

Choropampa residents demand clean-up and compensation after mercury spill.

hen a large mining operation begins, the area around the ore deposit often sees a sharp boost in economic activity. New roads are built; housing goes up for the miners; smaller businesses set up shop to serve the mine and its workers. And indeed, such operations are typically presented as the ticket to local prosperity. But the economies that grow up around large mines usually suffer from the "company town" syndrome: there is generally little economic activity that is independent of the mine. This high degree of dependency has not proven to be a good way to build long-term economic stability.

Even over the short term, the local mining economy tends to create some very powerful social deficits. The damage may begin with the displacement of local peoples from their traditional lands. In the developing world and in many indigenous communities in the industrialized world, many people lack legal title to the lands they live on, even though they may have occupied the same lands for many generations. Such people are vulnerable to eviction when a mining lease is granted, and the eviction may be imposed without prior consultation, meaningful compensation, or the offer of equivalent lands elsewhere.

In the Indonesian province of Kalimantan, for example, a 2001 investigation by the country's National Human Rights Commission substantiated claims of forced evictions around the PT Kelian gold mine, operated by the giant British and Australian mining company, Rio Tinto. The Commission found that from 1989 to 1992, military forces, along with Rio Tinto security personnel, had burned villages around the mine and forcibly evicted small-scale

miners from their claims. The 440 families displaced by the mine received only minimal compensation for their losses; the miners received nothing. Sometimes these evictions are imposed on an enormous scale; between 1990 and 1998, for instance, mining displaced more than 30,000 people in Ghana's Tarkwa District.³⁵

Even where there is no direct displacement of the people themselves, there is frequently a displacement of their traditional livelihoods. Large-scale mining is so destructive to the landscape that little in the way of traditional rural life is liable to survive in its vicinity. Industrial mining generally eliminates farming, fishing, small-scale forestry, and even—as is apparent from events in Kalimantan—any previous artisanal mining.

Despite the usual promise of jobs, the mining economy typically creates little employment for those who lose their livelihoods to the mine. In large operations, most workers are not likely to come from local communities, since the mining companies are usually looking for skilled labor. The

former Panguna copper mine on the island of Bougainville, part of Papua New Guinea, is a case in point. Virtually all its workers came from off the island; during a single four-year period, the mine imported 10,000 workers—to an island whose total native population numbered just 80,000.³⁶

A host of subsidiary problems tends to follow all the initial disruption. The loss of traditional ways of life and an influx of male migrant workers, usually living away from their families—in many places, this scenario has led to an increase in alcoholism, drug abuse, prostitution, crime, and domestic violence. A recent World Bank investigation identified such problems around the giant Yanacocha gold mine in northern Peru, an area formally inhabited by traditional farmers and herders. (See page 10.) The Bank found that "people are troubled about their future and a heavy cloak of anxiety and profound concern darkens the spirit of the place and threatens any meaningful sense of well-being." In Bougainville, the massive influx of mine workers spurred an increase in crime and alcohol abuse, which eventually led to riots and finally to a civil war.³⁷

The mining economy is also likely to produce a major public health deficit. A part of that deficit is generally the result of recurrent accidents—sometimes so recurrent, the term "accident" may be something of a misnomer. For example, in the Tien Shen mountains of Kyrgyzstan, at the Kumtor gold mine operated by the Canadian company Cameco, trucks delivering nitric acid, ammonium nitrate, and cyanide nitrate have on at least three occasions spilled part of their cargo into streams, poisoning more than 2,500 local residents. And beyond these immediate dangers, there looms the threat of injury from long-term exposure to toxics.³⁸

The Violence of Metals

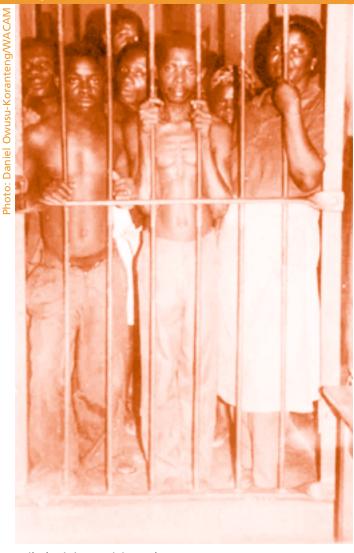
Community opposition to mining may encounter violent suppression by the companies themselves or by government forces working in concert with them—indeed, as a practical matter, it can be difficult to distinguish between these two entities. Especially in parts of Africa and the Pacific region, large-scale mining tends to become "militarized." In such situations, the actions of the police, the military, or persons unknown have often resulted in the death or disappearance of mining opponents. For example:

In West Papua, Indonesia, where Freeport McMoRan operates the giant Grasberg gold and copper mine, human

Photo: Oxfam Australia

An Australian mining company in Indonesia entertains military officials.

Dirty Metals



Jailed mining activists, Ghana

rights investigators have documented numerous human rights violations—including rape, torture, extrajudicial killings, and arbitrary detention—committed by the Indonesian military against indigenous communities living near the mine. During 1994 and 1995, according to the Australian Council on Overseas Aid, the Indonesian military, with the assistance of the mine's own security forces, "disappeared" or killed 22 civilians and 15 other people they alleged were "guerillas." Human rights advocates have long suspected that Freeport was paying Indonesian soldiers directly—an arrangement that would make the company complicit in the military's abuses. And in 2003, a document requested by Freeport's shareholders confirmed that the company was indeed doing this: Freeport paid the Indonesian military \$4.7 million in 2001 and \$5.6 million in 2002. In August of that year, the military shot and killed two American schoolteachers working near the mine, and one Indonesian mine employee.³⁹

In the west African nation of Ghana, a country with extensive gold mines, the Ghanaian Commission on Human Rights and Administrative Justice issued a report in 2000 that found "overwhelming evidence of human rights violations occasioned by the mining activities, which were not sporadic but a well established pattern common to almost all mining communities." An investigation by the Ghanaian community group WACAM (Wassa Association of Communities Affected by Mining) supports that conclusion. WACAM found that the Ashanti Goldfields Company (AGC) was committing human rights abuses against the Sansu community, which has a long history of artisanal mining in an area that AGC itself has recently begun to mine. The group found evidence that between 1994 and 1997, AGC security personnel, acting in conjunction with the police and the military, had killed three artisanal miners. In one incident in January 1997, 16 artisanal miners were severely beaten by AGC security personnel. WACAM also collected testimony from six other artisanal miners who say they were beaten and attacked by AGC security's guard dogs.40

Eventually the boom goes bust, as ore deposits are exhausted and the jobs generated by the mine disappear. Most large-scale projects have a lifespan of between 10 and 40 years, after which the mining companies close up shop and move on to new projects. Any schools, clinics, and other services established by the companies usually lose their funding.

When this happens, the miners and communities are generally left to fend for themselves. Since mining is specialized employment, miners typically have few other marketable job skills, nor do many governments or companies make much of an effort to provide those skills. There are few "just transition" programs, in which former mineworkers are retrained for other work. For these reasons, laid-off miners are likely to stay unemployed for long periods. The social effect of these layoffs is often profound, because the miners generally have a large number of dependents (although the majority of them may not be in the mining communities themselves). According to an estimate by the South African Chamber of Mines, one in every eight people in southern Africa is economically dependent on mining. In South Africa itself, the gold mining industry laid off some 400,000 workers between 1985 and 2000—nearly half its workforce.41

This is the end game of the local mining economy: the destruction of the traditional employment base, followed by the loss of the mine itself. It's little wonder that even in the United States, mining areas exhibit some of the highest poverty and unemployment rates in the country.⁴²

How Mining Injures Women

In the mining communities of the developing world, it is the women, already disadvantaged, who bear some of the most difficult burdens. A profile of their lot:

In many countries, women are not permitted to own land or their land rights are restricted. Lack of title often excludes women from land compensation payments. Even when women have title, they may be excluded from negotiations anyway because such matters are frequently seen as a male prerogative. In Papua New Guinea, for example, women were excluded from formal compensation negotiations with the Rio Tinto subsidiary that owns the Lihir gold mine.

Large-scale mining creates very few employment opportunities for women, and it displaces economic activities, such as agriculture or artisanal mining (see page 25), in which women often play major roles. These changes tend to concentrate economic power in the hands of men, increasing women's dependence on their husbands or male relatives. That's what has happened, for example, in the

Antamak region of Luzon, in the Philippines, around the Philippines-based Benguet Corporation's open-pit gold mine. As small-scale mining and farming have disappeared, women have been leaving town to look for work elsewhere, often withdrawing their children from school to take with them.

Women who do find work in mining companies may face severe discrimination—or worse. In East Kalimantan, Indonesia, for example, women employees of the PT Kelian Equatorial Mining company report being sexually abused by male supervisors.

The drinking, drug use, and prostitution typical of mining communities also aggravate some health risks that fall especially heavily on women, such as HIV infection. (Women are disproportionately affected by the spread of HIV/AIDS because they are anatomically at greater risk of infection than men.) For example, widespread infection of women has been found around the town of Timika, in Indonesia's Irian Jaya

Province, where there is a mine operated by the company PT Freeport Indonesia.

Environmental contamination from mining—especially water pollution—can greatly complicate the traditional role of women as providers of food and water to their families. In drier regions of the developing world, women must often walk considerable distances to collect the day's water. Mine pollution can lengthen that walk, reducing the time for everything else. And because it ruins farmland, mine pollution may also strain local food resources, as has happened, for example, around Placer Dome's gold mine on Misima Island, Papua New Guinea.

In January 1997, female mining activists from around the world gathered in Baguio City, in the Philippines, to look for ways to address these issues. The result was the establishment of the International Women and Mining Network—and a commitment to make the plight of women a central concern of mining activism.⁴³



The Toll on Indigenous Peoples

"IMK made us leave our gardens when the crops were ready for harvest.... IMK also destroyed our graveyards and sacred places that we have protected and respected."

–Mumpung, testifying on February 6, 2003, before the South Jakarta State Court in Indonesia, in a lawsuit brought by the Dayak people against the PT Indo Muro Kencana (IMK) Gold Mining Company.

round half of all the gold Amined from 1995 to 2015 is likely to come from native lands the traditional territories of indigenous peoples. Many indigenous peoples live in remote areas that until recently had not been accessible to the mining industry. And their relative isolation from mainstream society often leaves them without basic legal and political safeguards—a condition that lends itself to abuse. In many countries, for example, the law does not recognize indigenous peoples clearly as owners of their lands. Even when surface land rights are clearly titled to indigenous groups, governments frequently sell off the subsurface rights to mining corporations.

That's why the Dayak complaint quoted above might sound very familiar to the Assiniboine and Gros Ventre indigenous nations, whose traditional lands included parts of northern Montana. In 1895, the tribes were forced by the US government to abandon 16,200 hectares of what was then Spirit Mountain, a site sacred to both tribes. The government then opened the land to gold prospecting. Today, Spirit Mountain has been replaced by the Zortman-Landusky open-pit cyanide-leach gold mine. Although the mine was closed in 1998 when its owner, Pegasus Gold, declared bankruptcy, it continues to pollute what is left

of the landscape. Both surface and ground water have been extensively contaminated. The acid mine drainage (see page 9) has made water treatment a permanent necessity for people living downstream. Water quality problems and inadequate clean-up of damaged lands have prompted multiple lawsuits by the indigenous peoples against both the state and federal governments. Despite a \$37 million settlement, the problems persist.

In the United States and elsewhere, this same scenario is still being repeated. For example, Glamis Gold Ltd. has a proposal pending today in California for an open-pit cyanide-leach mine at Quechan Indian Pass. The mine would destroy or degrade over 50 known sites of cultural or religious importance to the Quechan Indian Nation, including graveyards, prayer circles, shrines, petroglyphs, and geoglyphs. To the south, in Bolivia, the Canadian company Orvana Minerals opened its Don Mario gold and silver mine in May 2003. The mine is in the heart of the formerly pristine Chiquitano Forest, home to numerous Chiquitano and Ayoreo indigenous communities. One month later, the regional indigenous federation filed a complaint with the World Bank's International Finance Corporation (IFC), which is funding the mine. Alleged violations of the Bank's environmental

and social policies have prompted an IFC investigation.

Some native communities have managed to negotiate acceptable agreements with mining corporations but so far, such negotiations are rare. As with violations of labor rights, (see pages 24 and 26), the key to progress may be the enforcement of international agreements. The International Labour Organization "Indigenous and Tribal Peoples Convention," adopted in 1991, guarantees indigenous groups the right to decide on their own development priorities, and to be consulted in good faith before any development takes place on their lands. In Latin America, where most countries have ratified the Convention and written it into national law, some indigenous movements have used the Convention to defend themselves against the incursion of extractive industries into remote parts of Amazonia.

Another international agreement, the UN draft "Declaration on the Rights of Indigenous Peoples," moves beyond consultation and requires the free, prior, and informed consent of the indigenous peoples concerned before any development can proceed. Indigenous groups around the world have invoked this right to defend their cultures, lands, and livelihoods against resource extraction operations. In December 2003, the Extractive Industries Review, an independent commission appointed by the World Bank, recommended that the Bank itself introduce this requirement for all its extractive industry investments.44

Facts on the Ground:

The Western Shoshone People

The story of the Western A Shoshone is a long lesson in the ways that law can fail indigenous people threatened by mineral interests. The ancestral territory of this native American people encompasses an area stretching from southern Idaho, through eastern Nevada, to the Mojave Desert of California. Underneath this swath of over 240 thousand square kilometers (over 60 million acres) lie billions of dollars worth of gold. Nearly 10 percent of the world's gold production—and 64 percent of US production—comes from Western Shoshone land.

Prospectors hoping to strike it rich began entering Western Shoshone territory in the 1840s. Clashes with the Shoshone prompted the 1863 Treaty of Ruby Valley between the US government and the Western Shoshone Nation. The treaty allowed settlers to mine, establish ranches, cut timber, and extract other natural resources from Shoshone lands, but it also recognized the Western Shoshone people as the landowner, entitled to royalties for the extractive activities. But no royalties have ever been paid.

The gold rush continues today, but the prospectors have been replaced by corporate mining—a practice that has proved far more destructive to Western Shoshone lands, sacred places, and scarce water resources.

The failure to pay royalties is a treaty violation and the Shoshone have been attempting for decades to get the government to live up to its constitutional obligations. In 1979, the government tried to legislate a settlement that would have abrogated the treaty and awarded the Shoshone a one-time payment of \$26 million, or roughly 15 cents an acre, in exchange for relinquishing title to their land. The Shoshone refused the settlement,

maintaining that the lands
were never for sale in the
first place. Even so, the
government is acting as if
it were the landowner.
Today, Shoshone ranchers are required to pay
federal grazing fees to
run cattle on their
traditional lands,
and the govern-

ment continues to hand over huge tracts of Shoshone lands to mining companies. Among the beneficiaries are Newmont, Placer Dome, and Barrick. Under the national mining law, which dates from 1872, corporations can purchase so-called public lands from the government for as little as \$5 a hectare (\$2.50 an acre), without owing a penny in royalties for the minerals they extract.

In December 2002, the Inter-American Commission on Human Rights, a part of the Organization of American States, found that the US government was violating the fundamental rights of the Western Shoshone to property, due process, and equality under the law. But the government has ignored the ruling and is moving forward with legislation that would open the territory up to a major new form of extraction, geothermal energy, and to additional mining. In September 2003, the Shoshone filed suit yet again, reasserting their claim to their ancestral territory and demanding payment of the royalties owed them under the treaty.45

Sacred site of the Western Shoshone, Nevada