

Fool's Gold

Ten Problems with gold mining

by Project Underground

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Over 85% of gold mined today will end up as jewelry tomorrow. Gold mining is not an essential industry like the harvesting of food or even paper production. It is certainly not sustainable, nor is it just. Yet the cumulative impacts of gold mining worldwide, on local economies and ecosystems, are at least as bad as those of industrial forestry and agribusiness. With more than 66% of all new mining exploration in the hard-rock sector currently focused on gold, the problems are going to get worse for people and places around the planet. Here's why:

1. GENOCIDE

Every major gold rush has meant death and devastation for local people at the hands of fortune-seekers. California's Native American nations were decimated first by the diseases the 49ers brought with them, then by the new California state government, which put bounties on the heads of native people. Today the Galamsey of West Africa, the Igorot of the Philippines, and the Macuxi and Yanomami of the Amazon are similarly endangered. The Yanomami, for example, had little contact with the rest of Brazil until the arrival of the first garimpciros (gold miners) in the 1970s. By 1989, an estimated 40,000 miners had flocked to the area, polluting rivers and spreading malaria. Decimated by disease, the number of Yanomamis living in Brazil (many also live in Venezuela) fell from 20,000 to about 8,000 in just 20 years. In the words of Yanomami representative Davi Kopenawa Yanomami, "What we do not want are the mining companies, which destroy the forest, and the garimpciros, who bring so many diseases. These whites must respect our Yanomami land. The garimpciros

bring guns, alcohol, prostitution, and destroy nature wherever they go. The machines spill oil into the rivers and kill the life existing in them and the people and animals which depend on them. For us, this is not progress."

2. WATER

Damage to water and water resources is the worst environmental consequence of gold mining. From California's Sierra Nevada in the 1850s to the lands of the Pemon in Venezuela today, people have ruined rivers by using high-pressure hoses to spray down the banks and sifting through the sediment for gold. Runoff flows downstream, destroying plant and fish life. But modern mining is even more destructive of water resources: the gold industry in Nevada - where most gold in the United States is mined - consumes more water than all the people in the state. The water table has fallen as much as 1,000 feet around some of the largest open-pit gold mines in northeastern Nevada, according to the U.S. Geological Survey. One of the mines consumes 100 million gallons per day - ac much as the city of Austin, Texac. And that's not all: Water systems around mines are contaminated by cyanide and other processing chemicals, and the acid mine drainage that runs off exposed rock.

3. WASTE ROCK

To make a simple gold wedding band, at least 2.8 tons of earth are excavated. The gold-mining industry generates an enormous amount of waste compared to its product: The 2,402 tons of gold produced in 1997 resulted in 725 million tons of waste, which was contaminated with metals, acids, and solvents, according to Worldwatch Institute. The standard ratio of waste production in the U.S. gold-mining industry is one to three million, meaning that for every ton of gold produced there are three million tons of waste rock. Most of the unsightly mess left behind is exposed to weathering and will ultimately leach acid and heavy metals into the local area at great ecological cost.

4. CORPORATE WELFARE

In many countries, gold-mining companies are allowed "free entry" to public lands for mineral exploitation. In the United States, it is not entirely free - but the companies only pay \$5 an acre to "patent" a patch of federal land and open it to mining. Since 1872, the government has "sold" land equivalent in size to the state of Connecticut under this law. This land contained \$245 billion worth of minerals! Pushed by corporate advisors, developing countries are adopting similar land policies as well. Since 1994, more than 70 countries have changed their laws to attract foreign gold-mining companies. As a result, the gold-mining industry in the global South is booming: Between 1991 and 1997, exploration investments doubled in Africa, quadrupled in the Pacific region, and expanded by six times in Latin America. Since a "pro-development" mining act was adopted in 1995 in the Philippines, over a quarter of the country's land surface has been handed over as gold mining prospects.

5. INDIGENOUS RIGHTS

In the United States - the world's second biggest gold producer - more than 70% of gold is ripped from native lands. The Western Shoshone, whose traditional domain covers most of

Nevada, are the unhappy hosts to more than three dozen open-pit gold mines on their land, many at least a mile wide and a mile deep, with toxic ponds at the bottom. The U.S. government has continually denied the Western Shoshone their land and treaty rights, as it increasingly allocates Nevada's lands to multinational mining. The story repeats itself around the globe. In Ghana, in the mid-1990s, thousands of traditional farmers were evicted and replaced by World Bank-sponsored gold mining operations covering hundreds of square kilometers. It is now estimated that 50% of gold produced in the next 20 years will come from indigenous peoples' lands.

6. CYANIDE

Cyanide is the chemical of choice for mining companies to extract gold from crushed ore. Very low-grade ore, with minimal residues of gold, is crushed and piled on the ground, then sprayed with a cyanide solution. No mine has ever avoided leaking cyanide into the ecosystem. In 1998, a cyanide spill on a Canadian-owned gold mine in Kyrgyzstan resulted in four deaths and the evacuation of thousands of people living downstream. At one southern Colorado mine, Summitville, taxpayers have already paid out \$100 million for the Environmental Protection Agency (EPA) to simply contain - not clean up - contamination of local rivers.

7. MERCURY

For centuries, mercury has been used to chemically separate gold from ore, leading to major public-health problems for miners and communities around mining districts. During the California Gold Rush, 7,600 tons of mercury were released into local rivers and lakes, resulting in neurological disorders and deaths amongst people exposed to this deadly toxin. More than 50% of mercury exposure today in the San Francisco Bay area is an historic legacy of the 1849 gold rush. Furthermore, millions of small-scale miners use mercury, from the Amazon - where they have invaded indigenous reservations - to the Philippines, resulting in the worst recent outbreaks of Minamata (or "Mad Hatter's") disease. Of 500,000 gold miners tested in Brazil, more than 30% showed mercury levels above the World Health Organization's tolerable limits.

8. DOWRY

Nearly 80% of gold is sold as jewelry, most of it in India. In 1998, the country's gold consumption added up to 815 metric tons, nearly twice that of the United States. This is not, however, a simple tale of vanity or excessive consumption. It is part of the dowry women pay for a man's hand in marriage. Activists working around the gold industry aim both to redress the abuses of mining for communities living in mineral producing areas, and to challenge the patriarchy that forces women to hold gold as their only fallback in times of scarcity. Indian women and activists fighting the dowry system are becoming increasingly aware of the dangers of gold production worldwide. As long as there is pressure on Indian women to own gold, however, it can be derived from non-virgin production. Gold in the vaults of the "developed world" could feed the demand even for India's market for years to come

9. DUD INVESTMENT According to Merrill Lynch, gold is "the duddest of dud investments." Ever since the U.S. dollar went off the gold standard, gold has had no special value as a commodity, with only 280 tons going to industrial uses per year. Yet some people continue to hoard it. The price of gold has been slowly dropping and is now well below the price of its production at many modern mines, which means companies mining new or "virgin" gold are a bad investment. Even the 35,000 tons of gold bullion held in central banks have lost 30% of their value over the last decade- a huge waste of taxpayer assets. Some governments are already beginning to sell off their gold reserves. In the last five years, the Argentine, Australian, Belgian, British, Canadian, Dutch, and Swiss central banks have sold large quantities of gold, as has the International Monetary Fund, causing the price of gold to plummet.

10. ECOSYSTEM IMPACTS

Contamination and waste of water, destruction of habitat and biodiversity, industrialization of wilderness, road-building, and waste-dumping in mined areas all negatively impact the environment around gold mines. "Frontier forests" - the last remaining old growth stands - are under siege from gold exploration. Fisheries suffer from heavy siltation and toxic run-off into waterways from gold mines. Today, mines scrape away and dig up more earth than do the world's rivers through natural erosion! The impact on wildlife is hard to calculate, but between 1980 and 1990 seven thousand birds were found dead near cyanide-laced ponds at gold mines in California, Nevada, and Arizona - the tip of the iceberg of gold mine-related wildlife deaths.

Project Underground is a Berkeley-based organization that provides informational, technical, legal, and scientific support for communities facing abusive oil, gas, and mining operations. A poster version of "Fool's Gold" and other materials on the social and environmental costs of mining and oil drilling are available from Project Underground's website www.moles.org.