Illegal Gold Mining in West Java - Can Antam’s Community Development Programs Win Over Cynical Locals?

Overview

Ever since the government-owned Indonesian mining giant, Antam, started gold mining operations in Pongkor Mountains in the early 1990s there has been a constant tug-of-war between the mining company and small-scale miners operating illegally within Antam’s concession zones. When the Asian Financial Crisis hit in 1997, Indonesia’s economy collapsed, but a change of government and raft of new reforms meant that illegal miners could operate with almost total impunity, and illegal gold mines spread like wildfire across West Java. In an attempt to rein in these operations, Antam worked with government authorities and law enforcement agencies, and launched a series of initiatives that aimed at engaging all the main stakeholders. Although these initiatives were successful in eliminating much of the illegal operations, the regional economy has taken a serious downturn, and locals and former illegal miners feel like they’ve been abandoned by both Antam and the government.

Geography and Demographics

Nestled in the Pongkor Mountains, Pongkor mine is located in Nanggung sub-district of Bogor Regency, in the province of West Java (see map on page 3). Varying greatly in altitude, from 375 to 850 metres above sea level and mostly covered by lateritic soil, Pongkor mines are about 38 km south of Bogor and about 100 km south of Jakarta, and are accessible by sealed road (Basuki et al., 1994). Established in 1981, the sub-district Nanggung consists of 10 villages covering an area of 109.99 km² and has a population of 74,211 (Budidarsono et al., 2006). The three major villages directly involved in gold mining activities are Bantar Karet, Cisarua, and Malasari, but Bantar Karet is the most active.

West Java

According to Indonesia’s 2005 Socio-Economic Survey, West Java’s population is 39,960,869, making it the most populous province in Indonesia. Apart from the province of Jakarta, it is the most densely populated province in the country with an average of 1,150 people per km² and an area of 34,736 km².

Summary of Issues

- Following the fall of Suharto’s New Order Regime, the new, more democratic government introduced reforms dismantling the nation’s autocratic governing style.
- This devolution of power led to major confusion and inconsistencies between central and local government policy with the mineral resource management legislation being no exception.
- Illegal mining operators exploited this lack of ‘synchronicity’ between central and local government policy and poor law enforcement, opening up illegal mining operations across the Indonesian archipelago.
- Illegal mining operations spread quickly in the Bogor Regency of West Java as this area holds rich gold deposits, particularly on Antam’s Pongkor Mountain concession zone.
- Since the turn of the millennium, Antam, government authorities and law enforcement agencies have made a concerted effort to shut down these operations, yet despite some community development programs many locals feel disillusioned and abandoned.

¹ A regency or kabupaten is one administrative level below provincial government. Regencies are made up of sub-districts or kecamatan which are divided into administrative villages or kelurahan.
Overview of Antam’s Mining Operations

In April 1992, the state-owned mining company PT Aneka Tambang (Antam) was granted a mining exploitation authorisation by the provincial government called KPDU893 or Kuasa Pertambangan Daerah Umum, allowing them to mine the Pongkor site for a 30-year period. Initially covering an area of 4,058 hectares, the operational site stretches across 105 hectares of Gunung Halimun National Park, and extends into Perhutani Unit III concession zone, a government owned area including 275 hectares of protected forest and 2,025 hectares of production forest. The rest of the mine site falls under 1,653 hectares of community land.

The first gold deposits weren’t discovered until 1981, when geologists were prospecting for minable zinc and lead ores and they accidentally hit a vein of quartz\(^2\) containing 4 gpt (grams per ton) of gold and 126 gpt of silver (Basuki et al., 1994). Even though gold mined from this region is considered among the finest in the world, the Dutch colonialists had no idea the deposits existed despite the fact that they had been mining gold in the surrounding areas of Cikotok and Cikondang since the 1800s.

It’s estimated that the Pongkor deposit holds about 6 million tons of wet rock, containing an average gold concentration of 17.14 gpt and an average silver concentration of 154.28 gpt making it Java’s largest gold reserve (Maret, 2004). Antam started developing its mining operations back in 1992 and by 1994 the mine sites were operational, with start-up costs running at about 100 billion rupiah (IDR) or around USD 10 million (Irawan et al., 2005). By August 2000, Antam had officially expanded its mining area in Pongkor to cover 6,047 hectares, adding another processing installation at Ciurug, to the south-east of the Pongkor concession zone (Directorate General of Mineral, Coal, and Geothermal, 2004).

\(^2\) Veins of gold-bearing ore occur most commonly in cracks and fissures in igneous rock. It is thought that the gold and its associated minerals are precipitated from superheated fluids forced upward from the depths of the Earth. In these hydrothermal deposits, gold is often associated with quartz or various sulfides.

History of Bongkor

Back in 1492 Bogor was part of the Siliwangi Kingdom and was ruled by Prabu Siliwangi (“prabu” means “king”). But long before that, in 450 A.D., it was part of Tarumanegara, the very first Hindu kingdom in the Java Island, and the second in Indonesia after the Kutai kingdom in Kalimantan. The most popular king of Tarumanegara was Purnavarman who ruled around the 5th century. It was during his reign when the kingdom reached its golden era.

Bogor now houses numerous stone “prasasti” (inscriptions) from both the Tarumanegara and the Siliwangi kingdoms. These inscriptions, scattered throughout the urban, suburban, and rural areas of Bogor, are written in Sanskrit language using the Pallava writing system.

For further information visit the Artisanal and Small-scale Mining in Asia-Pacific Portal on http://www.asmasiapacific.org
A History of PT Aneka Tambang Tbk.

PT Aneka Tambang Tbk (Antam) is a state-owned business entity with total mining concessions of approximately 363,846 hm² and is the only state-owned mineral exploration company in Indonesia (Irawan et al., 2005). Founded in July 1968 and holding an estimated IDR 6,420.71 billion (USD 705.57 million) worth of assets, Antam specialises in a number of key areas including mining and mineral processing, and marketing and trading, focusing mostly on gold and nickel resources (Aneka Tambang, 2006a). The company is made up of four strategic business divisions, including an exploration unit and a mining unit, and its gold mining subsidiary, International Antam Resources Ltd. (IAR), is listed on the Canadian Stock Exchange (Zulkarnain et al., 2003). According to the Antam website, the Government of Indonesia holds 65% ownership stake of Antam, while 35% of the issued capital or 667,691,950 shares are currently being publicly traded on the Jakarta Stock Exchange (JSX: ANTM), Surabaya Stock Exchange (SSX: ANTM) and Australia Stock Exchange (ASX: ATM). Most of the shares traded publicly were held by 213 foreign shareholders, with most of them based in the US, Netherlands, England, Luxemburg and Singapore (Antam Website, 2007).

The Sundanese People

The Sundanese are an ethnic group in the western part of the Java island in Indonesia, numbering approximately 31 million. The Sundanese are Muslim. They speak a distinct language which is known locally as Basa Sunda.

The oldest historical record containing the term ‘Sunda’ is the Kebonkopi 2 stone inscription dated from 536 AD and refers to the Sunda Kingdom. The word ‘Sunda’ may originate from Sanskrit, in which case it might mean either ‘light’ or ‘water’.

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The Presence of Illegal Miners

Even though there are four primary veins of gold-bearing ore within Antam’s concession zone, including the Pasir Jawa, Ciguh Utama, Kubang Cicau, and Ciurug deposits (see map on page 3), these ‘lode’ deposits are spread out over a large area, and there are tracts where Antam has no active mining operations. Over the last decade, these unexploited gold veins have attracted the attention of illegal mine operators, both local and migrant, who have been keen to cash in on the region’s lucrative mineral resources by setting up backdoor gold prospecting operations (Pudjiastuti, 2005). In 2000 Indonesia’s Directorate General of Mines estimates that about 26,000 illegal miners were employed on these illegal mine sites (McMahon et al., 2000).

The official term for the illegal miners is Penambang Tanpa Izin (PETI), which means ‘miners without permits’ in Bahasa Indonesia. The locals, however, aren’t so kind, referring to them as gurandil in their local language of Sundanese, which translates as “people who leap from one cliff to another” – in other words, “rats”. Generally, most PETI miners aren’t locals but are usually made up of migrants from other cities, such as Tasikmalaya, Sukabumi, Bandung, or other provinces both inside and outside Java, such as East Java, North Sumatra, South Kalimantan, East Nusa Tenggara, and even as far away as Maluku.

The spread of PETI operations in the Pongkor concession was initially triggered by Antam’s first exploratory surveys of the region, when contracted porters and guides working with geologists began to sell off information on where the mining company had discovered gold to interested parties. According to KAI, an Indonesian NGO that promotes water conservation, PETI operations in the area have been active since 1991 when the government of West Java granted mining exploitation rights to Antam. By 1998, however, their numbers had snowballed, and in just seven years the number of illegal miners operating in the region had gone from 50 to about 7000.

There are many reasons for this, but the biggest catalyst was the collapse of Indonesia’s economy which was triggered by the 1997 Asian Financial Crisis. The financial crisis shook Indonesia to the core with the rupiah devaluing from IDR 2,500 for every USD 1 to IDR 16,000 for every USD 1 in a matter of weeks, and this led to the resignation of the long-serving and unopposed dictator, President Suharto. With Suharto out of the picture, decades of autocratic rule came to an end, and there was a massive public call for a decentralisation of power from central government to local level, and a more democratic political process.

Suharto’s successor B.J. Habibie, introduced a raft of new policies called reformasi, addressing the public’s demands, and although it’s debatable how successful these reforms have been they did lead to considerable political instability and economic insecurity in the late 1990s. One unexpected outcome of this concerted effort to devolve power from central government to the local level, and give greater regional autonomy to Indonesia’s far-flung regions, was that it resulted in massive legislative inconsistencies between the various levels of government. The mineral resource management legislation was no exception, so in the late 1990s illegal miners took advantage of this muddled confusion, and started setting up PETI operations with relative ease and little interference from local authorities (Irawan et al., 2005).

Some illegal miners or gurandils. Courtesy of Antam

When Antam first launched its operations, only a small number of miners worked illegally in the area, and most of them were from the local community. Although these miners didn’t hold mining permits, Antam turned a blind eye to their activities since they were only small-scale activities where miners would occasionally pan for gold on the rivers. When the economic crisis struck in 1997, Antam understood that many in the

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1. A ‘lode’ deposit is a large mineral deposit in which the metal is either disseminated throughout the ore body or is in a widespread network of narrow veins.
Continued from page 4 - The Presence of Illegal Miners

local community lost their jobs and were struggling to survive, so they opened up parts of their concession zone for the locals to mine⁴.

With the economic downturn more than one million Indonesians lost their jobs, and farmers were no exception. Faced with unemployment, local farmers turned to illegal mining - one of the few sectors that was actually booming - and soon news spread and people started coming from other parts of Java and other islands. In the past many had left the their villages in Nanggung, heading north to Java’s main urban centres like Jakarta and Bogor to find jobs as office workers and on construction sites, but when the rupiah crashed, cities were hit especially hard, and they came flooding back to rural areas. Once again, these job seekers usually ended up working in PETI operations, and they were often joined by former Antam employees who had discovered that setting up their own illegal mines was usually more profitable than working for the Indonesian mining giant.

Pongkor gold’s shine was beginning to rub off on the locals, and although commodity prices tumbled with the bearish global markets leading to a massive devaluation of the Indonesian currency - the rupiah had lost most of its value - miners were actually getting paid far more, with gold prices rocketing up to IDR 100,000 (AUD 11) per gram (PBS Website, 2006). In just one week a gurandil could earn IDR 2-3 million² and in one month it’s estimated that all the PETI operations together could net from IDR 20-30 billion in profits. One local recounts how he used to see gurandils carting piles of money home, and that local businesses often sold them goods and services, such as food, drink, tools and entertainment, at ten times the going rate.

It wasn’t only businessmen, locals and migrant workers that cashed in on the illegal mining boom in West Java. Several reports reveal that military officers also set-up illegal mine sites, often within the Antam concession zone, or took over existing pits - also known as ‘rat holes’ - renting them out to mine operators at a rate of IDR 1-3 million an hour or about IDR 10 million a day, depending on their gold concentration. Not surprisingly, the military’s involvement had a significant impact on the regional mining industry, guaranteeing illegal miners protection from rival interests, and even from Antam, the rightful owner of the concession zone.

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An Insight into how Illegal Mines Operate

Illegal mining activities in West Java usually consist of the following players (Pudjiastuti, 2005):

- Capital investor
- Guards responsible for mine site security
- Miners working in the ‘rat holes’
- Porters carrying raw material
- Owner of gelundung - the equipment used to separate gold from surrounding material⁶
- Gelundung operators
- Mercury supplier
- Owner of equipment for gold extraction
- Gold traders

Opening up a ‘rat hole’ usually required an initial investment of about IDR 20 billion, usually put up by the capital investor, who is also often the owner of gelundung and gold extraction equipment. Capital investors, also usually the mine owners, and are generally made up of local businessmen and military officers.

Gold mining, however, is an unpredictable enterprise, and it’s not uncommon for miners to hit veins that contain little or no gold, and many investors have lost hundreds of millions of rupiah just because they followed the wrong vein. For this reason, former Antam employees are in huge demand, since their knowledge of where minable gold-bearing veins are located is often better than the locals.

⁴ Interview with a local miner in Pongkor (05/02/06)
⁵ Note that these are at 1997 exchange rates of about IDR 16,000 to USD1.
⁶ This equipment mixes the gold-bearing rock or soil with mercury, then spins it for 8-12 hours so the gold (metal) separates out by attaching with the Mercury.

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Continued from page 5 - An Insight into how Illegal Mines Operate

Once the ‘rat holes’ have been established, mine operators recruit security guards to protect the operation site from rival interests and criminal gangs - these guards are generally made up of army officers, policemen, or paid gangsters from the province of Banten on Java’s western tip. Prior to 2000, members of the Bogor and Nanggung local army Antam had also been contracted by Antam to safeguard their legal mining concessions, reflecting the army’s split allegiances between Antam and the PETI operators and their deep conflict of interests.

The late 1990s was a boom period for illegal mining operations in West Java, and literally hundreds of ‘rat holes’ perforated the earth from every angle like a giant honeycomb, sometimes even colliding with Antam’s own excavation tunnels (Zulkarnain, 2004). Tumbledown settlements quickly sprouted up around the pockmarked mine sites, jam-packed with large plastic tents where miners could find shelter.

Not surprisingly, probably the most indispensable member of the gold mining operation are the miners themselves, since they risk their lives toiling away at the bottom of the ‘rat holes’, first mapping and identifying the gold vein, and then actually extracting the gold-bearing ore - there’s little doubt that they’re the true gurandils (Pudjiastuti, 2005).

Before they start digging the gold shaft, mine operators round-up a team of five or six miners, and collect about IDR 2 million to pay for security guards and food for the labourers. The first step is to dig a hole just large enough for one miner to squeeze through, and then the miner lies either on their back or stomach in stifling and uncomfortable conditions chipping away at the soil or rock with simple tools such as chisels, machetes, hoes and mattocks7 until their sack is full of gold-bearing ore.

For the next three days miners take turns jamming themselves into the holes, usually for two or three hours at a time depending on the hardness of the soil or rock, generally filling about five sacks of soil worth with a minimum market value of about minimum IDR 4 million (AUD 460). After figuring in cost deductions and distributing profits among the work team, miners can earn up to IDR 500,000 (AUD 58) for every 3-day operation (Liputan 6, 2004).

Mining teams work closely with porters who are responsible for hauling the sacks of gold-bearing soil or rock from the mine shafts up in the mountains to the processing facilities. These porters, usually boys or teenagers, pile the sacks onto motor scooters, and display great skill as they zip down the mountain, often navigating treacherous roads, to get their loads down to the villages around Pongkor for further processing. Despite the dangers they face, and their difficult job, these young workers generally get paid poorly.

Once the gold-bearing ore or soil arrives at the processing facilities the gold content is separated from the soil material in hundreds of home-based processing plants. Setting up a processing plant isn’t a capital intensive operation, and at the peak of the gold rush it was common for almost every household in the villages around the Pongkor mine sites to be involved in processing the precious metal.

During the boom period, there were about 526 households in the villages around Pongkor Mountain that owned gold processing equipment called Gelundung, which is used to separate the gold from the surrounding ore body. These consist of between one to ten cylinders which are powered by diesel engines or waterwheels that mix the gold-bearing soil or rock with mercury (see Figure 1). While the wealthier households can afford eight to ten cylinder gelundung, which possesses a much greater production output capacity, the poorer can usually only afford one cylinder machines. Spinning for about 9-12 hours, the cylinders grind the small rocks inside the soil into a raw paste mixture of gold, silver, and mercury, which is then strained through a porous fabric which separates the gold and silver from the mercury. The end product of this process is called bullion (see Figure 2).

In the late 1990s, as the gurandils spread across West Java with almost total impunity, they could easily access cheap diesel, and processing plant operators used this fuel to power the gelundung (see Figure 3). With the turn of the millennium there was a steady increase in fuel prices, and a concerted effort by the government to clamp down on PETI operations by severing their access to cheap state-subsidised fuel, and processing plant operators had to think of

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7 A mattock is a tool like a pickaxe with one end of its blade flattened at right angles to its handle, used for loosening soil and cutting through roots.
Continued from page 6 - An Insight into how Illegal Mines Operate

new ways to power the gelundungs. The most effective alternative to diesel-run generators was using waterwheels powered by the flow of rivers and streams (see Figure 4). Other processing plant operators continued to use diesel fuel, but ran their equipment below full capacity to save on fuel costs. Most of the gelundung owners also work as gold extractor.

Typically, it takes a half sack of fresh soil to produce 4 grams of gold bullion, which is then taken to the gold incinerator – usually owned by the gold trader – for further processing into saleable gold. The tailings aren’t discarded, however, as this soil can sometimes still contain traces of gold – along with used mercury – which can be reprocessed and sold at a much lower market price.

Generally, the gelundung owners have no vested interest in the actual ‘rat hole’ so they are paid by the mine operators for the amount of gold they successfully extract from the gold-bearing soil. This is a precarious situation, as mine owners don’t usually monitor the processing plants, so they have to trust that the plant operator records and registers all the gold that’s extracted accurately.

Although it’s rare, occasionally the processing plant operators set up their own mining operations, leasing a ‘rat hole’ and recruiting miners to dig out the gold-bearing soil. Gelundung owners are also known to buy the fresh soil material outright as soon as it’s dug out from the mine shafts for about IDR 600,000 a sack, instead of working as a contractor for someone else, and being paid a service fee.

The Indonesian government prohibits free mercury trading, yet mercury is readily available. The main suppliers are usually local ethnic Chinese businessmen who run shops stocked with mining equipment and industrial chemicals in the bustling Leuwiliang Market, in the city of Bogor, south of Jakarta. Since mercury cannot be traded freely in Indonesia, these suppliers use sly tactics to dupe the authorities, never publicly displaying signs that show they stock mercury and only selling to trusted customers in under-the-counter transactions. These backroom dealings foster especially close relationships between the mercury suppliers, gelundung owners and gold extractors, and in some cases, the mercury suppliers also provide the initial seed money to start up the illegal mining operation.

Environmental Impacts

Gurandils activities can cause serious environmental problems. In 2002, the Director of Mount Halimun National Park, which is one of the largest tracts of virgin rain forest remaining on the island of Java, publicly stated that illegal mining operations have destroyed more than 200 hectares of protected park land (MiningIndo Website, 2006). To make matters worse, the ‘rat holes’ are left open and abandoned, and the land has been clear-cut, causing land subsidence which can trigger massive landslides and flooding in the surrounding area.

Another pressing concern is the use of mercury to separate gold from the ore body, a method commonly used across the developing world. Over a period of about one month, an eight cylinder gelundung uses about 1 kg of mercury during gold extraction – considering that at the peak of PETI activity, one village usually had about 2000 cylinders active at any one time, the volume of mercury-containing tailings being

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Birds feed on fish that have accumulated mercury in the flesh (Source: http://www.bhopal.net)

produced was immense. Even more disconcerting is the fact that tailings are dumped straight into local waterways without being treated – the same water used by locals for drinking, bathing, washing and cooking.

Classified as an occupational hazard by the World Health Organisation (WHO), mercury and its compounds are highly toxic to humans, ecosystems and wildlife, and even relatively low doses can have serious neurotoxic effects on adults and children.

According to WHO, Methyl mercury, which results from inorganic mercury interacting with anaerobic organisms once it gets into the environment, can cross the placenta, entering the fetus and accumulating in its brain and other tissues. For this reason exposure of women of childbearing age and children is of the greatest concern.

Owing to the transport of mercury through the environment and its bioaccumulation, the
principle source of exposure to Methyl mercury in the general population is diet, in particular fish consumption. This raises alarm bells, seeing as most of the mercury by-products from the gold extraction process in and around Pongkor end up in rivers and streams, and in the fish and shellfish eaten by the local population (WHO, 1967).

A survey undertaken by the Bogor District National Department of Health Officials found that many local gold miners suffered from poor circulation in the hands (Jatam, 2002). In 2000, a team from the West Java office of the Department of Energy and Mineral Resources carried out a series of environmental tests around the Pongkor region, and these tests revealed extremely high mercury concentrations of up to 26.88 parts per million (ppm) in almost all the test sites, far exceeding the maximum national standard for mercury of 0.01mg/L or 10 ppm (Setiabudi, 2005).

To put this into perspective, the mercury levels in mud samples from Minamata Bay, in the southern Japanese island of Kyushu - the site of one of history’s most notorious cases of mercury poisoning caused by Methyl mercury being released from the local chemical factory - showed mercury residue levels ranging from 19 to 59ppm (WHO, 1967).

Over the operation of the local chemical factory, thousands of Minamata locals contracted debilitating and fatal conditions, including many congenital conditions, which bodes ill for the local population living around the Pongkor region.

Astonishingly, it’s estimated that around 4.8 tons of mercury are being dumped into the local Cikaniki and Ciguha rivers every month, which both supply drinking water and fish to at least 16,500 locals, not to mention other people from the Bogor region (Jatam, 2002). The environmental damage, however, doesn’t stop here, with the rivers eventually emptying out into the Bay of Jakarta where the toxic chemicals can be absorbed by phytoplankton, ingested by zooplankton, accumulating in the flesh of fish and works its way into the food chain.

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Social Impacts

The region in and around Pongkor has a long, chequered history of community conflict and social unrest, and community leaders and locals are very conscious that these social impacts are often related to illegal mining. Even though the large influx of migrants working in PETI operations has stimulated the local economy and brought in much needed income, there’s also been an increase in conflict and other negative effects.

Migrants have been flooding into the region ever since the late 1990s, when illegal mining really took off, and in 2004 it was estimated that migrants made up at least 70 percent of gurandils (Zulkarnain, 2004). During this time, the local villages, and the mine sites nestled up in the mountains, were crowded with dimly lit stalls offering food, alcohol and prostitution, run by local and migrant businessmen cashing in on the mining boom (Pudjiastuti, 2005). Before the gold rush erupted in the region, there was little problem with alcoholism and prostitution, but since the mines started spreading, these problems have become widespread.

Competition for the most profitable tracts of gold-bearing land is fierce, and many gangs have sprung up to stake claim to these lucrative pieces of land. Several reports claim that these gangs - generally made up of migrants from the province of Banten, and the cities of Jampang Kulon on Java’s south-western coast and just north in Sukabumi - often use strong arm tactics including arson, destruction of property and terror in an attempt to secure the most valuable land.

Not surprisingly, conflict doesn’t only arise between the rival gangs representing the various illegal mining interests, but also between the gurandils and legal mining ventures such as Antam. On 3 December 1998 thousands of illegal miners raided Antam’s Pongkor branch office, smashing windows and property and setting alight eleven company vehicles after rumours spread that a security guard employed by Antam had shot an illegal miner (Media Indonesia, 1998). Fearing more reprisal attacks at its mine sites and processing plants, Antam shut down all its operations for ten days, losing an estimated IDR 10 billion in profits - Antam produces around 10 kg
gold per day, earning a revenue of about IDR 1 billion (AUD 115,800) (Julyawan, 2004).

Despite the fact that illegal mining has attracted millions of rupiahs into the local economy in the past, many locals believe that the income derived from this illicit business is ‘hot’ or even devil’s money, and the money flows out just as quickly as it comes in. One local talked about how it was common for migrant gurandils to return home at the end of the month with earnings of up to IDR 20 millions (AUD 2,300), far above the average monthly salary. Unfortunately, little of this money is seen by the family, with miners generally spending about one-tenth of their earnings, or about IDR 1-2 million (AUD 115-215), on their wife and kids every month.

Shaking his head unhappily, the local explained that the rest of the money was usually spent on hotels, alcohol, gambling, entertainment and prostitutes in the seedy neighbourhoods that have sprouted up around the mines and in the villages around Pongkor.

The mines operating in Pongkor also have one of the worst safety records in Indonesia, with at least 263 gurandils being killed in mine-related accidents between 1997 and 2001. Most accidents are caused by ‘rat holes’ collapsing in on the miners, as mine shafts are poorly constructed, and massive landslides, caused by the land subsidence triggered by intensive mining activity. The worst accident happened in 1998 when a combination of heavy rains, land clearing and land subsidence triggered a series of deadly landslides killing at least 133 people (Sebayang, 2004).

That’s not to say that Antam has been a perfect role model, and there are several reports of the company acting inappropriately to their own employees. Some Antam miners say that security personnel working for Antam demanded they pay bribes just to get to the mine sites, and if they didn’t they threatened to beat them up. In one interview, a miner claimed that one Antam work team had to pay IDR 2 million (US$220) to security guards, known locally as jin penunggu or watchmen genies, every time they wanted to enter the mines. To date, Antam vigorously denies this bribing allegation.

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That’s not to say that Antam has been a perfect role model, and there are several reports of the company acting inappropriately to their own employees. Some Antam miners say that security personnel working for Antam demanded they pay bribes just to get to the mine sites, and if they didn’t they threatened to beat them up. In one interview, a miner claimed that one Antam work team had to pay IDR 2 million (US$220) to security guards, known locally as jin penunggu or watchmen genies, every time they wanted to enter the mines. To date, Antam vigorously denies this bribing allegation.

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Continued from page 9 - Social Impacts

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Despite all the negative impacts related to these illegal operations, gurandils presence in Pongkor has had many positive spin-offs for the local people and the regional economy. Illegal mining activity stimulated the local economy during the disastrous Asian Financial Crisis of the late 1990s, and while most of Indonesia suffered economic collapse, the Pongkor area struck gold, literally.

This helped the local community weather the financial storm that hit Indonesia in 1997, and the region was transformed overnight from a cluster of dull, shabby villages into a place bustling with people and activity where the streets were clogged with traffic, noisy construction sites, crowded markets, and wheeling and dealing businessmen (Pudjiastuti, 2005). One local summed it up nicely when he explained “In 1998, there was no financial crisis in Pongkor. We just got richer.”

View from Pongkor Mountain

### Pongkor Gold Mines: The Present Situation

A lot has changed since the boom days of the late 1990s, and ever since the riots of December 1998 both Antam and government authorities have clamped down on illegal mining operations in Pongkor. In a concerted effort to curb these operations, Antam has beefed up its security forces, replacing local army officers, who happily accepted bribes from illegal operators if they turned a blind eye to illegal operations, with more trustworthy mobile police brigade, from West Java. These security forces are from another province, so they don’t have the same tight connections with local illegal operators, and working together with Bogor and Nanggung governments, the police force, as well as community leaders, they could tackle illegal mining operations much more effectively (Pudjiastuti, 2005; Zulkarnain, 2004).

The government also weighed in on the fight against illegal mining in West Java, when the former Minister of Mining and Energy, General Susilo Bambang Yuhoyono, now Indonesia’s President, put tackling the problem of illegal mining at the top of his national agenda.

Focusing on areas like West Java, in 2000 the Minister enacted Presidential Instruction No. 3/2000 which aimed to curb illegal operations by prosecuting PETI operators more rigorously.

Now that PETI operators had lost all support from local security forces and the authorities, Antam has had little trouble driving out most of their operations from their concession zones. Antam has used tough tactics in their attempt to shutdown the illegal mine sites, often going in with the support of law enforcement agencies, and demolishing the mine shafts, confiscating the gelundungs and diesel machinery, and tearing down the miners’ shacks and shelters (Zulkarnain, 2004).

Although Antam’s Board of Directors and management vehemently deny any involvement, there are rumours that they’re linked to an incident on 3 March 2004 where in an

Sketch of a cross-section of Antam mine operations in the Pongkor mining concessions.
attempt to drive out illegal miners, smoke produced from burning wood and tires was pumped into a number of ‘rat holes’ leading to the deaths of at least 12 illegal miners, who suffocated on the toxic plumes. Antam claims that they didn’t light the fires, but that they were started up by gurandils who were trying to chase Antam security staff away (Liputan 6, 2004).

Some argue that the significant reduction in illegal mining operations in the region has less to do with government initiatives and beefed up security forces, and more to do with the fact that it’s becoming much more difficult to mine gold using traditional methods as gold deposits are becoming rapidly depleted, and miners have to dig deeper, quarrying harder rock.

Another factor helping to reduce the number of illegal operations is the fact that miners are earning much less

### Antam’s Community Development Programs

Antam has learnt a lot of lessons since the riots of December 1998, and has successfully healed some of the rifts with the local community and gurandils that have formed over the years by launching a series of community development initiatives. Antam are aware that their crack down on illegal mining has triggered a downturn in the local economy leading to a loss of jobs for many locals. In response to this they’ve introduced a program that extends micro-credit loans to locals interested in setting up their own businesses. Taking a culturally-sensitive and ethical approach, the program aims to lure locals away from illegal mining by offering them viable employment opportunities for those who are already jobless and those currently working on PETI operations.

Indonesian governmental mineral resource management policies state that mining companies have to invest part of their profits into community development projects, and below is a breakdown of Antam’s allocation of funds to these initiatives (Irawan et al., 2005):

1. **District Entitlement to Mining Royalties** - the Autonomy Law (22/1999 and 25/1999) states that the district where the mining company operates is entitled to 32 percent of the mining royalties. Under this law a part of these royalty funds are to be allocated to community development projects.

2. **Community Small Business Development Plan** - governmental legal provisions require the mining company to allocate 1-3 percent of after-tax profits to developing the community’s small-scale business sector.
3. Community Infrastructure and Human Resources Development Plan - governmental legal provisions require the company to spend 2-3 percent of its total operating costs on developing the community's infrastructure and modernising the human resources sector.

Antam realises that it’s essential to engage all the key stakeholders if it is to effectively address the problems facing the local community and the former gurandils who now find themselves jobless.

One of the most significant actions was to start a dialogue with these stakeholders, ensuring the communication channels were always open. To this end, Antam launched a series of forums where Antam management, village leaders, former gurandils, Antam employees and locals discussed current problems and voiced their grievances. Other Antam-led initiatives included:

- Producing a detailed regional map highlighting the areas with the highest agrarian potential making it easier for former gurandils to find suitable land for farming;
- Building public facilities such as roads, bridges, schools and religious facilities;
- Offering free health services;
- Sending teaching assistants out to remote areas; and,
- Working with local universities, NGOs and experts to deliver small-business training programs.

In 2006 alone, Antam invested IDR 1,700 million (US$186,813) in funds to assist and develop small and medium-sized enterprises (SMEs) in Pongkor in a partnership program that brought on board all the main stakeholders (Aneka Tambang, 2006b).

On the environmental front, Antam has launched a series of comprehensive environmental initiatives that aim to rehabilitate mine-impacted land, and raise public awareness. With this goal in mind, Antam has sent teams to the abandoned and devastated mine sites to gather data on land destruction; replant critical areas; investigate the extent of mercury contamination along the waterways within the mining concessions; and educate miners and the community on the potential dangers of mercury and illegal mining (Zulkarnain, 2004).

In September 2002 Antam’s Pongkor mining operations were awarded a Certificate of Environmental Management, which recognises that Pongkor’s environmental management systems (EMS) meet the international standards defined by the ISO 14001. The company was also given credit for successfully eliminating most of the illegal mining operations on its concession zones (MiningIndo Website, 2006).

In its 2005 Annual Report, Antam claimed to have only 100-200 illegal miners still operating on its concession area, and all of them were located within Mount Halimun National Park (Aneka Tambang, 2006a). Since these miners are so few in number, they don’t pose a threat to the mining giant anymore, particularly since rumours have been spreading that Antam plans to shutdown their Pongkor operations all together. Antam is very conscious of the fact that gold deposits are rapidly becoming depleted and there are reports that their operations are no longer profitable.

Porters carry sacks of gold-bearing soil from the ‘rat
Conclusion

Even though Artisanal and small-scale mining has been practiced across the globe for time immemorial, it’s a relatively new phenomena in Pongkor. The rapid spread of PETI operations in West Java during the late 1990s was, for the most part, triggered by three key events - the collapse of Indonesia’s economy during the 1997 Asian Financial Crisis, the confusion resulting from decentralisation reforms that left gaping holes in the central and local government mineral resource management legislation, and Antam’s inability to effectively secure its mining concession zones.

Also, Antam’s failure to open up a dialogue with all the main actors and include them in the decision-making process led to the local community’s alienation, and the region’s population grew disillusioned with Antam. Why weren’t they getting a share of Antam’s massive profits? But the December 1998 riots rang alarm bells for Antam’s management board, and they realised that they had to win over the local community if they wanted to successfully tackle the problem of illegal mining.

They adopted a double-edged strategy where they would work with the local population and the illegal miners to find a solution to the problem, and at the same time ensure local authorities and law enforcement agencies adopted a more vigilant approach to taking on the illegal mining operators.

Even though Antam’s community development initiatives are considered to be a success, with the dramatic drop in the number of illegal miners since 2000 and the gradual rehabilitation of Pongkor’s natural environment, some question the methods used by the mining giant to achieve its goals. These cynics claim that Antam’s community development initiatives have more to do with wiping out illegal mining activities rather than genuinely helping locals.

But things didn’t start out this way, and when Antam established its Pongkor operations in the early 1990s the impoverished local community were very hopeful that they would share in the wealth generated by the gold mining activities, turning the dysfunctional regional economy around and providing jobs for the locals.

But in reality, Antam had little involvement with the local population, recruiting most of their staff from other regions - locals were poorly educated, and Antam were looking for a skilled work force. Occasionally locals could find work, but usually as poorly paid security officers who enjoyed none of the benefits or job security the other Antam staff received.

Antam is a majority state-owned company that was established in during Suharto’s New Order Regime, and their corporate philosophy still reflects the autocratic, highly centralised mindset of those years, where central government and the company’s management board knows what’s best for the local population. Even though Antam has tried to convince the main stakeholders that it’s involving all the parties in the decision-making process, cynics feel that the old corporate New Regime mentality is too deeply entrenched. Even with all the community development initiatives, these cynics feel that the company can never really work with the dispossessed local population, as there will always be a deep-seated distrust between the two groups.

It will be difficult for Antam to reconcile its differences with the out-of-work illegal miners and the local community, but concrete steps have to be taken to improve the locals’ lives so they don’t fall into the poverty trap. It will be difficult for Antam to reconcile its differences with the out-of-work illegal miners and the local community, but concrete steps have to be taken to improve the locals’ lives so they don’t fall into the poverty trap.

Despite Antam’s claims that it has invested significantly to develop the regional education system, the 2003 national consensus shows a very different picture. Only three percent of the Bantar Karet population completed their high school degrees, with about 39% dropping out in their primary school years, and an overall illiteracy rate of 28%.

With low literacy rates and poor educational infrastructure, the future looks bleak for the local community, and although the regional gold deposits have been greatly diminished, it’s likely that many will return to illegal mining as there are really very few alternatives. Although many are saying that Antam will shutdown their operations in the near future, their
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The island province of Bangka, just east of Sumatra, offers another counterpoint to the Pongkor scenario, as Indonesia’s the world’s leading tin producer and the island is the centre of tin mining, the region is integral to Indonesia’s economy. Even though the problem of illegal mining is much more widespread in Bangka, the government won’t shut down operations as they’re a cornerstone of the nation’s mining sector.

Finally, Antam has to recognise that the local population have been living in this area for generations and will be there even after the mines shutdown, even if they can’t flash legal documents proving land ownership. For them, Pongkor is their home, their life and their land. Besides, it’s far better for Antam to let some of the illegal miners operate within their concession zone, making sure that the miners adopt good mining practices that are environmentally responsible.

“Despite Antam’s mining lease doesn’t run out until 2022. Irrespective of when Antam leaves, chances are that the local community will be left worse off than ever. Not only is the local population uneducated and ignored by central government, they’ll no longer be able to rely on mining to eke out a living as the gold deposits are rapidly being depleted.

One way Antam can win over the disillusioned and dispossessed local population is to offer them more job opportunities at their company, and not just the poorly paid jobs, with no benefits or job security. To date, Antam has failed to set-up traineeship initiatives that accept locals into the company’s fold, up-skilling them so they can develop skills that ensure them brighter future prospects and the possibility of promotion.

The story of Pongkor mines is quite unique, and is a stark contrast to Indonesia’s two other major mining regions in the provinces of West Papua and Bangka. Gold mining in West Papua is very capital intensive, and usually only the biggest resources companies, such as the US-based gold-mining multinational Freeport-McMoran, can afford to set-up mining operations. Unlike Pongkor, where even the poorest in the community can start mining with simple farming equipment such as a hoe, machete and a flashlight, in West Papua mining requires heavy and expensive equipment, consequently there’s very little competition for resources from the local community.

Antam’s operations in Pongkor have little impact on the nation’s economy, so the government won’t hesitate to shutdown the mines.

For further information visit the Artisanal and Small-scale Mining in Asia-Pacific Portal on http://www.asmasiapacific.org
Bibliography


http://www.joshuaproject.net/peopctry.php?rop3=101015&rog3=ID


Artisanal and Small-Scale Mining (ASM) in Asia-Pacific Portal http://www.asmasiapacific.org

ASM Asia-Pacific Case Study Series
This series of case studies documents concrete examples of equitable, effective, and sustainable local-level partnerships including small-scale miners or their communities as a guide to develop better policy and practice in the Asia-Pacific region.

The project has been led by Kuntala Lahiri-Dutt. The case studies have been edited by Joel Katz and designed by Rachel P Lorenzen.

Artisanal and Small-Scale Mining (ASM) in Asia-Pacific Portal
The ASM Asia Pacific Portal is the public interface of a loose network of individuals and institutions working on poverty eradication, development and livelihoods in artisanal and small-scale Mining (ASM) in the Asia-Pacific region.

The portal’s mandate is to disseminate knowledge about ASM in the Asia-Pacific, to document best practice in community development and environmental management, and to promote fellowship and cooperation among stakeholders interested in poverty eradication and sustainable development.