

STATE REVIEWS



Indian Minerals Yearbook 2017

(Part- I)

56th Edition

**STATE REVIEWS
(Summary)**

(ADVANCE RELEASE)

**GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES**

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Summary

The total value of MCDR mineral production at 1,01,426 crore during 2016-17 decreased by 47% as compared to the previous year. Mineral production

was reported from 31 States, Union Territories and Offshore regions during the year. The major part of the value of MCDR mineral production was from States, namely, Rajasthan, Odisha and Andhra Pradesh (Table - 1).

**Table – 1 : Value* of Mineral Production, 2014-15 to 2016-17
(By States & Union Territories)**

(In `'000)

State/Union Territory	2014-15 ^S	2015-16 ^S	2016-17(P) ^{SS}
India	1946647608	1910697333	1014261229
Andhra Pradesh [#]	105573172	101514077	102481258
Arunachal Pradesh	428100	337209	337209
Assam	4306667	2255520	757856
Bihar	42842256	42892072	42781798
Chhattisgarh	238719078	214903492	76045547
Goa	7084895	9213777	17554690
Gujarat	83368583	82036986	65270885
Himachal Pradesh	2545985	2815316	2689531
Haryana	354967	354770	354770
Jammu & Kashmir	2187507	2556288	2394548
Jharkhand	219359985	206522854	18871425
Karnataka	77157908	55849293	67681353
Kerala	27578875	22680870	22582460
Manipur	2866	2866	2866
Meghalaya	15142157	21328533	3078879
Mizoram	12875	16793	16793
Madhya Pradesh	141886741	161371536	27339996
Maharashtra	120391264	115310564	51723203
Nagaland	1774	1774	1774
Odisha	290811076	264757189	165086239
Punjab	94448	94448	94448
Rajasthan	171056690	191685442	194694335
Sikkim	18787	18787	18787
Telangana [#]	177364744	204661424	81999380
Tamil Nadu	62274959	60766798	10945989
Tripura	53829	47554	47554
Uttar Pradesh	72881985	70596982	56553200
Uttarakhand	857043	718159	723896
West Bengal	81612945	74710513	1455113
Andaman & Nicobar Islands	675447	675447	675447
Puducherry	198	-	-

* Excluding the minerals declared as prescribed substances under the Atomic Energy Act, 1962.

\$ Excludes the value of Petroleum (crude) & Natural Gas (ut.)

\$\$Excluding Fuel minerals.

The figures reported for 2014-15 are for comparative purpose only by considering the corresponding districts under the newly formed states.

Note : The value figures for 2014-15 includes the value of minerals declared as Minor Minerals w.e.f. 10th February 2015.

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The index of mineral production (excluding atomic minerals) (with base year 2004-05=100) for 2016-17 at 132.2 displayed a growth of 2.2% as compared to the previous year.

The total number of reporting mines (excluding atomic minerals, petroleum (crude), natural gas and minor minerals) at all India level was 2,020 in 2016-17 as against 2,131 in the previous year. Out of the 2,020 reporting mines, the maximum of 268 were located in Madhya Pradesh followed by Tamil Nadu (236),

Gujarat (204), Jharkhand (196), Chhattisgarh (161), Odisha (157), Karnataka (141), Maharashtra (132), Andhra Pradesh (123), Rajasthan (89), Goa (85), Telangana (81) and West Bengal (76) (Table - 2).

Mineralwise reserves/resources in the country as on 01.04.2015 are furnished in Table-3.

As per the AMD of Department of Atomic Energy, the total ilmenite resources in the country was estimated at 629.57 million tonnes and rutile resources was estimated at 33.95 million tonnes.

**Table – 2 : Number of Reporting Mines*, 2014-15 to 2016-17
(By States)**

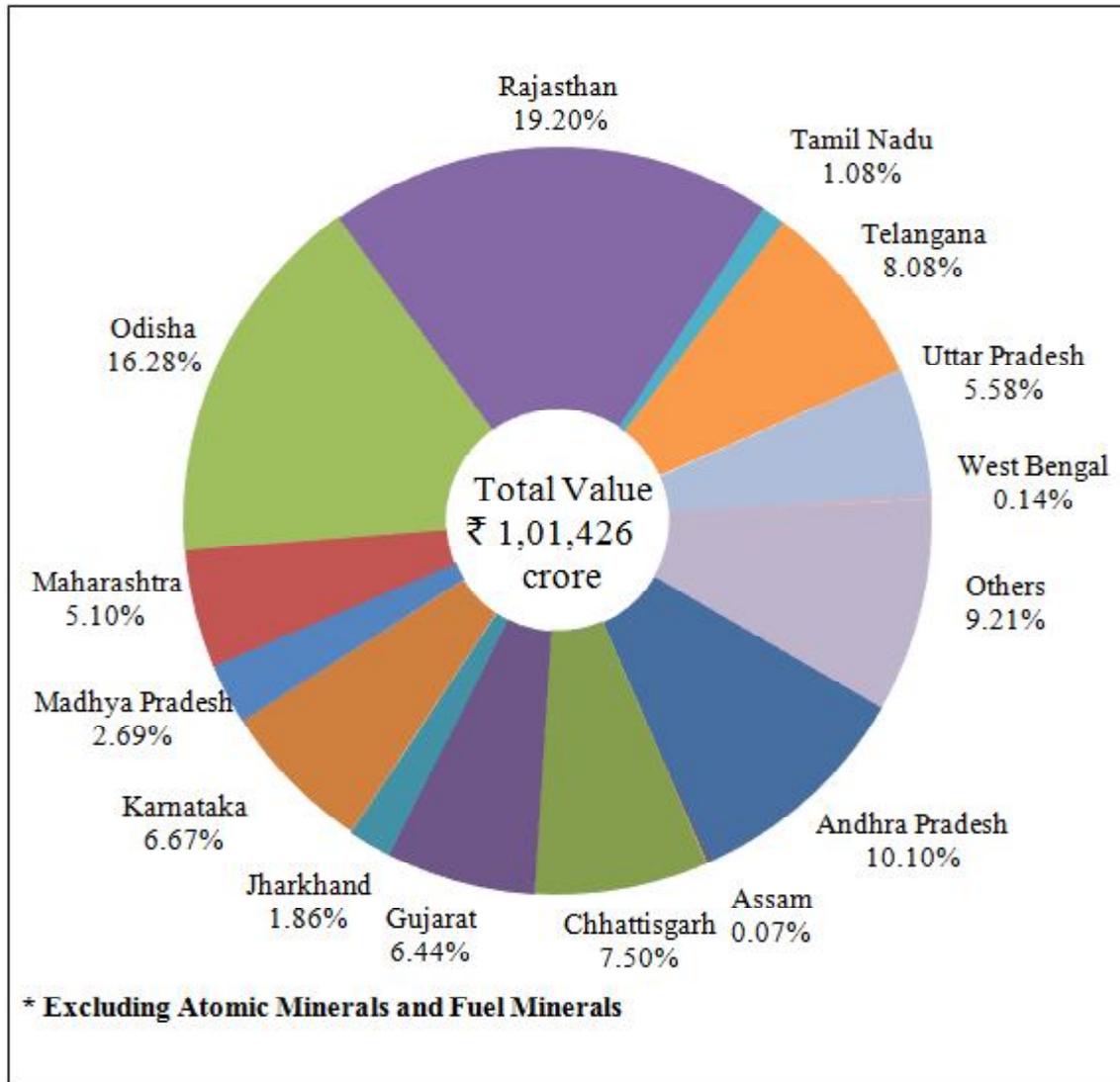
State	2014-15	2015-16	2016-17 (P)
India	3635	2131	2020
Andhra Pradesh#	428	136	123
Arunachal Pradesh	1	-	-
Assam	6	7	7
Bihar	3	1	1
Chhattisgarh	216	161	161
Goa	82	88	85
Gujarat	427	240	204
Himachal Pradesh	17	18	21
Haryana	1	-	-
Jammu & Kashmir	8	10	9
Jharkhand	226	202	196
Karnataka	197	160	141
Kerala	53	8	8
Meghalaya	17	16	16
Madhya Pradesh	398	280	268
Maharashtra	168	131	132
Odisha	175	162	157
Rajasthan	545	93	89
Telangana#	203	83	81
Tamil Nadu	313	250	236
Uttar Pradesh	17	6	6
Uttarakhand	16	3	3
West Bengal	118	76	76

* Excluding atomic minerals and minor minerals.

The figures reported for 2014-15 are for comparative purpose only by considering the corresponding districts under the newly formed states.

Note : The no. of mines for 2014-15 includes the mines of minerals declared as Minor Minerals w.e.f. 10th February 2015.

Share of States in the Value* of Mineral Production, 2016-17



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Table – 3: Reserves/Resources of Minerals as on 1.4.2015: India

Mineral	Unit	Reserves				Remaining Resources				Total Resources (A+B)				
		Proved STD 111	Probable		Total (A)	Measured STD331	Indicated STD332	Inferred STD333	Reconnaissance STD334		Total (B)			
			STD121	STD122								Feasibility STD211	Pre-feasibility STD221	Feasibility STD222
Andalusite	'000 tonnes	-	-	-	-	-	4000	24201	28201	28201	28201			
Antimony Ore	tonnes	-	-	-	-	-	10588	-	10588	-	10588			
Metal	tonnes	-	-	-	-	-	174	-	174	-	174			
Apatite	tonnes	27715	1680	29395	1385734	491818	1225345	2281521	11481250	6132768	1017646	24016082	24045477	
Asbestos	tonnes	20016	-	4617	24633	2488167	3114728	4064178	100687	2527959	10569233	57800	22922751	22947384
Ball Clay [#]	tonnes	33526297	11182801	4784522	49493621	11045214	4286560	13437994	624977	2497880	53357091	-	85249716	134743337
Barytes [#]	tonnes	50449000	49358	848467	51346825	410466	323345	1258521	205834	1284390	31735548	105721	35323825	86670650
Bauxite	'000 tonnes	434043	18599	203780	656422	254378	132633	382369	710878	430890	1209706	119588	3240442	3896864
Bentonite [#]	tonnes	13926227	50000	609406	659406	6838864	2721697	68632472	26519818	225744237	212115692	25730000	568302781	568962187
Borax	tonnes	-	-	-	-	-	-	-	-	-	-	74204	74204	74204
Calcite [#]	tonnes	928119	798170	1722578	3448867	1332076	217790	3339239	9122696	1241494	4204311	97476	19555082	23003949
Chalk [#]	'000 tonnes	4215	529	319	5064	741	331	151	196	-	269	-	1687	6751
China Clay [#]	'000 tonnes	140456	36144	52869	229469	107176	42220	98627	289723	415703	1685730	72599	2711777	2941247
Chromite	'000 tonnes	64465	12815	24930	102210	67618	15780	33506	26914	33076	44458	20452	241806	344016
Cobalt Ore	million tonnes	-	-	-	-	-	-	-	30.63	2	0.28	12	44.91	44.91
Copper Ore	'000 tonnes	162972	-	44796	207767	44925	31090	59209	158300	232654	772912	4640	1303730	1511498
Metal	'000 tonnes	2127.9	-	606.72	2734.62	382.18	324.55	585.42	1950.87	2050.98	4100.36	29.17	9423.33	12158.15
Corundum [#]	tonnes	200	-	-	200	70844	1073	63060	13	38	105794	52675	293497	293697
Diamond	carats	959500	-	159	959659	-	-	304601	1524317	29047514	-	30876432	31836091	
Diaspore [#]	tonnes	3242363	884525	3755546	7882434	114789	498756	480663	14241	110358	1045944	46068	2310817	10193251
Diatomite [#]	'000 tonnes	-	-	-	-	634	-	-	-	-	2251	-	2885	2885
Dolomite [#]	'000 tonnes	432636	107364	138883	678883	371516	323183	537932	307103	757005	5215075	224194	7736008	8414891

(Contd.)

Table - 3 (Contd.)

Mineral	Unit	Reserves										Total resources (A+B)		
		Proved		Probable		Feasibility		Pre-feasibility		Remaining resources			Total resources (A+B)	
		STD 111	STD121	STD122	STD121	STD211	STD221	STD222	Measured STD331	Indicated STD332	Inferred STD333			Reconnaissance STD334
Dunite#	'000 tonnes	10848	18	1901	12768	436	1925	108887	25202	1087	23832	13680	175049	187818
Emerald	kg	-	-	-	-	-	-	-	-	-	-	55869	55869	55869
Feldspar#	tonnes	173383004	103054634	43403974	319841612	45903221	42467697	40160373	13882441	17928113	150012330	3371567	313725742	633567354
Fireclay#	'000 tonnes	13295	5035	8707	27037	13878	30155	18260	49290	54093	524011	6104	695791	722829
Fluorite	tonnes	224824	63860	-	288684	4976749	745390	571311	1713833	6218421	3522537	145183	17893423	18182107
Fuller's Earth#	tonnes	3941000	-	-	3941000	-	-	58200	-	912340	256467419	-	257437959	261378959
Garnet	tonnes	9917936	278493	2587427	12783856	84320	1643412	3287667	121099	10247428	27992906	333	43377166	56161022
Gold Ore (Primary Metal)	tonnes	10404349	6401725	422100	17228174	1925669	1303000	1968176	30333248	70136727	233608305	145336333	484611458	501839632
(Primary)	tonnes	53.41	16.26	0.42	70.09	7.69	3.85	12.1	128.65	143.8	227.44	61.12	584.65	654.74
Ore (Placer)	tonnes	-	-	-	-	-	-	-	-	2552000	23569000	-	26121000	26121000
Metal (Placer)	tonnes	-	-	-	-	-	-	-	-	2.29	3.57	-	5.86	5.86
Granite (Dimension Stone)#	th. cu m	35741	201377	26574	263692	38462	51990	8234	837325	2063964	42543908	512216	46056098	46319790
Graphite	tonnes	4229675	1204423	2526694	7960793	9571933	3825575	3593404	741377	7368340	22361229	139464128	186925987	194886779
Gypsum#	'000 tonnes	35141	311	1169	36621	10826	93127	33419	9071	713834	428097	4518	1292892	1329513
Iron Ore (Haematite)	'000 tonnes	4053033	469917	918801	5441752	3444103	1553822	1496674	1762741	1798557	4498142	2491176	17045214	22486965
Iron Ore (Magnetite)	'000 tonnes	30352	2311	20037	52699	223388	15494	64091	1513195	1984566	6351286	584436	10736455	10789155
Kyanite	tonnes	639121	-	48958	688079	1505114	568205	2193427	579619	3577402	95869713	-	104293480	104981559
Laterite #	'000 tonnes	98598	12527	13608	124733	49655	8960	22724	3532	2626	243535	250787	581819	706552
Lead & Zinc Ore	'000 tonnes	31662	68687	5767	106116	5564	17411	31297	37055	192083	355403	4530	643343	749459
Lead Metal	'000 tonnes	624.56	1666.02	191.76	2482.34	119.31	521.74	780.56	690.65	2171.43	6237.67	-	10521.36	13003.7
Zinc Metal	'000 tonnes	2871.75	6728.14	399.63	9999.52	364.08	940.26	1362.05	1941.94	7931.06	13722.2	101.65	26363.24	36362.76
Lead & Zinc Metal	'000 tonnes	-	-	-	-	-	-	-	-	-	120.76	22.37	143.13	143.13
Limestone	'000 tonnes	9439243	3015917	3881208	16336368	4870136	4852713	8622861	7111337	22629060	130787772	8014504	186888383	203224752
Magnesite	'000 tonnes	77867	165	4244	82276	6210	9345	45574	59010	59652	131707	213	311711	393988
Manganese Ore	'000 tonnes	62982	19715	10778	93475	70742	44606	73823	18189	42803	135722	16513	402399	495874
Marble#	'000 tonnes	-	-	4551	4551	104236	202003	72387	-	107129	1453386	2200	1941341	1945891
Marl	tonnes	117115856	4650000	2090000	123855856	11704870	-	-	-	-	-	-	11704870	135560726

(Contd.)

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Table - 3 (Contd.)

Mineral	Unit	Reserves				Remaining Resources				Total Resources (A+B)				
		Proved STD 111	Probable		Feasibility STD211	Pre-feasibility		Measured STD331	Indicated STD332		Inferred STD333	Reconnaissance STD334	Total (B)	
			STD121	STD122		STD221	STD222							
Mica#	kg	82187635	20035595	12209547	114432777	38252500	10605400	124089303	143353477	56528016	144446953	3593715	520869364	635302141
Molybdenum														
Ore Contained MoS ₂	tonnes	-	-	-	-	-	1500000	-	36000	569304	17098594	167800	19371698	19371698
Nickel Ore	million tonnes	-	-	-	-	-	1050	-	83	287	11198.03	50.34	12668.37	12639.57
Ochre#	tonnes	21959552	4448341	10525912	54942176	44924890	13936202	31896176	2559245	3560819	32369262	1612607	89319089	144261265
Perlite	'000 tonnes	-	-	-	-	140	683	595	-	-	-	988	2406	2406
Platinum Group of Metals (PGM)	In tonnes of Metal cont. million tonnes	-	-	-	-	-	-	-	-	7.71	6.5	1.5	15.71	15.71
Potash	'000 tonnes	-	-	-	-	-	-	-	-	18142	3660	707	22508	22508
Pyrite	'000 tonnes	-	-	-	-	27129	-	32597	9590	77729	1527356	-	1674401	1674401
Pyrophyllite	tonnes	16575493	4322386	4035079	24932958	9539407	8301411	4240016	1118943	3589624	7533340	360006	34682745	59615703
Quartz & Silica														
Sand#	'000 tonnes	433210	94539	129677	657426	354429	367016	353626	36872	219180	1897962	21436	3250522	3907948
Quartzite#	'000 tonnes	47758	2016	33698	83472	120723	141437	160355	119953	152715	868850	11293	1575325	1658798
Rare Earth Elements	tonnes	-	-	-	-	-	-	-	-	6353	19140	-	25493	25493
Rock Phosphate	tonnes	64465	12815	24930	102210	67618	15780	33506	26914	33076	44458	20452	241806	344016
Rock Salt	'000 tonnes	-	-	-	-	10035	-	5990	-	-	-	-	16025	16025
Ruby	kg	-	-	-	-	-	429	3296	-	-	1623	-	5349	5349
Sapphire	kg	-	-	-	-	-	-	-	-	-	450	-	450	450
Shale#	'000 tonnes	15027	171	274	15472	495	2022	2022	-	-	1175	90	3781	19253
Sillimanite	tonnes	323231	5728868	450016	6502115	1020187	135278	20257525	4580083	17790664	16068690	3849600	63702027	70204142
Silver Ore	tonnes	69277075	8413000	72753828	150443903	-	1484543	46726460	29632000	65056000	218611729	0	361510732	511954635
Metal	tonnes	4309.78	220.77	2641.39	7171.94	-	42.85	259.62	2037.99	3236.39	17230.19	2.84	22809.88	29981.82
Slate#	'000 tonnes	19619	667	-	20286	-	-	1075	-	-	1511	-	2586	22872
Sulphur (Native)	'000 tonnes	-	-	-	-	-	-	-	-	-	210	-	210	210

(Contd.)

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Table - 3 (Concl.d.)

Mineral	Unit	Reserves					Remaining resources					Total resources (A+B)		
		Proved STD 111	Probable		Total (A)	Feasibility STD211	Pre-feasibility		Measured STD331	Indicated STD332	Inferred STD333		Reconnaissance STD334	Total (B)
			STD121	STD122			STD221	STD222						
Talc/Steatite/ Soapstone#	'000 tonnes	72172	8067	26251	106490	18178	13020	32221	2994	8126	128620	6275	209434	315924
Tin	tonnes	2067	897	1455	4419	22594200	2653	31330072	168457	561080	29064288	-	83720749	83725168
Ore	tonnes	44.56	94.02	15.62	154.2	33139.45	842.8	54049.65	813.29	231.63	13182.34	-	102259.16	102413.36
Metal	tonnes	-	-	-	-	624903	-	-	1994	-	341949	-	968846	968846
Leucoxene	tonnes	-	-	-	-	-	-	-	-	-	-	-	3345000	3345000
Anatase	tonnes	-	-	-	-	-	-	-	-	-	-	-	-	-
Titaniferous	tonnes	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnetite	tonnes	-	-	-	-	293539	-	117416	950000	3630000	35629202	-	40620157	40620157
Not-known	tonnes	12915	-	-	12915	-	31365	-	-	-	-	-	31365	44280
Tungsten	tonnes	-	-	-	-	2230000	-	173063	19611152	23435954	25356049	16581246	87387464	87387464
Ore	tonnes	-	-	-	-	-	-	450.00	9914.00	20180.92	103415.15	4566.28	142094.35	142094.35
Contained WO ₃	tonnes	-	-	-	-	3568.00	-	-	-	-	-	-	-	-
Vanadium	tonnes	-	-	-	-	276530	1720000	4108100	-	232000	18297225	-	24633855	24633855
Ore	tonnes	-	-	-	-	-	-	6032	-	487	54133	-	64594	64594
Contained V ₂ O ₅	tonnes	-	-	-	-	1106	2835	-	-	-	-	-	-	-
Vermiculite	tonnes	1582906	19413	30566	1632885	36411	26196	39794	58396	20179	538607	-	719582	2352467
Wollastonite	tonnes	1953384	48075	240003	2241462	3750118	12000	3748191	76088	3325042	3316385	-	14227824	16469286

Figures rounded off.

Note: The proved and indicated recoverable reserves of crude oil and natural gas as on 1.4.2016 in India are 621.11 million tonnes and 1,227.20 billion cu m, respectively.

Declared as minor mineral vide Gazette Notification dated 10.02.2015.

Minor mineral before Gazette Notification dated 10.02.2015.