restored. Things will not turn around quickly, but by the action of creating a favorable investment climate and strongly supporting the companies that are here now, the international community will see results and investment will follow”.

7.3 Constitutional Challenge to the Philippine Mining Act of 1995

Opposition to the development of the country’s minerals resources by foreign mining companies was the primary reason for the filing of a petition in the Philippine Supreme Court that challenges the constitutionality of the Philippine Mining Act of 1995 and the FTAA between the Philippine Government and Western Mining Corporation under a prior enabling statute (Executive Order No. 279).

The petition was filed by the Legal Rights and Natural Resources Center, Inc., an affiliate of Friends of the Earth International, together with other non-government organizations and a number of personalities identified with the NGO sector in the Philippines. The petition, officially docketed as La Bugal Tribal Association vs. the Secretary of the Department of Environment and Natural Resources, the Executive Secretary, the Director of the Mines and Geosciences Bureau and Western Mining Corporation, Phils., is founded on the *“power of judicial review vested by the Philippine Constitution to the Supreme Court which permits the Supreme Court to decide on the constitutionality of actions made by the executive and legislative branches of the government”*⁴⁰.

⁴⁰ Sison, Jose C. *Power of Judicial Review, A Law Each Day (Keeps Trouble Away)*. Philippine Star newspaper. October 01, 2001.

The resolution of the petition is hinged on how the provisions of Section 2, Article XII of the 1987 Constitution will be interpreted. Said provision, in part, reads:

“All lands of the public domain, waters, minerals, coal, petroleum, and other mineral oils, all forces of potential energy, fisheries, forests, or timber, wildlife, flora, fauna and other natural resources are owned by the State. The exploration, development and utilization of natural resources shall be under the full control and supervision of the State. The State may directly undertake such activities, or it may enter into co-production, joint venture or production sharing agreement with Filipino citizens, or corporations or associations at least sixty percentum of whose capital is owned by such citizens’ xxx...”

The President may enter into agreements with foreign owned corporations involving either technical or financial assistance for large scale exploration, development, and utilization of minerals, petroleum and other mineral oils according to the general terms and conditions provided by law, based on real contributions to the economic growth and general welfare of the country xxx...”

Specifically, the petition is anchored on the following arguments:

- *That the Constitution prohibits foreigners from engaging in exploration, development and utilization of the country’s mineral resources and reserves the same solely to Filipino citizens, or to corporations at least 60% of which are owned by Filipino citizens;*
- *That the Philippine Mining Act of 1995 allows the taking of private property without the determination of public use and for just compensation, depriving the surface owner of his rightful ownership and enjoyment of his property;*
- *That the Act is a piece of “class legislation” that favors foreign and fully owned corporations and discriminates against Filipinos in the exploration, development and utilization of mineral resources;*
- *That Financial or Technical Assistance Agreements (FTAA) are nothing more than the service contracts which have been abolished under the Constitution;*
- *That the “Financial or Technical Assistance Agreements” under the Constitution limits foreign participation to either the provision of financial resources or the transfer of technology/management skills;*
- *That the FTAA allows the inequitable sharing of wealth; and*
- *That the FTAA granted to WMC, Phils. is illegal and unconstitutional.*

In response, the Philippine Government, through the Solicitor General, argued for the dismissal of the petition based on the following:

- *That the Petitioners have no legal standing to question the constitutionality of the Mining Act because they do not have any right or interest to protect nor direct injury to sustain from the operation of the law;*
- *That the foreign participation in the exploration, development and utilization of the country’s mineral resources as contemplated in the constitution was intended not to be exclusively an option for either a financial or technical assistance but may encompass both;*
- *That the contrary to claims of the petitioners, the constitution does not prohibit but recognizes and makes provision for the concept of service contracts in the FTAA in*

recognition of the potential benefits that will accrue to the country as a result of such participation;

- That there is no taking of private property since the State, not the surface owners, owns the minerals found underneath the land; and
- That the Mining Act does not violate constitutional requirements of due process and equal protection because the law recognized the indigenous people's rights to their ancestral domains nor the law is a class legislation since both Filipinos and/or foreign corporations can apply for FTAA's.

In a two part newspaper article, Wallace⁴¹ commented that "as of the FTAA's that initially attracted over 20 major international mining companies, all but 3 have now left because of the challenge to the Supreme Court as to the constitutionality of the mining law. And two of those have had their environmental certificates cancelled arbitrarily and will probably leave too. There is a lack of recognition by the government of the benefit developing this industry could provide. And there is a lack by NGOs and others to balance benefit against whatever disadvantages they perceive. Today, modern mining companies are socially responsible, and are committed to causing the least possible damage to the environment - and putting the land back into the same, or better condition that it was when they leave.

Nearly five years since the petition was filed in February 1997, the Supreme Court has yet to resolve the petition. This uncertainty is often cited as one of the biggest stumbling blocks to foreign investments in mining.

The Supreme Court, unbelievably, has been sitting on a challenge to the constitutionality of the mining act for almost five years now. A case that add billions of dollars to export and investment, and create thousands and thousands of jobs. Surely, the Supreme Court should consider the economic importance of the case before them as well as the legal issues. They did so when they recognized the political necessity of confirming Ms. Gloria Macapagal-Arroyo into the presidency on January 20 and again a scant six weeks later affirming that decision. The national economy is no less important to the people, possibly more so as it creates jobs.

And for mining it does where it is most needed, in the rural areas where poverty is highest. A side benefit would be less urban migration into already grossly overcrowded cities".

7.4 Mining and Indigenous Peoples

"Most of the Philippines' indigenous peoples (IPs), who pride themselves of self-reliant and effective methods of subsistence that have withstood the test of time way before the first foreign settlers came, live in upland areas, the same place where minerals abound - and that is where the conflict arises.

Supported by church-based and other non-government organizations, IPs have strong points to raise against mining in the Philippines. They say that because of large tracts of land opened to foreign-owned corporations under the Financial or Technical Assistance Agreement (FTAA) scheme, they would be

⁴¹ Wallace, Peter. President, AYC Consultants Inc.. *RP at the Crossroads: A Window of Opportunity*. Philippine Star newspaper. December 11 and 12, 2001.

effectively displaced both socially and economically. They feel that ancestral lands and domains are being given away and they face the prospect of becoming nomads in their own lands.

*History is apparently with them. They consistently refer to the advent of large-scale corporate mining in the Philippines in 1842 in the case of the Igorots in Northern Philippines who were never considered a stakeholder and, therefore, never directly benefited from the use of mineral wealth in their ancestral lands*⁴².

7.4.1 Defining Indigenous Peoples

The passage of Republic Act No. 8371 or the Indigenous People's Right Act (IPRA) in 1997 was hailed more as a positive national development and a concrete improvement of the country's commitment to the betterment of the indigenous people as a signatory to ILO Convention 169 on Indigenous and Tribal Peoples. It gave cognizance to a significant sector of Philippine society as provided for in Sec. 5, Art. XII of the Philippine Constitution that *"(t)he State subject to the provisions of the Constitution and national development policies and program, shall protect the rights of the Indigenous Cultural Communities to their ancestral lands to ensure their economic, social and cultural well-being."*

The IPRA defined *indigenous peoples* (IPs) and *indigenous cultural communities* (ICCs) as:

"a group of people or homogenous societies identified by self-ascription and ascription by others, who have continuously lived as organized community on communally bounded and defined territory, and who have, under claims of ownership since time immemorial occupied; possessed and utilized such territories, sharing common bonds of language, customs, tradition and other distinctive cultural traits, or who have, through resistance to political, social and cultural inroads of colonization, non-indigenous religions and cultures, became historically differentiated from majority of Filipinos".

and

"people who are regarded as indigenous on account of their descent from populations which inhabited the country, at the time of conquest or colonization, or at the time of inroads of non-indigenous religions and cultures, or the establishment of present state boundaries, who retain some or all of their own social, economic, cultural and political institutions, but who may have been displaced from their traditional domains or who may have resettled outside their ancestral domains".

The Act recognizes the rights of the Indigenous Cultural Communities/ Indigenous Peoples (ICCs/IPs) to their ancestral domain that not only cover the physical environment but the total environment including mineral and other natural resources. Priority rights are given to ICCs/IPs in the extraction, development or exploitation of any natural resources within their ancestral domain. The Act provided protection and guarantee to possession and rights to lands they occupied, possessed and utilized since time immemorial including

⁴² Ramos, Horacio C. Director, Mines and Geosciences Bureau (MGB). *Environmental Issues Facing the Mining Industry in the Philippines*, paper presented during the International Environmental Workshop of the Minerals Council of Australia, Newcastle, Australia. October 13 to 18, 1996.

their customary laws governing property rights or relations in determining the owners and extent of ancestral domain.

The Act provided safeguards to the rights of the IPs to participate in the use, management and conservation of the natural resources. The Act also adopted the concept of *free and prior informed consent* (FPIC) which can be found in Article 16 of Convention that states “*where the relocation of these people is considered necessary as an exceptional measure, such relocation shall take place only with their free and prior informed consent. Where their consent cannot be obtained such relocation shall take place only following appropriate procedures established by national laws and regulations, including public inquiries where appropriate, which provide for the opportunity for effective presentation of the peoples concerned.*”

7.4.2 Indigenous Peoples in the Philippines

According to Dalupan-San Andres⁴³, ICCs/IPs in the Philippines are situated in various forest, lowland and coastal areas of the Philippines, estimated to be about 12 – 13 million or eighteen (18%) of the total national population, divided into 110 ethno-linguistic groups.

She added, citing a 1996 study done by UNDP and ILO TSSI mission, that the indigenous peoples in the Philippines are “*amongst the poorest and most disadvantaged social groups in the country. Illiteracy, unemployment, underemployment are much higher among them than in the rest of the population. Their major problems are social discrimination, weak political representation and political violence. Furthermore, consultations held by some of the government agencies identified that indigenous peoples in the Philippines suffer from economic marginalization, socio-cultural discrimination, displacement, political disenfranchisement, social and environmental destruction, and erosion of the strength of indigenous societies. Most of the reported deterioration of the indigenous cultural communities has been associated with mining as an economic activity in their communities. Thus, as a result of the past and present factors that threaten their value systems, indigenous people share a common struggle to protect their lands and their cultures*”.

Further, “*the social and environmental destruction of indigenous peoples by development strategies is well-documented. The erosion of the strength of indigenous societies and the accompanying processes of impoverishment have been brought about by a complex multitude of factors which include colonialism, disruption of the traditional economy, loss of traditional lands and domains, integration into the global economy, modernization and social and environmental degradation due to inappropriate development schemes*”.

“*Indigenous peoples are confronted with many problems rooted in the divergence in their perspectives of those of the dominant society in terms of many dimensions: relationship to nature (sacred versus secular), responsibility in that relationship (collective versus individual), life on earth (a gift of the Creator versus resources to be exploited), the meaning of human existence in relationship to sustainability and the*

⁴³ Dalupan-San Andres, Ma. Cecilia G. *Social Acceptability of Mining: Ancestral Rights And Community Issues. Meeting the Challenges: Mining, the Community and the Environment.* Chamber of Mines of the Philippines. 1998.

rationale for utilizing the organic matter of nature (sacred circle of life or chain of being versus linear growth for human satisfaction)”.

The Government’s management of the concerns of ICCs/IPs started with the creation of the Commission on National Integration in 1957 and later, through Presidential Adviser on National Minorities (PANAMIN). In 1984, the Office for Muslim Affairs and Cultural Communities (OMACC) was created to address matters relating to Muslim and non-Muslim tribal communities. This was later divided into the Office for Muslim Affairs (OMA), Office for Northern Cultural Communities (ONCC) and Office for Southern Cultural Communities (OSCC) under the Aquino Administration ⁴⁴.

Prior to the enactment of the IPRA, the DENR, in 1988, issued DENR Administrative Order No. 2, *The Rule and Regulations for the Identification, Delineation and Recognition of Ancestral Lands and Domain Claims which provided for the issuance of Certificates of Ancestral Domain Claims (CADCs) and Certificates of Ancestral Land Claims (CALCs)*, tenurial instruments that provided due recognition of the ICCs/IPs rights over their ancestral domains/lands. From its inception up to the approval of the IPRA, the “total number of CADC’s granted all over the Philippines has totaled 181, with an aggregate area of 2,546,035 hectares”⁴⁵.

Currently, the National Commission on Indigenous Peoples (NCIP), the government body created under the IPRA, manages the concerns of ICCs/IPs.

7.4.3 The Mining Industry and the IPRA Law

The passage of IPRA was seen as a blow to the mining industry. The IPRA invoked the Constitution’s recognition of ancestral domains, gave indigenous peoples control over considerable tract of lands. A study prepared by the Philippine Exporters Confederation estimated that 1.2 million hectares or 53% of areas identified in mining applications are found in areas covered by Certificates of Ancestral Land and Domain Claims (CADCs). The IPRA created confusion in the minerals industry as to what agency is tasked to regulate the minerals within the areas classified as ancestral. The IPRA may have the best of intentions, but to some it were seen as violating the Constitutional maxim that wealth must be utilized and conserved for the common good.

“Mining is far more destructive than logging because the damage goes far beneath the ground”

***- Alimaong holy warrior
(Philippine Daily Inquirer. 12/13/01)***

The primary concern of the local mining industry was on certain provisions in the IPRA that were seen as ambiguous. Some sectors of the civil society consider that the passage of

⁴⁴ Philippine Center for Investigative Journalism. *New law on indigenous peoples faces legal challenge.* www.pcij.com.ph.

⁴⁵ Domingo, Edwin G., Assistant Director and Jasareno, Leo L., Chief, Mining Tenements and Management Division, Mines and Geosciences Bureau. *The Indigenous Peoples Right Act: Boon or Bane.* unpublished and undated.

the IPRA superseded the Mining Act while some in the mining industry see it as a piece of class legislation.

The Department of Environment and Natural Resources (DENR) brought forth two legal arguments: (1) that only the State can own lands; and (2) that it has sole jurisdiction over the forests and mineral resources. The Chamber of Mines of the Philippines also echoed these same arguments.

Specifically, several implications⁴⁶ of the IPRA to the mining industry were identified:

- The time-honored practice of accepting mining applications on a first come, first serve basis, not to mention current requirements of technical and financial capability, will be dismantled. It is envisioned that this could cause not only a bidding war, but worse, some possible sacrifices on the environment due to lack of proper training and experience;
- Mining costs could unnecessarily be increased, jeopardizing the entry of investors, due to very high premiums in obtaining the consent and cooperation of the ICCs/IPs. Operating costs could also be very much heightened, lowering further the economic feasibility of certain projects;
- With the ICCs/IPs negotiating the terms and conditions of a mining contract, the obligations of the contractor, particularly on environmental protection, health and safety, could be jeopardized;
- Ongoing mining operations with expiring mining contracts are now at the mercy of the ICCs/IPs when the time comes for renewal. This situation could hold certain projects with already large chunks of capital already spent on the ground;
- Most of the prospective mineralized areas may be covered with ancestral lands that could be tied up forever from exploration and development. This will not only jeopardize the mining industry but the other members of the Philippine Society who should also benefit from such God-given favors;
- The sweeping powers of the ICCs/IPs and the NCIP could bear heavily on the investor's confidence and would likely reduce interest and investment in such ICCs/IPs areas, not only in mining, but also in other economic endeavors. In the end, the ICCs/IPs themselves may forever be bound by poverty and isolation;
- The NCIP could be unnecessarily duplicating the functions and responsibilities of other government agencies with no assurance of success since the NCIP is not organizationally designed to assume regulatory powers, and the difficulties of hiring the needed experts in the field of mining and the environment; and
- The non-IP/ICC members could perceive an unequal protection of rights of giving of undue benefits to one sector of society. Such real and perceived inequalities could lead to reverse discrimination, rather than promotion of integration and unification.

7.4.4 Challenge to the Constitutionality of the IPRA

The initial government response to the perceived ambiguities of the IPRA law was the issuance by the NCIP of Administrative Order No. 3 in 1998, the *Supplemental Guidelines in*

⁴⁶ Domingo, Edwin G. *Mining Worries*. Journal on Environment Energy and Minerals, Vol. II No. 1, 1999. pp. 42-43.

the Issuance of NCIP Certification Precondition and Free and Prior Informed Consent in connection with applications for lease, permit, license, contract and other forms of concession in ancestral domain. This guidelines provided recognition to existing/vested rights and pending applications for lease, permit, license, contract and other forms of concession. These areas were exempted from the FPIC requirement and the NCIP Certification Precondition. The NCIP Certification Precondition is required only prior to the issuance or renewal of any lease, permit, license, contract or other forms of concession in ancestral domains.

In order to clear up these perceived ambiguities, a petition challenging the constitutionality of the IPRA and its implementing rules and regulations was filed by retired Supreme Court Justice, Isagani Cruz and Atty. Cesar S. Europa, in the Philippine Supreme Court.

Among the issue raised were:

- **Ownership of Minerals.** The Constitution, under the principle of *jura regalia*, provides that all natural resources, particularly minerals are owned by the State. However, the IPRA provides that ancestral domains include minerals and that the ICCs/IPs have claims of ownership by virtue of their pre-conquest rights traced since time immemorial. They are also granted the right to regulate the entry of migrant settlers and organizations into areas claimed or declared by NCIP as ancestral lands;
- **Property rights.** While the IPRA recognizes and respects property rights within ancestral domains already existing and/or vested upon its effectivity, it also holds that ancestral domain rights are property rights. Under the Native Title Concept, these ICC/IP's property rights can be interpreted to extend since time immemorial and therefore, property rights granted later by the government (e.g. mining rights, Torrens Titles) are effectively distinguished;
- **Priority Rights.** Under the IPRA, the ICCs/IPs has the "priority rights to the harvesting, extraction, development or exploitation of the natural resources that maybe found in the ancestral domains". As to how long can the ICCs/IPs exercise these rights are however, unclear. Interpreted in the extreme, this could mean that any member of the ICCs/IPs can just barge in to file his mining application and dislodge any prior vested mining rights or applications. It is also not the State but the ICCs/IPs who have the right to enter into agreements for the development and utilization of the natural resources;
- **Self-Delineation.** The IRR of IPRA states that in the principle of self-delineation, ancestral domain shall be identified and delineated by the ICCs/IPs themselves through their leaders as identified by them through customary process. Further, the metes and bounds of ancestral domain through traditionally landmarks.

The right to self-delineation in defining the extent of ancestral domain areas without clear provisions for scientific basis and adequate documentation is an awesome right that may lend itself to abuse. With self-delineation, aggravated by an ambiguous definition of an ancestral domain, large tracts of land in the millions of hectares are unnecessarily exposed to ancestral domain claims and possibly closed to mining;

- **Powers and Jurisdiction of the NCIP.** IPRA has created a super body in the National Commission on Indigenous Peoples (NCIP) which may be an undue delegation of power by the State and may run counter to the equal protection clause of the Constitution. It describes the NCIP as autonomous despite the power of control vested in the President of the Philippine over all the executive department, bureau and offices: by self executing provisions of Article VII Sec. 17 of the Constitution. Composed exclusively of ICCs/IPs to decide over disputes involving rights of ICCs/IPs while charge with policy functions, the NCIP is virtually a judge, jury and execution at the same time. Significantly, it is the NCIP that has the exclusive right under the law to determine whether an area is within an ancestral domain. All other governmental agencies and offices, including the DENR, cannot issue any licenses for the development or exploitation of natural resources unless the Commission certifies that the area does not come within an ancestral domain as determined by it.

In the realm of mining, the main question being raised is on the proper authority to grant and manage minerals and mining rights: the DENR/MGB or the NCIP.

The MGB, and even the DENR, will lose their jurisdiction over mineral and natural resources, respectively, in ancestral domains. As suggested in the IPRA IRR, the NCIP shall engage the various government agencies to enter into a MOA for these agencies to temporarily manage and administer certain functions within ancestral domains, pending the development of full capacity of the NCIP;

- **Relationship between Customary Laws and National Laws.** As of the moment, the relationship between Customary Laws and National Laws are as yet unclear. The nature, scope, and superiority of one over the other has yet to be clearly defined; and
- **Right to Veto Projects.** IPRA vested upon the ICCs/IPs the right to stop or suspend any project that has not satisfied the requirement of the consultation process. No sector of society was given this right before, as this is usually within the powers of the State. In the wrong hands, these rights could render projects both public and private, hostage to the demands of the ICCs/IPs.

On December 06, 2000, the Supreme Court promulgated an *en banc* Resolution on the petition, docketed as G.R. No. 135385, with a 7 – 7 decision. That is, seven Supreme Court justices voted to dismiss the petition and the other seven voted to grant the petition.

In a separate opinion by a justice, it was argued that the provisions of the IPRA do not contravene the Constitution and the Regalian Doctrine as enshrined in the 1987 Constitution. Ancestral Domains and Ancestral Lands are the private property of indigenous peoples and do not constitute part of the public domain. It grants ICCs/IPs a distinct kind of ownership over ancestral domain and ancestral lands as defined in Section 3 (a) and 3 (b) of the IPRA. It was further stated that the right of ownership and possession by the ICCs/IPs of their ancestral domains is a limited form of ownership and does not include the right to alienate the same. Further, *“the rights granted by the IPRA to the ICCs/IPs over their natural resources in their ancestral domains merely gives ICCs/IPs, as owners and occupants of the land on which the resources are found, the right to the small-scale utilization of these resources, and at*

the same time, a priority in their large-scale development and exploitation. Section 57 does not mandate the State to automatically give priority to the ICCs/IPs. The State has several options and it is within its discretion to choose which option to pursue.”

Since the votes were divided and the necessary majority was not obtained, the case was re-deliberated but voting remained the same. Pursuant to Rule 56, Section 7 of the Rules of Civil Procedure, the petition was dismissed. The said decision of the Court led to the filing of a Motion for Reconsideration by the same petitioners.

Finally, on September 21, 2001, a resolution from the Supreme Court on the Motion filed by ex-Justice Isagani Cruz and Atty. Cesar Europa (G.R. No. 135385) was promulgated, declaring that the “...IPRA is constitutional..., ancestral lands do not constitute part of the public domain and that the IPRA merely grants to indigenous peoples certain rights but not the ownership over the natural resources in these ancestral domain”.

A separate opinion stated that “Section 57 does not grant absolute ownership of natural resources to the indigenous peoples, but only “priority rights”, in the utilization thereof, or the right of preference or first consideration in the award of privileges provided by existing laws and regulations”. Moreover, the same separate opinion stated that granting of *priority rights* does not preclude the State from undertaking activities, or entering into co-production, joint venture or production sharing agreements with private entities, to utilize the natural resources which may be located within the ancestral domains. And that the granting of priority rights to the indigenous peoples does not prevent non-indigenous people from undertaking the same activities within the ancestral domains upon authority granted by the proper governmental agency.

With the dismissal of the Motion for reconsideration, Ms. Evelyn Dunuan, Chairman of the NCIP, during the installation of new NCIP commissioners that “Malacanang (Office of the President)...is now ready to implement IPRA with enough sensitivity to the interests (of pressure groups like) the mining sector”⁴⁷.

7.5 Mining: Public Perception and Social Acceptability

7.5.1 Public Perception on Mining

In the *Philippine Mineral Sector to 2010: Policy and Recommendations*⁴⁸, Dr. Allen L. Clark summed up the mining industry’s

“Many are against mining not for ideological reasons but because of the terrible environmental damage and destruction wrought by mining operations...Mining companies have been accused of degrading the environment, of displacing communities, of disregarding indigenous cultures, of breaking their promises, and of not complying with local regulations. Mining companies have never been exactly pro-people or pro-environment”.

- Environmental and Social Science for Change, 1999.

⁴⁷ Cabreza, Vincent. *New officials of tribal commission installed.* www.inq7.net .

public image:

“...stunning is the generally poor public image that the Philippines mining industry has on environmental issues. In our experience, we have never seen a mining industry with a poorer environmental image...This poor public image is partly the result of past abuses and partly a consequence of the fact that a modern mine has not been developed in the country in the last decade. As a result of the industry’s poor public image and seeming continuing indifference, new mining projects are likely to face hostile and generally skeptical regulatory and public opinion forums.”

ESSC⁴⁹, on the other hand, described the opposition against mining as:

“Why there is such strong opposition, even hostility, to mining, especially to large scale mining in many parts of the country...Some groups are against foreign companies because of a particular type of nationalism. A meaningful dialogue with these groups would need to go beyond the pros and cons of a particular mining operation and focus on their political and philosophical principles of development. They do not seem to accept the present Philippine Constitution that recognizes a free market economy and the prerogative of the President to enter into agreements with foreign corporations. Many are against mining not for ideological reasons but because of the terrible environmental damage and destruction wrought by mining operations. We are asked to reckon with the bad track record of mining companies and the abuse and indignity on communities. Mining companies have been accused of degrading the environment, of displacing communities, of disregarding indigenous cultures, of breaking their promises, and of not complying with local regulations. Mining companies have never been exactly pro-people or pro-environment”.

Public perception could be generalized as follows:

- Mining destroys the environment such as loss of vegetation, land alteration due to open pit mining, soil erosion, river pollution, human health impacts of cyanide and other chemicals used in mining, acid mine drainage;
- The wealth derived from mining benefits only the privileged few, especially the capitalists and the grant of mining contracts to foreign companies is likened to the “plunder” of the national patrimony and their “prostitution” of it in exchange for a pittance; and
- Mining encroaches into the lands of the people and the communities, leading to their displacement and loss of their rights to their land in their own land.
- Minerals are non-renewable assets and sustainable development is non-existent in mining.

These attitude against mining, however, are not new. Lopez⁵⁰, narrated some of the earliest manifestations of anti-mining sentiments in the 70s:

⁴⁸ Mineral Policy Program, East-West Center (Hawaii). *The Philippine Mineral Sector to 2010: Policy and Recommendations* (Asian Development Bank Philippine Mineral Sector Study - draft final report). September 1994.

⁴⁹ as quoted by F. Kennedy Coronel, Executive Director, Foundation for Economic Freedom in *A Proposal to Establish the Philippine Minerals Development Council (Responding to the Need to Promote Socially Responsible Minerals Development)*. Mining Philippines 2001 Conference and Exhibition, Mandaluyong City, Philippines. November 21 and 22, 2001.

- The public outcry against the despoliation of beaches by the magnetic iron sand companies which was considered as an ugly reminder of what a mindless search for profit could do to the environment;
- Opposition to the development of the Philippine Sinter Corporation in the mid-70s, a 100% Japanese owned corporation since sintering is an energy-intensive, pollution causing process; that the 144-hectare site resulted in the displacement of 136 families and that the plant is tantamount to the transfer of problems of pollution from Japan where it was originally sited; and
- Opposition to the establishment of the Philippine Associate Smelting and Refinery (PASAR) in southern Luzon due to perceived environmental hazards that will result from its operation. The group of concerned citizens also asserted that the “smelter would continuously emit poisonous particulates, dusts, and gases that would pollute the air, water and soil of San Juan (Batangas) thus negating the supposed gains in extra jobs, new businesses and taxes which the smelter would generate. The original site was abandoned after six months and the plant later established in Isabel, Leyte.

The recent increase of opposition to mining can be traced to three major events: (1) the opening of an open pit mine, which was described a “new” mining method, in the Baguio copper-gold district, northern Philippines in the early 90s, which is pre-dominantly an underground mining district. This has the associated issue of the mine, covered by patented mining claims, being claimed by indigenous peoples as part of their ancestral domain land as well as a traditional small scale mining area; (2) the enactment of the Philippine Mining Act in 1995 which liberalized the local mining industry and allowed the entry of foreign-owned mining companies; and (3) the Marcopper tailings accident of 1996.

The NGOs and the religious sector are in the forefront of current opposition to mining. Even the Communist Party of the Philippines, in “*On the Issue of the Environment in the World and in the Philippines*” (March 30, 1995), made mention of the destruction caused by mining and other industrial development activities. Mining is also one of the talking points in the current ceasefire negotiations between the National Democratic Front (NDF) and the Philippine Government.

7.5.1.1 Displacement/Dislocation of Communities

Displacements of communities including IPs have been persistently raised against exploration and mining activities nationwide.

In 1998, a Department of Environment and Natural Resources Study Team was created in response to the memoranda issued by the President directing the Department to investigate specific cases of alleged dislocation brought about by environment-related development projects that include mining and other natural resource extraction activities.

⁵⁰ Lopez, SP (1992) . pages 231, 298 and 300-301.

The objectives of the study is to identify “do-able” appropriate responses to concrete displacement issues in identified case areas; investigate the phenomenon of displacement, particularly as it relates to environment and natural resources-related development activities; and formulate a conceptual and operational framework and mechanism regarding displacement brought by development programs. The criteria used in the selection of area for field investigations to which some of the mining companies have been selected are: magnitude/scope of actual or impending displacement; extent of the case documentation; observable/verifiable environmental degradation and destruction; level of community opposition to proposed/actual development projects; potential for recruitment for armed groups/resurge and armed conflict; presence of local partners; and geographic equity.

As part of the framework of the Study, displacement/sectoral displacement was defined as the “physical, cultural, economic and psychosocial dislocation of families and individuals belonging to the disadvantaged basic sectors as a result of projects or project related activities”. Displacement is seen as one of the negative impacts of development. In addition, it recognized that certain government policies and programs are the ultimate root of the problem.

Among the mining areas that were considered by the Study Team were those located in: Benguet (Benguet Mining Corp. and Philex Mining Corp.); Negros Occidental (Maricalum Mining Corp. and Philex Gold Philippines); and Zamboanga del Norte (Philex Gold Philippines).

Based on the Study, the occurrence of displacement caused by the mining operations could result from:

- **Environmental Degradation.** Contamination of water and crop, water depletion and siltation of water bodies are some of the common issues raised during the field visits conducted by the study team. These all leads to the variety of effects from health concerns to the adverse economic impact on the livelihood of the people. Degradation of marine resources in Sibutad has resulted to the economic displacement of the fisher folk in the area. The siltation of the Sipalay River was allegedly caused by the collapse of one of the tailings ponds of Maricalum Mining Corp that led to the siltation of farmlands that resulted to a decrease in agricultural productivity in the area. Heavy siltation of the river also aggravated the problem of flooding in the area which leads to physical displacement;
- **Land Dispute.** Conflict between mining claims, tenurial rights and other claims, e.g. with Indigenous Peoples, and the Comprehensive Agrarian Reform Law. Communities see it as deprivation of their rights to land to which they outsource their livelihood and to where physical displacement occurs urging the mining companies to provide relocation and compensation;
- **Land Conversion/Use.** Since mining companies hold on to their mining claims although these are mined out or idle for so many years by planning to convert these areas into other land use such as converting it into an industrial area

instead of giving the land back to the communities. For communities, displacement occurs because resource, which will be used to support local communities, is allocated elsewhere; and

- **Presence of Large-Scale Mining Companies** results to displacement of panning and small-mining activities within the neighboring areas since it results to competition in the utilization of the scarce resources in the areas.

Viewed from the definition used by the Study Team, then, dislocation did occur, especially, those associated with mine closures that left behind “ghost towns”, making the communities economically and socially dislocated – reason for some critics to accuse “*mining (of) contributing more to underdevelopment than development*”.

But viewed from the perspective of the industry, *physical* displacement did/does not occur. Mining companies are mandated by law to provide *just compensation*, either by paying for all the improvements introduced in the land or by relocating the affected families to a suitable area fitted with basic human amenities, to all people that may be affected by their operation. Compensation for damages has been made available by mining companies for environment-related incidents that may result to temporary or permanent displacement. The provision of livelihood and community assistance, i.e. provision of potable drinking water, and development of primary facilities in the area is also a form of response made by mining companies.

7.5.1.2 “Sell- Out” of National Patrimony

This stems largely from the mistaken notion that the Mining Act and the FTAA is tantamount to “*allowing foreign corporations to plunder the nation’s mineral wealth, leaving a mere pittance to the Filipino people*”. And that the investment incentives offered to mining companies and the grant of auxiliary mining rights (e.g., timber, easement, and water rights, entry to private lands) will lead to immense profits for the company and deprive Filipinos of their own rights, respectively.

The general perception is “*(t)he FTAA...gives transnational mining corporations a bonanza of incentives that includes 100% equity, 100% repatriation of capital and profit in US dollars, 25 – 50 years of tenure over 100,000 hectares of land per mining contract; water and timber rights; 5 – 10 years of tax holiday and absolute control and authority over mining areas, even allowing them to maintain private armed*

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- International Campaign Conference Against Mining and Globalization, 1998.

security forces with a “legal” right to evict indigenous occupants of the place”⁵¹. Others contend that the FTAA is meant to go around the constitutional prohibition on foreign firms controlling mining operations in the Philippines, “the Ramos (former President Fidel V. Ramos) government devised a devious mechanism. This is the Financial and Technical Assistance Agreement (FTAA), the core of the 1995 Mining Act. Under this mechanism, the government claims that it will do the mining operations itself, and not the foreign mining firm. To create the loophole for foreign firms, it further claims that it lacks financial and technical resources to carry out mining operations. So it contracts the “services” of a foreign mining, which provides the financial and technical resources. The foreign firm then gets the lion’s share of the revenues. Our natural wealth should be for the exclusive enjoyment of our people, and its use consistent with our role as responsible members in the community of life”⁵².

While the Government has conceded that “(t)his issue can be traced to the long-held perception that mining is purely a preoccupation of the capitalists, where only the privileged few are benefited and that the poor fiscal regime under the old mining laws also spawned the perceived inequities in benefit sharing”⁵³, the entry of foreign mining companies in the local mining industry is not a “sell-out” of national patrimony. Ramos⁵⁴ asserted that:

“Entry of foreign investors does not mean the giveaway of public land and of mineral resources nor do mining companies have a free and unencumbered ride. Foreign mining companies provide 100% of the capital but must pay all the required local, provincial, and national taxes for utilizing lands which, left on their own, are often non-productive or of lesser productivity. Sharing from the benefits of mining is 60/40 - 60% to the Government which is further divided into 50% for the national government, 20 % each for the host community and municipality and 10% for the provincial government. We also demand from the foreign investors the transfer of technology and preference to local workforce...”

“Demanding more from the company will be more detrimental than beneficial - higher taxes will force mine operators to "high-grade" the mineral deposit leading to the loss of mineral resources; not a palatable option from the conservationist point of view (emphasis supplied)”.

The Fiscal Regime for FTAA, which is part of the FTAA Pro-forma Contract was a product of a series of consultations between the government (DENR, MGB, NEDA, BoI and the Department of Finance) and representatives from the international and local mining industry associations.

The consultation has a specific policy objective of providing the equitable sharing among the Philippine Government (national and local), communities and the investor of the benefits derived from the mineral resources to ensure the sustainable development of the

⁵¹ Information sheet from the People’s Campaign Against Imperialist Globalization and Bagong Alyansang Makabayan announcing the *International Campaign Conference Against Mining and Globalization* on November 17 to 24, 1998 in Manila, Philippines.

⁵² *Respect the Earth and its Communities! NO to the 1995 Mining Act*, statement issued by the Kontra-Mina Network on Earth Day (April 22) 1998 bearing the name of 38 organizations.

⁵³ Ramos (1996). *ibid.*

⁵⁴ Ramos, Horacio C. *Mining Revisited: Can an Understanding of Perspectives Help? – Panelist’s Reaction* (during the launching of the book of the same title), Makati City, Philippines. December 9, 1999.

minerals industry. The consultation was also guided by the principle that the Government expects real contributions to the economic growth of the country and general welfare of the country while the contractor/investor expects a reasonable return on its investment.

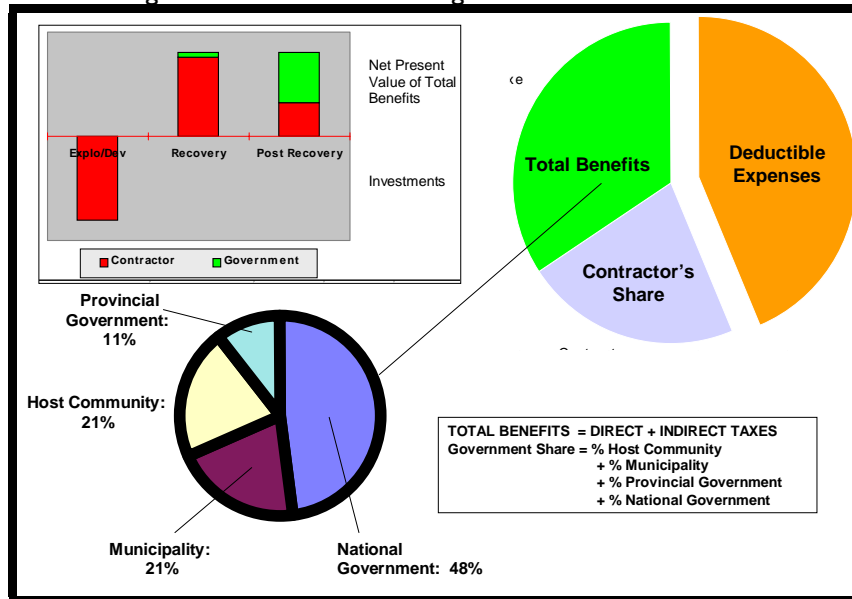
During the most difficult times of its operation – that is, the recovery period, the government grants fiscal incentives to the contractor/investor to ease its cash-flow position. Incentives are provided by the Government to account for the risks assumed by the company. After the recovery of its initial investment, however, the company shall pay all the usual taxes and fees charged to a mining business.

Figure 13 illustrates the benefit sharing among the major stakeholders – government (national, provincial, municipal), the host community/ies and the mining company.

“...Foreign mining companies provide 100% of the capital but must pay all the required local, provincial, and national taxes for utilizing lands which, left on their own, are often non-productive or of lesser productivity. Sharing from the benefits of mining is 60/40 - 60% to the Government which is further divided into 50% for the national government, 20 % each for the host community and municipality and 10% for the provincial government. We also demand from the foreign investors the transfer of technology and preference to local workforce...”

- Horacio C. Ramos, 1999.

Figure No. 13: Benefit Sharing Based on Financial Model.



(Source: A Response to the Issues Raised Against Mining (v3.2). Mines and Geosciences Bureau. 2001)

Amidst this debate on the entry of foreign mining companies and the export of minerals to a foreign country for refining/processing, one foreign mining executive⁵⁵ tried to rationalize the Philippine situation by relating it to the experience of her home country, Australia:

“the early days of foreign mining in Australia when the massive iron ore mines opened up in Western Australia in the fifties. Some of the companies were Australian; some were foreign to Australia. There was a large outcry from the Australian public. We were selling our patrimony etc. we may as well cut off the northeastern Australian block and tow the lot to Japan – said the cynics. Well, 40 years on the mines are still going, the ore reserves are still being extended, the industry has matured, there is downstream processing, there are more jobs for Australians, spin off industries, huge infrastructure development in the form of railways, roads, towns, etc.

Australia survived the invasion of large scale mining ventures and indeed prospered because of large scale mining”.

She further commented⁵⁶ that:

“Companies, in particular foreign companies, may not be aware of Filipino social dynamics and must establish good and meaningful dialogue with their host communities at the outset of their interest in a particular area. Sometimes companies get off to a bad start because they don’t understand the differences between working in their home countries and working here in the Philippines...cultural differences are not understood.

⁵⁵ Donovan, Kerin. Trustee, Philippine – Australian Business Council (PABC). *Development Perspective of the Global Mining Industry*. Talk made during the Training Program for the Speakers and Writers Bureau, Mines and Geosciences Bureau, Quezon City. November 21, 1998.

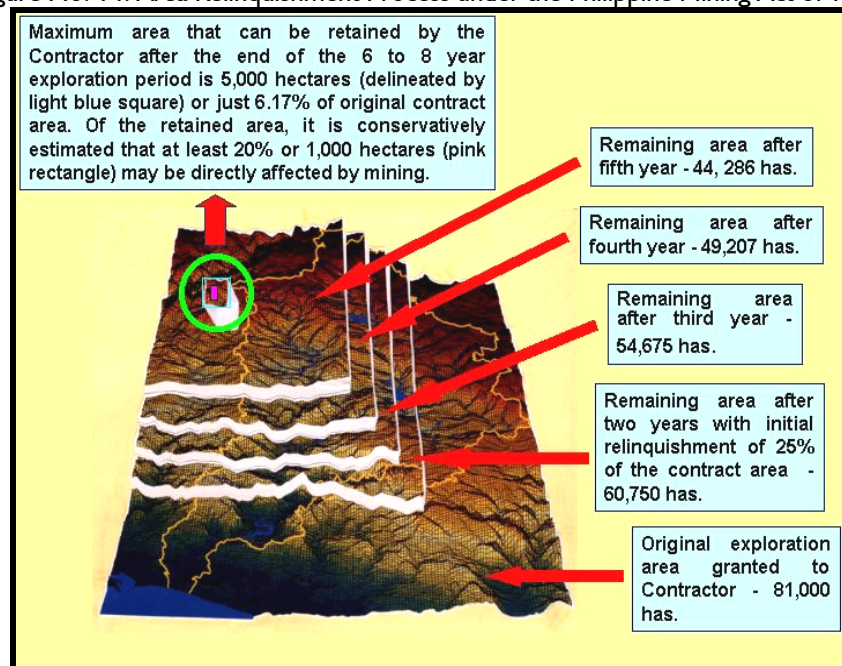
⁵⁶ Donovan, Kerin. *Community Involvement and Monitoring: Setting Guidelines*. Journal on Environment, Energy and Minerals, Volume III Number 4, 2000.

“Filipinos have been under the rule of too many foreign dynasties to lay out the welcome mat for a foreign economic dynasty which may be to their detriment. Before there is acceptance of foreign involvement, the people need to be assured that, in practice, there are sufficient checks and balances built into the corporate and legal systems under which foreign companies operate, so that the foreign firms cannot take control of the economy of the mineral industry”.

In raising the issue of foreign control of the 81,000 hectares maximum area for an FTAA contract for a period of 25 – 50 years, critics failed to/did not consider the provision of the law on *area relinquishment*.

Area relinquishment is defined as the progressive reduction of the contract area granted to the FTAA contractor. During the 6 to 8 year exploration period, the contractor shall relinquish at least 25% of the original contract area after the second year and 10% each on the third, fourth and succeeding years. The maximum area that can be retained after the exploration period shall be 5,000 hectares per mining area for metallic minerals and 2,000 hectares for non-metallic minerals, except for certain non-metallic minerals such as shale and limestone, marble, granite and construction aggregates, which final mining area shall be 1,000 hectares or less depending on certain qualifications.

Figure No. 14: Area Relinquishment Process under the Philippine Mining Act of 1995.



(Source: A Response to the Issues Raised Against Mining (v3.2). Mines and Geosciences Bureau. 2001)

Of the retained area, it is expected that only a small portion will be *directly* affected by mining operations. In the case of WMC’s Tampakan Copper Project, the mining area and the support infrastructures is expected to directly affect only about 400 – 500 hectares.

7.5.1.3 Open Pit Mining

One pervading belief among critics of the Philippine Mining Act of 1995 was it is “tailored to fit” or “endorses use of” open pit mining and that open pit mining will result in “monumental adverse effects on the environment”

This argument was precipitated largely by opposition of NGOs and affected communities to the use of open pit mining in a predominantly underground mining area in the Baguio copper-gold district in northern Philippines in the early 1990’s. In 1996, this issue led to the filing in the Philippine Senate, by then Senator Gloria Macapagal-Arroyo, of a bill proposing the banning of open pit mining method in the Philippines.

The industry and the Government, based on technical grounds, were one in saying that the location of the mineral deposit is dictated, not by man nor by free choice, but the imperatives of geology. Further, sufficient environmental and social safeguards are provided in the law which will minimize or eliminate potential negative impacts of open pit mines.

Nevertheless, this issue remains a rallying point against the Mining Act and the mining industry.

Of recent, nickel mining in Southern Philippines is being criticized for the “*kutkot – hakot* (dig – haul)” method of mining. That is, the nickel ore, either as beneficiated silicate ore or laterite form, being mined from the area are exported as raw materials to Japan for processing/refining and returned to the Philippines as expensive, finished products and that eventually, their mountains will be “flattened”. The current DENR Secretary, Heherson T. Alvarez, was also quoted by journalists to have said that “*he would not allow the reopening of the Manicani mine (a nickel mine that also exports nickel to Japan) on environmental grounds*” and “*described the nickel ore mining process as a “wholesale” transport of our homeland*”⁵⁷.

Another point of contention is that instead of exporting to Japan, processing/refining plant should be established in the area, similar to the Surigao Nickel Refinery in Nonoc island, in order to maximize employment opportunities, taxes paid to the government and the recovery of associated minerals (e.g., cobalt in nickel ores).

7.5.2 The Church’s Point of View on Mining

The Catholic Bishops Conference of the Philippines (CBCP) in their statement on the Environment - “*What is Happening to Our Beautiful Land?*”⁵⁸ - lamented the extensive and irreversible destruction brought about by man to the natural world in his quest for progress and development. A passage referring to mining decries the “*out-of-sight, out-of-mind mentality (allow us) to flush toxic waste and mine tailings into our rivers and seas in the mistaken belief that they can no longer harm us. Because the living world is interconnected, the poison is absorbed by marine organisms. We in turn are gradually being poisoned when we eat seafood*”.

⁵⁷ Quimbao, Cecilia. *Mining industry faces daunting challenges (Special Report)*. Manila Bulletin. November 25, 2001.

⁵⁸ Catholic Bishops Conference of the Philippines. *What is Happening to Our Beautiful Land?* January 29, 1988.

More recently, in 1998, the CBCP issued a more specific “A Statement of Concern on the Mining Act of 1995”⁵⁹, calling for, among others, the scrapping/repeal of the Philippine Mining Act of 1995; the recall of approved FTAAAs and to close down several local mining operations or stop activities by foreign mining companies. A similar Statement of Concern was issued by the National Council of Churches in the Philippines (NCCP) echoing the same concerns during their Earth Day commemoration in 1998.

Coincidentally, all the mining companies referred to in the Statement of the CBCP – Philex Gold Philippines and TVI Resource Development, Inc., both in Zamboanga del Norte; Benguet Corporation in Itogon, Benguet; Philex Gold Philippines and Maricalum Mining Corporation in Negros Occidental – have closed down/suspended operations for a variety of unrelated reasons.

“...The social doctrine of the Church places the human being at the center of development – the human being is the subject of development...In the case of mining, we need to ask: Why are we developing the mine? Who is going to benefit from this development? Are the rights of the people being protected? What about the environment? Is this development serving the common good? To work out genuine answers requires meaningful dialogue with all the stakeholders. People are not to be viewed as obstacles to development. They are reason for development.”

- The Church Point of View on Mining – Environment and Social Science for Change, 1999.

In *Mining Revisited*, ESSC elaborated on the Church’s position on mining:

“Traditionally, the bishops do not confine themselves to preaching the Word. As leaders of the local church and the local church organizations, they respond to the needs of a wider community and are always very active in disaster relief. The local church is always involved in social issues, in bringing comfort and help to the poor, the ill and the underprivileged...Issues such as mining and the environment are social issues and such they have a moral dimension. The bishops address these moral dimensions and make a moral judgment about economic and social matters...”

As bishops, they do not have any particular development plan for the country, they do not claim to be experts in economics, they do not profess to give technical solutions to the mining industry, they do not recommend or promote a certain type of environmental technology. That is not the role of the hierarchy.

But it is the role of the hierarchy to keep the focus on the purpose of mining – to serve and promote economic common good and the dignity of the peoples who make up this national community. It is the role of the hierarchy to remind us of our responsibility for the environment. We are stewards, administrators, caretakers of creation. It is the role

⁵⁹ Catholic Bishops Conference of the Philippines. A Statement of Concern on the Mining Act of 1995. February 28, 1998.

of the hierarchy to fix our gaze on the essence of development as seeking “to do more and to know more and have more in order to be more”⁶⁰.

“The bishops by drawing attention to social problems and by presenting the Church’s social teaching, furnish us with a set of principles which, if followed, will ensure that genuine development will take place. The social doctrine of the Church places the human being at the center of development – the human being is the subject of development...In the case of mining, we need to ask: Why are we developing the mine? Who is going to benefit from this development? Are the rights of the people being protected? What about the environment? Is this development serving the common good? To work out genuine answers requires meaningful dialogue with all the stakeholders. People are not to be viewed as obstacles to development. They are reason for development”⁶¹.

7.5.3 Opposition from Anti – Mining Groups/Organizations

Outside of the religious groups and other Church-based organizations, these groups/organizations include NGOs, environmental groups, people’s organizations (POs), other community-based organizations and civil society groups.

Ramos (1999) noted that “critics of the (mining) industry have repeatedly evoked the concept of collective original sin, that is, the current mining industry must bear the complete social and environmental cost(s) of past mining activities. Yet, many of today’s mining companies are new...” and that “critics of the industry often say that they are not opposed to mining per se but we cannot reconcile such statements to their repeated calls for the repeal of the Mining Act”.

Coronel⁶² wrote that, in addition to the present challenge to the Constitutionality of the Philippine Mining Act of 1995, “this campaign (against mining) is being waged on two other fronts”:

“Grassroots “organizing” – These are undertaken where companies conduct exploration work. It involves building-up local personalities and leaders to become mouthpieces of ideologies along national-democratic (“natdem”) lines such that the anti-mining campaign assumes a semblance of local resistance instead of being exposed as a vicarious lobbying by some militant ideological organizations. Peoples’ organizations were also organized along the same political lines and trained and mobilized for anti-mining rallies”.

⁶⁰ ESSC (1999). pages 61 – 62.

⁶¹ ESSC (1999). page 66.

⁶² Coronel, Kennedy F. C. Executive Director, Foundation for Economic Freedom. *Economics and Social Costs of the Constitutionality Issue of the FTAA and the Mining Act*. Mining Philippines 2001 Conference and Exhibition, Mandaluyong City, Philippines. November 21 to 22. 2002.

“Media campaign – Bogus reports on environmental report and social displacements were made in local and national print and broadcast media. Some of these reports include death of livestock due to toxic chemicals from drilling operations, flooding caused by open pit mining operations (when subjects were just in exploration stages), displacement of thousand of families...”

Corpuz (1999), meanwhile, described this opposition to mining as the “peoples struggle” and in his paper traced the origin of the struggle.

“The people’s struggle

Various experiences throughout the country tell of successful stories of

people’s opposition against the entry of mining companies in defense of their territories. As in the case of Panay Island, local opposition forced the withdrawal of Minera Mt. Isa.

There are also stories of people’s resistance even if the mining company had already entered a people’s territory and is doing exploration work. In Kasibu town, Nueva Vizcaya, the people held a referendum where 2,000 voted against and only seven favored the mining activities in eight barangays affected by the operations of Arimco of Climax Mining Company.

The experience of the indigenous peoples in their struggle against Benguet Corporation’s open pit mining also serves as a positive example. People from all over the country came to see what the future of their communities would be like if left to be strip-mined like Itogon. They listened to local elders who shared their experiences on how they were able to stop Benguet Corporation’s two other open pit mining projects and limited the expansion of its present operation.

Today the people’s struggle on the mining issue has spread to many provinces of the country, giving it a nationwide character. Before, many of these struggles were on a community level. But because of the wide area being applied for by mining companies, whether through the FTAA (Financial or Technical Assistance Agreement), MPSA (Mineral Production sharing Agreement) or EPA (Exploration Permit Agreement), the people are now forced to develop inter-barangay, inter-municipal or inter-provincial cooperation.

“Environmentalism is a good copy for the media, as criticism against big business has been good for media anywhere. Except that in the Philippines, we have a more active media than anywhere, a better organized NGO community than elsewhere and apparently, more bases to complain against mining than elsewhere. The NGOs, especially the environmental advocacy groups, continue to fight mining because there is a conviction that mining as an activity is not a good developmental undertaking due to the attendant environmental problems, the perceived failure of mining to bring prosperity down to the communities in which it operates, and the competition for land use it gives to farmers”.

*- former DENR Secretary Fulgencio S. Factoran Jr.,
in A Report
on the Challenge to the Constitutionality of FTAA’s.
Meeting the Challenges: Mining, the Community and
the Environment. Chamber of Mines of the Philippines.
1998.*

The nature of these people's struggles has also evolved to become militant. At the start, the people's response ranged from petitions, delegations to local government units and offices of the DENR, to confrontations with company officials. This was the common occurrence specially from 1994 to 1997. Numerous provincial or regional caravans were also launched such as those in the Cordillera, Negros, Panay Islands and Far South Mindanao.

But after years of protesting and exhausting legal means, the people were pushed against the wall and they re-assessed their methods of opposition. There were regions which openly avowed armed resistance as a last resort to defend their territories. In some case, community people out of desperation sniped at helicopters that were conducting exploration work through magnetic sensing. Such cases were reported in Abra, Mt. Province and Nueva Vizcaya...

In April 1998, tribal leaders and elders in the Cordillera Region forged a Unity Pact, which provides the use of armed resistance as a just means in defending their territories..."

In 1997, the Government and the mining industry's combined resources by launching an Information and Education Campaign (IEC) to enlighten Philippine society and critics on the importance of mining and to clarify the issues being raised against it. This, however, was described by Corpuz, as "(t)he propaganda offensive of the mining industry". Corpuz noted that being on the defensive since the late 80s with the "sustained struggle of the indigenous peoples of Itogon, Benguet since 1989 against Benguet Corporation's open pit mining operation" to the approval of the Mining Act in 1995 to the Marcopper accident in 1996, the mining industry "regrouped itself to launch its own propaganda initiative".

Corpuz stated that "from a passive stance, the mining industry became more aggressive in its propaganda offensive". This was in the light of the formation of the Committee on Environment at the Chamber of Mines of the Philippines; the conduct of the MGB's Speakers and Writer's Bureau and the publication and countrywide dissemination of the MGB public information material – "A Response to the Issues Raised Against Mining". He further noted that much effort has been exerted in this propaganda offensive of the industry and the government to "sanitize" the image of the industry and propagate the concepts of "sustainable development in the mining industry" and "socially and environmentally responsible mining".

The industry lags behind in utilizing, ironically, a technology made possible by the products of mining – the internet and which, conversely, is being utilized by industry critics to the fullest. Many of the groups opposing mining, either in the Philippines or in other countries, have maximized the use of information technology and the world wide web for knowledge sharing and dissemination, networking and in seeking financial support for their priority activities/advocacies.

This, however, shows that the combined IEC campaign and other initiatives by the government and the industry have been noticed by critics.

Nevertheless, the industry lags behind in utilizing, ironically, a technology made possible by the products of mining – the Internet and which, conversely, is being utilized by industry critics to the fullest.

Information available at the websites of the Mines and Geosciences Bureau (www.mines-denr.ph); the Philippine Chamber of Mines (www.philchamberofmines.com); the Philippine Society of Mining Engineers (www.psem.ph); and several local mining companies (www.benguetcorp.com, www.lepantomining.com and www.philexmining.com.ph) are plain statistical or company performance reports that pales in comparison to in-depth reports, analyses and situation/case reports posted (whether technically or factually correct is another matter) in the websites of mining industry critics.

This cautious approach on the part of the government and the industry, may have stem from experiences in the recent past when information provided by mining companies or by the government are interpreted by critics according to their “advocacy” and later used as an information tool *against* the provider of the information and worst, published and sold for a fee!

ESSC⁶³, for its part, discussed the role of NGOs in Philippine society:

“The NGO movement is well established in the Philippines and is probably one of the most vigorous and active in the world. NGOs have made their presence felt in a number of areas, in both the political and socio-economic spheres. They have been involved in environmental issues, and have been active in the areas of ...decentralization and local governance...indigenous peoples...”

As of 1995, there were 60,000 registered non-stock, non-profit institutions. Out of this number, 50,000 are NGOs and the remaining 10,000 are people’s organizations (POs) given the number, one can conclude that civil society in the Philippines is very active and healthy. However, the large number also gives rise to questions: Why are there so many NGOs? Are all these NGOs really necessary? Are the numbers just a reflection of the divisive nature of Philippine society? Should NGOs not be doing much more to draw up a common agenda and to strengthen the unity and cohesiveness of the nation? Despite concerns raised regarding some NGOs and their motivations, they have a key role in Philippine society. They are a vital part of civil society and if more strongly united could be much more effective and make a more significant contribution to the life of the nation....The NGOs and church sectors are the only genuine and principled opposition even if sometimes they are poorly informed. They could have much more impact if they made it their business to be better informed about issues, less emotional in their approach, more strongly united, and focused on a number of key issues. NGOs could make a massive difference if they were to concentrate their efforts on making government at all levels do what government is supposed to do – promote the common good and serve the people.

NGOs can never be a substitute for government but given the Philippine situation, they do have a critical political role to play in society. They can help ensure that political participation becomes more of a reality ...They can compel the government to release all

⁶³ ESSC (1999). pages xiv to xv.

relevant information on an issue. They can constantly remind the government that people have a right to know....their aim is not to replace government, but to make government function. We do not need a parallel government but a more effective government...

NGOs also need to see their role in a continually growing mature and positive light. They also have to promote the common good. NGOs are accountable to their constituents and to the advocacy group that raise issue affecting the nation and are accountable to the national community. NGOs are accountable for the issues they raise and for the way in which they raise them.

NGOs usually claim or give impression that they have chosen the high moral ground. They have an obligation to be honest, to research and study the issue thoroughly, and to put forward the best possible arguments in support of their position...Many people have views about things on which they lack even the elements of knowledge. These views or attitudes may have been picked up from TV, radio, newspapers – from journalists who are compelled by the nature of their work to have opinions about everything. The nature of their work does not allow them to be experts and they give thumbnail sketches of the most complicated problems. NGOs have to go further than this; they have to be well-informed. They owe this to the public since they are shapers of public opinion and action. NGOs can play an important in shaping a good society”.

Ramos (1999) expressed that “...(w)hile the fundamental ethics of the mining industry deserve in-depth scrutiny, so do the ethics of those opposing mining”. Ramos continued that:

“Our problem with NGOs is that they are quick to criticize or condemn but slow, if not zero, in providing for alternatives. We subscribe to well-meaning NGOs, but not to those who do not practice what they preach. We have seen NGO leaders shouting to high heavens about imperialism and colonialism while sporting Nike shoes and Ray Ban sunglasses. While we acknowledge that much of the work of these groups has been very valuable, many lacked or have ignored scientific and technical information presented to explain complex mining issues.

While NGOs question the entry of foreign capital, we know that they are themselves receiving foreign funding.

We do not mind that being an NGO is a business itself. We know that the ten largest global NGOs are said to own assets equivalent \$ 1 Billion. We can only speculate how much 50,000 NGOs in the Philippines have.

But we mind “the malady of NGOism”, particularly its “loyalty to the funding agency rather than the people’s movement” and its “ways of asserting its own vision and framework for community development rather than developing programs and projects attuned to the people’s actual needs”.

This was supported by ESSC⁶⁴ when it said that:

⁶⁴ ESSC (1999). page 77.

“Mining companies have no quarrel with NGOs which are not politically and ideologically motivated. They welcome dialogue with NGOs which espouse a genuine concern for the environment and for people. They welcome dialogue with people who are willing to investigate with an open mind and to discuss and debate issues in a rational manner. Mining companies agree that NGOs have a role to play in society and that they do help to level the playing field a little. But in the experience of mining companies, there are not too many of these types of NGO around. Mining companies, in an effort to be transparent, have allowed NGOs to enter their operations but have been badly burnt. The companies were surprised to find that the subsequent NGO report on the visit concentrated solely on the negative, and in most cases the reports were based on lies.

Other groups were invited to meetings so that evidence could be produced to show some of their accusations were false. These groups refused the invitation. Such behavior on the part of NGOs does not encourage dialogue and suggests to mining companies there is another agenda”.

The government, however, is aware that unless a “model mine” is developed, operated and rehabilitated following “best practices” in environmental management and social/community development, critics would always have the reason to oppose mining. In the first place, modern mining is not judged purely on its employment and tax contributions but also for its environmental and social performance.

7.5.4 Decentralization and Opposition by some Local Government Units

Republic Act No. 7160, the Local Government Code of 1991 is the enabling law which provides for the decentralization of certain national government responsibilities, functions and services to local government units (LGUs) as well as the sharing from the benefits of mineral resources development.

Under this Code, LGUs share with the national government the responsibility in the management and maintenance of ecological balance within their territorial jurisdiction. Within their territorial jurisdictions, LGUs shall, among other things, enhance the right of the people to a balanced ecology, economic prosperity and social justice.

It shall also be the duty of every national agency or government-owned or controlled corporation authorizing or involved in the planning and implementation of any program or project that may cause pollution, climatic change, depletion of non-renewable resources, among others, to consult with the LGUs, NGOs and other sectors concerned and explain the goals and objectives of the project or program, its impact upon the people and the community in terms of environmental or ecological balance, and the measures that will be undertaken to prevent or minimize the adverse impacts thereof.

Specific to mining, mining projects progressing to the development/extraction stage are required to secure the prior approval and endorsement from any two (2) of the concerned *Sanggunian* (*Panlalawigan, Bayan or Barangay*) in support of its application. While in the case of exploration projects, proof of consultation or project presentation with any two (2) of the concerned *Sanggunian* shall be required. In either case, the proof of prior approval, endorsement, consultation and/or project presentation shall be in the form of a formal

Resolution or Certification by the concerned Sanggunian. The grant of small scale mining permits (permits covering areas less than 5 hectares in size) was also devolved to LGUs through the Provincial/City Mining Regulatory Board (P/CMRB).

The LGUs and the host and neighboring communities share in the “management” of the mine through the mechanisms provided under the Mining Act as well as the primary beneficiaries of the one (1%) percent of the direct mining and milling costs allocated for community development.

The LGUs also receive their share from national and local taxes paid by mining companies. Payments made by the mining company to the LGUs (e.g., local business tax, real property tax occupation fee, community tax) are shared at 70%:30% by the concerned municipality and province, respectively. The LGUs also receive 40% of the payments made by mining company (e.g., income tax, excise tax, value added tax) to the national government as its share in the utilization and development of mineral wealth.

Dr. Clark⁶⁵, in the Philippine Mineral Sector Study, commented that:

“...In addressing the implications of the decentralization strategy for the minerals sector, it is important to understand that decentralization was perceived primarily as political empowerment rather than as an attempt to address socio-cultural geography or regional inequalities...”

“The designers of the decentralization strategy saw the devolution of power from the center to the regions and to local government units as a means of fostering greater grass roots participation in both political and economic decision-making. This led, naturally, perhaps even unconsciously, to a premise that people at the grass roots level should have a greater say in how natural resources (including minerals) are developed. As a political theory, this notion is both attractive and elegant. As a practical policy mechanism for the minerals sector, the concept has inherent problems”.

Clark⁶⁶, citing government reviews on the early implementation of the decentralization study, enumerated several trends that are of particular interest to the mining sector: (1) the system for the return of the 40 percent “national wealth” share from natural resources projects to local authorities does not seem to be functioning well, problems in the distribution of the national wealth revenues new mining projects might be opposed by local governments; (2) there appears to be increasing involvement of NGOs and private sector representatives in LGU deliberations which may result in some types of issues to receive a disproportionate weight in LGU decision making; and (c) the LGU see little role for themselves in environmental matters. Where environmental issues have been addressed by LGUs it has been with assistance of pressure from NGOs.

⁶⁵ Mineral Policy Program (1994). pages IV – 1 and 2.

⁶⁶ Mineral Policy Program (1994). page IV – 9.

A case in point is the Provincial Council of the central Philippine province of Capiz, citing powers vested upon them by the Code, approved Ordinance No. 6 on August 27, 1999 declaring a moratorium on all mining activities within the Province and declared that “(i)t shall be unlawful for any person or business entity engage in land clearing, prospecting, exploration, drilling, excavation, mining transport or mineral ores and such other activities in furtherance of and/or preparatory to large-scale mining operations for a period of fifteen (15) years”. There was, however, no clear explanation on the basis of the said Ordinance, outside of responding to public clamor and perceived environmental destruction from exploration/mining activities.

At least two Philippine province have banned large scale mining due to perceived environmental destruction and in exercise of their power vested under the Local Government Code of 1991.

More recently, the Province of Mindoro Oriental approved Ordinance No. 001 – 2002 which bans large scale mining of any form in the Province for the next 25 years⁶⁷.

“The ordinance declared “unlawful for any person or entity to engage in land clearing, prospecting, exploration, drilling, excavation, mining, or transport of mineral ores preparatory to all forms of mining operations for a period of 25 years.”

Exempted from the moratorium is the excavation of ordinary stones, sand, gravel earth and other miners, which are operated by small-scale miners.

Violators will be penalized with a fine of not more than PhP5000 and/or imprisonment of up to 12 months.”

Quoting one Provincial Board Member who voted yes, the Ordinance was anchored on the “*Local Government Code of 1991, Section 16 on the General Welfare clause, saying that local government units should ensure and support, among other things, the health and safety and enhance the right of the people to a balanced ecology*”.

Mining companies are also being indirectly blamed by some LGUs for their failure to receive their share in the national wealth. The current practice, as provided under the National Internal Revenue Code, requires the payment of national wealth taxes to the national government, which, in turn will remit the LGU’s 40% on a quarterly basis. However, some LGUs are questioning the sincerity of the national government to promote the development of self-sustaining local governments in view of non-remittance of their full share in the national wealth taxes. One example is Tuba, Itogon, Benguet in Northern Philippines, the host LGU of the Philex copper/gold mine, where only 46.3% (PhP65 million of the PhP141 million) was remitted by the national government for the six-year period, 1994 to 2000.

⁶⁷ Virola, Donna. *Mindoro officials OK 25-yr mining moratorium*. Philippine Daily Inquirer. February 10, 2002.

The Provinces of Benguet in the north and Surigao del Norte in the south are best examples of how mining contributes to regional economic growth and community development. The mining industry in both provinces experienced cyclical ups and downs that led to mine closures and lost of employment as well as reduced tax contributions. Both provinces are not solely dependent on mining, thus, the impacts were felt only in the host local government and communities. However, these very same experiences wherein communities were left behind in impoverished conditions after the closure of a mine is one reason why the Mining Act of 1995 mandated that at least 1% of the direct mining and milling costs be allocated for community empowerment and development. The Local Government Code also has the underlying objective of hastening countryside development, that is, if the share from the national wealth is re-channeled back to develop the areas where it was derived from and utilized to develop self-sustaining activities independent from the mining operation. Otherwise, history will repeat itself and the mining industry, singly or collectively, will again be accused of profiting from the utilization of mineral resources and leaving the host community poorer.

7.5.5 Industrialization of the Mining Industry

With vast mineral resources, why must the country remain an exporter of cheap non-renewable mineral ores and an importer of expensive processed metal products and by-products from the industrialized world? - this question has been raised many times in the past by economists and has often been part of the economic platform of the government.

Lopez⁶⁸, citing the 1946 – 7 Annual Report of the then Bureau of Mines, narrated that:

“The industrialization program will eventually lead to the establishment of steel and rolling mills, as well as plants for the manufacture of ferro-alloys, and industrial chemicals, such as sulphuric acid, soda ash, caustic soda, and fertilizers badly needed in our various industries especially in agriculture which is our basic and prime industry.

...The miners themselves shall be greatly benefited, as they will derive more profits from their products... We have all the advantages to go ahead of other countries in this part of the world now as we have most of the necessary raw materials and the supply of technical men needed...”

Lopez⁶⁹ further narrated the earlier efforts made by the Bureau of Mines and Geosciences (BMG), precursor of the present MGB, in devising a “grand blueprint for the industry”.

“In June 1978, it (BMG) produced its five – and ten – year integrated resources development plans as well as ‘perspective’ plan for the remaining years up to year 2000.

The ambitious targets outlined in these plans were a clear reflection of the government’s high hopes for the industry as a generator of jobs, foreign exchange, and ancillary firms... The plan also called for the industrialization of the industry, that is, the vertical

⁶⁸ Lopez, SP (1992). page 292 – 293.

⁶⁹ Lopez, SP (1992). pages 284 – 285.

integration of mining extraction activities with the processing requirements of the metal-based manufacturing industries”.

Specific to copper, Lopez⁷⁰ added that:

“...when a pound of unsmelted copper takes the costly trip abroad...it becomes international copper, and it thereby takes on the current world price of the metal. At 90 cents per pound in foreign exchange, it undoubtedly helps our economy.

The chief objection is this: once our world-traveling copper returns home, it must now be bought or resold at high international prices utterly unrelated to the low cost of Philippine mining and milling.

Suppose the Philippines is smelting and refining its own copper ore. The next logical steps will follow, and this country would soon become a major source of manufactured goods such as wire, sheet, tube and the countless things for which copper has no peer”.

The grandiose dream of transforming the Philippines as an “*industrial center of the Far East*”, however, failed to materialize. In the succeeding two decades, it was Japan which rapidly developed its industrial might and Asia’s four other little tigers: South Korea, Taiwan, Singapore and Hong Kong.

Of the major industrial projects then identified, only the nickel refinery (Nonoc Surigao Nickel Refinery) and the copper smelter (Philippine Associated Smelting and Refining - PASAR) were established according to plan. The integrated steel mill project did not materialize in view of the national debt crisis. The existing iron sintering plant, Philippine Sinter Corporation in Misamis Oriental and operated by Kawasaki Steel Corporation, however, is not part of the industrialization plans of the government. The sintering plant processes imported iron ores and the sintered iron shipped to steel makers in Japan. Currently, only PASAR is in operation together with on-going efforts to rehabilitate the Surigao Nickel Refinery.

Clearly, the concept of value-adding was well-recognized by policy makers and the industry in the past but it is not without critics. The programme for industrializing the mining industry was questioned by economists, government technocrats, and foreign experts largely on “*the economic soundness of setting up capital-intensive plants and other downstream processing projects in a country with scarce capital resources and a limited domestic market*”⁷¹.

⁷⁰ Lopez, SP (1992). page 295.

⁷¹ Lopez, SP (1992). page 292.

Currently, Sumitomo Metal Mining and Rio Tuba Nickel Mining Corp. are planning to establish “...an acid leaching plant in the Philippines to treat ore from the Rio Tuba lateritic nickel ore mine on the island of Palawan. The plant is expected to cost the equivalent of US\$150 million, and will produce 10,000 t/y of nickel and 700 t/y of cobalt over a 20-year life”⁷². Yet, while plans are still being concretized, there have been media reports that :

“We fully support the upstream and downstream integration of the industry. However, we need to be realistic, exploration in the Philippines is a challenge, developing a mine is a risk but demanding the establishment of refineries and manufacturing plants is simply asking too much. This is not to say that we will remain contented with exporting minerals but (it will entail) a great deal of maturity on our part, political or otherwise - how can you attract investments when the entry (of) foreign investors is viewed as “imperialist globalization” and every action by the government is either opposed in Court or met with raucous assemblies by “patriotic and democratic” groups”.

- Horacio C. Ramos (personal communication to Mr. Vicente Lava)

“The Pala’wan tribes affected by a proposed \$150 million nickel refinery are being forced to sign a document approving the project, allegedly by some employees of a giant mining company. This is in view of the food and medical missions being conducted by the company which the company stated were just part of their company obligation to help the communities living near it. Pala’wan applied for ancestral domain title in the contested area and the presence of a planned limestone quarry as part of the refinery will “not only affect their environment but also their culture and the next generation”⁷³.

7.5.6 Mining and the Communities

Building and maintaining a self-contained mining community is commonly an integral aspect in the development and operation of a mine and has given rise to mining towns and communities. During periods of profitability, this job is simple. However, during cyclical lows, any prolonged shutdown of the mine or outright closure can erupt into a serious socio-economic crisis and transform a bustling community to a “ghost town”.

De Veiga, Scoble and McAllister⁷⁴ defined a mining community as “one whose population in some part is significantly affected by an associated mining operation. This may be through the provision of direct employment or some other impact arising from mining, albeit, environmental, social or economic

⁷² Mining Magazine. *Philippine Nickel for Sumitomo*. September 2001.

⁷³ Tesorio, Joffe P. *Tribes forced to sign nickel deal, leader claims; mining firm denies charges, defends medical missions*. Philippine Daily Inquirer – Across the Nation Section. December 02, 2001.

⁷⁴ *Mining with Communities* by Marcelo M. Veiga and Malcolm Scoble, Department of Mining and Mineral Process Engineering, University of British Columbia, Canada and Mary Louise McAllister, Department of Environmental and Resource Studies, University of Waterloo, Canada.

impact. Many mining communities are based in remote regions and have few opportunities for diversification”. They added that:

“Mining communities differ significantly in terms of culture, political orientation, geographical location, environmental characteristics and collective attitudes towards resource development. Nevertheless, there tends to be a common characteristic shared amongst communities that have had a poor relationship with a mining community – this is the perception that miners are intruders into their environment culture and history. Such a feeling may particularly be the case where the community has no mining tradition and the benefits from mining have not been cooperatively determined nor equitably shared.

Any mining company that has experienced poor relations with local communities knows that sustaining the community is integral to sustaining an effective and respected operation”.

In the Philippines, DENR Administrative Order No. 2000 – 98 (Rules and Regulations on the Implementation of the Social Development and Management Program) differentiated mine camp (the portion of the mining contract area where housing/residential, recreational and others support facilities are built solely for mine employees and dependents) from the host (primary impact zone) and neighbouring (secondary impact zone) communities. The host and neighbouring communities will be the recipient of the 1% annual direct mining and milling costs (DMMC)⁷⁵ for community development projects/activities. The definition, however, is flexible enough to consider cases where the mine camp itself is the host community (e.g. Philex Mining Corporation) and therefore, is itself the recipient of the 1% DMMC.

Box No. 3 – The CARAGA Experience on Information Dissemination, Community Development and Mine Rehabilitation Fund Management

The passage of the Philippine Mining Act of 1995 and its revised implementing rules and regulation (DENR 96 – 40) enshrined the principles of sustainable mining. This new paradigm seeks to address the social and environmental concerns inherent in mining - learning from the failures and building up for the future. Simply, mineral resources development under the current law gives equal weight on the partnership and collaboration among major stakeholders - the Government (national and local), civil society/non-government organizations, the mining industry and the communities (host and neighboring) and on the equitable sharing of responsibilities and benefits from mining operations.

Given the skepticism on the motives of the industry and the government, the predominant negative impression of the communities and the NGOs is that *“kutkot-hakot, pagkatapos ng mga mina’y tao ang kawawa... (mining today, tomorrow, a suffering community)”*. Critical questions about the community’s participation in community development; the environmental impacts of mining while others are asking for their “share” for community development and other projects. Clearly, the objective of the law of establishing sustainable livelihood programs to ensure community development and community self-reliance even after the mining operation, was misunderstood.

⁷⁵ *Direct Mining and Milling Costs (DMMC)* refer to expenditures and expenses directly incurred from the mining of the ore to the mechanical and physical processing and/or chemical separation of the ore from the waste to produce marketable mineral products.

As a response, the Mines and Geosciences Bureau's CARAGA Regional Office, exercising jurisdiction over the northern Mindanao provinces of Agusan del Sur, Surigao del Norte, Surigao del Sur and the cities of Butuan and Surigao, created the *Technical Working Groups – Speakers Bureau on Information Communication and Education (TWG – SB on ICE)* to assist the *Mine Rehabilitation Fund Committee (MRFC)*. The MRFC is the mechanism under mining rules and regulations to ensure that the community and environmental responsibilities/commitments of a mining company are implemented properly.

Following the mandate given by the MRFC in 1999, the TWG – SB on ICE was piloted in Surigao del Norte – the acknowledged "Mining Capital" of the region with its nickel, chromite and copper gold deposits, 10 existing large scale mines with 5 currently operating; several small-scale mining areas and several local and foreign companies exploring for various minerals. The TWG – SB on ICE focused its activities on lectures/workshops on the Mining Act of 1995 and its Environmental and Social Provisions, the Environmental Impact Statement System; Pressing Issues Besetting the Mining Industry; Community Organization and Development, Existing Community Development Programs of each Mining Companies in the Region and Community Testimonies. Later, this mandate was expanded to include the implementation of the 1% annual direct mining and milling costs (DMMC) mandated by law for community development, hence, the name was changed to TWG – SB on ICE to TWG – SB on ICE/CD (Community Development). In the absence of a clear guideline on how to apportion the 1% DMMC, the MRFC authorized the use of 60% of the 1% DMMC for community development projects and the remaining 40% at the discretion of the mining company.

But with the enactment of DENR Administrative Order No. 2000 – 98 in 2000, the 1% DMMC sharing became 90% for community development and 10% for development of mining technology and geosciences.

Accordingly, with this much clearer mandate, the TWG – SB on ICE/CD conducted a planning workshop on ICE/CD; formulation of Annual Work Program/Targets for each Mining Community; the development of a Management Information and Dissemination System (MIDS) and Networking Structures to streamline and intensify ICE-CD operations using both regional/provincial and the grassroots level approaches to development; the development of the Social Development and Management Program (SDMP) for each mining operation; and strengthening of linkages with the Chamber of Mines chapter in the region, the Provincial Technical Management Group of the Provincial Mineral Resource Management Council and other sectors. Most significant was the active involvement of the Catholic church in the region and of REACH Foundation, a developmental NGO – contrary to the official position of the Church and most NGOs. They defined their involvement as "*critical collaboration*", meaning, they are not necessarily in favor of mining but are participating to ensure that the people receives what is due them and that mining and environmental laws, rules and regulations are properly implemented.

All stakeholders are involved ugnayan/pulong-pulong (community meetings), actual community participation in all ICE-CD activities including problem-diagnosis and people-based planning, establishment and management of livelihood projects and social development program monitoring/evaluation. to transform host and adjacent communities into self-reliant, self-propelling economic villages. This collaborative participation hopes to establish social harmony between and among stakeholders thus making the mining company and integral part of the community as well as transform the host and neighboring communities into self-reliant, self-propelling economic villages.

References:

- *The Caraga Experience: On Information Dissemination, Community Development and Mine Rehabilitation Fund.* Journal on Environment, Energy and Minerals. Volume III, No. 6, 2000.
- Manual on the Development of ICE-CD of MGB XIII and TWG-SB Inroads.

The importance placed on the host and neighbouring communities stems from past experiences when these communities, majority of which often does not directly benefit from the operation of the mine (i.e. in terms of employment) but in some ways developed a measure of dependence to the operation of the mine, besides, being the ones left behind after the closure of the mine, are caught socially and economically unprepared at the end of mining.

Disini⁷⁶, citing the 1980, 1986 and 1990 socio-economic surveys of nine (9) mining communities made by the MGB and the National Economic and Development Authority (NEDA), brought to light several conclusions there from:

- *In terms of land area, all the communities occupy some 21,344 hectares. Five hundred fifty five hectares or 2.6% comprise the residential areas. The mine establishments take up 2.16% while 26.89% are utilized for other purposes such as mine tailings and waste dumps. About 60% of the total area are either forested or have second growth forests;*
- *Mining population ranges from a low of 3,716 to a high of 102,135 with more than 60% belonging to the 0 – 24 age range;*
- *About 75% of the total income of a mining household are direct cash income (wages and benefits) and 18% from non-cash fringe benefits (e.g. free housing, electricity, water, health and recreational facilities);*
- *Average income was above the government set minimum wage for industrial workers;*
- *High literacy rate with the nine mining communities having a total of 35 schools – 5 pre-school, 19 elementary, 8 high schools and 3 vocational training schools; and*
- *Health, medical, dental and family planning services are provided with a hospital staff ratio of 1: 581 and a doctor to population ratio of 1: 4,690.*

However, between 1990 and 2001, no comprehensive socio-economic survey of the industry has been undertaken by either MGB or NEDA. Of the nine mining communities then surveyed, only one (Masinloc Chromite Operation of Benguet Corporation) is currently operating.

Lopez⁷⁷ provided some details on what transpired in two of the eight mining communities after the sudden closure of the mine – CDCP's Basay copper mine and MMIC's Nonoc nickel mine and refinery.

“...This cycle (boom and bust) was dramatically illustrated in the case of the mining community of Basay, Negros Oriental. Barrio Maglinao in Basay was transformed from an undeveloped, logged over, desolate place into a bustling 1,000-family town, through the operation of CDCP Mining...

Fishing and planting sugar cane were the means of livelihood for the five families inhabiting Barrio Maglinao in 1972 when the company's technical staff first set foot in the area. The development and commencement of the mine complex started in 1977. within two years, the once sleepy locality was transformed into a 275-hectare modern mining complex which boasts of a 1,800-metre-long strip, numerous housing facilities for the mine workers (from the senior staff down to the rank-and-file), a commercial centre, a 25-bed capacity hospital...a dental clinic...a chapel, a cafeteria where food was

⁷⁶ Disini, Artemio F. President, Chamber of Mines of the Philippines. *The Philippine Mining Industry: Partners in Development*. Meeting the Challenges: Mining, the Community and the Environment. Chamber of Mines of the Philippines. 1998.

⁷⁷ Lopez, SP (1992). pages 371 to 372.

subsidized, a commissary, a 1,500-seat capacity auditorium/recreation centre, a primary school...Basay also experienced a sharp increase in population...

However, this hive of activity did not last long. The debt-ridden company was foreclosed in 1984. The “economic boom” which warmed the hearts and minds of the Basay folk suddenly burst and the ensuing shutdown of the company dislocated thousands of workers and their dependents, most of whom were caught unprepared.

The Basay mining town story was repeated on a larger scale in the case of the Nonoc operation of Marinduque Mining and Industrial Corporation (MMIC). With Nonoc largely uninhabited and with the company’s huge operations requiring thousands of people, Marinduque literally had to import people and resources into the island and develop all the necessary amenities of modern living...in order to entice people to stay and work on the island. But with the debt and technological crisis that engulfed Marinduque’s Nonoc operations, the bustling town set up in the mid-1970s became a dreary ghost town of the mid-1980s”.

Indeed, sustaining the community is a challenge equally faced by the government, the mining company and the community itself.

Box No. 4 – Philex Mining Corporation – Padcal Operations: A Gift of God, A Work of Man

The Padcal Mine, one of the few surviving copper/gold mines in the Philippines, is Philex’s first mining operation located in Benguet Province. The mine straddles the municipalities of Tuba and Itogon and has a total claim area of 14,742 hectares – of which only 530 hectares or 3.6% is utilized for actual mining operations and another 50 hectares for residential, school, and recreational facilities.

Exploration started in 1955 and mining operation started in 1958. Since then, the mine has survived the onslaughts of various economic and political crises as well as natural calamities for over 40 years. The vision, courage, hard work, determination of the men and women of Philex (A Work of Man) and great deal of help from the Almighty (A Gift of God) transformed the mine into what it is now.

From the modest initial reserves of 18 million tons when the mine started, a total of 253 million tons have been mined over 40 years. The mine has generated a total of \$2.3 billion in foreign currency for the country through exports and has provided stable employment for over 3,000 people receiving wages 46% more than government prescribed rate in the region. It has made a considerable contribution in nation building by way of the direct and indirect taxes paid since the start of its operations estimated at P7.8 billion.

In its 40 years of existence, the Padcal Mine has significantly improved the quality of life and the socio-economic conditions of its hosts and adjacent communities - what was once a completely logged out area accessible only through a 20-km logging trail and inhabited by a small community of 5 to 7 families, is now a bustling self-contained community of some 20,000 people of various cultural backgrounds.

The Padcal mine community boasts the presence of a primary and secondary school providing quality education. Elementary education, free of charge, has been in existence for 38 years and has an annual enrollment of 3,500 pupils with an operation budget of P10 million per year. The secondary school, heavily subsidized by the Company at 70% of its operating costs and has been in operation for the last 24 years, has an average enrollment of 1,500 student at an operating costs of P5 million per year.

The Company’s Sto. Niño Hospital provides medical services to the residents of the community and the outlying communities. Trade, commerce and industry are flourishing. A branch of Bank of the Philippine Island serves the Padcal community while telecommunication facilities such as PT & T, PLDT and BayanTel keep the community open to the outside world. Operating within camp are some 500 medium to small-scale entrepreneurs and vendors who consider the Padcal community as a good market and a stable source of income. Other social

benefits provided by the Company include housing, training and livelihood, transportation, peace and order, youth welfare, sports, leisure and spiritual growth.

The Philex-Padcal Mine has been the recipient of various awards and citations from both private and government institutions for its social development program over the years, the most prestigious of which was the award given to the Padcal mine community, the mine's host community, by the United Nation's "We the People" organization as one of the 50 Model Communities in the World.

Source: Philex Mining Corporation (Padcal Operations): "A Gift of God, A Work of Man", May 2000.

Two mines – Lepanto Consolidated Mining Corp. and Philex Mining Corp. – in the Province of Benguet have the unique opportunity of demonstrating that the local mining industry can establish sustainable mining communities.

The Provincial Governor, Raul M. Molintas, recognized the socio-economic contribution of the two mines to the provincial economy⁷⁸. These include PhP1.3 billion in taxes for the period 1991 to 2000 and direct employment of over 5,000 employees as well as hosts to over 30,000 residents. Additionally, as mandated by the Mining Act, about PhP40 million were allocated for community development during the period 1996 to 2000. However, the Governor raised the following question:

"...(C)ould it...be said that the mining industries can trigger and sustain development and help alleviate poverty?"

Yes. The mining industry can trigger development and help alleviate poverty. But sustain development? It is a fact that the benefits that accrue to the province, host and neighbouring communities shall remain only up to the end of the life of mining operations as the mining permit allows. It is also a fact that minerals are non-renewable resources which are irreplaceable. While the Mining Act requires payment of a mine rehabilitation fund, we have yet to bear witness to the successful rehabilitation of mined out areas for the benefit of affected and neighbouring communities. What more, ...affected communities clamor for beneficial use of mined-out areas in contrast to the desire of mining companies to retain their mining concessions...."

This scepticism is not without foundation, the Benguet copper/gold district has been one of the most active mining operations in the Philippines and has, over the years, witnessed the coming and going of mining companies.

The question raised by the Governor is a challenge both for the industry and the government – for the industry, to prove that indeed the industry can transform mined out areas to more beneficial uses and for the government, to prove that the sustainable development of minerals resources is not just a concept but is an achievable objective. For companies like Lepanto and Philex, disproving the Governor's scepticism and demonstrating that mining companies are responsible and accountable is the biggest challenge.

⁷⁸ Molintas, Raul M., Governor of Benguet Province. *How the Mining Industry Can Trigger and Sustain Development and Help Alleviate Poverty*. Mining Philippines 2001 Conference and Exhibition, Mandaluyong City, Philippines. November 21 and 22, 2001.

Box No. 5 – The Tampakan Experiment: A Model for Sustainable Community Development

Environmental degradation, population displacement, disregard for indigenous culture, mining catastrophe, unkept promises, non-compliance to local regulations. These are the critical issues facing the mining industry in the Philippines in recent times. Attempts to respond to growing calls for corporate social responsibility in the mining sector are met with criticism or skepticism. Community development initiatives being facilitated by mining companies (i.e. construction of health and community centers and livelihood projects) are dismissed as mere marketing strategies by various sectors. This was the prevailing reality in mining when Western Mining Corporation of Australia started its exploration activities in the central region of Mindanao in the 1990s.

The Tampakan Copper Project (TCP) was pursued under the Financial and Technical Agreement granted by the Philippine Government on March 22, 1995. The identified mine development area covers 12,000 hectares of remote forested land characterized by marginalization and poverty situated between the boundaries of 5 tribal B'laan communities consisting of 253 households. Initially, the Community Development Program of the TCP focused on providing the immediate needs of the host communities in terms of infrastructures, and delivery of basic social services intended at gaining social acceptance. Thus, community centers, schools, and water systems were established. Medical assistance was regularly facilitated, and livelihood opportunities were provided to individual community members. Simultaneously, the project employed an extensive and intensive Information, Communication and Education (ICE) program geared towards raising individual and community awareness of the project. Mindful of the Mining Act and the company's own Indigenous Peoples Policy, WMC also negotiated the signing of Principal Agreements (PAs) with the barangays, tribal communities and municipal governments. These PAs gave consent to the exploration activities of WMC. In turn, WMC committed itself to providing funds for the development projects of the communities. More importantly, the PAs committed both parties to a process of consultation in the different undertakings contemplated by the agreements, including relocation and land use compensation.

Though seemingly successful in reaching their goal of social acceptability, WMC after undergoing a series of evaluation and reflection of the Project, found out that despite being able to assist the host communities in their various needs, and giving concrete and visible contributions to community development, their programs were generally palliative, short-term and are reactive in nature. What is lacking is a genuine, purposive capacity building process where members of the community are given the opportunity to fully participate in the development processes.

Accordingly, WMC adopted a new community development strategy. The Participatory Approach, in particular, Community Organizing. This strategy seeks to build a genuine partnership between a developer and its host communities, in a manner which develops their capacity to become managers of the development processes affecting them and their succeeding generation, through inclusive and transparent discussions, pursued in a culturally-sensitive and people-centered approach. Community Organizing is governed by the following principles: consultative, participatory, enabling, educative, and empowering. It has three strategic components, *social preparation*, which involves the provision of capacity-building and enhancement trainings to development partners; *access to and control of services*; and *social marketing or building strategic linkages and networks with other development entities*. In the beginning, the community organizing process requires the presence of a community organizer or a field worker who helps the host community in facilitating group processes and in the formulation of area-specific long-term community development plans, and in promoting participation of all members and sectors of the community. Given this experience, community organizing, as an approach and methodology, can effectively cut across the various issues raised against the Project and mining in general. It allows full people's participation and appreciation of existing culture thereby promoting transparency and accountability between the company and the host community.

References:

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7.5.7 Small-Scale Mining

7.5.7.1 Status

Small-scale mining has from the beginning been an integral part of Philippine mining history, answering various needs of the people such as personal adornments, hunting and farm implements, war materials, among others.

Prior to the 1980s, small scale mining was limited to intermittent alluvial gold placer mining. However, it took a dramatic turn in the late seventies when the price of gold soared to an all-time high of over \$800/oz. The situation was further aggravated by the depressed socio-economic condition in the Philippines during the early 1980's tremendously increase the pressures for alternative sources of livelihood. *“From only a few dozen people doing intermittent gold panning in the traditional gold-rich river systems, the number jumped to nearly a million directly involved in small-scale mining activities during the mid-80s”*⁷⁹.

In the Mt. Diwalwal gold rush area alone, the more popular name of Mt. Diwata located in southern Philippines, *“the small-scale miners numbered from 70,000 to 100,000 at one time, cramped within a few hundred hectares of mountainous land. Production also shifted from alluvial placer gold mining to the bonanza portions of narrow-gold-quartz veins. From only a few grams of gold purchases in the 70s, the Philippine Central Bank was buying an average of 8.5 tons per year during the period 1985-1990. The Government estimated that Central Bank purchases represent less than 40 percent of the actual small-scale mining gold production”*⁸⁰. In 1995, production from small-scale gold mining exceeded the output of large-scale mining operators.

Table No. 8 – Philippine Gold Production

YEAR	TOTAL PRODUCTION (KGS.)	SMALL-SCALE MINING PRODUCTION (KGS.)	LARGE SCALE MINING PRODUCTION (KGS.)
1983	25,397	136	25,261
1984	25,727	1,254	24,473
1985	33,063	8,085	24,978
1986	35,427	11,440	23,987
1987	32,780	8,047	24,733
1988	30,492	7,292	23,200
1989	30,046	8,698	21,348
1990	24,591	5,510	19,081
1991	25,952	9,204	16,748
1992	25,609	7,852	17,757
1993	24,917	9,491	15,426
1994	27,307	12,413	14,895
1995	27,023	14,493	12,530
1996	28,234	15,656	12,578
1997	31,199	14,062	17,137
1998	34,038	19,859	14,179
1999	31,050	17,045	14,005

(Source: Mines and Geosciences Bureau)

⁷⁹ Muyco, Joel D., former Director, MGB. *Status of Small-Scale Mining in the Philippines*. 1993.

⁸⁰ Muyco, J.D (1993). *ibid*.

In 1989, small-scale mining for metallurgical chromite ore also became prevalent because of favorable prices and higher demand. Small scale chromite production rose from about 47,000 MT in 1987-1988 to 221,000 MT in 1989-1990, representing 90% of the country's total metallurgical chromite ore output.

Table No. 9: Small-Scale Mining Sub-Groups⁸¹

SUB-GROUP	Small Family/ Group Operation	Small Business Family Operations	Small Mining Firms
% EMPLOYED FROM TOTAL SMALL-SCALE MINING LABOR FORCE	80%; represented by most gold panning and pocket mining operators	10%	10%
LEVEL OF ORGANIZATION	a maximum of 10 to 15 persons of all ages are involved per workplace	average employment of 30 or more miners	organized mining ventures
LEVEL OF PRODUCTION	generally as low as 0.1 to 0.2 ton per man-shift; basically intermittent or short-term in nature due to inability to exploit the deposit at greater depths	rises to about 0.6 ton per man-shift	rises to a maximum of 1 ton per man-shift
TYPE OF OPERATIONS	essentially unmechanized; only near-surface mining is possible	slightly mechanized	technology employed is basically the same as that of big mining companies but not as mechanized
INVESTMENT	estimated at P1,500 to P25,000; depending on the utilization of fabricated milling facilities	about P 1 million capital taken primarily from family contributions	may exceed P 1 million but less than P 10 million

7.5.7.2 Legal

Small scale mining was first legally recognized in the Philippines through Presidential Decree No. 1899, *Establishing Small Scale Mining as a New Dimension in Mineral Resources Development*, by the then President Ferdinand Marcos in 1984. The enactment of PD 1899 was anchored on the principle of “social equity” or equal access to natural resources and was aimed at providing the legal basis for the issuance of licenses and permits to small scale miners to generate employment and thus, alleviate rural poverty as well as to develop small mineral deposits that are or could be worked on profitably at small tonnages requiring minimal capital investment and utilizing manual labor.

Under PD No. 1899, small-scale mining was defined as:

- A single mining unit having an annual production not exceeding 50,000 metric tons of run-of-mine-ore, either a shallow opencast mine working or a sub-surface mine working which is driven to such distance as safety conditions and practices will allow;

⁸¹ from Ramos, Horacio C. and Jasareno, Leo J. *Small Scale Mining in the Philippines: Status, Issues and Solution*. Paper presented during APEC – GEMEED Environmental Cooperation Workshop, Australia. October 2000.

- A total capital not exceeding PhP10 million during the effectivity of the permit and its renewal; and
- The ratio of labor cost to equipment utilization cost to produce, process and market one metric ton of ore is equivalent to or exceeding one (1).

Under PD No. 1899, a small-scale mining permit can be granted for a maximum area of five (5) hectares and a validity of two (2) years, renewable once for like period.

In June 1991, a new small-scale mining law was approved, Republic Act No. 7076, the *People's Small-Scale Mining Act of 1991*. Similar to PD 1899, RA No. 7076 has the objective of rationalizing viable small-scale activities to generate more employment opportunities but it did not repeal PD 1899.

Two (2) major features of the Act are: (1) the identification, segregation, and reservation of certain lands as “*People's Small-Scale Mining Areas*”; and (2) the creation of *Provincial/City Mining Regulatory Boards (P/CMRBs)* as the permitting and regulatory arm of government for small-scale mining activities.

Other salient features of RA No. 7076 are:

- Cooperatives as the basic working unit and beneficiaries of declared small-scale mining areas;
- Strengthens the extension of government technical and financial assistance to small scale miners, including the establishment of support laboratories and custom mills and marketing;
- Generation of ancillary livelihood in small-scale mining areas;
- Provides for the collection of government revenues based on the gross revenues - 1½ % from metallic and 1% for non-metallic minerals;
- Gives priority to cultural minorities in the exploration, development and utilization of mineral resources within their ancestral lands; and
- Reserves 15% of the government revenue share for the establishment of a People's Small Scale Mining Protection Fund. The Fund shall be used exclusively for education and information dissemination, training in health and safety and environmental protection and the establishment of mine rescue and recovery teams, inclusive of purchase of needed equipment.

With the enactment of the Local Government Code of 1991, the management of small scale mining operations was devolved to local government units under the supervision of the Department of Environment and Natural Resources.

The DENR also came up with a *Small Scale Mine Safety Rules and Regulations* in 1997 to improve mine safety and health and sanitary practices in small scale mines.

7.5.7.3 Technology

Crude mining methods such as hydraulicking, panning, “camote” mining (pocket mining), “dog-hole” and more recently, “compressor” mining are utilized by small-scale miners in

the Philippines. “Camote” mining is a selective method where only the high grade portions of the deposits are extracted while in “dog-holing”, tunnels are very small in size, as in sufficient only to allow the passage of anything the size of a dog. “Compressor” mining, on the other hand, employs a rubber hose connected to a gasoline powered air compressor (hence, the name) to supply air to the miner. Wearing an improvised swimming goggles for eye protection, the miner “dives” into a deep, vertical, mud-filled shaft to extract the gold ore at the bottom of the hole.

Small-scale miners also employ inefficient techniques of ore extraction and metal recovery. Mercury, being a cheap and readily available substance, is widely used for the recovery of gold from the ore.

7.5.7.4 Environmental and Social Impacts

While it is understood that small scale mining has substantially contributed to the economic well being of many rural inhabitants, its effects are often short lived (transitory), localized and stop gap in nature, with lasting negative impacts, especially to the environment.

As the magnitude of small-scale mining grew, so were the problems and issues that it raised. Muyco (1993) enumerated the following:

1. **Conflicts in the mining rights.** Especially when the shift was made from mining alluvial placer deposits to lode vein deposits. The peripheries of operating mines became primary target areas for small-scale prospecting and eventual mining. Inevitably, such incursions into legitimate mining areas became rampant giving rise to various levels of conflict;
2. **Deaths and injuries in small-scale mining areas.** The get-rich-quick attitude of small scale miners and intense competition among them spawned a rush in constructing mine access workings in complete disregard of mine safety considerations. Together with unsafe mining practices, these resulted in numerous deaths and injuries to the miners, and even non-miners trapped in landslides and cave-ins. Furthermore, such incidences are never reported to concerned government agencies for fear that their areas of operations will be closed;
3. **Underutilization and wastage of non-renewable resources.** Small-scale mining is basically a low technology activity wherein high-grading has to be resorted to attain certain levels of economic viability of deposit as a whole or outright wastage due to the disposal of low-grade ores as gangue materials;
4. **Health hazards.** The gold and chromite rush areas are a nightmare in population density, dilapidated and bare living quarters, with no or little provisions for family or communal facilities for basic sanitation. Hence, health problems and even epidemics are common occurrence. The use of mercury in gold ore beneficiation has led to mercury poisoning, if not consequential deaths;
5. **Education neglect, child labor and social misbehavior.** Since miners are so engrossed in their activities and the mining areas are far from schools, education for their children is normally foregone and neglected. Instead, the children are themselves engaged in even the most dangerous aspects of small-scale mining

operation to maximize family incomes. On the other hand, the children are exposed to bar brawls, indecent shows and activities in night clubs, pornographic shows on ubiquitous and portable video equipment;

6. **Economic opportunists, illegal gold trading and smuggling and tax evasion.** In most small-scale mining areas, the miners are victimized by unscrupulous traders who under price the sellers, or shortchanged them by undervalued weight and purity of gold, or in the case of chromite, low grade assessment. On the other hand, prices for basic and prime commodities are exorbitantly high. Metallic mineral products are by law supposed to pay the government 5% ad valorem tax (now reduced to 2%) on the gross value. However, practically no taxes are collected due to various factors such as the remoteness and relatively inaccessibility of the small-scale mining areas, peace and order and security problems and the rapid mobility of small-scale miners;
7. **Environmental degradation.** A major concern is the deleterious effects of small-scale mining to the environment. Forests are indiscriminately logged for timber support, housing and other auxiliary mine uses. Diggings and particularly hydraulicking causes massive soil erosion and siltation. The mismanagement of mine waste and mill tailings not only caused siltation but also the spread of mercury contamination. The air is also practically polluted as a result of open air mercury vaporization by blow torch during the recovery of gold from the amalgam.

Mine rehabilitation is also difficult to find in the agenda of the traditional small-scale miner. He is often driven by the instinct of going after the high-grade ore, leaving behind diggings and waste dumps in terrible shape. Mine safety and health are likewise unknown.

ESSC⁸² similarly recognized the problems associated with small scale mining:

“Small scale mining is certainly not small-scale when it comes to damaging the environment. The small-scale mining in Diwalwal has had an adverse (e)ffect on the lowland areas. To cater to the needs of small-scale gold miners, ball mills and processing plants were set-up. The influx of miners, deforestation and the use of mercury and cyanide in the process of extracting gold have severely damaged the watersheds and tributaries. Waste tailings were indiscriminately dumped into the streams and rivers and the resulting pollution killed the fish. Farmers in neighboring communities had their lands damaged by the pollution generated by mining operation. Again, there will be much more to be discovered in the years ahead as to the social and environmental cost(s) of small-scale mining.

Apart from the environmental problems caused by small scale mining, it is in most cases controlled by “financiers”. These “financiers” exploit the poor to work in hazardous situations, without the benefit of any protection from labor laws and prescribed safety standards. Many people have died and there are incidence of child labor and mercury poisoning within small-scale mining areas. This is certainly an area where the CBCP and the NGOs also need to focus more sharply.”

ESSC⁸³, added that:

⁸² ESSC (1999). pages 71 and 72.

“...the issue of small-scale mining should also be thoroughly examined and discussed. There are more people employed on small-scale mining than in large-scale mining; its contribution to the economy is significant; the impact on the environment is certainly not small-scale and it is very deadly. Small scale mining is an area where the government, the NGOs and the Church can cooperate. Men, women and children are being exploited – this is everyone’s business. The silence of the NGOs and the Church regarding the abuses within, and the environmental damage being perpetrated by small-scale mining undermines their credibility...The Church, with its strong option for the poor, and the NGOs, with their concern for the people, should be able to cooperate in this undertaking”.

7.5.7.5 The Dilemma

Notwithstanding two laws on small scale mining, management of small scale mining continues to be a dilemma for the Philippines. The predicament of the Government is that the issue has both political and social dimensions – without alternative and with poverty in the countryside, stopping illegal small scale mining will create further social unrest. With some politicians and critics of the large scale mining industry exhibiting bias for the small scale miners, despite the negative environmental and social consequences of small scale mining, managing small scale mining will necessitate more than just political will.

In response to an inquiry by the Philippine Senate, the Government asserted that large-scale mining should not be pitted against small scale mining on the argument that the Government is favoring capitalists. Large- and small-scale mining are governed by separate and distinct mining laws that consider their uniqueness, e.g., in the occurrences of mineral deposits which vary in terms of grade, tonnage, metallurgical complexities; location and distance from the surface, etc. These factors are geological dictates that cannot be altered by man. As such there are deposits that can be mined profitably only by small-scale, some by medium-scale and others, only by large-scale mining.

It is understood that small scale mining is, first and foremost, poverty driven and unless poverty is addressed, small scale mining will persist. Indeed, small scale mining provides economic benefits, however, such benefits are temporary and unsustainable. Small scale mining should *“be addressed through a broad-based rural regeneration strategy which would aim at creating alternative but sustainable livelihood for poverty reduction”*⁸⁴.

The Government recognizes that an economically viable, socially manageable and environmentally acceptable small scale mining sector can enrich the country by its low investment costs and short lead time required from discovery to production utilizing otherwise small, non-commercially exploitable deposits, employing low-skilled labor and

⁸³ ESSC (1999). page 106.

⁸⁴ Labonne, Beatrice. Senior Advisor, Department of Economic and Social Affairs, United Nations. *Harnessing Mining for Poverty Alleviation*. Paper presented at the Special Conference of African Ministers of Mines and Energy, in Ouagadougou, Burkina Faso, 29 November 2000.

encouraging indigenous entrepreneurs. And under the appropriate conditions, SSM can serve as the transition stage to medium or even large scale mining.

Accordingly, the MGB is fully cooperating with Congress in crafting a new small scale mining law that will, hopefully, once and for all, address the issue.

Box No. 6 – The 1980's: Diwalwal and the Rise of Small-Scale Gold Mining

Mt. Diwata, colloquially known as Diwalwal, is one of four active gold rush areas in Davao del Norte, Mindanao. The other three are Mainit in Nabunturan, Boringot and Dihad - both in Barangay Napnapan, Pantukan. These areas, specifically Diwalwal, are considered major contributors to the total gold production of the country. In its early years, selective mining of grades from 20 to 50 grams per ton was common. It is considered to be the site of one of the richest and biggest gold deposits in the Philippines.

Historically, gold rush areas in the country have always been existent. But the accidental discovery of the gold vein in Diwalwal by a Mandaya tribesman, Camilo Banad on September 23, 1983 sparked the proliferation of small-scale gold mining, not only in the area, but also all over the country. "Gold rush" areas in Negros Oriental, Surigao and other areas of Davao sprouted where many groups work near each other, with their aggregate number in every gold rush area reaching sizes of 20,000 to 100,000.

Diwalwal has also exhibited the most notable technology utilization development. From the "dog-holing" of high-grade veins, the vein ores were eventually accessed with larger and timbered adits, tunnels and stopes. The use of mechanized rod mills and more adequately lined sluice boxes became prevalent, as well as more extensive use of amalgamation in the milling and panning stage. In the late 80's, the use of 5-50 tons per day batch cyanidation plant utilizing carbon-in-pulp (CIP) process became popular.

The Diwalwal gold rush area was also the main consideration in the issuance of Presidential Decree No. 1899, which established small scale mining as a new dimension in mineral resources development in the Philippines. Production from small scale gold mining steadily rose during the 80s and in the mid-90s, surpassed the production of large-scale gold mining.

Unfortunately, Diwalwal has also become a monument of how unmitigated and unregulated small-scale mining operations can ravage the environment and accelerate the depletion of a mineral deposit. More critically, the Diwalwal issue has become a serious socio-political problem - miners are, by legal definition, not small scale miners anymore. Government attempts to regulate the area, meanwhile, are being questioned in the courts while at the same time luring many groups who provide "security". Deaths of miners are often unreported. A recent study by the UNIDO also confirmed the presence of mercury poisoning

With excerpts from *Small Scale Mining in the Philippines: Status, Issues, and Solutions* by Horacio C. Ramos and Leo L. Jasareno. Paper presented during the APEC – GEMEED Environmental Cooperation Workshop, Australia. October 2000.

7.6 Mine Waste and Tailings Management

"Prior to the 70's, some local mining companies practiced riverine disposal (e.g., the case of Atlas Consolidated Mining and Development Corporation which discharged its tailings into Sapang Daku River, Province of Cebu before shifting to marine disposal) and shallow marine disposal (e.g., Marcopper Mining Corporation, Calancan Bay). In the late 70's and early 80's, there was considerable public and government concern with regard to the tailings disposal practices of major mines especially in the Baguio Mineral District. The alleged discharge of tailings into two (2) river systems (Bued and Agno) was perceived to have

contributed to the siltation of these rivers, notwithstanding, several studies that the contribution of tailings to the siltation of the rivers was insignificant compared to other sources as natural erosion”⁸⁵.

In the last two decades, at least ten (10) environmental accidents/events involving mines were recorded, of which eight (8) involved tailings dams. During the same period, the industry generated a volume of 1.2 billion tons of mine wastes and mill tailings.

“While only one resulted in the loss of human lives, the consequences of these accidents include the loss of other productive uses of the affected river for fishery, transportation, irrigation and livestock (as in Marcopper 1996), siltation of government irrigation systems and of river courses and in some cases, inundation of agricultural lands/crops. Concerns on the acid generation potential, heavy metal contamination and coastal pollution from the released tailings (including those previously discharged via riverine disposal or shallow marine disposal and by small scale miners) from these accidents are also being raised”⁸⁶.

“It is important to note, however, that tailings ponds in the Philippines require extra structural strength to defend against natural forces that bear heavily on their integrity. Whole year round, a tailings pond has to endure the onslaught of heavy rains, typhoons and earthquakes. Unless a tailings pond is adequately engineered, these forces will eventually wear the structure out”⁸⁷.

Tailings dam accidents also has the associated issue of cyanide use in gold mining. While there have been no verified report/s of death, directly or indirectly, caused by cyanide in gold processing, the mere mention of cyanide evokes fear due to the perceived toxicity of cyanide.

As a general rule, a *Cyanide Management Plan* is required from mining companies in the handling of cyanide as well as the installation of cyanide destruction/detoxification plants prior to the disposal of the tailings into a tailings dam. As a standard practice, water is recycled back to the mill. The remaining water is given sufficient residence time in the tailings dam to promote the natural disintegration of the cyanide. Only “clear water” that meets the prescribed effluents standards for cyanide can then be released into the nearest water body. Several underground mines in the past also recovered the sandy portion of the tailings and used for back-filling of underground workings.

Nevertheless, some volume of tailings are washed away during heavy rainfalls in view of inadequate management of the tailings dam or as a result of tailings dam failures.

⁸⁵ Cabalda, MV, Velasco, RL, Jr. and Ramos, HC. *Tailings Dam: Philippine Government Process, Perceptions and Concerns*. Paper presented during the Workshop on Managing the Risks of Tailings Disposal organized by UNEP, ICME and SIDA, Stockholm, Sweden. May 22 and 23, 1997.

⁸⁶ Ramos, HC, Cabalda, MV and Banaag, MA. *Tailings Dam Accidents and the Use of Chemicals in Mining – Issues, Policy Response and Lessons Learned from the Philippines*. Paper presented during the UNEP/Government of Australia International Workshop on Environmental Regulation for Accident Prevention in Mining – Tailings and Chemicals Management, Perth, Australia. October 26 and 27, 2000.

⁸⁷ Ramos, HC (1996). *ibid*.

Table 10: Environmentally Accidents/Events Involving Mines (from Ramos/Cabalda/Banaag, 2000)

DATE	COMPANY	DETAILS
August 09, 1999	Atlas Consolidated Mining and Development Corporation	Pressure build up in a clogged drainage tunnel in one open pit loosened the accumulated silt, releasing an estimated 5.7 million m³ of acidic water into the nearby river and into the open sea.
April 22, 1999	Manila Mining Corporation	Failure of decant structure in Tailings Pond No. 7 “due to excessive rains” resulted in the release of about 700,000 m³ of tailings.
March 24, 1996	Marcopper Mining Corporation	A mild earthquake affected the integrity of the concrete plug placed in the drainage tunnel of the open pit used as a tailings containment system; pressure exerted by the stored tailings caused the displacement of the plug and the release of 1.6 million m³ of tailings into the river system.
December 08, 1995	Philex Mining Corporation (Bulawan)	Leak in the decant tower of Tailings Pond No. 1 due to pressure exerted by impounded tailings.
September 02, 1995	Manila Mining Corporation	Collapse of TP No. 5 “due to heavier than normal rainfall, wave action and tectonic movement”.
June 26, 1993	Itogon Suyoc Mines, Inc.	Overtopping at the height of a typhoon that clogged the dam’s penstock and diversion tunnel.
January 1992	Philex Mining Corporation (Padcal)	Collapse of TP No. 2 due to weakened dam structure caused by the July 1990 earthquake.
October 17, 1986	Lepanto Consolidated Mining Corporation	Collapse of TP No. 3 due to weakened dam embankment caused by additional loading on the original embankment.
1975 – 1986	Marcopper Mining Corporation	Marine disposal of over 200 million MT of tailings in Calancan Bay resulted in marine pollution and an area of deposition of about 80 hectares.
November 08, 1982	Maricalum Mining Corporation	Collapse of Tailings Pond No. 3 due to weak foundation, releasing an estimated tailings volume of 27 million metric tons.

The system for compensating damages caused by mine wastes and tailings was first introduced in the Philippines in 1977 through *Presidential Decree No. 1251*, which imposed a mine wastes and tailings fee on operating mines in the Philippines in the amount of PhP0.05 and PhP0.10, respectively. The amount collected accrues to a Reserve Fund utilized for the purpose. This PD has since been incorporated in the implementing rules and regulations of the Philippine Mining Act of 1995 and is now known as the Mine Wastes and Tailings Reserve Fund (MWTRF). The penalty of PhP50 per metric ton for the unauthorized release of tailings, similarly provided in the IRR, also accrues to the MWTRF.

During the period 1981 to 2000, mine wastes and tailings fee collected amounted to about PhP37.5 million with over PhP16 million in compensation paid.

Table 11: Mine Wastes and Mill Tailings Generated and Fees Collected

(from Ramos/Cabalda/Banaag, 2000).

YEAR	MILL TAILINGS (MT)	MINE WASTES (MT)	AMOUNT COLLECTED (PHP)
1981	Not Available		1,924,447.68
1982	Not Available		1,656,159.86
1983	Not Available		1,563,000.52
1984	72,340,710	114,512,063	1,091,668.60
1985	48,205,234	80,631,719	832,636.01
1986	51,149,289	36,843,835	1,182,664.84
1987	52,557,854	49,368,798	1,224,186.20
1988	51,516,933	46,590,275	1,495,695.62
1989	58,268,691	41,954,443	1,347,790.03
1990	47,101,423	36,498,853	1,711,217.18
1991	42,697,062	47,443,794	2,944,397.77
1992	38,388,868	36,995,233	2,028,423.15
1993	42,031,245	30,886,467	2,043,475.36
1994	22,250,940	13,117,916	1,682,110.51
1995	18,482,743	25,471,829	3,536,467.30
1996	9,042,455	26,529,026	4,274,007.87
1997	5,171,599	16,006,184	1,892,935.97
1998	5,572,928	14,326,781	1,742,677.18
1999	13,735,821	4,695,067	1,486,553.91
2000	14,352,634	3,797,611	1,758,112.22
TOTALS	625,669,894	592,854,108	37,418,628.44

(Source : Mine Rehabilitation Section, MESD, MGB – CO)

Clark⁸⁸, however, noted that:

“We are not comfortable with the government’s policy on mine waste and tailings fees. As a basic principle, mine tailings should be retained rather discharged. DENR/MGB recognizes this fact but, through assessment of the fee, implicitly treats tailings and waste rock as a pollution source. This occurs since the sole use permitted...of the fees is to pay for corrective action, “...caused by pollution due to the operation of mining companies”. Thus, the mere (and inevitable!) generation of mine tailings is seen as pollution. While it is certainly not worth splitting semantic hairs over such distinctions, the implications of the tailings fee system are potentially far reaching.

...By removing companies from the compensation process, the reserve fund has the unfortunate effect of limiting their environmental liability to their tailings fee contributions. Effectively, the scheme shifts environmental liability from the mining companies to the government and charges a government administrative agency...with settling all claims. It might also be argued that the mere existence of a compensation fund encourages environmental compensation claims.

In its favor, the scheme does have an advantage. First the scheme is administratively simple. Second, by avoiding court litigation, it makes possible for poor claimants, who might be unable to afford a court suit, to be compensated for environmental damage. Third, it relieves mining companies of the burden of continuing litigation over relatively

⁸⁸ Mineral Policy Program (1994). pages IV – 47 and 48.

minor compensation claims. Against these advantages must be weighed several disadvantages”.

While in the past, assessment of claims were done with “*limited environmental (i.e., environmental monitoring) evidence*”, the current regulations provide for the creation of a Regional Investigation and Assessment Team (RIAT) to investigate all claims for damages. Environmental monitoring data can also now be sourced from the regular reports of the Multi-partite Monitoring Team (MMT). In some areas, local authorities have created Municipal Investigation and Assessment Teams (MIAT) to assist the RIAT.

Box No. 7 – Policy Standards and Guidelines for Mine Wastes and Mill Tailings Management

DENR Administrative Order No. 99 – 32, *Policy Standards and Guidelines for Mine Wastes and Mill Tailings Management*, was a product of a ten-year process that started with a USAID funded project on the Formulation of Policies and Standards for the Disposition of Mine Wastes and Tailings in 1990-91; a series of lectures/seminars by the eminent Filipino geotechnical engineer consultant, the late Dr. Jose Rolando Santos in 1996 and 1997; attendance to UNEP/SIDA/ICME *International Workshop on Managing the Risks of Tailings Disposal* in Sweden in 1997 as well as consultations with the local mining industry, several international consultants and similar guidelines developed by other organizations (Mining Association of Canada’s *A Guide to the Management of Tailings Facilities* and Western Australia’s *Safe Operation and Management of Tailings Storage Facilities*). The Policy is an attempt to finally address an issue that has beleaguered the mining industry since the 70’s.

The Policy prescribes minimum standards for both on-land tailings disposal and deep-sea tailings placement (DSTP). The Policy is anchored on the belief that sound engineering creates safe structures, thus, proper mine wastes and tailings management requires the use of appropriate engineering technologies in tandem with adequate operational supervision.

On-land disposal followed the principle – design-construct-operate-rehabilitate-decommission – which implies knowledge of environmental conditions, close supervision of the dam construction, careful operational surveillance, post mining monitoring and rehabilitation to a physically and chemically stable state without permanent need for surveillance or human intervention.

Deep Sea Tailings Placement (DSTP), meanwhile, is considered as an alternative tailings disposal and management option. DSTP is currently being utilized in several countries with limited impacts to the marine environment and its use of DSTP in the Philippines will be based on internationally accepted Best Practices. However, it must be emphasized that DSTP shall be considered **only** when there are significant constraints (e.g., poor geotechnical conditions, rugged topography or heavy land use etc.) to on-land disposal and **only** when DSTP exhibits the least environmental and social risks. The use of DSTP shall be considered on a case-to-case basis and is incumbent upon the results of detailed marine environmental studies.

7.7 Mine Rehabilitation and Abandoned Mines

While the environmental management practices espoused by the Philippine Mining Act of 1995 and its revised implementing rules and regulations would bring the desired industry performance in the future, the legacy of past mining remains.

“Mine rehabilitation as an integral part of a mining operation appears to be a new concept in the Philippine mining industry. As such, the industry has no record to show of any success story on mine rehabilitation, in particular on the post-mining land use stage. Instead, the record is consistent otherwise. Abandoned mines are literally abandoned: the mine pits become lifeless lakes and gaping holes, the mine camps becomes ghost towns; and infrastructures are left to the elements to rot”.

“If the Philippine mining industry will remain purely as an extractive industry, altering landforms in search for mineral and leaving the mined out areas as they are, the possibility is not remote that it shall suffer the same fate that befell the Philippine logging industry. Production forests as an industry is now in its sunset in the Philippines because of a track record that is not defensible.”

“The greatest flaws in the old mining laws (PD 463) are their inadequacy to provide guaranteed mechanisms for mine rehabilitation and their failure to recognize the strategic advantage of progressive mine rehabilitation works while mining operations are still active. The environmental provisions were never strictly considered as a major cost center, as monitoring of compliance with these provisions never took into consideration the accounting of expenses for environmental protection. Above all, there was the issue on the political will to apply the full force of the law on violators”⁸⁹.

Box No. 8 – The Philippine Mining Industry’s Commitment to the Environment

In 1997, in the presence of then President Fidel V. Ramos, the Chamber of Mines of the Philippines, the Philippine Mine Safety and Environment Association, the Marble Association of the Philippines, Federation of Non-metallic Mines of the Philippines, Miners Association of the Philippines, Philippine Society of Mining Engineers, Philippine Institute of Mining, Metallurgical and Geological Engineers, Inc., Society of Metallurgical Engineers of the Philippines, Geological Society of the Philippines and the Philippine Cement Manufacturers Corporation adopted the Philippine Mining Industry’s Commitment to the Environment which states that *“mining activities shall be managed in a technically, financially, socially, culturally and environmentally responsible manner to promote the sustainable development and the general welfare of the country”*.

The major commitments are:

Corporate Priority – Recognize environmental management as a key corporate priority and establish policies, programs and practices for conducting business in an environmentally sound manner through the development and implementation of environmental management systems.

Integrated Environmental Management – Establish environmental accountability at the highest management and policy making levels and integrate a Mine Environmental Protection and Enhancement Office into the mine organization. The said Office shall set the level of priorities and marshal the resources needed to implement environmental management programs and activities to ensure sustainable environmental conditions in all phases of the mining operation.

Best Practice – Adopt and implement best practices in environmental management in all phases of mining to achieve environmental protection objectives set by the company, regulatory standards and community expectations.

Community Consultation and Involvement – Establish relationships, ensure participation and encourage dialogue with the community not only as a recognition of the importance of the community as a part of the environment affected by mining operations but also because they can add sensitiveness and serve as invaluable partners towards the achievement of best mining practices.

Research and Continuous Improvement – Pursue continuous improvement in corporate policies, practices and environmental performance, through processes which include research, development and transfer of relevant environmentally sound technologies.

Progressive Rehabilitation and Closure – Conduct progressive rehabilitation at every stage of mining and establish a functional post-disturbance land use capability that is proximate to the land use prior to the disturbance of the mine area or other more beneficial land uses as predetermined and agreed with the concerned communities.

⁸⁹ Ramos, HC (1996). *ibid.*

These inadequacies became evident during the late 70s and in the 80s, at a time of metal market volatility, when a number of marginal copper and gold deposits developed largely on account of political patronage, closed down.

Clark⁹⁰ also noted that:

“...the scope of rehabilitation in the Philippines is defined as the cost of reforesting the abandoned mine. While serious reservations might be raised about such a narrow definition of “rehabilitation”, this approach does not lead to a reasonable clear and defensible basis for determining future rehabilitation costs... this eminently practical approach represents an excellent first step in the rehabilitation process, but it may fall short of generating a sufficient funding to fully cover eventual costs.”

“...the preparation of a rehabilitation strategy needs to be formally recognized as a joint obligation of the mine operator, the national government and the appropriate LGUs. The primary responsibility for planning the rehabilitation efforts must rest firmly with local authorities who are in the best position to evaluate alternative uses of the site in the light of other regional developments.”

The deficiencies in the past mining laws were remedied under the Philippine Mining Act of 1995 where the concept of “*planning for mine closure*” was made integral to the regulations.

According to the paper, *Legal Framework for Mine Closure*⁹¹, the Philippines is one among the Group B⁹² countries lumped with mining nations such as Australia, Canada, the UK, the US, and Wales as countries that “*can be said to have (a) comprehensive policy and legislation that provides for both comprehensive mine closure and post-mining sustainable development*”. The paper also cited: (a) the **Social Development Plan** as “*subject to community participation and public comments by all relevant parties and persons*” and (b) the **National Wealth Revenue Sharing** scheme where 40% of mining revenues are returned to regional and local areas. This was considered as one of the only few sharing schemes of such nature in the world.

With respect to abandoned mines, Ramos/Cabalda/Banaag (2000) proposed the conversion of the MWTRF to a **Central Mine Rehabilitation Fund** that will provide the seed fund to rehabilitate mines irresponsibly left behind by their operators, at no cost to the government. This was similar to the recommendation of Clark for a “*national rehabilitation fund financed by a fee on all operating mines*” as an alternative to individual self-financing.

⁹⁰ Mineral Policy Program (1994). pages IV – 53 and 54.

⁹¹ by Allen L. Clark, Koh Naito and Jennifer Cook Clark in *Mine Closure and Sustainable Development* (Results of the WB/MMAJ Workshop; book edited by Tracey Hanna), Mining Journal Books Ltd. (154 pps). 2000.

⁹² Group B countries are nations from Africa, Asia, Latin and South America, Pacific Island Nations and Southeast Asia while Group A includes Australia, Canada, Europe, Japan and the USA. Group A nations have a broadly developed national policies and legislation that impact directly or indirectly on mine closure. Group B, on the other hand, are countries where the level of provision for mine closure within the mining laws and regulations is largely dependent on three factors – (1) the age of the nation’s mining laws and regulations; (2) the activities of past mining enterprises and (3) related policy and legislation, in particular, environmental policy and legislation.

Table No. 12 - Mine Closure provisions in the Mining Laws and associated Implementing Rules and Regulations in Group B countries – Asia (Clark/Naito/Clark 2000)

COUNTRY	CLOSURE NEGOTIATED ⁹³	REQUIRE EIA ⁹⁴	REQUIRE SIA	REQUIRE RECLAMATION/REHABILITATION	REQUIRE BONDING
Bhutan	-	X	X	X	-
Brunei	-	-	-	X	-
Cambodia	-	X	-	X	X
China	X	-	-	X	-
Indonesia	X	X	-	X	-
India	X	-	-	X	-
Kazakhstan	-	X	-	X	-
Korea (Rep. Of)	-	-	-	-	-
Korea (DPR)	-	-	-	x	-
Kyrgyzstan	X	X	X	X	-
Lao PDR	-	X	X	X	X
Malaysia	X	X	-	X	-
Mongolia	-	X	-	X	X
Myanmar	-	-	-	-	-
Philippines	-	X	X	X	X
Sri Lanka	X	X	-	X	-
Tajikistan	-	-	-	-	-
Thailand	X	X	-	-	-
Uzbekistan	X	-	-	X	-
Vietnam	-	X	-	X	X

Clark⁹⁵, however, was cautious in his recommendations noting that “for existing mines to set aside adequate provision (individual self-financing) for mine closure/rehabilitation over the remaining life of their ore bodies may imply a prohibitive cost burden”. With respect to a national rehabilitation fund, Clark noted that “a major advantage of this approach is that funds might be available for (the) rehabilitation of already abandoned areas. On the other hand, the difficulty is the need to impose a higher financial burden on new projects to offset the anticipated shortfall due to the limited life of mines already in operation. Such a burden may mean that some new projects are not viable and are never developed. Since the costs of rehabilitating mines will vary enormously, developing a(n) equitable basis for making contributions to an industry-wide scheme would be quite challenging. This whole policy area requires a careful, detailed examination”.

⁹³ Virtually all mining laws provide for a great deal of discretion on the part of the respective Minister and would apply to issues of mine closure. Those noted (x) pertain to delegations of authority that are specific with respect to mine closure.

⁹⁴ Does not take into account provisions that may exist in other legislation (in particular environmental legislation) that may address mine closure issue either directly or indirectly.

⁹⁵ Mineral Policy Program (1994). pages IV – 54 and 55.

Box No. 9 – The Chamber of Mines of the Philippines Code of Conduct for the Environment

In 1997, the members of the Philippine Chamber of Mines, as part of its commitment to minimize the impacts of mining to the environment and in answer to the challenge posed to the mineral industry to be environmentally and socially responsible, formulated the *Philippine Mineral Industry's Code of Conduct for the Environment*. The goal of the Code is to have an industry-wide self-regulation.

Signatories to the Code committed themselves to the following:

Sustainable Development – ensuring the supply of mineral products and the generation of wealth from minerals to enhance peoples well-being in a manner which does not compromise the ability of the future generation to meet their own needs and integrating economic, environmental, and social considerations into decision-making and management;

Environmental Responsibility - Environmental impacts of all phases of operations and committing, as a corporate priority, to the minimization or mitigation of such impacts;

Social Responsibility – Adherence to a policy of openness, honesty, and equity with the community with respect to the operations and their environmental and social impacts and consulting with the community to understand their concerns, aspirations, and values regarding development and the operational impacts of mineral projects;

Risk management – Integrating risk assessment and Management in all aspects of operations;

Information, Education, and Communication – Maintaining a pro-active and sustained campaign to inform and educate the community on the company's economic, environmental, and social performance and implementation of the Code;

Continual Improvement – Adopting a culture of continuous monitoring of impacts and review of objectives, policies, systems, technology and procedure to suit changing needs and expectations; and

Rehabilitation and Decommissioning – Ensuring that decommissioned sites are safe, stable and brought to a state previously agreed upon with the stakeholders.

Seventeen (17) mining and exploration companies are current signatories to the Code.

7.7.1 Acid Mine Drainage (AMD)

A major issue associated with abandoned mines is acid mine drainage. This concern increases significantly when sulphur-bearing minerals, particularly pyrite, is present in the mining area. Reactive pyrite is the element primarily associated with potential acid mine drainage. Most Philippine ore deposits are associated with sulphur bearing minerals. Current operating mining companies manage AMD with lime treatment or limestone-lined drainage systems to prevent the pH from falling below the 6.5 effluent standard.

However, AMD was not seriously monitored in the past largely due to the lack of clear understanding of how to manage AMD and the profit motive. With the premature closure of a number of mines and the absence of monitoring systems, AMD is now being observed in a few closed mines. Recent monitoring of closed/abandoned mines revealed that AMD is emanating from waste dumps, underground openings and surface excavations/working areas.

The problem of AMD is related to the following:

- The release of large volume of acidic mine water from the flooded open pits of Atlas Consolidated Mining and Development Company, closed since 1993, that resulted in a fish kill in August 1999);
- AMD from the waste dumps and mine excavations of Marcopper Mining Corporation and Philippine Pyrite Corporation; and
- The AMD emanating from old mine workings in an island municipality that has been the site of polymetallic mining since the 1940s. The presence of AMD in the old mine workings is now being used to block the re-development of a new mine in the area.

In 2000, the MGB also commissioned the “*Semi-detailed Assessment of Closed/Abandoned Mines in the Philippines*” with twenty (20) study areas. Aside from providing an overview of current environmental conditions in the study areas, the report will provide the best policy options on how to manage closed/abandoned mines in the Philippines.

Box No. 10 – Acidic Mine Water Discharge from the Atlas Copper Mine

The Atlas Copper mine located in central Philippines started operation in the 60s and up to its temporary closure/inactivity in 1993 was considered as one of Asia’s largest copper mine with a daily production rate of 110,000 metric tons.

On August 9, 1999, surface discoloration of the sea was observed and traced to have originated from the Sapangdaku River. Subsequent investigations revealed that the source of the acidic water is the drainage tunnel of Atlas mine. An estimated 5.7 million cubic meters of the 50 million cubic meters of acidic water that has accumulated in three pits was released. This sudden discharge was attributed to “*pressure build-up... caused by the impounded water, allowing the silts to be pushed and flushed out of the tunnel, declogging the tunnel in the process ...discharging the impounded water into the river*”. Effluent samples yielded a pH of 3-4, copper content of 46.5 mg/l, manganese 19.53 mg/l, iron 156 mg/l and nickel 0.735 mg/l. Zinc, lead and cadmium were found to be within effluent standards.

Discoloration was observed as far as 2 km offshore resulting in a “fish kill”. Heavy metal contamination has yet to be determined but long term environmental monitoring is being put in place.

The company was subsequently assessed a fine of \$210,000 for exceeding effluent limits under the Water Pollution Law and a case filed with the Pollution Adjudication Board.

The incident, however, poses a predicament for the Government since the mine was placed in operation under the old mining law but the incident occurred when the new mining law was already in place. Provisions of the old mining law are insufficient to cover for the damage caused by the incident but the provisions of the new mining law cannot be applied retroactively. In addition, the mine was closed due to heavy debt burden and therefore, is not in a position to accept environmental and financial liability for the incident.

Adapted from *Planning for Mine Closure in the Philippines* by Horacio C. Ramos, Michael V. Cabalda and Manuel A. Banaag. Paper presented during the World Bank/Metal Mining Agency of Japan Mine Closure and Sustainable Development Workshop. March 1 to 3, 2000. Washington DC, USA.

Box No. 11 – Government Merit and Incentive Systems for the Philippine Minerals Industry

Adopt – A – Tree, Adopt A Mining Forest Program – Started in 1988 as the “Adopt-a-Tree, Adopt-a-Mining Forest Movement”, the Program

On April 4, 1988, the President of the Philippines declared the month of June of each year as Environment Month under Proclamation No. 237. The proclamation calls upon all citizens of the country to support and actively participate in the observance of the Environment Month towards the protection, enhancement and development of the environment. Responding to this, the DENR launched the “Adopt-a-Mountain, Adopt-a-Mining Forest Program”.

The objectives of the “Adopt-a-Mountain, Adopt-a-Mining Forest Program” are to accelerate the re-vegetation/re-greening of the country’s denuded/ degraded mountains and range lands so as to improve water yield capacity and timber production; to promote effectively the protection of the remaining and/or available natural forest as source of potential endemic species for educational and scientific research purposes; to promote voluntarism among the Filipinos in the rehabilitation and protection of forest lands; and to promote the “Bayanihan” spirit or camaraderie and self-reliance among marginal sectors towards the improvement of ecosystem.

As of year 2000, a total of thirty-three (33) mining companies are active participants to the Program. And since the inception of the Program, about 6.2 million surviving trees with a survival rate of 81.4% have been accounted for out of the 7,649,527 seedlings planted to 3,357.596 hectares. Sites reforested/afforested/maintained include mined-out areas, slopes, decommissioned tailings ponds, causeways and waste dumps and vacant lots within mining communities. Some of the most popular species planted are agoho, gmelina, acacia auriculiformis, acacia mangium, narra, molave, pine, and mahogany.

The Presidential Mineral Industry Environmental Award (PMIEA) – The PMIEA was officially established in 1997 under Executive Order No. 399. The PMIEA gives recognition to outstanding levels of dedication, initiative and innovation in the pursuit of excellence in environmental management by exploration, mining and other related entities involved in various aspects of mineral utilization.

The PMIEA is conferred every year to deserving groups and/or companies engaged in mining activities in the country under the following categories: Mineral Exploration, Quarry Operation, Surface Mining, Underground Mining Mineral Processing and Research and Development.

Since its inception in 1997, the Presidential Trophy has been awarded to Western Mining Corporation’s Tampakan Copper Project under the exploration category in 1997 and Apo Land and Quarry Corporation in 2001 under the Quarry category.

Safest Mines and Quarries and Best Mine Personalities – A private-public sector collaboration under the auspices of the Philippine Mine Safety and Environment Association (PMSEA), the Award recognizes mining companies and employees with the best mine safety performance. The categories are Safest Underground Block Caving Operation, Safest Underground Stopping Operation, Safest Surface Operation, Safest Quarry Operation, Safest Cement Operation, Safest Combined Surface and Underground Operation, Safest Concentrator and Most Improve Safety Record Award. Further, mines best personalities such as Best Safety Inspector, Best Foreman, Best Shift boss and Best Capataz are also conferred to deserving mine employees.

8. THE FUTURE PATH FOR THE PHILIPPINE MINERALS INDUSTRY

- How can you (the industry) compete globally? Recycling and substitution are trends that will continue and if metal prices are low, why persist on mining?
 - Small Scale Mining over Large Scale Mining?
 - Underground Mining in lieu of Surface/Open Pit Mining (topography is itself a resource)?
 - Indeed, mines can be rehabilitated but how much did it cost? Who were disadvantaged?
- *What development path is best for the Philippines?*
 - *Should it depend on the riches underneath the ground or that above ground? Should it sacrifice ecosystems in the short term with the view to rehabilitate them later should we pursue sustainable development path at each step of the way?*
 - *How much of Philippine development should be anchored on it?*

*- Dr. Angelina Galang
Executive Director,
Miriam College – P.E.A.C.E.*
- The way of life will continue even without developing the mineral deposit, if development is not accepted by the community, the community has another way of defining their quality/way of life.
 - Undertake a study on mining as a land use compared to other land uses bearing in mind that the Philippines is an island/archipelagic country with unique biogeophysical environment different from continental countries.
 - Win-win solution is to educate the people

In a polarized Philippine society, predicting the future of the local minerals industry is extremely impossible. Every action made by the government or by the industry is always met with counter action by critics. The wide divergence of opinion if mining can, indeed, contribute to economic growth and development and in alleviating poverty in the countryside is the subject of much debate.

In the paper, *The Philippine Mining Industry: An Empirical Cost-Benefit Analysis* (1998)⁹⁶, the Mines and Geosciences Bureau argued that:

⁹⁶ paper presented during the *Forum on Mining Issues and the Environment (Training Program for the Speakers and Writers Bureau)* conducted by the Mines and Geosciences Bureau, Quezon City. September 21 to 24, 1999.

“The obsession for growth triggers a country to pursue a development blue print by accessing all available resources. That much of the economic growth of the world pulls raw materials from forests, soils, seas and waterways make Singapore and Hongkong more of exception to the rule. The resource base justifies the development plan. Proper planning dictates that a plan is “doable” only if it’s backed up by available resources. It is in this context that countries abundant in mineral resources are taking mineral resources extraction as their development path.

Incidentally, the Philippines has a very strong natural resource base including mineral resources. Its geological setting offers many of the best potential sites for mineral resources development, earning for it a very high mark for mineral prospectivity...”

Pursuing mineral resources as a development path for a country entails taking options. The paper continued,

“Can the Philippines take other options?

Since minerals and mineral products are indispensable to any country, the real issue is whether the Philippine should produce the minerals thru its own mining industry or resort to importation.

The importation of minerals and mineral products is always an option. Japan apparently is now in that situation. But is Philippines in the same position as that of Japan? It is needless to argue on the sharp contrast. Records show, however, that Japan of today is the product of a massive industrialization build-up from as early as the 19th Century up to the 60s. Mining was a centerpiece during this build-up, without which industrialization could not have been attained, considering the geopolitical situation of Japan at that time.

Importing the minerals in order to be spared of the social and environmental costs is always an option of a country. But as to when to take this option requires a certain level of economic maturity that developing countries (like the Philippines) have not attained. Meanwhile, a country’s development path is a function of a resource base. The Philippine’s main resource base is its natural resources including mineral resources. With high-potential, high-profit world class mineral deposits operated in the mold of world-class mines employing Best Practice, the country’s economy is assured of big pillars to boost its growth. A few but world-class mines will be the future of mining in the country”.

Beyond the narrow economic focus of increased taxes and employment generation that a mine will bring, it is imperative that both the positive and negative impacts of mineral resources development are fully understood. This will necessitate the integration of social and environmental considerations in the decision making process – the sustainable development path.

ESSC⁹⁷, meanwhile, believes that:

“If parties are to work together to promote the national interest or the interest of a particular community, they must be willing to talk to each other. Dialogue is the path to

⁹⁷ ESSC (1999). pages 104 – 105.

peace. Partners in dialogue must be motivated by a strong desire to get the facts clear, be able to rely on the honesty, integrity and open-mindedness of each other. While the goodwill and sincerity of the partners must be assumed, these are subject to proof and subject to verification. Misrepresentation of the position of any other party is unacceptable. The purpose of the dialogue on mining is to clarify issues, to make sure the complexity of the issues is recognized, and to lead to the solution of the problems. We do not want to merely talk about the problem, we want to solve the problem. Mining is a practical problem.

Mining companies, NGOS, and church groups should not attempt to manipulate people; people need to be helped along and objectively informed to enable them to come to a decision. Mining companies, NGOs, and church groups should not use a community as a political football”.

On the other hand, the Mines and Geosciences Bureau, since 1998, has been laboring with the crafting of the *National Minerals Policy : Promoting Sustainability Through Responsible Mining* as the minerals industry equivalent of the Philippine Agenda 21. The Policy is a document aimed at providing the government and other stakeholders with the comprehensive decision-making tool necessary in reaching reasoned informed decisions on mining projects. The Policy integrates local and international policies, principles, practices, approaches, and systems that are consistent with the principles of sustainable development and applicable to the local minerals industry. Future stakeholder consultations will hopefully elicit and gather stakeholder concerns and inputs to come up with a Policy truly representative of the aspirations of stakeholders.

The Policy has been endorsed by both local international and local mining industry associations. The Chamber of Mines of the Philippines ***“urged the Macapagal – Arroyo administration to adopt a national minerals policy that will encourage responsible mining among mining companies and strengthen the monitoring activities of the Department of Environment and Natural Resources – Mines and Geosciences Bureau”***⁹⁸. More decisively, the Australian – New Zealand Chamber of Commerce recommended that ***“...the current administration issue a strong message stating that it supports a Sustainable, Responsible Mining Industry in the Philippines and welcomes foreign investments to achieve this. This could be done by endorsing, at Presidential level, the National Minerals Policy. This would give a strong message to investors that they are welcome in the Philippines and empower the DENR/MGB to resolve problems with LGU’s and NGO’s”***⁹⁹.

Pragmatically, mining as an industry will remain for as long as modern society demands for the products of mining. Any future decision on mining should be founded on *“factual information with a scientific (economics, social and environmental) foundation” and open mindedness, not on emotions and holier-than-thou attitude”*.

⁹⁸ in “Government urged to adopt a national minerals policy”. Philippine Daily Inquirer newspaper. June 20, 2001.

⁹⁹ ANZCHAM (2000). *ibid*.

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