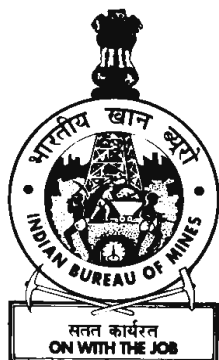


STATE REVIEWS



Indian Minerals Yearbook 2012

(Part- I)

51st Edition

STATE REVIEWS
(Chhattisgarh)

(FINAL RELEASE)

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CHHATTISGARH

Mineral Resources

Chhattisgarh is the sole producer of tin concentrates and is one of the leading producers of coal, dolomite, bauxite and iron ore. The State accounts for about 36% tin ore, 18% iron ore (hematite), 17% coal and 11% dolomite and resources of the country. Important mineral occurrences of the State are **bauxite** in Bastar, Bilaspur, Dantewada, Jashpur, Kanker, Kawardha (Kabirdham), Korba, Raigarh & Sarguja districts; **china clay** in Durg & Rajnandgaon districts; **coal** in Korba, Korba, Raigarh & Sarguja districts; **dolomite** in Bastar, Bilaspur, Durg, Janjgir-Champa, Raigarh & Raipur districts; and **iron ore (hematite)** in Bastar district, Bailadila deposit in Dantewada district, Chhote Dongar deposit in Kanker district, Rowghat, Chargaon, Metabodeli & Hahaladdi deposits in Rajnandgaon district, Boria Tibbu deposits in Dalli-Rajhara area, Durg district. Bailadila-Rowghat hill ranges in the State are considered to be one of the biggest iron ore

fields in India. **Limestone** occurs in Bastar, Bilaspur, Durg, Janjgir-Champa, Kawardha (Kabirdham), Raigarh, Raipur & Rajnandgaon districts; **quartzite** in Durg, Raipur, Rajnandgaon & Raigarh districts; and **talc/soapstone/steatite** in Durg & Kanker districts.

Other minerals found in the State are **corundum** in Dantewada district; **diamond** and other gemstones in Raipur, Mahasamund and Dhamtari districts; **fire clay** in Bilaspur, Raigarh and Rajnandgaon districts; **fluorite** in Rajnandgaon district; **garnet & marble** in Bastar district; **emerald** and **gold** in Raipur district; **granite** in Bastar, Kanker & Raipur districts; **quartz/silica sand** in Durg, Jashpur, Raigarh, Raipur & Rajnandgaon districts; and **tin** in Bastar & Dantewada districts (Table - 1). The reserves of coal are given in (Table - 2).

Exploration & Development

The details of exploration activities conducted by various agencies during 2011-12 are furnished in Table-3.

Table – 2 : Reserves/Resources of Coal as on 1.4.2012 : Chhattisgarh

(In million tonnes)

Coalfield	Proved	Indicated	Inferred	Total
Total	13987.85	33448.25	3410.05	50846.15
Sohagpur	94.30	10.08	-	104.38
Sonhat	199.49	2463.86	1.89	2665.24
Jhilimili	228.20	38.90	-	267.10
Chirimiri	320.33	10.83	31.00	362.16
Bisrampur	986.06	628.64	-	1614.70
Bisrampur (East)	-	164.82	-	164.82
Lakhanpur	455.88	3.35	-	459.23
Panchbahini	-	11.00	-	11.00
Hasdeo-Arand	1369.84	3629.64	397.99	5397.47
Sendurgarh	152.89	126.32	-	279.21
Korba	5651.14	5936.50	168.02	11755.66
Mand-Raigarh	4479.29	18031.59	2608.96	25119.84
Tatapani-Ramkola	50.43	2392.72	202.19	2645.34

Source: Coal Directory of India, 2011-12.

Table – 1 : Reserves/Resources of Minerals as on 1.4.2010 : Chhattisgarh

Mineral	Unit	Reserves						Remaining resources						Total resources (A+B)	
		Proved		Probable		Total (A)	Feasibility STD211	Pre-feasibility		Measured STD331	Indicated STD332	Inferred STD333	Reconnaissance STD334		Total (B)
		STD 111	STD121	STD122	STD221			STD222							
Bauxite	'000 tonnes	21246	48435	4818	74499	3992	4069	875	33764	11792	23241	18747	96480	170979	
China Clay	'000 tonnes	834	-	344	1178	480	765	1076	-	-	11512	-	13832	15009	
Corundum	tonne	-	310	288	597	-	-	-	-	-	288	-	288	885	
Diamond	carat	-	-	-	-	-	-	-	-	-	1304000	-	1304000	1304000	
Dolomite	'000 tonnes	41628	12984	6225	60836	19289	50384	24355	150795	24837	514235	1950	785846	846682	
Fireclay	'000 tonnes	-	23	12	35	-	27	-	7180	3400	10336	-	20943	20978	
Fluorite	tonne	-	-	-	-	65889	153132	9288	185485	5573	126088	-	545455	545455	
Garnet	tonne	-	-	-	-	-	-	-	-	-	28800	-	28800	28800	
Gold															
Ore (primary)	tonne	-	-	-	-	-	-	-	-	600000	4241033	-	4841033	4841033	
Metal (primary)	tonne	-	-	-	-	-	-	-	-	1.8	3.71	-	5.51	5.51	
Granite (Dim. stone)	'000 cu m	-	-	-	-	-	-	-	-	-	50057	-	50057	50057	
Iron ore (Hematite)	'000 tonnes	636460	-	263650	900110	114382	5080	15610	107625	527563	872739	748715	2391714	3291824	
Limestone	'000 tonnes	856930	10962	30004	897896	46468	742220	80465	1331984	480812	5379600	-	8061550	8959446	
Marble	'000 tonnes	-	-	-	-	-	-	-	-	-	83000	-	83000	83000	
Quartz-silica sand	'000 tonnes	141	-	46	187	385	-	620	56	-	191	7672	8924	9111	
Quartzite	'000 tonnes	1404	-	1267	2672	3086	3926	2195	-	-	14706	-	23913	26584	
Talc/soapstone steatite	'000 tonnes	22	-	8	30	-	-	-	-	70	8	-	78	108	
Tin															
Ore	tonne	4404	1015	1713	7131	-	1690	-	168622	559914	29063345	-	29793572	29800703	
Metal	tonne	925.75	189.76	16.92	1132.43	-	152.11	-	894.91	209.43	13097.75	-	14354.20	15486.63	

Figures rounded off.

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Table – 3: Details of Exploration Activities in Chhattisgarh, 2011-12

Agency/ State/ District	Location	Mapping		Drilling		Sampling (No.)	Remarks Reserves/Resources estimated
		Scale	Area (sq km)	No. of boreholes	Meterage		
GSI Coal Raigarh	Nawagaon block	-	-	-	-	-	Regional exploration under G-2 stage was completed to establish the developmental pattern and continuity of the regional Barakar coal seams, already established in the Chainpur area in the west, Ongana-Potiya area in the north and Sithra-Kurekela sector in the southwest, and to assess coal resources potentiality as well as to carry out appraisal of CBM content. Twelve regional (Seam I to XII in ascending order) and eleven local Barakar coal seams I zones have been intersected between the depths of 11.96 m and 406.15 m. The important seams are Seam I, IV, VI, VII and VIII with cumulative thickness of coal ranging from less than a meter to 20.44 m. Seam IV is the thickest seam and was intersected between the depths of 44.66 m and 283.48 m. Regional continuity of coal seams was established 10 km along strike and 12 km along down-dip direction. The investigation was closed on 22.11.2011.
GSI Coal Raigarh	Teram block	-	-	-	-	-	Regional exploration under G-2 stage was taken up during F S 2010-12 in Mand-Raigarh Coalfield to establish the developmental pattern and continuity of the regional Barakar coal seams intersected in already explored adjacent Kurumkela Block in the north-central part of Mand-Raigarh Coalfield and to evaluate additional coal resource in the area. In Barakar Formation, ten regional (Seam III to XII in ascending order) and few local coal seams with thickness ranging from less than a metre to 12.55 m (cumulative) were intersected between the depths of 132.90 m and 729.10 m. Of these, the important seams are Seam -V, VI, XI and XII. The thickest seam, Seam VI is banded in nature and its cumulative thickness ranges from 6.55 m to 12.55 m. During the period, regional continuity of coal seams was established over a strike length of 5 km along strike and 3.5 km along down-dip direction. The work is in progress.

(Contd.)

STATE REVIEWS

Table - 3 (Contd.)

Agency/ State/ District	Location	Mapping		Drilling		Sampling (No.)	Remarks Reserves/Resources estimated
		Scale	Area (sq km)	No. of boreholes	Meterage		
- do -	Samarsingha block	-	-	-	-	-	Regional exploration under G-2 stage in this area, commenced during FS 2010-12 in order to establish the developmental pattern and continuity of the regional Barakar coal seams, already established in the Nawagaon Block in the north and Sithra-Kurekela area in the west, to assess coal resources potentiality and to carry out appraisal of CBM content. In Barakar Formation, thirteen nos of regional coal seams/zones (Seam I to XII in ascending order) with thickness ranging from less than a metre to 8.52 m (cumulative) were intersected between the depths of 56.20 m and 604.50 m. Among these, the important seams are seam-I, VI, VII & XII . The work is in progress.
Coal Mahanadi coal filed Sarguja	Korja block	-	-	-	-	-	Regional exploration under G-2 stage was taken up to establish the developmental pattern and continuity of the regional Barakar coal seams, established in previously explored Pendrakhi Block in the west, to assess coal resource potentiality of the area as well as to generate CBM baseline data. Four regional (Seam III to VI in ascending order) and four local (Seam L1 to L4 in ascending order) Barakar coal seams/zones have been intersected between depths of 65.83 m and 342.35 m. Coal Seam /Zone III, IV and V are considered to be significant because of their cumulative coal thickness which ranges from 2.57 m to 6.45 m. The work was completed on 27.02.2012.

(Contd.)

STATE REVIEWS

Table - 3 (Contd.)

Agency/ State/ District	Location	Mapping		Drilling		Sampling (No.)	Remarks Reserves/Resources estimated
		Scale	Area (sq km)	No. of boreholes	Meterage		
GSI Coal (Son valley coal fields) Surguja	Reonti (West)	-	-	-	-	-	Regional exploration for coal (G-2) was carried out to establish the continuity of Barakar coal seams beneath the younger Raniganj and Barren Measures Formations as well as to appraise its resource potentiality. Subsurface data revealed the presence of Raniganj, Barren Measures and Barakar formations. Six regional (I to VI in ascending order) and few local coal seams of Barakar Formation ranging in thickness from less than a metre to 66.66 m (cumulative) have been recorded between depths of 702.10 m and 880 m. Seams III to VI are important for their thickness and regional persistency. The seam nos. IV and V are represented by several nos of split sections with the maximum cumulative thickness being 12.73 m (4.84 m clean coal) and 66.66 m (22.67 m clean coal) respectively. Work was completed on 09.09.2011.
-do-	Vijaynagar Giddhi	-	-	-	-	-	Exploration (G-2) commenced during FS 2010-12 in order (a) to establish the structural disposition of the Lower Gondwana sequences, (b) to establish the continuity of Barakar coal seams beneath the cover of Barren Measures and Raniganj Formation, (c) to appraise the resource potentiality of Barakar coal seams and (d) to generate CBM Baseline Data. Thirteen regional (I to XIII in ascending order) and ten local Barakar coal seams/zones ranging in thickness from 0.50 m to 14.80 m were intersected between 22.55 m and 605.60 m depths. Seam II, III, IV, V, VI, VIII, XII & XIII are important for their thickness and regional persistency. Seam nos III (6.15 m to 14.80 m), IV (3.40 m to 7.65 m) and V (0.60 m to 8.40 m) contain several split sections. During the period, regional continuity of coal seams was established 4 km along strike and 1 km along down-dip direction.

(Contd.)

STATE REVIEWS

Table - 3 (Contd.)

Agency/ State/ District	Location	Mapping		Drilling		Sampling (No.)	Remarks Reserves/Resources estimated
		Scale	Area (sq km)	No. of boreholes	Meterage		
GSI Diamond Bilaspur	Raigarh- Bilaspur Belt	-	-	-	-	-	Reconnaissance stage investigation (G-4) was taken up during FS 2010-12 to locate kimberlite clan rocks in the granitic basement along the high permeable zone characterised by mafic dykes. The areas studied are mainly of Palaeoproterozoic granites, phyllite, mica schist, mafic dyke, metabasics of Bilaspur-Raigarh- Surguja belt, limestone, purple shale and sandstone of Chhattisgarh Supergroup and Talchir Formation of Gondwana Supergroup. Ground follow up of interpreted PGRS map was carried out in the area. Heavy minerals studies indicated the presence of garnet, ilmenite, spinel, zircon and other opaques in the stream sediment samples. Four grains of garnets analysed under SEM EDX were identified as almandine garnets with FeO upto 36.31% and MgO up to 2.78% with inclusion of quartz, zircon and apatite. The work has been completed.
Diamond	Part of Chhattisgarh	-	-	-	-	44	Regional ground evaluation of aerogeophysical anomalies (G-4) initiated during ES. 2009-10 were continued to delineate KCR bodies and other types of mineralisation. The area is occupied by Kansapathar sandstone of Chhattisgarh Supergroup followed by Barren Measure, Barakar Formation and Kamthi Formation of Gondwana group of rocks. Chemical analysis of total 20 bed rock samples, 20 soil samples and 4 calcrete samples do not show any encouraging result. The soil sample shows Cu 40 ppm, Co-115 ppm, Cr 175 ppm and Au < 100 ppb. Bedrock sample collected from Lamikhair shows as 10 ppm. Twenty KCR indicator mineral grains (garnet and ilmenite) by SEM-EDX exhibits garnets 4.31% to 7.61% MgO, which indicates possible occurrence of KCR bodies in the upstream side of sampling area. The work has been completed.

(Contd.)

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Table - 3 (Contd.)

Agency/ State/ District	Location	Mapping		Drilling		Sampling (No.)	Remarks Reserves/Resources estimated
		Scale	Area (sq km)	No. of boreholes	Meterage		
Gold Raipur	Palasapali	-	-	-	-	-	Reconnaissance stage investigation (G-4) was taken up during FS 2010-12, to delineate new prospect block for gold mineralisation. The area exposes amphibolite, meta-basalt, tremolite / actinolite schists of Baghmara Formation of Sonakhan Group. They have been intruded by thick gabbro and quartz vein. The primary sulphides, pyrite and pyrrhotite have been recorded in the amphibolite and quartz veins. In the quartz veins the sulphides are oxidised to brown black; lemon yellow. The gold mineralisation in the Bhanwarpur area is associated with silicification of the contact zone of granite with basic volcanics. The work has been completed.
DGM Coal Korba	Saila area	1:50,000 1:4,000	-	6	1797.20	-	Coal seams occur in Barakar formation of Gondwana Supergroup. Coal also occurs as cyclic succession of coal, shaly coal, carb shale, grey shale & sandstone. Altogether 14 coal seams were encountered and objective of exploration was to understand the structural behaviour.
DGM Coal Raigarh	Dhaurabhata	1:50,000	-	2	498.35	-	The objective of exploration was to prove the workability of the block. The area mostly occupied by Gondwana rocks. Coal seams occur with Barakar formation as cyclic succession of shale, carb shale, shaly coal, coal & sandstone. About 14 million tonnes of coal resources (C to G) grade were estimated.

(Contd.)

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Table - 3 (Contd.)

Agency/ State/ District	Location	Mapping		Drilling		Sampling (No.)	Remarks Reserves/Resources estimated
		Scale	Area (sq km)	No. of boreholes	Meterage		
- do - Surguja	Gotan- Birju Pali area	1:50,000 1:4,000	300 0.48	-	-	25	The objective of exploration was to prove the workability of the block. Area is mostly occupied by Chhota Nagpur gneissic complex of Archean & Gondwana rocks. Barakars are the main lith-formation consisting of sandstone, shale & coal. Exposures of coal were noticed around Villages Dhandkesra, Patkura, Argoti & Kedmaand mareya. Work is under progress.
- do - Surguja	Saidu	1:50,000 1:4,000	-	-	-	20	The objective of exploration was to prove the workability of the block. Area is mostly occupied by Chhota Nagpur gneissic complex of Archean & Gondwana rocks. Barakars are the main lith-formation consisting of sandstone, shale & coal. Exposures of coal were noticed around Villages Saidu, Gidmuri, Parogiya, Basen, Pendrakhi, Kapri, Korja & Bhakurma. Resources were not estimated.
Bauxite Kabirdham	Darai	1:50,000 1:4,000	104 2.408	85	812.70	633	Bauxite occurs as weathered product of Deccan trap basalt, which is overlain by phyllite and quartzite of Chilpi Group. Bauxite also occurs as irregular & discontinuous lenses & pockets. It is generally pisolitic, brown, hard & compact. Thickness of bauxite is up to 2 m. About 325,000 tonnes of bauxite resources were estimated during the year.
Bauxite Surguja	Dandkeshra	1:50,000 1:4,000	215.0 2.75	112	1142.35	592	Bauxite is associated with laterite which was found over Deccan trap basalt. Bauxite deposit occurs as pockets & irregular lenses of 100-200 m length and a few cm to 3.6 cm in thickness. About 300 tonnes bauxite resources of metal grade were estimated.

(Contd.)

STATE REVIEWS

Table - 3 (Contd.)

Agency/ State/ District	Location	Mapping		Drilling		Sampling (No.)	Remarks Reserves/Resources estimated
		Scale	Area (sq km)	No. of boreholes	Meterage		
Granite Baster/ Kanker	Charama, Kanker & Keskal area	1:50,000	965	-	-	68	Area is mostly covered with Dongargarh granite with numerous acid & basic intrusive. Block granite (dolerite) have been noticed in various localities as hillocks with a dimension of 500 m x 150 m. Thickness was noticed around 10 m. These rocks seem to be suitable for cutting/polishing purpose. About 28 lakh m ³ block granite block (dolerite) resources were estimated.
Iron ore Kondagaon	Pavaras- Kachora	1:50,000	574.0 2.05	-	-	238	Area is occupied by litho-units of Bengal Group and Bailadila Group with acid & basic intrusives. Outcrop of BHQ & BMQ were noticed which spread over an area of 2 km x 0.2 km with a thickness of 5 m. About 5,109 million tonnes of iron ore resources (34% - 45% Fe) were estimated.
Limestone Bastar	Bastar area	1:50,000 1:4,000	300 1.16	-	-	115	Limestone of the area belongs to Jagadapur & Kanker formations of Indravati Group. Limestone occurs as small mounds & is horizontally bedded with local warping. Outcrops of limestone were noticed in an area of 0.90 x 0.30 km with a thickness up to 10 m. About 10 lakh tonnes of limestone resources of cement grade were estimated.

(Contd.)

STATE REVIEWS

Table - 3 (Concl.)

Agency/ State/ District	Location	Mapping		Drilling		Sampling (No.)	Remarks Reserves/Resources estimated
		Scale	Area (sq km)	No. of boreholes	Meterage		
Limestone Raipur	Deogaon- Kurra area	1:50,000 1:4,000	157 1.73	-	728.10	732	The rock formation of the area belongs to Raipur Group of Chhattisgarh Group. Main litho-units are shale, limestone & laterite. Limestone is mostly horizontally bedded, trending NE-SW. Depth of the limestone was confined up to 33 m. Limestone of the area is grey to pink, hard, compact, massive and stromatolitic in nature. About 17.98 million tonnes of limestone resources (blendable/beneficial) grade were estimated.
-do- Raipur	Kesla area	1:50,000 1:4,000	55 0.56	-	284.0	268	The rock formation of this area belongs to Raipur Group of Chhattisgarh Group. Main litho-units are shale, limestone & laterite. Limestone is mostly horizontally bedded, trending NE-SW. Depth of the limestone was confined up to 32.50 m. Limestone of the area is grey to pink, hard, compact, massive and stromato-litic in nature. About 17 million tonnes of limestone resources were estimated during the year.
Manganese Gariaband	Chhura- pursuli	1:50,000 1:4,000	151.0 0.56	-	-	28	Area is occupied by Pairi group, comprising Devdhara, Kulharighat, Neor, Galighat, Tarjhar & Ling Dongri formations containing arenaceous, argillaceous & calcareous rocks unconformably overlies the basement Bundeli granitoid rocks with sporadic development of magniferous laterite. The manganese mineral is intermittently mixed with feruginous laterite occurs as nodules & boulders of varying dimensions. It was difficult to estimate the manganese resources due to heterogenous in situ enrichment of manganese with laterite.
Mineral Dev. Corpn. Ltd Bauxite Surguja	Barima (Mainpat)	-	-	88	1135.50	210	-

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Production

The value of mineral production in Chhattisgarh at ₹ 17,480 crore in 2011-12, increased significantly by about 28% as compared to that in the previous year. The State is ranked fourth in the country and accounted for 7% of the total value of mineral production. The important minerals produced in the State in 2011-12 were coal, bauxite, iron ore, tin (conc.), dolomite, limestone which together accounted for about 98% of the entire value of mineral production in the State.

Chhattisgarh was the sole producer of tin concentrate in the country. The State is the leading producer of coal accounting for 21% and dolomite 30% in the total production of the country of respective minerals. It is also second largest producer of bauxite and third largest producer of iron ore with contribution of 18% each to the

national output of respective minerals. The State shared 9% of the total output of quartzite and 8% of limestone during 2011-12. During the year under review, production of quartzite increased manifolds and that of bauxite 12%, limestone 5%, iron ore 4% and dolomite 2%, whereas it declined 19% for tin concentrates as compared to previous year (Table-4).

The production value of minor minerals was estimated at ₹ 279 crore for the year 2011-12.

The number of reporting mines in Chhattisgarh was 187 in 2011-12 as against 167 in the previous year.

The index of mineral production in Chhattisgarh (base 2004-05=100) was 155.33 in 2011-12 as compared to 153.58 in the previous year.

**Table – 4 : Mineral Production in Chhattisgarh, 2009-10 to 2011-12
(Excluding Atomic Minerals)**

(Value in ₹ '000)

Mineral	Unit	2009-10			2010-11			2011-12 (P)		
		No. of mines	Quantity	Value	No. of mines	Quantity	Value	No. of mines	Quantity	Value
All Minerals		152		100529786	167		136924511	187		174796027
Coal	'000t	60	109953	50308300	62	113824	58256200	61*	113958	70740300
Bauxite	t	15	1687069	607911	13	2109949	777273	12	2365304	1268221
Iron Ore	'000t	10	26211	44227248	10	29320	71712050	11	30455	96429439
Tin Conc.	kg	5	59016	22895	6	60643	27799	6	48971	26742
Dolomite	t	24	1286514	335580	33	1592838	363551	38	1628165	394952
Graphite (r.o.m.)	t	-	-	-	-	-	-	1	-	-
Limestone	'000t	33	15160	2231873	40	19241	2997759	49	20124	3127956
Quartz	t	1	384	54	1	655	92	3	731	144
Quartzite	t	1	50	8	1	60	29	3	16086	18422
Talc/Soapstone/ Steatite	t	3	128	32	1	5	2	3	316	95
Minor Minerals @		-	-	2795885	-	-	2789756	-	-	2789756

Note: The number of mines excludes minor minerals.

* Relates to coal mines as on 31.03.2011.

@ Figures for earlier years have been repeated as estimates, wherever necessary, because of non-receipt of data.

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Mineral-based Industry

The important large & medium-scale mineral-based industries in the organised sector in the State are furnished in Table - 5.

Table – 5 : Principal Mineral-based Industries in Chhattisgarh

Industry/plant	Capacity ('000 tpy)
Aluminium	
Bharat Aluminium Co. Ltd, Korba	200 (Alumina) 350* (Aluminium)
*(Korba plant - 1 capacity of 100,000 tonnes per year is non-operational)	
Cement	
ACC Ltd., Jamul, Dist. Durg	1580
Ambuja Cements Ltd, Rawan, Dist. Raipur	1146
CCI Ltd, Akaltara, Dist. Janjgir-Champa	400
CCI Ltd, Mandhar, Dist. Raipur	380
Century Cement, Baikunth, Dist. Raipur	2100
Grasim Cement, Rawan, Dist. Raipur	2500
Lafarge India Pvt. Ltd, Arasmeta, Dist. Janjgir-Champa	2240
Lafarge India Pvt. Ltd, Sonadih, Dist. Raipur	400
Ultra Tech Cement Ltd, Hirmi, Dist. Raipur	2750
Fertilizer	
BEC Fertilizers, Sirgitti, Dist. Bilaspur	66 (SSP)
Dharamsi Morarji Chemical Co. Ltd, Kumhari, Dist. Durg	183 (SSP & H ₂ SO ₄)
Jairam Phosphate Ltd, Farahad, Dist. Rajnandgaon	66 (SSP) 49.5 (H ₂ SO ₄)
Iron & Steel	
Bhilai Steel Plant, Bhilai	6334 (Sinters) 4700 (Pig iron) 3153 (Saleable steel) 3925 (crude/liquid steel) 30 (Refractory bricks) 45 (H ₂ SO ₄) 53.2 (Amm. sulphate)
Jindal Steel & Power Ltd, Raigarh	1600 (Hot metal) 1370 (Sponge iron) 36 (Ferro chrome) 3000 (Crude/liquid steel)
Jayaswal NECO Industries Ltd, Siltara, Dist. Raipur	750 (Pig iron) 400 (Sponge iron) 800 (Sinter) 400 (Steel)

(Contd.)

Table - 5 (Contd.)

Industry/plant	Capacity ('000 tpy)
Sarda Energy & Minerals Ltd, (formerly Raipur Alloys & Steel Ltd) Siltara, Dist. Raipur	360 (Sponge iron) 240 (Finished steel) 60 MVA (Ferro Alloys)
Shri Bajrang Power & Ispat Ltd, Urla, Dist. Raipur	210 (Sponge iron) 130 (Steel)
Sponge Iron	
A.P.I. Ispat & Power Tech. Pvt. Ltd, Siltara Billets, Raipur	105
Alliance Integrated Metallics Ltd, Bemta, Dist. Raipur	500
Anjani Steel Ltd, Ujalpur, Dist. Raigarh	36
Arti Sponge & Power Ltd, Siltara, Dist. Raipur	45
Ambika Ispat (I) Pvt Ltd, Tarainal, Dist. Raigarh	30
Baldev Alloys Pvt. Ltd, Siltara, Raipur	30
Bhagavati Power & Steel Pvt Ltd, Siltara, Dist. Raipur	60
B.S. Sponge Pvt Ltd, Taraimal, Raigarh	30
Devi Iron & Power Pvt Ltd, Tandira, Dist. Raipur	30
Droliya Electro Steel Pvt Ltd, Siltara, Raipur	66
Euro Pratik Ispat Pvt Ltd, Charoda, Dist. Raipur	30
Gravity Treksim Pvt Ltd, Siltara, Dist. Raipur	30
Godavari Ispat & Power Ltd, Siltara, Dist. Raipur	495
Gopal Sponge & Power Pvt Ltd, Siltara, Dist. Raipur	30
Gitanjali Ispat & Power Pvt Ltd, Sirgitti, Dist. Bilaspur	30
GR Sponge & Power Ltd, Siltara, Dist. Raipur	37
Hare Krishna Sponge Pvt Ltd, Siltara, Dist. Raipur	30
HEG Ltd, Borai, Dist. Durg	120 (Sponge iron) 100 (Bxilllets)
Hi-Tech Power & Steel Ltd, Parsada, Dist. Raipur	30
Ind Synergy Ltd, Kotmar, Dist. Raigarh	300
Indian Ispat & Power, Siltara, Dist. Raipur	30
Kalindi Ispat Pvt. Ltd, Belpan, Dist. Bilaspur	60

(Contd.)

STATE REVIEWS

Table - 5 (Contd.)

Industry/plant	Capacity ('000 tpy)
Khetan Sponge & Infrastructure Pvt. Ltd, Sarora, Dist. Raipur	30
Maa Kali Alloys (Ind.) Pvt Ltd, Pali, Dist. Raigarh	30
Mangal Sponge & Steel Pvt Ltd, Bilha, Bilaspur	30
Mangala Ispat Pvt Ltd, Natvarpur, Dist. Raigarh	30
Millennium High-Tech Industries Ltd, Parsada, Dist. Raipur	30
MSP Steel & Power Ltd, Raigarh	90
Monnet Ispat Ltd, Hasaud, Raipur	1000
NR Sponge Pvt. Ltd, Raipur	60
Nalwa Sponge Iron Ltd, Taraimal, Raigarh	198
Nakoda Ispat Ltd, Siltara, Raipur	66
Navdurga Fuse Pvt Ltd, Raigarh	60
Nova Iron & Steel Ltd, Dagori, Bilaspur	150
Nutan Ispat & Power Ltd, Jaroda, Raipur	30
PD Industries Pvt Ltd, Siltara, Raipur	30
Prakash Industries Ltd, Hathenewra, Janjgir-Champa.	450
Shree Radhe Industries Ltd, Silpahari, Bilaspur	60
Raigarh Ispat & Power Ltd, Delari, Dist. Raigarh	30
Rameswaram Steel & Power Ltd, Gharghoda, Dist. Raigarh	30
Salasar Sponge & Power Pvt Ltd, Gerwani, Dist. Raigarh	30
Sree Nakoda Ispat Ltd, Siltara, Dist. Raipur	66
Topworth Steel Pvt Ltd, Rosmada, Dist. Durg	60
Shakambri Steel & Power Pvt Ltd, Raigarh	30
Shakun Sponge Iron Pvt Ltd, Shirgitti, Dist. Bilaspur	30
Shivalaya Ispat & Power Pvt Ltd, Guma, Dist. Raipur	30
Sidhi Vinayak Sponge Iron Pvt Ltd, Raigarh	30

(Contd.)

Table - 5 (Concl.)

Industry/plant	Capacity ('000 tpy)
S.K. Sarawagi & Co. Pvt Ltd, Siltara, Dist. Raipur	60
SKS Ispat & Power Ltd, Siltara, Dist. Raipur	270
Shivshakti Steel Pvt. Ltd, Chakradharpur, Dist. Raigarh	30
Shri Sita Ispat & Power Pvt. Ltd, Borjhara, Dist. Raipur	30
Shree Shyam Sponge & Power Ltd, Bachera, Dist. Raipur	30
Singhal Enterprises Pvt Ltd, Taraimal, Dist Raigarh	194
Sunil Sponge Pvt Ltd, Siltara, Dist. Raipur	30
Trimula Sponge Iron Pvt Ltd, Siltara, Raipur	30
Vandana Global Ltd, Siltara, Dist. Raipur	210
Vasvani Industries Ltd, Siltara, Dist. Raipur	30
Vidhyan Minerals India Pvt. Ltd, Bilaspur	30
Ferro Alloys	
Alok Ferro Alloys Ltd, Urla, Raipur	11
Chhattisgarh Electricity Co. Ltd, Siltara Dist. Raipur	36
Deepak Ferro Alloys Ltd, Urla, Dist. Raipur	5
Indsil Energy & Electro Chemical Ltd, Urla, Dist. Raipur	24
Hira Power & Steel Ltd, Urla, Dist. Raipur (Formerly Jain Carbides & Chemicals Ltd)	17
Monnet Ispat Ltd, Hasaud, Raipur	80
Nav-chrome Ltd, Urla, Dist. Raipur	50
Standard Chrome Ltd, Barmuda, Dist. Raigarh	15
Tirumala Balaji Alloys Pvt Ltd, Raigarh	21
Refractory	
Bharat Refractory Ltd, Bhilai, Dist. Durg (Bhilai Refractory Plant)	60
Vishva Vishal Engineering Ltd, Bhilai, Dist. Durg	8.2
Silicon Carbide Crucible	
M.P. Carbon (Pvt) Ltd, Raipur	NA