

Paper Number: 5423

The Saga of Indian mines: Environmental and Social Relevance

Gurmeet Kaur¹

¹ Department of Geology, Panjab University, Chandigarh-160014, India; Email: gurmeet28374@yahoo.co.in

India is an emerging economy of the world and has survived primarily on agriculture and mining industry in the past. The IT industry which is booming in India in the present scenario, along with agriculture and mining industry are pivotal in strengthening India's economic position on the world map. Mining in India has a historical account and numerous mentions of old workings that are documented in various research articles and books. During the British Raj and post-independence mining in India boomed and many new explorations were made for metals, non-metals and fuel minerals. The mining industries led to huge industrialization of India along with some environmental and social impacts which made us think in terms of sustainable and environmental sensitive mining.

The Indian subcontinent is well endowed with most minerals occurring on earth in ample quantity, and India enjoys a self-sufficient status in terms of most minerals both metallic as well as non-metallic. India has secured 4th position in terms of production (volume) of minerals and is only behind China, United States and Russia. The India's mining industry contributes significantly to the India's Gross Domestic Product (GDP) growth. As per the latest update by Federation of Indian Chambers of Commerce & Industry (FICCI, 2013) the country is currently producing eighty-seven (87) minerals. There are around 3,500 operational open cast and underground mines in India. The open cast mines dominate vis-à-vis underground mines. India enjoys a self-sufficient status in terms of iron ore, aluminium ore (bauxite), barite, chromite etc.

The environmental and social impacts of mining in India led to formulation of many laws, framing of national mineral policy along with many state and central policies on environment and social-economic rights of mine workers and also on how to go about sustainable and environmentally-friendly mining. The socio-economic impact of mining gave birth to lot of non-government organisations (NGO's) in India for protecting the social and economic rights of indigenous people in and around the vicinity of a mining industry. In spite of all this, the mining in India has a sad part in human rights violations and exploitation of workers. Most commonly the small scale mines, which lease a small piece of land for mining, contribute significantly to the exploitation of local women and children. Mining scandals and illegal mining has also become rampant in India. Indian mines have safety issues for its workers and Indian mines are prone to higher accident rates than the mines in the west. Although it has become mandatory to apply United Nations Framework Classification (UNFC) before initiating any mining project in India, in reality it is not so, especially in terms of its socio-economic parameters. Mineralization in India is mainly concentrated in southern, central and eastern parts of India which are dominated by rare tribal communities which are averse to mining projects and intervention by multi-national giants. The issue of rehabilitation of people displaced during mining and after closure of mines is paramount. Reclamation of the abandoned mine is also far from reality in India and thus it leads to destruction of a delicate ecosystem prevalent prior to mining.

