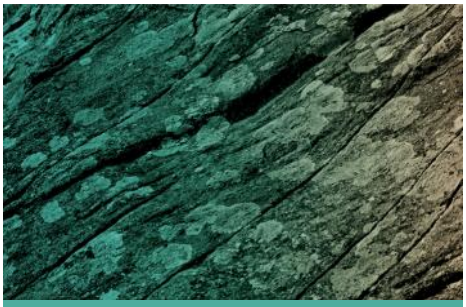

Sorowako-Petea mining areas

Slope geometry design

PTVI

Feasibility design

2020

Project fees :

260 000 Euros

MECATER INGÉNIERIE



## Project description

The project involves the development of easy-to-use practical slope design guidelines based on available geological data, geotechnical investigation and back analysis of previous failures. The set of data cover most of the geotechnical conditions encountered in the mining areas in Sorowako and Petea. The project also involves site supervision during the phases of the project.

## Scope of work

The project comprises six distinct phases as follows:

- Phase 1: Requirements for additional geotechnical studies and investigations. This phase involves the collation of data and the development of a detailed scope and schedule for additional studies and investigation works
- Phase 2: Geotechnical investigation and monitoring. This phase involves undertaking the investigation, testing and monitoring works. A supervision of investigation works is planned during this phase.
- Phase 3: Geotechnical studies. This step involves developing design parameters based on geotechnical investigation, back-analysis of recorded instabilities, sensitivity analysis and calibration against observed results
- Phase 4: Representative layout for mining areas. Correlation between geological data and geotechnical parameters will be provided at this phase. Representative slope layouts/configuration will be determined for each zone of the mining areas.
- Phase 5: Design guidelines definition of easy-to-use practical design guidelines adapted to each of the above layouts, applicable to majority of the mining areas. The guidelines will specify for each layout the overall slope angles, the bench angles and bench width to be adopted depending on zone of the mining area as well as geotechnical, hydrogeological and operational conditions encountered
- Phase 6: Design guidelines implementation /Training of PTVI personnel.