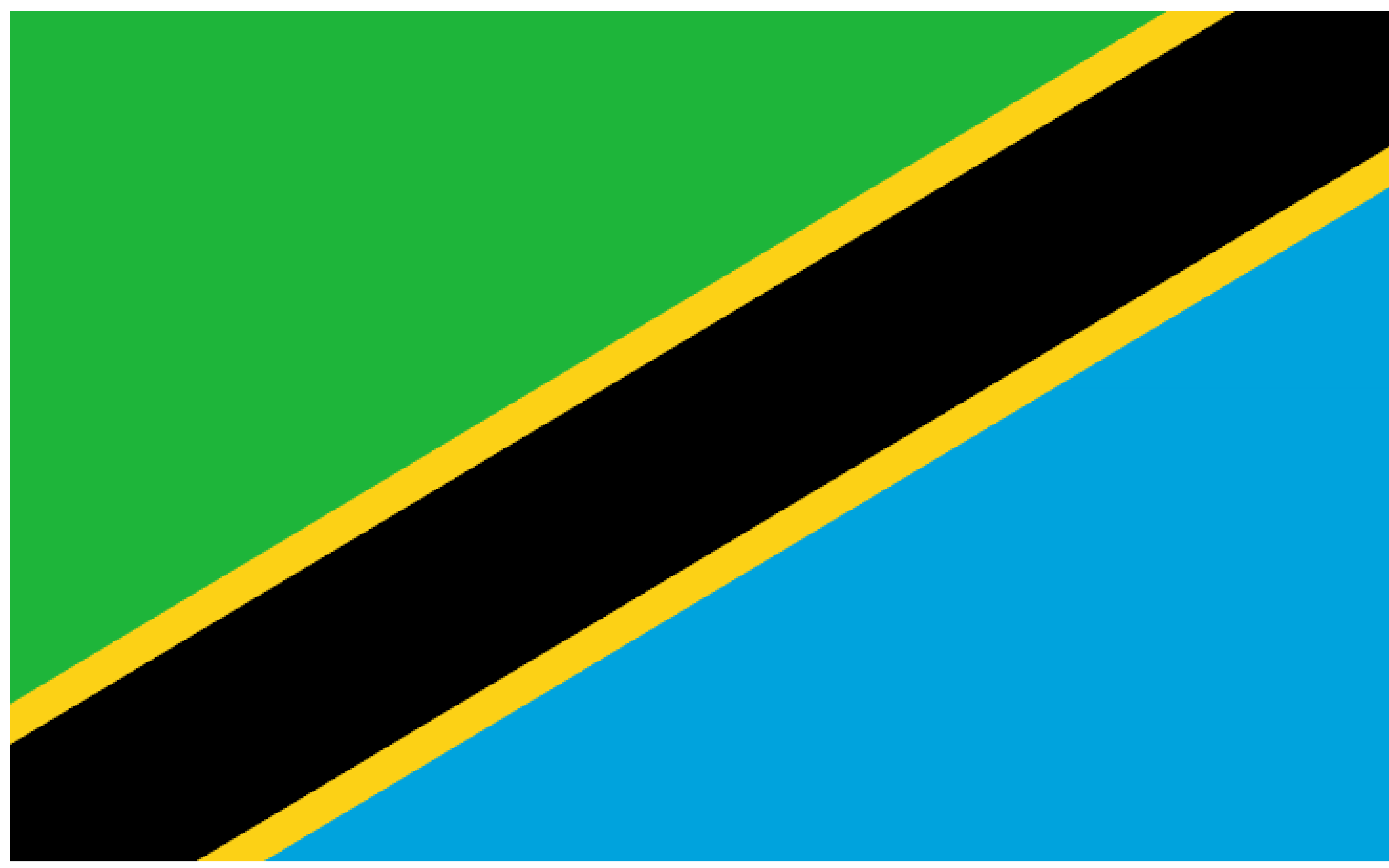


# TANZANIA



## MINE WASTE MANAGEMENT DRAWINGS FOR SMALL SCALE MINING

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## INTERNATIONAL TRAINING PROGRAMME 308

Mine Water & Mine Waste Management



Sweden  
**Sverige**



## THE CHANGE PROJECT

Tanzania is experiencing fast growing rate of the mining industry achieved through Small Scale (SSM), Medium and Large mining operations. The success is also attributed to the positive impact of amendments of regulatory review that took place in 2017 where the Mining Act and Regulations formalizes, acknowledges, supports and compliments the contributions of SSM in the National GDP. In 2019/2020 alone, SSM contributes 22% of the revenue accrued from the Mining Sector. This growth is expected to increase in subsequent years. Growth of the mining sector and SSM activities has also brought various environmental challenges which include but not limited to un-environmental friendly management of mine water and mine waste.

**Mining in SSM sub-sector** focuses mainly on exploitation of mineral resources to make a considerable profit within a short period of time while paying little attention to the generated mine waste. Un-managed mine waste resulting from processing of oxide and sulphides ores poses a great potential for generation of AMD and environmental pollution. Therefore, the project intends to provide technical solutions on mine water and mine waste management in order to control the abovementioned challenges.

**The organizations' main goal** was to have working tool that will not only enhance SSM performance but also work in harmony with other regulating authorities. The project has therefore developed Mine Waste Management Drawings for SSM which are crucial to the organizations as they provides simple mine layout and guidance in managing mine waste and mine water with ultimate goal of promoting safe and environmental friendly smallscale mining in-line with Sustainable Development Goals (SDGs). The final version of the project will be distributed free of charge to all SSM.



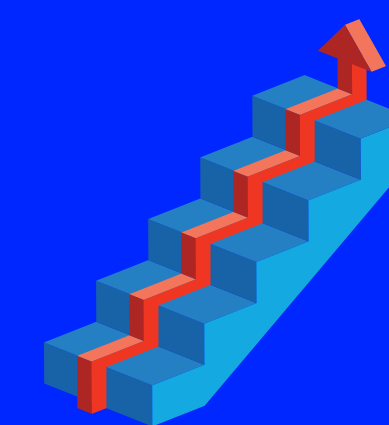
A Vat Leaching Plant, Perspective View.



## SIGNIFICANCE FOR THE PEOPLE AND THE ENVIRONMENT

**The project will increase** environment awareness among SSM, impart technical knowhow and in turn increase their respective production while conserving environment. The project will also be a standalone working tool for environmental and mining inspectors during inspections and approval processes.

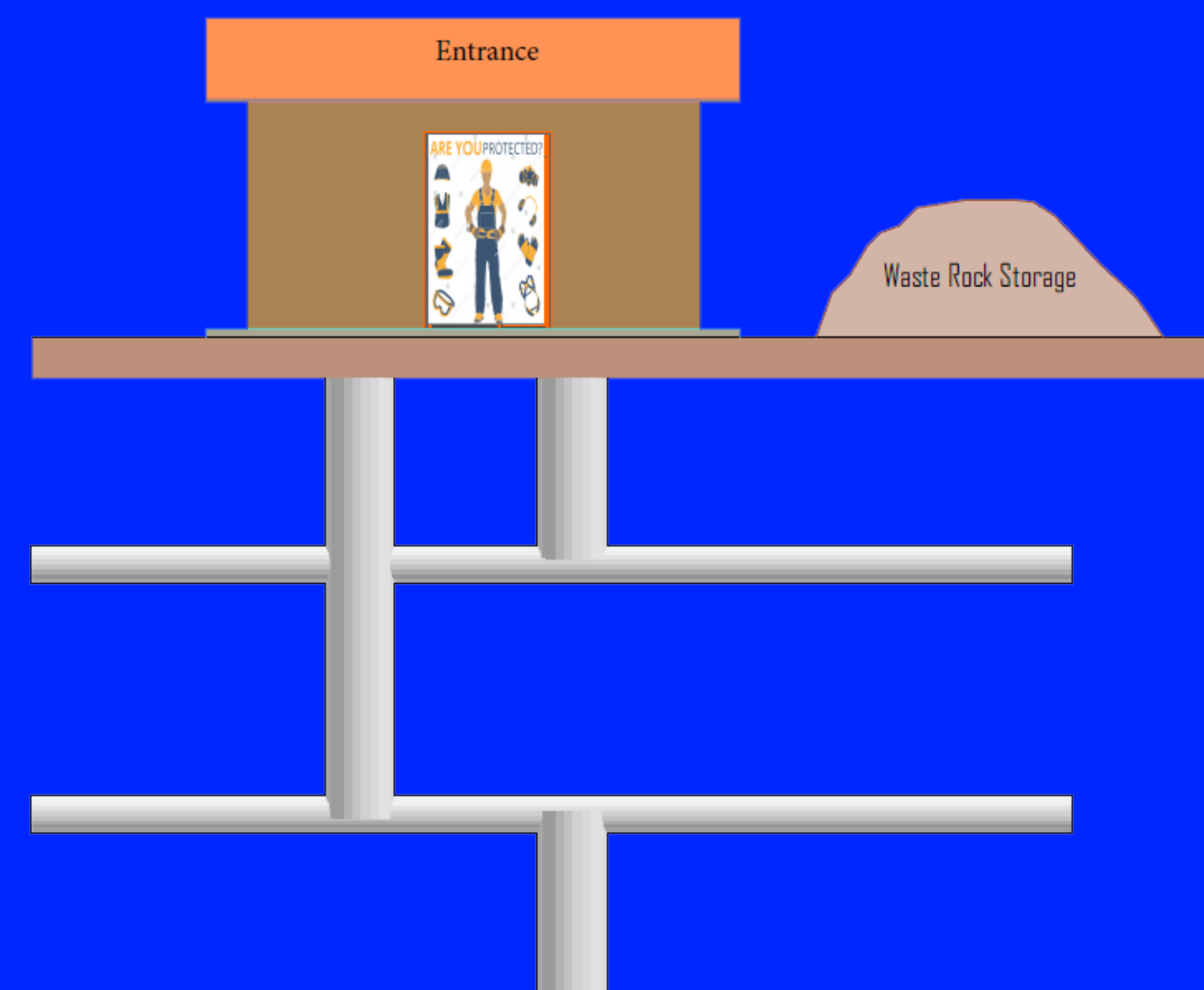
**The project is also a building block** towards the completion of the "Guidelines for Mine Water and Tailings Management for Small and Medium Scale Mines in Tanzania" that was completed by group 1 within the training programme ITP308. The organizations will have a working instrument that is applicable to all regulators within the mining sectors. The project will provide uniformity and harmony to the organizations as they conduct their daily routine work. The SSM on the other hand will have an appropriate tool of directives on how to plan the mining projects in consideration of environment for sustainable mineral exploitation.



## RESULTS AND ACHIEVEMENTS

**By using methods** of literature reviews, site visits of selected sites (field work) as well as discussions and consultations of key stakeholders, the project has achieved the goal of producing the illustrations for small scale mining management.

**The project** will be an annexure to the "Guidelines for Mine Water and Tailings Management for Small and Medium Scale Mines in Tanzania" and also standalone technical document.



Shaft side view plan.



## THE WAY FORWARD

**The project will** be put to test for one year to assess its usability and performance. Any shortfalls and challenges that hinders its applicability will be updated, otherwise this tool is planned to reviewed after every three years (3) or whenever the need arise.

**The team also** intends to continue with the awareness programme in tandem with routine mines inspection activities. Moreover, this tool will be distributed to all our offices that are located in all regions across the country; these offices conduct trainings at least once every two years. Also, Internet based platforms such as social media will be used for awareness creation.

**The team further recommends** merging the Guidelines for Mine Water and Tailings Management for Small and Medium Scale Mines in Tanzania with the Drawings Illustrations from this project. The project can also be extended to include information relevant to Medium Scale Mining. The project still needs User test, finalization, endorsement by relevant authorities (Ministry of Minerals, Mining Commission and NEMC) and translation into Kiswahili Language.



Safety illustrations for Head Room, Laboratory and Chemical Store.