

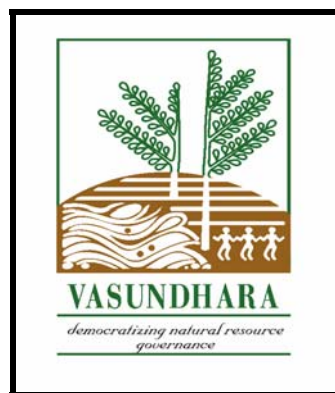
STATUS PAPER ON MINING LEASES IN ORISSA

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STATUS PAPER ON MINING LEASES IN ORISSA

The Republic of India covers a land area of approximately 3,287,300 square kilometers and is topographically, geographically, environmentally, and culturally diverse. India is rich in mineral resources and has a long history of mining, mineral production, and mineral utilization. India is among the top ten mineral producing nations in the world. The Indian economy to a great extent depends on the value of the minerals produced, as these represent a major portion of the raw materials for the nation's industrial activities.

India is the third largest producer of coal in the world and one of the world's leading producers of bauxite (aluminium ore), iron ore, zinc, and limestone (approximately 122 Mt annually). The majority of aluminium, copper, lead, and zinc ores mined in India are utilized domestically, as well as approximately 50 percent of the iron ore.

The Indian minerals industry produces more than 80 mineral commodities including mineral fuels, base and precious metals and industrial minerals. Approximately 4,000 to 5,000 mines (excluding artisanal mines) operate throughout the country, the majority of which are small surface mines using manual mining methods and having relatively low annual production outputs. Of the total number of mines, approximately 500 are underground mining operations, most of which are small, having non-mechanized operations. Most of the more important mineral resources are mined and produced by Indian national or state corporations, which also operate some of the larger, more progressive and modern mechanized mines. The major non-coal mining sectors are: Bauxite (aluminium), Chromite (chromium), Copper, Hematite/magnetite (iron), Lead/zinc, Manganese, Limestone, etc.

In the mineral map of India, Orissa occupied an important position both in terms of deposit and production. The mineral deposit of the state is not only vast but also equally diverse. It is one of the largest minerals bearing states in India, having 16.92% of the total reserves of the country.

MINERAL RESERVES OF INDIA AND IN ORISSA (IN MILLION TONNES)

SI No	Mineral/Ore Name	Reserves in Orissa	Reserves in India	% to all India reserves
1	Chromite	111.00	114.00	97.37
2	Nickel ore	174.50	183.50	95.10
3	Graphite	4.60	6.00	76.67
4	Bauxite	1530.00	3076.00	49.74
5	Iron Ore	4177.00	12317.30	33.91
6	Mineral Sand	86.00	266.00	32.33
7	Manganese	116.00	406.20	28.56
8	Coal	60983.30	221005.90	27.59
9	Fireclay	177.00	706.00	25.07
10	Pyrophyllite	4.80	22.60	21.24
11	Vanadiferous Magnetite	2.50	12.00	20.83
12	China clay	314.00	2353.00	13.34
13	Dolomite	882.00	7349.00	12.00
14	Lime stone	2224.00	169941.00	1.31
15	Lead Ore	1.90	176.00	1.08
16	Talc-Soap stone	1.10	327.00	0.34

Source: Directorate of Geology, Orissa, Bhubaneswar

MINERAL RESERVES AND RATE OF EXPLOITATION (IN MILLION TONNES)

SI No	Mineral/Ore Name	Total Reserves in Orissa in 2004 – 05	Exploitation during				Rate of Exploitation to total reserves (%)			
			2001-2002	2002-2003	2003-2004	2004-2005	2001-2002	2002-2003	2003-2004	2004-2005
1	Chromite	111.00	1.76	3.29	2.88	3.42	0.96	1.80	1.13	3.08
2	Graphite	4.60	0.04	0.05	0.03	0.04	2.00	2.50	1.10	0.87
3	Bauxite	1530.00	3.60	4.93	4.94	4.91	0.21	0.28	0.28	0.32
4	Iron Ore	4177.00	16.79	22.26	34.89	46.06	0.47	0.62	0.72	1.10
5	Mineral Sand	86.00	0.21	0.15	0.23	0.27	0.26	0.17	0.28	0.31
6	Manganese	116.00	0.54	0.63	0.70	1.08	1.08	1.26	0.59	0.93
7	Coal	60983.30	47.80	52.03	60.20	66.82	0.09	0.10	0.12	0.11
8	Fireclay	177.00	0.04	0.05	0.06	0.16	0.04	0.05	0.03	0.09
9	Dolomite	882.00	1.45	1.15	1.27	1.36	0.33	0.27	0.14	0.15
10	Lime stone	2224.00	2.15	2.30	2.24	2.26	0.21	0.22	0.14	0.10

Source: Directorate of Mines & Directorate of Geology, Orissa, Bhubaneswar

MINING LEASES

Emphasis has been given on grant of mining leases for mineral based industries for value addition so as to promote industrialization in the state. There are a total of 605 mining leases covering an area of 99,931.55 Ha in the state which have been granted with mining leases before 31st Dec 2005. Out of these 335 mining leases covering an area of 72,076.914 Ha are working and in operation while 270 mining leases covering an area of 27,854.63 Ha are non – working.

The top 6 districts of Orissa where mining activities are being undertaken rampantly include Keonjhar (31.28%), Sundergarh (20.03%), Angul (10.24%) followed by Jharsuguda (8.87), Koraput (6.3%) and Mayurbhanj.

The largest number of mining leases (m.l) is in Sundergarh district (130m.l) followed by Keonjhar (119), Bolangir (75), Kalahandi (72), Mayurbhanj (46) and Jharsuguda (26).

Out of the 605 mining leases, maximum numbers of leases have been granted for Graphite ore mines (114), followed by Iron ore mines (75), and Quartz mines (72).

Iron ore mines (21,086.282 Ha), coal mines (17,557.842 Ha) and Iron and Manganese mines (15,246.117Ha) occupy the largest mining area in the state.

Iron ore is abundantly available in the districts of Keonjhar (46 mining leases occupying 12,076.225 Ha of mining area), Sundergarh (18 mining leases occupying 5,650.226 Ha of mining area), Mayurbhanj (10 mining leases occupying 3,169.63 Ha of mining area) and Jajpur (1 mining lease occupying 190.2 Ha of mining area).

There are two major **Coal** bearing areas in the state – Talcher and Ib valley. Angul (12 mining leases occupying 9,590.15 Ha of mining area) is the major coal bearing district followed by Jharsuguda (14 mining leases occupying 7,656.55 Ha of mining area), Sambalpur (1 mining lease occupying 170.305 Ha of mining area) and Sundergarh (1 mining lease occupying 140.84 Ha of mining area).

Iron and Manganese Ore Mines are mostly common in Keonjhar (38 mining leases occupying 13,870.9 Ha of mining area), Sundergarh (18 mining leases occupying 1,190.46 Ha of mining area) and Mayurbhanj districts (1 mining lease occupying 184.76 Ha of mining area).

Chromite is mostly available in Jajpur (16 mining leases occupying 4,320.93 Ha of mining area), Keonjhar (5 mining leases occupying 2,013.123 Ha of mining area) and Dhenkanal districts (3 mining leases occupying 960.8 Ha of mining area).

Koraput (2 mining leases occupying 4,647.177 Ha of mining area) is the major **Bauxite** bearing district in Orissa and produces 98.82 % of the state's total production followed by Rayagada (1 mining lease occupying 1,388.7 Ha of mining area) and Sundergarh (4 mining leases occupying 419.4 Ha of mining area).

Dolomite is available in plenty only in the district of Sundergarh while **Manganese** ore is largely exploited in Sundergarh (20 mining leases occupying 2,940.44 Ha of mining area), Keonjhar (15 mining leases occupying 2,306.28 Ha of mining area), Rayagada (5 mining leases occupying 580.07 Ha of mining area) and Bolangir district (1 mining lease occupying 7.27 Ha of mining area).

Out of the 605 mining leases granted, 38 leases covering an area of 19,420.295 Ha were held by M/S O.M.C Ltd out of which 17 leases are in operation covering an area of 14,568.303 Ha. Similarly, 30 leases covering an area of 17,556.432 Ha were held by M/S Mining Corporation Ltd out of which 29 leases are in operation covering an area of 17,447.227 Ha. M/S TISCO holds 10 mining leases in the state covering an area of 5,740.282 Ha while M/S SAIL holds 8 mining leases covering 6000Ha in the state.

Other significant mining lessees include M/s Rungta Mines having 12 mining leases (most of them for Iron and Manganese mining), M/s OMDC having 4 mining leases majorly for Iron and Manganese mining and M/s NALCO having 2 mining leases for bauxite mining.

District Wise Status of Mineral Leases in Orissa (Dec 2005)

District Name	Number of Mining Leases	Total Mining Lease Area (Ha)	% to Total Mining Lease Area
Keonjhar	119	31,255.470	31.2768
Sundergarh	130	20,017.210	20.0309
Angul	17	10,230.460	10.2374
Jharsuguda	26	8,865.483	8.8715
Koraput	8	6,297.288	6.3016
Mayurbhanj	46	5,391.597	5.3952
Jajpur	21	4,543.153	4.5462
Ganjam	2	2,486.659	2.4883
Rayagada	18	2,387.164	2.3888
Bolangir	75	1,892.027	1.8933
Cuttack	13	1,733.146	1.7343
Baragarh	25	1,436.410	1.4373
Kalahandi	72	1,074.177	1.0749
Dhenkanal	3	960.799	0.9614
Nuapada	9	555.445	0.5558
Sambalpur	8	460.497	0.4608
Khurda	2	127.452	0.1275
Subarnapur	2	67.445	0.0674
Boudh	4	55.473	0.0555
Kandhamal	2	38.84	0.03886
Malkangiri	2	38.707	0.03873
Nayagarh	1	16.641	0.01665
TOTAL	605	99,931. 550	100

Source: Directorate of Mines, Information obtained under RTI Act, Jan 2006.

Mineral Wise Status of Mineral Leases in Orissa (Dec 2005)

Name of Mineral	Number of Mining Leases	Total Mining Lease Area (Ha)	% to Total Mining Area
Iron	75	21086.282	21.1007
Coal	28	17557.842	17.5699
Iron & Manganese	57	15246.117	15.2566
Chromite	24	7294.850	7.2998
Bauxite	7	6455.352	6.4598
Limestone & Dolomite	37	5970.487	5.9746
Manganese	41	5834.064	5.8381
Fireclay	32	4054.219	4.0570
Graphite	114	3123.425	3.1256
Limestone	9	2850.360	2.8523
Mineral Sand	1	2483.019	2.4847
Chinaclay	16	1528.668	1.5297
Quartz	72	1330.645	1.3316
Quartzite	26	785.112	0.7856
Soap Stone	7	588.180	0.5886
Iron & Bauxite	2	480.163	0.4805
Sand (Stowing)	4	427.545	0.4278
Dolomite	3	408.424	0.4087
Pyrophyllite & Quartzite	6	305.008	0.3052
Gemstone	16	274.595	0.2748
Fireclay & Silica Sand	1	255.160	0.2553
Pyrophyllite	3	198.293	0.1984

Fireclay & Sandstone	1	192.175	0.1923
Chromite, Magnesite & Serpentinite	1	187.030	0.1872
Iron Ore , Dolomite & Limestone	1	134.733	0.1348
Asbestos	1	117.350	0.1174
Quartz & Silica Sand	1	111.980	0.1121
Red Ochre / Red Oxide	1	102.275	0.1023
Quartz & Quartzite	2	93.336	0.0934
Chinaclay & Fireclay	2	93.161	0.0932
Talc	1	62.483	0.0625
Kyanite	1	55.490	0.0555
Manganese & Bauxite	1	52.176	0.0522
Soapstone & Pyroxenite	1	50.646	0.0507
Asbestos & Pyroxenite	1	49.220	0.0493
Tin	1	36.260	0.0363
Silica Sand	1	17.446	0.0175
Sandstone	2	9.921	0.0099
Quartz & Gemstones	1	8.361	0.0084
Quartz & Feldspar	1	8.127	0.0081
Galena	1	5.261	0.0053
Soapstone, Steatite & Talc	1	3.640	0.0036
Mica	1	2.670	0.0027
TOTAL	605	99,931. 550	100

Source: Directorate of Mines, Information obtained under RTI Act, Jan 2006.

SUMMARY

- ❖ There are a total of 605 mining leases in the state out of which 335 are working while 270 are non – working.
- ❖ Total Mining Lease area allotted for 605 mines covers 99,931.55 Ha of the state.
- ❖ Keonjhar (31% of total mining area in the state) and Sundergarh (20% of total mining area in the state) are the districts where mining activities are to a maximum.
- ❖ The largest number of mining leases are in Sundergarh (21.5% of total number of mining leases) and Keonjhar (19.7% of total number of mining leases).
- ❖ Maximum numbers of leases have been granted for Graphite ore mining (18.84% of total number of mining leases).
- ❖ Iron ore (21% of total mining area in the state) and coal mines (17.6% of total mining area in the state) occupy the largest mining areas in the state.