

## **Abstract**

This research explores the ecological disasters in Umzingwane district caused by artisanal small scale gold mining. The International Labour Organisation (ILO) acknowledges gold mining by itinerant miners as the means of livelihood for more than 13 million people in the developing world. Although there are many potential socio-economic benefits of artisanal small scale gold mining, there are numerous negative impacts from these small and inefficient operations as a result of wasteful extraction and processing techniques. Environmentalists and disaster planners face the challenge of regulating the artisanal small scale mining sector to reduce the ecological impacts because of lack of resources since the country is on the verge of hyper inflationary environment. The escalating rate of unemployment is a force behind the increase of artisanal small scale miners, especially in Umzingwane district. Their unregulated activities in the district result in risk accumulation processes as it promotes land degradation, vegetation destruction, and pollution of water sources. This risk accumulation process if not checked as is the case in Umzingwane district will put an insurmountable pressure on the ecology resulting in its collapse in future. The unskilled and underequipped artisanal small scale gold miners use mercury for amalgamation as it requires no special skill and is inexpensive, fast and effective. The study used observational fieldwork, archival research, interviews and questionnaires. The research projects found that it was a ticking time bomb for an ecological disaster. The operations were found to be worsening environmental impacts. The negative effects are already being felt in the district as rampant land degradation has contributed to siltation of rivers and dams among other variables, destruction of vegetation as well as contamination of water bodies. Bulawayo Metropolitan province and other rural areas that receive their water supply from the Umzingwane catchment have been affected in the process. The impacts far outweigh the potential socio economic benefits of artisanal small scale mining. There is massive land clearing as by burning of bushes and unregulated stripping of the overburden. The role of the government as enforcers of laws and regulations and promoter of mining development need to be defined. Environmentally destructive mining practises persist as there is lack of enforcement and control mechanisms. On the other hand miners need to take responsibility for the negative impacts from their livelihood. They however need improved access to financial resources and more incentives for conservation.