

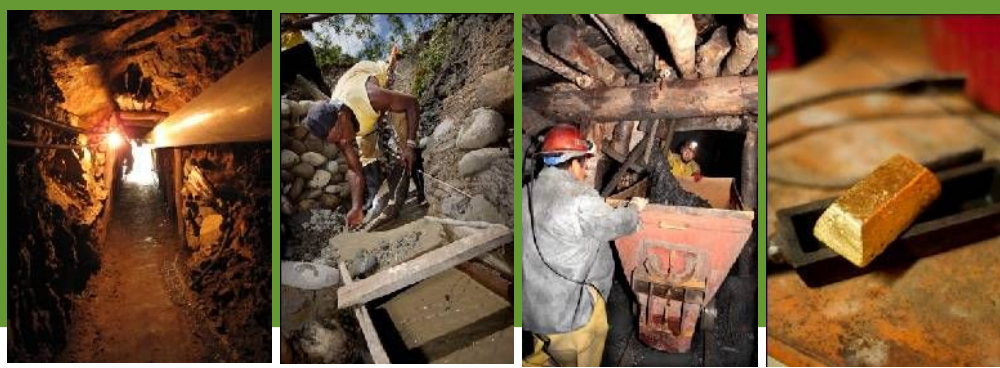


Sustainable Mercury Reduction Practices

Lessons Learned and the Way Forward

Global ASGM Forum 2013 – Lima, Peru

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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

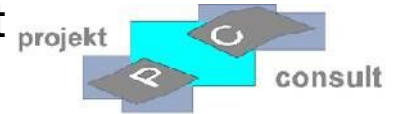


Retort Service Pilot Project In Senegal (2007-2010)

- 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





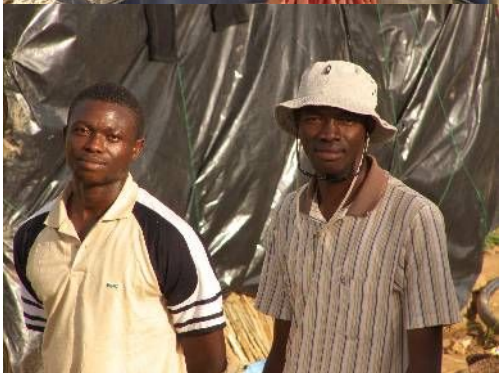
Potential approach in the Design of NAPs (3)



- 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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The Alliance for Responsible Mining Foundation Charity Number: S0001168, registered in Colombia