

JAPANESE INVOLVEMENT IN NICKEL MINING IN INDONESIA¹

by anto sangadji²

Nickel in Indonesia

Nickel mining has been going on in Indonesia for many centuries. Nickel ore within iron deposits, plentiful in the central part of Sulawesi, was an important resource used in making *keris* (traditional Indonesian swords) since the Majapahit dynasty. The area around Lake Matano was a key source of nickel in eastern Indonesia at that time. In the area near Lake Matano and the upper reaches of the Kalaena River, about half of the laterite nickel that rested inside iron deposits lay very close to the earth's surface.

The history of capitalist nickel mining in Sulawesi began with systematic study by geologists and the Dutch government. E.C. Abendanon, who had conducted studies in the eastern part of Sulawesi in 1909 and 1910, believed that there was iron and nickel in the area and recommended a systematic survey. Earlier, in 1896, Sarasin, who was then accompanied by Grasbauer in 1902, also conducted a study. In 1916, the Mining Department (*Dients van den Mijnbouw*) certified that there was indeed nickel and iron in the region, after a few months of study.

The government gave two contracts to two separate companies, *Mijnbouw Maatschappij Celebes* (a subsidiary of *Billiton Maatschappij*) and *Mijnbouw Maatschappij Toli-Toli* – known as *Mijnbouw “Boni Tolo”* – which was affiliated with *Oost Borneo Maatschappij*. The two companies had a long history of mining in the Dutch East Indies.

Mijnbouw Mij. “Boni Tolo” conducted mining activities in Southeast Sulawesi in 1937, accompanied by shipments of nickel to Germany and to Japan. Export notes indicate that in 1938 as much as 20 metric tons were shipped; in 1939, 23.535 metric tons; and in 1940, 55.540 metric tons (ter Braake).

In Soroako, Sulawesi, *Mijnbouw Maatschappij Celebes* (MMC) began work in 1941, with the construction of an operational center in an area then known as “the old camp.” MMC conducted exploration and some nickel mining, gathering nickel deposits close to the land's surface. It is estimated that half of the men in Soroako worked for MMC. However, MMC's existence in the region was very brief, because following the Japanese invasion in 1942, nickel exploitation was undertaken by Japan. At that point, MMC had already built installations to contain and ship nickel (ter Braake, 1977). As the holder of concession rights in the area, MMC had the right to mine nickel, iron, cobalt, chromium and magnesium.

For the duration of the Japanese occupation, nickel mining was conducted by Japan to supply the war industry (ter Braake, 1977). From 1942 to 1945, *Sumitomo Metal Mining Co.* took over mining operations from *Mijnbouw Boni Tolo* and built a smelting plant to produce matte nickel (Anonymous, n.d.). There is not much information available on production levels during this period. However, it is estimated that as much as 27,000 tons of nickel were produced in 1942, and 58,000 tons in 1944 (Munggoro, et. al., 1999).

After independence in 1945, the nickel industry did not receive much attention. During the partial Dutch reoccupation in 1946, MMC personnel also returned and the firm operated for about three years

¹ A discussion paper prepared for a meeting of Japanese NGOs in Tokyo, 18 July 2002. The meeting was organized by NINDJA (Network for Indonesian Democracy, Japan) and FoE.

² Director of *Yayasan Tanah Merdeka* (the Free Land Institute), Palu, Indonesia. (e-mail: anto@ytm.or.id)

(Robinson, 1986). There was no activity after this, however. A few companies were also interested in conducting exploration in Pomalaa, including Freeport Sulphur Co., Oost Borneo Maatschappij and Sumitomo Metal Mining Company. Nickel mining from that point on, however, was undertaken by NV Perto (Pertambangan Toraja), which in 1957 shipped the nickel that still remained from the Japanese occupation period to Japan, and in 1959 began mining work in Maniang Island in Southeast Sulawesi. In 1961, NV Perto became PT Pertambangan Nickel Indonesia (PNI), a state-owned enterprise. This company then merged with several other state-owned mining firms to become PT Aneka Tambang (PT Antam).

At present, there are two companies conducting nickel mining in Indonesia, the state-owned PT Aneka Tambang and PT Inco. In Pomalaa, Southeast Sulawesi, PT Antam has two ferronickel smelting plants, known as FeNi I and FeNi II, with production capacity around 11,000 tons. In 1999, production in Pomalaa was as high as 9,221 tons of ferronickel. PT Antam plans to construct a new plant, FeNi III, in Pomalaa, which it hopes will be operational in 2003, at which point Antam's production will reach 24,000 tons of nickel per year. To undertake this construction project, estimated at US \$270 million, PT Antam joined with the German firm Tessag Industrie-Anlagen GmbH (*Kontan*, 15/01/2001). Before 1998, Mitsui & Co. from Japan, and Krupp Tyssen Nirosta GmbH from Germany competed for this project, a competition that was fraught with conflict of interest. At that time, reports were that Mitsui was supported by Ginandjar Kartasasmita, Coordinating Minister for Economy, Finance and Industry, and Krupp was supported by Tareq Habibie (son of President Habibie) and Tanri Abang, State Minister for State-Owned Enterprises (*Kontan*, 10/05/2001).

Indonesia possesses rich nickel deposits. In 2000, Indonesia's reserve base was 13 million tons, or 8 percent of total world reserves. But the development of the nickel industry in Indonesia is still in an early phase. At this stage, Indonesia's nickel industry is limited to nickel ore mining and smelting of matte nickel. The nickel industry in Indonesia has not yet reached the point of producing nickel alloy, semi-manufactured nickel or nickel fragment. Nickel ore mining is conducted in Gebe, Gee/Halmahera, Soroako, Pomalaa and Teluk Weda (Halmahera); matte nickel smelting takes place in Soroako and Pomalaa.

Indonesia's nickel industry is characterized by mineral extraction with an orientation toward exports. The products from this sort of industry include nickel ore and concentrate, ferronickel and nickel intermediate products. All of the output from production is exported to be processed further overseas. Nickel products from PT Inco are exported to Japan. Nickel ore that is mined in Pomalaa is sent to Japan and Australia, and a small percentage is sent to the smelter in Pomalaa. In 2000, total nickel production in Indonesia reached as high as 71,353 metric tons, of which PT Inco controlled the production of as much as 60,353 metric tons, and PT Aneka Tambang 10,000 metric tons (see www.platts.com/plattsmetal/asiacrisis/thai.shtml).

PT INCO in Sulawesi

P.T. International Nickel Indonesia, commonly known as PT Inco, received a second-generation contract of work for 30 years on July 27, 1968. This contract was received after winning tender from among three large groups and consortiums of foreign companies, including Le Nickel (France), Kaiser Aluminum and Chemical Corporation and a consortium of Japanese firms that comprised Fuji Iron Steel Co. Ltd., Sumitomo Metal Mining Co, Nippon Yakin Kogyo Co. Ltd., Pacific Nickel Co. Ltd., and Sumitomo Shoji Kaisha, Ltd.

Inco Ltd. is the majority shareholder in PT Inco, along with several Japanese companies. In 2001, Inco Ltd. controlled 59 percent of shares in PT Inco. In 1988, Inco Ltd. sold 20 percent of its equity in PT Inco to Sumitomo Metal Mining Co, at a value of US \$100 million. Several other Japanese firms hold small amounts of shares in PT Inco. PT Inco also publicly sold as many as 49,681,694 shares of stock in 1990. As such, foreign investors hold no less than 80 percent of shares in PT Inco.

Other than Inco Ltd, companies that hold shares in PT Inco are those connected to the nickel industry. Sumitomo Metal Mining Co. is the largest nickel producer in Japan, making up one part of the Japanese *zaibatsu* Sumitomo Group. Nissho-Iwa Ltd. is another large trading company in Japan that is affiliated with

two *zaibatsu*, Sanwa and Dai-Ichi Kanyo, with its main business in the metal industry. Nissho-Iwa Ltd. holds 44 percent of shares in Akashi-Gokin, a nickel alloy factory. Additionally, Tokyo Nickel Company is a nickel-processing factory that manufactures distilled nickel products (Swift & The Development Education Centre, 1977). At the time it was founded in 1965, Tokyo Nickel Company formed a joint venture with Shimura Kako Co. Ltd. (50 percent), Inco, Ltd. (40 percent) and Mitsui & Co. Ltd. (10 percent).

Table 1: Structure of PT Inco Shareholders

Shareholder	Percentage
Inco Ltd.	58.73
Sumitomo Metal Mining Co.	20.00
Tokyo Nickel Company, Ltd.	0.54
Nissho-Iwa Ltd.	0.14
Sumitomo Shoji Kiasha	0.14
Mitsui & Co Ltd.	0.36
Public	20.00

In Indonesia, Inco Ltd. does not only own shares in PT Inco. Its other subsidiary is PT Ingold Maluku Satu. Inco Ltd. controls 85 percent of this company's shares through Maluku Holding Inc, with the remaining 15 percent held by PT Aneka Tambang. PT Ingold Maluku Satu received a seventh-generation contract for an area of 106,489 hectares in Ambon, Haruku, Nusa Laut and the Saparua Islands that contains deposits of copper, lead and zinc. Inco Ltd. itself coordinated with Dowa Mining Co. Ltd. from Japan to form a joint venture in 1999 to undertake exploration for copper, gold, silver and zinc in Indonesia. This same Dowa Mining Co. Ltd. holds 49 percent of the shares in PT Maluku Holding, and has contributed financially toward exploration work for a three-year period.

1. Construction of Production Facilities

Nickel production in Soroako forms one of the largest laterite nickel mining operations in the entire world (PT International Nickel Indonesia Yearbook, 1999). PT Inco has constructed several facilities including, among others:

- (a) Refineries, comprising drying ovens, reduction ovens, electric hearths, purifying and granulating hearths, along with collectors;
- (b) Two hydroelectric power plants, PLTA Larona (165 MW) and PLTA Balambano (93 MW);
- (c) A port along the Malili River, which empties into the Gulf of Bone. This port can be utilized by ships with 3 meter drafts and weights up to 2500 DWT;
- (d) A natural gas and oil terminal in Tanjung Mankasa, and pipelines 50 km. long to deliver oil to the smelters in Soroako;
- (e) A road connecting the smelters in Soroako with the port in Malili;
- (f) Complete urban living facilities, including housing, a hospital, an airfield, a bus terminal, a market, office space and a golf course;
- (g) Schools (grade school through senior high school) and a higher education program (polytechnic).

In 1975, because of increased production costs caused by the high price of oil, an agreement was reached with the Indonesian government to begin a second phase of construction (1975-1978). This included the construction of the PLTA Larona hydroelectric plant, with a capacity of 165 MW, to supply electricity to PT Inco. A dam was built at the outlet of Lake Towuti to turn this lake into a natural reservoir that could power PLTA Larona. PT Inco, of course, received exclusive rights to build and develop electricity-generating facilities along the Larona River. President Soeharto officially inaugurated the mining project on March 31, 1977. Commercial production began in April 1978, signaled by the first shipment of products to Shimura Kako Co. Ltd. and Tokyo Nickel Co. Ltd. in Japan. PT Inco owned shares in both of these two companies.

2. PT Inco's Performance

PT Inco is the foremost mining firm in Indonesia. As of December 2001, its total assets were estimated to reach US \$1,229,705,000, or approximately 12 trillion Rupiah. This total is possibly rivaled only by PT Freeport Indonesia. This figure far surpasses that of PT Aneka Tambang – the state-owned company that also produces nickel, and which possesses assets totaling about 2.62 trillion Rupiah. PT Inco is also noted as one of the most widely traded foreign companies on the Jakarta Stock Exchange. This complies with section 10 of the company's 1968 contract of work, which requires domestic investment of at least 20 percent in PT Inco. PT Inco's performance is shown in more detail in Table 2.

The firm produces matte nickel (78 percent), which is then exported to Japan for further purification, before being sent to stainless steels factories in Japan, South Korea, Taiwan and China. In 2001, PT Inco produced as much as 62,600 tons of nickel. This figure was still below the initial target of 68,000 tons (Inco Lt., 2001). This total was reached after PT Inco completed the expansion of its factories and constructed PLTA Balambano, a hydroelectric plant with a 93 MW capacity. Production levels like this make Inco a leading nickel producer, contributing 90 percent of total nickel production in Indonesia.

PT Inco has already reaped great benefits from its 20-year investment in Sulawesi. As reported, PT Inco turned a profit for the first time in 1987, at US \$1 million. After this, PT Inco's profits took off, reaching US \$174 million in 1988 and US \$182 million in 1989 (*Tempo*, 24/03/1990). In the years that followed, PT Inco continued to make a profit, although not as large. In 1997, net profit was US \$24.3 million, and in 1998 this figure sunk down to US \$6.182 million. In 1999, PT Inco made a net profit of US \$21.248 million, which then rose to US \$80.485 million in 2000. As reported in the daily newspaper *Koran Tempo*, last year's net profit was only US \$9.3 million.

PT Inco is one of the most cost-efficient nickel producers. One of the secrets to its success is low-cost electricity, which PT Inco receives from the PLTA facilities that it owns and that provide approximately 80 percent of electric energy needed. As an illustration, with the addition of the second PLTA plant, electricity costs in 1999 already went down 53 percent.

Table 2: PT Inco's Performance

	2000	1997	1994
Production of matte nickel			
→ million lbs.	130.5	71.0	99.9
→ 1,000 tons	59.2	32.9	45.2
Sales of matte nickel			
→ million lbs.	129.7	69.0	98.5
→ 1,000 tons	58.8	31.3	44.7
Sale price (US \$)			
→ per lb.	3.06	2.50	2.18
→ per ton	6.74	5.51	4.81
Net sales (US \$1,000)	401,607	174,929	217,332
Net profit (US \$1,000)	80,482	24,300	42,004
Net profit per share (US \$)	0.32	0.10	0.17
Equities (US \$1,000)	728,466	620,532	513,339
Total assets US \$ 1,000)	1,300,807	1,077,527	697,322
Capital investments (US \$1,000)	32,703	239,048	11,824
Total employees at year-end	2,360	2,098	2,066

3. Japanese Support toward Investment in PT Inco

Japan is not a country that possesses nickel reserves, because it does not have any domestic nickel mining industry. However, Japan's role in the global nickel industry is extremely important. Japan possesses the second-largest nickel refining industry in the world, behind only Russia. In 2000, refinery production reached 160,700 tons, or 14.9 percent of the total world production. Japan is also the leading consumer of nickel in the world. In 2001, consumption levels reached 18 percent of total global nickel consumption.

Based on objective conditions like these, Japan requires a regular supply of nickel produced overseas. Therefore, the support of the Japanese government, through public financial institutions, to Japanese mining companies that operate overseas is certainly meant to protect the interests of industry and domestic nickel consumers inside Japan.

Japanese government support toward investment in PT Inco should be seen from this perspective. Assistance has been given to pay for various nickel production facilities in Soroako. That investment support was made through the Overseas Economic Cooperation Fund (OECF) and Jexim/JBIC.

At the time of project construction in 1973, OECF participated as a financing organization. OECF provided project funds to the tune of US \$11,250,000. In addition to OECF, this project was paid for by the Bank of Montreal, the Toronto Dominion, the BNS International (Hong Kong), Morgan Guarantee Trust, Crocker National Bank, Chemical Bank of New York, Banker's Trust Company, Asia Pacific Capital Corporation, Canada's Export Development Corporation (EDC) and the Export-Import Bank of the US.

With project expansion in 1996, Jexim/JBIC of Japan provided a loan of US \$140 million. Meanwhile, EDC provided US \$200 million in loans, and North American Bank loaned US \$115 million.

PT Inco's shareholding companies from Japan also provided loans for investment, as much as US \$36 million that was paid for through the sale of items produced using PT Inco's nickel outputs. These firms received outputs from phase I nickel production for 15 years.

Human Rights Violations in PT Inco Mining Operations

1. Land Conflicts

Residents of Soroako and the surrounding area are farmers. They rely fully on the land to make their living, through planting rice and other crops, and from harvesting forest products such as rattan, resin and wood. In addition to being a source of freshwater fish, Lake Matano is also used by its surrounding inhabitants as a means of transportation between villages, who utilize traditional rafts.

The arrival of PT Inco changed the agricultural conditions in the area. In the quest for nickel, mining expanded into forest areas. This caused communities to lose their traditional access to the wealth of forest resources, such as rattan, resin and other items. Similarly, farmland was converted into area for mining, factories and other development facilities. As described by Robinson (1991), the loss of agricultural land from daily Inco operations had a dramatic effect on the area's residents. Not only was farmland lost, but even the small Karunsi'e ethnic group, which had been forced to leave its traditional homeland in Dongi Baru during unrest in the 1950s, was affected.³ By the time the Karunsi'e won the right to move back to their traditional land, it had already been converted to a golf course, owned by PT Inco.

Independent reports and academic works indicate that the appearance of PT Inco brought with it not a few land problems. Robinson (1986) notes the occurrence of land alienation between traditional inhabitants

³ This occurred around the period of the DI/TII (Darul Islam/Indonesian Islamic Army) rebellion, which stemmed from the discontent of revolutionary veterans in South Sulawesi.

and their land, both because of road construction and also because of problems surrounding land compensation. Particularly with regards to compensation, negotiation took place only between PT Inco and the government, without involvement from the landowners in the area. At the time, when PT Inco built up a small city (Soroako), 200 farmers were coerced by the government into giving up their land at an extremely low price, about two cents (US \$0.02) per square meter (Aditjondro, 1982). A portion of the farmers rejected this form of compensation, but many more were forced to accept it. Andi Baso AM – who is now the Chairman of the Soroako Indigenous Union (*Kerukanan Wawanua Asli Soroako*, or KWAS) – was among those who then rejected the offer. Amid the restrictive political environment of the time, Andi Baso was criticized as having committed anti-development acts, for which he was forced to remain in a police cell for eight days.

To this day, land conflicts have not come to a halt. On the contrary, land conflict has escalated, with the criminalization of Soroako residents. Residents' land claims in the old camp area – one of the housing sites for PT Inco employees – have resulted in accusations against Andi Baso of illegally occupying land owned by PT Inco.

PT Inco's construction of PLTA Larona and PLTA Balambano was also colored by land conflict. In 1980, 95 families on the edge of Lake Towuti dragged PT Inco to court in Ujung Pandang to demand 750 million Rupiah in compensation for their mosques, rice fields, orchards and houses that would be flooded were the lake filled in permanently. This petition was eventually settled outside of court, after PT Inco agreed to pay compensation and to help move the mosque to higher ground (Aditjondro, 2000).

While the building of PLTA Balambano is now complete, there seems no end in sight for related cases involving land compensation. On January 25, 1998, Mendi, a resident of Balambano village in the Nuha sub-district, sent a letter to PT Inco regarding a compensation claim for his land. The land was about three hectares wide, with mangoes and other fruit trees, and had already been taken over for a project, without compensation. In the end, though, nothing came of Mendi's claim because PT Inco returned to old-style methods for handling compensation, namely going through the government.

When the reports of the compensation for the PLTA Balambano project – for which funds totaled 7 million Rupiah – were completed, Mendi's name was nowhere to be found. In a letter to the sub-district chief dated January 26, 2000, H. Ghanis Kuriady, PT Inco's Coordinator for Government Relations and Community Affairs, stated that all forms of compensation had already been given out in accordance the official compensation plan. However, through his attorney Sya'ur Salaga, Mendi is still pursuing his compensation claim and has sent a letter to the head of the district legislature regarding the case (Sangadji, 2001a, 2001b).

Currently, PT Inco plans to expand its exploitation area into Central Sulawesi province. PT Inco has already conducted exploration and has taken samples in the village community of Bahomotefe, and in the transmigrant village One Pute Jaya. The residents of Bahomotefe are being forced to give up their land with only minimal compensation for lost crops. Meanwhile, the residents of One Pute Jaya – recent settlers from Java, Bali and Lombok under a government-sponsored population transfer scheme – are slated to be moved out of their new homes to another location.

2. Enclave

PT Inco built Soroako as a kind of enclave. The existence of Soroako city illustrates the striking differences between the lives of the area's original residents and employees of PT Inco. Indigenous residents' houses in Old Soroako village are cramped and built on top of one another. Meanwhile, houses of employees are spacious and neatly arranged. Some of original residents have been forced to build their houses on top of the lake, because of land shortages. In contrast, employee houses have wide front lawns. The roads in Old Soroako are unpaved, very different from the smooth paved road in the employee-housing complex. Employees enjoy a free supply of electricity, while the rest of the community must pay for their electricity service from PLN.

The contrast in conditions of the lives of PT Inco employees and the original residents of the area are evident in Soroako city. PT Inco directors and government officials from Makasar or Jakarta sweat out a game of golf on a spacious nine-hole course. Meanwhile, from the corners of the golf course you can see farmers bathing in sweat from digging into their cramped farmlands to plant the season's crops.

3. Labor

Currently, PT Inco employs approximately 3,000 workers. There are about 20 foreign employees at PT Inco. Generally, workers at PT Inco come from all regions of Indonesia. Among them are workers with very good qualification. Of the original inhabitants of Soroako – 2,549 people – 143 work at PT Inco. The majority of them are manual laborers. A few of the Soroako workers have been hired for clerical positions, but they often feel treated unfairly, as they have the same qualifications and more seniority but are often placed in positions below workers who have newly entered the company.

The fate of Soroako residents who work at PT Inco has not changed much since the late 1970s and 1980s. As described by Robinson (1986), Soroako residents who work at PT Inco are basically manual workers who receive low salaries. In this regard, there has not been any meaningful change. The majority of workers at PT Inco are not from Soroako, Wasuponda, Tomampu or the other villages that lie within the company's concession area (Montesori S, 2001). It is not surprising then that in a July 1998 statement from Kwas, local citizens demanded that PT Inco give priority to indigenous residents in hiring, access to education and training, and hoped for work contracts that could make them permanent employees.

An important aspect of labor that must be given attention is worker safety. In 1990, 10 workers died after an accident occurred at one of PT Inco's nickel smelting plants (Marr, 1993). Ten years later, in 2000, another accident occurred that demands attention. Hamzah Baso, a PT Inco worker, was burned to death when the vehicle he was driving, used to dispose of slag, ran off its tracks and was poured in along with the slag. PT Inco itself has stated that in 2000 its on-the-job injury rate was 0.22 per 100 workers. This figure increased from 0.16 per 100 workers the year before. Given the importance of worker safety, it is also important to remember that PT Inco's own parent company, Inco Ltd., has a bad reputation in this area.

4. Environmental Destruction

More than 20 years after starting its operations in Soroako, there is abundant evidence that PT Inco owns a bad reputation in the area of environmental management. The eyewitness testimony of Kathryn M. Robinson – author of the book *Stepchildren of Progress* – is extremely important in this regard. Robinson (1986) stated that strip mining in an area where there is high rainfall causes clay from on top of the hills to fall down into the lake with ease when rain comes down. Yellow streams of water enter the lake, polluting the shores in lakeside villages. Shores full of mud deposits cannot be used for washing clothes. In addition, the lake is polluted by streams of factory effluent that flows through a channel near to villages. Test samples from places along the lake where Soroako residents bathe and do their wash indicate a level of E. Coli bacteria as high as 2,400 parts per million. According to Robinson, in Australia tolerable levels of E. Coli are set at 200 parts per million.

Nowadays, if one visits Soroako, it is easy to see the air pollution. Smoke of various colors (black, brown and white) comes out from factory smokestacks in Soroako, which demonstrates that PT Inco is not really serious about environmental protection. For dozens of kilometers around the plant, leaves are covered with little black particles from the smelting plant. In effect, Soroako and the surrounding area are blanketed with dust. This despite PT Inco's statements that it has already spent US \$60 million to manage this problem.

It is only a short distance from the factory to Soroako city, meaning that the dust that is created by factory smokestacks easily spreads throughout areas where people live. According to Soroako residents, if you set clothes out to dry in the evening, there is a risk they will be covered with dust by the following morning.

Imagine how easy it is for this dust to enter also into people's houses under these conditions, given that houses are open and constructed very simply. Very different from then houses of PT Inco employees that use air conditioners.

Advocating a Way Forward

Based on the outline of problems above, advocacy activities regarding violations and activities of PT Inco should widely involve the Japanese public. The Japanese public must be made aware that they need to take responsibility for controlling PT Inco in Indonesia. It is their taxes that pay for, and have already been used by, PT Inco to finance its mining activities that have caused significant human rights violations and environmental damage.

Palu, 13 July 2002