

Indigenous Peoples and Environmental Issues: An Encyclopedia

Irian Jaya/Papua New Guinea

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Introduction

Irian Jaya (Papua New Guinea), a province of Indonesia on the west; formerly known as Australian New Guinea on the east, is one of the most environmentally exploited large islands in the world. In West Papua, one of the world's largest gold and copper mines continues to grow, spewing waste that turns forests into moonscapes. Several hundred local indigenous people have died following protests of the mine's environmental and safety record during a quarter century of strenuous opposition to the destruction, by strip mining, of mountains they regard as sacred.

If the results had not been so tragic, some of the environmental history of Papua New Guinea could provide the makings of an environmental soap opera. What other reaction could a serious student have when the chief executive officer of Freeport MacMoRan, owner of one of the largest gold and copper mines in the world (which is sawing off the top of one of the tropics' few snow-capped mountains) compares the mine's environmental impact to his urinating in the ocean? In addition to Freeport's Grasberg mine, indigenous peoples in Papua New Guinea have found themselves opposing dam construction, logging, and several other types of mining.

Freeport's Grasberg Mine: Tidal Waves of Waste

New Orleans-based Freeport McMoRan's Grasberg Mine, in West Papua's Jayawijaya district, operates in conjunction with the Rio Tinto Company (formerly Rio Tinto Zinc). Grasberg, the largest gold mine (and the third-largest copper mine) in the world, is situated on 16,500-foot high, snow-capped Mount Jaya, a few hundred miles south of the equator in Papua New Guinea, in an area considered sacred by indigenous people in the area. The Grasberg Mine contains gold, silver, and copper valued at \$50 billion. (Bryce, 1996) According to one observer, "Freeport's Grasberg mine is essentially grinding the Indonesian mountain into dust, skimming off the precious metals, and dumping the remainder into the Ajkwa River." (Bryce, 1996)

The Mineral Policy Institute has called for an end to Rio Tinto's environmentally destructive mining activities at the Freeport Mine, "a mine described as having them world's worst record of human rights violations and environmental destruction." (Rio Tinto's Shame, 2000) The Freeport mine uses Lake Wanagon, an alpine lake that also is considered sacred by the indigenous Amungme people, to dispose waste rock in from its massive gold and copper mining operation near the Grasberg gold mine.

Freeport mines 78,000 tons of ore a day, as well as additional overburden, nearly all of which is dumped as mine waste and tailings into the rivers surrounding the mine, and others in the area, "making the water toxic and thick with silt, smothering and killing all plant life along the previously fertile river banks," contaminating drinking-water supplies. (Resource Boom, N.d.)

In Freeport's five-square-mile strip mine, between 80 and 100 giant trucks haul 600,000 tons of rock daily from a pit almost 3,000 feet deep. Twelve miles of conveyor belts carry ore to a milling plant that uses more than a billion gallons of water a month. Most of the machinery in the mine was dismantled and hauled up rock walls in pieces on an aerial tramway. (Roberts, 1996) Mount Jaya, 16,500 feet high towers above the mine, containing three of the world's eight remaining equatorial glaciers. Gold production from the mine averages between 1 million and 1.5 million ounces a year; copper production averages 1 billion pounds a year. The mine employs about 17,000 people, 89 per cent of them non-Papuans. (Roberts, 1996, 14)

Freeport has not paid any mining royalties (or any other compensation) to the roughly 4,000 Amungme indigenous people displaced by the growing mine's concession area of 9,266 square miles since strip mining began there in 1972. Many of the displaced people have moved to the lowlands, where malaria and other diseases have killed several hundred of them. (Roberts, 1996, 15)

Mine tailings are dumped into a tributary of the Ajikwa River, after which they flow down steep mountainsides into rain forests at lower elevations, producing a desolate landscape. The scene was described by one observer: "Dead and dying trees are everywhere, their broken branches protruding from tracts of gray sludge. . . . Vegetation is being smothered by accumulated sludge that is several yards deep in places. . . . By the company's own calculations, 51 square miles of rain forest is expected to be destroyed before the century is out." (Roberts, 1996, 16)

An estimated 3 billion tons of rock will have been processed by the time the mine is exhausted about 2040. According to the Mineral Policy Institute, "This waste is acidic and contains heavy metals. The water from Lake Wanagon flows into the Ajikwa River system that flows down to the Arafura Sea. In addition the mine dumps 300,000 tons of waste tailings into the Ajikwa River every day." (Rio Tinto's Shame, 2000)

In 1977, local indigenous peoples affiliated with the Free Papua Movement issued their own critique of its environmental record by blowing up one of its ore pipelines. According to Al Gedicks, writing in *Resource Rebels* (2001), reaction of the Indonesian military was swift and emphatic:

The Indonesian military responded by sending United States-supplied OV-10 Bronco attack jets to strafe and bomb villagers. The retaliation was code-named Operation Tumpas ("annihilation"). Papuans claim that thousands of men, women, and children were killed in this action; the government admits to 900. Reports of the use of these counterinsurgency aircraft did not appear in the world press until a year later. (Gedicks, 2001, 95)

Local protests of the Grasberg mine have continued for many years. In 1996, after an indigenous man was hit and injured by a car driven by a Freeport employee, 6,000 tribal

people laid siege to the mine's offices. When Freeport Chief Executive Officer Jim Bob Moffett arrived at a local airstrip March 12, 1996, a group of similar size gathered at the airport to demand that the mine be shut down. Moffett was quoted in the September/October, 1997 issue of *Mother Jones* as saying that the environmental impact of the mine is the equivalent of "me pissing in the Arafura Sea." (Ziman, 1998)

Moffett earned \$83 million (salary, bonuses, and stock options) during 1995 and 1996; according to *Business Week*, he was the tenth-highest compensated C.E.O. in the United States. "Looking at it another way," reported the *Austin (Texas) Chronicle* in April, 1997, "Moffett's pay was nearly three times the total amount that [Freeport] has agreed to pay several thousand Amungme tribal members who have been displaced by the company's mining projects in Indonesia." (Ziman, 1998) Meanwhile, members of the indigenous Amungme tribe have literally watched their mountain disappear. Mining has removed enough earth to lower the mountain by 400 feet in seven years, and now the Ajkwa river is so badly polluted from the mine that Kwamki-lama residents have been warned by Freeport's own employees not to drink the water or eat plants that grow near the water. (Ziman, 1998)

During March, 1997, several thousand villagers rioted in the towns of Timika and Tembagapura, located near the mine. Four people were killed and more than a dozen injured as protesters damaged Freeport's equipment. The Australian Council for Overseas Aid (A.C.F.O.A.) and the Catholic Church of Jayapura reported that Freeport turned a blind eye while the Indonesian military killed and tortured dozens of native people in the area surrounding the mining concession. "Villagers were beaten with rattan, sticks, and rifle butts, and kicked with boots," one tribal leader told Catholic Church officials. "Some were tortured until they died." (Ziman, 1998)

Even as Freeport adamantly denied responsibility for alleged human-rights violations, the company and the Indonesian military responded to local indigenous protests by spending \$35 million to assemble barracks and other facilities to house and support 6,000 troops, "more than one soldier for each adult Amungme." (Gedicks, 2001, 106-107) The company asserted that the A.C.F.O.A. had backtracked on its original claim that Freeport was involved in the killings. (Bryce, 1996) Indonesian military troops routinely guarded the area around the mine, and Freeport provided them with food, shelter, and transportation. (Bryce, 1996) The Indonesian government maintained a 9 per cent share in the mine, enough to earn several hundreds of millions of dollars a year in royalties, taxes, and benefits, making Freeport Papua New Guinea's largest single taxpayer.

During May, 2000, the Grasberg mine's waste-rock disposal dam collapsed, killing four workers, and, according to one account,

sending several 40-meter-high "tidal waves" of waste roaring down the Wanagon river towards Banti village. Incredibly, there was no loss of life at Banti despite most people being asleep when the waves arrived, passing just meters below homes, killing livestock and destroying the village graveyard. Adding insult to injury, 30 minutes after the flood reached Banti, an early-warning system installed by Freeport rang the alarm. (Rio Tinto's Shame, 2000)

One witness at the site reported in the *Jakarta Post* that a "150-foot high wave had 'destroyed pig sties, vegetable gardens, and a burial ground' about seven miles downstream

of the basin." (Gedicks, 2001, 30) One report described the resulting tidal wave of waste as "a mini-tsunami." (Freeport Faces, 2000) The spill occurred, coincidentally, one day before the annual shareholders' meeting for Freeport McMoRan Copper & Gold.

Within days of the spill, on May 8 and again on May 18, protests against Freeport shut down the company's offices in Jakarta and prevented about 1,000 Freeport employees from entering their workplaces. In addition to protesting the environmental devastation and deaths caused by the spill, the protesters demanded that Freeport Indonesia provide a larger proportion of its earnings to support local people in the impoverished province surrounding the mine.

Soon after the accident, about 600 Amungme people from Banti, Tsinga, and Arwanop blockaded the Freeport mine's access road, preventing workers' buses from entering the mine. Roughly 100 police confronted the blockade but failed to break it until representatives met personally with Hermani Soeprapto, Freeport's General Manager, and addressed grievances to the company.

Indonesian environmental officials later told Freeport that it must submit a comprehensive new plan and obtain government approval before opening a replacement dump for its waste rock. Freeport also was instructed to clean up all destruction and pollution caused by the waste released during the accident. In addition, Freeport was told to allow a criminal investigation by the police and government officials into the four men's deaths caused by the collapse. The company also was ordered by the government to compensate losses suffered by residents of Banti.

The dam at Lake Wanagon has failed three times (June 20, 1998, March, 20, 2000, as well as May, 2000) due to the company's dumping of overburden. After the third breach, dumping was halted pending an investigation. The investigation, conducted by Freeport and the Institute of Technology of Bandung (Indonesia) cleared the company to continue operations in January, 2001.

Construction of a dormitory town at Tembagapura in association with Freeport Indonesia's mining operation at Mount Carstenz led to eviction of indigenous Amungme, who were barred from entering the town, which houses as many as 20,000 workers and family members. (Resource Boom, N.d.) Freeport moved the 1,000 inhabitants of a village, Lower-Waa, to the coastal lowlands, where, in one month, 88 of them died of malaria. (Resource Boom, N.d.)

"Freeport has taken over and occupied our land," said Tom Beanal, leader of LEMASA, an acronym for the Amungme Tribal Council, the community organization of the indigenous Amungme people. "Even the sacred mountains we think of as our mother have been arbitrarily torn up by them, and they have not felt the least bit guilty. Our environment has been ruined, and our forests and rivers polluted by waste." (Ziman, 1998) "They take our land and our grandparents' land," said Beanal. "They ruined the mountains. They ruined our environment. . . . We can't drink our water anymore." (Bryce, 1996)

Indigenous peoples living in the area that is being mined by Freeport have no legal title to their lands under Indonesian law. Their land is classified as tanah negara (state-owned land)

under the terms of the Indonesian Constitution. The same central government has granted Freeport a legal right to use the land largely as it sees fit, with only the lightest of environmental oversight.

During October, 1995, after a lengthy investigation, the Overseas Private Investment Corp., a federal agency that supports American companies doing business overseas, canceled Freeport's \$100 million political-risk insurance policy, citing environmental problems at the mine. In a letter dated October 10, 1995, O.P.I.C. told Freeport the mine had "created and continues to pose unreasonable or major environmental, health, or safety hazards with respect to the rivers that are being impacted by the tailings, the surrounding terrestrial ecosystem, and the local inhabitants." (Bryce, 1996)

Freeport's Grasberg mine is only the best-known and largest of several mineral-extraction projects on Papua New Guinea which have stirred protests by the island's indigenous peoples. In Papua New Guinea, Rio Tinto's Panguna Mine, which was one of the world's largest open-pit copper mines before it was closed, dumped more than one billion tons of mine waste into the Pangana, Jaba and Kawerong Rivers, killing all aquatic life in the 480 kilometer river system. The waste formed a deposit approximately 20 kilometers long, as much as a kilometer wide and several meters deep along these rivers, with a copper-contaminated outwash fan in Empress Augusta Bay covering roughly nine square kilometers. (Mining in the South Pacific, N.d.)

The U.S. State Department at one point attempted to defeat a lawsuit alleging genocide and environmental damage that had been filed by Bougainville landowners against Rio Tinto's operation of the Panguna mine. State Department officials wrote to the judge hearing the case saying that airing of the class-action suit would affect U.S. relations with Papua New Guinea. The government of Papua New Guinea also tried to block the lawsuit, according to a report November 30, 2001 by the *Australian Broadcasting Corporation*. (Hotspots: Bougainville, 2001)

Rio Tinto, a mining partner of Freeport in West Papua, is the parent company of C.R.A., an Australian mining company which operated the huge Bougainville Copper Mine, which was established by Rio Tinto during the 1970s while Papua New Guinea was still an Australian protectorate. A guerrilla movement has been campaigning since the 1980s for compensation of Bougainville's traditional landowners, who have been dispossessed by the company's operations. An estimated 5,000 civilians were killed (or died of imported diseases) in the Bougainville area during the 1990s.

The Kutubu project, operated by the U.S.-based Chevron Oil Company, was Papua New Guinea's first oil-extraction project; critics alleged that its environmental and social impacts were much greater than reported, "including significant impacts on biodiversity, and the risk of [oil] spills, with the benefits to landowners being relatively low. One academic expert on the area described the impact as "devastating." (Mining in the South Pacific, N.d.) Oil is piped 176 kilometers to the Kikori estuary. In 1996, non-essential staff had to be evacuated after threats from landowners dissatisfied with royalty payments.

The Porgera gold mine, maintained by Placer Pacific of Australia, (majority shareholder Placer Dome of Canada) has been one of the dirtiest operations on Papua New Guinea. It

dumps 40,000 tons of tailings and waste rock daily into the Strickland/Fly River catchment basin. Environmental sampling has indicated levels of metals as much as 3,000 times levels permitted by government regulations, which are not enforced.

The Ok Tedi Mine has been a subject of controversy because its tailings killed all aquatic life along 70 kilometers of the Ok Tedi River of Papua New Guinea following pollution by tailings and waste rock. Court suits by indigenous landowners forced B.H.P. Billiton of Australia, owner of the mine, to reach an out-of-court settlement for \$550 million Australian. Members of communities affected by the mine's pollution blockaded and shut it down on November 25, 2001, costing the company close to U.S. \$1 million in lost production.

Late in 2001, B.H.P. Billiton convinced the Papua New Guinea government to endorse three acts of legislation affecting the Ok Tedi Mine which "have caused an uproar in the environmental and human rights communities who say that the company will escape responsibility for the damage it has caused to the environment and communities living near the Ok Tedi in the western province of Papua New Guinea." (B.H.P. Billiton, 2001) According to a summary provided by Slater and Gordon, an Australian law firm that has filed a lawsuit against the company, the agreements will give B.H.P. and Ok Tedi Mining "unrestricted legal indemnity for the pollution and destruction caused now and into the future by the operations of the Ok Tedi mine. The mine's owners will have no obligation to stop tailings entering the river system in future, and will be permitted to increase the amount of copper it is currently permitted to dump into the river system." (B.H.P. Billiton, 2001) The agreements release Billiton from any liability under an ongoing suit in Australia's Victorian Supreme Court; under the same agreements, landowners also lose their common-law rights to enforce a 1996 settlement as well as any future legal rights to sue the mine for any environmental damage.

At about the same time, representatives from four indigenous communities living near the mine presented a petition demanding compensation and a share of B.H.P. Billiton's 52 per cent stake in Ok Tedi. The local people also demanded compensation for environmental damage from the date the mine opened (1981) to the present. The government of Papua New Guinea denied a request from local landowners to grant them 12 per cent of the benefits from the Program Trust Company, to which B.H.P. Billiton's interest in the mine was sold in 2002. (Hotspots: Papua, 2001)

Papua New Guinea's Prime Minister, Sir Mekere Morauta, has called the Ok Tedi Mine a national asset. Morauta argues that closure of the mine could devastate the nation's economy and cause the ruin of communities that depend on it. The mine accounts for 10 per cent of Papua New Guinea's gross national product and 20 per cent of its export income.

As the mine's owners were sealing their deal with the Papua New Guinea government, the Australian Conservation Foundation issued a report saying that nearly 70 kilometers of the Ok Tedi River has become "almost biologically dead," and 130 kilometers of riverbank have been "severely degraded." Fish stocks have declined between 50 per cent and 80 per cent, according to the mine's own internal report. Roughly 30,000 downstream landowners have lost their ability to live off their own land. A scientific Peer Review Group employed by the mine's management identified potential for a total collapse of the fishery. (B.H.P. Billiton, 2001)

In addition to widespread logging on traditional lands in West Papua, some of the world's largest transnational mining corporations have been active in exploiting the island's oil and minerals, including Union Oil, Amoco, Agip, Conoco, Phillips, Esso, Texaco, Mobil, Shell, Petromer Trend Exploration, Atlantic Richfield, Sun Oil and Freeport (United States of America); Oppenheimer (South Africa); Total (France); Ingold (Canada); Marathon Oil, Kepala Burung (United Kingdom); Dominion Mining, Aneka Tambang, B.H.P., Cudgen R.Z., and C.R.A. (Australia). Petromer Trend and Conoco have produced 300 million barrels of oil from the field at Sele near Sorong, valued at an estimated \$4.5 billion. (Resource Boom, N.d.) Mining concessions in the Ertsberg and Grasberg mountains, the Paniai and Wissel Lakes region, Fak Fak, the Baliem Valley, the "Bird's Head" western tip and the Papua New Guinea border area, involving dislocation and suppression of Papuan peoples have sparked popular uprisings followed by military reprisals.

By early 2002, B.H.P. Billiton had officially exited Papua New Guinea leaving behind operations at the Ok Tedi gold mine, leaving 30,000 people displaced by pollution. The company admitted in 1999 that the "sediment load" (a build-up of waste rock or tailings) has caused a 90 per cent fish kill in the lower Ok Tedi River. (Hotspots: Papua, 2002)

According to a report in *Drillbits and Tailings*, "Part of B.H.P.'s plans to exit Ok Tedi included a transfer of its 52 per cent equity interest to the P.N.G. Sustainable Development Program. SDPL is a special-purpose development fund that will channel dividends to sustainable development projects, mainly in the Western province. According the PNG-based Environment Watch Group, the deal is "a slap in the face" especially because B.H.P. has destroyed the Fly River." (Hotspots: Papua, 2002)

Dam Development in Papua New Guinea

A proposed \$6 billion dam on the Mamberamo River in West Papua (New Guinea) would flood one of the richest biological areas of the world. Not only would this project reduce biodiversity in the area, but it also could devastate the cultures and traditions of 35 nomadic tribes in the area. Wimpie Dilasi, a leader of the regional tribes' federal council, said that these plans, especially the 10,000-megawatt dam, will create widespread misery. Local indigenous people have only rarely been consulted regarding their homelands' future.

In 1997, an Indonesian government official arrived at Lau, West Papua, a group of palm-thatched houses along a remote tributary of the Mamberamo River. The envoy said that everyone in Lau would soon be forced to move into the surrounding mountains. Their land, an area larger than England, was slated to be flooded. On April 2, 2001, West Papua's governor, J.P. Salossa, announced that the Mamberamo mega-project was proceeding with "renewed momentum" with funding from the World Bank and the Asian Development Bank. (The Damming, 2001) An Lau village chief told the coordinator of the World Wildlife Fund during the same year that during his visit to "I would rather be shot in the head than be resettled." (Carrere, Indonesia, 2001)

During 1999, a South Korean firm, P.T. Kodeco Mamberamo Plywood, opened a sawmill and planted an oil-palm plantation in the area. Extensive, industrial-scale logging of old-growth rainforests in the company's 691,700-hectare concession already was threatening populations of endangered green turtles and birds of paradise. According to an analysis by

the World Rainforest Movement, this is just the beginning of an industrial future for the area: "Land that has been cleared by P.T. Kodeco will serve as a site for a major industrial estate with metal-smelting works, sawmills, agribusiness plantations, and petrochemical processing factories to be powered by the dam." (Carrere, Indonesia, 2001)

Areas within some mining concessions have been questionably designated "earthquake zones", requiring mass resettlement of tribespeoples such as the Hupla of the central highlands, an unnecessary and destructive practice according to the World Rainforest Movement. Communities are often coerced into moving to sites at lower elevations, where they are more prone to diseases such as malaria and where traditional mountain foods do not grow.

The Moi, Logging and Mining in West Papua

Under Indonesian national law, all land not being actively used for agriculture, housing or industry is deemed state property. The government therefore often concludes that indigenous peoples are not "using" their communal homelands according to a body of law that recognizes no form of indigenous land rights. Any protest of this situation has led to accusations that the Moi are "security disturbers -- the official term -- used to silence any form of indigenous protest." (Resource Boom, N.d.) Like other indigenous communities, the Moi people have come into conflict with the Intimpura Timber company.

The livelihoods of the Moi and other indigenous peoples have been threatened as vast tracts of land have been granted as concessions to timber companies. These are some of the most biologically diverse forests in the world. Numerous species that are unique to the area have been threatened by logging and other development projects.

Indonesia has encouraged the development of a large timber-processing industry by banning the export of raw logs; the country has thereby become one of the world's largest exporters of plywood. As Indonesia's remaining forest resources decline in Sumatra and Kalimantan (Borneo) the forestry industry has targeted West Papua. Four Jakarta-based timber tycoons have divided West Papua between them; their domination being achieved with support of the government. To exploit the country's resources fully, the government has given the construction of roads in previously inaccessible areas a high priority. "Logging roads are carelessly constructed," according to one observer,

leading to substantial soil erosion and consequent silting of rivers and irregularity of river flow. Roads are routinely built over minor streams; the result is a roadside string of standing pools, which produce unusually high concentrations of mosquitoes and present the threat of malaria and other diseases. . . . The heavy machinery destroys trees used by local people for food sources and traditional medicines. (Resource Boom, N.d.)

Changes in the land worry Damien Arabagali, a community leader in Toroba, West Papua:

I think nature will pay back the disrespect shown to her. Look around you! It's becoming hotter, drier, more eroded. Here, in Huli country, people are hiding from the sun. They never used to do that before. The land is more barren than ever before. That's why people have to work much harder than ever before. Look at how skinny they are! And because of all this clearing of our forests we have floods, which we never had before. We can see it here. Our fertile swamps, where we plant kaukau and our sweet potatoes . . . are drying out. Soon there will be no more swamps.

What then? What's the cause of all this? I think it's greed. Something in humanity must be evil in itself. . . . The big companies have become dehumanized. Profits at all costs, no matter what that leaves behind." (Interpress Service, 1993, 89)

FURTHER READING

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[http://www.moles.org/ProjectUnderground/drillbits/6_10/2.html]
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- "The Damming of the Mamberamo River in West Papua Threatens Villages." *Cultural Survival News Notes*. August 17, 2001.
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[NOTE: As of October 2002, the above link does not resolve. The following contains some of the above:
"Washed away - The damming of the Mamberamo river in West Papua threatens to flood one of the least explored areas of the planet and change forever the lives of the nomadic tribes reports Eben Kirksey". *The Guardian*, August 1, 2001
<http://www.guardian.co.uk/Archive/Article/0,4273,4231187,00.html> --ratitor]
- "Freeport Faces Investigation due to Recent Disaster and Past Mismanagement." *Drillbits and Tailings* 5:9(May 31, 2000)
[http://www.moles.org/ProjectUnderground/drillbits/5_09/3.html]
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- "Mining in the South Pacific: On the Other Side of the Forests." No date.
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"Forum: Mining in the South Pacific - Beyond the Forests"
http://www.mpi.org.au/mm/editions/mining_monitor_vol2no2pp7-11.pdf --ratitor]
- "Resource Boom or Grand Theft?" Australia West Papua Association, Sydney. No date.
[<http://www.cs.utexas.edu/users/cline/papua/deforestation.htm>]
- Rio Tinto's Shame File: Indonesian Landowners' Discontent Represented at Rio Tinto AGM. Mineral Policy Institute. May 22, 2000.
[http://www.mpi.org.au/releases/rio_agm.html]

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