

Training of Trainers on alternatives of mercury and Best Available Techniques (BATs) and Best Environmental Practices (BEPs) in Artisanal and Small Scale Mining in Tanzania (Phase III)

AGENDA for Environment and Responsible Development (AGENDA), February 2010

1. Background

Phase one of the project on artisanal and small scale gold mining in Tanzania was mainly based on conducting scoping exercise to analyze the extent of use and impacts of mercury pollution from artisanal gold mining activities in Tanzania, including identifying sources of mercury (both legal and illegal), current practices/technologies that are used for gold extraction activities within Tanzania, alternative technologies available elsewhere in the world, quantifying the potential impacts of mercury in hot spots areas by taking and analysing samples of water, soil, sediments, fish, vegetables and assess potential health impacts, assess the level of awareness and training needs by artisanal gold miners and surrounding communities, and establishing role and efficacy of the Industrial and Consumer Chemicals Act (2003) in managing mercury use in Tanzania.

After completing the scoping exercise, AGENDA held a National Mercury Forum in March 2009 that brought together wide range of stakeholders on small scale mining activities including government agencies and ministries in mining activities, chemicals regulators, environment, research institutions, small scale miners, CSOs and other interested stakeholders in order to share findings as well as needs prioritising, prepare strategies for different stakeholders in order to address the mercury use, exposure and pollution problem and feed into national planning system as part of preparation of mercury use phase out in Tanzania. Also AGENDA had opportunity to present its findings to international audience during the Africa Regional SAICM which was held in Dar es Salaam Tanzania in July 2008.

The results of the scoping were:

- Enforcement of the national laws and international Treaties is poor due the fact that all mercury that is being used in small scale gold mining is obtained through illegal cross border trade and there are no legal importation to the country;
- There is poor occupational protection to those working under hazardous conditions by licensed claim owners, miners and the sponsors of the small scale gold mining activities as well as pollution to the environment;
- Artisanal and small scale gold miners in Tanzania still depend on the use of metallic mercury as the main technique to extract fine gold from ore. This is due to lack of awareness, technical knowledge on the impacts of releasing toxic chemicals to the environment and lack of alternatives;
- The unregulated trading of mercury from industrialized countries to developing countries makes mercury easily available at the mine sites. In most countries with ASM, mercury is readily available to miners at ASM sites. In some cases it is given for free, contingent on gold being sold to the mercury provider.
- Most technological problems in the gold mining industry, affect small-scale miners most. Most people associated with small-scale mining in Tanzania have no technical know-how and the country has a shortage of mining technicians through which skill-transfer to artisanal miners could be effected. The problem of dissemination of information across all parties is a serious one due to the fact that miners are usually not informed of

facilities available within the country and when literature is available it is usually written in English which most miners do not comprehend.

- Small scale mining is contributing to significant mercury release into the environment not only to Tanzania but globally. The solution to this problem is not to stop the business but rather to support it by introducing cleaner and safer gold mining and extraction technologies. However, for successful outcomes, long-term initiatives would be required since miners have to: first, acknowledge the problem; and secondly, agree “on their own willingness” to participate on future pollution control initiatives such as use of retorts. However, miners should be involved in finding solutions such as designing and proper consideration of stakeholders issues of concerns should be taken. Awareness and piloting of retorts use should be carried out in order to identify shortcomings in order to rectify them before presented to large miners’ communities.
- Awareness activities provided by government are not sufficient as was also reported by miners. They need to be structured in such a way that the address all groups around the villages since effects are widespread regardless of whether the person is conducting mining or not.
- Most of the interviewed miners have varied levels of knowledge on hazardousness of mercury, but all continues with their old ways as usual. This is attributed to lack of readily user friendly available alternatives and technologies, negative believes on using the alternatives and practices. More awareness creation is needed to miners as well as strict management and abating illegally mercury business in mining areas hence will help in curbing the sources of mercury to miners.

Further to these projects above, the World Bank (WB) has agreed to carry out a project *‘Tanzania Sustainable Management of Mineral Resources Project’* which has one component (Component A) aimed at helping artisanal and small scale miners, including gold miners. Part of this work will entail helping the miners improve environmental practices, including improving mercury management. The project is expected to last for 5 years (from 2009). They are planning to have a holistic approach to their training plan, and will be therefore also refer/promote alternative techniques to mercury (e.g. borax but not limited to one technique). Contacts with the project team have already been established.

Therefore this proposed phase intends to build upon the outcome of the first phase, particularly in the area of training and awareness raising on the existing technologies, and also consider the work under the WB project.

2. Project Objectives

The project objective is to ensure that important information on available alternatives of mercury as well as Best Available Techniques (BATs) and Best Environmental Practices (BEPs) is shared and passed on to artisanal and small scale miners through their regional associations as well as zonal mining officers (representatives of the Ministry of Energy and Minerals) and hence feed into government policy planning system for effective and efficient mercury phase out on mining activities in Tanzania.

Furthermore, close contacts will be kept with the WB project to try to influence projects to ensure these are contributing to our NGO global objectives, but also to further get involved and ensure complementarity with our work.

In addition, AGENDA will participate in the global and European campaign on mercury as relevant opportunities arise.

Specific objectives of the project are:

- Conduct training of trainers in collaboration with the WB project to small scale miners, Zonal Mining Officers and key Government Officials on alternatives of mercury as well as Best Available Techniques (BATs) and Best Environmental Practices (BEPs);
- Awareness raising to small scale miners and general public on impacts of mercury to human health and the environment through media
- Continue contacts with the WB project in view of ensuring that actions are complementary;
- Find out the list of projects that may be developed under WB and try to influence their content and implementation to ensure contribution to our global NGO objectives;
- Follow developments, rules and calls for tender relevant to the WB project in view of getting further involved in the future;
- Through the NGO network create pressure in for a robust globally binding treaty following the INC deliberations;
- Participate and actively contribute, by providing data and facts about the country, at the EU and global debate and follow relevant meetings (separate funding).

3. Project Activities and Outputs

On the basis of the results presented above, we will now try to overcome the difficulties that were identified in the first phases of our projects.

AGENDA had been working on ASGM for long time now and had built trust to Regional Miners Associations as well as their roots in their constituencies. By training extension staff of the ministry of mining and representatives of the miners to be trainers in their respective regions it will be a great help such that the trainees will pass on training and information to small scale miners at grass root level. Furthermore, regional miners associations usually hold meetings with their members where they will use to share information and experiences. Brochures and leaflets will help passing on information to those who know how to read right and while demonstration will help cement the ideas posed on brochures and leaflets to trainees. We will urge those who can read to help pass on the information to those who cannot read. Due to the fact that most of the miners know the health effects of mercury, when some miners adopt cleaner technologies others will follow due to economic advantages. However, we will need to embark into a major demonstration campaign to reach more miners and in the remote areas of the country. We will also consult the World Bank project coordinator to understand better their project and see how our project can fit into that project and what we can complement.

Output	1	Training of Trainers on on alternatives of mercury as well as Best Available Techniques (BATs) and Best Environmental Practices (BEPs)
Activity	1.1	Preparation of the training materials and demonstration equipments
Activity	1.2	Organise the trainings in collaboration with WB project at small scale mining centers (e.g Nyarugusu-Geita,Makongolosi-Chunya)
Activity	1.3	Selection of suitable trainees for the training in collaboration with WB project and sending out invitations letters
Activity	1.4	Conduct trainings of trainers
Output	2	Awareness raising to small scale miners and general public on impacts of mercury to human health and the environment through media
Activity	2.1	Preparation of awareness materials (leaflets, brochures, radio sessions and news articles)
Activity	2.2	Awareness raising campaign
Output	3	Contacts and follow up with WB project
	3.1	Short report with relevant contact persons and list of projects that will be proposed/tendered for implementation
	3.2	If relevant, draft a proposal for one of the call for tenders that will be made from WB
Output	4	Participation to the European/global campaigns
	4.1	Description of activities/work relevant to mercury in the framework of the European/global campaigns carried out by the organization. Establish a respective website/page and link it to www.zeromercury.org
	4.2	When necessary sent letters/contributed with input to global discussions in preparation for the INC

4. Proposed Budget for the study

S/n	Description	Cost [€]
1	Coordinator's salaries contribution	
	€ 180 x 6 months	1,080
2	Training of Trainers in 2 mining centers	
	Trainers transport to training centers @ € 900	1,800
	Perdiem of trainers	1,250
	Training materials production and equipments (demonstration)	950
3	Awareness creation	
	Leaflets (500)	165
	brochures (500)	330
	Posters A3 (500)	495
4	Office overhead costs (7% of (1+2+3))	425
5	GRAND TOTAL	6,495

5. Project Implementation schedule

Project duration February – June 2010

S/n	Activity	Months				
		1	2	3	4	5
1.1.	Preparation of training materials					
1.2	Identification and booking for training venue					
1.4	Conduct training of trainers					
2.1	Preparation of awareness materials					
2.2	Awareness creation					
3	Short Report on WB developments (and proposal if relevant)					
4	Links/web input to global campaign					
5	Report preparation and submission					