

Discovery of the Largest Manganese-ore Deposit in Central India

A team of Faculty Members from Indian Institute of Technology (Indian School of Mines) Dhanbad carried out exploration studies for manganese-ore deposits in central India. The work was carried on an area close to Nagpur (Maharashtra). The area is located between two working mines of MOIL (Mansar Mine in the north and Beldongri Mine in the south), where occurrence of manganese-ore was not previously reported. Detailed mapping (gravity and magnetic) in a block of 200 m X 200 m shows presence of the ore-body at a depth of 20-60 m (average 40 m) with a reserve of 0.35 million tonnes. Thereafter, the strike continuity of the ore-body for about 3.5 km has been confirmed from magnetic survey. The reserve of the orebody is estimated to be approximately 30 million tonnes.

Economic Return to the Country

Current rate of manganese ore (~40% grade) = Rs.12000/- per tonne

Total value of the ore-deposit = 30 million tonnes X Rs. 12000 / tonne = Rs. 36000/- crores.
(Rupees thirty six thousand crores only)

This reserve is the largest amongst all manganese-ore deposits of Manganese Ore (India) Ltd. (MOIL) in India. The reserves of the existing mines of MOIL (compiled from Indian Minerals Yearbook 2014, IBM) are given below:

Reserves of different Manganese-ore deposits of MOIL

Sl. No.	Deposit	Strike length (in km)	Reserve (million tonnes)
1.	Bharweli Mine	2.80	23.69
2.	Ukwa Mine	5.15	8.60
3.	Tirodi mine	Different pockets	1.17
4.	Dongri-Buzurg Mine	1.90	11.79
5.	Chikla Mine	1.60	4.98
6.	Gumgaon Mine	Different pockets	4.22
7.	Kandri Mine	1.5	5.53
8.	Mansar Mine	2.80	4.60
9.	Beldongri Mine	0.25	0.32
10.	Present Discovery	3.5	30.00

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