

12 Stories About Small-Scale Mining

Communities and  
Small-Scale Mining



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# Small-scale Challenges, Large-scale Opportunities

If you were to choose a single development activity that cuts across all the major challenges presented by the Millennium Development Goals, what would that activity be?


- a) Infrastructure development
- b) Climate change mitigation and adaptation
- c) Governance and corruption
- d) Artisanal and small-scale mining
- e) All of the above

All of the above is perhaps a brave and tempting guess. But if you want to be more precise, then your answer will probably be d). Simply put, the social and economic characteristics of small-scale mining fully reflect the challenges of the Millennium Development Goals, including: health, environment, gender, education, child labor, and poverty eradication.

Take, for instance, gender and child labor. As many as 650,000 women in 12 of the world's poorest countries are engaged in artisanal mining. And between 1 and 1.5 million children, evenly split between boys and girls, are also involved in this activity worldwide.

Or take health issues. Small-scale mining communities are highly vulnerable to communicable diseases including malaria, tuberculosis, influenza, cholera, yellow fever, sexually transmitted diseases, and HIV/AIDS.

Or just poverty related to lack of job opportunities. Artisanal and small-scale mining is practiced in about 50 countries by people who live in the poorest and most remote rural areas, with few employment alternatives.



You could also take misuse of mercury in gold extraction, for instance, which has very damaging consequences not only to the environment and biodiversity but also to the health of artisanal miners and their families.

Or take the potential conflict over lack of basic rights. Large-scale mining, for instance, often comes to areas of traditional artisanal and small-scale mining, which creates potential conflicts around issues of land ownership rights.

And we could go on and on, but the bottom line is that worldwide at least 20 million people engage in artisanal and small-scale mining, and a further 100 million people depend on it for their livelihood. And these numbers are simply growing in line with higher prices and demand for minerals both in OECD countries and emerging economies such as China and India.

Through a holistic approach to artisanal mining, the World Bank and multi-donor global initiative called Communities and artisanal & Small-Scale Mining (CASM) aims to transform this activity from a source of conflict and poverty into a catalyst for economic growth and sustainable development.

We all know that the MDGs are strongly interdependent, and CASM, as an outstanding example of partnership in action, is certainly delivering benefits for thousands of artisanal miners across the whole spectrum of the eight development goals.

The 12 short stories in this booklet are just an illustration of concrete results achieved on the ground over the past five years and of the great potential for accelerating poverty reduction if more projects like these are implemented around the world.

Katherine Sierra  
World Bank's Vice President  
For Sustainable Development

# PERU

## Miner's Voice

CASM promotes the contribution of artisanal and small-scale mining to national economic growth and poverty reduction.

CASM and its partners are transforming the lives of artisanal miners and their communities around the world.

One of these miners is Manuel Reinoso who, amongst thousands of other Peruvian artisanal and small-scale miners, has experienced firsthand the benefits of the formalization of the artisanal and small-scale mining sector in Peru.

In the southern region of Peru, where Reinoso is based, 36 associations or companies have been established to benefit around 4,000 artisanal miners. Today, more than 50 per cent of artisanal miners in Peru have already joined the formal economy, contributing to economic growth and sustainable development.

"Since the law that legally recognizes the artisanal mining sector was approved in 2002, we have had several advantages including access

to exploitation contracts, property and mining concessions," Reinoso proudly explains.

Felix Hruschka, a mining engineer from Austria and a member of the CASM international network, was instrumental in developing the legal framework for artisanal and small-scale miners in Peru.

Hruschka explains that both legalizing artisanal miners and promoting the right conditions for their development, so that they can contribute to the formal economy, is today best practice that more countries in Latin America and other regions of the world should embrace.

"The law should promote, not forbid, it should give incentives," says Hruschka. "When artisanal miners get formalized, it's a win-win for the government, miners, large or small, and society as a whole."





# TANZANIA

## Empowering Women

CASM empowers women to generate income, invest in health and education improvements.

A high proportion of artisanal miners in the poorest countries are women who suffer the worst working and living conditions.

CASM plays an important catalytic and empowering role for women in the artisanal mining sector, and the Tanzania Women Miners Association (TAWOMA) is a living proof of it.

CASM has funded TAWOMA representatives to help them participate in training and dialogues where they have developed new contacts and business opportunities, learned from others' experiences and exchanged ideas.

"CASM mobilized us to form *CASM Africa* where we discuss our development problems,

priorities and any other matters concerning Africa in the mineral sector," says Shamsa Diwani, TAWOMA's Secretary General.

Through CASM the topic of Fair Trade Gold was introduced in Tanzania, and TAWOMA together with other women associations in Malawi and Botswana are now forming a partnership to increase gold production and curb black marketing in the region.

"CASM provides important funding for various projects that benefit artisanal and small-scale miners," Diwani says. "We believe that donors' support for CASM is essential to continue to develop more of these projects."





# LARGE OR SMALL

## Mining Together

CASM provides a neutral platform to help prevent conflict over mineral resources and encourage all parties to work together towards sustainable development.

Large-scale mining and artisanal and small-scale mining often compete to exploit the same mineral resources, especially in countries like the DRC, Ghana, and Tanzania, but also in Brazil, Peru, Indonesia and the Philippines.

Although this situation often spells conflict, an increasing number of examples show that it is possible to strike a balance between the economic objectives of large-scale miners and the livelihood requirements of artisanal miners.

Through recent workshops and dedicated research, CASM is focusing efforts on opening paths to achieve such a balance. Through a workshop in Lubumbashi, DRC, for instance, participants from both large-scale and small-scale mining operations discussed some practical solutions and identified key steps to facilitate positive interactions and co-habitation between the two sectors where feasible.

A guidance document entitled “Mining Together” has been published as a result of collaboration between CASM, the IFC/World Bank’s Oil, Gas and Mining Community Development Fund together with the private sector association, the International Council on Mining and Minerals. This guidance, and its companion toolkit for practitioners, seeks to provide an understanding of the main issues and a conceptual framework for constructive interaction between large-scale and artisanal miners.

“CASM adds value in that it provides a ‘safe space’ for dialogue on difficult issues between divergent stakeholder groups,” explains Prishani Satyapal, Social Development Manager with AngloGold Ashanti in South Africa and member of CASM’s Strategic Management Advisory Group. “It is one of the few such organizations which can bring together divergent groups without suspicion of the motives involved.”





# ARTISANAL GOLD

## Toward Fair Trade

CASM encourages cooperation and prevents duplication amongst agencies working to ensure a fairer deal for the poor.

The Association for Responsible Mining (ARM) is an NGO working out of South America on the development of a scheme for fair trade artisanal gold. Fair trade aims to certify and label gold that has been produced according to good environmental and social standards.

CASM has supported ARM in the hosting of consultation workshops on Fair-trade Gold in Madagascar and Mongolia during the annual CASM conferences. It is also providing crucial funding for ARM's exploratory program on "Scoping Opportunities for Fair-trade Labeling of Gold in Africa". This support has allowed ARM to undertake studies to identify the most appropriate local and national groups to pilot fair-trade gold standards in Tanzania, Mozambique and Uganda.

In 2007 members of the CASM's network were mobilized to provide technical expertise to ARM in developing "a standard zero for fair trade artisanal gold and associated silver and platinum."

Mindful that many agencies are working on the development of fair/ethical trade schemes in min-

ing, CASM established a working group through which there is an active exchange of ideas and experiences to achieve common goals.

"The CASM annual meetings and learning events are the key venue and the only global meeting that exists today for all of us involved in or working with artisanal miners around the world," says Cristina Echavarria, Secretary General of ARM. "The fact that it is the World Bank and development cooperation agencies such as DFID, DANIDA and others who lead this initiative, makes governments sit up and listen."

CASM conferences provide an important opportunity to influence and support host governments to create more enabling policy and legal frameworks for responsible artisanal mining.

"No one organization can address or solve the challenges of artisanal mining," explains Echavarria. "We need complex, intercultural, multidisciplinary and multi-stakeholder approaches, and that we can only do through open and generous collaboration. CASM provides a meeting point for us all."



# BOLIVIA

## Reaching the Summit

CASM helps improve efficiencies to give artisanal miners better economic returns while also serving environmental and social goals.

Artisanal miners around the world are often the forgotten sector of the economy. With little access to knowledge, finance, and networks, thousands of artisanal miners have almost no chance to escape poverty.

At 21,424 feet or 6,530 meters above sea level, the Sajama peak is the highest mountain in Bolivia. In honor to this volcanic-shaped Andean icon, Cumbre del Sajama is an organization that aims high in its work with artisanal miners and their communities. And CASM is helping it reach the summit.

As an active member of the CASM community, Cumbre del Sajama has established relations, networks and contacts with various organizations from around the world.

Through a constant exchange of knowledge and information this NGO has incorporated improved practices into its projects for enhancing

the quality of life of artisanal miners and their communities.

Through interaction with CASM's network, Cumbre del Sajama, and other organizations like it, improves their knowledge by sharing different perspectives on various topics.

These have included improving the relationship between large scale mining and artisanal mining communities; using different approaches and tools to improve life of artisanal miners; and using new technologies to improve the production process of small-scale miners.

"The projects developed in Bolivia over the past years have implemented the CASM philosophy of reducing poverty by improving the economic, social and labor conditions of artisanal miners and their communities," comments Daniel Lafuente, coordinator of Cumbre del Sajama.





# CONFLICT DIAMONDS

## Strengthening partnerships

CASM helps ensure the success of an international process to better manage international trade in mineral resources.

Conflict diamonds are rough diamonds used by rebels to finance armed conflict. Some of the countries most affected by this practice, such as Angola, the Democratic Republic of Congo, and Sierra Leone, are now in the process of post-conflict development. Artisanal miners can contribute to this peace building process or they can also reignite conflict if their needs are ignored.

The Kimberley Process for certification of diamonds has achieved considerable success in ensuring that “conflict diamonds” are kept out of official trading channels. However, this success will be short lived if the root causes of the problems associated with this trade are ignored. Many of these problems revert back to artisanal diamond miners and the poverty and exploitation they endure.

CASM has assisted the Kimberley Process Certification Scheme working group on Alluvial Diamond Diggers (chaired by Angola) with issues papers and participation in the CASM network – especially through south-south co-operation between African and South American members. It has also assisted the Belgian Royal Institute for International Affairs helping

this group get a better understanding of the artisanal mining issues.

Through education, policy dialogue and projects targeted directly to artisanal diamond miners and their communities, the Diamond Development Initiative (DDI), another forum trying to address these issues is intending to demonstrate that diamonds can be an asset for economic growth and a catalyst for individual and community development in conflict-affected countries.

CASM has provided seed money to the DDI in its mission to face the political, social and economic challenges of artisanal diamond mining in order to optimize the development impact of the sector to miners and their communities.

The crucial challenge that organizations like the DDI and CASM face is to encourage better working environments and fairer prices for diggers. Some of the answers to this challenge include more programs on education for miners, access to credit and artisanal mining equipment, training in diamond valuation, improved labor laws, and government action to streamline marketing efforts.







# MAP CASM Activities Around the World



## CASM PROJECTS FOCUS ON:

- The Value Chain in artisanal mining
- Large-scale and Small-scale mining issues
- Gender issues
- Environmental Management
- Community Development
- Fair-trade
- Formalization and Legal Frameworks



# UGANDA

## Promoting alternative livelihoods

CASM helps convert non renewable natural capital into more sustainable forms of incomes.

Small-scale mining in Buzzi and neighboring villages in Central Uganda is one of the core activities of the communities. The majority of miners are women, mostly widows or single mothers, with families of at least six dependants each.

They extract stones from rented land and pay a tribute to landlords per truckload of product. The profit margin for these women is small or almost non-existent and women miners in the district are unable to save for any viable investments. Living from hand to mouth, these communities have therefore remained poor, powerless and vulnerable.

Many women in the quarries expressed an interest to undertake other economic activities and reduce their dependence on mining.

Entebbe Women Association, a non-government organization with a mission to empower women, children and youth, developed a project in 2006-2007 with support of a CASM grant.

The main objectives of the project were to promote livelihood diversification while reducing child labor and reclaiming artisanal mining sites for purposes of environmental and biodiversity conservation.

The project supported 100 households with alternative sources of income like piggy, poultry and fruit farming.

The project also succeeded in planting over 100,000 trees and in reclaiming mining areas for habitat restoration and protection of biodiversity.





# PERU

## Santa Filomena on the right track

CASM supports a holistic approach to the integration of the principles of sustainable development into artisanal and small-scale mining activities.

They still mine for gold in Santa Filomena, a remote mining community some 500 Km from Lima, Peru. But these days, they do it without the children. This village of 1,500 inhabitants was indeed able to declare itself child-labor free in 2004, providing a new sheen to the miners and their community. But their will for improvement did not stop there.

In 2003, the local Mineworkers' Association, SOTRAMI, applied for CASM assistance to design an Environmental Management Plan for the communal processing plant. The operation of the processing facilities was a brand new experience for the miners. The plan was written in an accessible manner with an appropri-

ate training program to ensure the assimilation of the process in the long term.

The Environmental Plan also allowed the plant to operate within the Peruvian legal framework and a responsible commitment of the mining company.

Combining strategies of formalization, modernization of production, strengthening organizational capacities, improving social protection, creating income for women, awareness-raising and the development of education, nutrition and health services, the Santa Filomena community is on the right track to sustainable development.







# CHINA

## Establishing a national platform

CASM encourages ownership and identification of relevant local priorities through a rigorous regional community of decentralized networks.

The six million artisanal miners in the People's Republic of China represent well over half of the artisanal miners in the world and constitute one of the largest sectors of the mining industry worldwide. China is one of the largest producers and consumers of metals and minerals, topping the world in antimony, coal, iron, lead, manganese, tin, tungsten and zinc. Artisanal miners produce at least 30 per cent of each of these minerals.

Artisanal production is a key legacy of China's recent past. Yet opinion within the country is sharply divided between those who see artisanal mining activity as harmful and unnecessary and those who see it as essential for local development.

CASM-China was launched in 2004 with the support of CASM global. It brings together

a wide range of people involved in artisanal mining in China, from government officials to private sector representatives to a multidisciplinary group of researchers.

CASM-China is working with the Chinese government to develop and successfully implement national policies and regulations that encourage poverty alleviation and a more sustainable small-scale mining industry.

CASM-China has implemented various activities including its own formalization under the Chinese Mining Association, the development of a web-based knowledge centre and the creation of an online small-scale mining forum and multi-stakeholder meeting platform, as well as field surveys with local miners and officials.



# MADAGASCAR

## Golden local development

CASM contributes to institutional capacity building to better manage mineral wealth.

As in other mining countries around the world, thousands of artisanal miners in Madagascar are in dire need of technical assistance and capacity building to make sure that the subsoil riches drive local development.

In Madagascar's Maevatana area, the joint efforts of artisanal miners and local authorities have paid off: quarterly production jumped from 13.8 kg of gold in November 2005 to 53.5 kg in November 2007. At the same time gold prices went up from 17000 Ariary per gram to 35000 Ar/gr. This has allowed much needed social infrastructure and services to be put in place.

How did artisanal mining catalyze local development?

The government of Madagascar together with the World Bank and CASM supported a project aimed not only at bringing artisanal miners into the formal economy but also at strengthening the management and technical capacity of the municipal authorities so that the revenues

from artisanal mining were integrated into the local development plans.

During the project's implementation, led by a national NGO, dozens of municipal officers, council members, and village leaders were trained to facilitate the formalization of some 1,500 artisanal miners. Programs focused on increasing awareness about how to enforce recent artisanal mining legislation. Artisanal miners and gold traders were then officially registered and encouraged to pay small fees to the local administration.

As a result the local administration developed a strong commitment towards active management of the sector and formalization of the informal artisanal mining activities. The financial return from fees and levies were then invested into development projects like schools and health centers and into social infrastructure to expand access to electricity and public lightning.





# MONGOLIA

## Getting the right legal framework for the “ninjas”

CASM helps develop national mining policy and legislation to reduce poverty and better manage mineral wealth.

In Mongolia artisanal miners are called “ninjas” because of the circular green pans many of the gold miners hang on their backs while walking to the gold fields. The pan makes them appear to resemble the “ninja turtles” of movie and cartoon fame.

Artisanal mining in Mongolia has recently become part of an informal social safety net in the face of persistent poverty for thousands of people. Some attribute this to the impact of global warming which is encouraging desertion of formerly sustainable livelihoods into mining as a means of adapting to climate change.

Artisanal mining, however, has been criticized by different quarters as a damaging and illegal business. Abandoned excavations and widespread mercury use in gold mining, for instance, cause significant environmental damage and raise concerns over the health and safety of both the miners and herders alike.

In September 2007, the Annual CASM Conference was hosted by the Mongolian government in Ulaanbaatar. The event provided a

unique opportunity to share information and knowledge about artisanal mining.

CASM experts met with Mongolian Parliamentarians and members of Government to exchange experiences and best practices on artisanal mining regulatory frameworks.

CASM took this opportunity to address the rapid increase of artisanal mining activities in the country, and to share various observations regarding the crucial process of adopting an appropriate legal and regulatory framework for small-scale mining. Internationally this has proved to be more effective in enabling sustainable development rather than attempting to curtail small-scale mining through punitive measures.

“The challenge of a new law is to avoid perpetuating the culture of illegality and to allow the artisanal mining sector to play a fundamental role in alleviating poverty, making a real contribution to community development,” notes Gotthard Walser, CASM manager at the World Bank Group.







# ECUADOR

## Hard rock results

CASM develops tri- sector partnerships to achieve environmental sustainability.

Following an artisanal mining boom in hard rock gold in the southern region of Ecuador in the early 90s, the situation for many of the 50,000 miners involved had deteriorated by the middle of the decade.

Unsafe mining techniques had led to environmental damage that was endangering people's lives and their surroundings.

Building on international best experience of integral solutions, the Government's PRODEMINCA project, with the support of CASM experts, shifted from a mainly technical approach towards a fully integrated program with the active participation of the miners and local communities, and with an emphasis on the community's environmental and social problems.

This integrated approach resulted in the formalization of 166 associations; the development of sustainable measures to limit the environmental degradation caused by small scale mining; the control of the occupational and toxicological problems related to mining through a series of actions such as the construction of tailings dams, the support to improved metallurgical processes, the reduc-

tion of mercury use, the development of local equipment, and re-forestation.

The PRODEMINCA project also facilitated the organizational, managerial and technological training of small scale miners, supporting the establishment of miners' associations and small enterprises, with the view of up-grading the efficiency and performance of the sector.

The project also involved local communities in the monitoring of environmental and socio-economic impacts from mining through the creation of "environmental committees", and it facilitated the development of alternative economic activities.

And last but not least, the project was also instrumental in setting up a network of NGOs, government authorities and other aid agencies working on small-scale mining and with a shared view to taking a systematic and collaborative approach in addressing the issues that will allow artisanal miners to contribute to sustainable development and economic growth.

This network was then named CASM or Communities and Artisanal & Small-Scale Mining.





“There are signs that the development sector is increasingly recognizing the opportunities artisanal mining communities present for development processes. Heads of State meeting at the 2007 G8 summit highlighted the importance of the artisanal mining sector and reaffirmed the need for increased support to CASM and other organizations working on artisanal and small-scale mining issues.”

– Jon Hobbs, DFID representative and chairman of CASM



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