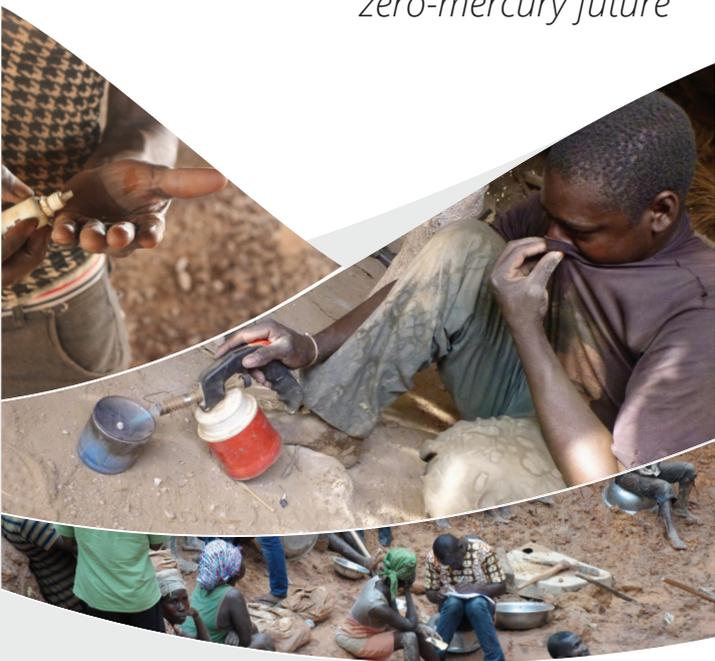




Less Mercury More Gold Better Health

The Minamata National Action Plan to reduce mercury use in artisanal and small-scale gold mining:

*Government, business, miners
and communities working
together to create a path to a
zero-mercury future*



African Regional Forum

Practical Considerations for the Development of National Action Plans for Artisanal and Small Scale Gold Mining

May 23rd-24th, 2017, Nairobi, Kenya

FINAL REPORT

December 2017



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**EEB/ZMWG African Regional Forum:
Practical Considerations for the Development of National Action Plans for
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Introduction and background

The Minamata Convention on Mercury (“the Convention”) is a global treaty whose objective is to protect human health and the environment from the adverse effects of anthropogenic releases of mercury and mercury compounds. It was adopted in 2013, and entered into legal force on August 16th, 2017.

The European Environment Bureau (EEB), together with partner organizations of the Zero Mercury Working Group (ZMWG), held an African regional forum in Nairobi, Kenya, on 23rd-24th May, 2017 to assist countries implement various aspects of the Convention.

The project

To promote the effective implementation of the Convention, the EEB/ZMWG is carrying out a three year project to assist four African countries with meeting some of their obligations as Parties to the Convention.

The project is entitled ***“Contributing to the preparation/implementation of the Minamata Convention on Mercury, with a focus on developing strategies for phasing out mercury-added products and on reducing mercury use in Artisanal and Small Scale Gold Mining through development of National Action Plans, in four African countries”*** (July 2014-December 2017). It is funded by the European Commission DG Development and Cooperation (EC DEVCO) via the Food and Agricultural Organization of the United Nations (FAO), as part of its program on Capacity Building Related to Multilateral Environmental Agreements (MEAs) in Africa, Caribbean and Pacific (ACP) countries, phase 2 (ACP MEAs 2).

The project has seven partner nongovernmental organizations (NGOs). The project coordination team is composed by the Mercury Policy Project (MPP- US), National Resource Defense Council (NRDC-US), groundWork (South Africa) and the European Environmental Bureau (EU). Four NGOs in 4 African countries are the main proponents of the project.

Work in Mauritius and Nigeria, with Pesticides Action Network Mauritius (PANEM-Mauritius) and Sustainable Research and Action for Environmental Development (SRADev - Nigeria) focuses on mercury product phase out work. In Tanzania and Ghana, AGENDA for Environment and Responsible Development (Agenda-Tanzania) and Friends of the Nation (FoN- Ghana) have been assisting their respective governments in the development of their National Action Plans (NAP) on reducing mercury use in Artisanal Small Scale Gold Mining (ASGM).

The regional forum

In collaboration with UN Environment, the EEB/ZMWG organised a week-long series of workshops, to share project results and to facilitate regional capacity building. These workshops focused on phasing out mercury-added products and on reducing mercury use in ASGM. In total, 71 representatives from Environment and Mining ministries from 29 African countries and Jamaica, five UN bodies and special agencies, two intergovernmental organisations, 13 NGOs, as well as academics, private sector representatives and consultants took part in the workshops. This summary describes the results of the ASGM workshops.

The requirements of the Convention on Artisanal and Small Scale Gold Mining

The Convention places special emphasis on ASGM, which is currently the largest global source of mercury emissions and releases. All countries with ASGM are required to take steps to reduce, and where feasible eliminate, mercury use, emissions and releases. Countries with more than insignificant ASGM are required to develop a NAP. Annex C of the Convention specifies the required content of the NAP, including national objectives and reduction targets, actions to eliminate worst

practices as well as steps to reduce mercury exposures, and steps to facilitate formalisation or regulation of ASGM, to manage mercury trade and to address public health.

Key outcomes

The UN Environment – Global Mercury Partnership hosted, on 22nd May 2017, a training workshop that presented a series of tools that can be used to develop an ASGM baseline mercury use estimate, and to create a country profile of the ASGM sector. More details can be found at <http://web.unep.org/chemicalsandwaste/global-mercury-partnership/reducing-mercury-artisanal-and-small-scale-gold-mining-asgm/meetings-8>

The EEB/ZMWG, on the 23-24th May 2017, followed with a related workshop covering practical considerations for the development of NAPs. In addition to providing an overview of NAP requirements, the EEB/ZMWG workshop focused on two of the most challenging aspects of the NAP development and implementation: **formalisation** and **technical approaches to reducing mercury use in ASGM**. Furthermore, the NGOs from Tanzania and Ghana shared their on-the-ground experiences¹ working with miners and governments on the NAP processes in those countries.

Formalisation: Representatives of the governments of Tanzania, Kenya and Ghana, as well as a representative from a small mining cooperative in northern Kenya, participated in a panel addressing the challenges of formalisation in their respective countries and shared their experiences in formalising the ASGM sector. Several key points emerged from these discussions:

- Several countries stated that all of the NAP components hinge on formalisation, which can in turn allow for monitoring of the ASGM sector;
- To develop the ASGM sector, organization, formalisation and then legalization (in that order) need to be addressed;
- To facilitate formalisation, countries are encouraged to develop a long term vision of where they want the sector to be in 10 to 15 years;
- Miners should see clear benefits from formalising, for example through improved market access and better training and capacity building, in addition to access to technology and finance.
- Barriers to formalisation include the length of time required for a miner to obtain a mining license, as well as the cost;
- Civil society representatives recommended that governments should not outlaw the sector, as this makes dialogue and engagement with miners impossible.

Technical alternatives: Delegates also expressed the need for alternatives to mercury use in ASGM, as miners have noted willingness to use alternatives if they are available and affordable. International ASGM technical experts presented an overview of mining techniques and alternative methods to mercury in ASGM. Depending on the type of deposits (hard rock vs. alluvial) various steps can be used to improve gold liberation and gravity concentration (using spiral or vortex concentrators, improved sluices, centrifuges, shaking tables or even just panning), reducing and in some cases eliminating the need for mercury.

¹ For more information about the ASGM sectors in Tanzania and Ghana from our project experience, see: Baseline information on the NAP for ASGM in Tanzania (http://www.zeromercury.org/index.php?option=com_phocvdownload&view=file&id=231%3Abaseline-information-for-the-nap-on-asgm-tanzania&Itemid=70) and Ghana (http://www.zeromercury.org/index.php?option=com_phocvdownload&view=file&id=235:baseline-information-for-the-nap-on-asgm-ghana&Itemid=70)

The forum also provided a platform for dialogue on those elements of the NAPs that can benefit from common regional approaches, particularly **mercury trade flows** among neighbouring countries. Delegates highlighted a number of priority issues related to mercury trade management, such as the development of policies and procedures for prior informed consent and wisdom of developing a regional strategy to control illegal mercury trade; consideration of different market based mechanisms to promote mercury-free mining; and increased awareness-raising.

One important challenge to creating a comprehensive NAP is the need for **collaboration among multiple stakeholders**. To help gain experience with this challenge, the delegates engaged in a **role playing exercise**, where delegates practiced what to say and do when faced with some potentially challenging situations and conflicts that may arise when developing and implementing their NAPs. Delegates found the activity fruitful and enjoyable.

The workshop concluded with a discussion of the importance of **miner consultations** when developing NAPs. Consultations with miners are critical to obtain buy-in and to support development of feasible policies for the ASGM sector; to inform miners of the requirements under the Convention; and to provide education on alternative technologies and health impacts linked to mercury. NGOs from Tanzania and Ghana shared their on-the-ground experiences working with miners, and presented a series of guidelines for conducting miner consultations². Participants affirmed that working with NGOs with close trust relationships with the mining community can be very helpful in conducting outreach to miners, because the artisanal mining sector can be secretive and the establishment of trust takes time. Governments were encouraged to engage with NGOs that have existing relationships with this sector, to facilitate NAP development. NGOs stand ready to complement and aid the actions of the government; the closer the collaboration, the more successful the implementation of a NAP may likely be.

Conclusion:

Together, the UN Environment and EEB/ZMWG workshops raised awareness and provided practical tools and approaches for countries to prepare an ASGM national overview and baseline estimate of mercury use, and to address formalization, trade and technical approaches for reducing mercury use. The workshop underscored the importance of collaboration among government, miners, and civil stakeholders within a country, as well as regional cooperation among countries in Africa, for the successful implementation of the ASGM obligations of the Minamata Convention.

² ZMWG publication – Engaging Artisanal and Small Scale Gold Miners in the NAP Development, http://www.zeromercury.org/index.php?option=com_phocadownload&view=file&id=233%3Aengaging-artisanal-and-small-scale-gold-miners-in-the-nap&Itemid=70

Agenda

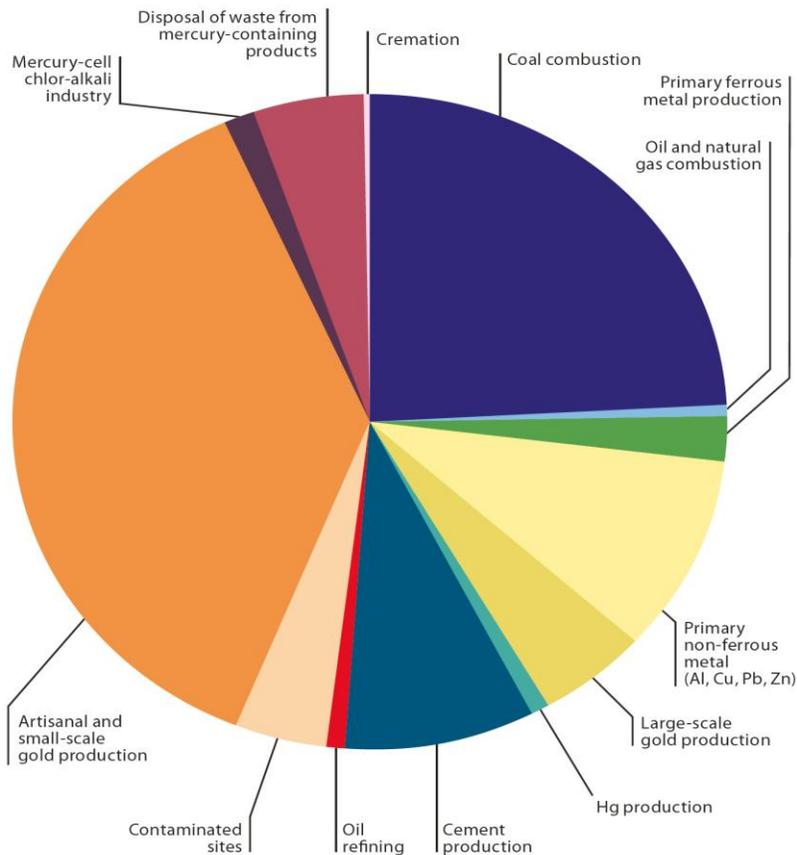
| WORKSHOP DAY 1 | | |
|----------------|---|---|
| 08:30 -09:30 | Registration | |
| 09:30- 10:00 | Opening session | Presenters: Elena Lymberidi-Settimo, European Environment Bureau (EEB); Ken Davis, UN Environment; Oluyomi (Yomi) Banjo, UN Industrial Development Organization (UNIDO) <i>Welcoming remarks and expectations for the meeting</i> |
| 10:00-10:15 | Overview of the Minamata Convention and its ASGM requirements | Presenter: Ken Davis, UN Environment <i>Overview of Minamata Convention and all requirements related to ASGM including (Annex C)</i> |
| 10:15-11:00 | National Action Plan requirements | Presenters: Global Mercury Partnership leaders: Ken Davis, UN Environment; Oluyomi (Yomi) Banjo, UNIDO; Susan Keane, Natural Resources Defense Council (NRDC) <i>Presentation of specific actions that are required in NAPs per Annex C</i> |
| 11:15-12:30 | Plenary discussion on Minamata Convention/ NAP implementation | Facilitators: Rico Euripidou, groundwork; Malgorzata (Gosia) Stylo, Global Mercury Partnership <i>Opportunity for government representatives to share their status and experiences so far, regarding NAP preparation</i> |
| 14:00-15:15 | Challenges of formalization | Facilitator: Susan Keane, NRDC / Presenters: Mr. Joseph Kiruki, Division of Environment, Vice President's Office, Tanzania, Mr. Chacha Marwa Megewa, Assistant of the Assistant Commissioner of Small Scale Mining, Ministry of Energy and Minerals, Tanzania, Mr. Abel Chumba, Chief Superintending Inspector of Mines, Ministry of Mining, Kenya, Toni Aubynn, Ghana Minerals Commission, Mr. Julius Opiyo, Manager, Migori County Artisanal (MICA) Miners Cooperative Society Ltd., Kenya. |
| 15:30-16:00 | Means of engaging stakeholders/ consultations with miners | Presenters/Facilitators: Haji Rehani, AGENDA Tanzania; Solomon Kusi Ampofo, Friends of the Nation (FoN), Ghana <i>Discussion of miner consultations, including:</i> <ul style="list-style-type: none"> • <i>Involving key stakeholders</i> • <i>Practical aspects of miner engagement</i> • <i>Expected outcomes</i> |
| 16:00-17:00 | Technical approaches to reducing mercury use in ASGM | Presenters: Dr. Paul Cordy, Cordy Geosciences; Kirsten Dales, Canadian International Resources and Development Institute (CIRDI); Facilitator: Susan Keane, NRDC <i>Informal session using videos and other visual aids to describe alternatives to mercury use in artisanal and small-scale gold mining</i> |
| WORKSHOP DAY 2 | | |
| 09:00-09:15 | Welcome to Day 2 | Presenter: Elena Lymberidi-Settimo, EEB <i>Overview of the day's sessions</i> |
| 09:15-09:45 | Relationships among government agencies in NAP development | Presenter: Ken Davis, UN Environment; Malgorzata Stylo, Global Mercury Partnership <i>Brief introduction to the importance of stakeholder collaboration in implementing the NAP, particularly among government agencies</i> |
| 9:45-11:15 | Exercise on roles and responsibilities of various stakeholders in developing and executing NAPs | Facilitator: Rico Euripidou, groundWork <i>Role-play Exercise: A menu of several specific potential actions under the NAP will be presented to participants. Working in groups, participants will discuss how they would implement selected actions/strategies.</i> |
| 11:15-12:15 | Group presentations and discussion on exercise | Presenters: Observers from group exercise will share main observations with plenary. |
| 12:15-13:00 | Summary and resources available | Presenters: Haji Rehani, AGENDA; Solomon Kusi Ampofo, FoN; Malgorzata Stylo, Global Mercury Partnership; Oluyomi Banjo, UNIDO <i>Summary and discussion of resources available from NGOs and UN agencies to assist countries with NAP development.</i> |

Conference presentations and discussions

1. Overview of the Minamata Convention and its ASGM requirements

(Presenter: Ken Davis, UN Environment)

Artisanal and Small-Scale Gold Mining (ASGM) is the largest contributor of mercury emissions on a global scale.



UNEP, Global Mercury Assessment 2013

Under the Minamata Convention, artisanal and small-scale gold mining is defined as: “gold mining conducted by individual miners or small enterprises with limited capital investment and production” (Article 2) and specifically applies to artisanal and small scale gold mining and processing where mercury amalgamation is used.

Each Party that has artisanal and small-scale gold mining and processing is required to **“take steps to reduce, and where feasible eliminate, the use of mercury and mercury compounds in, and the emissions and released to the environment of mercury from, such mining and processing.”** Parties to the Minamata Convention that have a **more than insignificant** ASGM sector must develop and implement a NAP within 3 years of entry in force, and provide a review every three years thereafter. **Parties may cooperate** with each other and with relevant intergovernmental organizations and other entities, as appropriate, to achieve the objectives of the Article (paragraph 4, points a-f).

As per the Annex C on the ASGM (see annex 1), National Action Plans must include the following elements:

- National objectives & reduction targets;
- Baseline estimates of the quantities of mercury used and the practices employed;
- Actions to eliminate certain identified worst practices;
- Steps for formalization or regulation of the sector;
- Strategies to reduce mercury use and mercury exposures;
- A series of other strategies, including strategies for control of, trade, stakeholder involvement, providing information to affected communities, and public health strategies amongst others (see full text in annex C).
- Schedule for implementation

More information on the Minamata Convention and ASGM can be obtained from the Interim Secretariat of the Minamata Convention, The Global Mercury Partnership and the UN Environment NAP Global Component.³

The Global Mercury Partnership is open to all stakeholders that share the partnership's goals. Members (currently 147 partners, 8 intergovernmental agencies, 107 civil society/ industry/ individuals) benefit from a network of experts, policy makers and donors and receive assistance coordinating global and regional projects.

Discussion:

Representatives from the United Nations Development Program (UNDP), UN Environment, United Nations Industrial Development Organization (UNIDO), NRDC, the Africa Institute and Ghana discussed several issues surrounding mercury trade, including its sources and regional approaches to control it.

- UNDP noted the list of prohibited sources of mercury that may be used in ASGM and inquired about the existence of a list of permitted sources. UN Environment clarified that though the Minamata Convention does not include an explicit ban on mercury in ASGM it strongly discourages it and aims for elimination, therefore a list of permitted sources has not been developed.
- Ghana raised the questions of controlling mercury flows on a national level when developing a NAP, taking into consideration that neighboring countries might not be undertaking the same steps in addition to the presence of illegal transboundary movements of gold and mercury. Countries need to cooperate on a regional level to find a common strategy. One approach towards regional mercury control that NAP implementing countries can take, is to have bordering countries develop a Mercury Initial Assessment (MIA) if they are not in the process of developing their own NAP.

³ See the NAP guidance here

https://wedocs.unep.org/bitstream/handle/20.500.11822/11371/National_Action_Plan_draft_guidance_v12.pdf?sequence=1&isAllowed=y

2. National Action Plan Requirements

(Presenters: Global Mercury Partnership leaders: Ken Davis, UN Environment; Oluyomi Banjo, UNIDO; Susan Keane, Natural Resources Defense Council, NRDC)

Key points from the presentations include:

- There are four general categories that countries need to consider while developing their NAPs (Goals and Processes, Health, Technical Strategies, Enabling Policy Frameworks)⁴.
- Under the first stages of developing the NAP, stakeholder involvement is key. It is particularly important to involve miners in the overall process, and when considering the members of the steering committee of the NAP.
- To derive a baseline of the ASGM sector there are two components:
 - A desk study component (interviews, literature review, legal review)
 - Field study (including data collection at each individual site and resulting use estimates; extrapolation from individual sites to regional and national estimates; setting country-specific strategy). The aim is not only to quantify the amount of mercury used, but know how it is used and why.
- In terms of health, it is essential that the public health sector engages with the populations that are exposed to mercury use within ASGM. Worldwide, there are approximately 15 million people employed in the ASGM sector, and 4-5 million of those are women and children. Occupational hazards related to mining are high, accompanied with environmental conditions, social conditions and living conditions. The WHO is currently developing recommendations for a public health strategy on ASGM, and the NAP guidelines are being updated.
- Reducing and eventually eliminating worst practices includes: controlling or stop using whole ore amalgamation, open burning of amalgam, burning in residential area; and cyanide after mercury has been used.
- Various methods of gold liberation can be used, that could avoid the use of mercury all together. Depending on the type of deposits (hard rock vs. alluvial) one can go through various steps to optimize gold liberation. Different technical options to improve gold concentration are: spiral, improved sluice, centrifuge, vortex, shaking table or panning. If these are conducted well enough the need for mercury could be eliminated all together.
- In terms of enabling policy framework, aspects of organization, formalization and then legalization (in that order) need to be addressed. Countries are encouraged to formalize their sectors, but in order to do that there needs to be a long-term vision of where the country wants the sector to be in 10 to 15 years. Miners should benefit from formalizing. When organized in small cooperatives they attain a new identity, they gain improved market access and better training and capacity building, in addition to access to technology and finance. The infrastructure needs to be provided whether by the government or the private sector. Regardless of the institution that addresses the formalization of miners; several questions need to be kept in mind: How long does it take for a miner to obtain a mining license and

⁴ See Annex for complete list and a link the Guidance document

how much does it cost? The potential barriers as to why miners wouldn't go through the process need to be foreseen and respectively addressed.

- Regional aspects of gold and mercury trade are also necessary to focus on, particularly with border countries with mercury trade flows. Prior informed consent in terms of mercury trade is another policy requirement of the Minamata Convention and should be considered when implementing a NAP.
- Though not required in the NAP, different market based mechanisms also exist to promote the business of mercury free mining (Fairmined and Fairtrade labels). Lastly, awareness raising is also a very important. Whether it is through miner training programs or outreach programs, individuals who work first hand in the ASGM sector need to be involved in the dialogue to design and implement a NAP.

Discussion:

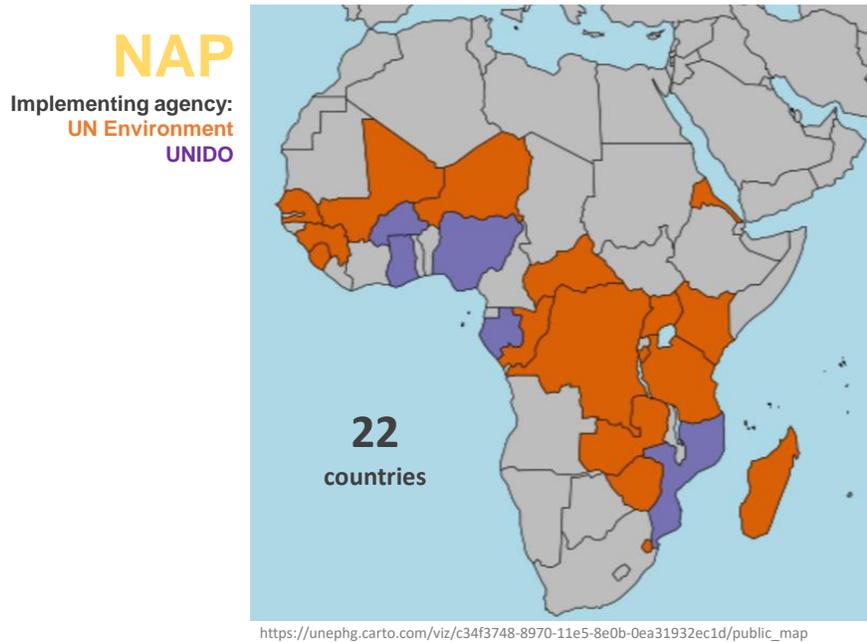
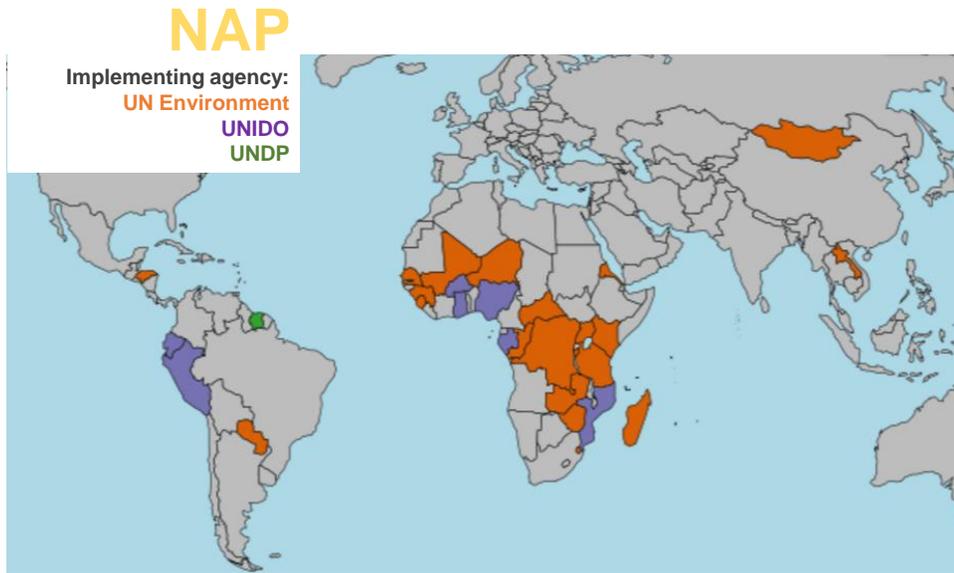
The main themes of the discussion concerned data collection under the NAP related to health effects from mercury exposure, public health strategy implementation, formalization of the ASGM sector, regional strategies to control the illegal trade of mercury, and the integration of socio-economic aspects of ASGM into the NAP.

- NRDC clarified questions from UNITAR regarding baseline data collection on health effects from mercury exposure. The NAP can include information regarding baseline health data for countries that are already collecting it. Common health issues to look at are: Prevalence of diseases, availability of health services and their structure, in addition statistics on sexually transmitted diseases and infant mortality rates. Participants were requested to share their experiences in implementing public health strategies.
- Swaziland raised concerns about the formalization requirements under the NAP, due to most of their ASGM sector being illegal. NRDC advised against outlawing the sector, as such measures reduce the chances of engaging with miners. If the sector is regulated there is a higher chance being able to formulate policy that is inclusive of ASGM activities.
- SRADev Nigeria, UNIDO, Nigeria, the African Union and NRDC discussed the need for a regional strategy to curb illegal mercury imports. These issues must be discussed amongst regional trade partners, as other regions such as Latin America plan to do, with assistance from the Global Environmental Facility (GEF).
- Nigeria underlined that miners in the region are interested in alternatives to replace mercury, though they need assistance putting the alternatives into practice in the field and requested assistance from the UN.
- Niger underlined that analysis of socio-economic aspects of ASGM must be taken into account, due to different cultural practices related to the division of labor for women and children in mining sites.

3. Plenary discussion on Minamata Convention/ NAP Implementation

(Facilitators: Rico Euripidou, groundWork; Malgorzata Stylo, Global Mercury Partnership)

The ASGM Partnership presented a map of the countries that have already initiated a NAP process. There are total 29 countries, the majority being from the African region with 22 countries. From surveys distributed, out of 22 countries, 13 have already established a coordination committee and 6 have started a national overview of the ASGM sector.



Discussion:

The participants of the meeting that had NAP implementation experience were invited to share with the plenary the steps they have taken already. Tanzania, Mozambique, Uganda, Senegal, Zambia, Gabon, Niger and Madagascar contributed to the discussions. Countries had many steps in common, such as: the establishment of a coordination body; the development of terms of reference and questionnaires to obtain data on mercury use from the ASGM sector; the timely coordination

between implementing and executing agencies; advantages and disadvantages of using external consultants and the content of inception workshops for different countries.

- The Africa Institute raised several points regarding coordination bodies, the collection of information from the field, and the controversies related to international consultants. It was recommended that coordination bodies be as small as possible for efficiency purposes and that the information that is collected from the field must be done by an agent which is not simultaneously responsible for judging the quality of the collected data. A separation is necessary for the sake of credibility.
- Mozambique raised the need for multiple rounds of data collection from the field, as information obtained from a government agency or an international institution can be different. Two rounds of questionnaires were distributed and answers were cross compared accordingly. Furthermore, Mozambique raised the importance of taking advantage of simultaneous project execution. The questionnaires for the NAP allowed them to learn what machinery was necessary in the ASGM sector, and funding obtained from a World Bank project allowed them to deliver on some of the sector's needs.
- Gabon shared their difficulties in collection information from the ASGM sector, due to the fact that it is largely informal. After a relevant call for tender, a local consultant was hired for the data collection.
- SRADeV Nigeria inquired about the space for civil society in the steering committees of the countries that contributed their NAP experiences. All country representatives expressed that it was important to have civil society included in the steering committees.
- Uganda, Zambia, groundWork and the Africa Institute exchanged views regarding the hiring of international consultants. Difficulties remain surrounding the debate of hiring international consultants, as national governments often do not feel ownership over the process if the implementing agency is responsible for the hiring process. Simultaneously however, it is necessary to recognize the lack of local capacity and to take into account their experience vis-à-vis an international consultant in order to ensure the quality of the consultation. Nonetheless, the procurement process of executing & implementing agencies needs to be in synergy with the national procurement process, taking into account that the former have more flexibility in this regard.

4. Challenges of formalization

(Facilitator: Susan Keane, NRDC. Panel: Mr. Joseph Kiruki, Division of Environment, Vice President's Office, Tanzania; Mr. Chacha Marwa Megewa, Assistant of the Assistant Commissioner of Small Scale Mining, Ministry of Energy and Minerals, Tanzania; Abdel Chumba, Chief Superintending Inspector of Mines, Ministry of Mining, Kenya; Mr. Toni Aubynn, Chief Executive Office, Minerals Commission, Ghana; Mr. Nelson Ahedo, Principal Mining Engineer, Ghana; Mr. Julius Opiyo, Manager, Migori Country Artisanal (MICA) Miners Cooperative Society Ltd., Kenya.)

Perspectives on the challenges of formalization faced by both government institutions and miners were provided by government representatives from Tanzania, Kenya and Ghana, and MICA Miners Cooperative in Kenya. Overarching themes of the discussion addressed how different countries define ASGM, the barriers to formalization of the sector, and the different country requirements for environmental impact assessments.

Tanzania

Tanzania has classified mines in three categories: small-scale, medium and large. The scale definition is based on the amount of financial capital the mine has; for instance, small scale mining comprises activities of a financial range between 0 and 500 USD. The difference between small scale and illegal mining activities is a license which can be obtained online. Barriers to formalization in Tanzania relate to the registries of use of mercury and the requirement of environmental auditing and environmental impact assessments. Though the use of explosives are banned, the use of mercury is not, and the government is conducting training with miners on how to use mercury in a safe way (using designated areas). Any miner using mercury must also register their activities, but up to date there is a very small registry of mercury use overall in the country and none of it is associated with the ASGM sector. There is a need for access to finance, to facilitate compliance with the regulations.

Kenya

Kenya has classified mining areas in blocks in order to determine where mining permits can be issued. These permits are obtained online and at a country level and are issued by the artisanal licensing committee. Artisanal mining officially becomes small scale mining when mining activities have any form of mechanization. For miners in Kenya, one of the main barriers to formalization is the digitization of the application process. As miners are often located in remote areas, access to computers and the internet may be unreliable or scarce. Furthermore, there are grey areas in the mining code regarding the use of mercury, cyanide or explosives. The Ministry of Mines and the Ministry of Environment have established an environmental impact assessment process but cannot assist with the cost of carrying out these assessments. This often poses an insurmountable cost to miner, especially the expense of hiring external consultants to aid in the process.

Ghana

Ghana only has two categories of mines: Small or large scale. Small scale corresponds to anything below 25 acres, and large scale comprises anything above. Ghana has a history of illegal mining activities due to the fact that until 1989, only colonialists had the legal right to mine. Since 1989, gold mining activities for Ghanaians, as well as the use of mercury, have been legalized. However, formalization of the sector still remains a challenge, mainly in grouping miners into associations. Closer relationships based on trust are required to have a clearer understanding as to what the barriers formalization are for miners in Ghana. One approach to help small miners has been for the government to explore mineral rich areas and then direct miners to the best places to go. Further in collaboration with miners, the government has elaborated requirements for environmental protection evaluations for ASGM, and small scale miners have a simplified form for an Environmental Impact Assessment. Nonetheless, difficulties with enforcement remain, as miners use larger machinery than before, continue to mine in non-permitted areas such as river bodies or find ways to circumvent established regulation.

Discussion:

Participants responded to the panel's contributions. The discussion covered issues such as: how to approach the ASGM sector when it is illegal, how to address site rehabilitation, challenges faced in cooperation between ministries when developing environmental impact assessments, and the steps governments can take to reduce the barriers to formalization found by the ASGM in different contexts.

- Exchanges between Gabon, Mozambique and Ghana underlined the importance of legal recognition of the ASGM sector as it is a source of national revenue. . An example from

Tanzania showcased steps the country has taken to recognize the ASGM sector: the geological survey of Tanzania has set up demarcated mining areas, and provides the information to the ASGM sector. As a result there are now over 300 demarcated areas for small scale mining.

- All of the governments on the panel require Environmental Impact Assessments from their respective ASGM sectors. In Ghana, for registered and formalized miners, they are also required to conduct site rehabilitation. In Burkina Faso, however tensions emerged between the Ministry of Mines and the Ministry of Environment on the development of environmental impact assessments. Despite this, the Ministry of Environment developed an assessment at lower cost, in addition to a law requiring site rehabilitation.
- Representing miners, MIA Coop Ltd emphasized that miners consider formalizing very important, as this process grants access to government services and financial institutions. However, a simplification of the formalization process and financial assistance in meeting the requirements formalization (be it licensing, machinery upgrading, protective equipment or environmental impact assessments) would be most welcome, otherwise transitioning is too high of a burden to bear. In response to this Ghana established regional offices in mining areas that could assist miner with the administrative aspects.

5. Means of engaging stakeholders/ consultations with miners – (Presenters: Haji Rehani, AGENDA, Tanzania; Solomon Kusi Ampofo, Friends of the Nation (FoN), Ghana)

AGENDA and Friends of the Nation presented the project work they carried out in Tanzania and Ghana respectively, related to consulting miners about the development and implementation of the NAP. To that end a Miners Consultation Guide ⁵ was developed. As was mentioned throughout the meeting, it is crucial to involve miners, as they have the firsthand understanding of day to day operations in the field and can play a direct role in improving the ASGM sector and developing sound policies.

The objective of holding miner consultations is simultaneously to introduce the Minamata requirements for the ASGM NAP, and enrich the NAP with the input from the mining community. It is also an opportunity to listen to their concerns, because they are relevant to the NAP preparation, and to provide education on alternative technologies and health.



⁵Engaging Artisanal and Small Medium Gold Miners in the National Action Plan Development

http://www.zeromercury.org/index.php?option=com_phocadownload&view=file&id=233:engaging-artisanal-and-small-scale-gold-miners-in-the-nap&Itemid=70

Why Carry Out Miners Consultations?



An important step in developing and implementing the NAP



Know about the day to day operations



Improving the ASGM sector and developing sound policies



Before going into the field to conduct consultations, it is important to have the following basic background about the ASGM sector: the policies and regulatory framework; how the resources and profit are divided; miners' organization systems and basic units operations.

Steps and actions to consider BEFORE GOING TO THE FIELD

Basic knowledge about the ASGM sector



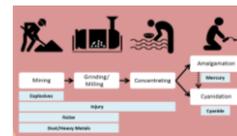
Policy and regulatory framework



Sharing of resources and profits



Miners' organisation systems



Basic Unit operations



The consultations should be announced two weeks prior to the meeting to ensure maximum participation. The meetings should be held at the district mining centers and major mining communities which are easily accessible for miners and other participants. Miners should be granted a subsidy for their transportation and certificates of participation should be given as incentives. The length of the consultation should not be more than 6.5 hours and participants should not exceed 40 people. A variety of stakeholders are relevant at these consultations (Ministries of Environment, Labor, Trade, Health; academics, NGOs, traditional leaders, etc) as the topics to address have a broad spectrum. However, it is important to consider the differences between formal and informal meetings, and the difference of stakeholders present between the two. Informal

meetings will likely require different communication tools (info graphics and other visual documents) as many of the miners are illiterate. It is not recommended to invite government institutions or press to informal meetings. These meetings often take place on mining sites and the presence of government representatives and press could make the miners feel uneasy. Formal meetings however, that take place in a conference space, is a more suitable setting to invite the formerly listed stakeholders.

Topics of consultation can vary, but priority is often given to aspects of formalization and the barriers for miners to do so, in addition to the environmental and health effects cause by the use of mercury in their sector. The outcomes of the miner consultations are meant to help identify the priorities that should be considered by the NAP National Steering Committee, in order to develop a feasible and practical document that reflects the priorities of miners.

Discussion:

Participants discussed the presentation through further inquiries about communication tools and the difference between stakeholders at formal and informal meetings.

- Mozambique and Nigeria expressed concern regarding the lack of government presence at informal meetings, seeing as in their experiences contact with the ASGM sector has been positive.
- AGENDA, Friends of the Nation, NRDC and UNIDO clarified that government has a crucial role to play, but that it is important to be sensitive towards the setting in which the government and miners establish contact. Miner consultation should be executed by a neutral body other than the government or miners themselves. NGOs often have a long established relationship with mining communities and are a trusted stakeholder. Seeing as in many countries ASGM has both legal and illegal activity, having a stakeholder that is trusted in both areas is an advantage for establishment of relationships and ultimately promoting mercury reduction that encompasses the whole sector (legal and illegal).

6. Technical approaches to reducing mercury use in ASGM

(Presenters: Dr. Paul Cordy, Cordy Geosciences; Kirsten Dales, Canadian International Resources and Development Institute (CIRDI); Facilitator: Susan Keane, NRDC)

6.1 CIRDI

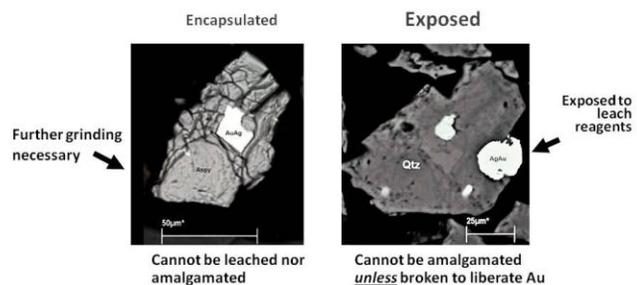
The presentation given by CIRDI provided an overview of geological background of gold mining, different kinds of mines and respective mining techniques. It is important to note that mining techniques will depend on the geology of the mine and the type of ore being mined. Best mining techniques depend on whether the mines are open pit, drift mines, vertical shafts or alluvial mines. Regardless of the type of mine, gold must be liberated from other minerals. Gold that remains attached to gangue minerals⁶ (poor liberation) will be lost during gravity concentration and amalgamation.

Good liberation, which can be achieved by efficient grinding, will leave gold particles exposed and liberated for leaching and amalgamation. Efficient grinding can be determined by sequential grinding of ore samples and panning.

However, efficient grinding is often the most costly operation in mineral processing.

Once gold is liberated, there are a variety of concentration methods that can be used, and each method is appropriate for different particle sizes:

UNLIBERATED GOLD PARTICLES: REFRACTORY

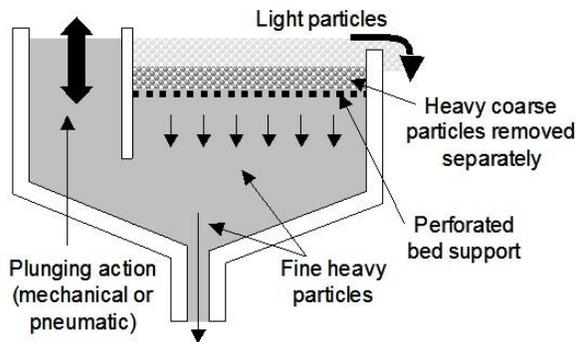


CONCENTRATION METHODS



⁶ Guange is the commercially valueless material in which ore is found

JIG



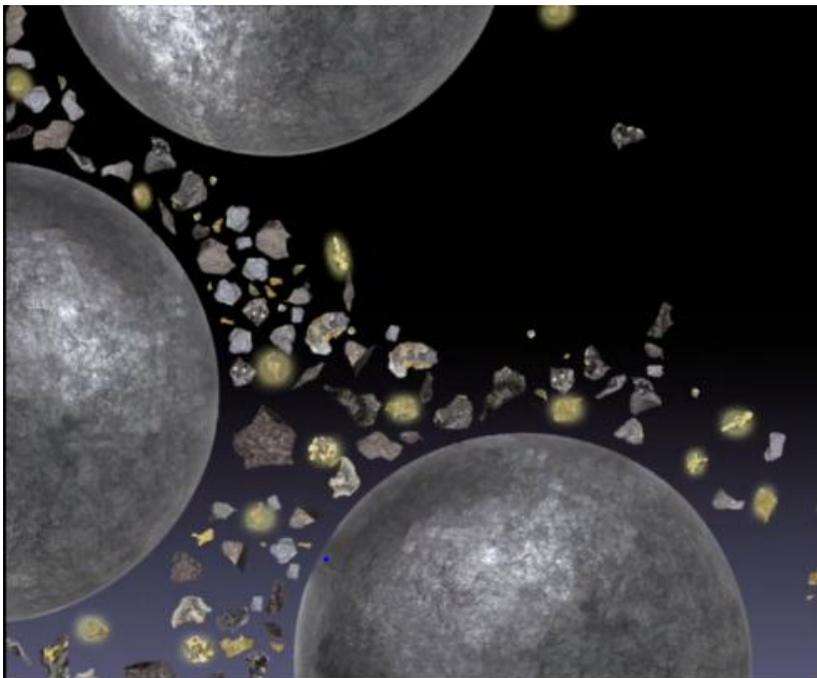
FLOTATION

Cyanidation is often used to recover unliberated particles of gold and is promoted as a mercury free method. However, using cyanidation on ore tailings to which mercury has been added without first removing the mercury, is one of the practices to eliminate under Article 7. If mercury is not removed before cyanidation, tailings may form cyano-Hg compounds that are more soluble than mercury itself. Because these compounds are more soluble, it means they can move more easily in water and more readily affect aquatic ecosystems. Ore tailings in ASGM are sold as a commodity on the second-hand market, because they usually still contain a significant amount of gold. Because of this, it is necessary to develop appropriate technical assistance to address mercury-cyanide management issues in ASGM. The International Cyanide Management Code could inform the Minamata convention on the development of best practices. CIRD1 expressed the need to compile best cyanide management practices and prepare a technical submission for COP2 in November, 2018.

6.2 Cordy Geosciences

Dr. Paul Cordy presented various technical aspects of achieving mercury free ASGM, followed by two informational videos.⁷ The presentation mainly focused on how to improve milling efficiency and concentration in order to recover more gold, without using chemicals. Each step in the gold mining production cycle, from ore extraction to gold refining have impacts on profit and pollution, depending on the tools that are used.

Milling is the most important step in the mineral processing chain as it is the step that liberates the gold from other minerals. Optimal liberation, which will free more gold particles for further processing, can be determined by sequential grinding and a study of grain sizes and gold concentrations. If the ore is ground too little the gold will remain attached to other minerals. If it is ground too much the gold particles will be too fine to recover without the use of chemicals.



It is important to find out exactly how long ore needs to be milled for in order to liberate gold. This is easy to test for via a liberation test, where material is panned after every 20 minutes of milling time to see how much gold has been liberated after each milling cycle.

A case study in the Philippines showcased how a liberation test that defined optimal milling time yielded higher amounts of gold in the subsequent concentration step. By milling for the optimal time, 30% more gold obtained from the same amount of ore, than using the traditional local method of

milling with mercury. In this case, optimal milling time was shorter than the customary time. By figuring out the optimal time, these miners also milled for less time and recovered their gold more quickly, spending less electricity without making use of mercury.

Once good milling is achieved, several methods/tools can be used to concentrate the gold by gravity methods or chemical separation. In all concentration methods, gold and heavier grain settle down to the bottom, while a current of water washes away other minerals that remain at the top.

All concentration methods will lose some gold, though the loss can be minimized by building a chain of concentration tools that where each captures gold lost in previous steps. Making use of a good concentration circuit can completely eliminate the need for chemicals.

⁷ To watch the videos again, see: <http://web.unep.org/chemicalsandwaste/global-mercury-partnership/reducing-mercury-artisanal-and-small-scale-gold-mining-asgm/videos>

For instance, a facility in Burkina Faso that used to extract gold by making use of gold towel sluices and no process control now uses a mill that controls grain size , with primary and secondary sluices for initial concentration.



The sluice concentrate is then fed to a shaker table, which traps gold and heavy minerals in shallow channels, while the water flowing across the channels washes away the quartz. At the end of the table, the freed gold washes into the collector which can then be directly smelted into gold bars. This new system of concentration circuits enables miners to capture 30% more gold, without using any chemicals.

Using a combination of the above tools, it is not only possible to extract gold without mercury, but more gold may be recovered using alternatives technologies.

7. Relationships among government agencies in NAP development

(Presenter: Ken Davis, UN Environment; Malgorzata Stylo, Global Mercury Partnership)

ASGM is often complex and therefore the development of the NAP has to be a participatory process reflecting its complexity and interconnectedness. In order to ensure an effective transition towards a more sustainable sector it is essential to consult broad range of stakeholders. Though the NAP process is often lead by the Ministry of Environment, the following are a range of stakeholders that should be involved in the NAP process:

NATIONAL ACTION PLAN
Stakeholder involvement



A step by step process to develop a NAP has been elaborated by UN Environment and the Global Mercury Partnership.

NATIONAL ACTION PLAN
Step by Step Process



Step 1 - Establishing a Coordinating Body

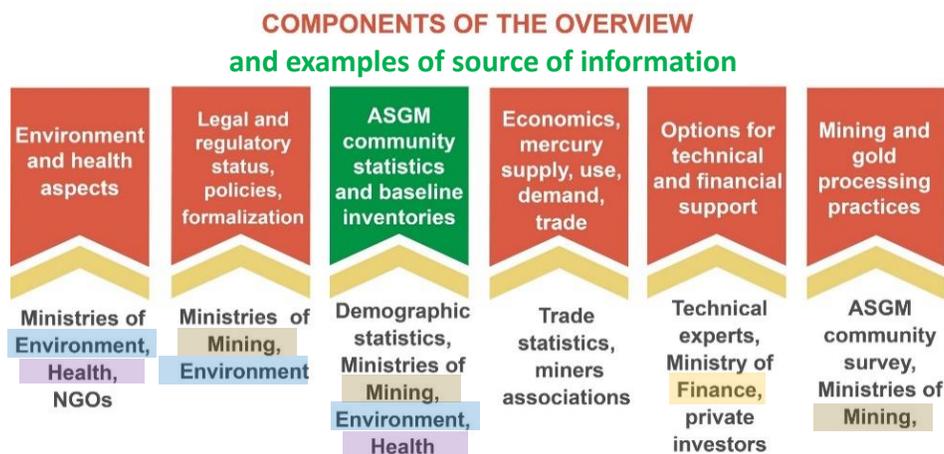
The coordinating working group for the NAP should include government ministries, local government representatives and ASGM community representatives. An advisory group of crucial national stakeholders (gold processors, ASGM community leader, technical experts, environmental organizations, academia, large scale mining representatives and legal professionals) can be consulted and interacted with regularly to ensure NAP cohesion with overall environmental, economic and development agendas as well as a reflection of the voice of the ASGM community.

Step 2- Develop a National ASGM Overview

The National Overview should contain a broad range of components and sources of information.

NATIONAL ACTION PLAN

Step 2 – Develop a National Overview



Different stakeholders may be more appropriate to provide certain kinds of information. For instance, the Ministry of Health is more likely to have information on environment and health aspects in the ASGM sector, the Ministry of Mines is more likely to have information regarding mining and gold processing practices. Therefore, it is crucial that stakeholders interact and share information to inform the NAP elaboration.

Step 3- Set Goals and Objectives

The target areas of the NAP can be divided into Main and Specific targets. Main targets address larger overarching objectives, such as reduction, phase out or elimination of mercury in the sector: "By 2020 reduce mercury in the sector by 50%". Specific targets are related to mechanisms by which the Main targets are achieved, such as by delivering mercury free technology, eliminating worst practices and the logistics of the transformation. For instance: "By 2019 new equipment is provided to the pilot project locations". It is important to set larger overarching goals to not lose site of the wider impact the NAP is setting out to accomplish. Yet, it is simultaneously just as important to have specific targets, to make the overarching goals deliverable through more concrete actions.

Step 4- Develop an Implementation Strategy

Once the goals and objective for the NAP have been set, it is important to:

1. Identify authorities responsible for implementing each task
 - National, regional and local governments
2. Define the scope and logistics
 - National, or phased regionally
3. Secure resources
 - Financial, technical, human, political, social
4. Identify partners
 - NGOs, private sector, academia, IGOs, IOs
5. Identify specific required actions, including:

NATIONAL ACTION PLAN

Step 4 – Develop Implementation Strategies



Once all the general strategies are identified, the working group should elaborate on these strategies and actions by developing a work plan, and outreach plan, a timeline and an overall budget.

The final two steps of the NAP process are: formulating an evaluation strategy; and endorsing and submitting the NAP. In these stages, collaboration among governmental agencies is imperative. In order to ensure collaboration, the establishment of regular working group meetings is necessary to hold discussions at the conclusion of each step and to begin the next.

8. Exercise on roles and responsibilities of various stakeholders in developing and executing the NAPs

(Facilitator: Rico Euripidou, groundWork)

In order to visualize and practice the process of interactions across multiple stakeholder groups, a role-playing activity was carried out.

The purpose of the exercise was for participants to get accustomed to discussions and potential conflicts/arguments that they will be faced with when returning to their home countries to implement their NAPs in a multi-stakeholder setting. A series of different scenarios were developed to mimic these circumstances.

In the exercise, delegates divided into groups of three role players: Actor 1, Actor 2 and Observer. Each actor was assigned a role (eg: Environment Minister and ASGM Miner or Customs Officer and Ministry of Mines). The scenario in which they were to act out these roles were pre-defined and provided in writing. The observers took notes on the exchange and gave feedback on its conclusion. Example scenarios:

Role Play #1: Unfriendly politician role play:

Actor #1: Unfriendly politician: You are an unfriendly politician who is opposed to ASGM reform because you represent a mining district, and you believe that any restriction on the use of mercury will have negative impacts on the community he/she represents.

Actor #2: NAP executing partner: Your politician is opposed to ASGM reform because he/she represents a mining district, and he/she believes that any restriction on the use of mercury will have negative impacts on the community he/she represents. Describe the steps you will take to deal with this situation and to convince the unfriendly politician that taking steps to reduce and ultimately phase out mercury will have positive benefits for the community.

Role Play #2: National objectives and reduction targets:

Actor #1: Uninterested community leader: You represent a small rural district and have no specific knowledge/interest in chemical issues. You know your party is usually industry-friendly and generally opposed to regulation. Why would you take on the risk of supporting a possibly unpopular reform?

Actor #2: You are meeting with an “undecided” or “uninterested” community leader. Your NAP implementation team has decided to take actions to eliminate: whole ore amalgamation; open burning of amalgam or processed amalgam; and burning of amalgam in residential areas. Describe the practical steps you will take to convince this community leader to implement this decision in a small rural district in the field.

9. Group presentations and discussion on exercise

(Presenters: Observers from group exercise shared main observations with the plenary)

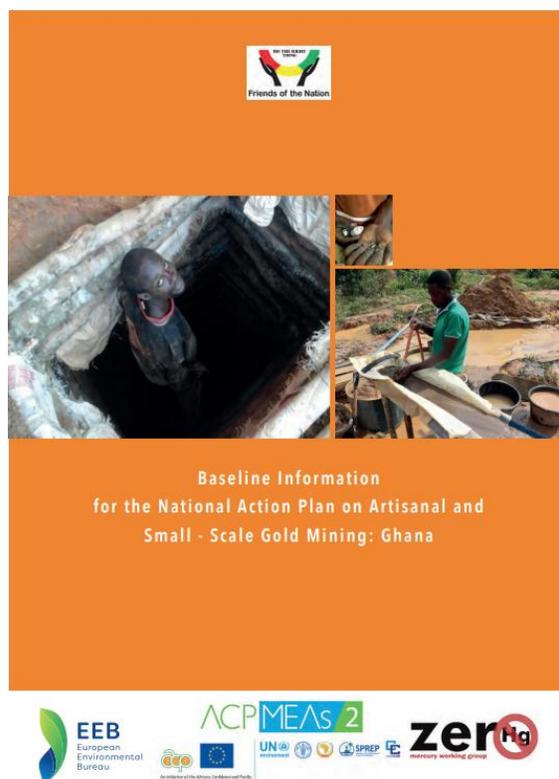
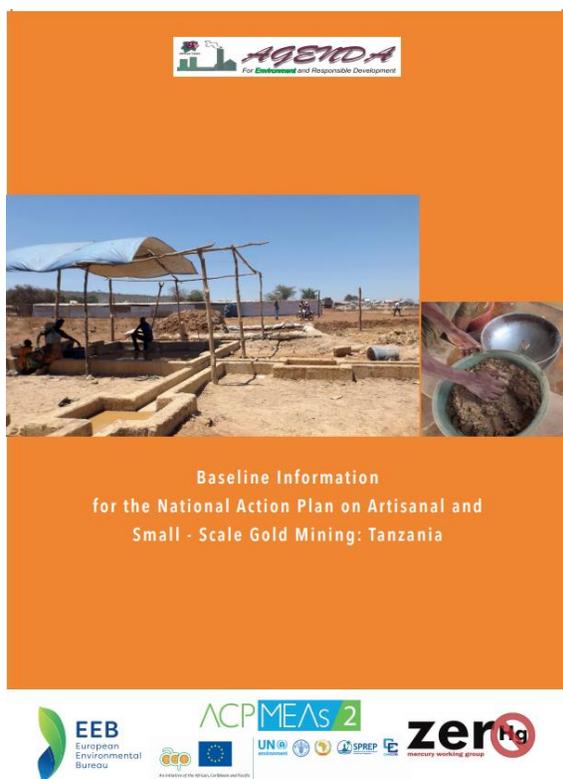
Participants reported back to plenary about their experiences with the exercise. Feedback was provided on the structure of the activity and the results from the interactions that emerged during the scenario note. Results were then compared to actual experiences that government delegates have had in their own countries. The plenary included the following observations:

- Conversations reflected the behavior that government institutions often have towards miners, which is to arrive with set ideas on how to improve the sector before hearing out the miner's perspective. This causes defensive reactions from miners and hinders the advancements of a fruitful exchange. Hearing out the miners before proposing solutions was emphasized in the post-exercise exchange. The exchange held in the Francophone group between those playing "miners" and those with government agencies roles reflected the real situation, that miners were open to cooperation when governments expressed that they had solutions to make their activities more profitable. Furthermore, the "miners" expressed their interest in reducing their environmental impact, just without financial losses, which reflects national experiences shared by participants.
- Burundi, Togo, NRDC and the Africa Institute noted that exchanges held between ministries involved less conflict, as it involved two government bodies discussing policy. However, it was noted that though conversation were more diplomatic, stakeholders such as the Ministry of Energy or Mines can have a conflict of interest with the Ministry of Environment as they have diverging vested interests in the implementation of the NAP.
- Ghana, NRDC, groundWork, Zambia and CIRDI had an exchange on the possibility of having health care professionals share educational materials as they have a higher level of trusts amongst miners as opposed to representatives from other types of government agencies.
- Need for engagement with and capacity building for customs agents emerged as a common theme amongst many participants. Chad, Swaziland and Zambia explained that when approaching customs to aid in the NAP implementation, the communication strategy has to emphasize customs ownership in the process. The Ministry of Environment has to make customs feel like they have something to contribute, not they are receiving a mandate to implement. Uganda, republic of Congo, NRDC and JVE- Cote d'Ivoire requested assistance from UN Environment in capacity building for customs. Training specifically needs to cover identification of mercury-containing products in order to keep them from entering the country and to take necessary precautions.

10. Summary and resources available

(Presenter: Haji Rehani, AGENDA; Solomon Kusi Ampofo, FoN; Malgorzata Stylo, Global Mercury Partnership; Oluyomi Banjo, UNIDO)

AGENDA and Friends of the Nation presented ideas on how NGOs could support development of the NAP and also presented some specific resources that government delegates can use^{8 9}.



Civil society can support communication with miners and others, based on their relationships with different stakeholders. Both AGENDA and Friend of the Nations have extensive field experience, and they underlined that governments can rely on civil society for practical technical background information on the ASGM sector, in addition to insight into the workings in the field. Both NGOs have experience in technology transfers to miners. Despite the differences in function and process between civil society and governments, AGENDA and Friends of the Nation underlined that their trusted presence on the ground can complement and aid the actions of the government, in addition to providing practical experiences.

⁸ Baseline information for the NAP on ASGM: Tanzania -

http://www.zeromercury.org/index.php?option=com_phocadownload&view=file&id=231:baseline-information-for-the-nap-on-asgm-tanzania&Itemid=70

⁹ Baseline information for the NAP on ASGM: Ghana -

http://www.zeromercury.org/index.php?option=com_phocadownload&view=file&id=235:baseline-information-for-the-nap-on-asgm-ghana&Itemid=70

Annexes

Annex 1 - Annex C of Minamata Convention

Artisanal and small-scale gold mining

National action plans

1. Each Party that is subject to the provisions of paragraph 3 of Article 7 shall include in its national action plan:

- (a) National objectives and reduction targets;
- (b) Actions to eliminate:
 - (i) Whole ore amalgamation;
 - (ii) Open burning of amalgam or processed amalgam;
 - (iii) Burning of amalgam in residential areas; and
 - (iv) Cyanide leaching in sediment, ore or tailings to which mercury has been added without first removing the mercury;
- (c) Steps to facilitate the formalization or regulation of the artisanal and small-scale gold mining sector;
- (d) Baseline estimates of the quantities of mercury used and the practices employed in artisanal and small-scale gold mining and processing within its territory;
- (e) Strategies for promoting the reduction of emissions and releases of, and exposure to, mercury in artisanal and small-scale gold mining and processing, including mercury-free methods;
- (f) Strategies for managing trade and preventing the diversion of mercury and mercury compounds from both foreign and domestic sources to use in artisanal and small scale gold mining and processing;
- (g) Strategies for involving stakeholders in the implementation and continuing development of the national action plan;
- (h) A public health strategy on the exposure of artisanal and small-scale gold miners and their communities to mercury. Such a strategy should include, inter alia, the gathering of health data, training for health-care workers and awareness-raising through health facilities;
- (i) Strategies to prevent the exposure of vulnerable populations, particularly children and women of child-bearing age, especially pregnant women, to mercury used in artisanal and small-scale gold mining;
- (j) Strategies for providing information to artisanal and small-scale gold miners and affected communities; and
- (k) A schedule for the implementation of the national action plan.

2. Each Party may include in its national action plan additional strategies to achieve its objectives, including the use or introduction of standards for mercury-free artisanal and small-scale gold mining and market-based mechanisms or marketing tools.

Annex 2 - UN workshop concept note and agenda



Introduction to the UN Environment toolkit”

Brackenhurst Conference Center, Nairobi

22 May 2017

Development of National Action Plans (NAPs) for Artisanal and Small Scale Gold Mining (ASGM) is an obligation under Article 7 of the Minamata Convention on Mercury for each country that determines that ASGM in its territory is more than insignificant. Development of baseline estimates for the ASGM sector, as required in Annex C paragraph 1d of the Convention, is a key early step in the NAP process. The information obtained through baseline data gathering is necessary to design the rest of NAP, including setting objectives and goals, and developing implementation and evaluation strategies. The baseline data will enable creation of a realistic targets and strategies on how to reduce, and where feasible, eliminate mercury use in ASGM. A unified and scalable methodology on how to generate ASGM baseline estimates is therefore fundamental for NAP development.

The Global Mercury Partnership is undertaking activities to enhance national information exchange, capacity building and knowledge generation to facilitate the development of the NAPs. As part of these activities, the Partnership is developing a comprehensive and harmonized set of tools and methodologies on how to elaborate ASGM baseline estimates.

Objectives of the workshop:

1. Raise awareness among national focal points and other national stakeholders about importance of the baseline data collection and creation of the national overview of the ASGM sector, including the baseline estimates of the mercury use and practices employed.
2. Present recommended methodology and the draft of the UN Environment practical toolkit for developing baseline estimates of mercury use in ASGM.
3. Build national capacity and provide the assistance to NAP countries in their efforts to create a national overview and baseline estimates of mercury use in ASGM sector.
4. Provide an opportunity for regional cooperation between countries and executing agencies developing NAPs.

Expected results:

1. NAP countries and executing agencies are sensitized about the importance of the national overview and baseline estimates of mercury use in ASGM for NAP development.
2. NAP countries and executing agencies are equipped with the necessary knowledge foundation to set a country specific strategy for the data collection, and development of the national overview and baseline estimates of mercury use in ASGM, as required for the NAP process.
3. Opportunities for the regional cooperation are identified and explored.

Target audience:

National focal points, technical coordinators, other national representatives, executing agencies involved in the process of the NAP development, as well as subject matter experts and practitioners.

*The workshop will be held in English with simultaneous interpretation into French

Agenda

| | Monday, 22 May 2017 | Presenter/Moderator |
|----------------------|---|------------------------|
| 08:30 - 9:00 | Registration | |
| 09:00 - 9:10 | Welcome | UN Environment |
| 09:10 - 9:30 | Introductions | all |
| 09:30 - 10:00 | <p>Developing a national overview of the ASGM sector, including baseline estimates of the mercury use, as a key step in the process of the National Action Plan development</p> <ul style="list-style-type: none"> - <i>Session will emphasize the importance of baseline data collection and development of the sector overview for setting strategies and goals for the NAP and measuring progress.</i> | UN Environment |
| 10:00 - 10:15 | <p>Toolkit - Purpose, structure, skills required, and for whom</p> <ul style="list-style-type: none"> - <i>Session will introduce the toolkit and its intended use and audience, as well as outline the skills necessary for conducting ASGM baseline estimates.</i> | Artisanal Gold Council |
| 10:15 - 10:45 | <p>Toolkit - Baseline estimates Preparation: Introduction to ASGM</p> <ul style="list-style-type: none"> - <i>Session will provide a base understanding of the ASGM sector, including information on geology, ore extraction, and processing, mercury use, the gold supply chain, organization of mining groups, and how each is an important source of information for ASGM baseline estimates.</i> | Artisanal Gold Council |
| 10:45 - 11:00 | COFFEE BREAK | |

| | | |
|----------------------|---|---|
| 11:00 – 11:45 | Toolkit - Baseline Estimates Preparation: Introduction to ASGM Baseline Estimates <ul style="list-style-type: none"> - <i>Session will provide a base understanding of ASGM baseline estimates, including the overall process, possible approaches, data collection techniques and tools, cross-checking information, and data analysis.</i> | Artisanal Gold Council |
| 11:45- 12:30 | Toolkit - Performing Baseline Estimates <ul style="list-style-type: none"> - <i>Session will be a walk-through of the baseline estimates guide section of the toolkit, which provides step-by-step detail of how the process is carried out, sources of information, data collection, analysis etc.</i> | Artisanal Gold Council |
| 12:30-13:30 | LUNCH BREAK | |
| 13:30-14:15 | Interactive session: Setting a country-specific strategy <ul style="list-style-type: none"> - <i>This participatory exercise will introduce participants to the complexities of site selection, resource allocation, and collecting the correct information to develop baseline estimates. Participants will be given a fictional scenario and asked to develop a country-specific research plan by identifying missing information, appropriate stakeholders to interview, sites to visit, and data to be collected.</i> | Artisanal Gold Council, UN Environment |
| 14:15- 14:45 | Questions and discussion | all |
| 14:45 – 15:15 | Interactive session: use of the electronic tool (mobile app) for the management of the collected data <ul style="list-style-type: none"> - <i>Demonstration of an open-source data collection tool for the easier data management.</i> | UNITAR |
| 15:15 – 15:30 | COFFEE BREAK | |
| 15:30 – 16:30 | Experience from the field <ul style="list-style-type: none"> - <i>The session will present case studies from Ghana, Cote d'Ivoire and Kenya, describing process of country-specific strategy setting and baseline data collection in the field.</i> | Friends of Nation CASE Paul Cordy |
| 16:30 – 17:00 | Questions and discussion | all |
| 17:00 | Wrap up and closure | UN Environment |

List of Acronyms:

ASGM: Artisanal and Small Scale Gold Mining

NAP: National Action Plan

GEF: Global Environmental Facility

NRDC: National Resources Defense Council

SRADeV Nigeria: Sustainable Research and Action For Environmental Development

UNITAR: United Nations Institute for Training and Research

UNIDO: United Nations Industrial Development Organization

WHO: World Health Organization

JVE – Cote D'Ivoire: Jeunes Volontaires pour l'Environnement Côte d'Ivoire

Pictures

Group Photo



Panel composed of the Artisanal Gold Council, EEB/ZMWG and UN Environment



NRDC Facilitating a panel on the challenges of formalization in ASGM.



Group discussion amongst francophone delegates



Friends of the Nation presenting results from Miner's Consultations in Ghana.



Participants List

UNEP-EEB/ZMWG Mercury Events - Nairobi 22-24 May 2017

LIST OF PARTICIPANTS

Governments

| | |
|--|--|
| <p>BURKINA FASO Mrs. Watta Koulibaly Ouedraogo Directrice de la Prévention des Pollutions e des Risques Environnementaux Ministère de L'Environnement Direction Générale de la Préservation de l'Environnement 03 BP 7044 Ouaga 03 Burkina Faso Tel: +226 70 26 64 78 Email: ouedwata@yahoo.fr</p> | <p>CHAD Mr. Abdallah Younous Adoum Point Focal de la Convention de Minamata sur le Mercure Ministère de l'Environnement et des Pêche du Tchad Quartier Beguinage B.P. 447 N'djamena Chad Tel.: +235 63 64 83 00 Email: abou_idjab08@live.fr</p> |
| <p>BURUNDI Mr. Jérôme Ahishakiye Environmental Education Service Chief and NAP/ASGM project Assistant Burundian Office for Environment Protection (OBPE) P.O.Box 56 Gitenga Burundi Tel.: +257 71513356 Email: Jerome560@yahoo.fr</p> | <p>REPUBLIC OF CONGO Ms. Genevieve Bazoma Dongui Point Focal SAICM – Convention de Minamata sur le Mercure, Coordinatrice du Projet MIA/NAP Ministère de l'Economie Forestière, du Développement Durable et de l'Environnement Direction Générale de L'Environnement BP. 958 Brazzaville République du Congo Tel.: +242 05540 7536 Email: bazogene@yahoo.fr</p> |
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| <p>GABON Mr. Serge Molly Allo'o Allo'o Technical Head, SAICM Focal Point Centre National Anti-Pollution STFO Concession de la Direction Provinciale des Forets de L'Estuaire 3241 Libreville, Gabon Tel.: +24 10 77 08 528 Email: sergemolly14@gmail.com</p> | <p>GHANA Mr. Toni Aubynn Chief Executive Officer Minerals Commission 12 Switchback Road Residential Area, Cantonment P.O.Box M248, Accra Ghana Tel.: +233 302 772783 Email: kwesiaubynn@gmail.com</p> |

| | |
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