Exploiting Natural Resources

Growth, Instability, and Conflict in the Middle East and Asia

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PRAGMATIC STEPS FOR GLOBAL SECURITY
Indonesia is blessed with abundant mineral resources which, if managed properly, could provide a strong base for the livelihood of its people. Indeed, the existence of mining projects in Indonesia has often been regarded as a catalyst for accelerating development of infrastructure and increasing community well-being in many areas. This is particularly true for many districts (kabupaten) where local governments generally lack the capacity to provide public services. Several early-generation foreign multinational mining companies, operating for many years in remote rural areas, in some ways have acted as “proxies” for local governments (i.e., districts and subdistricts) in many development areas. The companies created wealth and jobs, delivered public services, and generally improved the welfare of the people. However, their operations have not been without adverse consequences, and problems have increased significantly in the last decade.

In frequency and magnitude, conflicts involving mining operations have intensified since the fall of President Suharto in 1998. As a result, there has been a serious decline in mining investments (see figure 1), with likely long-term consequences for Indonesia. The main goal of this paper is to examine the driving forces behind these conflicts. Understanding them is critical to developing informed future policies and to the sustainable growth of this important contributor to Indonesia’s economy and the socioeconomic well-being of its people.

Indonesia’s Mining Industry and the Impact of Conflict

As a resource-rich developing nation, Indonesia relies heavily on its mining industry. Coal and mineral mining have contributed significantly to the country’s economy and have become even more important in recent years. Mining activities contribute to government revenue and GDP at a higher rate than in other Association of Southeast Asian Nations

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1 Examples are PT Freeport Indonesia in Papua, PT Inco in Sulawesi, and PT Kaltim Prima Coal in Kalimantan.
(ASEAN) countries. In 2000, coal and mineral mining contributed approximately 3 percent of the total government revenue and 3 percent of Indonesia’s GDP; by 2007, this had increased to approximately 8 percent and 4 percent, respectively.\(^1\) The export of ores and minerals increased from US$3.2 billion in 2000 to US$7.2 billion in 2005—an annual increase of 18 percent. In 2005, the amount of exports was still slightly higher than India’s, despite India’s annual export growth of about 41 percent during the same period.

Indonesia is the third largest coal producer in the world, after Australia and China. Coal production in 2006 was more than double its production in 2000.\(^2\) In 2007, revenue from coal made up 70 percent of that year’s US$6 billion mining contribution to government revenue, and Indonesia supplied approximately 26 percent of the world’s coal.\(^2\) The rise in coal production and revenue is in part because its export value has been the highest among mining commodities since 2003, reaching US$6 billion.\(^3\)

Mining activities have been the source of various conflicts caused by policy and regulatory uncertainties over land use and property rights, illegal artisanal mining (artisanal mining is often, but not always, small scale; it can also refer to larger and somewhat coordinated

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\(^2\) Production of copper and gold showed a slightly declining (or at most, steady) trend from 2000 to 2006, and tin and nickel a slowly increasing trend.

\(^3\) In comparison, the export value of copper was around US$4.6 billion.
mining operations that are not associated with legal mining companies), pollution and environmental impacts, and uncertainty surrounding the livelihoods of local residents after mining closure.[3] These conflicts are being exposed and have become more pronounced under the current structure of decentralization of authority to local governments, and a substantially freer social and political environment.

Since 1999, these tensions have hampered new legal investment in the mining sector. There have been almost no new mining contracts since 1998,[4] and, as shown in figure 1, investment has plunged from approximately US$1.9 billion in 1998 to US$0.2 billion in 2001. Total investment has bounced back again since 2002, but the amount in 2006 was still far below the levels in 1997 or 1998. Furthermore, most investments were earmarked for maintenance and expansion of production under existing contracts.[5]

Land Use and Property Rights

Policy and regulatory uncertainties and overlapping land use and property rights have created conflicts between mining and forestry concerns, central and local governments, and mining interests and local communities.

Mining versus Forestry

Mining activities in Indonesia are currently governed by an outdated law (Law 11/1967 on the Basic Provisions of Mining). On state forest lands, the mining industry must also comply with Forestry Law 41/1999.4 As two-thirds of the nation’s land area is recognized as forest lands (Kawasan Hutan) and is under the control of the Ministry of Forestry, this law is of critical importance for the issuance of mining rights or licenses. Much of the most commercially viable mineral ores and metals are found in forested areas, particularly in areas that are categorized as protected forests,[6] but the Forestry Law strictly prohibits open-pit mining activities in protected forests. This has severely limited the development of the mining industry in such areas. Prior to 1999, forest lands’ uses and development were governed by the Basic Forestry Law (Law 5/1967), which did not contain prohibitions for mining activities in protected forests. Conflict between the mining and forestry sectors is thus almost certain to develop.

On the one hand, proponents of conservation applauded the Ministry of Forestry’s effort to maintain the functions of protected and conservation forests amidst strong pressures from the business mining sector. On the other hand, this new policy is seen as a major setback in the government’s effort to lure investors into the mining sector. This legal uncertainty has

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4 On private lands, these activities are regulated by Law 5/1960 on the Basic Provisions of Agrarian Principles.
deterred many potential investors: between 1999 and 2005 there were no new investments in exploration activities.[7]

Fierce lobbying by the mining sector resulted in the issuance of Government Regulation in Lieu of Law 1/2004, later formally strengthened to become Law 19/2004. This law clarified that all mining contracts or licenses made prior to the issuance of the 1999 Forestry Law remained valid. As a result, 13 mining companies that had acquired a mining contract or license for protected or conservation forest areas before the enactment of the 1999 Forestry Law[8] were allowed to continue with their activities.[9] To maintain the level of protection and conservation, however, the government issued a regulation requiring companies to compensate for land lost to mining activities with a certain area of forested lands. Mining interests saw this requirement as a further barrier because compensation had to be in the form of land, and they continued to lobby the government. In 2008, a new regulation (PP 2/2008) changed the form of compensation for mining activities to money, but environmental and community NGOs strongly oppose this development. They consider the “rent” for land leased to mining companies too low. More fundamentally, they object to forsaking the protected forests.

The saga of changing government policies in the forestry sector reflects the fluidity and uncertainty of regulatory frameworks that govern mining activities in Indonesia and the growing power of conservation interests as they intersect with mining.

**National versus Subnational Governments**

Another uncertainty of the regulatory environment involves mining license authority. As many aspects of government administration are decentralized, authority over these licenses has devolved to local and regional governments, which have also been empowered to apply certain levies and taxes. Thus, all levels of government may issue mining licenses and apply certain levies/charges. This has added to the confusion and legal uncertainty over mining rights. For example, in 2008, a local government issued a license to a third party for a nickel mining area that had previously been secured for Rio Tinto Ltd. by the national government. Rio Tinto sued the local government in question.[10]

**Conflicts with Local Communities**

As in many other countries, mining activities in Indonesia have a long history of socio-cultural, economic, and environmentally driven conflicts between mining operators and local and/or indigenous communities.

In Indonesia, much of the conflict is triggered by the allocation of mining permits or contracts to companies on community or indigenous lands. Land tenure rights are at the heart of the problem. According to Indonesia’s constitution, all of its land is controlled by the state, and while customary (adat) or indigenous lands are recognized, it is on the condition
that their use is not in conflict with national interests. In rural areas of the outer islands, land certificates are not the norm; rather, land rights are recognized traditionally and informally within and among local and/or indigenous communities.

Through the New Order period (the Suharto years, 1966–98), the national government granted many timber and mining concessions to large-scale companies—mostly without communities’ consent or consultation and proper compensation—on lands where traditional and indigenous communities have dwelled, earned their livelihood, and practiced their cultural heritage for generations. As a result, conflicts abound when these mining operations trespass or excavate communities’ villages, hunting areas, gardens, farms, or burial and sacred grounds. Problems also occur when large-scale operations force out artisanal local miners.[11] Furthermore, there is an issue of equity. Most mining revenues accrue to the national government, and employment of local population in the mining operations is often marginal.

In recent years, conflicts appear to have escalated in number and intensity, facilitated by a more open and democratic environment and the support of NGOs, which have consequently become more powerful themselves. In particular, conflicts increasingly revolve around environmental issues, amplifying the social problems in and around mine areas.

Illegal Mining

The stigma surrounding illegal mining is closely associated with the way Indonesia controls its natural resources. Article 33, point 3, of the country’s constitution mandates the state to “control and exploit all the lands, waters, and natural riches contained therein for the greatest benefit of the people.” This article is the foundation of the state’s control right (Hak Menguasai Negara) which has inspired subsequent mining laws. This document defines illegal mining as “…mining business conducted by a person, group of people, or company/foundation which has legal entity, which in its operation does not hold a legal government permit.”[12] In Indonesian terms, these miners are often called PETI (Penambang Tanpa Izin, or mining without permit).

Around 90 percent of artisanal mining is regarded as illegal.[13] Under the current Mining Law (Law 11/1967), the state explicitly allows members of the local population in possession of a mining authorization (permit or Kuasa Pertambangan) to exploit minerals in areas designated by the Ministry of Mines to have no economic significance. These activities are called “people’s mining” (pertambangan rakyat) and are defined as follows: “…the mining activity conducted by the locals on a small scale or in collectives with simple tools

5 Mining Law 11/1967 clearly specifies the risk of imprisonment for a maximum of 6 years and/or an IDR 500,000 (US$55) fine for illegal activities.
for their own income.” Because of license processing difficulties—mainly slow, complicated, and expensive red tape—these miners are often reluctant to obtain permits. Thus, they automatically become engaged in mining activities considered illegal.

Although obtaining illegal mining data is not easy, researchers believe that these activities have a significant impact on the country’s mining industry. Some data show that in the mid-1990s there were approximately 77,000 illegal mines in Indonesia with around 465,000 employees. Indonesia’s Central Bureau of Statistics recorded average informal sector employment in mining from 1997 to 2002 as 324,000. This figure is about 10 times higher than the average number of legal mining workers—34,000—in the same period.

Trends behind the Rise in Illegal Mining Activities

Illegal mining activities increased significantly following the 1998 economic crisis and resulting unemployment, and expanded further due to the decentralization and reformasi following the fall of Suharto in the same year. A rise in world ore and mineral prices since the late 1990s also contributed to this increase. For example, in the Pongkor gold mine in West Java Province, the number of gurandil—the local term for illegal gold miners—jumped from 500 in the early 1990s to 8,000 in 1998–2000. The spike followed massive unemployment created by the closing down of many manufacturing industries in the Jakarta-Bogor-Tangerang-Bekasi areas and the increase in the price of gold on the world market.

Overlapping authority and conflicts of interest between departments or even between the central and local governments in dealing with illegal mining problems have also played a part. In South Kalimantan, PETIs have been indirectly or informally supported by the district head (bupati), since these miners have contributed more revenue to the region than the existing state-licensed mining companies. These bupatis have openly granted mining authorization to local miners within the mining companies’ concession areas. Meanwhile, the central government, which grants mining concessions to the large companies, regards these local miners as illegal. At various levels of government, regulations were developed to collect these fees, and whoever fails to meet any of these regulations falls into the illegal category. Because of the confusion created by overlapping authority over mining concessions, the term “illegal mining” has become blurred and ambiguous.

In the last decade, lenient sanctions for violations and inconsistency in implementing regulations have also contributed to increased illegal mining. In general, the government rarely enforces its illegal mining regulations and policies. Of the numerous cases of arrest and equipment confiscation by the police, only a few select cases were actually brought to trial,

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6 This was made possible by clauses of Government Regulation 75/2001 on the Implementation of Mining Law, which referred to Law 22/1999 on Decentralization/Regional Autonomy, where local governments are authorized to issue mining licenses.
in large part because the government treats various minerals differently based on strategic, vital, and other uses. Illegal tin mining is not the same as illegal diamond mining. Moreover, several environmental NGOs have accused the government of exercising a double standard, of only wanting to curb illegal operations within big mining companies’ concession areas, as in the case of Indo Muro Kencana’s gold mine in Central Kalimantan. [20]

Finally, widespread illegal mining is also the result of local resistance to government regulations. Perceiving that they have been treated unjustly for decades with regard to the mining situation, local people show little reluctance to defy government policies and regulations. They argue that all articles regarding people’s mining in Mining Law 11/1967 are designed to restrict, rather than to promote, its existence. [21] People’s mining is certainly prohibited from operating in large-scale mining companies’ concession areas. Meanwhile, large-scale miners are not prohibited from operating on indigenous lands.

**The Role of Illegal Miners**

In terms of production, illegal miners cannot be regarded as insignificant players. Indonesia’s coal mining company, PT Arutmin, recorded that in South Kalimantan during 2001–03, PETIs have “looted” some 28.2 million tons or an average of 9.4 million tons of coal per year, which is almost equivalent to Arutmin’s 2002 production of 10.5 million tons. This means a loss of IDR 513 billion in royalties for the government, or approximately IDR 1.3 million per person if the money were to be distributed evenly among the 3 million people living in South Kalimantan. [22] About 40,000 tons of tin sand were produced by illegal mining (tambang inkonvensional [TI]) in Bangka-Belitung in 2001, a similar amount to the production in the same year of a state-owned tin company, PT Timah. [23] With a world demand of 200,000 tons of tin per year, this illegal mining production certainly affected the stability of the world’s tin prices and the company’s financial performance. [24]

The Indonesian government tends to deal only with the symptoms of illegal mining, and is generally reluctant to probe the core problems associated with it. This has created an opportunity for neighboring countries’ business players to obtain minerals cheaply from Indonesia without having to internalize the sociocultural, economic, and environmental externalities that would come from mining on their own soil. Most illegal mining operations are funded by foreign investors. It is highly unlikely that, given the annual national income per capita of US$725, locals would be able to self-finance billions of rupiah of mining operations involving trucks, excavators, 20-horsepower machineries, smelters, and even ships. Along the coasts of Batulicin, South Kalimantan, mountains of illegal stockpiles of coal abound, and barges line up to ship coal to investors’ destinations, mainly China and India. In Bangka, tin smelters—with the exception of Timah’s—are mostly funded by smelting companies based in Singapore and Malaysia. In 2002, the Indonesian government banned export of tin sand. Consequently, low concentrated tin sand has to be processed in Bangka-
Belitung prior to shipping it to Singapore and Malaysia. Establishing smelting facilities to process this tin is expensive.

Like other illegal activities, such as drug smuggling or illegal logging, the financing chain of illegal mining is always covert. Links between operators and the fund provider are difficult to trace. In the case of Bangka, investors assigned local figures to recruit former farmers, fishermen, or the unemployed and to pay them for mine work. In Pongkor, illegal gold miners (gurandils) only knew that some rich locals paid for their operations and that they were obliged to sell their gold to them. In fact, these rich locals were just intermediaries, people employed by some unknown bosses in the city. When it comes to arrests and confiscations, these investors have always managed to escape detection.

**Socioeconomic Impacts of Illegal Mining**

There are strong financial incentives for the locals to conduct these illegal mining activities since they have—at least so far—significantly supported local livelihoods and contributed to the local economies. For example, gurandils in Pongkor helped both locals and immigrants survive the 1998 economic crisis and transformed the area from quiet, shabby villages into lively, populated areas with permanent buildings and vehicle ownership. A similar situation occurred in Bangka, where new, permanent houses flourished along the new road following an increase of illegal mining in 2001. In South Kalimantan, the Banjarese (the locals of the region) charter a Boeing 737 at least twice a year to take them to Jakarta, en route to their umrah pilgrimage to Mecca, Saudi Arabia. There is no doubt that illegal mining has benefited some poor and rural people. By engaging in these activities, they can develop their capacity, realize their economic potential, and overcome the challenges that arise from limited access to subsistence resources.

But the presence of illegal miners increases conflicts among people in the surrounding areas. In Pongkor, for example, gurandils have always been associated with community conflict and social unrest. They frequently fight over mining territories. On many occasions, the role large companies play in tackling illegal mining causes conflict. Having been granted a concession by the state, some companies want to rid their mining sites of local miners. This often leads to violence as companies try to assert and maintain control over production, resulting in loss of land, livelihood, and above all, human life. Bringing in the military or police can complicate the situation. In a struggle between illegal miners and Freeport McMoran in Papua, for example, there have been indications that the military, while making a show of protecting the company from illegal gold mining activities, is actually behind the illegal miners.

Alcohol abuse and prostitution have been associated with illegal mining. There are also instances of child labor. For example, some 10 percent of illegal miners in Kalimantan are
under 17 years old. These children are more susceptible to health risks and accidents as well as physical and psychological problems than their adult counterparts. Community leaders and local people are concerned about the social impacts of illegal mining.

The problems associated with illegal mining in Indonesia lead some to consider legalization. It is often compared to prostitution: you cannot stop people from doing it, but you can make them do it safely. Perhaps the authorities and mining companies in Indonesia could take Benguet’s Acupan Mining Partnership in the Philippines as an example. This project enables a large-scale operator and small-scale gold miners to be grouped as mining cooperatives and work together legally. Benguet Corporation acknowledges the existence of small-scale miners in its area of operation and assists them with safer and environmentally friendly operation methods, as well as agreeing to purchase their gold. In return, the small-scale mining community agrees to foster harmonious coexistence with the company, to protect the environment, and follow certain health and safety measures. The government also takes part by setting rules, regulations, and measures to accommodate the project, and oversees their implementation. This tripartite agreement is considered a success by many. Project manager Angelito Gomez reports that since the launch of the project in 2002, it has provided employment to 1,000 local residents, 800 of whom are small-scale miners from Acupan and the surrounding bays. He adds that the project has managed to improve the company’s performance, improve the community’s quality of life, and minimize illegal and destructive gold extraction.

On the one hand, illegal mining provides a breeding ground for social, economic, and health problems. On the other, it creates more employment than formal mining operations and accommodates those at the lower end of the economy. There are still ambiguities in the way the government, NGOs, politicians, and local societies define and take positions regarding these activities.

Environmental Issues

Large-Scale Mining

Conflicts between local communities (often supported by NGOs) and mining operators—both domestic and foreign—typically occur over pollution or environmental destruction caused by mining activities. In general, mining operators are accused of being irresponsible in managing environmental damage caused by their activities. As Indonesia’s social and political environment becomes substantially freer (as in other Southeast Asian countries in general), cases of social conflict arising from pollution and environmental destruction are receiving more public attention, and thus are of increasing concern in the mining sector.

Environmental violations occur despite government regulations that require companies to satisfy certain environmental standards. For instance, companies are required to undertake
an environmental impact assessment (EIA) prior to the establishment of their operations. However, EIAs are frequently only an on-paper exercise; even appropriate EIAs do not necessarily lead to effective enforcement. Furthermore, foreign mining companies operating in Indonesia and other Southeast Asian nations often apply a double standard of environmental criteria.\[32\] The companies are largely enabled by slack enforcement associated with a range of factors, including inadequate capacity, ineffective regulatory oversight, and the absence of good governance.

Some of the environmental damage associated with large mining companies in Indonesia is the result of tailing, waste rocks, and acid leaching. These wastes poison surface water and groundwater with a high level of toxicity that harms aquatic plants, wildlife, and other organisms. In the American-owned Freeport mine area, one of the world’s largest gold and copper mine operations, sites of significance for the indigenous Amungme people, including Lake Wanagon, have been completely destroyed and replaced by waste rock. The waste and pollution of the mine have also caused vegetation smothering, heavy metal accumulation in plants and wildlife, estuary habitat destruction, and contamination of the estuary food chain.\[33\] Ecological balance within and around mining areas is at stake. A study indicated that at least 8,000 species of plants are found within Freeport’s area.\[34\] Freeport’s mining operation threatens the majority of species, as well as putting a heavy environmental pressure on the Lorenz National Park, a World Heritage site that wraps around the area.

Other foreign mining operations share Freeport’s environmental report card. Recently, Newmont, an American gold mining company operating in Eastern Sulawesi, was taken to court by domestic NGOs, accused of discharging tailings with dangerous levels of mercury into the nearby Buyat Bay. An Australian-owned gold and silver mining company operating in Central Kalimantan, PT Indo Muro Kencana (a subsidiary of Straits Resources), has produced over 48 million tons of waste rock in its 14 years of operation.

Open-pit mining, also known as opencast mining, open-cut mining, or strip mining, is the common practice in Indonesia and creates significant environmental destruction. The removal of trees, animals, and soil from a huge coverage area upsets the ecosystem. Reclamation is only conducted in small areas where the soil has been reallocated, and often it is done carelessly, for example by planting nonnative species. Large ex-mine areas are abandoned without bringing in new soil, leaving the land virtually infertile. Coal mining operations in Kalimantan are a particular concern, since they cover a huge forest area.

**Illegal Mining**

Illegal mining operations have also caused environmental problems. For example, in South Kalimantan, illegal mining activities cause hillsides and hilltops to be carved away,
resulting in substantial soil erosion and sedimentation in streams as well as acid rock drainage in some areas. Dumps of mercury, cyanide, oil, garbage, and tailings along the riverbanks are also a problem. Over 1 million hectares of land area in Kalimantan have been destroyed by local illegal mining activities.\[35\]

The land in Bangka Belitung is heavily damaged, with huge holes filled with standing turbid water everywhere. In the last 10 years, fishermen in the area have often complained about the significant drop in their catches because of the presence of floating tin mining vessels (TI apung). Rivers in the Pangkalpinang area are no longer swimmable because they are heavily polluted with solar fuel and soil, not to mention sedimentation.

The “rat” tunnels or holes created by illegal miners in Pongkor cause landslides and erosion in the nearby Gunung Halimun National Park. The mercury they use in gold processing pollutes the Cikaniki and Ciguha Rivers—important water sources for 16,500 residents.\[36\] In Sawahlunto, West Sumatra, hundreds of hectares of the areas exploited by illegal coal mining are subject to flooding because of the lack of rehabilitation work.\[37\]

There are also health-related concerns. Illegal miners often operate in poor conditions. Mining is dangerous work, and safety standards are often neglected.\[38\] Adnan (2005) records that gold miners in Kalimantan never use diving equipment or protect their bodies with wire while diving to the bottom of the river. These miners rarely wear gloves and allow their skin to be in direct contact with hazardous mercury and often inhale it; never put on ear caps, despite 6 to 8 hours nonstop exposure to loudly vibrating mechanical sounds; never wear boots or other protective gear when submerged in river water; drink mercury-contaminated river water; and prefer to see a traditional healer (dukun) than a doctor to cure them when they are sick. To make things worse, there is a lack of official government data revealing the health impacts of illegal mining, or the number of fatalities caused by mining accidents. Many accidents at illegal mining sites are not reported, and most injured miners do not receive proper medical attention.\[39\]

Environmental degradation in mining sites not only affects the workers but also their families and others in the area. Women and children are exposed daily to toxic fumes and poisonous water even though they do not work at the sites. In some places, including Tatelu, North Sulawesi, women work in mining, crushing ore at the plant or managing the whole operation.\[40\]

**Mining Closure**

What happens in post-mining operations in Indonesia and other parts of the world is no less critical than what takes place during the operational period. Mine closures involve significant safety, environmental, economic, and social risks. In developing countries like
Indonesia, the closing of mine activities creates more complex and serious problems than in developed countries. In many of Indonesia’s mining areas, local governments often lack development capacity. The closure of mining companies in such areas often means the end of a significant economic driver, which could lead to social and economic disturbance, or even collapse. In particular, it can lead to job redundancy, the absence of a regional economic driver, the discontinuation of company service delivery and outreach programs, a drop in government revenue, and environmental degradation. Such chaos occurred when tin mining operations closed in the Bangka and Belitung islands.\[41\]

There is also a justice issue. Local people receive only limited revenues, while mining operators get high revenues during the extraction period of the mineral. When the mineral supply is depleted, mining operators abandon the area with no means of survival for the locals. Mining operators, the government, and local communities have debated what should be done about this as well as about the extent of environmental reclamation required prior to the closure of the mining operation.

Mining closure has recently become a serious issue because most of the major companies operating in Indonesia are governed by the early generation of mining agreements (contract of work), which rarely have clauses relating to closure.\[42\] The draft of the new mining law (Mineral and Coal Mining Law or UU Minerba) contains clauses on mine closure. However, the draft has been under discussion in Parliament for several years, and at the time of this writing, it is still not clear when it will be passed.\[43\]

In the absence of closure regulations, civil society and the government impel mining companies in Indonesia to adopt corporate social responsibility (CSR) best practices that follow sustainable development principles and include comprehensive closure plans. CSR practices address integrative programs toward long-term ecological health, strengthening local economies, and improving community well-being, which simultaneously promote sustainable livelihoods after the mine closure. In pushing forward the implementation of CSR, the government of Indonesia promulgated Investment Law 25/2007. This law obliges investors operating in the country to carry out CSR.\[44\] In addition, Corporation Law 40/2007 specifically mandates extractive industries to adopt CSR.\[45\] This law also elaborates sanctions for noncompliance. The spirit of CSR is working together among government, companies, and communities to promote sustainable livelihood for all; corporations are not expected to take over the responsibility of the government in providing welfare to the people.

Under decentralization, in response to the augmented power of local authorities and local stakeholders, mining industry CSR practices need to balance the diverse demands of communities and the imperatives of protecting the environment. In doing so, the CSR practices must recognize newly empowered stakeholders (such as indigenous peoples); identify the interests, concerns, and objectives of all stakeholders; provide transparent and accountable
information on the mining operation to them; and recognize the need to balance or accommodate different interests.\[46\]

PT Kelian Equatorial Mining (KEM), one of the few mining companies in Indonesia to have recently closed its operation in 2004, provides a valuable lesson. KEM had tried to engage its CSR programs well in advance of its closure and had taken an integrated social and environmental approach in its closure process.\[47\] Nevertheless, conflicts occurred.\[48\] Under a decentralized system of governance such as in post-Suharto Indonesia, where local stakeholders have gained increased powers, companies that seek community acceptance of their operations face a situation in which collective social performance demands, such as compensation, environmental mitigation, and employment opportunities, cannot be established in an appropriate and timely manner. This kind of situation can drive a company into a “vicious trap” of having to cope with a wide range of demands from local stakeholders.\[49\]

It is not clear whether the implementation of CSR can help mitigate the challenges associated with mining closure. Clear written guidelines of the detailed actions undertaken within the CSR framework have not been established, and monitoring of CSR implementation is weak. In practice, mining companies are implementing CSR to varying degrees. So far, there are very few cases of mining closure in Indonesia that have not had a shocking impact on the livelihood of the local people and that have not caused environmental degradation in the affected areas.

**Conclusion: The Way Forward**

In the last three decades, mining has had increasing significance in the Indonesian economy. Compared with other Southeast Asian countries, its contribution to the Indonesian economy is substantial. It has also played an important role in the world’s supply of strategic ores and minerals, such as coal, tin, and copper. With the world’s looming energy crisis, coal mining has probably become the most important mining operation in the country. However, mining operations are a source of substantial conflict with adverse social and environmental consequences. Since the early 2000s, the conflicts have become worse in number and severity, affecting the development of the country’s mining sector, and ultimately its overall economic performance.

Primary sources of conflict are policy and regulatory uncertainties over land use, property rights, and authority over mining licenses. These uncertainties have created a continuing tug of war between the Ministry of Forestry and conservationists on one side, and the Ministry of Energy and Mineral Resources and mining companies on the other. The uncertainties have also induced conflicts between central and regional governments over who has the authority to issue mining licenses. These uncertainties and overlapping authorities are
exacerbated by the issue of community land tenure, which was largely ignored during the New Order period (the Suharto years). Clearly the issues of land use and clear property rights need to be resolved to maintain existing investments in the country, as well as to secure new investments.

Secondary sources of conflict are illegal mining activities. Illegal mining is caused partly by regulatory uncertainties—notably those associated with the lack of secured and guaranteed property rights on the part of local communities—and partly by weak implementation of regulations, conflict of interest on the part of authorities, high financial incentives, and the burdensome process of obtaining a license. These complex issues suggest that there is no silver bullet to overcome the problem. One possible avenue might be to legalize these activities and provide guidance on operating safely and coexisting with the large mining operations in the area. Even though there are clearly huge challenges to pursuing this option, and it might not eliminate all conflicts, it should be considered.

The third and fourth major sources of conflict are environmental destruction caused by mining operations and the “leftover” condition after mining closure. In general, mining operators have historically been irresponsible in mitigating the environmental impact of their activities and in handling the socioeconomic and environmental conditions after a mine closure.

To resolve these challenges, at least four goals must be pursued. First, the government must create consistent standards and regulations, and insist on consistent implementation and monitoring. Second, government and mining operators should be more transparent and accountable in providing all socioeconomic and environmental information about mining operations. Third, all stakeholders, particularly mining operators, should take shared responsibility for the socioeconomic and environmental repercussions of mining activities. Fourth, distribution of revenues from mining operations among various stakeholders should seriously take into account equity and justice considerations from the perspectives of these stakeholders. In a democracy, it is important that mining operators obtain a “social license” from the locals. Appropriate sociocultural considerations have increasingly become key to successful mining operations in Asia. While this is not easy, government and the private sector should move forcefully in this direction.

Some of the mining contracts or licenses issued under the New Order period have now expired and are bound to be extended. New investors are also attracted to the potential in the region. A new mining law is currently under consideration that will incorporate the various issues encountered in this sector, and changes that have occurred, since the enactment of the 1967 law. The new law is expected to provide legal certainty regarding licensing, land acquisition, and security, as well as to improve coordination among the different arms and levels of government. Having the “right” new mining law is, however, only a first step in resolving the many conflicts that plague Indonesian mining activities and areas.
Notes

Water Resource Management Challenges in the GCC Countries: Four Scenarios

2. Ibid.
10. Ibid.
16. Bahrain: 85 BCM; Kuwait: 335 BCM; Oman: 340 BCM; Qatar: 220 BCM; Saudi Arabia: 15,830 million cubic meters; United Arab Emirates: 2,483 million cubic meters.

The Political Economy of Forest Management in Pakistan


**Socioeconomic Conflicts in Indonesia’s Mining Industry**

4. Ibid.
5. Ibid.
24. Ibid.
32. Ibid.
33. WALHI 2006, op. cit.
43. Cesare and Maxwell 2003, op. cit. See also Wiriosudarmo 2001, op. cit.
44. Article 15.
45. Article 74.

Making the Connections: Water, Forests, and Minerals Exploitation in South and Southeast Asia

2. Oxfam America, Small Scale Gold Mining in Cambodia: A Situation Assessment (July 2004).
6. Ibid.
11. Interview conducted by the author in the Philippines, August 2008.
13. Interview conducted by the author in Indonesia, July 2008.
18. Interview conducted by Kendra Patterson in Bangladesh, September 2008.
22. Interview conducted by the author in the Philippines, August 2008.
23. Interview conducted by the author in Indonesia, July 2008.
24. Interview conducted by the author in Indonesia, July 2008.

**Natural Resources and the Development-Environment Dilemma**


2. Ibid.


