



Miners can protect themselves and the environment by using simple kitchen bowl retorts to recover mercury.



Training Sudanese miners

## GMP

The **Global Mercury Project** is a joint initiative of the Global Environment Facility, United Nations Development Program, and UNIDO. For more information: [www.globalmercury.org](http://www.globalmercury.org)

## UNIDO

The **United Nations Industrial Development Organization** is a specialized agency of the United Nations that focuses on relieving poverty by fostering productivity growth. Its activities help developing countries with economies in transition in their fight against marginalization. UNIDO has 171 member states. For more information: [www.unido.org](http://www.unido.org).



Water-pipe retort in Zimbabwe

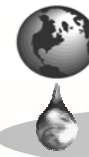
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## Bringing Solutions to Miners

The GMP introduces affordable and accessible technology to miners in developing countries. Currently GMP is working in six countries: **Brazil, Indonesia, Laos, Sudan, Tanzania and Zimbabwe**. This effort is focused on simple, mobile, and reproducible solutions that can reach many miners quickly and efficiently. Mobile training units work directly in communities and provide:

- Techniques to reduce mercury use
- More efficient gold processing practices
- Safer gold extraction methods
- Testing mercury in people, rivers & streams
- Public health training
- Micro-financing for miners
- Environmental management
- Community planning
- Strengthening government policies
- National awareness campaigns

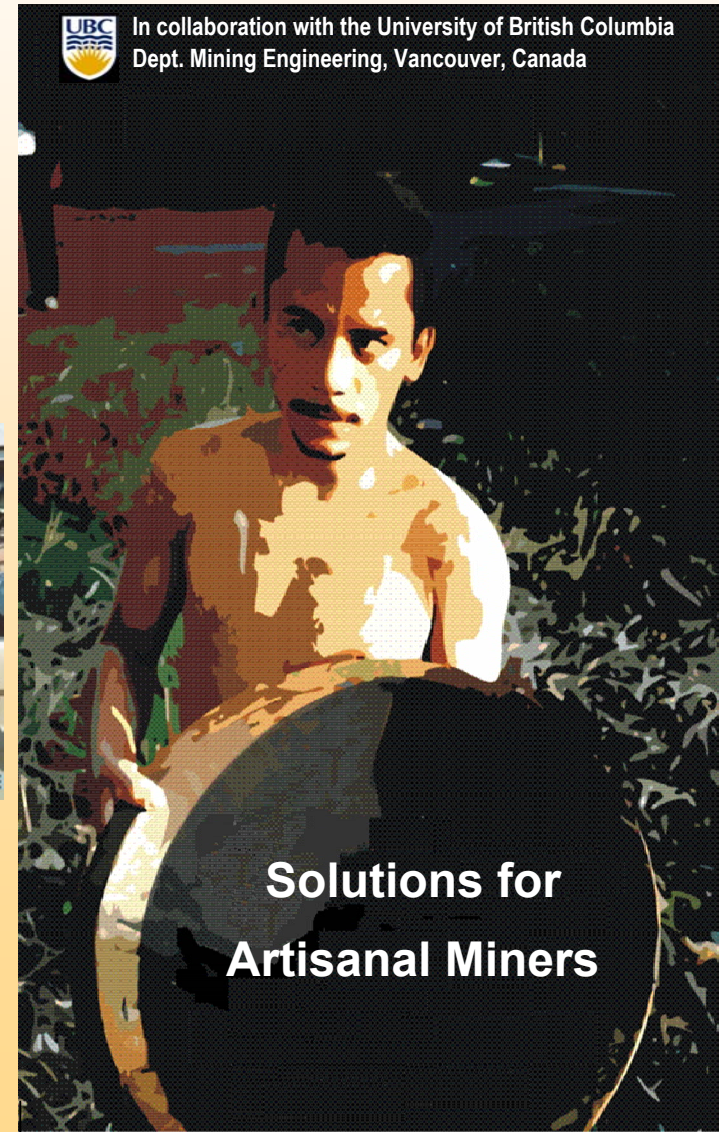


# Global Mercury Project

A Global Effort for  
**Less Mercury,  
More Gold, and  
Better Health**



In collaboration with the University of British Columbia  
Dept. Mining Engineering, Vancouver, Canada



**Solutions for  
Artisanal Miners**



*Indonesian miner amalgamating gold*

## About the GMP

We are currently witnessing the biggest gold rush the world has ever seen. In more than 50 countries, there are 15 million people working as artisanal gold miners, including 4 million women and 1 million children.

The Global Mercury Project is an initiative of the United Nations to promote safer and cleaner practices in artisanal mining communities where mercury is used to process gold.

The emergence of this worldwide gold rush is causing unprecedented global mercury pollution. Artisanal mining releases 1000 tonnes of mercury every year. The GMP is introducing solutions to alleviate health and environmental crises in communities and promote cost-effective practices.



*Panning gold in Lao PDR*

## Mercury, Health and Gold Mining

Artisanal gold mining creates 30% to 40% of the world's man-made mercury pollution. Mercury is a powerful poison which damages the brain and kidneys, and is very dangerous for developing babies and small children.

Gold miners and people living in and near mining communities are exposed to mercury in 2 ways:

- mercury vapor is inhaled when miners burn amalgam, and
- mercury is ingested through contaminated fish



*Venezuelan miner burning amalgam in a shovel*



*Tanzanian mother mining gold ore*

After it is released into the environment as vapor or liquid in mining wastes, mercury transforms into a more toxic compound (methylmercury) which is rapidly absorbed by aquatic organisms and goes up in the food chain.

Once mercury has entered the ecosystem, it is very hard to remove it. This is why it is so important for miners to reduce or even eliminate the use of mercury.



*Mercury-gold amalgam from China*

## Global Environmental Equity

Artisanal gold mining is driven by increasing poverty in rural communities. At least 100 million people around the world depend on artisanal gold mining for their livelihood. The GMP supports long-term economic solutions which are healthy, equitable, and sustainable. In the end, relief from poverty is the best way to eliminate mercury pollution.



*Training miners in Mozambique*