Indian Mineral Industry at a Glance

2014-15

Issued by

Controller General
Indian Bureau of Mines
Nagpur

Indian Bureau of Mines

Nagpur

Controller General
R.K. Sinha

MINING & MINERAL STATISTICS DIVISION

Deputy Director General (Statistics)	K. Thomas	
Directors (Statistics)	Saji George	Junaid Farooqui
Deputy Mineral Economists (Statistics)	R. Kumar	S.K. Deshpande
Assistant Mineral Economists (Statistics)	M.V.Sonkusale	Manoj Kumar Saini
		Smt.Supriya Saxena

Compilation, Processing and Computer Designing

Senior Statistical Officer	M. M. Chaskar	Smt. Sashi Pasin
Junior Statistical Officer	Smt. Lalita Tripathi	

PREFACE

"Indian Mineral Industry at a Glance 2014-15" is the thirty-sixth edition in its series. The publication has been divided into eight sections viz., General, Mineral Production, Production of Metals and Alloys, Foreign Trade, Employment in Mines, Consumption of Minerals, Production of Mineral-based Products and Mining Machinery for ease of reference. The salient features of the data presented in each section are highlighted at the beginning of the section. The Indian Mineral Industry at a Glance pocket book is handy and a ready reckoner with important features of the mining sector. It is stated that some of the figures of GDP/GVA, consumption, foreign trade, mineral based product etc. pertaining to previous years are updated based on latest data.

The publication has been brought out by the Mining and Mineral Statistics Division of the Bureau. This Division, in addition to the extensive data available with it, has also utilised the data furnished by the Mineral Development and Regulation Division on Afforestation for Section-1 and Mining Machinery for Section-8. Similarly, Mineral Economics Division has furnished data on Mineral Resources and Mining Leases for Section-1 and on Consumption of Minerals for Section-6.

The foreign trade data on minerals, metals and selected mineral-based products is received from the Director General of Commercial Intelligence & Statistics (DGCI&S), Kolkata. The export data includes re-exports for the years

2005-06 to 2014-15. Country-wise break-up of some of the minerals and metals at 8-digit customs tariff / ITC (HS) code level is not available for few items. The entire data of such minerals and metals have been grouped under country-item 'unspecified', which has been clubbed with 'others'. The data for the remaining countries in respect of tables of such minerals have limitations to that extent.

The Bureau is thankful to the Ministry of Petroleum and Natural Gas, New Delhi; Office of the Coal Controller, Kolkata; Joint Plant Committee, Kolkata; The Director General of Commercial Intelligence and Statistics, Kolkata; The Department of Industrial Policy & Promotion, Office of the Economic Advisor, Ministry of Commerce & Industry, Ministry of Chemical and Fertiliser and Central Statistical Office for providing the valuable information for this publication.

During the year under review 31 non-metallic minerals were notified as minor minerals by the central government w.e.f.10.02.2015.The figures of such minerals were available for the period from April 2014 to January 2015. Therefore the figures of these minerals are of the period of 10 months (April 2014 to January 2015) and not comparable with those of previous years.

This publication is compiled as a reference material on mining and minerals related information to all those who are directly or indirectly associated with the mineral sector.

Nagpur
Dated : 8th December, 2016

Controller General
Indian Bureau of Mines

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Note: *(i) Figures for the previous year have been revised wherever necessary. Figures for the latest year are provisional and subject to revision.*

(ii) In certain cases sum of individual items may not tally with the total of the table due to rounding off the figures.

Symbols and Abbreviations

(e)	Estimated
N.A.	Not Available
(R)	Revised
++	Negligible
-	Nil
(P)	Provisional
%	Percentage
kg.	Kilogram
t	Tonne
’000 t	Thousand Tonnes
m.t.	Million Tonnes
m.cu.m.	Million Cubic Metres
R.O.M.	Run-of-mine
Av.	Average
m.m.	Millimetre
h.p.	Horsepower

Section – 1
General

Section-1

General

The value of mineral production in India covering fuel, metallic, non-metallic and minor minerals rose spectacularly during the last 6 decades since 1954 and touched the level of Rs. 280332 crores in 2014-15. The increase in the value was attributable to both rises in mineral production as well as in mineral prices.

During 2014-15, production of principal minerals like coal, lignite, petroleum (crude), bauxite, chromite, copper concentrates, iron ore, lead and zinc concentrate, manganese ore, silver, diamond, dolomite, gypsum, kaolin, limestone, phosphorite, steatite etc. has gone up whereas it declined in case of gold, kyanite and mica (crude) as compared with that of 1953.

The index of mineral production (base 2004-05=100) has increased from 124.7 in 2013-14 to 126.5 in 2014-15 showing a marginal increase as compared to previous year.

Fuel minerals contributed a major share of 69% in the value of mineral production in 2014-15 while metallic minerals contributed about 14% and non-metallic minerals (including minor minerals) about 17 percent. Offshore regions continued to be in leading position, in terms of value of mineral production in the country and had the share of about 20% in the value of national output followed Next by Rajasthan with a share of 12% and percent. Remaining state/ union territories

contributed rest of the total value of mineral production during the year under review.

Off-shore region was the major source for supply of petroleum (crude) and natural gas (utilised) during the decade contributing a substantial amount to the exchequer.

The value of mineral production in India in 2014-15 was at Rs. 280332 crore showing an increase of 1% in comparison with the previous year. Public sector accounted for around 62% of the total value of mineral production during the year. The total number of reporting mines in 2014-15 (excluding those of petroleum (crude), natural gas (utilised), atomic and minor minerals was 3529. Of these, 558 mines belonged to coal & lignite, 637 to metallic minerals and 2334 to non-metallic minerals.

Growth during 1953 to 2013-14

The mining sector has shown significant growth since 1954. The value of mineral production reached the level of Rs. 280332 crore in 2014-15 from Rs. 88 crore in 1954. This was mainly due to significant achievements made in the production of fuel, metallic & non-metallic minerals. The value of fuel minerals increased from Rs. 56 crore in 1954 to Rs. 193372 crore in 2014-15. Similarly, the value of metallic minerals rose from Rs. 24 crore to Rs. 38597 crore and that of non-metallic minerals including minor minerals from Rs. 8 crore to Rs. 48363 crore during the same period.

The performance of some important minerals such as fuel, metallic and

non-metallic minerals in the last 60 years is shown under Appendix-I at the end of this publication.

Fuel Minerals

The production of coal at 609 million tonnes in 2014-15 was more than 16 times of its production at 37 million tonnes 1954. The production of lignite at 48 million tonnes was substantially higher than that of 30 thousand tonnes in 1954. The production of petroleum (crude) at 37 million tonnes during 2014-15 was also significantly higher than that of the 308 thousand tonnes in 1954. Natural gas (utilised), which had no production in 1954, recorded a production of 33656 m.cu.m. in 2014-15.

Metallic Minerals

The production of all metallic minerals, except gold, registered a spectacular growth during the last 60 years. The production of iron ore increased from 6 million tonnes in 1954 to 129 million tonnes in 2014-15. The production of bauxite increased from 76 thousand tonnes in 1954 to 22.23 million tonne in 2014-15, chromite from 46 thousand tonnes to 2.16 million tonnes, manganese ore from 1542 thousand tonnes to 2345 thousand tonnes, lead concentrates from 3 thousand tonnes to 198 thousand tonnes and zinc concentrates from 4 thousand tonnes to 1502 thousand tonnes. The production of silver, a by-product in the country, was at 327647 kg. in 2014-15 as compared to 5013 kg. in 1954.

Non-Metallic Minerals

In the non-metallic group of minerals, the production of limestone at 293 million tonnes in 2014-15 was about 40 times of the output recorded in 1954. The production of apatite & phosphorite rose from 2 thousand tonne in 1954 to 1580 thousand tonnes during 2014-15, barytes from 19 thousand tonnes to 911 thousand tonnes, dolomite from 140 thousand tonnes to 6210 thousand tonnes, gypsum from 622 thousand tonnes to 2478 thousand tonnes, kaolin from 148 thousand tonnes to 3861 thousand tonnes, magnesite from 72 thousand tonnes to 276 thousand tonnes and steatite from 43 thousand tonnes to 774 thousand tonnes in the same period of 60 years.

Mineral Reserves and Resources				
Mineral	Unit	As on 1.4.2010		
		Reserves (A)	Remaining Resources (B)	Total (A+B)
Andalusite	'000 t	-	18450	18450
Antimony #				
Ore	tonnes	-	10588	10588
Metal	tonnes	-	174	174
Apatite #	'000 t	31	22630	22661
Asbestos	'000 t	2511	19656	22167
Ball Clay	'000 t	16778	66616	83394
Barytes	'000 t	31584	41150	72734
Bauxite #	'000 t	830195	2908856	3739051
Bentonite	'000 t	25060	543307	568367
Borax	tonnes	-	74204	74204
Calcite	'000 t	2664	18281	20945
Chalk	'000 t	4332	585	4917
Chromite #	'000 t	107221	214530	321751
Cobalt (Ore) #	m. tonnes	-	44.91	44.91
Copper #	'000 t			
Ore		237573	1273445	1511018
Metal		2996.97	9221.56	12218.53
Corundum #	tonnes	597	267218	267815
Diamond #	th. carats	985	30876	31861

Mineral Reserves and Resources (Contd…)

Mineral	Unit	As on 1.4.2010		
		Reserves (A)	Remaining Resources (B)	Total (A+B)
Diaspore	'000 t	2860	3125	5985
Diatomite	'000 t	-	2885	2885
Dolomite #	'000 t	783905	7300667	8084572
Dunite	'000 t	17137	168232	185369
Felspar	'000 t	44503	87832	132335
Fireclay	'000 t	30104	683415	713519
Fluorite #	'000 t	4574	13614	18188
Fullers Earth	'000 t	58	256594	256652
Garnet	'000 t	19325	37638	56963
Gold #				
Ore (Primary)	'000 t	14616	480188	494804
Metal (Primary)	tonnes	71.91	568.48	640.39
Ore (Placer)	'000 t	-	26121	26121
Metal (Placer)	tonnes	-	5.86	5.86
Granite (Dimension stone)	'000 cu.m	263692	45966608	46230300
Graphite #	'000 t	8469	180205	188674
Gypsum	'000 t	39096	1247402	1286498

Mineral Reserves and Resources (Contd…)

Mineral	Unit	As on 1.4.2010		
		Reserves (A)	Remaining Resources (B)	Total (A+B)
Iron Ore & Conc.	'000 t			
Hematite #		6606562	13969145	20575707
Magnetite #		34592	10712763	10747355
Kaolin	'000 t	177158	2528049	2705207
Kyanite	'000 t	1575	101671	103246
Laterite #	'000 t	59898	498777	558675
Lead & Zinc #	'000 t			
Ore		102795	606248	709043
Lead Metal		2114.91	9888.89	12003.80
Zinc Metal		10893.10	24963.00	35856.10
Lead & Zinc Metal		-	140.82	140.82
Limestone	m.t.	14926	170009	184935
Magnesite #	'000 t	20772	307339	328111
Manganese Ore #	'000 t	95872	379314	475184
Marble	'000 t	276495	1654968	1931463
Marl	'000 t	139976	11705	151681
Mica	tonnes	190741	341496	532237

Mineral Reserves and Resources (Contd…)

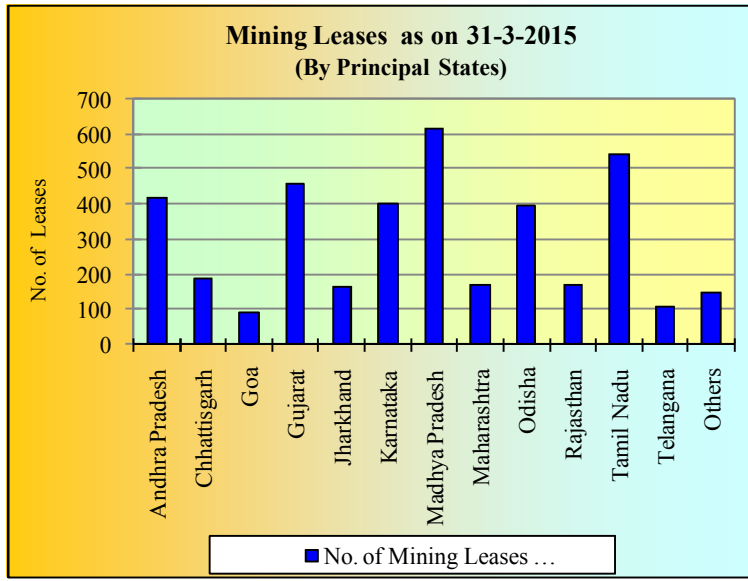
Mineral	Unit	As on 1.4.2010		
		Reserves (A)	Remaining Resources (B)	Total (A+B)
Molybdenum #				
Ore	tonnes	-	19371698	19371698
Contained MOS_2	tonnes	-	12668.37	12668.37
Nickel #	m.t.	-	188.71	188.71
Ochre	'000 t	54942	89319	144261
Perlite	'000 t	428	1978	2406
PGM (Metals)	Tonnes of Metal Content	-	15.7	15.7
Phosphorite/Rock Phosphate #	'000 t	65392	249120	314512
Potash	m.t.	-	21816	21816
Pyrites	'000 t	-	1674401	1674401
Pyrophyllite	'000 t	23275	32808	56083
Quartz & Silica Sand	'000 t	429223	3069808	3499031
Quartzite	'000 t	86599	1164649	1251248
Ruby	kg.	236	5112	5348
Salt (Rock)	'000 t	16026	-	16026
Sapphire	kg	-	450	450
Shale	'000 t	15331	580	15911

Mineral Reserves and Resources (Concld…)				
Mineral	Unit	As on 1.4.2010		
		Reserves (A)	Remaining Resources (B)	Total (A+B)
Sillimanite	'000 t	4085	62902	66987
Silver #				
Ore	'000 t	118281	401289	519570
Metal	tonnes	7907.97	21880.38	29788.35
Slate	'000 t	-	2369	2369
Sulphur (Native)	'000 t	-	210	210
Talc/Steatite/Soap Stone	'000 t	90026	178996	269022
Tin #				
Ore	'000 t	7	83719	83726
Metal	tonnes	1181.19	101093.65	102274.84
Titanium Minerals	'000 t	22030	371966	393996
Tungstun #				
Ore	tonnes	-	87387464	87387464
Contained WO_3	tonnes	-	142094.35	142094.35
Vanadium #				
Ore	tonnes	-	24633855	24633855
Contained V_2O_5	tonnes	-	64594	64594
Vermiculite	tonnes	1704007	803003	2507010
Wollastonite	tonnes	2487122	14082751	16569873
Zircon	tonnes	1347470	1786482	3133952

: Provisional as on 01.4.2013

Mining Leases as on 31-3-2015@ (By Principal Minerals)				
Mineral	No. of Mining Leases Granted/Executed	% to Total Leases	Area ('000 ha)	% to Total Area
Total	**3868**	**100**	**340**	**100**
Limestone	1972	51	159	47
Iron ore	541	14	83	24
Bauxite	339	9	26	8
Manganese ore	297	8	15	4
Graphite	136	3	4	1
Others	583	15	53	16

@ Excluding fuel, atomic & minor minerals and also the minerals declared as 'Minor' vide. Gazette Notification Part II- Section 3- Sub- section (ii) dated 10 February, 2015.


Mining Leases as on 31-3-2015
(By Principal States)
No. of Leases
700
600
500
400
300
200
100
0
Andhra Pradesh
Chhattisgarh
Goa
Gujarat
Jharkhand
Karnataka
Madhya Pradesh
Maharashtra
Odisha
Rajasthan
Tamil Nadu
Telangana
Others
No. of Mining Leases …

Mining Leases as on 31-3-2015@ (By Principal States)				
State	No. of Mining Leases Granted/Executed	% to Total Leases	Area ('000 ha)	% to Total Area
All States	**3868**	**100**	**340**	**100**
Andhra Pradesh	419	11	25	7
Chhattisgarh	188	5	23	7
Goa	90	2	7	2
Gujarat	456	12	22	7
Jharkhand	166	4	24	7
Karnataka	398	10	45	13
Madhya Pradesh	613	16	32	9
Maharashtra	172	5	13	4
Odisha	397	10	69	20
Rajasthan	167	4	47	14
Tamil Nadu	543	14	9	3
Telangana	110	3	11	3
Others	149	4	13	4

@ Excluding fuel, atomic & minor minerals and also the minerals declared as 'Minor' vide. Gazette Notification Part II- Section 3- Sub- section (ii) dated 10 February, 2015.

Concentration of Mining Leases as on 31-3-2015@ (By Potential)					
Potential Bearing Districts	No. of Districts	No. of Mining Leases Granted/ Executed	% to Total Leases	Area ('000 ha)	% to Total Area
Total	**212**	**3868**	**100**	**340**	**100**
Low	195	2090	54	220	65
Medium	9	654	17	39	11
High	8	1124	29	81	24

@ Excluding fuel, atomic & minor minerals and also the minerals declared as 'Minor' vide. Gazette Notification Part II- Section 3- Sub- section (ii) dated 10 February, 2015.

High : > 100 mining leases in a district

Medium : 51 – 100 mining leases in a district

Low : 1– 50 mining leases in a district

Distribution of Mining Leases as on 31-3-2015@ (By Sectors)				
Sector	No. of Mining Leases Granted/Executed	% to Total Leases	Area ('000 ha)	% to Total Area
Total	**3868**	**100**	**340**	**100**
Public	294	8	103	30
Private	3574	92	237	70

Distribution of Mining Leases as on 31-3-2015 @ (By Lease Groups)					
Frequency Groups (No. of Leases)	Minerals Covered	No. of Mining Leases Granted/Executed	% to Total Leases	Area ('000 ha)	% to Total Area
Total	**40**	**3868**	**100**	**340**	**100**
1 to 50	33	410	11	50	15
51 to 100	1	66	2	1	++
101 to 200	2	243	6	6	2
201 to 300	1	297	8	15	4
301 to 500	1	339	8	26	8
501 to 1000	1	541	14	83	24
Above 1000	1	1972	51	159	47

@ Excluding fuel, atomic & minor minerals and also the minerals declared as 'Minor' vide. Gazette Notification Part II- Section 3- Sub- section (ii) dated 10 February, 2015.

Distribution of Mining Leases as on 31-3-2015 @ (By Area Groups)				
Frequency Groups (Area in ha.)	No. of Mining Leases Granted/Executed	% to Total Leases	Area ('000 ha)	% to Total Area
All Groups	**3868**	**100**	**340**	**100**
0-10	1871	48	8	2
10-20	454	12	7	2
20-50	549	14	18	5
50-100	375	10	27	8
100-200	237	6	33	10
200-500	203	5	65	19
Above 500	179	5	182	54

@ Excluding fuel, atomic & minor minerals and also the minerals declared as 'Minor' vide. Gazette Notification Part II- Section 3- Sub- section (ii) dated 10 February, 2015.

Number of Reporting Mines, 2005-06 to 2014-15 (By Mineral Groups)				
Year	Total*	Coal & Lignite	Metallic Minerals	Non-Metallic Minerals
2005-06	2999	556	636	1807
2006-07	3005	570	639	1796
2007-08	3025	570	693	1762
2008-09	3150	574	719	1857
2009-10	3055	573	701	1781
2010-11	3118	573	719	1826
2011-12	3609	573	682	2354
2012-13	3978	575	708	2695
2013-14	3979	552	711	2716
2014-15(P)	3529	558	637	2334

**Excluding Petroleum (crude), Atomic and Minor minerals.*

***Reporting mine** : 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.*

Number of Underground Mines, 2014-15 @ (By Principal Minerals)			
Mineral	Total	'A' Category	'B' Category
Total	**66**	**33**	**33**
Apatite	1	-	1
Barytes	3	-	3
Chromite	6	6	-
Copper Ore	4	4	-
Gold	5	4	1
Lead & Zinc	8	8	-
Manganese Ore	13	8	5
Mica	17	2	15
Steatite	9	1	8

@ Excluding fuel, atomic & minor minerals.

'A' Mechanised Mines: > 150 labours in all
> 75 labours in workings below ground

'B' Other than 'A'

Decennial Growth in the Value of Mineral Production, 1954 to 2014-15@ (By Groups)

(Rs. Crore)

Year	Total	Fuels	Metallic Minerals	Non-Metallic and Minor Minerals
1954	88	56	24	8
1964	252	170	34	48
1974	864	615	113	136
1984	8089	6906	515	668
1994-95	30730	25526	2211	2993
2004-05	81608	60521	9940	11147
2014-15(P)	280332	193372	38597	48363

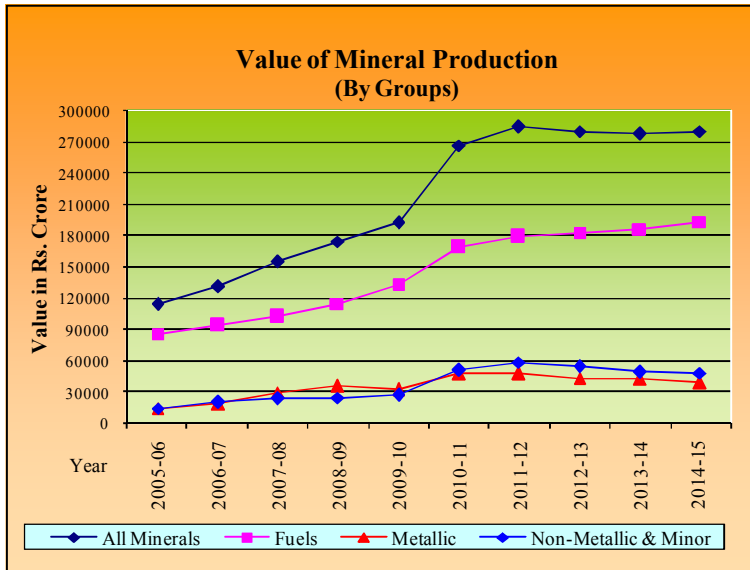
@ Excluding atomic minerals.

Value of Mineral Production, 2005-06 to 2014-15@
(By Mineral Groups)

(Rs. Crore)

Year	All Minerals	Fuels	Metallic Minerals	Non-Metallic and Minor Minerals
2005-06	113354	85616	13903	13835
2006-07	131023	92905	18286	19832
2007-08	154622	102119	29182	23321
2008-09	174133	114717	35076	24340
2009-10	192108	133658	31734	26716
2010-11	266623	168581	47630	50412
2011-12	284149	178922	47025	58202
2012-13	280006	182689	43164	54153
2013-14	277413	186467	42390	48556
2014-15(P)	280332	193372	38597	48363

@ Excluding atomic minerals.

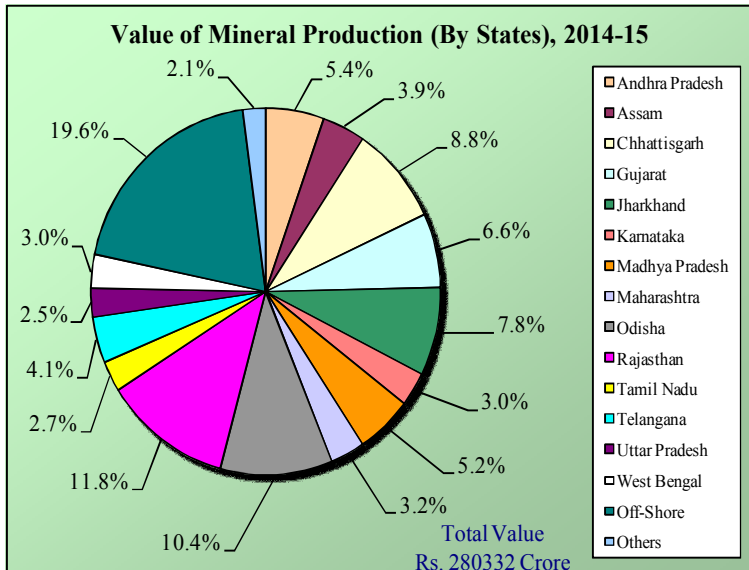

Value of Mineral Production
(By Groups)
Value in Rs. Crore
300000
270000
240000
210000
180000
150000
120000
90000
60000
30000
0
Year
2005-06
2006-07
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
All Minerals
Fuels
Metallic
Non-Metallic & Minor

Value of Mineral Production[@] (By Minerals)		(Rs. Crore)
Minerals	2005-06	2014-15(P)
All Minerals	**113152**	**280332**
Coal	33675	89287
Petroleum (crude)	40479	68088
Iron Ore	10804	28534
Natural Gas (utilised)	9308	27834
Lignite	2153	8163
Limestone	1740	5212
Lead & Zinc Concentrates	649	3704
Chromite	1093	1819
Manganese Ore	505	1363
Silver	23	1195
Bauxite	293	1077
Copper Concentrates	251	545
Apatite & Phosphorite	296	391
Gold	270	361
Barytes	44	269
Dolomite	97	225
Gypsum	40	128
Kaolin	205	110
Others	11227	42027

@ Excluding atomic minerals.

Value of Mineral Production[@] (By States)		(Rs. Crore)
State	2005-06	2014-15(P)
India	**113152**	**280332**
Andhra Pradesh	8326	15158
Assam	6312	10989
Chhattisgarh	7582	24588
Goa	1114	623
Gujarat	10267	18365
Jharkhand	8293	21837
Karnataka	3334	8483
Kerala	671	1561
Madhya Pradesh	6505	14562
Maharashtra	4328	8873
Meghalaya	756	1514
Odisha	8107	29119
Rajasthan	3481	33025
Tamil Nadu	2685	7574
Telangana	-	11439
Tripura	87	946
Uttar Pradesh	3402	7043
West Bengal	3373	8350
Off-Shore	32893	54955
Others	1636	1328

@ Excluding atomic minerals.


Value of Mineral Production (By States), 2014-15
2.1%
5.4%
3.9%
8.8%
19.6%
6.6%
3.0%
7.8%
2.5%
4.1%
3.0%
2.7%
5.2%
11.8%
3.2%
10.4%
Total Value
Rs. 280332 Crore
Andhra Pradesh
Assam
Chhattisgarh
Gujarat
Jharkhand
Karnataka
Madhya Pradesh
Maharashtra
Odisha
Rajasthan
Tamil Nadu
Telangana
Uttar Pradesh
West Bengal
Off-Shore
Others

Value of Mineral Production,[@] 2005-06 to 2014-15
(By Sectors)

(Rs. Crore)

Year	Total	Public Sector	Private Sector
2005-06	113354	82241	31113
2006-07	131023	89788	41235
2007-08	154622	100762	53860
2008-09	174133	115240	58893
2009-10	192108	121794	70314
2010-11	266623	141000	125623
2011-12	284149	152452	131697
2012-13	280006	156695	123311
2013-14	277413	167886	109527
2014-15(P)	280332	174806	105526

@ Excluding atomic minerals.

Value of Mineral Production & Number of Mines, 2014-15(P) (By Sectors)			
	Total *	Public Sector	Private Sector
No. of Mines	**2971**	**207**	**2764**
Total Value #	**45920**	**19257**	**26663**
Metallic #	38597	17913	20684
Non-metallic #	7323	1344	5979

** Excluding fuel, atomic & minor minerals.*

 # Value in Rs. Crore.

Index of Mineral Production, 2005-06 to 2014-15
(By Mineral Groups)

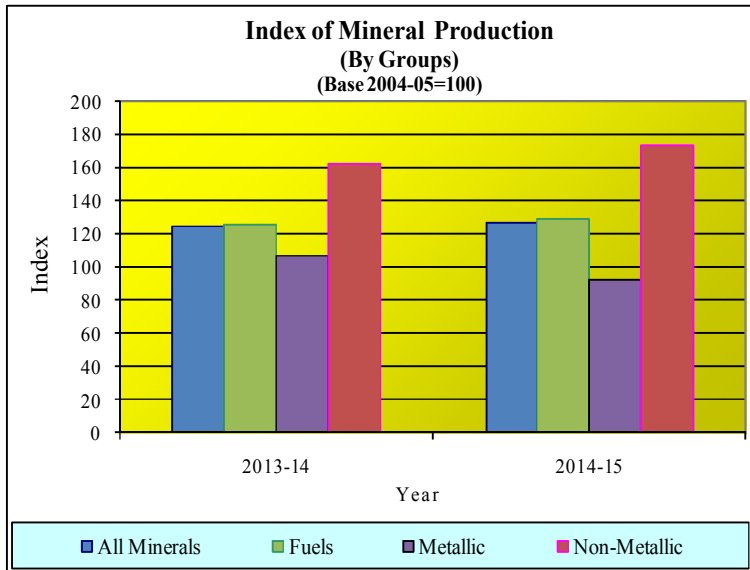
(Base 1993-94 = 100)

	All Minerals	Fuels	Metallic Minerals	Non-Metallic Minerals
Year/Weight	1000.000	857.180	80.765	42.327
2005-06	157.40	148.25	240.17	191.18
2006-07	167.08	154.48	283.36	211.30
2007-08	173.55	159.43	311.28	210.63
2008-09	175.96	162.80	302.26	215.48
2009-10	193.36	183.00	291.38	239.14
2010-11	204.95	194.98	298.57	256.87

(Base 2004-05 = 100)

Year/Weight	1000.000	812.328	103.983	27.414
2010-11	131.1	130.2	136.5	142.5
2011-12	128.5	129.4	115.4	150.6
2012-13	125.5	127.7	98.1	158.4
2013-14	124.7	125.5	106.7	162.1
2014-15(P)	126.5	129.2	92.1	173.3

***Note**: - Weight of minor minerals production in the index of mineral is 19.728 for base year 1993-94 = 100 and it is 56.275 for base year 2004-05=100.*

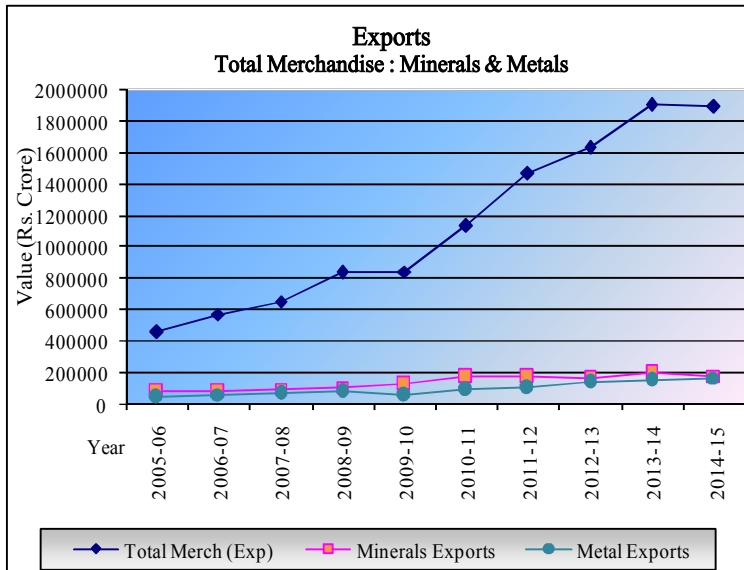

Index of Mineral Production
(By Groups)
(Base 2004-05=100)
200
180
160
140
120
100
80
60
40
20
0
Index
2013-14
2014-15
Year
All Minerals
Fuels
Metallic
Non-Metallic

Wholesale Price Index, 2005-06 to 2014-15 (By Groups)					
					(Base 2004-05 = 100)
Year	All Commodities	Minerals	Metallic Minerals	Other Minerals	Mineral Oils
2005-06	104.47	115.15	127.92	104.78	116.73
2006-07	111.35	136.61	162.14	108.38	127.40
2007-08	116.63	152.78	192.77	116.14	126.25
2008-09	126.02	186.52	266.15	144.19	141.84
2009-10	130.81	202.92	258.32	145.98	135.75
2010-11	143.32	253.28	373.78	153.37	157.47
2011-12	156.13	320.65	411.52	165.88	184.02
2012-13	167.62	346.91	438.95	204.72	202.45
2013-14	177.64	346.49	387.34	213.20	225.95
2014-15(P)	181.19	308.52	388.57	211.77	219.64

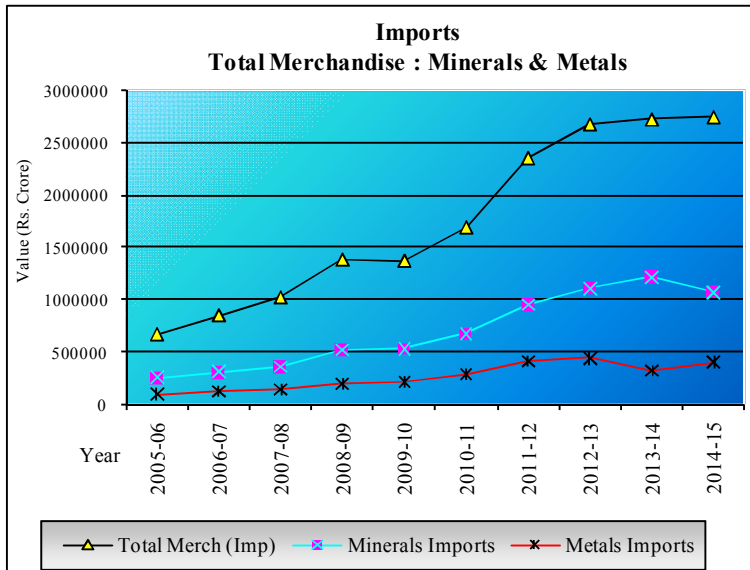
Gross Domestic Product (GDP) at Current Prices (Rs. Crore)			
Year	Total GDP	Mining & Quarrying	Percentage
2005-06	3390503	94462	2.8
2006-07	3953276	106787	2.7
2007-08	4582086	124812	2.7
2008-09	5303566	139828	2.6
2009-10	6108903	159304	2.6
2010-11	7248860	204866	2.8
2011-12	8391691	222716	2.7
Gross Value Added (GVA) at Current Prices (Rs. Crore)			
Year	Total GVA	Mining & Quarrying	Percentage
2012-13 (NS)	9252051	284771	3.1
2013-14(NS)	10477140	298544	2.8
2014-15(PE)	11550240	275812	2.4

(NS) : New series (PE) : provisional estimates.

Exports Total Merchandise: Minerals & Metals (Rs. Crore)					
Year	Total Merchandise	Minerals	% Share	Metals	% Share
2005-06	456418	79790	17	39657	9
2006-07	571779	80931	14	62621	11
2007-08	655864	95022	14	66361	10
2008-09	840755	109296	13	82239	10
2009-10	845534	127831	15	57975	7
2010-11	1136964	174370	15	94052	8
2011-12	1465959	175310	12	102500	7
2012-13	1634318	160101	10	140614	9
2013-14	1905011	194784	10	153156	8
2014-15(P)	1896348	178077	9	167120	9


Exports
Total Merchandise : Minerals & Metals
2000000
1800000
1600000
1400000
1200000
1000000
800000
600000
400000
200000
0
Value (Rs. Crore)
Year
2005-06
2006-07
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
Total Merch (Exp)
Minerals Exports
Metal Exports

Imports Total Merchandise : Minerals & Metals (Rs. Crore)					
Year	Total Merchandise	Minerals	% Share	Metals	% Share
2005-06	660409	243839	37	92149	14
2006-07	840506	305028	36	123461	15
2007-08	1012312	349507	35	141947	14
2008-09	1374436	514509	37	199489	15
2009-10	1363736	524830	38	214425	16
2010-11	1683467	669010	40	286835	17
2011-12	2345463	944430	40	418310	18
2012-13	2669162	1100800	41	446566	17
2013-14	2715434	1215827	45	321356	12
2014-15(P)	2737087	1071689	39	401259	15


Imports
Total Merchandise : Minerals & Metals
Value (Rs. Crore)
3000000
2500000
2000000
1500000
1000000
500000
0
Year
2005-06
2006-07
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
Total Merch (Imp)
Minerals Imports
Metals Imports

Consumption of Explosives, 2013-14@
(By Principal Minerals)

(In tonnes)

Mineral	Gun Powder	High Explosives
Total:	**12**	**85802**
Limestone	12	40866
Lead & Zinc Ore	-	23339
Iron Ore	++	11268
Copper Ore	-	4050
Bauxite	-	2087
Manganese Ore	-	1115
Dolomite	++	597
Steatite	-	553
Chromite	-	502
Barytes	-	480
Gold	-	415
Others	++	**530**

@ Excluding fuel, atomic and minor minerals.

Consumption of Explosives, 2013-14@ (By Principal Minerals)

(In thousands)

Mineral	Detonators (Nos.)		Fuses (Meters)	
	Ordinary*	Electric	Safety	Cordtex
Total	**2343**	**4948**	**1939**	**13698**
Bauxite	164	39	250	1657
Chromite	2	122	3	225
Copper Ore	12	667	3	1044
Gold	60	266	0	191
Iron Ore	224	82	34	1911
Lead & Zinc Ore	127	726	0	1072
Manganese Ore	29	766	42	528
Barytes	12	35	10	25
Dolomite	257	317	241	652
Limestone	1099	1620	691	5578
Magnesite	51	87	80	176
Mica	46	72	60	0
Steatite	181	12	443	526
Wollastonite	6	51	0	63
Other	**73**	**86**	**82**	**50**

@ Excluding fuel, atomic and minor minerals. **Includes other detonators*

Afforestation in Metalliferrous Mines during 2014-15 (By Principal Minerals)						
Mineral	**Total Mines Covered**	**Area Covered (ha)**	**Trees**		**Survival**	
			Planted (Nos.)	**Survived (Nos.)**	**Percentage**	('000 trees) per ha
Total	**882**	**1893**	**2548727**	**2083199**	**81.73**	1.10
Bauxite	78	65	166084	127070	76.51	1.95
Chromite	4	5	10630	8588	80.79	1.72
Copper	6	15	20600	17240	83.69	1.15
Dolomite	4	14	11100	9650	86.94	0.69
Iron ore	166	145	386799	296109	76.55	2.04
Iron & mn	21	16	123868	107021	86.40	6.69
Lead & Zinc	2	10	12300	11800	95.93	1.18
Limestone	497	1481	1699396	1408963	82.91	0.95
Manganese	28	45	41600	36640	88.08	0.81
Magnesite	5	1	770	534	69.35	0.53
Others	71	96	75580	59584	78.84	0.62

Section – 2

Mineral Production

Production, Value, Employment and Reporting Mines, 2005-06 to 2014-15, (Principal Minerals)

Section-2

Mineral Production

Fuel Minerals

The steady rise in the production of coal continued during the decade under review and reached the level of 609 million tonne during 2014-15. The production of lignite also had a rising trend during the decade ending 2014-15 except in 2008-09 and 2013-14 and was 48 million tonne in 2014-15. The production of petroleum (crude) reached to 37 million tonne in 2014-15 from 32 million tonne in 2005-06. The output of natural gas (utilised) in 2010-11 at 52219 m.cu.m. attained the highest level of the decade but declined thereafter gradually and reached to 33656 m.cu.m. in 2014-15.

Metallic Minerals

The production of bauxite during the decade was highest in 2007-08, then declined till 2010-11 and increased thereafter gradually to 22 million tonne in 2014-15 matching the level of previous year. The production of chromite at 2.2 million in 2014-15 decreased 25% as compared to the previous year. The output of copper ore and concentrates had a fluctuating trend during the decade and their respective

production in 2014-15 was 3586 thousand tonne and 108 thousand tonne with decrease of about 5% and 18% respectively over the preceding year. During the decade ending 2014-15, the production of iron ore touched the highest level of 219 million tonnes in 2009-10. Then it declined till every year except 2013-14 and was at 128.9 million tonne in 2014-15 with 15% decrease over the preceding year. The production of manganese ore showed fluctuating trend during the decade and touched the highest level of 3.1 million tonne in 2010-11 and was at 2.3 million tonne in 2014-15 with a decrease of about 11% as compared to the previous year. The production of lead and zinc ores at 9346 thousand tonne, lead concentrates at 198 thousand tonne and that of zinc concentrates at 1502 thousand tonne in 2014-15 was at the highest level in the decade with a nominal increase as compared to the previous year.

Non-Metallic Minerals

During the decade ending 2014-15, the production of apatite & phosphorite touched the highest level of 2.3 million tonnes in 2011-12 and it was 1581 thousand tonnes in 2014-15 recording an increase of 9% over the previous year. The production of diamond showed declining trend in the initial years of the decade but increased during 2011-12 to 2013-14. It stands at 36 thousand carats in the year 2014-15 with 5% decrease over the previous year.

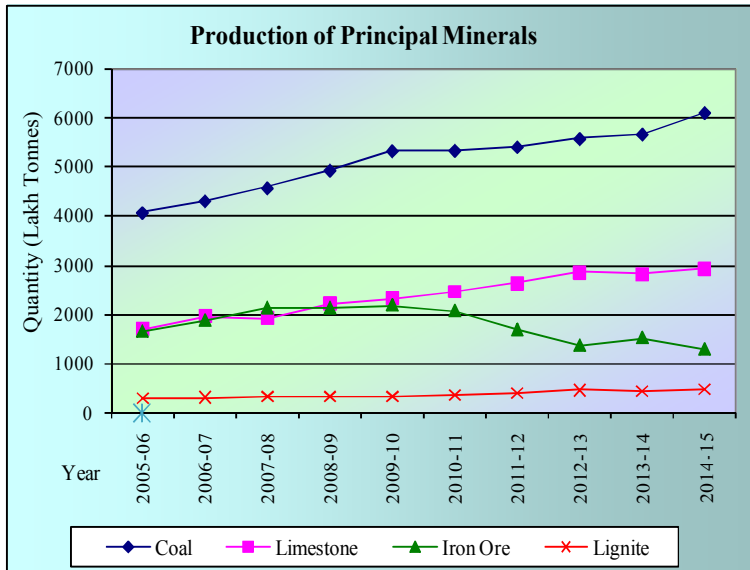
The output of kyanite at 9 thousand tonne was highest the beginning of the decade and maintained a fluctuating trend. It was six thousand tonne in 2014-15 with 50% increase over the previous year. The production of limestone showed an increasing trend during the decade ending 2014-15 except a marginal decrease in 2007-08 and 2013-14. Its production at 293 million tonnes in 2014-15 was 4% higher over the preceding year and was also at highest level of the decade. The production of magnesite showed mixed trend during the decade ending 2014-15 and it was 276 thousand tonne during 2014-15, showing an increase of 40% as compared to the previous year.

Production of Coal, 2005-06 to 2014-15				
Year	No. of* Mines	Quantity (Lakh tonnes)	Value (Rs. Crore)	Labour* Employed (Av. Daily)**
2005-06	547	4070	33675	384644
2006-07	561	4308	34837	371490
2007-08	559	4571	38465	357467
2008-09	561	4928	45537	356848
2009-10	560	5320	51318	360705
2010-11	559	5327	62021	355721
2011-12	559	5400	70172	352930
2012-13	559	5564	74719	345302
2013-14	536	5658	82535	338896
2014-15(P)	539	6092	89287	343548

* *Excluding Meghalaya*

** *Data relates to calendar year*

Production of Lignite, 2005-06 to 2014-15				
Year	No. Of Mines	Quantity (Lakh tonnes)	Value (Rs. Crore)	Labour Employed (Av. Daily)
2005-06	9	301	2153	14246
2006-07	9	313	2626	14246
2007-08	11	340	2961	14246
2008-09	13	324	3688	12566
2009-10	13	341	3776	13245
2010-11	14	377	4331	14406
2011-12	14	423	5338	13107
2012-13	16	465	5511	13212
2013-14	16	443	5968	13976
2014-15(P)	19	483	8163	12356


Production of Principal Minerals
Quantity (Lakh Tonnes)
7000
6000
5000
4000
3000
2000
1000
0
Year
2005-06
2006-07
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
Coal
Limestone
Iron Ore
Lignite

Production of Petroleum (Crude), 2005-06 to 2014-15		
Year	Quantity ('000 tonnes)	Value (Rs. Crore)
2005-06	32190	40479
2006-07	33988	45679
2007-08	34118	49694
2008-09	33508	53385
2009-10	33690	60789
2010-11	37684	68804
2011-12	38090	69202
2012-13	37862	68817
2013-14	37788	68683
2014-15(P)	37461	68088

Production of Natural Gas (Utilised), 2005-06 to 2014-15		
Year	Quantity (m.cu.m.)	Value (Rs. Crore)
2005-06	32202	9308
2006-07	31747	9764
2007-08	32417	11000
2008-09	32845	12107
2009-10	47496	17775
2010-11	52219	33425
2011-12	47559	34211
2012-13	40679	33642
2013-14	35407	29282
2014-15(P)	33656	27834

Production of Bauxite, 2005-06 to 2014-15				
Year	No. of Mines	Quantity ('000 tonnes)	Value (Rs. Crore)	Labour Employed (Av. Daily)
2005-06	200	12596	293	8448
2006-07	197	15733	385	8082
2007-08	209	22625	568	8971
2008-09	198	15460	470	8546
2009-10	197	14124	489	8178
2010-11	193	12723	512	7851
2011-12	172	13600	613	7684
2012-13	178	16508	796	7410
2013-14	177	22319	1000	6854
2014-15(P)	152	22226	1077	6048

Production of Chromite, 2005-06 to 2014-15				
Year	No. of Mines	Quantity ('000 tonnes)	Value (Rs.Crore)	Labour Employed (Av. Daily)
2005-06	18	3714	1093	5514
2006-07	21	5296	1450	6157
2007-08	20	4873	2142	5982
2008-09	24	4073	2263	6359
2009-10	22	3426	1045	6735
2010-11	21	4326	2596	6862
2011-12	22	2923	2424	6845
2012-13	25	2834	2263	6761
2013-14	26	2878	2376	6277
2014-15(P)	25	2164	1819	6077

Production of Copper Ore and Concentrates, 2005-06 to 2014-15					
Year	No. of Mines	Copper Ore Quantity ('000 tonnes)	Copper Concentrates		Labour Employed (Av. Daily)
			Quantity ('000 tonnes)	Value (Rs. Crore)	
2005-06	5	2643	125	251	1700
2006-07	4	3274	150	312	1661
2007-08	4	3242	150	347	1835
2008-09	4	3452	138	409	2291
2009-10	4	3271	125	381	2611
2010-11	4	3602	137	473	2712
2011-12	4	3479	130	539	2774
2012-13	5	3636	124	629	2898
2013-14	5	3778	139	668	3324
2014-15(P)	5	3586	108	545	3470

Production of Gold Ore and Gold, 2005-06 to 2014-15							
Year	No. of Mines	Gold Ore Qty. ('000 tonnes)	Gold				Labour Employed (Av. Daily)
			Qty (Kg.)	Qty (Kg.)	Qty (Kg.)	Value (Rs.Crore)	
2005-06	3	479	2880	167	3047	282	3085
2006-07	3	513	2361	127	2488	229	2943
2007-08	4	681	2969	-	2969	302	3064
2008-09	4	587	2438	-	2438	315	3210
2009-10	4	518	2084	-	2084	343	3210
2010-11	4	742	2399	-	2399	435	3150
2011-12	4	492	2194	-	2194	531	3100
2012-13	4	503	1588	-	1588	517	3204
2013-14	4	420	1564	-	1564	423	3433
2014-15(P)	5	449	1440	-	1440	361	3432

Note :- No. of Mines and labour employed relates to primary gold.

Production of Iron Ore, 2005-06 to 2014-15				
Year	No. of Mines	Quantity (Lakh tonnes)	Value (Rs. Crore)	Labour Employed (Av. Daily)
2005-06	284	1652	10804	39450
2006-07	290	1877	14204	39341
2007-08	314	2133	23379	46056
2008-09	328	2130	28544	42702
2009-10	320	2186	26462	43557
2010-11	336	2072	39614	46147
2011-12	313	1686	38357	46673
2012-13	310	1366	32824	42645
2013-14	322	1522	31649	39127
2014-15(P)	290	1289	28534	38059

Production of Lead & Zinc Ore and Concentrates, 2005-06 to 2014-15

Year	No. of Mines	Lead & Zinc Ore Qty. ('000 tonnes)	Lead Concentrates		Zinc Concentrates		Labour Empl-oyed (Av. Daily)
			Qty. ('000 tonnes)	Value (Rs. Crore)	Qty. ('000 tonnes)	Value (Rs. Crore)	
2005-06	7	4801	96	77	889	572	2628
2006-07	7	5140	107	133	947	971	3914
2007-08	7	5783	126	144	1036	939	3991
2008-09	7	6681	134	136	1224	947	4157
2009-10	7	7102	134	177	1280	1306	3859
2010-11	6	7540	148	200	1427	1793	3408
2011-12	6	8042	162	245	1414	1986	3980
2012-13	8	8633	184	330	1493	2395	4665
2013-14	8	9282	194	437	1491	2739	7116
2014-15(P)	8	9346	198	560	1502	3144	6999

Production of Manganese Ore, 2005-06 to 2014-15				
Year	No. of Mines	Quantity ('000 tonnes)	Value (Rs. Crore)	Labour Employed (Av. Daily)
2005-06	116	1906	507	12321
2006-07	114	2116	557	12893
2007-08	130	2697	1206	13226
2008-09	149	2789	1774	13796
2009-10	142	2492	1191	13806
2010-11	149	3056	1468	13682
2011-12	155	2412	1178	14258
2012-13	172	2342	1284	15550
2013-14	163	2626	1518	16659
2014-15(P)	146	2345	1363	14031

Production of Apatite and Phosphorite,2005-06 to 2014-15				
Year	No. of Mines	Quantity ('000 tonnes)	Value (Rs. Crore)	Labour Employed (Av. Daily)
2005-06	7	2058	296	1614
2006-07	7	2003	195	1535
2007-08	8	1856	215	1672
2008-09	9	1810	310	1501
2009-10	9	1611	312	1507
2010-11	9	2101	502	1749
2011-12	7	2263	750	1604
2012-13	7	1942	681	1350
2013-14	7	1455	476	1205
2014-15(P)	7	1581	391	1474

Production of Barytes, 2005-06 to 2014-15				
Year	No. of Mines	Quantity ('000 tonnes)	Value (Rs. Crore)	Labour Employed (Av. Daily)
2005-06	14	1156	44	503
2006-07	10	1681	95	499
2007-08	12	1076	57	435
2008-09	10	1686	97	480
2009-10	11	2153	260	507
2010-11	8	2339	270	597
2011-12	12	1777	169	563
2012-13	21	1789	531	900
2013-14	28	1171	356	976
2014-15(P)	21	911	269	942

Production of Diamond, 2005-06 to 2014-15				
Year	No. of Mines	Quantity ('000 carats)	Value (Rs. Crore)	Labour Employed (Av. Daily)
2005-06	2	44	23	235
2006-07	2	2	1	220
2007-08	2	0.6	1	197
2008-09	2	0.5	0.5	154
2009-10	2	17	12	167
2010-11	2	11	11	163
2011-12	2	18	20	167
2012-13	2	32	37	180
2013-14	2	38	61	157
2014-15(P)	2	36	61	176

Production of Dolomite, 2005-06 to 2014-15				
Year	No. of Mines	Quantity ('000 tonnes)	Value (Rs. Crore)	Labour Employed (Av. Daily)
2005-06	117	4751	116	2987
2006-07	124	5172	113	3091
2007-08	121	5852	146	2922
2008-09	120	5509	155	3060
2009-10	123	5912	167	2554
2010-11	136	5840	187	2822
2011-12	194	5969	174	3195
2012-13	197	7234	262	3986
2013-14	185	7311	268	3783
2014-15(P)	172	6209	225	3338

Production of Fireclay, 2005-06 to 2014-15				
Year	No. of Mines	Quantity ('000 tonnes)	Value (Rs. Crore)	Labour Employed (Av. Daily)
2005-06	79	536	6	1544
2006-07	80	497	7	1077
2007-08	75	545	9	810
2008-09	61	496	8	713
2009-10	51	549	9	548
2010-11	60	857	14	553
2011-12	82	983	16	906
2012-13	74	1000	18	777
2013-14	62	921	19	664
2014-15(P)	51	713	13	471

Production of Gypsum, 2005-06 to 2014-15				
Year	No. of Mines	Quantity ('000 tonnes)	Value (Rs. Crore)	Labour Employed (Av. Daily)
2005-06	22	3291	40	222
2006-07	28	3006	49	299
2007-08	31	3400	72	167
2008-09	27	3877	99	144
2009-10	27	3370	100	294
2010-11	30	4918	148	323
2011-12	38	3979	169	334
2012-13	37	3557	170	375
2013-14	38	3115	155	393
2014-15(P)	31	2478	128	337

Production of Kaolin, 2005-06 to 2014-15				
Year	No. of Mines	Quantity ('000 tonnes)	Value (Rs. Crore)	Labour Employed (Av. Daily)
2005-06	106	1336	205	2904
2006-07	104	1460	162	2927
2007-08	95	1466	57	2907
2008-09	93	2084	64	2718
2009-10	92	2798	68	2226
2010-11	81	2728	74	2061
2011-12	105	3077	65	2344
2012-13	145	4259	116	2818
2013-14	160	4853	124	2939
2014-15(P)	135	3861	110	2787

Production of Kyanite,2005-06 to 2014-15				
Year	No. of Mines	Quantity (’000 tonnes)	Value (Rs. Crore)	Labour Employed (Av. Daily)
2005-06	9	9	0.7	179
2006-07	7	8	0.8	151
2007-08	6	5	0.5	149
2008-09	5	5	0.5	125
2009-10	4	5	0.6	115
2010-11	5	6	0.6	127
2011-12	3	4	0.5	56
2012-13	4	1	0.1	55
2013-14	4	4	0.8	64
2014-15(P)	3	6	1.1	52

Production of Limestone, 2005-06 to 2014-15				
Year	No. of Mines	Quantity (Lakh tonnes)	Value (Rs. Crore)	Labour Employed (Av. Daily)
2005-06	550	1700	1906	18164
2006-07	583	1967	2405	18758
2007-08	553	1931	2400	17865
2008-09	601	2216	2922	19446
2009-10	565	2330	3248	21006
2010-11	592	2463	3635	19213
2011-12	719	2629	4086	23138
2012-13	778	2850	4797	22615
2013-14	779	2809	5133	22977
2014-15(P)	740	2928	5212	21655

Production of Magnesite, 2005-06 to 2014-15				
Year	No. of Mines	Quantity ('000 tonnes)	Value (Rs. Crore)	Labour Employed (Av. Daily)
2005-06	11	341	39	2104
2006-07	12	239	34	1285
2007-08	10	253	33	880
2008-09	10	253	36	770
2009-10	8	301	44	899
2010-11	10	236	38	899
2011-12	11	224	35	777
2012-13	15	224	46	964
2013-14	14	197	45	818
2014-15(P)	16	276	67	903

Production of Mica (Crude), 2005-06 to 2014-15				
Year	No. of Mines	Quantity ('000 tonnes)	Value (Rs. Crore)	Labour Employed (Av. Daily)
2005-06	29	2.1	3.4	397
2006-07	35	1.4	3.8	411
2007-08	31	4.6	16.1	375
2008-09	35	1.5	4.3	425
2009-10	32	1.1	4.0	403
2010-11	32	1.3	4.5	403
2011-12	35	1.9	6.9	386
2012-13	36	1.3	4.0	451
2013-14	39	1.7	4.8	443
2014-15(P)	31	0.6	2.2	330

Production of Sillimanite, 2005-06 to 2014-15				
Year	No. of Mines	Quantity ('000 tonnes)	Value (Rs. Crore)	Labour Employed (Av. Daily)
2005-06	4	33	17	2110
2006-07	4	26	10	1940
2007-08	4	41	18	1924
2008-09	4	34	24	2050
2009-10	4	34	26	2066
2010-11	4	49	41	1790
2011-12	4	59	52	1683
2012-13	5	44	35	1767
2013-14	5	67	41	2166
2014-15(P)	4	66	47	2017

Production of Steatite, 2005-06 to 2014-15				
Year	No. of Mines	Quantity ('000 tonnes)	Value (Rs. Crore)	Labour Employed (Av. Daily)
2005-06	154	682	36	3874
2006-07	139	740	40	3461
2007-08	139	923	59	3598
2008-09	135	889	60	4018
2009-10	126	877	71	3731
2010-11	123	903	62	3748
2011-12	138	998	88	3894
2012-13	141	972	89	3685
2013-14	116	888	98	2878
2014-15(P)	105	774	95	2689

Section–3

Production of Metals & Alloys

Production of Metals and Alloys, 2005-06 to 2014-15

Section – 3

Production of Metals & Alloys

Ferrous Metals

There was a continuous upward trend in production of finished steel during the decade ending 2014-15, except in 2008-09. It was 106 million tonnes during the year 2014-15 with an increase of 4% over the previous year. Similarly, upward trend in production of semi-finished steel was also observed during the decade ending 2014-15 except in the years 2007-08 and 2008-09. It increased to more than thrice of the level at the beginning of decade and reached to 65.8 million tonne in 2014-15.

Ferro-Alloys

Increasing trend in production of ferro-chrome was observed during the decade ending 2014-15 till 2012-13 and maintained the level of 944 thousand tonne in last three years of the decade. The output of ferro-manganese showed mixed trend in the decade and it was 518 thousand tonne during 2014-15. The production of ferro-silicon also had an increasing trend and was 90 thousand tonne during year 2014-15.

Non-ferrous Metals

Among the non-ferrous metals, India has achieved self-sufficiency in aluminium and zinc. The production of alumina rose steadily, except in 2006-07, 2009-10 and 2012-13 and reached the highest level of the of decade at 4024

thousand tonne in 2014-15, registering an increase of 6% as compared to that in the previous year. The production of aluminium increased steadily during the decade except in 2013-14, and at 2027 thousand tonne it reported 22% increase as compared to the previous year.

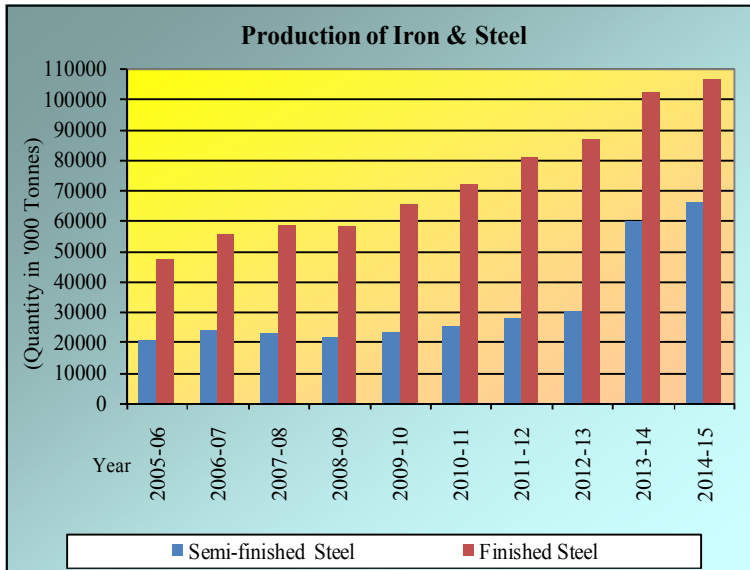
The production of copper (blister)/anode was highest at 311 thousand tonnes in 2005-06 and then declined sharply to 16 thousand tonnes in 2014-15. The production of copper (cathode) at 766 thousand tonnes and that of copper (CCWR) at 338 thousand tonne in 2014-15 registered an increase of 19% in both the metals as compared to the level of previous year.

There was a fluctuating trend in the production of gold (including by product recovery from imported copper cathodes) during the decade and at 9987 kg. in 2014-15, it was 8% higher than that of the preceding year. The production of silver, a by-product, at 402 tonne in 2014-15 was 2% lower as compared to the previous year.

The output of lead (primary) showed increasing trend during the decade except in 2010-11 and during 2014-15 the production of lead (primary) at 127 thousand tones was 3% higher than the previous year. The output of zinc ingots also maintained a rising trend during the decade except in 2012-13 but during 2014-15 it was 733 thousand tonnes, 4% lower as compared to the previous year.

Production of Iron and Steel, 2005-06 to 2014-15 ('000 tonnes)		
Year	Semi-finished Steel[@]	Finished Steel*
2005-06	20143	47486
2006-07	23692	55287
2007-08	22685	58263
2008-09	21367	57659
2009-10	23561	65428
2010-11	25273	71775
2011-12	27928	80352
2012-13	29984	86381
2013-14	59379	102090
2014-15(P)	65793	106052

[@] *Including Steel ingots*
* *Including C.R. Sheets*
Source: Joint Plant Committee, Kolkata


Production of Iron & Steel
(Quantity in '000 Tonnes)
110000
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
Year
2005-06
2006-07
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
Semi-finished Steel
Finished Steel

Production of Principal Ferro-Alloys, 2005-06 to 2014-15 ('000 tonnes)			
Year	Ferro-Chrome	Ferro-Manganese	Ferro-Silicon
2005-06	327	184	55
2006-07	363	156	69
2007-08	383	163	69
2008-09	618	332	81
2009-10	922	513	81
2010-11	938	511	81
2011-12	943	517	89
2012-13	944	518	90
2013-14	944	518	90
2014-15(P)	944	518	90

Source: Joint Plant Committee, Kolkata.

Production of Alumina & Aluminium, 2005-06 to 2014-15 ('000 tonnes)		
Year	Alumina	Aluminium
2005-06	3086	931
2006-07	2811	1114
2007-08	3320	1240
2008-09	3620	1347
2009-10	3433	1481
2010-11	3577	1621
2011-12	3931	1654
2012-13	3610	1720
2013-14	3779	1667
2014-15(P)	4024	2027

Production of Copper, 2005-06 to 2014-15

('000 tonnes)

Year	Blister/ Anode	Electrolytic Wire Bar	Cathode	CCWR
2005-06	311	1	529	289
2006-07	51	-	511	276
2007-08	45	-	501	284
2008-09	29	-	514	314
2009-10	18	-	533	312
2010-11	14	-	512	300
2011-12	19	-	505	288
2012-13	17	-	494	285
2013-14	17	-	644	283
2014-15(P)	16	-	766	338

CCWR: Continuous Cast Wire Rod.

Production of Gold* and Silver*, 2005-06 to 2014-15 (Kilograms)		
Year	Gold	Silver
2005-06	9760	63038
2006-07	12823	101633
2007-08	12104	133635
2008-09	7309	142590
2009-10	11198	183656
2010-11	9360	193376
2011-12	11286	263910
2012-13	8304	434569
2013-14	9209	411504
2014-15(P)	9987	402467

**Includes production reported from HINDALCO Industries Ltd.*

Production of Lead and Zinc, 2005-06 to 2014-15 ('000 tonnes)		
Year	Lead (Primary)	Zinc Ingots
2005-06	24	296
2006-07	45	381
2007-08	58	457
2008-09	60	579
2009-10	64	614
2010-11	57	740
2011-12	92	784
2012-13	118	704
2013-14	123	767
2014-15(P)	127	733

Section – 4

Foreign Trade

Section-4

Export

The value of exports of minerals excluding petroleum (crude) from India, showed increasing trend in the decade except in 2012-13 and 2014-15. It was Rs. 178077 crore during 2014-15 which decreased by 9% as compared to its value in 2013-14. Diamond accounted for 83% of the total value of exports of minerals during 2014-15 followed by granite 6% and alumina and iron ore 2% each.

India imports diamond (uncut) and after cutting & polishing exports the same thus earning substantial foreign exchange by value addition. The share of diamond in the value of exports of minerals increased from 77% to 83% during the period 2010-11 to 2014-15.

The export of iron ore had a fluctuating trends throughout the decade ending 2014-15 and at 7.5 million tonnes during 2014-15 it was lowest of the decade.

Granite is one of the leading foreign exchange earners during the decade. The value of its exports at Rs. 9832 crore in 2014-15 registered a marginal derease of as compared to 2013-14.

The exports of manganese ore has decreased from 289 thousand tonne in 2009-10 to 11 thousand tonne in 2014-15. The value of exports of manganese ore also declined continuously from 121 crore in 2008-09 to 7 crore in 2014-15.

Other notable mineral items exported from India during 2014-15 were alumina, barytes, bauxite, chromite, coal, garnet (abrasive), marble, titanium ores & conc., emerald (cut & uncut) and some precious & semi-precious stones, zinc ore & concentrates, etc.

Imports

The value of imports of minerals and metals went up steeply from Rs. 335988 crore in 2005-06 to the level of Rs. 1472948 crore in 2014-15. During the year 2014-15, the share of petroleum (crude) in the total value of imports of minerals was 66% and that of diamond 12%, coal 10%, natural gas 5% and copper ore & concentrates 3%. The value of import of petroleum (crude) was Rs. 709375 crore in 2014-15 and that of diamond was Rs. 125035 crore.

India imported 218 million tonnes of coal valued at Rs. 104513 crore in 2014-15. The quantity of imports of petroleum (crude) went up steadily from 99 million tonnes in 2005-06 to 188 million tonnes in 2014-15.

The imports of rock phosphate fluctuated during the decade ending 2014-15. The quantity of imports of rock phosphate at 8.26 million tonne increased by 15% in the year 2014-15 and the value of its imports increased 12% as compared to the year 2013-14.

The imports of sulphur (excluding precipitated, sublimed and colloidal) were at the level at 1.4 million tonnes in 2005-06, fluctuated during the decade and it was 1.63 million tonnes during 2014-15. The value of its imports was Rs. 1745 crore in 2014-15.

Coke, copper ores & concentrates, asbestos, emerald (cut & uncut), precious and semi-precious stones, manganese ore, marble and molybdenum ores & concentrates etc. were the other important minerals imported into India in 2014-15.

Exports of Chromite, 2005-06 to 2014-15		
Year	Quantity ('000 tonnes)	Value (Rs. Crore)
2005-06	693	631
2006-07	1203	794
2007-08	907	1223
2008-09	1899	974
2009-10	689	801
2010-11	173	286
2011-12	225	489
2012-13	196	311
2013-14	195	347
2014-15(P)	25	66

Exports of Granite, 2005-06 to 2014-15		
Year	Quantity ('000 tonnes)	Value (Rs. Crore)
2005-06	2841	3491
2006-07	3292	4725
2007-08	3701	4287
2008-09	3959	4815
2009-10	3828	4994
2010-11	4500	5593
2011-12	4605	6382
2012-13	6061	7942
2013-14	6802	9869
2014-15(P)	6563	9832

Value of Exports of Granite, 2010-11 to 2014-15 (By Principal Countries)					(Rs. Crore)
Country	2010-11	2011-12	2012-13	2013-14	2014-15(P)
All Countries	**5593**	**6382**	**7942**	**9869**	**9832**
China	1904	1920	2681	3266	3022
USA	742	934	1206	1613	1600
Turkey	229	277	346	392	431
Germany	248	309	312	349	405
UAE	172	185	230	271	315
Italy	288	288	244	281	312
UK	190	233	262	304	295
Poland	112	144	152	205	261
Belgium	179	201	216	210	214
Chinese Taipei/ Taiwan	101	165	157	199	190
Other	1399	1698	2168	2779	2787

Exports of Iron Ore, 2005-06 to 2014-15		
Year	Quantity (Lakh tonnes)	Value (Rs. Crore)
2005-06	840	16829
2006-07	914	17656
2007-08	685	23400
2008-09	689	21725
2009-10	1015	28366
2010-11	469	21416
2011-12	472	22184
2012-13	181	8985
2013-14	163	9481
2014-15(P)	75	3212

Value of Exports of Iron Ore, 2010-11 to 2014-15
(By Principal Countries)

(Rs. Crore)

Country	2010-11	2011-12	2012-13	2013-14	2014-15(P)
All Countries	**21416**	**22184**	**8985**	**9481**	**3212**
China P Rp	19900	20100	7698	7338	1258
Japan	533	1264	1013	1487	1125
Iran	++	++	N.A.	34	483
Korea Rp	406	478	76	307	305
Oman	19	N.A.	N.A.	180	4
Others	558	342	198	135	37

Exports of Manganese Ore, 2005-06 to 2014-15		
Year	Quantity ('000 tonnes)	Value (Rs. Crore)
2005-06	237	46
2006-07	157	45
2007-08	208	83
2008-09	205	121
2009-10	289	117
2010-11	99	80
2011-12	75	44
2012-13	72	27
2013-14	66	19
2014-15(P)	11	7

Exports of Marble, 2005-06 to 2014-15		
Year	Quantity ('000 tonnes)	Value (Rs. Crore)
2005-06	259	249
2006-07	290	281
2007-08	311	408
2008-09	307	363
2009-10	276	305
2010-11	522	327
2011-12	325	386
2012-13	371	543
2013-14	338	570
2014-15(P)	326	599

Exports of Mica, 2005-06 to 2014-15		
Year	Quantity ('000 tonnes)	Value (Rs. Crore)
2005-06	80	106
2006-07	81	109
2007-08	100	125
2008-09	191	180
2009-10	94	162
2010-11	127	226
2011-12	132	289
2012-13	128	346
2013-14	128	376
2014-15(P)	141	426

Imports of Asbestos, 2005-06 to 2014-15		
Year	Quantity ('000 tonnes)	Value (Rs. Crore)
2005-06	236	415
2006-07	253	519
2007-08	312	590
2008-09	347	874
2009-10	331	939
2010-11	366	1003
2011-12	378	1199
2012-13	460	1900
2013-14	286	1330
2014-15(P)	396	1717

Imports of Coal, 2005-06 to 2014-15		
Year	Quantity ('000 tonnes)	Value (Rs. Crore)
2005-06	38587	14909
2006-07	43079	16689
2007-08	49792	20739
2008-09	59004	41341
2009-10	73257	39180
2010-11	68918	41549
2011-12	102841	78827
2012-13	145790	86851
2013-14	166861	92335
2014-15(P)	217785	104513

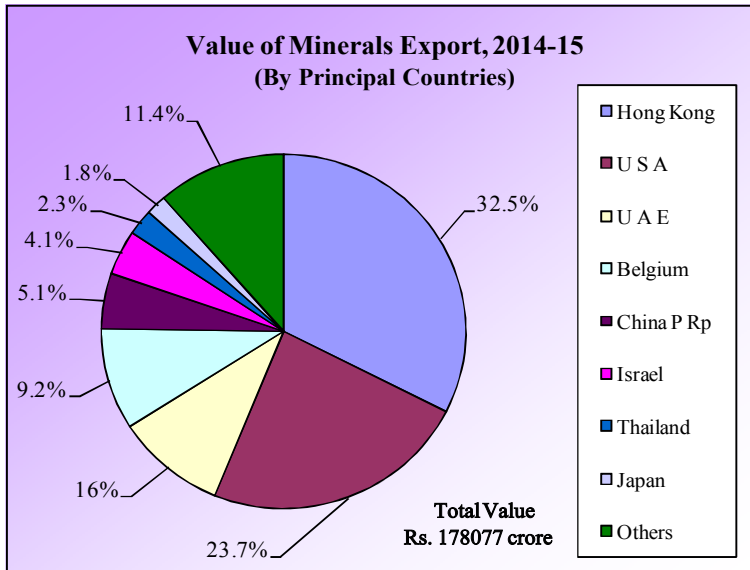
Imports of Petroleum (Crude), 2005-06 to 2014-15		
Year	Quantity (Lakh tonnes)	Value (Rs. Crore)
2005-06	993	172429
2006-07	1068	213088
2007-08	1153	257462
2008-09	1300	346845
2009-10	1536	365901
2010-11	1531	421616
2011-12	1657	643689
2012-13	1855	785602
2013-14	1892	869657
2014-15(P)	1879	709375

Imports of Rock Phosphate, 2005-06 to 2014-15		
Year	Quantity ('000 tonnes)	Value (Rs. Crore)
2005-06	4478	1391
2006-07	5009	1614
2007-08	5018	1853
2008-09	5010	4840
2009-10	5684	3275
2010-11	5194	3211
2011-12	9730	8315
2012-13	8161	7310
2013-14	7161	5518
2014-15(P)	8258	6180

Imports of Sulphur*, 2005-06 to 2014-15		
Year	Quantity ('000 tonnes)	Value (Rs. Crore)
2005-06	1390	602
2006-07	1402	494
2007-08	1406	1456
2008-09	1286	2994
2009-10	1534	681
2010-11	1357	1098
2011-12	2038	2283
2012-13	1547	1736
2013-14	1290	1100
2014-15(P)	1626	1745

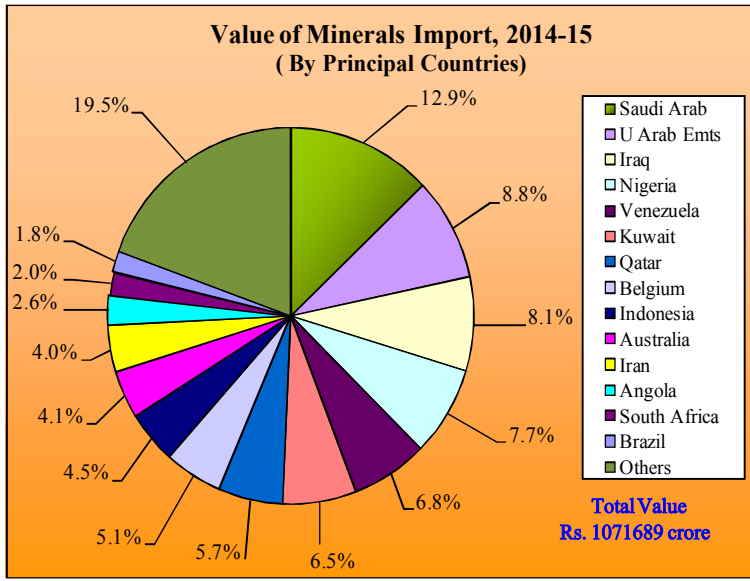
***** *Excluding sublimed, ppt and colloidal.*

Value of Exports of Minerals, 2014-15(P) (By Principal Countries)		
Country	Value (Rs. Crore)	Percentage Contribution
Total	**178077**	**100**
Hong Kong	57832	32
U S A	42195	24
U Arab Emirates	17486	10
Belgium	16466	9
China P Rp	9037	5
Israel	7285	4
Thailand	4170	2
Japan	3270	2
UK	1955	1
Switzerland	1375	1
Singapore	1249	1
Australia	1155	1
Bangladesh	938	1
Others	13664	7


Value of Minerals Export, 2014-15
(By Principal Countries)
11.4%
1.8%
2.3%
4.1%
5.1%
9.2%
16%
23.7%
32.5%
Total Value
Rs. 178077 crore
Hong Kong
U S A
U A E
Belgium
China P Rp
Israel
Thailand
Japan
Others

Value of Exports of Metals, 2014-15(P) (By Principal Countries)		
Country	Value (Rs. Crore)	Percentage Contribution
Total	**167120**	**100.0**
U Arab Emirates	32127	19.2
U S A	17458	10.5
China P Rp	13836	8.3
Korea Rp	6625	4.0
Saudi Arabia	5885	3.5
Iran	4973	3.0
Italy	4869	2.9
Germany	4329	2.6
Mexico	4289	2.6
Singapore	4086	2.4
Malaysia	4075	2.4
Nepal	4070	2.4
U K	3079	1.8
Belgium	2397	1.4
Chinese Taipei/Taiwan	2283	1.4
Thailand	2267	1.4
Netherlands	2244	1.3
Others	48228	28.9

Value of Imports of Minerals, 2014-15(P) (By Principal Countries)		
Country	Value (Rs. Crore)	Percentage Contribution
Total	**1071689**	**100**
Saudi Arab	137858	13
U Arab Emts	94314	9
Iraq	86328	8
Nigeria	82541	8
Venezuela	72374	7
Kuwait	70119	6
Qatar	61284	6
Belgium	54799	5
Indonesia	48727	4
Australia	43900	4
Iran	42972	4
Angola	27643	3
South Africa	21231	2
Brazil	19081	2
Others	208518	19


Value of Minerals Import, 2014-15
(By Principal Countries)
12.9%
8.8%
8.1%
7.7%
6.8%
6.5%
5.7%
5.1%
4.5%
4.1%
4.0%
2.6%
2.0%
1.8%
19.5%
Saudi Arab
U Arab Emts
Iraq
Nigeria
Venezuela
Kuwait
Qatar
Belgium
Indonesia
Australia
Iran
Angola
South Africa
Brazil
Others
Total Value
Rs. 1071689 crore

Value of Imports of Metals, 2014-15(P) (By Principal Countries)		
Country	Value (Rs. Crore)	Percentage Contribution
Total	**401259**	**100.0**
Switzerland	124071	30.9
China P Rp	40422	10.1
U Arab Emts	37447	9.3
U S A	22779	5.7
Korea Rp	18131	4.5
South Africa	15120	3.8
U K	13024	3.3
Australia	12891	3.2
Japan	12700	3.2
German F Rep	8540	2.1
Russia	7824	1.9
Malaysia	7399	1.8
Other	80911	20.2

Exports, Imports and Net Trade in Minerals and Metals, 2005-06 to 2014-15

(Rs. Crore)

Year	Minerals and Metals (Including Petroleum)			Minerals (Excluding Petroleum Crude)		
	Exports	Imports	Difference	Exports	Imports	Difference
2005-06	119447	335988	-216541	79657	71410	+8247
2006-07	143552	428489	-284937	80606	91940	-11334
2007-08	161383	491454	-330071	94913	92045	+2868
2008-09	191536	713998	-522462	109156	167664	-58508
2009-10	185807	739255	-553448	127742	158929	-31187
2010-11	268423	955845	-687422	174370	247394	-73024
2011-12	277809	1362740	-1084931	175238	300741	-125503
2012-13	300715	1547366	-1246651	160101	315198	-155097
2013-14	347940	1537183	-1189243	194784	346170	-151386
2014-15(P)	345197	1472948	-1127751	178077	362314	-184237

Exports, Imports and Net Trade in Minerals and Metals, 2005-06 to 2014-15 (Rs. Crore)						
Year	Petroleum Crude			Metals		
	Exports	Imports	Difference	Exports	Imports	Difference
2005-06	133	172429	-172296	39657	92149	-52492
2006-07	325	213088	-212763	62621	123461	-60840
2007-08	109	257462	-257353	66361	141947	-75586
2008-09	140	346845	-346705	82239	199489	-117250
2009-10	89	365901	-365812	57975	214425	-156450
2010-11	++	421616	-421616	94052	286835	-192783
2011-12	72	643689	-643617	102500	418310	-315810
2012-13	-	785602	-785602	140614	446566	-305952
2013-14	-	869657	-869657	153156	321356	-168200
2014-15(P)	-	709375	-709375	167120	401259	-234139

Share of Principal Minerals in the Value of Mineral Exports, 2010-11 to 2014-15 Exports

Year	Exports of all Minerals (Rs. Crore)	Percentage Share of Principal Minerals						
		Diamond*	Granite	Iron Ore	Alumina	Emerald (Cut & Uncut)	Precious & Semi-Precious Stones (Cut & Uncut)	Others
2010-11	174370	77	3	12	2	++	1	5
2011-12	175310	77	4	13	1	++	1	4
2012-13	160101	79	5	6	1	2	1	6
2013-14	194784	81	5	5	1	1	1	6
2014-15(P)	178077	83	6	2	2	1	1	5

** Includes mostly cut, industrial and powder.*

Share of Principal Minerals in the Value of Mineral Imports, 2010-11 to 2014-15 Imports								
Year	Imports of All Minerals (Rs. Crore)	Percentage Share of Principal Minerals						
		Petroleum (Crude)	Diamond*	Coal	Natural Gas	Copper Ore & Conc.	Coke	Others
2010-11	669010	63	23	6	2	3	++	3
2011-12	944430	68	14	8	3	3	1	3
2012-13	1100800	71	11	8	4	3	1	2
2013-14	1215827	72	11	8	4	3	1	1
2014-15(P)	1071689	66	12	10	5	3	++	4

** Includes mostly cut, industrial and powder.*

Share of Principal Countries in the Value of Exports of Diamond, 2010-11 to 2014-15 Exports of Diamond (Mostly Cut)									
Year	Value of Exports (Rs. Crore)	Percentage Share of Principal Importing Countries							
		Hong Kong	USA	Belgium	UAE	Israel	Thai-land	Japan	Others
2010-11	134064	25	13	7	35	3	1	1	16
2011-12	133881	32	18	12	22	5	2	1	8
2012-13	126568	35	22	10	19	5	2	1	6
2013-14	158005	35	23	10	17	5	3	1	6
2014-15(P)	148056	38	27	11	10	5	3	1	5

Share of Principal Countries in the Value of Imports of Diamond, 2010-11 to 2014-15 Imports of Diamond (Mostly Cut)									
Year	Value of Imports (Rs. Crore)	Percentage Share of Principal Exporting Countries							
		Belg-ium	UAE	Hong Kong	Israel	Botsw-ana	Rus-sia	Saudi Arab	Oth-ers
2010-11	152657	21	40	21	4	++	N.A.	N.A.	14
2011-12	132181	30	26	25	5	++	N.A.	N.A.	14
2012-13	117568	38	25	16	6	++	3	N.A.	12
2013-14	134117	40	25	14	5	2	3	1	10
2014-15(P)	125035	44	20	11	5	5	4	3	8

Production, Exports/Imports and Apparent Consumption as Percentage of Total Availability, 2014-15(P) (By Selected Minerals)

Mineral	Total Availability* ('000 tonnes)	Percentage Share of			
		Gross Production	Imports	Exports	Apparent Consumption
Barytes	918	99	1	71	29
Bauxite	24027	93	7	28	72
Steatite	778	100	0	20	80
Sulphur & Pyrites	2056	21	79	19	81
Iron Ore	141002	91	9	5	95
Magnesite	378	73	27	2	98
Limestone	306644	95	5	1	99
Chromite	2407	90	10	1	99
Manganese Ore	5518	43	57	0	100
Coal	826985	74	26	0	100
Asbestos	396	0	100	0	100
Silica sand	3124	98	2	0	100
Rock Phosphate	9838	16	84	0	100
Petroleum (crude)	225372	17	83	0	100

** Total Availability = Apparent Consumption + Exports = Production + Imports*

Section – 5

Average Daily Employment in Mines

Average Daily Employment in Mines

Section-5

Average Daily Employment in Mines

The average daily employment of labour at around 5.41 lakh persons during 2005-06 decreased to 5.09 lakh persons in 2014-15. Among the major group of minerals, fuel accounted for 75% to the total employment during 2014-15, metallic minerals 15% and non-metallic minerals about 10 percent. The average daily employment of labour in 2014-15 was 508925 which was 2% lower as compared to the preceding year.

In the case of fuel minerals, coal and lignite together accounted for 94% of the labour force engaged during 2014-15 in fuel group of minerals. In metallic group of minerals, iron ore accounted for 49% of the total employment, followed by manganese ore 18%, lead & zinc concentrates 9%, bauxite and chromite 8% each and copper concentrates and gold 4% each. The share of limestone in the labour employed in non-metallic minerals was 43% followed by dolomite 7%, kaolin, steatite and quartz (5% each); Sillimanite 4%; silica sand, felspar, garnet (abrasive) and apatite & phosphorite (3% each) while remaining 19% labour were employed in other non-metallic minerals.

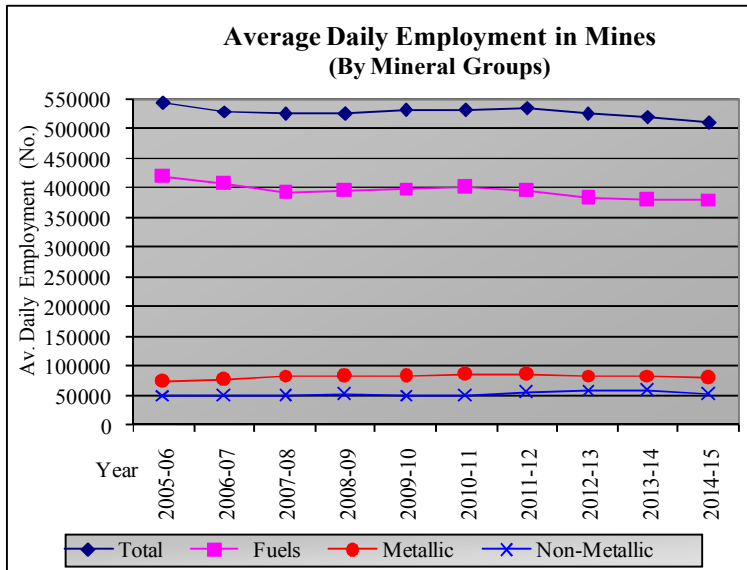
In the case of metallic and non-metallic minerals covered under MCDR,

1988 (which excludes fuel, atomic and minor minerals) 494 mines of category 'A' employed 83 thousand persons while 2477 mines of 'B' category employed about 46 thousand persons in 2014-15. The contribution of category 'A' and category 'B' mines to the total value of MCDR minerals in 2014-15 was 78% and 22% respectively. About 40 thousand persons were engaged in 207 public sector mines and 89 thousand persons engaged in 2764 private sector mines in 2014-15. The shares of public and the private sectors in the total value of metallic and non-metallic minerals production were 42% and 58% respectively.

Average Daily Employment in Mines, 2005-06 to 2014-15 (By Groups)				
Year	Total	Fuels*	Metallic Minerals	Non-metallic Minerals
2005-06	541330	418178	73188	49964
2006-07	528434	404960	75039	48435
2007-08	523171	390937	83181	49053
2008-09	525024	392988	81119	50917
2009-10	530699	398845	82000	49854
2010-11	531122	399570	83865	47687
2011-12	532552	393384	85361	53807
2012-13	523352	380815	83172	59365
2013-14	518926	378070	82820	58036
2014-15(P)	508925	379935	78150	50840

*: *Calendar year*

Source: *Fuel - DGMS, Dhanbad*
Metallic & Non-metallic - Returns received under MCDR, 1988.


Average Daily Employment in Mines
(By Mineral Groups)
Av. Daily Employment (No.)
550000
500000
450000
400000
350000
300000
250000
200000
150000
100000
50000
0
Year
2005-06
2006-07
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
Total
Fuels
Metallic
Non-Metallic

Average Daily Employment in Metallic Minerals Mines, 2014-15(P) (By Sectors)			
Mineral	Total	Public	Private
Total	**78150**	**30006**	**48144**
Iron Ore	38059	12509	25550
Manganese Ore	14031	7567	6464
Lead & Zinc Concentrates	6999	-	6999
Chromite	6077	2051	4026
Bauxite	6048	1029	5019
Copper Concentrates	3470	3470	-
Gold	3432	3380	52
Tin Concentrates	34	-	34

Average Daily Employment in Non-Metallic Minerals Mines, 2014-15(P) (By Sectors)			
Mineral	Total	Public	Private
Total	**50840**	**10084**	**40756**
Limestone	21655	2656	18999
Dolomite	3338	822	2516
Kaolin	2787	225	2562
Steatite	2689	-	2689
Quartz	2450	55	2395
Sillimanite	2017	2017	-
Silica Sand	1716	147	1569
Felspar	1591	-	1591
Garnet (Abrasive)	1570	1123	447
Apatite & Phosphorite	1474	1269	205
Pyrophyllite	1140	38	1102
Chalk	1011	-	1011
Others	7402	1732	5670

Employment in Mines, 2014-15(P) (Metallic & Non-Metallic Minerals) (By Category/Sector)			
Category/Sector	No. of Mines	Average Daily Employment for the Group	Value of Production (Rs. Crore)
Total	**2971**	**128990**	**45920**
Category A	494	83074	35930
Category B	2477	45916	9990
Public Sector	207	40090	19257
Private Sector	2764	88900	26663

Category 'A' *i) Mechanised Mines*
ii) > 150 labours in all
iii) > 75 labours in workings below ground

Category 'B' *: Other than 'A'*

Section – 6

Consumption of Minerals

Section-6

Consumption of Minerals

Iron & Steel Industry

Iron ore is the basic raw material required for iron & steel industry. Besides coal, limestone, dolomite and manganese ore are also consumed.

During the year 2014-15, upward trend of mineral consumption in above minerals was observed in iron & steel industry. The increase in consumption was noticed in respect of limestone (0.3%), iron ore (4.8%), manganese ore (3.5%) and dolomite (4.7%) as compared to previouis year.

Consumption of coal maintained almost the same level in 2014-15 as compared to previous year.

Cement Industry

Important minerals, consumed in cement industry are limestone with other calcareous materials and gypsum. Quartz, bauxite, coal, kaolin (china clay), fire clay and iron ore are also consumed.

During the year 2014-15 consumption increased in respect of quartz (14.9%) and bauxite (5.3%) while marginal decrease was observed in case of iron ore

(3.9%), gypsum (2.6%), limestone (0.7%), kaolin (0.15%) and fireclay (4.4%).The consumption of coal was at the same level as compared to previous year.

Refractory Industry

During the year 2014-15 increase in consumption was observed in respect of dolomite (9%), kyanite and sillimanite (4.5%) while decrease in consumption was noticed in bauxite/diaspore (1.4%), chromite (4.2%), fireclay (2.2%), kaolin (17.6%) and quartz & quartzite (4.4%).

The consumption of magnesite maintained almost the same level as that in the previous year.

Consumption of Minerals in Iron & Steel Industry, 2005-06 to 2014-15

('000 tonnes)

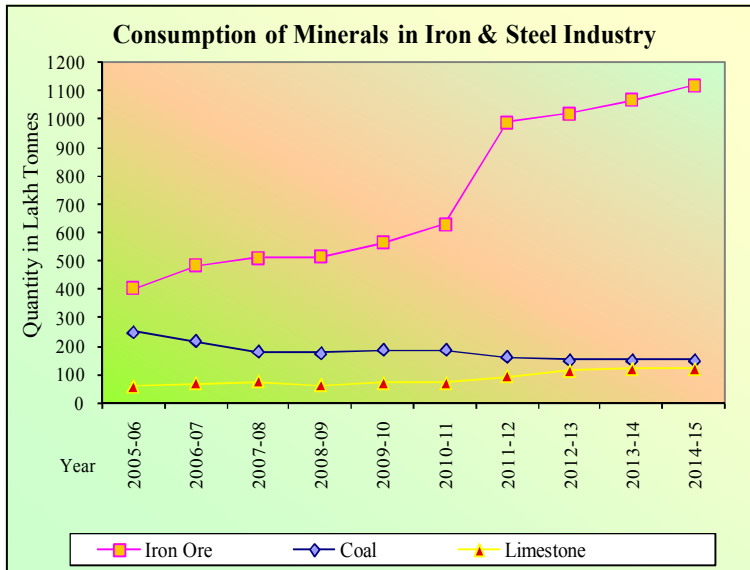
Year	Iron Ore*^	Coal*@	Lime-stone*	Dolomite	Manganese Ore	Ferro-Alloys	Bauxite	Fire clay	Fluorite
2005-06	402	252	59	3740	123	395	1	N.A.	N.A.
2006-07	484	217.7	69.6	4330	139	418	1	20	3
2007-08	513.0	179.7	73.2	4580	108	449	1	21	2
2008-09	516.6	177.7	62.3	4790	148	538	1	35	3
2009-10	564.2	185.7	72.5	4360	135	574	1	35	1
2010-11(R)	629.5	186.3	72.5	5290[$]	151	571	1	29	3
2011-12(R)	990.0	160.5	93.2	5840[$]	254	630	1	11	2
2012-13(R)	1019.6	150.7[#]	114.1	5355[$]	255	416	1	11	2
2013-14(R)	1068.4	150.7[#]	119.6	5544[$]	262	406	1	11	2
2014-15(P)	1120.3	150.7[#]	120.0	5807[$]	271	415	N.A.	N.A.	N.A.

[*] *Lakh tonnes. @ Relates to despatches of coal. (R) Revised (P) Provisional*

[#] *Provisional coal statistics, 2013-14, Office of the Coal Controller, Kolkata.*

[$] *The figures for iron & steel and pelletisation (iron & steel) added.*

^ *Iron & steel industry including sponge iron.*


Consumption of Minerals in Iron & Steel Industry
Quantity in Lakh Tonnes
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
Year
2005-06
2006-07
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
Iron Ore
Coal
Limestone

Consumption of Minerals in Cement Industry, 2005-06 to 2014-15

('000 tonnes)

Year	Limestone*#	Coal*@	Gypsum*	Quartz $	Bauxite	Iron Ore	Kaolin	Fireclay
2005-06	1320	147	49	289	516	950	238	262
2006-07	1570	147	57	293	693	1066	243	262
2007-08	1680	152.7	59.5	293	615	1022	270	247
2008-09	1720	131.2	65.6	298	1144	1074	339	245
2009-10	2030	131.2	69.8	279	1043	1294	642	245
2010-11(R)	2320	141.8	82.1	332	1082	1494	665	286
2011-12(R)	2400	128.8	86.2	356	1041	1548	665	276
2012-13(R)	2533	135.5 #	92.3	382	535	1586	665	253
2013-14(R)	2527	135.5(e)	91.8	334	561	1455	663	294
2014-15(P)	2510	135.5(e)	89.4	384	591	1397	662	281

* *Lakh tonnes. #: Limestone and other calcareous material. (R) Revised (P) Provisional*

@ *Relates to despatches of coal. $:Includes Quartz, Quartzite and Silica Sand.*

Provisional coal statistics, 2013-14, Office of the Coal Controller, Kolkata.

Consumption of Minerals in Refractory Industry, 2005-06 to 2014-15

('000 tonnes)

Year	Dolomite	Fire clay	Magnesite*	Quartz & Quartzite	Bauxite & Diaspore	Chromite*	Kyanite & Sillimanite	Kaolin
2005-06	373	188	215	61	295	21	24	24
2006-07	373	179	239	59	295	23	28	23
2007-08	63	182	239	53	304	23	20	28
2008-09	63	182	312	54	318	24	17	28
2009-10	63	163	229	65	128	24	18	33
2010-11(R)	213	171	163	43	118	45	15	34
2011-12(R)	213	182	112	46	280	25	15	35
2012-13(R)	375	181	91	69	313	24	21	33
2013-14(R)	321	176	58	68	291	24	22	34
2014-15(P)	350	172	58	65	287	23	23	28

* *Includes consumption in iron & steel industry.*

(R) :Regular

(P): Provisional

Section – 7

Production of Mineral-Based Products

Section – 7

Production of Mineral-Based Products

Cement and Asbestos-Cement Products

The output of cement in the country has increased by about 86% during 2014-15 at 2613 lakh tonne as compared to 1405 lakh tonnes in 2005-06 and it was nearly 5% higher as compared to the level of previous year.

Ceramic Products

The total production of ceramic products consisting of glazed tiles and insulators showed increasing trend from 1121 thousand tonnes in 2005-06 to a highest level of 1634 thousand tonnes in the year 2011-12 and then decreased to 1538 thousand tonnes in the year 2014-15. The output of glazed tiles at 1077 thousand tonne in 2005-06 recorded an increasing trend till 2011-12 and was at 1477 thousand tonne during 2014-15. Production of insulators had a fluctuating trend during the decade and was at the level of 61 thousand tonne during 2014-15.

Fertilisers and Sulphuric Acid

The output of fertilisers witnessed fluctuations during the decade and reported the production of 16.7 million tonnes in 2014-15. The production of sulphuric acid at 5018 thousand tonne was 11% lower in 2014-15 as compared to the previous year.

Production of Cement and Asbestos-Cement Products, 2005-06 to 2014-15[@]

Year	Cement	Asbestos-Cement Products*
	Production (Lakh tonnes)	Production ('000 tonnes)
2005-06	1405	2050
2006-07	1547	2232
2007-08	1676	2448
2008-09	1814	2382
2009-10	2007	2606
2010-11	2097	2468
2011-12	2235	N.A.
2012-13	2406	N.A.
2013-14	2498	N.A.
2014-15(P)	2613	N.A.

** Includes the production of asbestos cement sheets and Asbestos cement pressure & building pipes, etc.*

Source: Department of Industrial Policy and Promotion.

@ Production figures pertain to the units included in the sample/frame for Index of Industrial Production with base year 2004-05.

Production of Ceramic Products, 2005-06 to 2014-15@ ('000 tonnes)		
Year	Glazed Tiles	Insulators (H.T. and L.T.)
2005-06	1077	44
2006-07	1340	41
2007-08	1365	55
2008-09	1381	56
2009-10	1452	61
2010-11	1478	68
2011-12	1573	61
2012-13	1464	56
2013-14	1451	58
2014-15(P)	1477	61

Source: Department of Industrial Policy and Promotion.

@ Production figures pertain to the units included in the sample/frame for Index of Industrial Production with base year 2004-05.

Production of Fertilisers, 2005-06 to 2014-15

('000 tonnes)

Year	Phosphatic	Nitrogenous
2005-06	4221	11354
2006-07	4517	11578
2007-08	3807	10900
2008-09	3464	10870
2009-10	4321	11900
2010-11	4222	12156
2011-12	4101	12259
2012-13	3541	12194
2013-14	3714	12378
2014-15*	4017	12683

Source: Annual Report 2014-15,
Department of Fertilisers,
Ministry of Chemicals and Fertilisers.

** : Figures reported are estimated.*

Production of Sulphuric Acid, 2005-06 to 2014-15[@] ('000 tonnes)	
Year	Production
2005-06	6974
2006-07	7156
2007-08	6569
2008-09	6395
2009-10	7444
2010-11	5670
2011-12	5870
2012-13	5730
2013-14	5619
2014-15(P)	5018

Source: Department of Industrial Policy and Promotion.

@ Production figures pertain to the units included in the sample/frame for Index of Industrial Production with base year 2004-05.

Section – 8

Mining Machinery

Mining Machinery, 2014-15

Section – 8

Mining Machinery

During the reporting year, 2014-15, a total number of 493 opencast mechanised mines were covered for compilation for preparation of statement on mining machinery as against 673 mines covered during 2013-14. Hence, there is an decrease of 26.7% on the coverage of mines during the year.

The majority of the mechanised mines covered are of limestone, iron ore, bauxite, gypsum, manganese ore, chromite and others. Conventional method of deep-hole blasting with Shovel – Dumper combination is mostly found.

It is observed that there is a decrease in the number of mining machinery like Hauler/Dumper, Front-End Loader, Bull Dozer, Back Hoe, Blast Holes Drills, Dipper Shovel (Mech.), Cranes and Locomotives, Drills/Blast Holes, Motor Grader, Dipper Shovel (Hydraulic), Crusher, Air Compressor; whereas, an increase in the population of Surface Miner during the reporting year. However, there was an overall decrease in the number of mining machinery to the extent of 16.39 percent.

Mining Machinery in Metalliferrous Opencast Mechanised Mines in India, 2014-15

Dipper Shovels (Mechanical and Hydraulic)

Capacity (Cu.m)	Total			Mechanical			Hydraulic		
	Total	Public	Private	Total	Public	Private	Total	Public	Private
In Use (Nos.)									
< 1.16	88	5	83	2	-	2	86	5	81
1.16-2.30	43	2	41	-	-	-	43	2	41
2.31-3.45	41	10	31	-	-	-	41	10	31
3.46-4.60	122	18	104	2	2	-	120	16	104
>4.60	63	17	46	-	-	-	63	17	46
Total	**357**	**52**	**305**	**4**	**2**	**2**	**353**	**50**	**303**
In Reserve (Nos.)									
< 1.16	2	2	-	-	-	-	2	2	-
1.16-2.30	1	1	-	-	-	-	1	1	-
2.31-3.45	7	3	4	-	-	-	7	3	4
3.46-4.60	10	3	7	-	-	-	10	3	7
>4.60	5	-	5	-	-	-	5	-	5
Total	**25**	**9**	**16**	-	-	-	**25**	**9**	**16**

Mining Machinery in Metalliferrous Opencast Mechanised Mines in India, 2014-15

Front End Loaders

Capacity (cu.m.)	In Use (Nos.)			In Reserve (Nos.)		
	Total	Public	Private	Total	Public	Private
< 1.16	55	7	48	1	-	1
1.16 – 2.30	301	29	272	16	6	10
2.31 – 3.45	86	22	64	7	2	5
3.46 – 4.60	39	7	32	1	-	1
> 4.60	45	14	31	1	-	1
Total	**526**	**79**	**447**	**26**	**8**	**18**

Mining Machinery in Metalliferrous Opencast Mechanised Mines in India, 2014-15

Bulldozers/Ripper Dozers

Capacity (h.p.)	In Use (Nos.)			In Reserve (Nos.)		
	Total	Public	Private	Total	Public	Private
< 100	39	6	33	4	1	3
100-200	70	14	56	3	0	3
201-300	45	6	39	6	1	5
301-400	101	19	82	4	3	1
> 400	57	35	22	4	2	2
Total	**312**	**80**	**232**	**21**	**7**	**14**

Mining Machinery in Metalliferrous Opencast Mechanised Mines in India, 2014-15
Motor Graders

Capacity (h.p.)	In Use (Nos.)			In Reserve (Nos.)		
	Total	Public	Private	Total	Public	Private
< 100	11	6	5	-	-	-
100-200	28	3	25	1	-	1
201-300	24	8	16	2	2	-
301-400	7	4	3	2	1	1
> 400	4	4	-	-	-	-
Total	**74**	**25**	**49**	**5**	**3**	**2**

Mining Machinery in Metalliferrous Opencast Mechanised Mines in India, 2014-15

Haulers/Dumpers

Capacity (tonnes)	In Use (Nos.)			In Reserve (Nos.)		
	Total	Public	Private	Total	Public	Private
< 10	1628	123	1505	48	2	46
10-20	1481	259	1222	90	33	57
21-30	1024	243	781	60	22	38
31-40	509	57	452	36	4	32
41-60	378	92	286	58	5	53
61-100	62	19	43	-	-	-
101-150	50	32	18	17	14	3
> 150	38	7	31	28	-	28
Total	**5170**	**832**	**4338**	**337**	**80**	**257**

Mining Machinery in Metalliferrous Opencast Mechanised Mines in India, 2014-15

Drills/Blast Holes

Capacity in diameter of the hole/bit (m.m.)	In Use (Nos.)			In Reserve (Nos.)		
	Total	Public	Private	Total	Public	Private
< 50	157	58	99	32	8	24
50-100	85	19	66	15	10	5
101-150	324	63	261	36	9	27
151-200	66	17	49	2	-	2
> 200	-	-	-	-	-	-
Total	**632**	**157**	**475**	**85**	**27**	**58**

Mining Machinery in Metalliferrous Opencast Mechanised Mines in India, 2014-15

Crushers

Capacity (tonnes/hour)	In Use (Nos.)			In Reserve (Nos.)		
	Total	Public	Private	Total	Public	Private
< 10	18	1	17	-	-	-
10-50	31	5	26	4	1	3
51-100	60	1	59	2	-	2
101-300	152	22	130	4	1	3
301-500	45	6	39	-	-	-
> 500	91	22	69	4	1	3
Total	**397**	**57**	**340**	**14**	**3**	**11**

Mining Machinery in Metalliferrous Opencast Mechanised Mines in India, 2014-15

Air Compressors (Diesel & Electric)

Capacity	Total			Diesel			Electric		
(cu.m./min.)	Total	Public	Private	Total	Public	Private	Total	Public	Private
In Use (Nos.)									
< 5	98	14	84	71	7	64	27	7	20
5.0 – 10	84	12	72	69	5	64	15	7	8
10.1 – 15	178	45	133	159	40	119	19	5	14
15.1 – 50	77	14	63	65	6	59	12	8	4
50.1 – 100	32	6	26	29	5	24	3	1	2
> 100	96	9	87	88	6	82	8	3	5
Total	**565**	**100**	**465**	**481**	**69**	**412**	**84**	**31**	**53**
In Reserve (Nos.)									
< 5	6	2	4	4	2	2	2	-	2
5.0 – 10	6	1	5	3	-	3	3	1	2
10.1 – 15	23	5	18	23	5	18	-	-	-
15.1 – 50	3	1	2	2	-	2	1	1	-
50.1 – 100	-	-	-	-	-	-	-	-	-
> 100	6	-	6	6	-	6	-	-	-
Total	**44**	**9**	**35**	**38**	**7**	**31**	**6**	**2**	**4**

Mining Machinery in Metalliferrous Opencast Mechanised Mines in India, 2014-15

Locomotives

Pay load capacity (tonnes)	In Use (Nos.)			In Reserve (Nos.)		
	Total	Public	Private	Total	Public	Private
< 50	3	3	-	-	-	-
50-100	3	-	3	-	-	-
101-150	3	2	1	-	-	-
151-200	-	-	-	-	-	-
> 200	2	-	2	-	-	-
Total	**11**	**5**	**6**	**-**	**-**	**-**

Mining Machinery in Metalliferrous Opencast Mechanised Mines in India, 2014-15

Back Hoes

Capacity (cu.m.)	In Use (Nos.)			In Reserve (Nos.)		
	Total	Public	Private	Total	Public	Private
< 1.16	374	41	333	21	8	13
1.16 – 2.30	319	43	276	14	1	13
2.31 – 3.45	164	24	140	8	2	6
3.46 – 4.60	32	2	30	3	-	3
> 4.60	36	8	28	1	-	1
Total	**925**	**118**	**807**	**47**	**11**	**36**

Mining Machinery in Metalliferrous Opencast Mechanised Mines in India, 2014-15

Cranes

Lifting capacity (tonnes/hour)	In Use (Nos.)			In Reserve (Nos.)		
	Total	Public	Private	Total	Public	Private
< 10	53	17	36	2	-	2
10-20	35	13	22	-	-	-
21-50	23	13	10	1	-	1
51-75	9	1	8	-	-	-
> 75	-	-	-	-	-	-
Total	**120**	**44**	**76**	**3**	-	**3**

Mining Machinery in Metalliferrous Opencast Mechanised Mines in India, 2014-15

Surface Miners

Capacity (tonnes/hour)	In Use (Nos.)			In Reserve (Nos.)		
	Total	Public	Private	Total	Public	Private
< 150	13	-	13	-	-	-
150-200	7	-	7	-	-	-
201-250	3	-	3	-	-	-
251-300	7	-	7	-	-	-
> 300	3	-	3	-	-	-
Total	**33**	-	**33**	-	-	-

Appendix - I

Decennial Growth in Production of Important Minerals

Mineral	Unit	1954	1964	1974	1984	1994-95	2004-05	2014-15 (p)
Fuels								
Coal	'000 t	37441	62440	84102	143873	257770	382615	609200
Lignite	'000 t	30	1569	3044	7680	19256	30475	48300
Natural Gas (Utilised)	m.cu. m.	-	182	1003	3922	17339	30820	33656
Petroleum (Crude)	'000 t	308	2212	7490	27933	32239	34015	37461
Metallic Minerals								
Bauxite	'000 t	76	593	1114	2093	4899	11964	22226
Chromite	'000 t	46	36	395	459	1138	3621	2164
Copper Concentrates	'000 t	N.A.	37	95	226	245	137	108
Copper Ore	'000 t	348	473	1429	3923	4767	2929	3586
Gold	Kg.	7439	4619	3145	1989	2373	3526	1440
Gold Ore	'000 t	N.A.	625	524	493	434	493	449
Iron Ore	'000 t	5758	21388	35545	42310	64507	145942	128909
Lead Concentrates	'000 t	3	6	11	35	53	82	198
Zinc Concentrates	'000 t	4	11	29	86	269	666	1502
Lead & Zinc Ore	'000 t	N.A.	174	609	1350	2179	3929	9346
Manganese Ore	'000 t	1542	1407	1504	1147	1681	2386	2345
Silver	kg.	5013	4735	4581	24886	45911	10955	327647

(Contd.)

Decennial Growth in Production of Important Minerals (Concld.)

Mineral	Unit	1954	1964	1974	1984	1994-95	2004-05	2014-15 (p)
Non-Metallic Minerals								
Apatite & Phosphorite	'000 t	2	4	451	890	1108	1732	1580
Barytes	'000 t	19	47	146	468	531	1159	911
Diamond	th. carats	2	2	21	14	26	78	36
Dolomite	'000 t	140	521	1195	2383	3376	4339	6210
Fire Clay	'000 t	93	453	792	735	427	663	713
Gypsum	'000 t	622	882	1073	1268	1646	3685	2478
Kaolin	'000 t	148	212	363	625	732	934	3861
Kyanite	'000 t	43	34	42	38	5	8	6
Sillimanite	'000 t	3	12	3	18	10	31	66
Laterite	'000 t	N.A.	N.A.	N.A.	N.A.	443	950	4651
Limestone	'000 t	7263	17017	25948	45857	93207	165753	292810
Magnesite	'000 t	72	208	266	420	334	384	276
Mica (Crude)	tonnes	5308	22810	13804	6170	1988	1276	636
Steatite	'000 t	43	136	293	345	409	684	774

* Relates to dressed mica.

Appendix – II

Decennial Mineral Production

Mineral	Unit	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15 (p)
Fuels											
Coal	'000 t	407039	430832	457082	492757	532042	532694	539950	556400	565800	609200
Lignite	'000 t	30066	31285	33980	32421	34071	37733	42332	46500	44300	48300
Natural Gas(Ut.)	m. cu. m.	32202	31747	32417	32845	47496	52219	47559	40679	35407	33656
Petroleum(Crude)	'000 t	32190	33988	34118	33508	33690	37684	38090	37862	37788	37461
Metallic Minerals											
Bauxite	t	12595803	15732535	22624960	15460202	14124093	12722820	13599566	16507960	22319148	22226062
Chromite	t	3714284	5295551	4872684	4073479	3425580	4325699	2923435	2833895	2878320	2163942
Copper Ore	t	2642706	3273906	3242371	3452406	3271169	3601984	3479189	3635751	3777772	3586028
Copper Conc.	t	125392	149584	150187	137514	124577	136856	130456	123654	139307	107541
Gold Ore	t	479353	512609	681243	587215	517520	741522	491562	502831	420429	448671
Gold	kg	3047	2488	2969	2438	2084	2399	2194	1588	1564	1440
Iron Ore	'000 t	165230	187696	213250	212960	218553	207157	168582	136618	152183	128909
Lead &Zinc Ore	t	4801184	5139915	5783099	6680698	7101872	7539999	8041881	8633411	9281807	9346349
Lead Conc.	t	95738	107334	125755	133768	133921	147625	161854	184486	194426	197668
Zinc Conc.	t	889007	947387	1035828	1224077	1279880	1427231	1414009	1492781	1490662	1501586
Manganese Ore	t	1906353	2115507	2696980	2789025	2491950	3056385	2411871	2342169	2626291	2345361
Silver	kg	27961	53271	80697	105284	138780	148303	207144	374046	349774	327647
Tin Conc.	kg	98734	100835	63218	59778	59016	60643	48765	47774	34862	24689

Decennial Mineral Production (Contd…)

Mineral	Unit	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15 (p)
Non-Metallic Minerals											
Agate	t	9	38	25	-	11	19	476	493	100	-
Apatite	t	9053	9464	6691	6415	5992	3846	3053	572	1300	930
Phosphorite	t	2049277	1993468	1849188	1803954	1605489	2097490	2259726	1941158	1453580	1579561
Asbestos	t	2323	390	269	315	243	268	276	389	172	-
Ball Clay	t	406675	626801	796134	997676	932993	1086714	1646516	1750559	2130995	1910060
Barytes	t	1156227	1680695	1076290	1686148	2152552	2338806	1776980	1789431	1170522	910963
Calcite	t	73558	105724	86364	67284	49309	38826	54081	74488	92122	91783
Chalk	t	148352	210838	194934	203085	185218	177197	178736	175516	142696	94467
Clay (Others)	t	805765	1224235	818993	1220783	1056273	730752	1417684	2680726	2506662	2248184
Corundum	kg	58000	156000	89920	21000	6600	-	37000	5000	-	-
Diamond	crt	44170	2180	586	536	16891	11222	18490	31988	37517	35724
Diaspore	t	24494	15944	21236	24642	25569	26082	23818	16222	14599	12207
Dolomite	t	4750512	5171649	5852296	5509237	5911759	5839710	5968554	7233958	7310599	6209476
Dunite	t	36621	29708	57989	50935	71642	23716	38774	88274	64917	75050
Felspar	t	426498	479715	488458	534032	496997	546472	835526	1459008	1512982	1343366
Fireclay	t	535735	497402	544973	495781	548748	856741	983155	999925	920809	712792
Felsite	t	981	642	550	1238	3049	1670	1117	1266	551	324

Decennial Mineral Production (Contd…)

Mineral	Unit	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15 (p)
Fluorite (Graded)	t	5577	2053	3970	3176	105232	59954	5010	3092	2487	2947
Fluorite (Conc.)	t	3764	-	3794	6814	-	-	-	-	-	-
Flint Stone	t	-	-	-	-	-	-	708	633	459	294
Garnet (Abrasive)	t	671541	865618	1275919	1151241	1580617	2126337	1717904	768248	483559	78924
Garnet (Gem)	kg	-	-	-	-	-	-	-	-	-	-
Graphite (R.O.M.)	t	125651	162293	170813	117767	124625	115697	153339	134735	146390	116512
Gypsum	t	3291478	3005572	3400050	3876671	3370322	4918170	3978806	3556723	3115363	2477849
Iolite	kg	-	-	-	-	758	4	-	-	-	-
Jasper	t	536	-	-	99	-	-	-	-	-	-
Kaolin	t	1335744	1460363	1466442	2083731	2798340	2727946	3076795	4258697	4853420	3861380
Kyanite	t	8869	8059	5102	4620	5495	5954	4064	1048	3679	6260
Sillimanite	t	33119	26366	40537	33702	33687	48784	59206	43736	67265	66025
Laterite	t	1040816	1476260	1478590	1237393	1300772	1220304	2815275	4224842	3475368	4650597
Limestone	'000 t	170029	196695	193089	221573	232950	246336	262882	285030	280863	292810
LimeKankar	t	291926	395817	336385	434332	335067	383817	311219	192426	140088	111382
Limeshell	t	110296	103548	128250	97856	62215	30410	33225	24044	18750	16150
Magnesite	t	340674	238981	252849	252880	301070	235762	224104	224315	196940	275678
Marl	t	-	-	4155925	4167452	5908226	4399379	4140577	4337009	3254486	2179489

Decennial Mineral Production (Concld.)

Mineral	Unit	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15 (p)
Mica (Crude)	t	2116	1411	4578	1462	1061	1333	1899	1256	1660	636
Mica(Waste &Scrap)	t	4754	3170	3505	5685	8098	7311	14186	16255	19752	11852
Ochre	t	1007088	1047831	1233221	766382	1258207	1218261	1576265	1833783	1580675	2203708
Perlite	t	122	68	-	-	-	-	-	-	-	-
Pyrophyllite	t	182526	147807	203707	255699	240747	240082	255891	247968	224677	147431
Pyroxenite	t	340953	301733	289321	281785	279332	253205	86031	58562	2985	-
Quartz	t	302259	293660	315281	430734	512320	497546	782575	1384155	1488743	1381406
Quartzite	t	109210	102711	95850	97458	112652	118117	272141	501399	584235	583095
Silica Sand	t	2369977	2663289	4303513	2836804	2545988	3380968	4867667	4303883	3724241	3047485
Moulding Sand	t	-	-	-	-	-	-	30	3118	29963	6383
Sand (Others)	t	2277632	1770235	1804306	1808185	2159405	2057119	2625111	2638424	2577869	2100563
Salt (Rock)	t	1871	1714	1216	2011	1836	1200	-	-	-	-
Shale	t	2683853	2849877	2894922	3047063	3033948	3081622	3439775	3067718	3006945	2792904
Slate	t	2527	4	7827	8931	-	-	0	278	351	218
Steatite	t	681534	739849	922505	888995	876548	902686	998438	971778	887925	774281
Selenite	t	-	-	3864	15224	14598	6736	13047	7577	531	207
Sulphur	t	152090	204186	227311	269572	263124	236998	381146	449004	390325	429258
Vermiculite	t	6674	11827	8910	12647	11662	19234	10194	7947	11851	15327
Wollastonite	t	128582	131572	118666	111581	132385	183381	184445	145667	192712	186519