Sustainable Mercury Reduction Practices
Lessons Learned and the Way Forward
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Outline of the Presentation

1. Lessons learned from pilot experiments in Senegal (2007-2009)
   - Achievements, bottlenecks
   - Lessons learnt and feedbacks

2. How the experience may be continued: a new project jointly executed by ARM and AGC
   - Dissemination of good practices
   - Ways toward sustainability

3. The crucial role of Governments
   - Incentives, legal framework, formalisation
Retort Service Pilot Project In Senegal (2007-2010)

- Adapt a tool to the expectations of the miners
  - Quick
  - Giving Good looking product
  - Low maintenance
- Disseminate good practices
  - Perform amalgam burning in a single place
  - Adopt standard operating procedure
  - Monitor performance and results

A Project funded by European Union and implemented by Projekt-Consult

Implemented under the direction of the Government of Senegal
Approach For Appropriation of the Tool

- Involve the miners in the design of the tool
- Take into account their concerns
- Find cheap and low tech ways for maintenance and monitoring
  - Tool built locally
  - Monitor with standard scales used by buyers
- Include pilot experiment within a formalisation process
  - Access to mining authorisation
  - Improvement of organisation of the mine
Achievements and problems

- Miners satisfied with quality of result and operation of tool
- Miners come the retorting service place
- ASMO management agrees to promote the use of the retorting centre
- Miners appreciate the recovery of mercury
- Not **All** of the miners use the service
- The ASMO is not successful in making the rule for amalgam burning
- Miners do not easily change habits
- Not an economically sustainable service
Feedback From Field Experiments

- Lack of incentives to adopt good practices
- Poor internal enforcement of the rules => The role of organisation!
- No external source of information on the mercury issue
  - Mining and sanitary authorities are not playing a role
  - Poor access to technology and knowledge
- Need to adapt techniques to local situation
- Lack of easy means to detect Hg presence/pollution
- Informed miners are more sensitive to the issue
- Recovery if a good incentive
Approach of a New Project in Western Africa

- Covering **Burkina Faso, Mali and Senegal**
- Technical/formalisation processes in parallel
  - Specific approach on Hg issues
- Work with local NGOs
- Measurable improvement with certification
- Economic incentive with Fairmined bonus
- Enhance inter-relations amongst miners
- Holistic approach - interacting parameters

A Multi-donor project Monitored by UNIDO
Specificity of the Fairmined Standard

- Strong economic incentive
- Knowledge transfer to local NGOs for a long term and local support to ASMOs
- Develop indicators with the ASMOs to measure progress
- Importance of the community development
  - Make more money => greater part of the income to the miners
  - Increase quality of life at the local level
- Develop relationships and organisations that organise the sector at national and international levels
- Traceability and certification of the production
Objectives of the Project

- Achieve certification of one ASMO and develop a certified supply chain in this region
- Reach a stage where ASGM sector is self-supportive
- Increased capacity of stakeholders like NGOs and local concerned administration
- Adapt technology to enhance transition to cleaner separation solutions and reduce emissions during transition period
- Improve productivity and recovery rate
- Improve potential of training on ASM issues
- Adapt legal framework to facilitate access to legal authorisations
Potential Approach In the Design of NAPs

- Consider ASGM as a productive sector on its own, here to stay
  - Provide equal opportunities for ASGM and industry to develop

- Mercury emission reduction in ASGM sector closely related to the way the sector can evolve
  - It is strongly linked to formalisation opportunities
  - The legal framework must orientate miners towards good practices
  - Access to finance is possible only with a mining authorisation

- It is much more efficient to channel and improve the use of mercury than to ban it
  - Need to work on mercury emissions reduction during a transition period with the 4 golden rules: work on concentrates - use retorts – recover excess Hg in concentrates – recycle Hg

=> These rules allow to reduce emissions and releases by up to 90%
Potential Approach In the Design of NAPs (2)

- The straight ban of mercury can have adverse effects
  - Development of uncontrolled mercury black markets
  - Open door to uncontrolled use of cyanide
Potential approach in the Design of NAPs (3)

- Getting away from mercury means access to other techniques
  - Information, technology transfer, etc.
  - Training of miners and teachers
  - Tools with local maintenance and production, with a capacity of adapting to the change of needs

- Miners need support like any other industrial sector to evolve towards better and cleaner production
  - Technical and administrative advice from qualified partners: local NGOs, Administrations, Industrial projects
  - Inclusion in mining policies
Thank you for your attention!

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