

# **Bauxite Mining Mechanization**

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- Improve Bauxite quality by managing silica & Iron-rich boulders

## Key Focus



- Immediate actions can enhance efficiency and reduce reliance on manual labor.



- CAPEX investments in R&D and scalable technologies will future-proof operations.



## Objective

To assess the mechanization options for manual jobs at Samri Mines for more reliable and safe operations with quality dispatch.

**Problem Statement-** Manual working (Sorting, sizing, stacking and loading) at bauxite mining. Excavated ROM ore is manually sized and sorted in temporary yard near the active face and/or in designated sorting yards. Subsequently, high grade hand-sorted bauxite is manually loaded in trucks and transported to the customer. In some cases, screening is carried out for the mineral rejects to recover value out of it.

#### **EXISTING PRACTICES IN BAUXITE MINING**













### **Mining Operation**

**Stacking of Bauxite** 





**Bauxite Stacking at mine stock yard** 

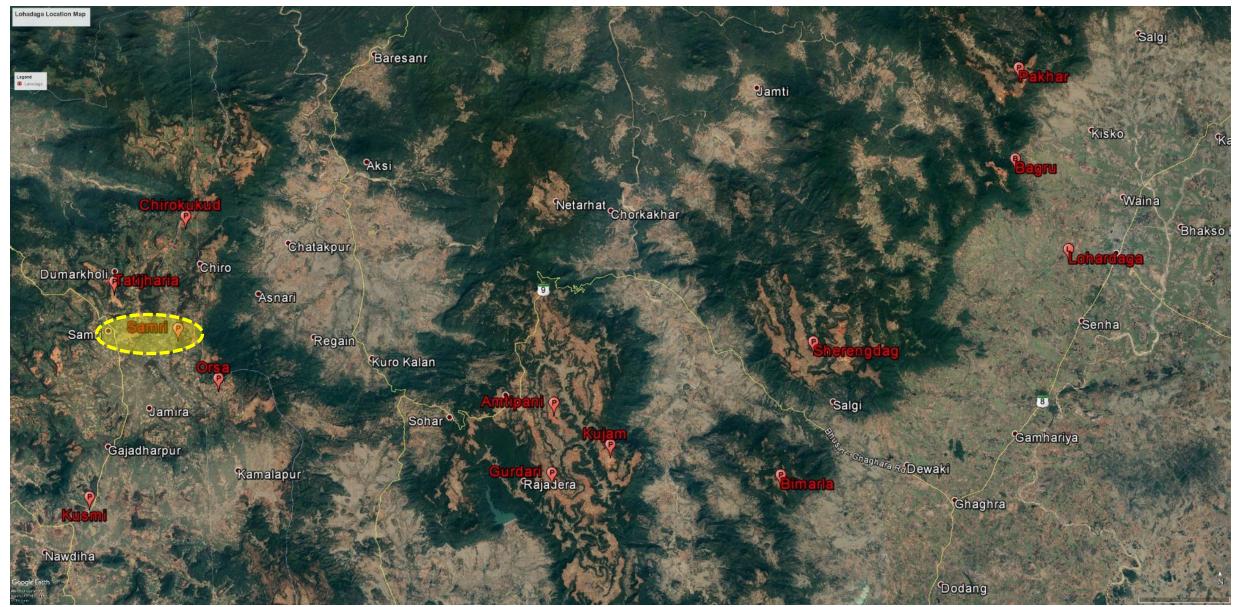
### KEY CHALLENGES IN BAUXITE MINING





#### **LOCATIONS OF OUR MINES**







## THANK YOU!!!

### LOCATION MAP OF OPERATIONAL AREA



