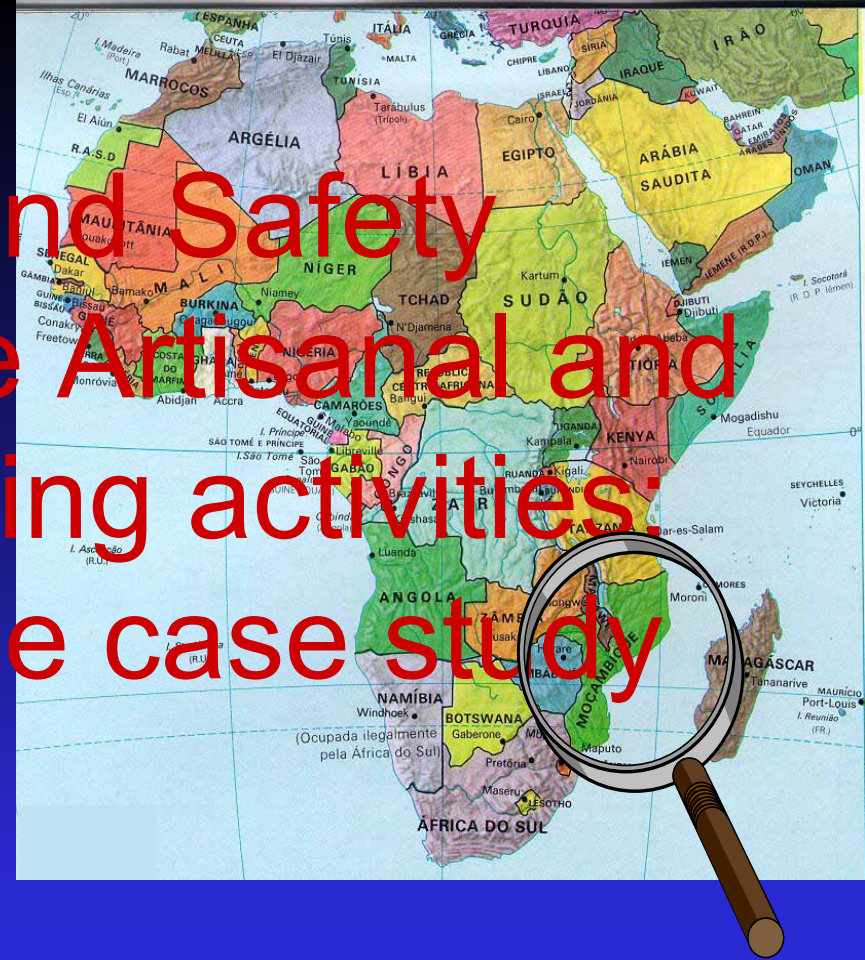


The Health and Safety regulations for the Artisanal and Small Scale Mining activities: The Mozambique case study



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Presentation layout

- Why Safe ASM
- Synopses (Mozambique case)
- Health and Safety Mining Regulation (ASM)
- How to implement Safety in ASM

Why Safe ASM

- Studies show that the main attention is given to the Environment, to the communities, to the geological conditions of the deposits and very little is given to the proper miner in terms of its safety.
- At best of our knowledge it is only the Philippines that have specific regulations for the ASM. In all other countries mining is regarded as mining in terms of law (regulations etc.)
- But the ASM has specificities in terms of mining methods and conditions, organization and motivations which are different from the LSM.

Synopses (Mozambique case)



- Presently, ASM in Mozambique produce 100% of the country's gold. The sector contributes positively to the national GDP, and it is also an important source of livelihood and poverty alleviation for many residents.

- ASM lacks financial and technical resources which leads to haphazard and wasteful mining, inefficient mineral processing, illegal trading, precarious living and working conditions, as well as severe environmental and social problems.



Health and Safety Mining Regulation (ASM)



- Every stage of the Artisanal mining cycle in Mozambique is unsafe and unhealthy for both miners and surrounding communities.
- The health and safety regulation for ASM in Mozambique is structured as follows:
 - ◆ mining area, work organization,
 - ◆ equipment for individual protection,
 - ◆ extraction,
 - ◆ transportation,
 - ◆ washing, processing and concentration of ore,
 - ◆ social infrastructures and
 - ◆ environmental rehabilitation and restoration.



Operation conditions



- 1. In the designated areas for “Senha Mineira”, it is not allowed the improper use of mercury or other toxic (noxious) substances for gold processing.
- 2. The ASM Associations and the Small Scale Miners (ASM) should collaborate with the inspectors from the Provincial Directorate of the Mineral Resources, the General Inspection of the Mineral Resources (GI) to ensure the fulfilment of the safety rules in Artisanal mining.



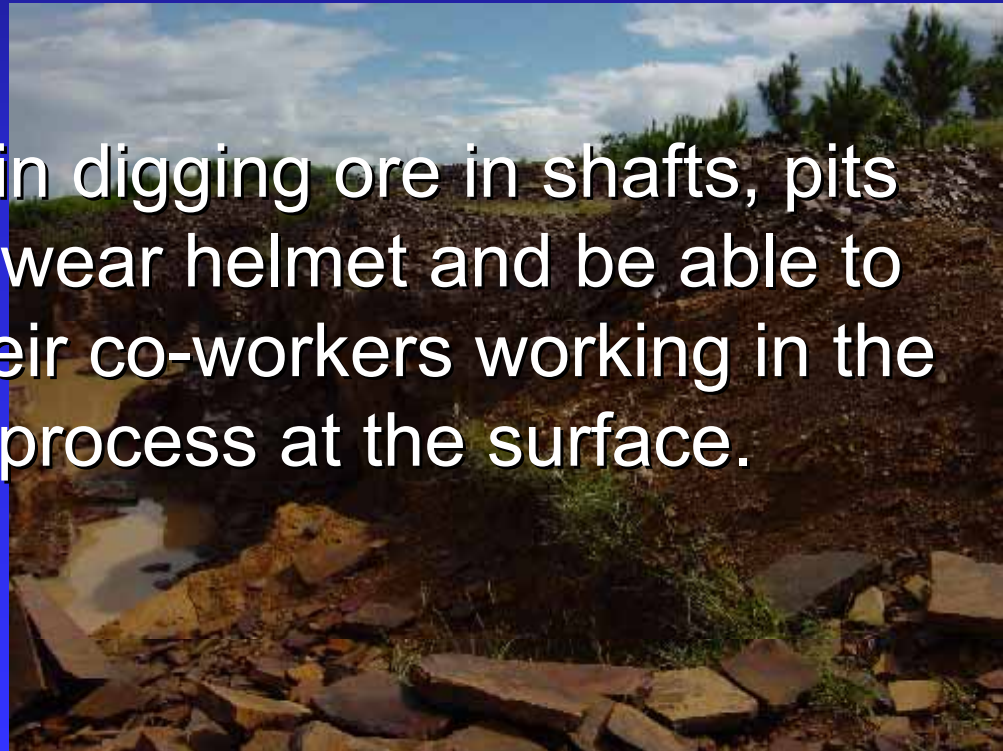
Work Organization

- The individual work is only allowed if in the proximities and within eye contact there are other workers in the same activity.
- Application for mining licence by Associations must indicate the type of predicted shelter and sanitation facilities.
- The access of children in the mining areas is not allowed, except if accompanied by adults and at very limited time.

Equipment for Individual Protection for ASM



- Competent Entities must promote use by all artisanal miners of the equipments for individual protection adapted to the work at their hands.
- E.g.
- The miners involved in digging ore in shafts, pits or adits must always wear helmet and be able to communicate with their co-workers working in the ore elevation (lifting) process at the surface.





Ore extraction

- This article describes the way of making workface safe (e.g. height) in different geological materials including the additional authorizations for communicating adits.
- It is not allowed the mining of sands, clays, muds and diatomite by artisanal means at night.





Ore Transportation

- Workers involved in the transport of ore from the extraction site to the washing and concentration areas must wear appropriate clothes, footwear and helmet.
- The paths for ore transportation must be constructed in such a way that they remain safe during the rain season, with adequate drainage system and floor protection.
- The maximum load to be transported by a worker cannot exceed 50 Kgs





Wash of Ore, Processing of the Concentrate



- Washing sites must be constructed in such a way that easy the cleaning of tailings accumulated in the sinks.
- Washing of ore or deposition of any tailings in river systems is not allowed
- The burning of amalgam in closed places, which are not prepared for the operation, is not allowed.
- In the amalgamation centres it is not allowed the presence of pregnant women, women with children or children in pre-school age.



Social Infrastructures,

- Simple sanitary facilities, clean and protected from any type of contamination
- Drinkable water for everybody, in sealed recipient and protected from contamination.



Environmental restoration and reclamation

- All mined out areas must be rehabilitated and environmentally restored before they are abandoned or handed over to a different economic activity such as agriculture.





Thank You

