# **Exploration Activity**

Recently, the Geological Survey of India has increased reserve estimates in the State of Orissa, bring total reserves there to 15.48 million tonnes at a cut-off grade of 20% Mn. Exploration is planned for the Balaghat district of Madhya Pradesh, and the Nagpur district in Maharashtra.

### **Prospects**

Most manganese mines in India are worked manually. In general, upgrading of mineral technologies, and use of modern mining methods to increase productivity is given high priority by the Government of India.

#### Bauxite/Aluminum

### Major Producers

National Aluminum Co. Ltd. (Government of India)
Indian Aluminum Co. Ltd. (Private)
Hindalco Industries Ltd. (Private)
Bharat Aluminum Co. Ltd. (Government of India)
Madras Aluminum Co. Ltd. (Private)
Bombay Mineral Supply Co. Ltd. (Private)
Orient Abrasives Ltd. (Private)
Gujarat Mineral Development Corp. (State government owned)
Madhya Pradesh State Mining Corp. (State government owned)
Minerals and Metals Ltd. (Private)
Saurashtra Calcined Bauxite & Allied Industries (Private)

## Output/Trade

Bauxite is found extensively in India, notably in the states of Orissa, Andhra Pradesh, Madhya Pradesh, Maharashtra, Gujarat, and Bihar. Reserves are estimated by the Indian Bureau of Mines to total 2333.4 million tonnes, of which 598 million tonnes are proved and 462 probable.

India is self-sufficient in bauxite and aluminum production, and is a major exporter of both bauxite and alumina. In 1991/92, exports of bauxite reached 121,618 tonnes and of alumina 392,398 tonnes. Two companies, National Aluminum (NALCO) and Bharat Aluminum (BALCO), both public sector companies, account for two-thirds of aluminum production.

In addition to work done in-house, research and development related to aluminum is conducted at the newly created Jawaharlal Nehru Aluminum Research, Development and Design Centre in Nagpur. The Nehru Centre will focus on new uses of aluminum and its alloys.

Over the period from 1991-92 to 1996-97, aluminum production is targetted to grow from 514 thousand tones to 656 thousand tonnes, an increase of nearly 28 per cent.