

THE USE OF MERCURY IN GOLD WASHING ACTIVITIES: THE SOCIO-ENVIRONMENTAL IMPACTS IN THE DEPARTMENT OF KEDOUGOU (SENEGAL)

Partial Summary: Study in progress

Considered as an almost immutable and eternal traditional livelihood activity for some and a fire bet for others, the gold washing remains in the heart of economical and social activities in the department of Kedougou and is in interest for all the fringes of the population.

This phenomenon of “poverty and opportunity driven» type results widely from the constant impoverishment of populations confronted with the recurring economical difficulties.

This sector literally “exploded” in a context of liberalization and globalisation.

Although it is delicate to draw up reliable statistics on a largely abstract and often occasional secular activity, it is probable that today, at least more than five thousand persons are directly and regularly involved in gold washing in Kedougou area.

Nevertheless this activity is not without generating some social and environmental problems!

The main and general objective of the research is to carry out a rapid assessment of the use of mercury in gold washing practice in the department of Kedougou (Saraya district) which overflows with five thousands (5000) gold washers. Within the visited sites, we can mention Sabodala, Tenkoto, Bantanko and Khossanto which are the more active sites because they drain more people.

The study enables us to estimate the gold washing population in the area, to see the percentage of the use of mercury in the gold washing activity, to take note of the way in which mercury is integrated in the craft exploitation of gold, to make some samples of grounds, to measure the impact of the use of this chemical on environment and to draw a series of propositions leading the gold washers to become aware of the dangers and risks as well medical as environmental of such a practice on one hand and on the other hand to reorganize and rationalize their activity in order to make it less harmful on health and environment.

The study was carried out on a sample of 85 gold washers from all age and sex chosen at random within the villages of Bantako, Tenkoto, Sabodala and Khossanto. Gold washing is an activity which concerns as well educated as not educated. But if 33.3% of the questioned gold washers say to have attended school, only 3% of them could reach the secondary school and all the rest stopped their studies at primary school.

About half of the gold washers (46.9%) practise other activities like agriculture or breeding and the other half concentrated exclusively on gold washing say to find this activity much more profitable than agriculture.

Nevertheless, 88.9% of the gold washers maintain that the incomes drawn from this activity do not allow them to take in charge their needs like food, health, and clothing. In addition, they state in majority to have been confronted with problems of health in relation with their activity.

Almost all the gold washers (91.4%) know the mercury which they call in a banal manner “the product” considered as “effective”, “essential” and even “useful” in the recovery of gold. Mercury is not too expensive then to treat 10 to 15 G of gold, the gold washer uses on average 10 G of mercury, which means that the gold washers use approximately 50kg of mercury each season of gold washing and despite the poverty in the area, the gold washers spend nearly 2500 dollars in the purchase of mercury, the gram being sold with 1250f (2.5 dollars). Although 32.1% of the gold washers state to be conscious of the danger of the use of mercury on health, no protection arrangement is implemented and despite the strong use of mercury in gold washing, the population have never taken advantage of a public awareness campaign on their awareness on the toxicity of this chemical; Which shows that the extent of the phenomenon and the risks and dangers relative to it do not get into trouble the authorities who leave the gold washers to their sad fate. During the amalgamation where the entire mercury evaporates with the heating, there are certainly heavy losses which will turn over in the rivers and this is the risk of exposure by organic mercury starting from the fish which could be contaminated if the methylation is carried out; this is why it is urgent to propose alternatives for a large scale awareness campaign.

The first recommendation to give, if the objective of the research is limited to the formulation of a series of strategies leading the gold washers to become aware of the danger which the use of mercury represents in their activity and thus to agree to give up it, remains undoubtedly to sensitize the local populations by training some of them who are supposed to have to pass on their knowledge to their gold washers colleagues. It is one of the challenges we set with our partners who are Black Smith Institute, the Ministries for Environment, Health and Mines.

The region has surface rivers especially Gambia River and its affluent coming from Guinea and the other streams watered with rainwater and this water is used for domestic needs and certainly for fishing. In this fact, the risk of contamination would be large if the conditions to lead the entry of mercury in the food chain by organic form are met.

Basing on what we saw during the investigation, the populations likely to be affected directly are those who use mercury and for the others who are not gold washers and who live out of this area, that will depend on the level of contamination of the water which we cannot evaluate during this study. It is a special protocol which will be necessary to set up for that and likewise, it would be significant to organize training sessions towards the different actors (gold washers, local and traditional authorities) because they must be involved in activities for awareness and can also be used to take over in the passing on of knowledge.