# Highlights of Mineral Production April 2012 to March 2013

#### A. General

During the financial year 2012-13, the total value of mineral production (excluding atomic and minor minerals) in the country was at Rs. 222747 crore indicating a marginal fall of 2.58% over the previous year. This was due to decrease in the production of natural gas (utilized), petroleum (crude), gold, iron ore, tin conc., diaspore, fireclay, graphite, kyanite, limekankar, limeshell, mica (crude), pyroxenite, selenite, sillimanite, steatite, vermiculite and wollastonite. However, the production of some of the minerals like, coal, lignite, bauxite, chromite, lead and zinc conc., silver, agate, asbestos, ball clay, calcite, clay (others), diamond, dolomite, dunite, felsite, felspar, kaolin, laterite, limestone, ochre, quartz, quartzite and sand (others) increased during 2012-13.

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

The index of mineral production (base 2004-05=100) for the year 2012-13 was 125.46. A decline of about 2.3% during current year over that of 2011-12 was observed owing to decrease in production of natural gas (utilized), petroleum (crude), copper conc., gold, iron ore, manganese ore, apatite, phosphorite, silica sand etc. The index of mineral production has shown a decline of about 1.3% in fuel minerals and 15.8% in metallic minerals in current year. However there was an increase of 5.2% in non metallic minerals in 2012-13 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 2012-13 increased to 3,691 as compared to 3,603 in the preceding year. The number of mines in fuel group of minerals excluding petroleum (crude) and natural gas (utilised) was 573, metallic group of minerals was 635 and in the case of non-metallic group of minerals it was 2483. In the total number of mines in 2012-13, among major states, Andhra Pradesh accounted for as many as 680 or 18.4 % mines, Rajasthan 488 or 13.2%, Gujarat 447 or 12.1%, Madhya Pradesh 382 or 10.3%, Tamil Nadu 346 or 9.4%, Jharkhand 283 or 7.7%, Karnataka 205 or 5.6%, Chhattisgarh 193 or 5.2%, Odisha 184 or 5.0%, Maharashtra 146 or 4.0% and West Bengal 125 or 3.4 percent. The remaining States/Union Territories accounted for the other 212 or 5.7 percent of total mines.

## D. Statewise Analysis

As regards State-wise scenario during 2012-13, the value of mineral production (excluding atomic and minor minerals) from Off-Shore region was the highest at Rs. 53621 crore or 24.1% of the total value of mineral production followed in order of importance by Odisha Rs. 29450 crore or 13.2%, Rajasthan Rs. 23503 crore or 10.6%, Chhattisgarh Rs. 16600 crore or 7.5%, Jharkhand Rs. 16516 crore or 7.4%, Gujarat Rs. 13046 crore or 5.9%, Andhra Pradesh Rs. 12292 crore or 5.5%, Assam Rs. 11000 crore or 4.9%, Madhya Pradesh Rs. 10502 crore or 4.7%, West Bengal Rs. 8882 crore or 4.0%, Maharashtra Rs. 6152 crore or 2.8%, Tamil Nadu Rs. 5744 crore or 2.6%, Meghalaya Rs. 4674 crore or 2.1%, Karnataka Rs. 4409 crore or 2.0% and Uttar Pradesh Rs. 3151 crore or 1.4% percent. Other States/Union Territories shared the remaining 3205 crore or about 1.4% of the total value of mineral production.

Among the States, value of mineral production registered an increase in Andhra Pradesh, Bihar, Himachal Pradesh, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Tamil Nadu, Tripura and West Bengal. Whereas, Arunachal Pradesh, Assam, Chhattisgarh, Goa, Gujarat, Jammu & Kashmir, Kerala, Meghalaya, Uttar Pradesh, Uttarakhand and Off-Shore region indicated a 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. 71929 crore or about 32.3% of the total value of mineral production followed by Petroleum (crude) Rs. 69140 crore or 31.0%, Iron Ore Rs. 33227 crore or about 14.9%, natural gas (utilised) Rs. 25433 crore or 11.4%, lignite Rs. 5665 crore or 2.5%, limestone Rs. 4322 crore or 1.9% and chromite Rs. 2448 crore or 1.1 percent. The share of these seven minerals together to the total value of mineral production during 2012-13 was about 95.1 percent.

The contribution of fuel minerals to the total value of mineral production (excluding atomic and minor minerals) was 77.3 percent. The remaining 22.7% was on account of MCDR minerals comprising metallic (19.6%) 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 15360 thousand tonnes during 2012-13 registered an increase of 13% as compared to the previous year. Odisha with 36% share in total production was the leading producer of bauxite followed by Gujarat (20%), Jharkhand and Maharashtra (13% each), Chhattisgarh (12%) and Madhya Pradesh (5%). The remaining one percent was contributed by Goa, Karnataka and Tamil Nadu.

NALCO, BALCO, & HINDALCO are the major companies engaged in the mining of bauxite in the country. The share of these companies with 21 captive mines was 65% in the total production during 2012-13. The contribution of Panchpatimali bauxite mine of NALCO alone was 35% in the total output. The share of public sector in the total production was 42% and the remaining 58% was contributed by private sector. There were 152 reporting mines of Bauxite during 2012-13 of which 20 were owned by public sector and 132 by private sector.

**CHROMITE:** The production of chromite at 2950 thousand tonnes in 2012-13 increased by about one percent as compared to that in the previous year. Odisha with 99.77 % of the total production continued to be the leading producer of chromite. The remaining 0.23 % production was reported from Karnataka. There were 25 reporting mines during the year as compared to 22 in 2011-12.

Mining of chromite was mostly dominated by six principal producers, namely TATA STEEL, OMC, IMFAL, FACOR, Balasore Alloys Ltd. and JSL. The contribution to the total production of chromite by these companies was 93% during the year. Three public sector companies, namely OMC, MML, and IDCOL having 11 mines together reported 24 % of the total production and the remaining 76 % was contributed by private sector mines. In the private sector Tata Steel, IMFAL and FACOR having their own plants and having 10 mines produced 60 % of the total production.

**COPPER ORE AND CONC.:** The production of copper ore in 2012-13 at 3639 thousand tonnes increased by 5% as compared to that in the previous year. There were five reporting mines of Copper ore in 2012-13 as against four mines in the previous year. HCL was the only producer of copper ore and copper concentrate in India. The average metal content in copper ore was 0.89% in 2012-13.

The production of copper concentrates at 124 th. tonnes decreased by 5% in 2012-13 as compared to that in the previous year. The average metal content in copper conc. was 23.74% during the period under review.

**GOLD:** The Hutti Gold Mine Limited, a public sector company, was the major producer of primary gold in India. It accounted for almost entire production while a nominal quantity was reported by Manmohan Mineral Industries (P) Ltd. The production of gold ore at 471 th. tonnes in the year 2012-13 decreased by 4 % as compared to that in the previous year. The recovery of gold bullion in the current year was also decreased by 28% as compared to that in the previous year due to more attention towards development works of the mines owned by HGML. The production of Gold primary in 2012-13 was 1588 kgs.

There were four mines reporting production of gold during the year under review. Three public sector mines are located in Karnataka and one private sector mine is in Jharkhand.

**IRON ORE:** The production of iron ore consisting of lumps, fines and concentrates at 136.02 million tonnes in 2012-13 decreased by 19% as compared to that in the previous year. This decrease is mainly due to discontinuation of mines in Karnataka and Goa owing to the Hon'ble Supreme Court order. There were 270 reporting mines in 2012-13 as against 313 mines in the previous year. Besides, production of iron ore was reported by 14 associated mines during 2012-13 as against 25 in the previous year.

During the year under review, Odisha was the leading producer of Iron Ore accounting for 47% of the total production followed by Chhattisgarh (21%), Jharkhand (13%), Goa and Karnataka (8%) each and remaining (3%) production was reported from Andhra Pradesh, Madhya Pradesh, Maharashtra and Rajasthan.

The share of 34 Public Sector mines was about 39% of the total production, out of which 53% was contributed by NMDC, 41% by SAIL and 6% by Orissa Mining Corporation Limited. The share of private sector in the total production was 61%, out of which Tata Steel contributed 19% in 2012-13. The five leading producers, namely, NMDC, SAIL, Tata Steel, Rungta Mines Ltd. and Sarda Mines Pvt. Ltd. having 22 mines together contributed 58% of the total production of iron ore in the country.

**LEAD AND ZINC ORE & CONC.:** The production of Lead & Zinc ore at 8582 thousand tonnes in 2012-13 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 1.89% and 9.94% respectively.

The production of lead concentrate increased by about 14% and that of zinc concentrate by 6% during the year. The average metal content in lead conc. was 56.55% while that in zinc conc. was 50.88%.

MANGANESE ORE: The production of manganese ore at 2322 thousand tonnes in 2012-13 decreased by 4% as compared to the previous year. There were 165 reporting mines of manganese ore during the year. MOIL continued to be the largest producer of manganese ore contributing 49% of the total production followed by Tata Steel (13%), RBSSDP & FN Das (10%), M. L. Rungta (6%) and S. R. Ferro Alloys (3%). The share of five principal producers having 25 reporting mines was about 81% of the total output. The contribution of public sector mines was about 49% in the total production during the year.

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

**BARYTES:** The production of barytes at 1739 thousand tonnes in 2012-13 decreased by 2% as compared to that in the previous year due to non-availability of labours, lack of market demand and heavy rains. About 98% of the total production was reported by Andhra Pradesh Mineral Dev. Corpn. Ltd., a public sector undertaking operating single mine. The remaining production was reported from 13 mines in the private sector. There were 14 reporting mines as against 12 in previous year.

**DOLOMITE:** The production of dolomite in 2012-13 at 6713 thousand tonnes registered an increase of 12% as compared to previous year. Five principal producers reported 40% of the total production of dolomite. Steel Authority of India Ltd. was a major producer of dolomite during the year, accounting for 14% of the total production followed by Rashtriya Ispat Nigam Ltd. (8%), South West Mining Ltd. (7%), Tata Steel Ltd. (6%) and The Bisra Stone Lime Co. Ltd. (4%).

Six public sector mines contributed about 29% of the total production during the year. There were 179 reporting mines in 2012-13 as against 194 mines in the previous year. Chhattisgarh was the leading producer of dolomite among the states and contributed about 28% of total production followed by Andhra Pradesh (23%), Odisha (13%) and remaining (36%) was contributed by other six states.

**FIRECLAY:** The production of fireclay during 2012-13 at 817 thousand tonnes showed a decrease of 17% over the previous year due to closure of some mines because of environment clearances problem, non-availability of labour and lack of market demand in some states. The number of reporting mines was 69 in 2012-13 as against 83 in previous year. Private Sector mines contributed 99% of the total production during the year.

**GYPSUM:** The production of gypsum at 3538 thousand tonnes in 2012-13 decreased 11% as compared to that in the previous year. Rajasthan continued to the dominant state in the production during this year also. In both the years (2012-13 and 2011-12) almost entire output of gypsum was reported from Rajasthan. The 30 public sector mines in Rajasthan belonging to Rajasthan State Mines & Mineral Ltd. and Fertilizer Corporation of India Ltd. together accounted for almost the entire production in both the years.

**KAOLIN:** The production of kaolin at 3679 thousand tonnes in 2012-13 increased by 20% as compared to that in the previous year. The five principle producers contributed 47% of the total production. These are V.P.Solanki (24%), English India Clays Ltd. (9%), H.D.Enterises (P) Ltd. (7%), Satish Valji Chhanga (4%) and Manoj P. Solanki (3%).

Gujarat being the leading producing state for kaolin contributed 54% of total output followed by Kerala (24%), Rajasthan (16%), West Bengal (3%) while remaining (3%) was contributed jointly by Andhra Pradesh, Jharkhand, Karnataka and Madhya Pradesh.

There were 131(5 public sector and 126 private sector) reporting mines in 2012-13 as against 105 (5 public sector and 100 private sector) in the previous year. Almost entire production was reported from private sector mines. The share of processed kaolin amounts 3% of the total production.

**KYANITE:** The production of kyanite at 1066 tonnes in 2012-13 decreased heavily by 74% as compared to that in the previous year due to forest clearance problem, non-renewal of mining plan, non-availability of labour and lack of demand. Public Sector mines in Jharkhand (Jharkhand Mineral Dev.Corpn Ltd.) and Maharashtra (Maharashtra State Mining Corpn. Ltd.) accounted for almost entire production of kyanite. A nominal production was reported by one private sector mine. There were 4 reporting mines in 2012-13 as against 3 mines in the previous year.

**PHOSPHORITE:** The production of phosphorite at 2124 thousand tonnes in 2012-13 decreased by 6% as compared to that in the previous year due to less lifting of ore at crushing plant of Jhamarkotra mine of RSMML, Rajasthan. During the year 91% of the total output was contributed by public sector mines and the remaining was reported by one mine of Hindusthan Zinc Limited. The share of Jhamarkotra mine of RSMML was about 79% of the total production during 2012-13. There were 5 reporting mines during 2012-13, of which four were non-captive and one was captive.

SILLIMANITE: The production of Sillimanite at 43736 tonnes in 2012-13 decreased by 26% as compared to previous year due to decrease in raw sand quantity and low throughput to the plant. The Indian Rare Earths Ltd., a public sector company operating 3 mines, two in Kerala and one in Odisha accounted for 39% of the total production. A nominal production was reported by another public sector company, Maharashtra State Mining Corpn. Limited having two mines. Private Sector mines in Andhra Pradesh and Maharashtra reported the remaining production of sillimanite as an associated mineral with garnet and kyanite respectively. There were 5 reporting mines in year 2012-13 as against 4 in 2011-12.

**LIMESTONE:** The production of limestone at 280 million tonnes during 2012-13 increased by 7% as compared to that in the previous year. There were 723 reporting mines during the year, as against 716 mines in the previous year. In all there are 325 captive mines in India contributing about 88% of total production. There were 28 public and 695 private sector reporting mines during 2012-13 as against 30 public and 686 private sector mines in the previous year. The share of public sector mines was 4.5% as against 5% in the preceding year.

As regards state wise production, Andhra Pradesh contributed 22% followed by Rajasthan (19%), Madhya Pradesh (12%), Gujarat & Tamil Nadu (9% each), Karnataka (8%), Chhattisgarh (7%) and remaining (14%) production was contributed by the other states. About 54% of total

production was reported by principal producers namely, Ultra Tech Cement Limited (15%), Ambuja Cement, Jaiprakash Associates Limited & ACC Limited (7% each), Shree Cement Limited (5%), The India Cement Limited (4%), Madras Cements Ltd., Dalmia Cement (Bharat) Ltd. and Binani Cement Ltd. (3% each).

MAGNESITE: The production of magnesite at 213 th. tonnes during 2012-13 decreased by 5% as compared to that in the previous year. There were 14 reporting mines in 2012-13 as against 11 in the previous year. Tamil Nadu continued to be the leading producing state contributing about 70% of the total production during 2012-13. The remaining 30% was reported jointly from Karnataka and Uttarakhand.

Five principal producers contributed 93% of the total production and the remaining 7% was shared by small producers. Among the principal producers Tamil Nadu Magnesite Ltd. contributed 52%, Almora Magnesite Ltd. 19%, S.Sunder Rajan 13%, N.B.Minerals 6% and Dalmia Magnesite Corporation Ltd. 3 percent. Public sector mines contributed 74% of total production of magnesite in the year 2012-13 as compared to 75% in the previous year.

SILICA SAND: The production of silica sand at 3690 th. tonnes in 2012-13 decreased by about 24% as compared to previous year due to decrease in market demand and non-availability of labour in some mines. There were 140 reporting mines in 2012-13 as against 149 in the previous year. About 97% of the production was reported from 136 private sector mines and the remaining 3% production was reported by 4 public sector mines.

Andhra Pradesh and Gujarat jointly accounted for about 68% percent of the total production during 2012-13. The major producers of silica sand during 2012-13 were Bhawani Minerals (13%), Mohammad Sher Khan Pathan (8%), Kumar Swamy Silica Mines (6%), Alimiya I Saiyad (4%) and Nishita Mines & Minerals (3%).

STEATITE: The production of steatite in 2012-13 at 939 thousand tonnes reported a decrease of 6% over the previous year. Five principal producers contributed nearly 58% of the total production of steatite. They are Associated Soapstone Dist Co. (P) Ltd. (26%), Udaipur Mineral Dev. Syndicate Pvt. Ltd. (22%), Ratan Lal Deedwaniya (4%), Nalwaya Mineral Industries Pvt. Ltd. and Rajasthan Minerals & Co. (3% each). There were 133 steatite mines reporting production during the year in comparison to 138 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 81% of the total production followed by Uttarakhand 10% and Andhra Pradesh 8%. Rest of the production was reported from Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh and Tamil Nadu.

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