

## **Highlights of Mineral Production**

**April 2013 to March 2014**

### **A. General**

During the financial year 2013-14, the total value of mineral production (excluding atomic and minor minerals) in the country was at Rs. 225660 crore indicating a fall of 3.28% over the previous year. This was mainly due to decrease in the production of lignite, natural gas (utilized), petroleum (crude), gold, silver, tin conc., agate, barites, dolomite, felspar, fireclay, limestone, limekankar, limeshell, magnesite, phosphorite, pyroxenite etc. and also due to decrease in the unit value of coal & iron ore. The production of some of the minerals like coal, bauxite, chromite, copper conc., iron ore, lead conc., manganese ore, apatite, ball clay, calcite, diamond, kaolin, kyanite, mica (crude), quaetz, quartzite, vermiculite, wollastonite etc. increased during 2013-14.

### **B. Index of Mineral Production**

The index of mineral production (base 2004-05=100) for the year 2013-14 was 124.7. A marginal decline of about 0.6% during current year over that of 2012-13 was observed owing to decrease in production of lignite, natural gas (utilized), petroleum (crude), gold, tin conc., zinc conc., dolomite, limestone, phosphorite, steatite etc. The index of mineral production has shown a decline of about 1.7% in fuel minerals in current year. However there was an increase of 8.8% in metallic minerals and 2.3% in non metallic minerals in 2013-14 over the previous year.

### **C. Reporting Mines**

The Reporting mine is defined as, "a mine reporting production or reporting 'Nil' production during a year but engaged in developmental work such as overburden removal, underground driving, winzing, sinking work; exploration by pitting, trenching or drilling as evident from the MCDR Returns".

Total number of reporting mines (excluding atomic and minor minerals) during 2013-14 decreased to 3722 as compared to 3978 in the preceding year. The number of mines in fuel group of minerals excluding petroleum (crude) and natural gas (utilised) was 575, metallic group of minerals was 663 and in the case of non-metallic group of minerals it was 2484. In the total number of mines in 2013-14, among major states, Andhra Pradesh accounted for as many as 661 or 17.8 % mines, Rajasthan 557 or 15.0%, Gujarat 464 or 12.5%, Madhya Pradesh 364 or 9.8%, Tamil Nadu 354 or 9.5%, Jharkhand 257 or 6.9%, Chhattisgarh 202 or 5.4%, Karnataka 187 or 5.0%, Odisha 180 or 4.8%, Maharashtra 163 or 4.4% and West Bengal 122 or 3.3 percent. The remaining States/Union Territories accounted for the other 211 or 5.6 percent of total mines.

### **D. Statewise Analysis**

As regards State-wise scenario during 2013-14, the value of mineral production (excluding atomic and minor minerals) from Off-Shore region was the highest at Rs. 54435 crore or 24.1% of the total value of mineral production followed in order of importance by Rajasthan Rs. 24714 crore or 11.0%, Odisha Rs. 22932 crore or 10.2%, Jharkhand Rs. 20645 crore or 9.1%, Chhattisgarh Rs. 19566 crore or 8.7%, Gujarat Rs. 12389 crore or 5.5%, Andhra Pradesh Rs. 11867 crore or 5.3%, West Bengal Rs. 11751 crore or 5.2%, Assam Rs. 11153 crore or 4.9%, Madhya Pradesh Rs. 11077 crore or 4.9%, Maharashtra Rs. 6899 crore or 3.1%, Tamil Nadu Rs. 6075 crore or 2.7%, Karnataka Rs. 5742 crore or 2.5% and Uttar Pradesh Rs. 3234 crore or 1.4 percent. Other States/Union Territories shared the remaining 3179 crore or about 1.4% of the total value of mineral production.

Among the States, value of mineral production registered an increase in Chhattisgarh, Haryana, Jammu & Kashmir, Jharkhand, Karnataka, Madhya Pradesh, Rajasthan, Tamil Nadu, Tripura and West Bengal. Whereas, Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Goa, Gujarat, Himachal Pradesh, Kerala, Maharashtra, Meghalaya, Odisha, Uttar Pradesh, Uttarakhand and Off-Shore region indicated decline in value of mineral production during the year under review.

## E. Mineral-wise Analysis

During the year under review, the contribution of Coal in terms of value was the highest at Rs. 73523 crore or about 32.6% of the total value of mineral production followed by Petroleum (crude) Rs. 68664 crore or 30.4%, Iron Ore Rs. 32031 crore or about 14.2%, natural gas (utilised) Rs. 28459 crore or 12.6%, lignite Rs. 5435 crore or 2.4%, limestone Rs. 4690 crore or 2.1% and zinc conc. Rs. 2742 crore or 1.2 percent. The share of these seven minerals together to the total value of mineral production during 2013-14 was about 95.5 percent.

The contribution of fuel minerals to the total value of mineral production (excluding atomic and minor minerals) was 78 percent. The remaining 22% was on account of MCDR minerals comprising metallic (18.9%) and non-metallic (3.1 %). A brief review of the production trend of some of the important minerals, which come under the purview of MCDR 1988, is as follows:

### **METALLIC MINERALS:**

**BAUXITE:** The Production of bauxite at 21666 thousand tonnes during 2013-14 registered an increase of 30% as compared to the previous year. Odisha with 35% share in total production was the leading state in bauxite production followed by Gujarat (32%), Jharkhand (11%), Maharashtra (10%), Chhattisgarh (6%), Madhya Pradesh (3%), Goa (2%). The remaining one percent was contributed by Karnataka and Tamil Nadu.

NALCO, HINDALCO, Bombay Minerals, Prabhu Das Vitthal Das and Utkal Alumina Industrial Ltd. are the major companies engaged in the mining of bauxite in the country. The share of these companies with 25 mines was 69% in the total production during 2013-14. The contribution of Panchpatimali bauxite mine of NALCO was 29% in the total output. The share of public sector in the total production was 31%. There were 163 reporting mines of bauxite during 2013-14 of which 20 were operated by public sector and 143 by private sector.

**CHROMITE:** The production of chromite at 2853 thousand tonnes in 2013-14 increased by about one percent as compared to that in the previous year. Odisha with 99.96 % of the total production continued to be the leading producer of chromite. The remaining production was reported from Karnataka and Maharashtra. There were 26 reporting mines during the year as compared to 25 in previous year.

Mining of chromite was mostly dominated by six principal producers, namely TATA STEEL, OMC, IMFAL, FACOR, Balasore Alloys Ltd. and Jindal Stainless Ltd. The share of these six companies to the total production was 95% during the year. The three major public sector companies, namely OMC, MML, and IDCOL having 4 mines together reported 24 % of the total production. The remaining 76 % was contributed by private sector mines. In the private sector Tata Steel, IMFAL and FACOR having their own plants and operating 6 mines produced 61 % of the total production.

**COPPER ORE AND CONC.:** The production of copper ore in 2013-14 at 3778 thousand tonnes increased by 4% as compared to that in the previous year. There were five reporting mines of copper ore in 2013-14. HCL was the only producer of copper ore and copper concentrate in India. The average metal content in copper ore was 0.90% in 2013-14.

The production of copper concentrates at 139 th. tonnes increased by 13% in 2013-14 as compared to that in the previous year. The average metal content in copper conc. was 23.11% during the period under review.

**GOLD:** Hutti Gold Mine Limited was the major producer of primary gold in India accounting for 99.5% of the total production and the rest was reported by Manmohan Mineral Industries (P) Ltd. The production of gold ore at 421 th. tonnes in the year 2013-14 decreased by 16 % as compared to that in the previous year due to more attention towards development works of the mines owned by HGML. The recovery of gold bullion in the current year was also decreased by 2% as compared to that in the previous year. The production of Gold primary in 2013-14 was 1564 kgs.

There were four mines reporting production of gold during the year under review. Three mines were located in Karnataka and one mine was in Jharkhand state.

**IRON ORE:** The production of iron ore consisting of lumps, fines and concentrates at 152.43 million tonnes in 2013-14 increased by 12% as compared to 136.62 million tonnes in the previous year. There were 298 reporting mines in 2013-14 as against 310 mines in the previous year. Besides, production of iron ore was reported by 16 associated mines during 2013-14. No production was reported from Goa due to suspension of mining activities owing to the Hon'ble Supreme Court order.

During the year under review, Odisha was the leading producer of Iron Ore accounting for 50% of the total production followed by Chhattisgarh (20%), Jharkhand (15%), Karnataka (12%) and remaining (3%) production was reported from Andhra Pradesh, Madhya Pradesh, Maharashtra and Rajasthan.

Public Sector mines contributed about 39% of the total production, out of which 54% was contributed by NMDC, 42% by SAIL and 4% by Orissa Mining Corporation Limited. The share of private sector in the total production was 61%, out of which Tata Steel contributed 20% in 2013-14. The five leading producers, namely NMDC, SAIL, Tata Steel Ltd., Rungta Mines Pvt. Ltd. and Serajuddin and Co. having 22 mines together contributed 60% of the total production of iron ore in the country.

**LEAD AND ZINC ORE & CONC.:** The production of lead & zinc ore at 9252 thousand tonnes in 2013-14 increased by 7% as compared to that in the previous year. There were eight mines reporting production of lead and zinc ore in the year under review. The average metal content of lead and zinc in the ore was 1.73% and 9.23% respectively.

The production of lead concentrate increased by about 5%, however the production of zinc concentrate remained almost same during the year. The average metal content in lead conc. was 56.48% while that in zinc conc. was 51.65%.

**MANGANESE ORE:** The production of manganese ore at 2588 thousand tonnes in 2013-14 increased by 11% as compared to the previous year. There were 153 reporting mines of manganese ore in 2013-14. MOIL continued to be the largest producer of manganese ore by contributing 44% of the total production, followed by Tata Steel (13%), OM&ML (6%), RBSSDP (6%) and ML Rungta (4%). The share of these five principal producers having 29 reporting mines (including one associate mine) was about 73% of the total production. Two public sector companies were engaged in the mining and exploration of manganese ore in India during the year 2013-14 and their contribution was 44% to the total production.

#### **NON-METALLIC MINERALS:**

**BARYTES:** The production of barytes at 1137 thousand tonnes in 2013-14 decreased by 36% as compared to that in the previous year due to non-availability of labour, machinery and lack of market demand. About 94% of the total production was reported by Andhra Pradesh Mineral Dev. Corpn. Ltd., a public sector undertaking operating single mine. The remaining 6% production was reported from 20 mines in the private sector. There were 21 reporting mines in both the years.

**DOLOMITE:** The production of dolomite in 2013-14 at 7109 thousand tonnes decreased by 2% as compared to that of the previous year. Five principal producers reported 37% of the total production of dolomite. Steel Authority of India Ltd. accounted for 15% of the total production followed by Rashtriya Ispat Nigam Ltd. (7%), South West Mining Ltd. (6%), The Bisra Stone Lime Co. Ltd. (4%) and Commercial Stone Supply Co. (4%).

Seven public sector mines (including one associate mine) contributed about 29% of the total production during the year. There were 173 reporting mines in 2013-14 as against 197 mines in the previous year. Chhattisgarh was the leading producer of dolomite among the states and contributed about 37% of total production followed by Andhra Pradesh (19%) and Odisha (9%) while the remaining (35%) was contributed by six other states.

**GYPSUM:** The production of gypsum at 2930 thousand tonnes in 2013-14 decreased 18% as compared to that in the previous year. Rajasthan continued to be the dominant state in the production during this year also. In both the years (2013-14 and 2012-13) almost entire output of gypsum was reported from Rajasthan. The 32 public sector mines in Rajasthan belonging to Rajasthan State Mines

& Mineral Ltd. and Fertilizer Corporation of India Ltd. together accounted for almost the entire 98% of the production during the year.

**KAOLIN:** The production of kaolin at 4753 thousand tonnes in 2013-14 increased by 12% as compared to that in the previous year. The five principle producers are Vinod P. Solanki (22%), English India Clays Ltd. (9%), H.D. Enterprises (P) Ltd. (8%), Gopal Sava Dangar (6%) and Satish Valji Chhanga (4%). They together contributed about 49% of the total production.

Gujarat being the leading producing state for kaolin contributed 65% of total output followed by Rajasthan (17%), Kerala (15%), West Bengal (2%) while remaining (1%) was contributed jointly by Andhra Pradesh, Jharkhand, Karnataka and Madhya Pradesh.

There were 158 (5 public sector and 153 private sector) reporting mines in 2013-14 as against 145 (5 public sector and 140 private sector) in the previous year. Production was also reported by 7 associated mines in 2013-14 and 10 associate mines in 2012-13. Almost entire production was reported from private sector mines. The share of processed kaolin is 1% of the total production.

**PHOSPHORITE:** The production of phosphorite at 1384 thousand tonnes in 2013-14 decreased by 29% as compared to that in the previous year as operation in two mines were temporarily discontinued during the year. The 87% of the total output during the year was contributed by public sector mines and the remaining 13% was reported by one mine of Hindustan Zinc Limited. The share of Jhamarkotra mine of RSMML was about 77% of the total production during 2013-14. There were 3 reporting mines during 2013-14, of which two were non-captive and one was captive.

**LIMESTONE:** The production of limestone at 278.7 million tonnes during 2013-14 decreased by 2% as compared to that in the previous year. There were 717 reporting mines during the year, as against 778 mines in the previous year. In all there were 334 captive mines in India contributing about 88% of total production. There were 23 public and 694 private sector reporting mines during 2013-14 as against 24 public and 754 private sector mines in the previous year. The share in production of public sector mines was 4.2% as against 3.9% in the preceding year.

As regards state wise production, Andhra Pradesh contributed 21% followed by Rajasthan (20%), Madhya Pradesh (13%), Tamil Nadu (9%), Gujarat, Karnataka & Chhattisgarh (8% each) and remaining (13%) production was contributed by the other states. About 49% of total production was reported by principal producers namely; Ultra Tech Cement Limited (15%), Jaiprakash Associates Limited (7%), ACC Limited and Ambuja Cement (6% each), Shree Cement Limited (5%), The India Cement Limited (4%), The Ramco Cements Ltd. and Dalmia Cement (Bharat) Ltd. (3% each).

**SILICA SAND:** The production of silica sand at 3346 th. tonnes in 2013-14 decreased by about 22% as compared to previous year due to decrease in market demand and non-availability of labour. The number of reporting mines was 136 in 2013-14 as against 170 in the previous year. About 99% of the production was reported by 131 primary and 8 associated mines in private sector while rest of the production was reported by 5 public sector mines.

Andhra Pradesh and Gujarat jointly accounted for about 68% percent of the total production during 2013-14. The major producers of silica sand during 2013-14 were Sanghi Industries (10%), Mohammad Sher Khan Pathan (9%), Bhawani Minerals (6%), D. Balkrishna Reddy (4%), Ish Kripa Minerals (3%) and Bundi Silica Sand Supply Company (3%).

**STEATITE:** The production of steatite in 2013-14 at 865 thousand tonnes reported a decrease of 11% over the previous year. Five principal producers contributed nearly 61% of the total production of steatite. They are Associated Soapstone Distribution Co. (P) Ltd. (25%), Udaipur Mineral Dev. Syndicate Pvt. Ltd. (24%), Rajasthan Minerals & Co. (5%), Ratan Lal Deedwaniya (4%), Katiyar Mining & Indl. Corpn. (3%). There were 111 principal and 11 associated mines which have reported production during the year in comparison to 141 principal and 9 associated mines in the previous year. The entire production of steatite was reported from private sector.

Rajasthan was the leading producing state of steatite contributing about 83% of the total production in 2013-14. Among the other states, the share of Uttarakhand was 9% and that of Andhra Pradesh was 7% and the rest of the output was reported from Gujarat, Madhya Pradesh and Tamil Nadu.