

UNIDO – Swiss side event at the 3rd Conference of the Parties to the Minamata Convention on mercury: TOWARDS MERCURY-FREE Artisanal and Small Scale Gold Mining

Artisanal and small-scale gold mining (ASGM) has challenging environmental and social implications. The sector is the largest source of mercury releases and emissions reaching up to 35% of the emissions at the global level creating considerable damage to human health and the environment. Currently, many efforts are under way to improve this situation.

The Government of Switzerland and UNIDO and the Better Gold Initiative organized a side event during the third conference of the parties to the Minamata Convention to discuss the current challenges as well as a way forward for this specific sector focusing on three main areas:

i) access to market and traceability of the gold supply chain; ii) the formalisation of the sector and iii) the management of tailings from ASGM.

The event started with key note speeches from Switzerland, Ecuador, Ghana and the Artisanal Gold Council. This set the ground for breakout group discussion on the same three thematic focuses. Close to 100 representatives from governments, private sector (gold refiners, jewellery sector, waste management companies) international organization, and civil society actively exchanged.

The outcomes of these interactive discussions are summarised below. They represent the views of the different representatives present in the breakout groups.

Access to market and traceability:



Figure 1. Sustainable ASGM value chain

There are a wide number of stakeholders involved in the gold supply chain from the ASGM sites to the international market. All need to be involved in the establishment of a formal, fair, sustainable and transparent supply chain. The challenge is to develop an approach that offers incentives for all of them.

Key players are the intermediaries/middle “men” typically active between the artisanal miners and the exporter of the gold in the mining country. Their status is often informal or even illegal. As these players are benefiting from the current lack of transparency of the gold supply chain, it remains challenging to offer them incentives to legalize their activities and improve the chain of custody along the chain. However, creating a traceable and fair supply chain is essential for both; creating attractive business models for artisanal miners and establishing stable market based solutions for international actors to invest. It is indispensable to include intermediaries as first aggregators in value chains with low volumes in order to achieve substantial amounts of the commodity that allow exporting at competitive prices and that compensate the export-related costs.

There are standards for fair and clean gold that are affordable, effective and implementable. They can be implemented and bring several advantages and benefits to the miners. The set-up of a monitoring system to assess compliance with any standards requires field presence. A solution accepted by all stakeholders and implementable by all actors would be clearly preferable to options that might not all be as efficient. For the miner the gold price paid still remains as the most attractive incentive.

The demand for fair and sustainable artisanal gold exists but cannot be met by the supply for different reasons.

Numerous actors are testing traceability approaches such as block chain technologies or physical- and chemical-based tracers. A major challenge is to trace the gold from the artisanal mining site to the main national aggregator.

There is reluctance from international gold buyers to engage with the sector before it reaches a formal status and it is deemed "clean". An intermediary mechanism between the international buyers and the miners could help leveraging investment from international buyers without the reputational risk inherent to a direct relation with an artisanal gold mining community.

Formalization:

Formalization is a process and takes time. An overall inclusive framework for formalization at national level at least facilitates the process and ensures continuity. The existing organizational structure already in place at artisanal mining site level should be taken as starting point for any formalization process. The suitable organisational structure could be a cooperative, an association or even an enterprise.

Formalization is not only about getting a mining permit. It should also open the way to access to investments, market and public services (health care, education, sanitation).

More awareness raising is needed on (i) what the objective of formalisation is, (ii) how it can be done, and (iii) that this process will improve the situation for the entire communities in the long term.

Privatization often gives priority to middle and large-scale mines which produce more gold and are better to control. In many countries, most land is allocated to large-scale mines. A legal framework that improves the status of miners when they adopt mercury-free technology creates an incentive for formalization. This could further support the transformation of artisanal and small-scale mining communities to middle scale miners.

The Minamata Convention is a strong legal document that can be used to initiate the formalization process and other improvements in the sector. The obligation of the Convention to develop a National Action Plan for this sector (for countries that recognize that ASGM is more than insignificant in its territory) offered a good opportunity to involve and engage miners and different government officials.

Banning the use of the mercury or even the operation of the entire sector is not always a solution. In some cases it has brought positive effects since miners are under pressure to find alternative technologies but in most cases it just pushes the miner towards a more illegal and insecure situation while it triggers the illegal flows of this toxic substance.

The promotion of direct smelting could allow for a higher gold recovery but would also require a larger investment.

Management of tailings from ASGM

Preventing the use of mercury in the ASGM sector is the most effective way forward for the sustainable management of tailings. Environmentally sound tailings from mercury is a challenge and can be very costly. There is a knowledge gap on the volume of tailings from ASGM and its content of mercury at both national and global levels.

It would be useful to develop practical guidance on the identification of tailings and their environmental sound management, but also on best and practical treatment technologies and option for financing. This could be done through the next revision of the existing mercury waste management guidelines under the Minamata and Basel Convention.

The ownership of the tailings is critical when it comes to the responsibility of treatment. In active mining sites, the tailing often belongs to the gold ore owner. However, once the mining site is abandoned and/or closed, the responsibility for the treatment is not clear anymore.

Since the tailings contaminated with mercury still contain a certain amount of gold the treatment is an attractive business. However, the environmentally sound management is often not ensured.

The interim storage of mercury extracted from tailings and its final disposal is a big challenge for developing countries. To arrange it through regional or sub-regional cooperation could be a good way forward.

Conclusion

This side event focusing on artisanal and small-scale gold mining offered an excellent opportunity to exchange on the challenges and solutions related to the three main topics: (i) access to market and traceability, (ii) formalization, and (iii) management of tailings. While country-specific circumstances must always be taken into considerations, some challenges are similar in most ASGM countries and the related solutions and lessons learned can be shared and replicated. The active engagement of the various participants clearly indicates demonstrated that such exchange of information on the different challenges present in the sector is necessary in order to be able to transform the ASGM into a more sustainable sector.