

Indian Mining Industry

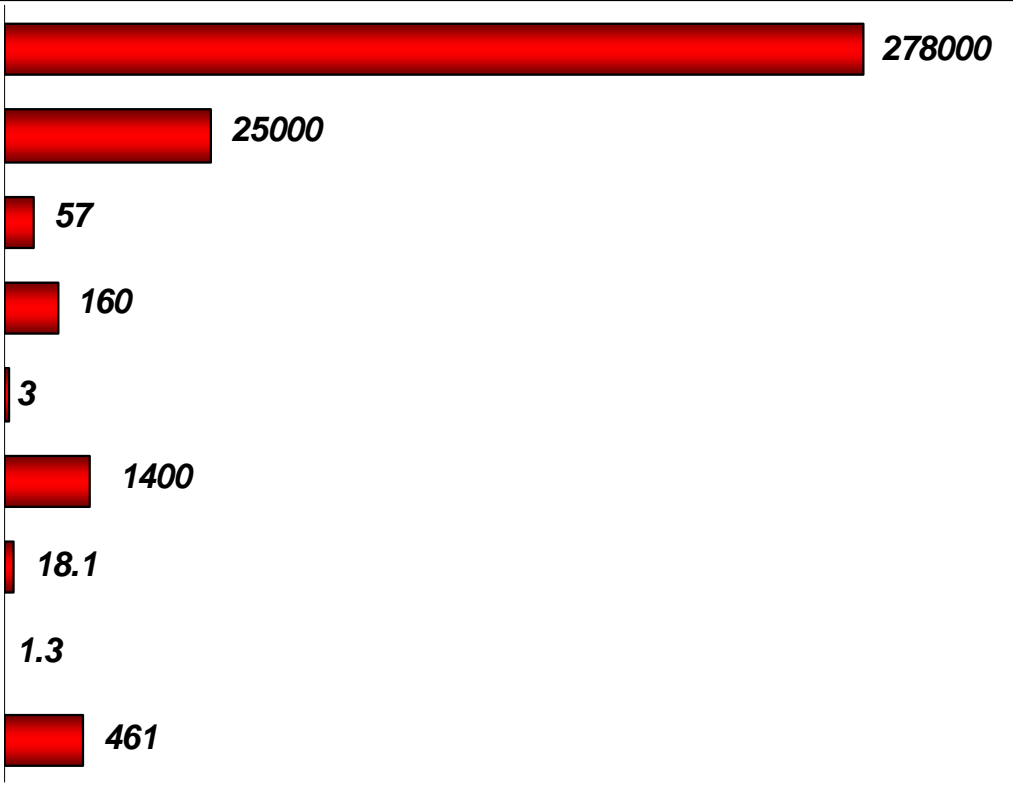
Confederation of Indian Industry

Indian Mining Sector - Overview

- India produces 90 minerals out of which
 - 4 are fuel minerals
 - 11 metallic
 - 53 non-metallic and
 - 22 minor minerals
- The mining leases occupying about 0.7 million hectares which is 0.21 per cent of the total land mass of the country.
- The Indian mining industry provides employment to about 1.1 million persons
- Operates more than 3100 mines which consist of 572 coal mines, 2500 metalliferrous mines and a score of other small mines.

Indian Natural Resources as % Global

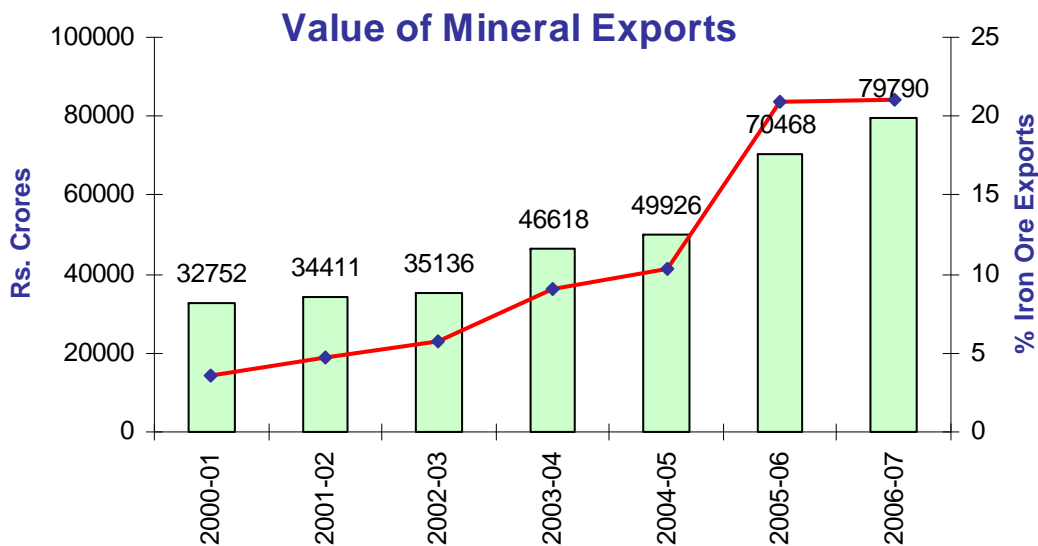
In Million Tonnes

India's Resources as a % of World Resources	Key Resources	India Resources
10	Coal (including lignite)	 278000
13	Iron Ore	25000
7	Chromite	57
3	Manganese Ore	160
0.3	Copper	3
4	Bauxite	1400
11	Kaolin	18.1
1	Lead	1.3
30	Ilmenite	461

Mineral Production & Export Value

In Million tonnes

Mineral	2002-03	2003-04	2004-05	2005-06	2006-07
Coal	341	361	383	407	430
Bauxite ('000 tonnes)	9867	10957	11964	12335	13075
Iron Ore	99	121	146	154	172
Chromite ('000 tonnes)	3069	3199	3621	3423	4101
Copper ('000 tonnes)	152	143	137	124	115



The Total Value of Mineral Production for the period 2006-07 estimated to be **Rs. 87866 crores** a 4.67% increase over the previous year.

Fuel Mineral including coal, oil and lignite accounts for ~72% of total value of mineral production

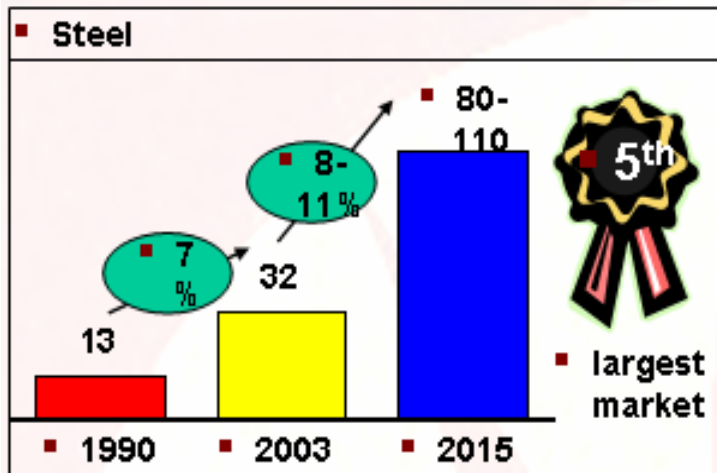
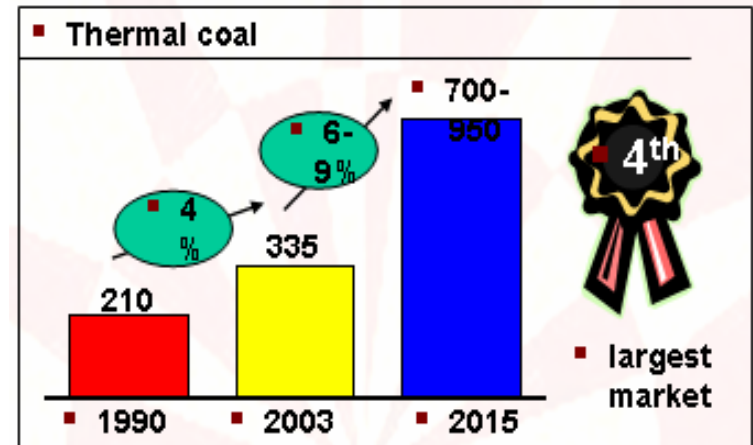
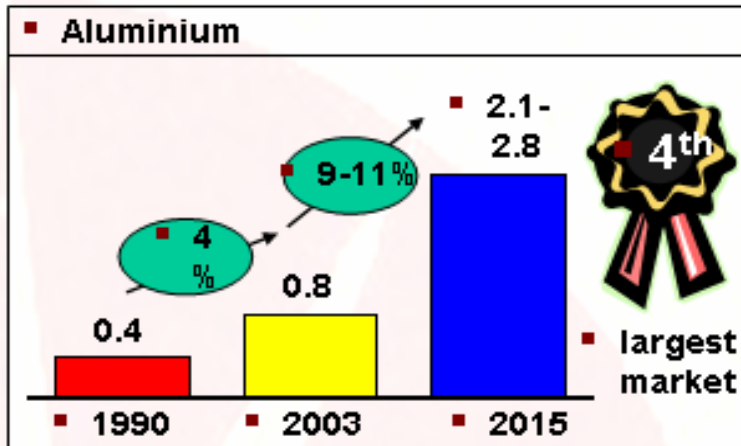
Iron ore exports accounts for 21% of total export value for the year 2006-07

Mining Industry – GDP Contribution

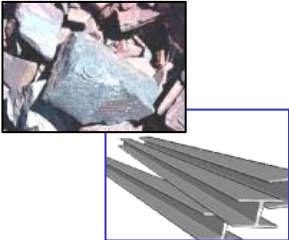
	2002-03	2003-04	2004-05	2005-06	2006-07
GDP growth rate of Country	3.8%	8.5%	7.5%	9.0%	9.4%
GDP growth rate of Mining & Quarry	8.8%	3.1%	7.5%	3.6%	5.1%
Share in GDP	2.8%	2.5%	3.0%	2.8%	2.7%


Contribution to GDP : 2015 ~ USD 75 to 85 Bn [Current is at 27Bn]


India's Demand Forecast



Projected Mineral and Metal Output

Million tons			2003	2015
	Iron ore/ steel	Iron ore	119	355
		Steel	32	110

	Coal	Coal	335	950
		Power (‘000MW)	105	309

	Alumina/ Aluminium	Alumina	2.70	14.5
		Aluminium	0.7	4.5-5

Policy Reforms in Indian Mining Industry

- Central Govt. has taken initiatives for reforming the sector
 - Constituted High Power committee to Review the National Mineral Policy and recommend possible amendments
 - **New Mineral Policy expected in Q2 of 2008.**
- Key recommendations:
 - Thrust on commercial mining
 - Free market regime
 - Speedy approvals and Clearances – Seamless transfer of licences
 - Step up thrust on:
 - Increase reserves through scientific and systematic exploration
 - Maximize resource utilization through ~ Adoption of world's best practices – Beneficiation, Large-scale mining ventures

Mineral Policy favours development of Mining Industry

Investment Opportunities

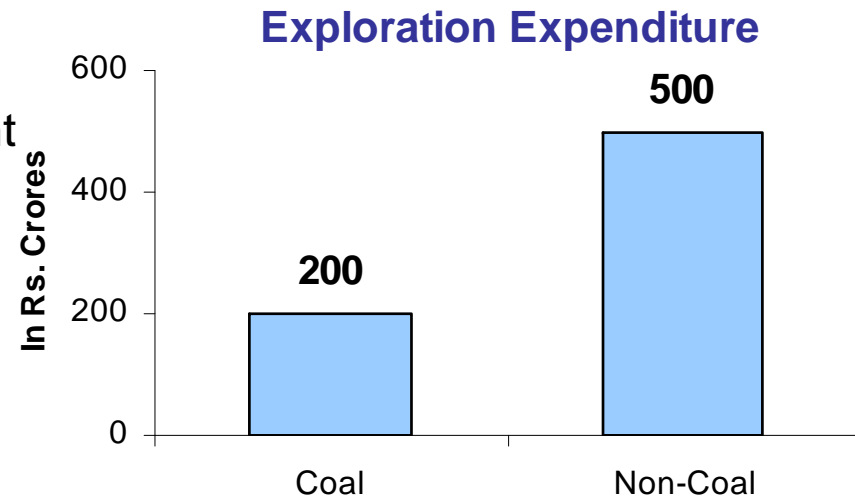
- Coal sector ~ US\$40 billion in next 10 yrs
- Metal Ore ~ US\$15 billion in next 5 yrs
- Oil and Natural Gas ~ US\$10 billion by 2010
- Mining Equipment ~ US\$5 billion in next 5 yrs

Total Investment Potential – USD 75Billion

Opportunities ~ Mineral Exploration

- Land Mass for Mineral exploration ~ 1.82 Million Sq kms
 - Geo physical mapping ~ 56,000 Sq kms (3%)
 - Geo chemical mapping ~ 73,000 Sq kms (4%)
- Annual spending is only USD 5Million; mostly on Coal
- Likely positive paradigm shift in exploration policies

- Thrust on Exploration
- Thrust on Mineral Development
- Encouragement of private sector investment



Mineral Exploration ~ Huge opportunities likely to be in offing

Indian Mining Equipment Industry

- Over 100 companies manufacturing mining equipment present in India.
- 71 % of the sector is comprised of PSUs while the remaining 29% comprises of private limited, JVs and closely held private limited companies.
- 75% of the companies manufacturing in India were involved in the entire range of activities like design and engineering, manufacturing, erection, servicing and commissioning. There are only a few companies who act as selling agents for international players. There are others who manufacture and also import complete equipment or in SKD condition from their principals abroad and market them.
- The technology leaders in the mining equipment sector are: Sandvik, Caterpillar, Atlas Copco, Terex, Volvo, Case, Joy Mining, Liebherr, Bomag, John Deere, Tega, JCB, Poclain, Bitelli, Kobelco, Hyundai and Daewoo.