Eliminating the 3 main pollution sources

Prohibit whole ore mercury-amalgamation

 (i.e. Hg must not be used until after the ore has been concentrated with a Hg-free method)



- 2. Prohibit the combined use of Hg and cyanide and the cyanidation of Hg-rich tailings
- 3. Prohibit the heating of Hg amalgam without the use of a retort to contain vapor

Protecting water bodies and homes

Do not use Hg near water body

Do not use of Hg near houses

Use concrete lining for amalgamation ponds

Other aspects

Standards for Storage and Disposal

Safety labeling and posters

(Control of mercury burning in gold shops was not as much a concern in Zimbabwe as in Indonesia)

Community-based monitoring through multi-actor accountability

Multi-Actor Responsibility: Mine owners, mine managers, and gold dealers are legally responsible (as well as miners)

Mine owners also are responsible for informing about hazards and providing appropriate equipment

Mine managers designate Amalgamation Centers

Clear responsibilities for local authorities

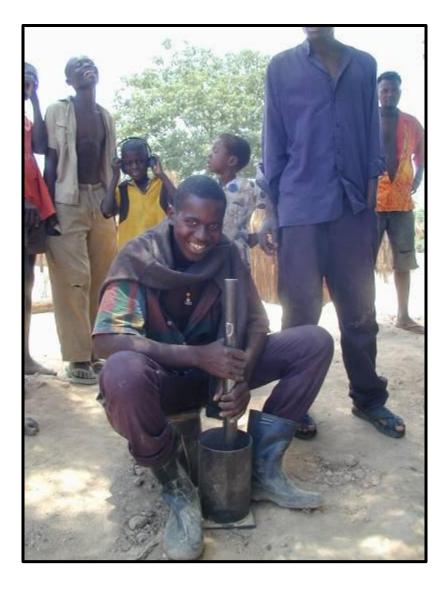


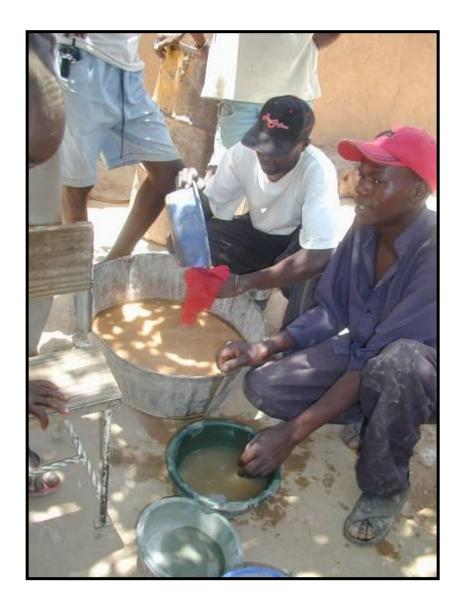
Eliminating Major Hazards in Milling ("Centralized" / "Semi-Formal" ASM)





Discussions with miners





Understanding Community Perspectives

In the words of one miner...

"Mercury is our friend but it is also a danger It is important for everybody that clear standards are created and followed."



Policy review workshop with Mines Officers



In Zimbabwe, Small-Scale Miners Associations Reaching Out to Miners Nationwide (Integrating Themes: Hg and Social Empowerment)



Case Study: Regulating Mercury in Indonesia

Mercury Concerns in Central Kalimantan, Indonesia

Rural Gold Mining Areas



Urban Gold Shops



Policy discussion workshops...





New Mercury Management Policy Adopted in 2007 (Central Kalimantan)

- Five local government departments, along with UN project workers, focused on developing new mercury management policy while conducting outreach campaigns that promoted environmental health education and technology training
- Main focus on gold shops in urban areas, less on rural mining areas.
- The 2007 policy emerged through consultation with gold shop owners, local environmental analysts, equipment fabricators, miners and others.



Program's results in urban gold shops proved to be very successful (>40 gold shops adopted fumehoods); however, the program was not successful in rural areas due to limited resources and as the government remains ambivalent about how to manage the mining activity

Aerial View of Small-Scale Mining Site in Galangan - Central Kalimantan, Indonesia



"Mobile Training Unit" for Technology Demonstrations in Mining Areas

Bottom-Up & Top-Down Policy Perspectives

requirements

laws and regulations

•Community-driven codes of conduct

compliance

•Community awareness

•Education

•Training

•Organizational capacity-building

•Incentive-based approaches

Monitoring and legal sanctions
Community-based monitoring
Self-enforcement

enforcement

community capacity-building

National Mercury Trade – Not Easily Regulated



Some Ideas:

- Raise Capacities to detect and halt illegal traffic in Hg

-Raise the legal classification of Hg to the class of Hazardous Substance (requires labeling, licensing, etc)

Priority: Building Miners' Capacities

<u>The Move Toward International Mercury Trade Bans</u> <u>Augment the Need for Local Capacity-Building</u>







Some priorities:

Developing clarity in mercury policy

Working with local miner associations

Building capacity of equipment fabricators

Building a policy vision and plan for long-term livelihood support