Enhancing ASEAN Minerals Trade and Investment

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Authors:

ABARE

Jane Mélanie, Marina Kim, Sam Hester, Peter Berry, Allison Ball and Karen Schneider

Mekong Economics

Paul Burke, Le Hoa Au Duong and Adam McCarty

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EXECUTIVE SUMMARY

The Association of Southeast Asian Nations (ASEAN) region is well endowed with mineral resources. However, to date, the minerals sector has performed below its potential in the majority of member countries, reflecting a diverse set of regulatory and institutional constraints. In an environment of growing global demand for mineral based commodities, the sustainable development of these resources has the potential to deliver substantial economic benefits to ASEAN member countries. In some of these countries, the mining sector represents a large potential source of government revenue, that could contribute to the resources required to finance social and physical infrastructure to support economic growth and alleviate poverty. In other countries, the development of the sector also provides an opportunity to create a diversified and more resilient economic portfolio.

A. STUDY OBJECTIVES

The key objectives in this study, undertaken jointly by the Australian Bureau of Agricultural and Resource Economics (ABARE) and Mekong Economics Ltd (MKE) for the ASEAN Secretariat, through the ASEAN-Australia Development Cooperation Program (AADCP) Regional Economic Policy Support Facility (REPSF), are as follows:

- identify key mineral commodities in ASEAN in terms of resources, production and trade;
- assess the international market outlook for minerals, including mineral processing activities, and examine ASEAN's actual and potential economic and trade performance in the light of the policy and market environment;
- evaluate current regulatory and institutional arrangements in ASEAN member countries that govern investment, including foreign direct investment, in the minerals sector, and identify the factors determining the attractiveness of investment in that sector; and

- o provide recommendations for enhancing the attractiveness of investment in the minerals sector in ASEAN, taking into account the potential role of regional cooperation.

The focus in this study is primarily on high value globally traded non-energy minerals significant in the ASEAN region. These include metallic minerals such as gold, copper and tin, and gemstones. It should be noted, however, that locally and regionally traded mineral products, in particular non-metallic minerals, often dominate in volume terms in several ASEAN member countries.

B. MINERALS SECTORS OF THE ASEAN REGION

From a regional perspective, ASEAN's role in global minerals production, consumption and trade is currently relatively limited, with the exception of tin, nickel and copper for which the region contributes a significant share of world production and trade. Minerals production accounted for 0.9% of ASEAN gross domestic product (GDP) in 2003. However, within the region, there is significant variation in the composition and volume of minerals produced, reflecting different resource endowments, economic structures and socio-political settings. The contribution of minerals production to GDP is highest in Indonesia (2.3%), followed by the Lao PDR (1.7%), and the Philippines (1.6%).

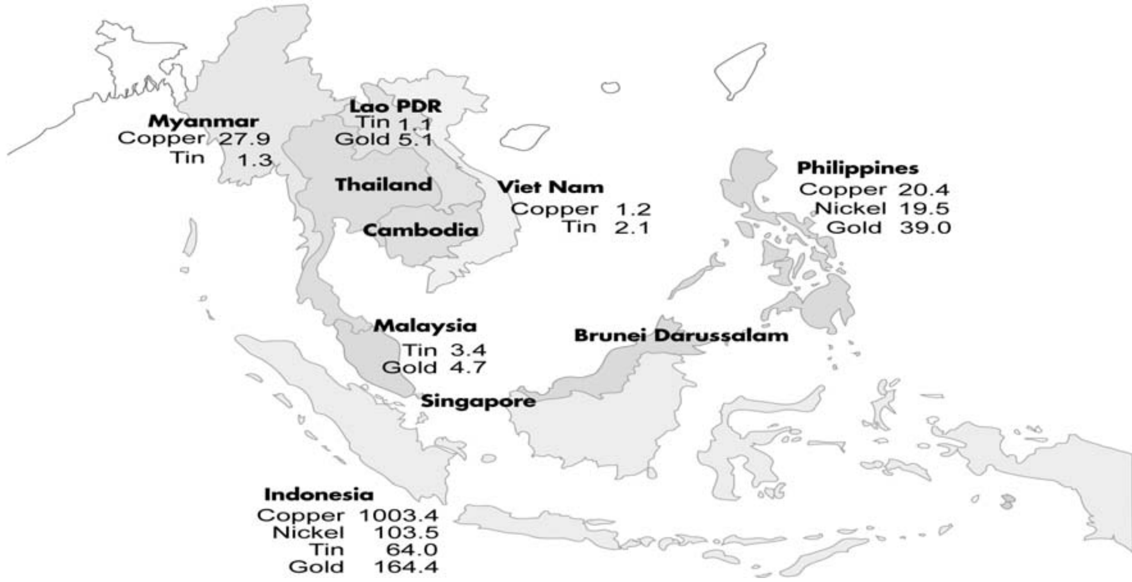
Minerals production in ASEAN is backed by diverse reserves of both metallic and non-metallic minerals. A lack of consistent reserves data across all ASEAN member countries makes it difficult to provide definitive estimates for the region as a whole. Indonesia accounts for a significant share of ASEAN and world mineral reserves, including 7.5% of the world's known reserves of copper, more than 13% of known reserves of tin, more than 5% of known reserves of nickel, and more than 4% of the world's known gold reserves (USGS 2005). Myanmar, the Philippines, Thailand and Viet Nam are also well endowed with substantial mineral wealth.

Different resource endowments, risk profiles, levels of economic development and regulatory and institutional factors account for the considerable diversity in the size and scope of minerals production across countries in the region (Figure 1). Indonesia is by far the largest producer of a number of metallic mineral commodities, mainly as a result of its rich mineral endowment and government promotion of investment in the mining sector. In value terms, the key minerals produced in ASEAN member countries are nickel, copper, tin and gold, with Indonesia being the main producer of these metals. For tin, nickel and copper, ASEAN production represents a significant share of world production, accounting for 29%, 11% and 8% of global production respectively. Other metallic minerals produced on a smaller scale in the region include bauxite, lead, zinc and iron ore. In 2003, ASEAN total minerals production was valued at around US$5.9 billion.

ASEAN member countries are also significant producers of a wide array of non-metallic minerals, including gemstones, gypsum, limestone, kaolin, phosphate rock, sand, gravel and a wide range of other industrial minerals. Non-metallic minerals production is important for the economies of the Lao PDR, Malaysia and Myanmar, and constitutes a significant share of total minerals production in Thailand and Viet Nam.

There are limited processing facilities in ASEAN and most of the production of metallic minerals is exported as ores and concentrates for processing/refining outside the region. However, some mineral processing occurs in the region, particularly of copper, bauxite, lead, zinc and tin. As the largest producer of mineral ores and concentrates, Indonesia is also the main producer of refined mineral products. Some of the refined metals produced locally in ASEAN member countries are consumed by domestic manufacturing and construction industries, although the region generally relies on imports of refined metals to meet consumption requirements.

Figure 1: Production of Key Metallic Minerals in ASEAN, 2003



Note: Production in thousand tonnes; gold production is in tonnes.
Source: World Bureau of Metal Statistics 2005.

ASEAN accounts for a substantial share of world trade in tin, copper and nickel, although its role in world markets for other mineral commodities is relatively minor. In 2003, ASEAN export volumes of refined tin accounted for 58% of world trade, while exports of unrefined and refined copper accounted for 16% and 6% of world trade respectively. In value terms, the key ASEAN minerals exports over the 10 years to 2003 were copper, aluminium, tin and nickel. The value of ASEAN exports of metallic minerals grew rapidly until 1995, largely led by strong growth in copper and aluminium. From this peak, the value of minerals exports declined, to be more than 8% below the 1995 level in 2002, reflecting lower world prices for copper, nickel, zinc and tin over the period. However, world demand for metals rose significantly in 2003 and 2004, resulting in strong price rises for mineral commodities. As a consequence, the value of ASEAN exports of copper, nickel, aluminium, lead, zinc, tin and other base metals rose by more than 62% to US$7.1 billion in 2003 (AFTA 2005). With increased ASEAN minerals production and stronger metals prices, the value of ASEAN minerals exports has risen significantly in 2004 and 2005.

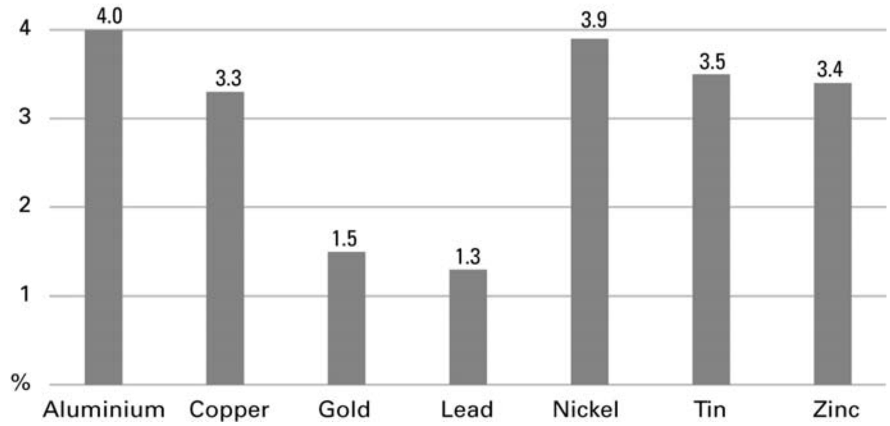
In contrast with metallic minerals, a significant proportion of ASEAN non-metallic minerals production is consumed locally. Some higher value non-metallic minerals, such as gemstones, are largely exported, both to foreign countries and other ASEAN member countries.

C. GLOBAL OUTLOOK FOR MINERALS

Economic growth, supported by growth in the construction, infrastructure and manufacturing sectors, will remain the key driver of world minerals and metals consumption over the medium to longer term. Also important will be continued population growth and rising per person incomes.

Global consumption of most refined minerals considered in this study is projected to grow by more than 3% a year between 2004 and 2010 (Figure 2). The strongest growth in consumption is expected to occur in aluminium, followed by nickel, tin and zinc. World gold consumption is projected to grow at a slower rate, at around 1.5% a year out to 2010.

Figure 2: Forecast Average Annual Growth in World Metals Consumption, 2004-2010



Source: ABARE.

Continued growth in demand in China is expected to be one of the key drivers of world metals consumption in the coming years. In the medium term, China's consumption of all mineral commodities is expected to grow well above the average world growth rates. More specifically, annual growth of more than 10% is expected in China's consumption of nickel, tin and zinc. Aluminium and copper consumption in China are forecast to grow by 9% a year over the period to 2010. The strong demand for minerals in China can be expected to provide significant opportunities for minerals producers worldwide. In 2003, China accounted for close to 7% of total exports of mineral products from ASEAN (AFTA 2005). The expected growth in China's minerals demand represents an important opportunity for ASEAN member countries to become more prominent players on the international minerals scene by taking advantage of their mineral prospectivity, geographical proximity to key markets and relatively low labor costs.

D. INVESTMENT IN THE MINERALS SECTOR

A key determinant of ASEAN member countries' ability to capitalise on future growth opportunities in world minerals markets is their capacity to secure the necessary investment to support long term capital intensive mining projects. Domestic sources of finance are often constrained and unable to satisfy total demand for investment, making minerals sector developments in ASEAN strongly dependent on inflows of foreign direct investment (FDI).

Investment in the ASEAN minerals sector over the past decade has remained relatively limited and concentrated in a handful of member countries. Mining sector investment typically contributes a small percentage of total investment in ASEAN, representing less than 5% of total investment in most ASEAN member countries in recent years. As can be expected, countries with a more established minerals sector, such as Indonesia, have received larger investment inflows than countries where the minerals sector is less mature, such as Cambodia.

Over time, foreign investment has increasingly become a dominant factor in total capital flows in a number of countries in the region. However, while several ASEAN member countries have established minerals sectors built on FDI, the relatively new ASEAN members have opened their doors to foreign investment only recently. Over the period 1999-2003 (the period for which data are available), FDI in the ASEAN mining and quarrying sector was highly variable, with a low of US$635 million in 2000 and a peak of US$1.6 billion in 2001. Similarly, the share of FDI in the ASEAN mining and quarrying sector as a proportion of total FDI in ASEAN fluctuated widely, ranging from 3% in 2000 to 10% in 2002 (Table 1).

Table 1: FDI in Mining and Quarrying, ASEAN member countries, 1999-2003, US$ Million

	1999	2000	2001	2002	2003	1999-2003	Share of FDI in mining and quarrying, 1999-2003[a] (%)
Indonesia	(211.0)	(275.3)	(233.7)	(242.3)	232.3	**(729.9)**	-
Lao PDR	12.2	9.2	2.0	4.8	9.5	**37.7**	1
Malaysia	722.4	677.4	911.1	1,089.0	253.0	**3,652.8**	61
Myanmar	220.2	107.2	111.2	162.9	112.7	**714.1**	12
The Philippines	379.0	79.9	(1.0)	22.3	(7.5)	**472.7**	8
Thailand	(41.8)	(274.7)	518.0	(97.0)	(5.0)	**99.4**	2
Viet Nam	264.6	311.2	298.6	406.7	431.8	**1,712.8**	29
ASEAN	**1,345.6**	**634.9**	**1,606.2**	**1,346.4**	**1,026.8**	**5,959.6**	**100**
Share of total FDI in ASEAN (%)	**5**	**3**	**8**	**10**	**5**	**3**	

a: Indonesia had a negative net FDI flow over the period 1999-2003. The share is not reported to avoid confusion related to the sign of the percentage.
FDI = foreign direct investment.
Note: negative numbers are enclosed in parentheses.
Source: ASEAN Secretariat 2004a.

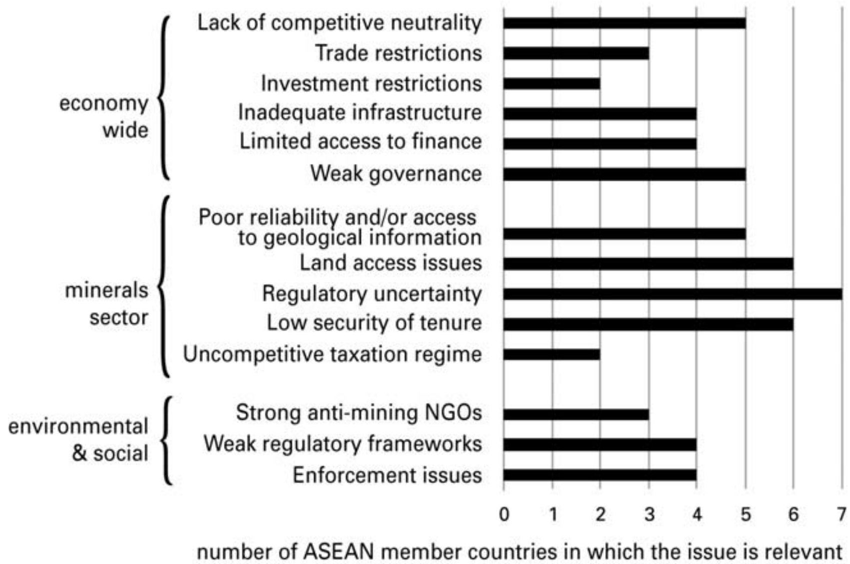
This broad regional profile is underpinned by significant diversity across individual countries. In particular, in the period between 1999 and 2003, FDI in mining and quarrying declined in the Philippines, while rising sharply in the Lao PDR, and more moderately in Myanmar since 2001. Indonesia and Thailand mostly saw FDI outflows from the sector over the 5-year period to 2003. More than 60% of total FDI in ASEAN mining and quarrying was directed to Malaysia and was largely associated with oil and natural gas.

There is a wide assortment of factors that determine a country’s ability to attract foreign investment in the minerals sector. Some factors are common to investment decisions across all sectors. Typically, these relate to the maturity and stability of the political, economic and legal systems in a potential host country, and the availability of infrastructure. Other factors are more specific to the minerals sector and include geological potential, security of tenure, taxation regimes, and access to technologies and skilled labor.

Importantly, environmental and social considerations are also having a strong bearing on investment decisions pertaining to the minerals sector. Poor environmental management during the early development of the industry has tarnished the image of the sector in several ASEAN member countries, giving rise to strong anti-mining sentiments. Further, it is increasingly recognised that much of the environmental damage caused by mining activities has a direct impact on local communities in terms of their livelihoods and health. Against this background, it is becoming increasingly clear that the institutions and systems that countries establish to regulate, manage and monitor the environmental impact of mining operations directly influence the extent of investors’ interest in starting up a particular mining operation.

In view of the general objective to increase FDI in the region, ASEAN member countries have achieved significant progress in liberalising their trade and investment regimes. However, to date, the minerals sector has not been successful in attracting a significant share of total FDI inflows in the majority of ASEAN member countries. This reflects a wide spectrum of economy wide and sector specific impediments that have constrained the development of the sector. An assessment of the key impediments, as identified through the extensive consultation program in individual ASEAN member countries, is summarised in Figure 3.

Figure 3: Key Impediments to Minerals Sector Investment in ASEAN



A key impediment at the economy wide level is weak governance at many levels including weak rule of law, lack of transparency and accountability, and lack of partnership between government and non-government organisations.

In terms of sector specific issues, uncertainty, whether related to the scope and implementation of regulations, the process for obtaining exploration and mining licences, or the resolution of land access issues, represents a significant impediment to investment in many of the countries in the ASEAN region. These factors, combined with shortcomings at the broader economy wide level, contribute to raise the risks associated with mining activities in the region. The higher the risks involved, the higher the rate of return required to attract investment in the minerals sector.

E. POLICY RECOMMENDATIONS

The development of the minerals sector within a country calls for a strong and effective policy framework. Governments are ultimately responsible for the regulatory and institutional settings within which mining takes place in a given jurisdiction, and their actions are critical to achieving sustainable benefits from the minerals industry for the national economy. More specifically, the sustainable development of the minerals sector is contingent on the provision of strategic direction; the requisite legal, regulatory and institutional frameworks to pursue economic, social and environmental objectives; accountability, transparency, and stakeholder consultation; and systems to deliver tangible benefits to the country's citizens.

These conditions are also necessary for attracting the substantial levels of private sector investment, particularly FDI, required to underpin the development of the minerals sector in ASEAN member countries. At a time when globalisation is creating new opportunities for investment and increasing competition for mining capital, maintaining a stable and facilitative policy climate is becoming more important, and more challenging than it has ever been.

Key policy recommendations to address the wide spectrum of shortcomings identified in the report are summarised below. These recommendations are structured within the framework of the ASEAN Minerals Action Plan (AMCAP) 2005-2010. Country specific recommendations to improve the trade and investment environment in individual ASEAN member countries are provided in the Country Reports (see Volume II).

Economy wide recommendations

In order to enhance trade and investment in the minerals sector, governments in ASEAN member countries should address issues at the economy wide level. In particular, governments should:

AMCAP Strategy 1: Facilitating trade and investment

- have a clear sense of direction, vision and purposeful commitment to ensure that there is a level playing field across all economic sectors in terms of fiscal and other economic conditions;
- convey their commitment to the community through targeted and sustained education programs designed to enhance the profile of the minerals sector in terms of its potential economic benefits and environmental performance;
- minimise the involvement of state-owned enterprises in the operation of resources sectors and remove any conflict of interest between the government as a regulator and developer of natural resources;
- remove all non-tariff barriers to trade affecting the minerals sector both directly and indirectly;
- remove restrictions on FDI in order to facilitate further development of the region's minerals sector. In some countries, this would involve removing quotas for domestic investment in minerals sector enterprises. In several other countries, the relaxation of joint venture requirements would also assist to stimulate foreign investors' participation in the development of extractive industries;
- create and maintain an environment characterised by a liberal trade and investment regime and stable macroeconomic conditions;
- reduce the commercial and political risks faced by potential investors;
- strengthen domestic capital markets through the provision of stable and unambiguous regulatory environments;
- consider the consolidation of equity markets across ASEAN member countries. Such a consolidated market would benefit from higher volumes, reduced trading costs and harmonised regulations;

AMCAP Strategy 3: Strengthening institutional and human capacities

- continue to invest in capacity building programs to strengthen the technical, regulatory, legal, commercial and administrative skills of public sector agencies involved in regulation of the minerals and other sectors;
- pay particular attention to capacity building at the local government level in terms of personnel, financial resource management, and intra- and intergovernmental relationships;
- focus on delivering accountable, participative and results-oriented governance outcomes in countries where significant policy reform initiatives are already in place; and
- pursue an integrated and sustainable reform strategy, backed by strong political will and appropriate resourcing.

Minerals sector recommendations

In addition to addressing economy wide issues, governments in ASEAN member countries should address issues that affect the minerals sector specifically. In this context, governments should:

AMCAP Strategy 1: Facilitating trade and investment

- strive to provide high level geoscientific information;
- in the presence of limited government resources, explore the opportunities for partnerships with industry, academia and community organisations to provide that information;
- generate support for collaborative research programs designed to add to the region's mineral reserves by developing ways of finding new ores and extracting currently uneconomic resources in a sustainable manner;
- investigate the potential for donor funding to improve the capacity of ASEAN member countries to collect, compile and disseminate geological information;
- adopt a market based system for determining the optimal allocation of land resources, in cases where property rights can be assigned to particular land uses;
- devote additional resources to the development of regulatory frameworks for allocating and securing property rights over land resources where property rights are not clearly defined;
- where property rights cannot be defined, adopt transparent and consistent administrative processes and procedures to remove the uncertainty surrounding access to land resources;
- ensure that these processes and procedures are flexible enough to allow new information related to mining technologies, for example, as well as changes in economic factors such as minerals prices, to be taken into account;
- ensure that the licensing process is clear, efficient and transparent, while acknowledging that improving regulatory certainty in the minerals sector requires an enhancement of both regulations themselves and institutions that carry out their implementation;
- where laws are vague or incomplete, pay attention to improving their clarity and broadening their scope;
- strengthen institutions to ensure that government agencies are consistent in their application of regulations, acknowledging that improving regulatory certainty in the minerals sector is closely linked to the broader issues of improving governance generally and reducing sovereign risk;
- provide clear information about existing regulations and procedures, including licensing processes, to potential investors in a readily accessible form;
- consider the establishment of a 'one-stop shop' for minerals sector investment;
- consider the potential contribution of the private sector in identifying the weaknesses in existing regulations and procedures and in designing and delivering appropriate capacity building programs;
- ensure that the requirements for investors to proceed from an exploration licence to a mining licence are clear and transparent so as to reduce the actual and perceived

risks involved in allocating substantial capital resources at the high risk exploration stage;

- o specify the conditions under which a title can be revoked;
- o ensure that minerals rights are exclusive, and transferable to other enterprises, provided that all technical, financial, environmental and other requirements are met;
- o move toward mining taxation regimes that are:
  - internationally competitive and allow a fair share of benefits between governments and investors;
  - easy to understand;
  - easy to administer;
  - stable and predictable over time;
  - non-discriminatory;
  - transparent; and
  - provide a level playing field for all participants.
- o consider their minerals sector taxation regimes in comparison with those of countries with more established minerals sectors and countries that have had recent success in attracting substantial capital inflows to their minerals sector (Chile and Mongolia, for example), taking into consideration that the mix of minerals produced, the degree of decentralisation and the level of economic development will affect the composition of minerals taxation regimes across countries;
- o develop taxation regimes for the minerals sector with a full understanding of the international context in which mining companies operate;
- o move toward the adoption of royalty arrangements that are linked to profitability, given the cyclical nature of minerals markets;

AMCAP Strategy 2: Promoting environmentally and socially sustainable mineral development

- o demonstrate their commitment and ability to set appropriate and reliable environmental rules, at acceptable international standards, and to monitor these standards in a credible manner;
- o where the legal and institutional settings are not in place, initiate a process of gradually establishing:
  - a legal basis for environmental regulation;
  - basic institutional responsibilities;
  - essential regulatory frameworks;
  - monitoring and enforcement procedures, including public disclosure; and
  - human and financial resources to address priority issues, taking into account that the methods employed for achieving environmental objectives will vary considerably on the basis of different local, natural, socio-economic and cultural conditions;
- o where the legal and related institutional mechanisms are already in place, focus on the implementation of these frameworks and in finding pragmatic solutions that take into account resource and capacity constraints;

- o work with the private sector to address the environmental liabilities that the mining sector has inherited from past operations;
- o provide strong underlying regulatory regimes to encourage the development of, participation in, and continued evolution of effective voluntary initiatives;
- o consider more explicitly the social impact of mining, particularly on local communities that rely on the natural environment for their livelihoods; and

AMCAP Strategy 3: Strengthening institutional and human capacities

- o seek to improve technical skills in geology, mine engineering, environmental sciences and other disciplines related to the mining sector through regional cooperation initiatives and public-private sector partnerships.

F. THE ROLE OF REGIONAL COOPERATION

The majority of constraints to the development of the minerals sectors in ASEAN member countries are driven by domestic policies. Consequently, most of the reforms required to improve the investment environment in the minerals sector are also domestic in nature.

However, significant potential also exists for regional cooperation to complement domestic efforts to improve the trade and investment environment in the minerals sector. Governments have a role to play in the provision of public goods such as high level geological information, and the facilitation of an enabling regime for private sector investment. ASEAN cooperation in minerals can enhance the ability of ASEAN governments to carry out these functions at both the domestic and regional levels through activities ranging from the development of policy frameworks to the undertaking of joint scientific and economic research. Further, regional cooperation provides an opportunity to benefit from the potential economies of scale and scope in activities such as those involved in undertaking geological surveys.

To date, the role of ASEAN cooperation in the development of the minerals sector has been limited. However, recent advances under the ASEAN minerals cooperation umbrella have generated significant momentum in fostering stronger ties across ASEAN member countries. In particular, the ASEAN Minerals Cooperation Action Plan (AMCAP) 2005-2010, adopted at the first ASEAN Ministerial Meeting on Minerals (AMMin) in Malaysia in August 2005, is poised to become one of the most comprehensive regional minerals cooperation programs in the world. The AMCAP 2005-2010 identifies a comprehensive list of activities and projects to be carried out toward:

- o facilitating and enhancing trade and investment in minerals;
- o promoting environmentally and socially sustainable mineral development; and
- o strengthening institutional and human capacities.

Importantly, the outcomes of the plan will be highly contingent on its effective implementation over the next 5 years. Implementation of the AMCAP will require resources, careful project planning, institutions that are capable of implementing the plan, and ongoing political will in ASEAN member countries.