

MINERAL AND MINING INDUSTRY IN INDIA

1. INDIA'S MINERAL SECTOR

1.1 Background

The history of mineral development is as old as the civilization. In case of India, the mineral production dates back to the ancient times as the mining activities can be traced as far back as 6,000 years or so. The remains of some of the old mine workings are a witness to this fact. A few of these workings have led to the discovery of a number of significant mineral deposits, which are being worked in the present time.

In recent times the impetus to the mineral development was imparted in the country only after the political Independence came in the year 1947 when the significance of role of minerals was realized in nation building.

Realising the significance of industrial development of the country, Industrial Policy Resolution was promulgated in 1956 by the Central Government. Under this ambitious programme of developing several industries (such as steel, non-ferrous metals, cement, power, fertilizers, etc.) were launched which required increasing quantities of minerals. Coal was the one to have received the maximum attention for being the basic fuel for a whole range of industries such as steel, railways and power plants.

The entire production of lignite, petroleum and natural gas, copper, lead- zinc ores, gold, silver, diamond, tungsten concentrates, pyrites, rock phosphate, etc. was contributed from the mines operated under the public sector.

1.2 Current Status

Being aware of the vast potential of the sector, the Indian Government has been consistently and in a pragmatic manner opening up the previously controlled regime to usher private investment in the sector and infuse funds, technology and managerial expertise. The opening up of the Indian mining sector has, therefore, generated considerable global interest. The Indian mining sector was opened up to Foreign Direct Investment in 1993 after the announcement of the New Mineral Policy.

In India, 80 per cent of mining is in coal and the balance 20 per cent is in various metals and other raw materials such as gold, copper, iron, lead, bauxite, zinc and uranium.

Of the 89 minerals produced in India, 4 are fuel minerals, 11 metallic, 52 non-metallic and 22 minor minerals. India is the largest producer of mica blocks and mica splittings, ranks third in the production of coal & lignite, barytes and chromite; 4th in iron ore, 6th in bauxite and manganese ore, 10th in aluminium and 11th in crude steel. Iron-ore, copper-ore, chromite and zinc concentrates, gold, manganese ore, bauxite, lead concentrates, and silver account for the entire metallic production.

The search for minerals did not remain confined to landmass only. It was extended to off shore area and even deep sea. Result was the discovery of large petroleum deposits in the Arabian Sea which came to be known as Bombay High. The exploration work in the deep ocean led to the discovery of polymetallic nodules bearing cobalt, nickel, copper and manganese at a depth of 3,000 metres. This work earned India the status of Pioneer Investor in seabed mining conferred by the United Nations.

Limestone, magnesite, dolomite, barytes, kaolin, gypsum, apatite & phosphorite, steatite and fluorite account for 92 per cent of non-metallic minerals. However India is not endowed with all the requisite mineral resources.

Today, the reserves details are available for as many as 20,000 mineral deposits all over the country. The Indian Bureau of Mines has prepared inventory of mineral deposits for the country and updates it every five years. The country is self sufficient in case of 36 minerals and, deficient in respect of a number of minerals. Demand for minerals is expected to grow very fast, due to increasing levels of consumption, infrastructure development, and growth of the economy. Management of mineral resources has, therefore, to be closely integrated with the overall strategy of development and exploitation of minerals is to be guided by long-term national goals and perspectives.

2. MAJOR PLAYERS & ORGANISATIONS IN THE SECTOR

In India mining has a large presence of public sector companies which account for over 80 per cent of the total value of minerals produced. Large integrated players with interests from mining to metallurgy and processing like SAIL and Tata Steel in steel and Hindalco and Nalco in aluminium, dominate the metal and mining industry.

While SAIL, Nalco, National Mineral Development Corporation (NMDC) and Hindustan Copper are the largest public sector companies; Tata Steel, Hindalco and Sterlite are the major companies in the private sector. Sesa Goa (a subsidiary of Mitsui) is one of the largest companies in mining and export of iron ore. Orissa, Jharkhand and Chattisgarh are the most mineral-rich states of India. Orissa has over 50 per cent of India's bauxite reserves and over 20 per cent of India's reserves of iron ore.

The major players in the Mining sector are classified on the basis of the minerals produced by them namely

Mining Sector	Major Players
Exploration and Production of Coal / Lignite	<ul style="list-style-type: none"> • Coal India Ltd • Neyveli Lignite Corporation • IISCO
Exploration of Metals	<ul style="list-style-type: none"> • NALCO • BALCO • Mineral Exploration Corporation Ltd • Bharat Gold Mines Ltd • ONGC • Ircon • Hindustan Zinc Ltd • Hindustan Copper Ltd • Sikkim Mining Corporation
Iron Ore Sector	<ul style="list-style-type: none"> • National Mineral Development Corporation • Kudremukh Iron Ore company • Steel Authority of India Ltd • Orissa Mining Corporation
Bauxite Mining and Aluminium Production	<ul style="list-style-type: none"> • National Aluminium Company
Copper	<ul style="list-style-type: none"> • Ore Mining • Hindustan Copper Ltd
Rock	<ul style="list-style-type: none"> • Phosphate and Barytes Mining • Rajasthan State Mines and Minerals Ltd • Andhra Pradesh Mining Development Corporation

Organizations in Survey and Exploration

Geological Survey of India (GSI)

A premier organisation of earth science studies was set up in 1851. It is a subordinate office of the Ministry of Mines; Govt. of India. GSI has provided vital earth science input into all facets of national economic development.

Mineral Exploration Corporation Ltd (MECL)

Since its inception in the year 1972, MECL is carrying out mineral exploration activities and has added 129130 million tonnes of mineral reserves to the National Mineral Inventory.

Organisations in Regulation and Conservation

The Indian Bureau of Mines (IBM)

IBM is a subordinate office under the Ministry of Mines. It is engaged in the promotion and conservation of minerals, protection of mines environment and scientific development of mineral resource of the country, other than coal, petroleum and natural gas, atomic mineral and minor minerals.

Companies into Mining and Processing

Hindustan Copper Limited (HCL)

HCL was incorporated on 9th November 1967, under the Companies Act, 1956. It was established as a Government of India enterprise to take over all plants, projects, schemes and studies pertaining to the exploration and exploitation of copper deposits, including smelting and refining from National Mineral Development Corporation Ltd.

National Aluminium Company Ltd (NALCO)

NALCO was incorporated in 1981 and is Asia's largest integrated alumina- aluminium complex, comprising bauxite mining, alumina refining, aluminium smelting and casting, power generation, rail and port facilities. NALCO enjoys the status of a Star Export House and a Miniratna company.

3. INVESTMENT POLICY & INITIATIVES

Institutional Framework

The Mines and Minerals (Development & Regulation) Act (MMDR), 1957 and the Mines Act, 1952, which constitute the basic laws governing the mining sector, are promulgated by the Central Government.

The Ministry of Mines regulates and promotes the activities of mining in the country and is responsible for:

- Survey and exploration of all the minerals, other than coal, natural gas, petroleum and atomic minerals;
- Mining and metallurgy of non ferrous metals like aluminium, copper, zinc, lead, gold, nickel; and
- Providing administration for prospecting and mining laws.

The relevant rules in force under the MMDR Act are the Mineral Concession Rules, 1960, outlining the procedures and conditions for obtaining a prospecting license or a mining lease, and the Mineral Conservation and Development Rules, 1988 that lay down the guidelines for ensuring mining on a scientific basis and without environment degradation.

All the major minerals come under the purview of the Central Government. Minor minerals are separately notified and come under the purview of State Governments who have formulated Mineral Concession Rules for this purpose.

In the federal structure, the State Government is the owner of minerals in their respective territorial jurisdiction. In offshore areas, exclusive economic zone and the continental shelf, the rights are vested in the Central Government.

High quality geological databases have been generated by national agencies like the Geological Survey of India, Mineral Exploration Corporation, National Remote Sensing Agency, National Geophysical Research Institute and Indian Bureau of Mines. This database is accessible on a commercial basis and makes investment in mining exploration in India a low-risk investment proposition. In addition to the above, there exists a Federation of Indian Mining Industries (FIMI) which is an association of all those engaged in the business of mining. FIMI from time to time suggests to the Government desired changes in the prevailing mining policy that would facilitate improved activities in the sector.

Private Participation in the mining sector

The National Mineral Policy was revised in 1994 and as a result, private investment (both domestic and foreign), has been permitted for the exploration & exploitation of thirteen minerals. In 1994, the MMDR Act, 1957, had accordingly been amended. The Act had been amended with a view to accelerate the inflow of private capital, both domestic and foreign, as also state-of-the-art technology.

13 minerals in which there can be private participation (both domestic and foreign) for the exploration & exploitation are

Iron – ore ,Copper, Manganese, Lead, Chrome ore, Zinc, Sulphur, Molybdenum, Gold, Tungsten ore, Diamond, Nickel and Platinum group of metals

The Minerals (except fuel minerals and atomic minerals) which require prior concurrence of Central Government for grant of mineral concessions are only 10. These are Asbestos, Bauxite, Zinc, Chrome Ore, Precious Stones, Copper Ore, Manganese Ore, Gold, Lead and Iron Ore

No case of renewal of prospecting license/ mining lease even for the 10 minerals listed above needs reference to the Central Government. Similarly, transfer of mining leases even for these 10 minerals does not require reference to the Central Government. State Governments have been delegated powers to grant mineral concessions even for areas, which are not compact or contiguous. State Governments have been empowered to permit amalgamation of two or more adjoining mining leases. State Governments have been delegated powers to approve mining plans for certain category of mines. For large mining operations (proposed investment exceeding Rs. 2 billion) mining lease shall not lapse if mining development does not take place in two years. Level playing field between Government owned Companies and others have been provided e.g. prematurely terminated lease area available for re-grant for both public and private sector and Government owned companies cannot charge premium in case of transfer of mining lease.

Investment Policy

In 1999, the foreign investment policy has been further liberalised to promote Foreign Direct Investment (FDI) in the mining sector. In a significant relaxation of the general policy governing process of automatic approval for FDI for the mining sector, the automatic route for FDI and/ or technology collaboration is also available to those who have or had any previous joint venture or technology transfer agreement, subject to a declaration being filed that they have no existing joint venture for the same area and/ or the mineral concerned.

On April 24, 2000, the Coal Mines (Nationalization) Bill, 2000 was introduced in the Parliament, for amending the Coal Mines (Nationalisation) Act, 1973 and permitting private investment in coal and lignite mines, subject to certain conditions.

For FDI proposals not meeting the above mentioned guidelines, approval will be given by the Foreign Investment Promotion Board keeping in mind parameters such as project size, commitment of external resources for funding project costs, the company's mining track record and financial strength, level of technology and the Indian partner's equity holding.

Investment Incentives

The government offers a wide range of concessions to investors in India, engaged in mining activity. The main concessions include, inter alia

- Mining in specified backward districts is eligible for a complete tax holiday for a period of 5 years from commencement of production and a 30 percent tax holiday for 5 years thereafter.
- Environment protection equipment, pollution control equipment, energy saving equipment and certain other equipment eligible for 100 percent depreciation.
- One tenth of the expenditure on prospecting or extracting or production of certain minerals during five years ending with the first year of commercial production is allowed as a deduction from the total income.
- Export profits from specified minerals and ores are eligible for certain concessions under the Income tax Act.
- Minerals in their finished form exempt from excise duty.
- Low customs duty on capital equipment used for minerals; on nickel, tin, pig iron, unwrought aluminium.
- Capital goods imported for mining under EPCG scheme qualify for concessional customs duty subject to certain export obligation.

4. INVESTMENT OPPORTUNITIES & CHALLENGES

Challenges in the Mining Sector

One of the major hurdles in investment in the mining sector is the delay in approval due to bureaucratic delays, discretionary interpretation and need of numerous approvals and agencies at Central and State Government level. At times this process takes 3-7 years for approvals and clearances which is much higher than other countries (e.g. 1.5 years in Australia).

Again infrastructural impediments like, high railway freight, inadequate availability of rail wagon capacity and inadequate power evacuation infrastructure also creates impediments to investment.

The Opportunities

India has an estimated 85 billion tonnes of mineral reserves remaining to be exploited. Besides coal, oil and gas reserves, the mineral inventory in India includes 13,000 deposits/ prospects of 61 non-fuel minerals. Expenditure outlay on mining is a meagre sum when compared to other competing emerging mining markets and the investment gap is most likely to be covered by the private sector. India welcomes joint ventures between foreign and domestic partners to mobilise finances and technology and secure access to global markets.

Potential areas for exploration ventures include gold, diamond, copper, lead, zinc, nickel, cobalt, molybdenum, lithium, tin, tungsten, silver, platinum group of metals and other rare metals, chromite and manganese ore, and fertiliser minerals.

The main opportunities in the mining sector (excluding coal and industrial minerals) are in the development and production of surplus commodities such as iron ore and bauxite, mica, potash, few low-grade ores, mining of small gold deposits, development of placer gold resources located on the frontal belt of the Himalayas, mining known deposits of economic and marginal categories such as base metals in Bihar and Rajasthan and exploitation of laterite for nickels in Orissa, molybdenum in Tamil Nadu and tin in Haryana.

Considerable potential exists for setting up manufacturing units for value added products. There exists considerable opportunities for future discoveries of sub-surface deposits with the application of modern techniques.