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The Philippine Mining Act of 1995: Is the law sufficient in achieving the goals of output growth, attracting foreign investment, environmental protection and preserving sovereignty?

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Abstract: Mining in the Philippines plays a crucial role in the pursuit of industrial development because of its ability to provide mineral resources that serve as raw materials for the manufacturing, construction, utilities as well as the services sub-sectors. It is also a major contributor of foreign currency through the exports of mineral ore and other processed and semi-processed mineral products and provides employment to communities in far flung areas where the only source of economic activity is mining operations. Although the industry produces output and provides employment, it also destroys the environment through deforestation, and the loss of vegetation and biodiversity. It alters the land and the natural terrain due to open pit mining, soil erosion, and river pollution. There is also the human health impact of cyanide and other chemicals used in mining and the acid mine drainage which encroaches into the settlements of the people and their communities, which leads to their displacement alongside the loss of productive agricultural land.

The Philippine Mining Act of 1995 is the main policy/ legislation which governs all mining operations in the country and includes various measures to protect the environment and defines areas in which mining can be allowed. The legislation provides two approaches in forming and finalizing mining contracts namely: the Mineral Production Sharing Agreement (MPSA) and the Foreign Technical Assistance Agreement (FTAA) which permits 100 percent foreign ownership of mining operations.

The primary objective of the study is to determine the extent by which the provisions of the Philippine Mining Act of 1995 may have been able to help achieve the goals of increasing mining output, attracting foreign direct investment, protecting the environment and preserving national sovereignty. The methodology used is the descriptive approach which includes a thorough discussion of the policy provisions as well as the evaluation of the mining industry performance after the enactment of the law. A discussion of documented cases involving the environmental impact of several major mining projects is also included to determine the effectiveness of policy implementation. Initial results have indicated that further reforms will be necessary in order to improve the effectiveness of the Philippine Mining Act in attracting new investments, protecting the environment and settling sovereignty issues. In addition, there is a need to address the method or process by which regulation is implemented as well as increase the extent of transparency and accountability in order to better serve the interest of local communities, industry and government.



Key words: Philippine Mining Act; mineral production sharing agreement; foreign technical assistance agreement; environmental protection; governance and regulation

1. INTRODUCTION

Mining in the Philippines plays a crucial role in the pursuit of industrial development. The industry both induces and supports economic growth by providing mineral resources that serve as raw materials for the manufacturing, construction, and utilities sectors. It contributes foreign currency through the exports of mineral ore and other processed and semi-processed mineral products and provides employment to communities in far flung areas where the only source of economic activity is mining operations. In addition, it is also a source of both direct and indirect tax revenues for government.

Although the Philippines has \$840 billion worth of untapped mineral wealth which includes copper, gold, nickel, chromite, limestone, clays, feldspar and semi-precious stones, the growth of mining investments in the country have been slow over the past several years. The gross production value for mining was \$3.466 billion in 2012, but investment in the mining sector fell by 31 percent during the same year. Although the industry generates output and provides employment, it also has a destructive impact on the environment through deforestation, and the loss of vegetation and biodiversity. It alters the land and the natural terrain due to open pit mining, soil erosion, and river pollution. There is also the human health impact of cyanide and other chemicals used in mining and the acid mine drainage which encroaches into the settlements of the people and their communities, which leads to their displacement alongside the loss of productive agricultural land.

2. METHODOLOGY

The paper provides a thorough discussion of the policy provisions as well as the evaluation of the mining industry performance after the

enactment of the law. A discussion of documented cases involving the environmental impact of several major mining projects is also included to determine the effectiveness of policy implementation.

3. RESULTS AND DISCUSSION

3.1 Philippine Mining Act of 1995 and Executive Order 79

In March 1995, President Fidel Ramos signed into law the Philippine Mining Act (Republic Act No. 7942) which was designed to revive the mining industry and attract more foreign investment by defining the agreements for mineral exploitation, and provide the requirements for acquiring mining rights. It governs the exploration, development, processing and utilization of mineral resources in the Philippines. It is expected to protect the national interest by ensuring that the benefits from mining are shared with the government through the Mineral Production Sharing Agreement (MPSA). The law allows 100 percent foreign ownership of mining projects through the Financial or Technical Assistance Agreements (FTAAAs) and provides several incentives to encourage mining such as a four year income tax holiday, tax and duty free capital equipment imports, value added tax exemptions, income tax deductions (when operations are posting losses) and accelerated depreciation. It strengthens the role of local government units in mining projects both as beneficiaries and as active participants in mineral resource management, consistent with the provisions of the constitution and government policies on local autonomy and empowerment. It fully recognizes the rights of indigenous people and cultural communities and respect for ancestral land and institutionalized stringent measures to ensure compliance of mining contractors and operators to internationally accepted standards of environmental management.



The constitutional basis for the law was challenged in the courts by anti-mining groups, the catholic church, indigenous people's organizations and environmental protection groups and for seven years led to the decline of investor interest in the mining industry. In December 2004, the Supreme Court of the Philippines declared the mining act to be constitutional paving the way towards its full implementation. However, because of the continued protest over alleged violations of mining companies, their destruction of the environment and the displacement of indigenous people and communities, the local government's of 14 provinces had promulgated ordinances banning open pit mining. In January 2011, President Aquino imposed a moratorium on the processing of all new mining agreements, for the purpose of formulating a new mining regime that would better stimulate investment, increase the government's share of revenues from mining operations address the problem of illegal mining and protect environmentally sensitive areas. On July 6, 2012, Executive Order No. 79 (EO 79) was issued by the President which sought to strengthen the protection of the environment, promote responsible mining and provide a more equitable revenue sharing scheme between government and private firms. It should harmonize mining policies and require firms to be more transparent and accountable for their actions as well as strengthen coordination among stakeholders to ensure strict compliance by mining operators to existing laws and regulations.

3.2 Mining Output Performance

From 1997 to 2012, the gross production value in mining had increased from P33.1 billion to P146.4 billion. Production value had increased by an annual average rate of 23.36 percent from the 2001 level of P29.0 billion up to P102.2 billion in 2007. Consistent increases in production value were also recorded from P87.1 billion in 2008 up to P163.2 billion in 2011 reflecting an average annual growth rate of 23.28 percent. Shorter periods of growth occurred from 1997 (P33.1 billion) to 1998 (P37.7 billion) at 13.9 percent and from 1999 (P30.9 billion) to 2000 (P31.0 billion) at 0.3 percent (Mining Industry Statistics, Mines and Geosciences Bureau, 2013).

However, significant declines in gross production value were recorded on four occasions over the 15-year period. Gross production value decreased by 18.037 percent from 1998 (P37.7 billion) to 1999 (30.9 billion), 6.45 percent from 2000 (P31.0 billion) to 2001 (P29.0 billion), 14.77 percent from 2007 (P102.2 billion) to 2008 (P87.1 billion) and 10.3 percent from 2011 (P163.2 billion) to 2012 (P146.4 billion) (Mining Industry Statistics, Mines and Geosciences Bureau, 2013).

The contribution of mining output to Gross Domestic Product (GDP) remains very low from 0.8 percent in 1998 to its highest level of 1 percent for the years 2010 and 2011. The share of mining output to GDP fell to 0.7 percent by the year 2012 (Mining Industry Statistics, Mines and Geosciences Bureau, 2013).

3.3 Mining Employment

Employment in the mining sector had generally increased from 130,000 workers in 1997 to 252,000 workers in 2012. The number of workers employed consistently increased from 2002 to 2012 (from 101,000 to 252,000) with an average annual increase of 9.6 percent (Mining Industry Statistics, Mines and Geosciences Bureau, 2013).

Decreases in mining employment occurred only in 1998 (a decline of 7.7 percent from 130,000 to 120,000 workers), 1999 (a reduction of 16.67 percent from 120,000 to 100,000 workers) and 2002 (a decrease of 2.9 percent from 104,000 to 101,000 workers) (Mining Industry Statistics, Mines and Geosciences Bureau, 2013).

The mining sector's contribution to total employment in the entire economy remains low at less than 1 percent. For the year 2012, the mining sector's contribution to total employment in the economy was at its highest at 0.7 percent (Mining Industry Statistics, Mines and Geosciences Bureau, 2013).

3.4 Mining Investments (Philippines relative to other ASEAN countries)



Investments in the Philippine mining industry was subject to wide fluctuations during the 2006 to 2012 period. Significant declines were recorded in 2008 (a 14.71 percent decrease from \$708.4 million to 604.2 million) and 2012 (a 31.14 percent reduction from \$1,149.7 million to \$791.7 million). On the other hand, mining investments increased by 3.72 times from 2006 to 2007 (from \$190.3 million to \$708.4 million), and this was followed by continued increases from 2008 to 2011 (from \$604.2 million to \$1,149.7 million, indicating an average annual increase of 17.45 percent (Mining Industry Statistics, Mines and Geosciences Bureau, 2013).

Compared to other ASEAN countries, the amount of foreign direct investments in mining going to the Philippines is substantially lower than those of Indonesia, Malaysia, Brunei Darusalam Myanmar and Thailand. Net foreign direct investment inflows to the Philippine mining sector was recorded at \$282.1 billion in 2010. This is pales in comparison to net foreign direct investment inflows to the mining sectors of Indonesia at \$1,896.6 million, Malaysia at \$991.7 million, Brunei Darusalam at \$482.7 million, Myanmar at \$448.2 million and Thailand at \$419.2 million (ASEAN Investment Report, 2012).

For the year 2011, net foreign direct investment inflows to the Philippine mining sector was at negative \$240.4 million. This indicates a greater amount of mining investments moving out of the Philippines relative to the investment coming in. These capital outflows indicate the presence of a poor investment environment in the Philippine mining sector relative to the other ASEAN countries where net foreign direct investment inflows are positive. In 2011, the net foreign direct investments in the Philippine mining sector severely lagged behind those of Indonesia at \$3,882.0 million, Malaysia at \$2,410.9 million, Brunei Darusalam at \$1,058.0 million, Thailand at \$296.2 million and Laos at \$78.9 million (ASEAN Investment Report, 2012).

3.5 Mining Exports

From 1997 to 2012, mineral and mineral product exports had generally increased from \$762 million to \$2,265 million. The longest period for

sustained export expansion occurred from 2002 to 2007 when mineral and mineral product exports increased from \$519 million to \$2,605 million, reflecting an average annual growth rate of 38.07 percent. Shorter periods of export growth occurred from 1998 (\$592 million) to 2000 (\$649 million) showing a 4.7 percent average annual increase, and from 2009 (\$1,470 million) to 2011 (\$2,840 million) reflecting a 39 percent average annual growth rate.

Significant decreases in exports also occurred six times over the 1997 to 2012 period. Negative export growth for minerals and mineral products took place in 1998 at 22.3 percent (from \$762 million to \$592 million); 17.25 percent in 2001 (from \$649 million to \$537 million); 3.35 percent in 2002 (from \$537 million to \$519 million); 4.1 percent in 2008 (from \$2,605 million to \$2,498 million); 41.15 percent in 2009 (from \$2,498 million to \$1,470 million); and 20.25 percent in 2012 (from \$2,840 million to \$2,265 million). For the year 2012, exports of minerals and mineral products contributed 4.9 percent to total Philippine exports. Over the 1997 to 2012 period, the share of minerals and mineral product exports to total exports remained low ranging from a minimum of 1.5 percent in 2002, to a maximum of 6 percent in 2011 (Mining Industry Statistics, Mines and Geosciences Bureau, 2013).

3.6. Cases of Environmental Damage

Several incidents involving waste spillovers from large scale mining firms have been documented despite the promulgation of the 1995 Mining Act. In March 1996, Marcopper mines in Marinduque spilled out 3 to 4 million metric tons of mineral tailings into the Makulapnit-Boac river system causing flash floods in areas along the river. Muddy floodwater displaced 400 families, twenty villages were evacuated, drinking water was contaminated killing fish and shrimp. Flooding destroyed crops and killed livestock and destroyed irrigation channels. Boac river was declared unusable (Coumans, 2002). In October 2005 , Lafayette Mining Corporation's Rapu Rapu mines in Albay was responsible for cyanide spills and acid mine drainage and toxic heavy metal pollution resulting to massive fish kills along the fishing grounds of Rapu Rapu island and the



adjacent municipalities on the eastern coast of Sorsogon (Regis, 2012)

In August 2012, Philex Pacdal Mines in Benguet spilled out 20 million metric tons of mineral tailings which drained into the Balog and Agno river systems affecting the water requirements of the San Roque Dam used for agricultural irrigation and power generation (Senate Economic Planning Office, 2013). The Philex, Pacdal Mine has so far only cleaned up one million metric tons or just five percent of the total amount of toxic mine tailings it spilled from its outdated dam facilities. Philex has refused to pay the P6.42 billion demanded by the National Power Corporation for rehabilitation of the affected San Roque Dam (Bautista, 2013). In July 2012, the Nicua Mining Corporation operating in MacArthur Leyte, released mine wastes resulting to a large fish kill in the rich fishing grounds of Lake Bito Leyte.

In November 2012, slit spilled from the Toronto mine of Citinickel Mines and Development Corporation in Narra, Palawan, with waste from mining operations flowing into a river and irrigation canals affecting farms and a fish pond. The Mines and Geosciences Bureau imposed fines of over P500,000 on the firm for the mine spills attributed to negligent operations. The firm was also required to clean up and rehabilitate the affected waterways (Mines and Communities, 2013).

Aside from the breakdown of mining waste disposal systems, the failure of firms to undertake mine rehabilitation and maintenance procedures for their abandoned mines also lead to problems such as acid mine drainage, heavy metal contamination of surface water, sedimentation, and pit void which create both environmental and health hazards for residents in the immediate vicinity. This leads to the dislocation of communities, risks to health and livelihood, massive environmental damage and the loss of mining resources to a small group of large scale mining companies.

In addition to the various cases of environmental damage, mining operations evicted indigenous peoples from mining sites, it imposes an imminent danger to indigenous culture, destroyed mangroves, coral reefs, agriculture and biodiversity.

The record of mining companies with regard to environmental protection, disasters and post-mining clean-up in the Philippines is widely acknowledged to be very poor (Doyle, et al., 2007)

3.7 Effects of the Mining Act

Considering that nine million hectares of land have been identified by the Mines and Geosciences Bureau as having high mineral potential, with untapped mineral resources estimated at \$840 billion, and the Philippines being ranked as third in the world in gold deposits, fourth in copper reserves, fifth in nickel and sixth in chromite (based on density of deposits per square kilometer of land area) (Business World, 2005), the participation of the mining industry in the economy has been marginal at best.

During the past 15 years, the highest share of mining output to GDP was at 1 percent and the contribution of mining employment to total employment has at most been 0.7 percent. In 2011, net foreign direct investment inflows in the Philippine mining sector were drastically lower compared to those of Indonesia, Malaysia, Thailand, Brunei Darusalam, Laos and Myanmar. By 2012, net foreign direct investment inflows for Philippine mining even became negative, indicating larger capital flows moving out of the sector, while exports of minerals and mineral products were at most 6 percent of total country exports.

Environmental disasters caused by mining operations continue despite the implementation of the Philippine Mining Act. In view of the country's high mineral potential, alongside the marginal contributions of the industry to the economy, and the very low net foreign investment inflows, it can be observed that the Philippine Mining Act has not been effective in terms of achieving consistent mining output growth, faired poorly in attracting foreign direct investment and is unsuccessful in preventing massive environmental disasters caused by poorly regulated mining operations.

3.8 Flawed Provisions of the Mining Act that discourage Investments



Output growth and job creation in the mining sector depend heavily on the amount of new investments that would facilitate the exploration, construction, development and extraction of minerals. Although rising local and international prices of minerals and mineral products encourage greater production by mining firms, only the inflow of new investments can raise productive capacity and increase employment.

The amount of investments flowing into the mining sector have not been sufficient in order to fully tap the immense potential mineral reserves of the country. One of the primary reasons for the low level of investments being generated by the sector is the risk and uncertainty created by the flawed provisions of the Philippine Mining Act of 1995 and its overlaps with other laws such as the Local Government Code of 1991, the Indigenous People's Rights Act of 1997, the National Integrated Protected Areas System Act of 1992, the Agriculture and Fisheries Modernization Act of 1997, the Wildlife Resources Conservation and Protection Act of 2001 and the Tax Reform Act of 1997.

Local government bans on open pit mining

The completion of a mining agreement between the national government through the Department of Environment and Natural Resources (DENR) and a private mining firm and the consequent issuance of a mining permit may be challenged at the local government level. Under the Local Government Code, an ordinance may be passed to ban open pit mining operations which contravenes the Mining Act. This had been done by 14 provinces in the Philippines with an additional 6 provinces and two cities currently pursuing the passage of a law to ban mining in their respective areas. A well known case involves the local government of South Cotabato which passed an ordinance in 2010 banning open pit mining in the province. Then governor Arthur Pingoy and congress woman Daisy Avance Fuentes vowed to implement the ordinance "unless ordered by the court (Mines and Communities, 2013).

Mining permits awarded by the DENR may also be challenged by indigenous peoples organizations protecting ancestral domain and sacred burial sites by requiring the certificate of

Free and Prior Informed Consent (FPIC) under the Indigenous Peoples Rights Act of 1997, which serves as a precondition to mining operations. Mining permits can also be challenged by farm and fishery groups whose livelihood will be put at risk by mining operations and waste disposal, and by wildlife conservation and animal welfare groups intent on protecting the biodiversity of the forest ecosystem.

Interpretation and application of tax laws

Disputes concerning the interpretation of tax laws have occurred with the Bureau of Internal Revenue (BIR) interpreting the Tax Reform Act in a way which contravenes the Philippine Mining Act.

A recent case involves Revenue Memorandum Circular 17-2013 issued by the BIR last February 15, 2013 effectively rescinding the "recovery period" for "pre-operating expenses, exploration and development expenditures", provided under the Philippine Mining Act.

In the Mining Act, collection of the government's share of mining revenues includes among other things, corporate income taxes, excise tax, special allowance, withholding tax on dividend or interest payments, and other such taxes and fees as required by law but only commences after the expiration of the "recovery period". The BIR' new policy stipulates that after the end of any "tax holiday" collection of taxes shall be enforced regardless if the project is still within its "recovery period" or not (Kritz, 2013).

The definition of government "income shares"

Another case involves the interpretation of "income" supposedly derived from Mineral Production Sharing Agreements (MPSA) and Financial or Technical Assistance Agreements (FTAA). The Mining Act and Department Administrative Order (DAO) 2007-12 limit the supposed government share to the usual taxes, duties and fees, hence there is no provision for government shares in mining income. However, it is clear that taxes are different from income and under DAO 2007-12, there is even the possibility that government does not get any "additional share".



The Mining Act's provision on income from MPSA's and FTAA's, as well as the equitable distribution of opportunities, income and wealth from the exploitation of land and non-renewable mineral resources should only be defined by Congress and not the DENR Secretary. Congress must enact an alternative mining law that does not limit to taxes, duties and fees the "government share" or the income from extraction of non-renewable mineral resources (Mining and Communities, 2013).

Legal disputes arising from the application of conflicting national and local government laws, discourage investment inducing firms to move towards mineral rich countries with more clear, certain and consistent rules for doing business.

3.9 Protecting the National Interest through Revenue Sharing under the Revised Implementing Rules and Regulations of the Philippine Mining Act

Addressing the deficiencies of the Philippine Mining Act will require congressional action which is expected to be a prolonged process of discussion, debate and deliberation. However, it is important to consider initiating policy adjustments which can be undertaken much earlier in order to further prevent the loss of investments to other countries and at the same time protect the national interest. At present, the executive branch of government produced the Revised Implementing Rules and Regulations (IRR) of the Philippine Mining Act. The provisions of the IRR which ensure that government benefits from privately contracted mining projects focus primarily on collecting revenues from various types of taxes.

Mining activities generate income both for the local and national governments. The tax payments required under the Mining Act and the National Internal Revenue Code paid to the national government are: 1) corporate income tax; 2) excise tax on minerals; 3) customs duties; 4) value added taxes; 5) royalties on minerals

extracted from mineral reservation; 6) documentary stamp tax; 7) capital gains tax.

Tax payments to local government include: 1) business tax; 2) real property tax; 3) registration fees; 4) occupation fees; 5) community tax; 6) other local taxes.

Withholding taxes are applied on: 1) payroll; 2) interest income in banks; 3) royalties to technology transfer; 4) interest payments to foreign loans; 5) foreign stockholders dividends; 6) remittance to principal.

In addition to the above taxes, duties and fees, mining contractors are required to pay or expend on: 1) additional government share for FTAA contractors; 2) royalties to landowners/ claim owners; 3) royalties to indigenous peoples; 4) social development programs; 5) environmental obligations; 6) research and development of mining technology and geosciences.

The benefits of mining projects provides approximately not less than sixty (60) percent of the total proceeds of the mining operations to the government and the Filipino people, considering that the contractor infused 100 percent of the capital. These proceeds include all direct and indirect taxes and benefits to other Filipinos (Republic Act 7942, Revised IRR).

3.10 Environmental Protection

Aside from the stringent conditions imposed for securing an environmental compliance certificate (ECC), the revised implementing rules and regulations of the Philippine Mining Act that cover environmental protection generally include provisions that require firms to allocate funds for environmental protection programs. These include: 1) the mandatory allocation of 10 percent of the initial capital expenditures of the mining project for environment-related activities; 2) mandatory annual allocation of 3 to 5 percent of the direct mining and milling costs to implement an Annual Environmental Protection and Enhancement Program; 3) mandatory establishment of a Mine Rehabilitation Fund to be composed of a monitoring trust fund of P50,000 which is replenishable and rehabilitation cash fund of P5 million or 10 percent of the EPEP cost whichever is



lower to be deposited as a trust account in a government depository bank and managed by an MRF committee composed of the MGB Regional Director, DENR Regional Executive Director, representatives of the Local Government Units (LGU), NGOs and the Contractor; and 4) mandatory establishment of the Contingent Liability and Rehabilitation Fund (CLRf) to be managed by a steering committee chaired by the MGB Director with members coming from concerned government agencies (Republic Act 7942, Revised IRR).

To further ensure that the mining firms implement work plans geared towards environmental protection the following provisions are also included in the revised implementing rules and regulations: 1) conduct an Environmental Work Program (EWP) during the exploration stage and an Environmental Protection and Enhancement Program (EPEP) during the development and operations stage; 2) institutionalization of an incentive mechanism to mining firms utilizing engineered and well maintained mine waste and tailings disposal systems with zero-discharge of materials/ effluents and/ or with wastewater treatment plants; 3) mandatory constitution and operationalization of a Multipartite Monitoring Team composed of representatives from the MGB, DENR Regional Office, affected communities, Indigenous Cultural Communities, and environmental NGO and the Contractor/ Permit Holder, to monitor mining operations (Republic Act 7942, Revised IRR); 4) mandatory establishment and operationalization of a Mine Environmental and Protection Enhancement Office (MEPEO) in each mining/ contact area which shall set the level of priorities and marshal the resources needed to implement environmental management programs; 5) conduct an independent environmental audit to identify environmental risks affecting mining operations as a basis for the development of an effective environmental management system; 6) mandatory preparation and implementation of a final Mine Rehabilitation/ Decommissioning Plan at least (5) years prior to the end of the life of the mine, to be undertaken in consultation and in coordination with the concerned communities and shall be submitted for approval by the MGB and LGU concerned; 7) Imposition of a higher penalty (P50.00 per metric ton) to mining firms that are

found to have illegally discharged and or discharging solid fractions of tailings into areas other than the approved tailings disposal area; 8) authorizing the MGB Regional Director to summarily suspend mining/ quarrying operations in case of imminent danger to human safety and the environment; 9) mandatory compliance with the rules and regulations of the Mines Safety Rules and Regulations by all Contractors, Permittees, Lessees, Permit Holders and Service Contractors and; 10) institution of the Presidential mineral Industry Environmental Award to be given to exploration or operating mining firms based on their exemplary environmental performance and accomplishments (Republic Act 7942, Revised IRR).

3.11 Preserving Sovereignty

The major provisions intended to preserve sovereignty include: 1) stipulating that government grants to the contractor only the right to conduct mining operations within, **but not title over**, the contract area and shares in the production whether in kind or in value as the owner of the minerals therein, under the Mineral Production Sharing Agreement (MPSA); 2) allowing 100 percent foreign equity ownership under the Financial or Technical Assistance Agreements (FTAA) for large scale exploration, development and utilization of minerals subject to a mining contract with a leasing agreement applicable for 25 years with strict conditions on minimum capitalization, infrastructure investment, social and community development, free and prior informed consent from indigenous peoples and cultural communities and adherence to environmental and safety regulations.

Local governments can further preserve sovereignty by actively participating in the process by which communities reach an informed decision on the social acceptability of a mining project as a requirement for securing an Environmental Compliance Certificate (ECC); and participation in the monitoring of mining activities as a member of the Multipartite Monitoring Team, as well as in the Mine Rehabilitation Fund Committee.

3.12 Problems in the implementation of laws and enforcement of regulations



The severe lack of government personnel with the appropriate technical expertise and a grossly inadequate budget for monitoring mining operations severely reduces the capability of regulators to ensure the compliance of firms to the provisions of the Mining Act. In the recent past for example, the Mines and Geosciences Bureau (MGB) as well as the National Commission on Indigenous People (NCIP) had failed to effectively apply the law particularly with regard to requiring the Free and Prior Informed Consent (FPIC) before allowing several mining operations to start (Vivoda, 2008). The MGB and NCIP have severely limited resources in terms of budget and expertise required to deal with the complex matters of consent with indigenous communities (Vivoda, 2008). Many local governments do not have the capability to estimate the projected benefits of mining, and even the DENR has relatively few experts on natural resource valuation as most left the agency to become consultants in the private sector (Landingan, 2008). The enforcement of regulations is slow, erratic and inefficient, as the agencies are swamped with a large number of applications from mining companies, and many existing firms are not effectively monitored and penalized for violations (Economic Intelligence Unit, 2007). Bureaucratic red tape in the approval of permits by local and national government is slowing the rehabilitation of existing mines and the development of new ones (Chase and Lague, 2006). When regulatory agencies do not have enough technically qualified personnel and when budgets for the inspection of mining sites and their operations remain inadequate, the mining firms which do not comply with the provisions of the law, and recklessly destroy the natural environment by digging, blasting and dumping toxic waste into river systems and lakes will effectively avoid penalties. The lack of monitoring personnel from the regulatory agencies will also make it difficult to determine and verify the extent and volume of mineral extraction and processing making it difficult for government to assess its fair share of benefits to be obtained from mining operations.

Poor governance as manifested by the presence of graft and corruption among officials of the regulatory agencies will also obstruct the full implementation of the law. Regional Directors of agencies who accept bribes from mining firms in

order to ignore violations of environmental regulations will lead to more environmental disasters caused by non compliant firms. Offering bribes to government officials to approve applications for mining permits, environmental compliance certificates and free and prior informed consent certificates that do not meet the conditions required in the Mining Act will lead to more violations of greater severity in the future, putting the environment and indigenous communities at risk. Powerful vested interests supporting a mining firm will always be in a better position to obtain preferential treatment in terms of the more lenient application of the conditions and requirements stipulated by law when officials of regulatory agencies are known to accept bribes. It will be necessary to eradicate graft and corruption with the regulatory agencies in order to ensure the full and faithful implementation of all provisions in the Mining Act. In 2001, the Department of Environment and Natural Resources was identified to be one of the most graft-ridden and corrupt institutions in the Philippines (Structural Adjustment Participatory Review International Network, 2001). If reforms to eradicate graft and corruption are not imposed, non of the provisions of the Mining Act will be effectively implemented leading to more mining induced environmental disasters and the loss of resources to private interest without government getting its fair share of benefits.

4. CONCLUSIONS

The Philippine Mining Act was signed into law in 1995, and its constitutionality challenged for seven years. Questions continue to emerge concerning differences in interpretation among regulating agencies (the DENR, BIR and the National Commission on Indigenous Peoples (NCIP) and the LGUs to mention a few), and several documented cases of environmental damage caused by breakdowns in mining waste disposal systems continue to occur. The contributions of the mining sector to output, employment, investment and exports to the economy have been at best marginal, despite the enormous mineral reserve potential existing in the country. Although the Mining Act was created to revive and enhance the development of the industry, it has not been



effective in achieving this goal as shown by the inconsistent growth of production, its marginal contribution to gross domestic product, exports and employment and the low levels of net foreign direct investment inflows relative to five other economies in the ASEAN region. There may be other factors which affect the performance of the mining sector such as movements in local and international mineral and mineral product prices, but overall, the mining sector's weakness in attracting investments both local and foreign are responsible for its minimal contributions to output growth, employment and exports. The provisions of the law and the revised implementing rules and regulations appear to be comprehensive enough in order to protect the environment and secure a

substantial share of the benefits for the national and local governments. However, the bigger challenge to address is the ability of the Department of Environment and Natural Resources, Mines and Geosciences Bureau, Local Government Units, Bureau of Internal Revenue, National Commission on Indigenous Peoples and other relevant departments and agencies to implement the provisions of the Mining Act. Full implementation and enforcement through the imposition of the prescribed penalties on violations will ensure that the environment is indeed protected, that abandoned mines are rehabilitated and properly decommissioned and that government collects its fair share of the benefits from mining operations.

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