

Indian Mineral Industry at a Glance

2023-24



Issued by

**Controller General
Indian Bureau of Mines
Nagpur**

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Indian Bureau of Mines

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PREFACE

Indian Mineral Industry at a Glance 2023–24 is the 43rd edition in its series. For ease of reference, the publication has been organised into five sections, namely: General, Minerals, Metals & Alloys, Foreign Trade and Employment in Mines. The salient features of the data presented in each section are highlighted at the beginning of the respective section. This publication serves as a handy and ready reckoner, providing important insights into the mining sector. It is also noted that certain figures relating to GDP/GVA, consumption, foreign trade, employment, and mineral-based products pertaining to previous years have been updated in line with the latest available data.

The publication has been brought out by the Mining & Mineral Statistics Division of the Bureau. In addition to the extensive data available within the Division, information furnished by the Mineral Economics Division on mineral resources and mining leases has also been utilised for Section I.

The Foreign trade data on minerals, metals and selected mineral-based products have been sourced from the Director General of Commercial Intelligence & Statistics (DGCI&S), Kolkata. However, country-wise break-up data for certain minerals and metals at the 8-digit Customs Tariff/ITC (HS) code level are not available for a few items. In such cases, the data have been grouped under the country-item category “unspecified” and clubbed with “others.” Consequently, the data for the remaining countries in the relevant tables are subject to this limitation.

The Bureau acknowledges with gratitude the Director General of Commercial Intelligence and Statistics, Kolkata; the Department of Industrial Policy and Promotion, Office of the Economic Adviser, Ministry of Commerce and Industry; and the Central Statistical Office for providing valuable information for this publication.

During 2014–15, thirty-one non-metallic minerals were notified as minor minerals by the Central Government with effect from 10 February 2015. The figures for these minerals for the year 2014–15 are available only for the period from April 2014 to January 2015. Accordingly, the data represent a ten-month period and are not comparable with those of previous years.

Overall, this publication has been compiled as a reference document on mining- and mineral-related information for all stakeholders who are directly or indirectly associated with the mining and mineral sector.

Place: Nagpur
Dated: March, 2026

**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)	अनुमानित	Estimated
N.A.	अनुपलब्ध	Not Available
(R)	संशोधित	Revised
++	नगण्य	Negligible
-	शून्य	Nil
(P)	अनंतिम	Provisional
%	प्रतिशत	Percentage
kg	किलोग्राम	Kilogram
t	टन	Tonne
'000t	हज़ार टन	Thousand Tonne
m.t.	मिलियन टन	Million Tonne
m.cu.m.	मिलियन घन मीटर	Million Cubic Metres
R.O.M.	अप्रसाधित अयस्क	Run-of-mine
Av.	औसत	Average
m.m.	मिलीमीटर	Milli metre
h.p.	हॉर्सपावर	Horsepower

SECTION - 1

GENERAL

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SECTION - 1

GENERAL

RESERVE/RESOURCES

Table-1: Mineral Reserves and Resources as on 01.04.2020

Mineral	Unit	Reserves (A)	Remaining Resources (B)	Total (A+B)
Alexandrite	--	N.E.	N.E.	N.E.
Andalusite	'000t	-	126050	126050
Antimony				
Ore	Tonne	7503	11180	18683
Metal	Tonne	75	180	255
Apatite	Tonne	29395	21080904	21110299
Asbestos	Tonne	-	22908067	22908067
Bauxite	'000t	646493	4311754	4958248
Borax	Tonne	0	74204	74204
Chromite	'000t	78535	253150	331685
Cobalt(Ore)	Million Tonnes	-	45	45
Copper				
Ore	'000t	163891	1496979	1660870
Metal	'000t	2162	10036	12197
Diamond	Carats	847559	30876432	31723991
Diatomite	'000t	-	2885	2885
Emerald	Kilogram	-	55869	55869
Fluorite	Tonne	404241	20588239	20992480
Garnet	Tonne	8590472	47416654	56007126
Gold				
Ore(Primary)	Tonne	23728100	494506270	518234370
Metal(Primary)	Tonne	93	515	607
Ore(Placer)	Tonne	-	26121000	26121000
Metal(Placer)	Tonne	-	6	6
Graphite	Tonne	8563411	203060176	211623587
Iron Ore (Haematite)	'000t	6209034	17848870	24057905
Iron Ore (Magnetite)	'000t	202823	11024791	11227614
Kyanite	Tonne	846865	104835455	105682321
Lead-Zinc				
Ore	'000t	103275	663222	766497
Lead Metal	'000t	1900	10970	12870
Zinc Metal	'000t	7438	25732	33170
Lead+ Zinc Metal	'000t	-	143	143
Limestone	'000t	19028470	208560789	227589259
Magnesite	'000t	66070	393047	459117
Manganese Ore	'000t	75041	428583	503624

SECTION - 1

GENERAL

Table-1: Mineral Reserves and Resources as on 01.04.2020 (Contd...)

Mineral	Unit	Reserves (A)	Remaining Resources (B)	Total (A+B)
Marl	Tonne	68145000	31053477	99198477
Molybdenum				
Ore	Tonne	-	27203398	27203398
Contained MoS ₂	Tonne	-	16891	16891
Nickel Ore	Million Tonnes	-	189	189
Perlite	'000t	-	2406	2406
Platinum group of metals (PGM)	Tonnes of Metal Contained	-	21	21
Potash	MillionTonnes	-	23091	23091
Pyrite	'000t	-	1674401	1674401
Rare Earth Elements (REE)	Tonne	-	459727	459727
Rock Phosphate	Tonne	30876093	280377392	311253485
Rock Salt	'000t	3860	8920	12780
Ruby	Kilogram	-	5349	5349
Sapphire	Kilogram	-	450	450
Sillimanite	Tonne	8262300	64005091	72267391
Silver				
Ore	Tonne	170446020	398197732	568643752
Metal	Tonne	7707	22561	30268
Sulphur (Native)	'000t	-	210	210
Tin				
Ore	Tonne	2101	83720794	83722895
Metal	Tonne	974	102783	103757
Titanium	Tonne	15998625	411108526	427107150
Tungsten				
Ore	Tonne	-	89432464	89432464
Metal	Tonne	-	144650	144650
Vanadium				
Ore	Tonne	-	24633855	24633855
Contained V ₂ O ₅	Tonne	-	64594	64594
Vermiculite	Tonne	1590996	765227	2356223
Wollastonite	Tonne	2680978	22427488	25108466
Zircon	Tonne	669466	1674435	2343901

Source: National Mineral Inventory as on 01.04.2020

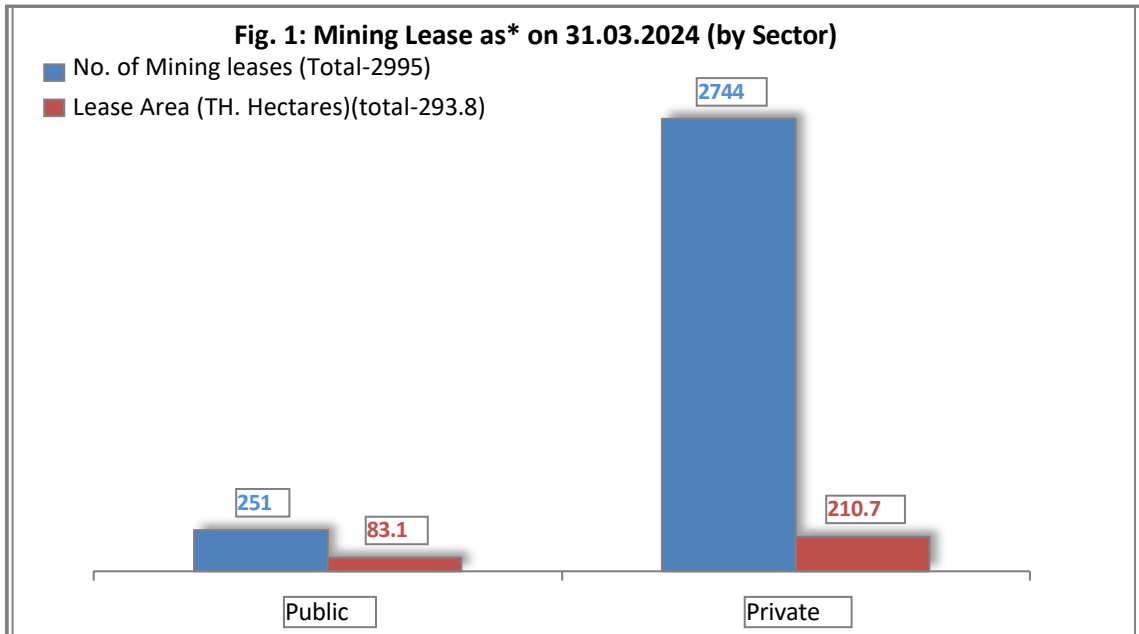
(P): provisional

N.E: Not estimated

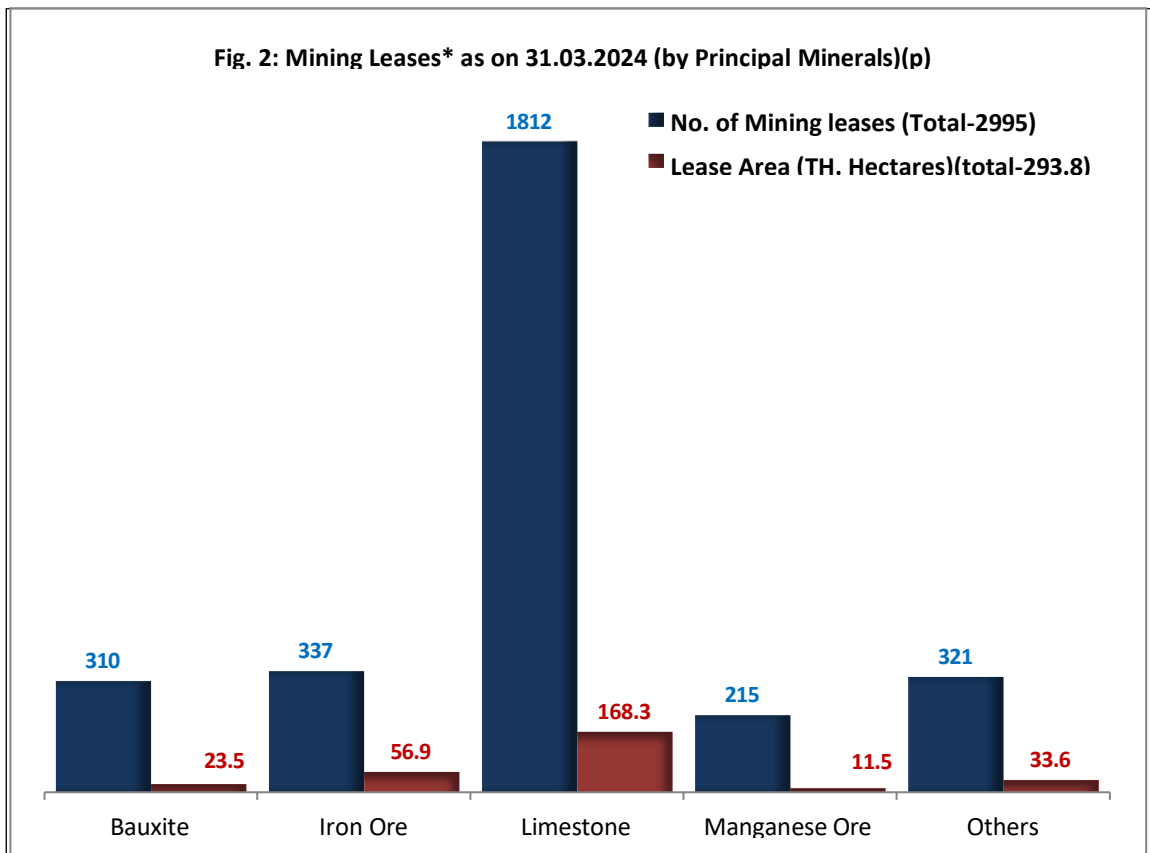
Note: Figures are rounded-off.

SECTION - 1 GENERAL

MINING LEASES



Source: Data as received from respective State Government Departments (DGMs/DMG).
 *: Excluding fuel, atomic & minor minerals (p): provisional



Source: Data as received from respective State Government Departments (DGMs/DMG).
 *: Excluding fuel, atomic & minor minerals (p): provisional

SECTION - 1

GENERAL

Table-2: Mineral wise Mining Leases* (as on 31-3-2024) (p)

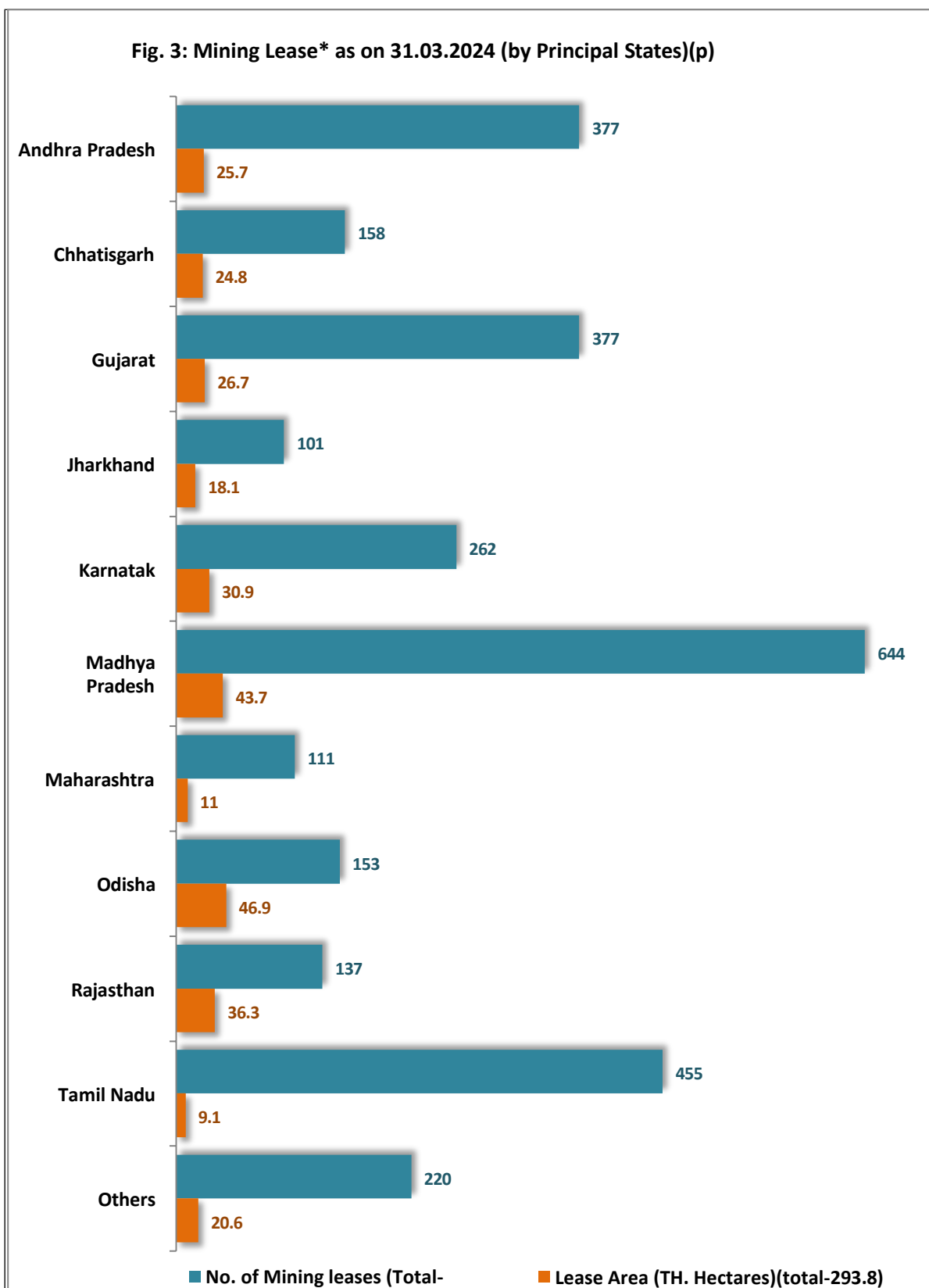
Mineral	No. of Mining Leases	Lease Area (in Hectares)
Grand Total	2995	293811.54
Metallic Total	932	115718.94
Aluminous Laterite	1	90.36
Bauxite	310	23524.363
Chromite	22	5620.859
Copper Ore	9	3916.851
Gold	10	6934.26
Iron Ore	337	56920.617
Lead and Zinc Ore	11	6890.4875
Manganese Ore	215	11482.96
Tin	17	338.183
Non-Metallic Total	2063	178092.597
Amethyst	2	5.83
Apatite	1	13.47
Beryl	2	9.8
Borax	1	159
Diamond	2	275.963
Emerald	2	125.64
Epidote	1	4.0515
Fluorite	7	416.158
Fluorspar	1	63.2
Garnet	20	118.7838
Gemstone Cats Eye	3	82.357
Graphite	27	1199.0369
Iolite	2	16.417
Kyanite	15	288.982
Limeshell	18	873.958
Limestone	1812	168264.605
Magnesite	33	2301.721
Moulding Sand	6	39.232
Perlite	1	144.8831
Rock Phosphate	7	1534.237
Rock Salt	1	8.122
Selenite	4	624.3466
Semi Precious Stone	14	164.214
Siliceous Earth	17	168.4086
Sillamanite	1	4.64
Stibnite/Antimony	1	40.468
Vermiculite	50	890.9683
Wollastonite	12	254.1042

Source: Data as received from respective State Government Departments (DGMs/DMG).

*: Excluding fuel, atomic & minor minerals

(p): provisional

SECTION - 1 GENERAL



Source: Data as received from respective State Government Departments (DGMs/DMG).
 *: Excluding fuel, atomic & minor minerals (p): provisional

SECTION - 1

GENERAL

Table-3: State wise Mining Leases* as on 31-3-2024 (p)

State/UT	No. of Mining Leases	Lease Area (in Hectares)
All India	2995	293811.5373
Andhra Pradesh	377	25650.8434
Assam	6	858.5
Bihar	5	53.378
Chhattisgarh	158	24825.281
Goa	10	918.3144
Gujarat	377	26732.8153
Haryana	4	46.85
Himachal Pradesh	39	2430.489
Jammu & Kashmir	37	1330.231
Jharkhand	101	18099.9169
Karnataka	262	30945.005
Kerala	5	421.654
Ladakh (UT)	1	159
Madhya Pradesh	644	43658.856
Maharashtra	111	10990.034
Meghalaya	23	824.6102
Odisha	153	46921.1818
Rajasthan	137	36253.10025
TamilNadu	455	9096.255
Telangana	78	10429.733
Uttar Pradesh	4	2960.21
Uttarakhand	7	191.809
West Bengal	1	13.47

Source: Data as received from respective State Government Departments (DGMs/DMG).

*: Excluding fuel, atomic & minor minerals (p): provisional

SECTION - 1

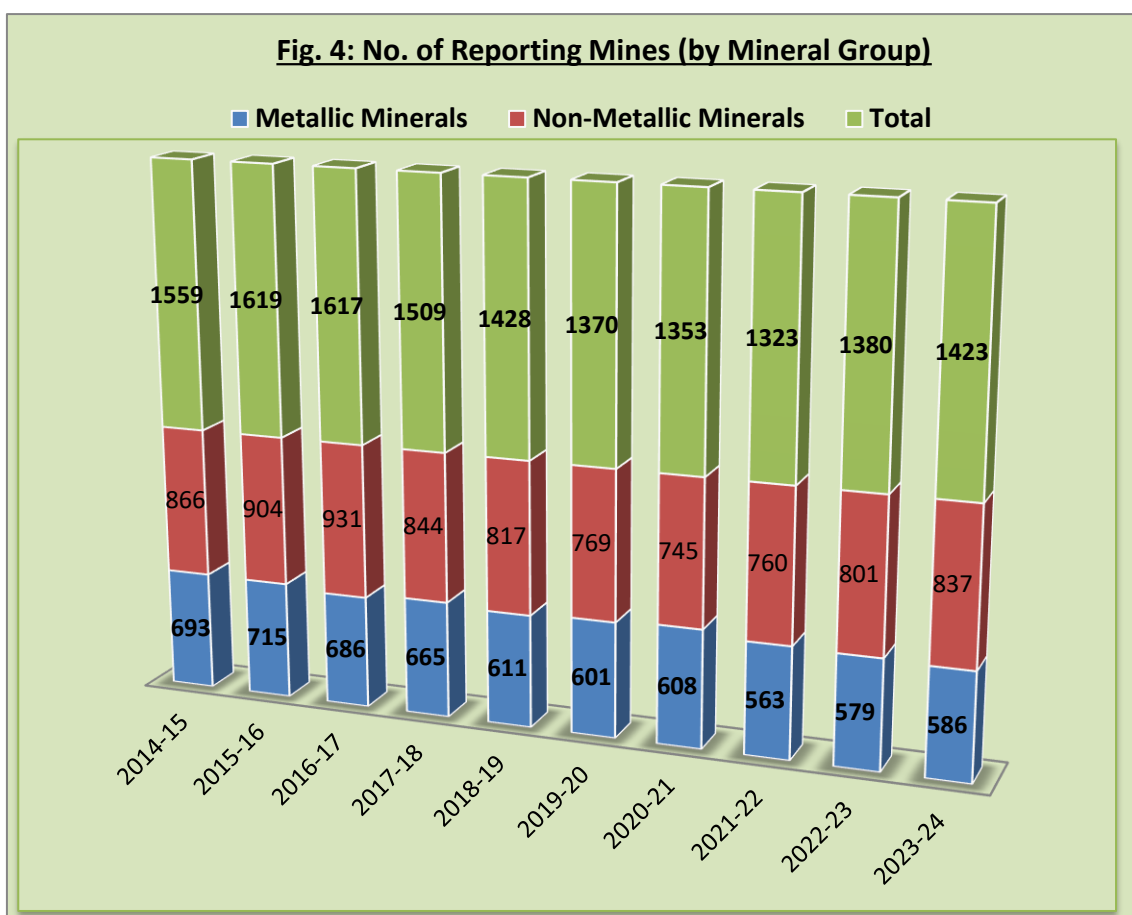
GENERAL

REPORTING MINES

Reporting mine is defined as “A mine reporting production or reporting ‘nil’ production during a year but engaged in developmental work, such as, overburden removal, underground driving, winzing, sinking work, exploration by pitting, trenching or drilling as evident from the MCDR returns”.

There were 1,423 reporting mines (excluding Fuel Minerals, Atomic and Minor Minerals) in India located in different States and UTs during 2023-24. Among them, 586 belong to Metallic Minerals and 837 to Non-metallic Minerals. There were 171 mines in Public Sector and the rest of 1,252 mines were in Private Sector (Table-4).

REPORTING MINES



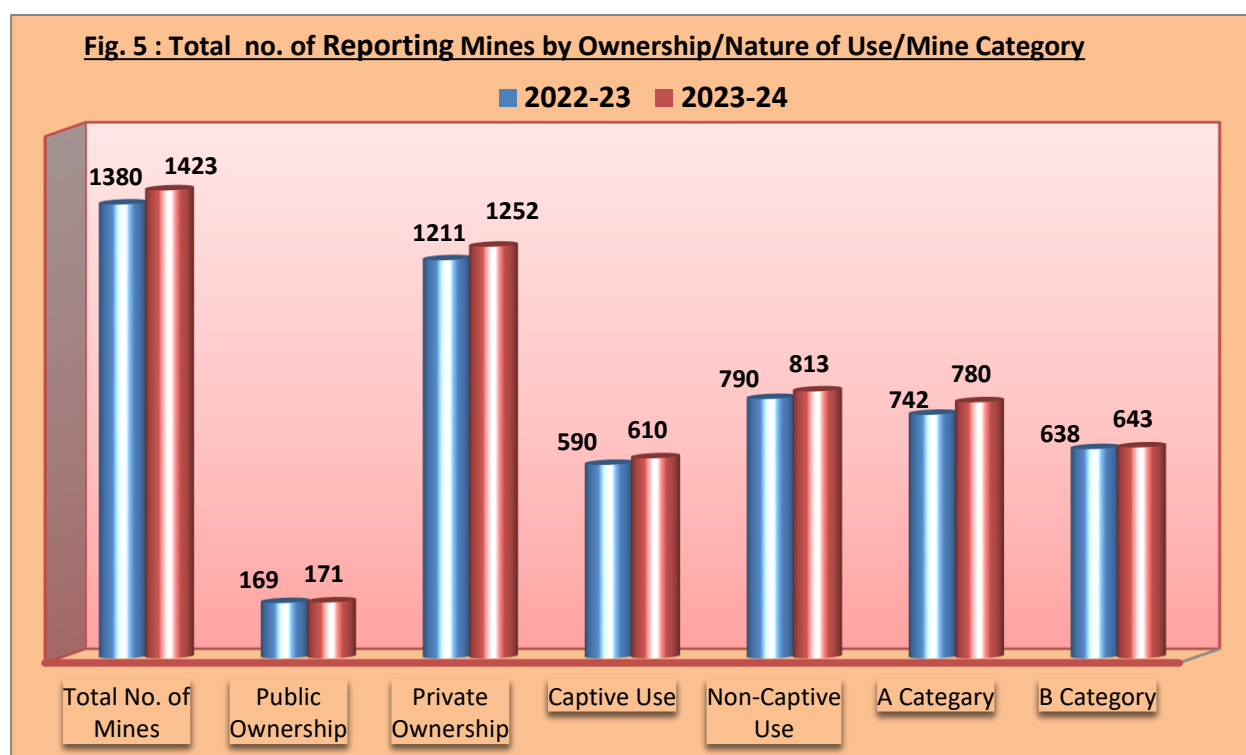
SECTION - 1

GENERAL

Number of Reporting Mines* (By Mineral Groups)

Year	Metallic Minerals	Non-Metallic Minerals	Total
2014-15	693	866	1559
2015-16	715	904	1619
2016-17	686	931	1617
2017-18	665	844	1509
2018-19	611	817	1428
2019-20	601	769	1370
2020-21	608	745	1353
2021-22	563	760	1323
2022-23	579	801	1380
2023-24(P)	586	837	1423

*: Excluding Atomic, Fuel and Minor Minerals



Source: MCDR Returns

SECTION - 1
GENERAL

Table-4: Number of Reporting Mines * (Mineral wise)

Mineral	2023-24(P)							2022-23						
	No. of Mines	Ownership		Nature of Use		Mine Category		No. of Mines	Ownership		Nature of Use		Mine Category	
		Public	Private	Captive	Non-Captive	A	B		Public	Private	Captive	Non-Captive	A	B
All India	1423	171	1252	610	813	780	643	1380	169	1211	590	790	742	638
Metallic Minerals: Total	586	118	468	144	442	284	302	579	113	466	141	438	274	305
Bauxite	160	22	138	49	111	48	112	150	19	131	55	95	44	106
Chromite	21	8	13	9	12	19	2	21	8	13	9	12	19	2
Copper Ore & Concentrates	5	5	0	5	0	5	0	2	2	0	2	0	2	0
Gold	6	4	2	6	0	5	1	5	4	1	5	0	5	0
Iron Ore & Concentrates	202	43	159	54	148	121	81	207	42	165	49	158	122	85
Lead & Zinc Concentrates	10	2	8	8	2	8	2	10	2	8	8	2	8	2
Manganese Ore	178	33	145	10	168	78	100	180	35	145	10	170	74	106
Silver	0							0	0	0	0	0	0	0
Tin Concentrates	4	1	3	3	1	0	4	4	1	3	3	1	0	4

*: Excluding fuel, atomic & minor minerals

SECTION - 1
GENERAL

Table-4 (contd...): Number of Reporting Mines * (Mineral wise)

Mineral	2023-24(P)							2022-23						
	No. of Mines	Ownership		Nature of Use		Mine Category		No. of Mines	Ownership		Nature of Use		Mine Category	
		Public	Private	Captive	Non-Captive	A	B		Public	Private	Captive	Non-Captive	A	B
Non-Metallic Minerals: Total	837	53	784	466	371	496	341	801	56	745	449	352	468	333
Apatite	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asbestos	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diamond	3	3	0	0	3	2	1	3	3	0	0	3	2	1
Emerald	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flint Stone	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fluorite	2	1	1	0	2	1	1	4	3	1	2	2	3	1
Garnet	8		8	0	8	4	4	5		5	0	5	3	2
Graphite	10	1	9	9	1	2	8	11	1	10	1	10	2	9
Iolite	1	0	1	0	1	0	1	3	0	3	1	2	0	3
Kyanite	5	2	3		5		5	5	2	3		5		5
Lime Shell	2		2	0	2	0	2	2		2	0	2	0	2
Limestone	735	30	705	428	307	440	295	696	31	665	418	278	413	283
Magnesite	10	5	5	5	5	8	2	10	5	5	5	5	7	3
Marl	20		20	19	1	19	1	20	0	20	19	1	19	1
Moulding Sand	4		4	1	3	1	3	3		3	0	3	1	2
Phosphorite	8	7	1	1	7	5	3	8	7	1	1	7	5	3
Salt (Rock)	1	1	0		1		1	1	1		0	1	0	1
Selenite	3	2	1	1	2	2	1	2	2	0	0	2	1	1
Siliceous Earth	10		10	0	10	9	1	12		12	0	12	9	3
Sillimanite	2		2		2		2	2		2		2		2
Vermiculite	10	1	9	1	9	2	8	9	1	8	1	8	2	7
Wollastonite	3		3	1	2	1	2	5		5	1	4	1	4

*: Excluding fuel, atomic & minor minerals

SECTION - 1 GENERAL

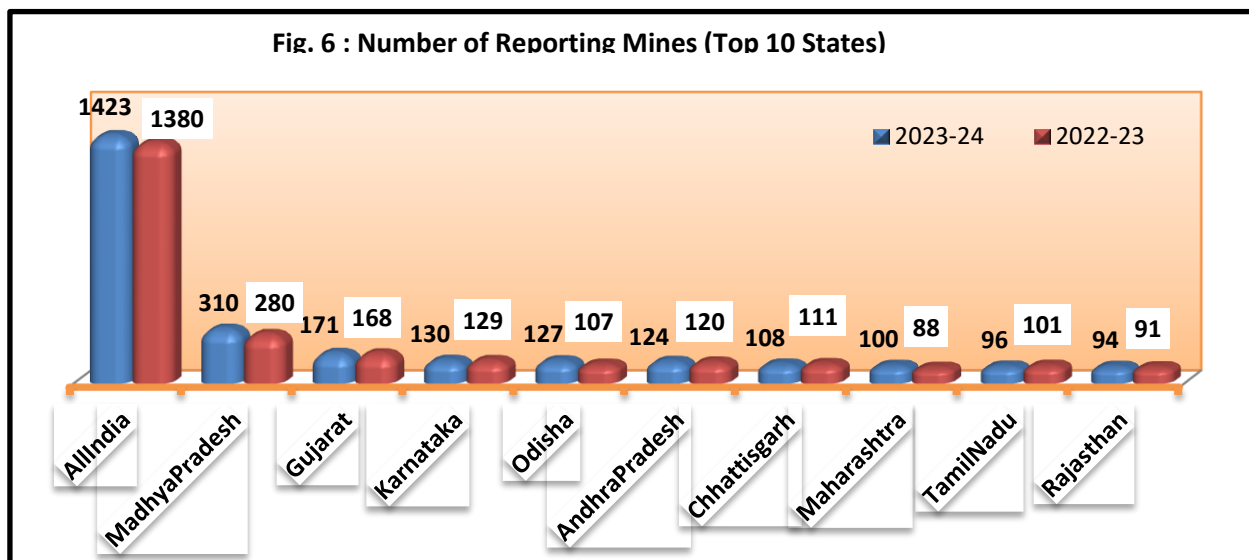


Table-5: Number of Reporting Mines*(State wise)

State	2023-24(p)	2022-23@
All India	1423	1380
Andhra Pradesh	124	120
Arunachal Pradesh	0	0
Assam	4	3
Bihar	1	1
Chhattisgarh	108	111
Goa	10	21
Gujarat	171	168
Haryana	0	0
Himachal Pradesh	27	23
Jammu and Kashmir	19	9
Jharkhand	38	41
Karnataka	130	129
Kerala	1	1
Madhya Pradesh	310	280
Maharashtra	100	88
Meghalaya	17	40
Odisha	127	107
Rajasthan	94	91
Tamil Nadu	96	101
Telangana	41	42
Tripura	0	0
Uttar Pradesh	3	3
Uttarakhand	2	1
West Bengal	0	0

*: Excluding fuel, atomic & minor minerals.

SECTION - 1
GENERAL

Table-6: Gross Value Added (GVA) at Current Prices (Rs. Crores)

Financial Year	Total GVA	Mining & Quarrying	Percentage
2014-15(NS)	11481794	314177	2.7
2015-16(NS)	12566646	301230	2.4
2016-17(NS)	13935917	321872	2.3
2017-18(2 nd RE)	15513122	357788	2.3
2018-19(2 nd RE)	17161213	377171	2.2
2019-20(2 nd RE)	18355109	358517	2.0
2020-21(2 nd RE)	18188780	316268	1.7
2021-22(2 nd RE)	21635584	439339	2.0
2022-23(FRE)	24659041	494602	2.0
2023-24 (PE)	26762147	525881	1.9

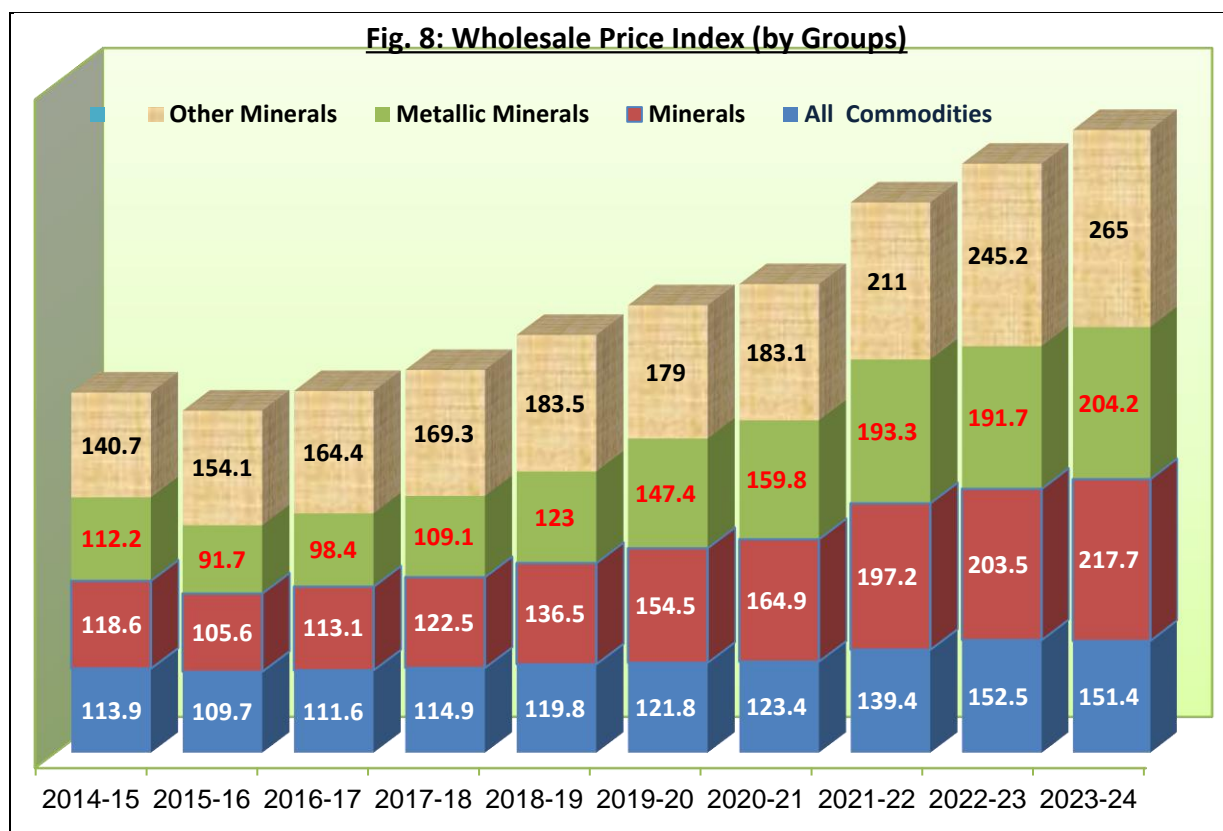
Source: MOSPI. (NS): New Series (RE): Revised Estimates (PE): Provisional Estimates

Table-7: Index of Mineral Production, 2014-15 to 2023-24(p)
(By Mineral Groups)

Year	Fuels	Metallic Minerals	Non-Metallic Minerals	All Minerals
(Base 2004-05)	W=857.18	W=80.765	W=42.327	W=1000
2014-15	129.1	92.1	175.4	126.5
(Base 2011-12)	W=751.172	W=230.004	W=18.824	W=1000
2015-16	98.1	94	106.5	97.3
2016-17	98.7	114.6	107.8	102.5
2017-18	100.3	119	117.4	104.9
2018-19	102.6	123.5	128.1	107.9
2019-20	99.6	141.3	120.9	109.6
2020-21	95.5	117.7	117.4	101
2021-22	102.6	146.8	130.1	113.3
2022-23	110.6	148.6	137.7	119.9
2023-24(P)	119.3	158.4	149.0	128.9

Note: Minor Minerals are excluded from Item Basket for Base Year 2011-12

SECTION - 1 GENERAL



**Table-8: Wholesale Price Index, 2014-15 to 2023-24
(By Groups)**

Year	All Commodities	Minerals	Metallic Minerals	Other Minerals
(Base 2011-12=100)				
2014-15	113.9	118.6	112.2	140.7
2015-16	109.7	105.6	91.7	154.1
2016-17	111.6	113.1	98.4	164.4
2017-18	114.9	122.5	109.1	169.3
2018-19	119.8	136.5	123.0	183.5
2019-20	121.8	154.5	147.4	179.0
2020-21	123.4	164.9	159.8	183.1
2021-22	139.4	197.2	193.3	211.0
2022-23	152.5	203.5	191.7	245.2
2023-24(P)	151.4	217.7	204.2	265.0

Source: Office of Economic Adviser, DPIIT.

SECTION - 2 MINERALS

Mineral Production	Value of Mineral Production (By Mineral Group), 2014-15 to 2023-24	23
	Value of Mineral Production (By State), 2019-20 to 2023-24	24-25
	Number of Mine (By Type of Ownership/ By Nature of Use/ By Mine Category), 2014-15 to 2023-24 &	26
	Value of Mineral Production (By Type of Ownership/By Nature of Use/ By Mine Category), 2014-15 to 2023-24	

Mineral Overview	Mineral wise Overview (By Number of Mines/Mineral production/Closing Stock/Labour Employed), 2014-15 to 2023-24	27-38
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SECTION - 2

MINERALS

MINERAL PRODUCTION

The value of mineral production in India, covering both metallic and non-metallic minerals, was reached ₹1,41,803 crore in 2023–24. The value of mineral production was increased by 15% as compared to the previous year. Metallic minerals accounted for about 90.69% of the total value, while non-metallic minerals contributed the remaining 9.31% during 2023–24 of the total value of mineral production in India.

During 2023–24, the production of major metallic minerals such as bauxite, iron ore, manganese ore, copper ore and concentrates, gold, and silver showed a significant increase over the last decade, whereas the production of chromite and tin concentrates declined during the same period. Similarly, the production of non-metallic minerals—excluding diamond and sillimanite—exhibited an overall upward trend during the last decade.

Metallic Minerals:

The production of bauxite was at 23.84 million tonnes in 2022–23 and increased marginally to 23.96 million tonnes in 2023–24. Over the decade, bauxite production showed a fluctuating trend. The Chromite production was recorded at 3.1 million tonnes in 2023–24, reflecting a decline of about 11% compared to the previous year. The output of copper ore also showed a fluctuating trend during the decade and reached 3,782 thousand tonnes in 2023–24, marking an increase of about 14 % over the preceding year.

Iron ore production touched its highest level of 277 million tonnes in 2023–24 during the decade. However, its output fluctuated over the period and was recorded at 258 million tonnes in 2022–23, which was increased 7% over the previous year. The production of manganese ore was exhibited a fluctuating trend and peaked at 3,381 thousand tonnes in 2023–24, showing an increase of 20 % compared to the previous year.

In 2023–24, the production of lead and zinc ores was touched at 16,521 thousand tonnes, while lead concentrates accounted for 381 thousand tonnes and zinc concentrates for 1,710 thousand tonnes. During the decade ending in 2023–24, the production of primary gold was recorded at 1,603 kilograms, whereas silver production was recorded at 745980 kilograms in 2023-24.

Non-Metallic Minerals:

The production of apatite and phosphorite was recorded at 1,558 thousand tonnes in 2023–24, reflecting a decline of about 21 % compared to the previous year. Over the decade, their production exhibited a fluctuating trend. Diamond production showed a mixed trend during the decade and was recorded at 349 carats in 2023–24. It was decreased by about 10 % over the preceding year.

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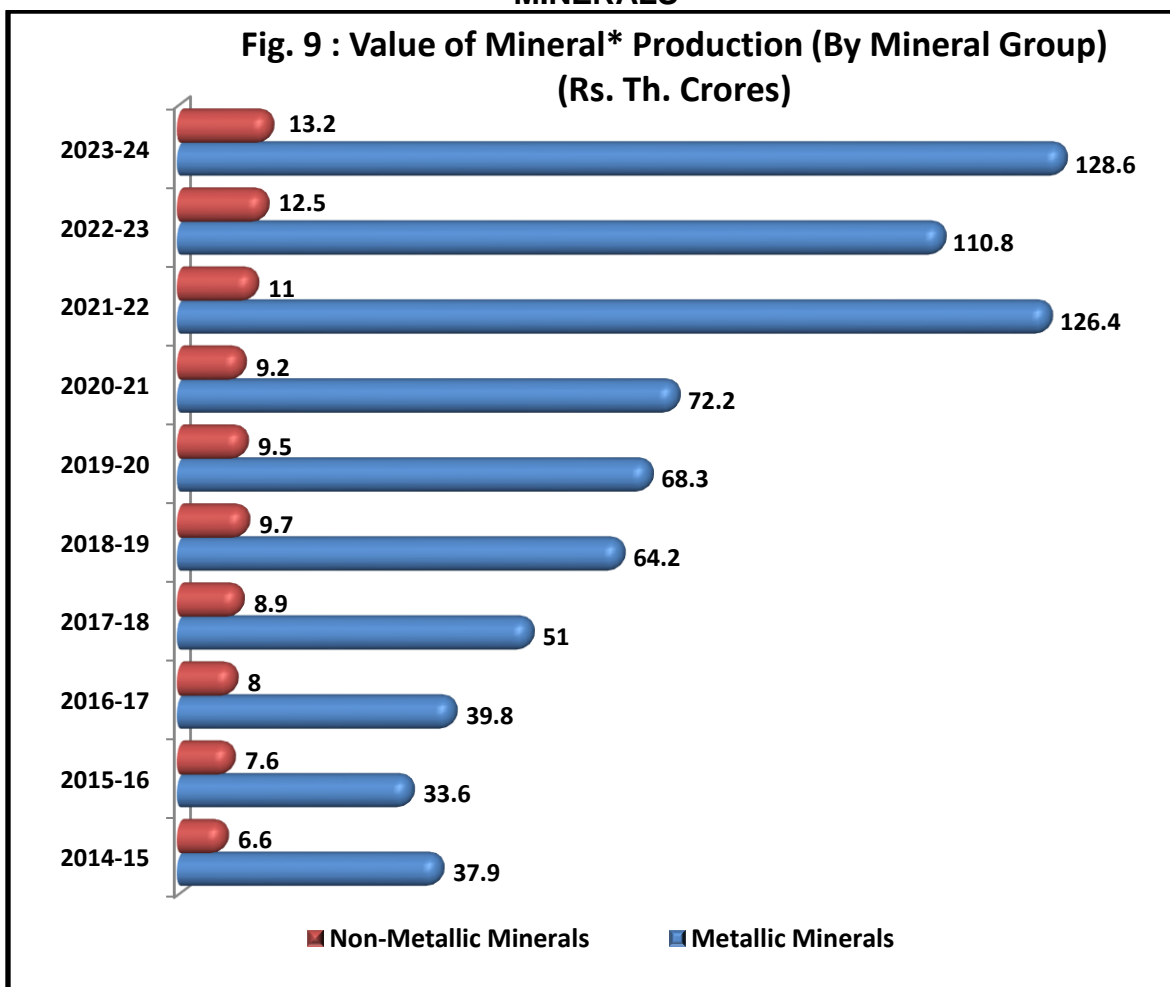
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The Limestone production also displayed a fluctuating trend during the decade ending 2023–24 and reached its highest level of 452 million tonnes in 2023–24, which was 12% higher than in 2022–23. The production of magnesite showed a mixed trend over the decade and was recorded at 132 thousand tonnes in 2023–24, marking an increase of 22 % compared to the previous year.

The Garnet production was reached at 23 thousand tonnes in 2023–24. Graphite production touched its highest level of 168 thousand tonnes during the decade in 2023–24, showing a substantial increase of 79 per cent over the preceding year. However, the production of sillimanite declined sharply and reached its lowest level of 771 tonnes in 2023–24, representing a decrease of 46 per cent compared to the previous year.

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**Value of Mineral* Production, 2014-15 to 2023-24
(By Groups)**

(Value in Rs. Thousand Crore)

Year	Total	Metallic Minerals	Non-Metallic Minerals
2014-15	44.5	37.9	6.6
2015-16	41.2	33.6	7.6
2016-17	47.8	39.8	8
2017-18	59.9	51	8.9
2018-19	73.9	64.2	9.7
2019-20	77.8	68.3	9.5
2020-21	81.4	72.2	9.2
2021-22	137.4	126.4	11
2022-23	123.3	110.8	12.5
2023-24(P)	141.8	128.6	13.2

*: Excluding fuel, atomic & minor minerals.

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**Fig. 10 : Value of Mineral Production by Principal States
(Rs. Thousand Crores)**



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**Table-9: Value of Mineral* Production
(By States)**

(Value in Rs. Crore)

State	2019-20	2020-21	2021-22	2022-23	2023-24 (P)
All India	77802	81435	137422	123318	141803
Andhra Pradesh	1094	979	1222	1353	1501
Assam	50	47	54	61	63
Bihar	26	30	35	33	40
Chhattisgarh	11098	14311	23514	18521	20164
Goa	0	90	0	0	2
Gujarat	696	652	704	715	764
Haryana	0	0	0	0	0
Himachal Pradesh	275	263	298	276	312
Jammu & Kashmir	28	30	29	30	31
Jharkhand	3188	3044	5769	5160	5796
Karnataka	8268	10832	17816	13375	16104
Kerala	36	33	37	32	30
Madhya Pradesh	2603	2657	3358	3373	3864
Maharashtra	1137	1205	1937	3360	5524
Meghalaya	299	269	297	413	477
Orissa	34126	30044	62542	54250	63942
Punjab	0	0	0	0	0
Rajasthan	13500	15731	18399	20895	21671
Tamil Nadu	747	625	721	820	882
Telangana**	530	497	599	574	557
Uttar Pradesh	93	90	85	69	70
Uttaranchal	8	5	5	7	11
West Bengal	0	0	0	0	0

Source: MCDR Returns.

*: Excluding fuel, atomic & minor minerals.

** : State came into existence w. e. f. 02.06.2014

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**Table-10: Number of Mines*, 2014-15 to 2023-24
(By Ownership/Nature of Use/Mine Category)**

Year	Number of Mines	Ownership		Nature of Use		Mine Category	
		Public	Private	Captive	Non Captive	A	B
2014-15	1559	145	1414	543	1016	480	1079
2015-16	1619	144	1475	550	1069	487	1132
2016-17	1617	153	1464	544	1073	510	1107
2017-18	1509	151	1358	548	961	541	968
2018-19	1428	157	1271	549	879	559	869
2019-20	1370	148	1222	539	831	563	807
2020-21	1353	160	1193	534	819	595	758
2021-22	1323	161	1162	567	756	600	723
2022-23	1380	169	1211	590	790	742	638
2023-24(P)	1423	171	1252	610	813	780	643

Source: MCDR Returns.

*: Excluding fuel, atomic & minor minerals.

**Table-11: Value of Mineral* Production, 2014-15 to 2023-24
(By Ownership/Nature of Use/Mine Category)**

(Value in Rs. Crores)

Year	Total Value	Type of Ownership		Nature of Use		Mine Category	
		Public	Private	Captive	Non Captive	A	B
2014-15	45824	18543	27281	16396	29428	35553	10271
2015-16	41194	13357	27836	18085	23109	32665	8528
2016-17	47789	15120	32670	19758	28031	38160	9629
2017-18	59831	19562	40269	22645	37186	46560	13271
2018-19	73955	22516	51439	26542	47413	57851	16104
2019-20	77802	20668	57134	27200	50602	59938	17864
2020-21	81435	27659	53775	28981	52454	64727	16708
2021-22	137422	55388	82034	44996	92426	112785	24637
2022-23	123318	48608	74710	34533	72055	87971	18617
2023-24(P)	141803	55145	86658	42002	82361	98552	25811

Source: MCDR Returns.

*: Excluding fuel, atomic & minor minerals.

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Table-12: Mineral Overview

Mineral	Year	No. of Mines	Quantity	Value (Rs. Crore)	Closing Stock	Labour Employed (Av. Daily)
Bauxite ('000 tonne)	2014-15	162	22494	1192	10768	6698
	2015-16	190	28124	1544	14093	8652
	2016-17	165	24745	1487	16301	6491
	2017-18	163	22786	1578	18072	6632
	2018-19	157	23690	1784	19927	6093
	2019-20	144	21825	1630	15289	6162
	2020-21	134	20381	1679	17116	5023
	2021-22	127	22494	2528	16101	5275
	2022-23	150	23843	2737	17320	7857
	2023-24(P)	160	23968	2690	17524	6243
Chromite ('000 tonne)	2014-15	26	2164	1880	2245	6772
	2015-16	25	2916	2121	2560	6645
	2016-17	26	3728	3194	2694	6959
	2017-18	25	3481	3204	2270	7234
	2018-19	26	3971	3685	2253	7245
	2019-20	22	3929	3213	2411	5845
	2020-21	24	2830	2186	2764	4249
	2021-22	20	3786	4797	2988	4480
	2022-23	21	3557	4663	2940	5911
	2023-24(P)	21	3148	4886	2624	6253
Iron Ore ('000 tonne)	2014-15	320	129321	27664	123705	39243
	2015-16	330	158108	22321	144498	42065
	2016-17	318	194584	25229	148716	45383
	2017-18	304	201426	34713	152953	45988
	2018-19	252	206494	45347	163121	43125
	2019-20	271	244083	49643	146718	45687
	2020-21	280	205041	52729	121170	42422
	2021-22	255	254099	100826	118595	48934
	2022-23	207	258312	83400	97385	56102
	2023-24(P)	202	277332	99825	83053	59620

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Table-12: Mineral Overview (Contd...)

Mineral	Year	No. of Mines	Quantity	Value (Rs. Crore)	Closing Stock	Labour Employed (Av. Daily)
Manganese Ore ('000 tonne)	2014-15	161	2369	1366	1114	15504
	2015-16	146	2167	855	1317	12990
	2016-17	153	2395	1625	1218	12505
	2017-18	149	2600	1991	1951	12903
	2018-19	148	2832	2164	2884	13164
	2019-20	137	2910	1885	6134	11775
	2020-21	145	2703	1742	2727	10191
	2021-22	134	2692	2207	2826	10600
	2022-23	180	2827	2284	3102	12960
	2023-24(P)	178	3381	2479	3468	13422

Source: MCDR Returns.

Table-12: Mineral Overview (contd...)

Mineral	Year	No. of Mines	Copper Ore	Copper Concentrates		Closing Stock (TH. Tonne)	Labour Employed (Av. Daily)
			Quantity (TH. Tonne)	Quantity (TH. Tonne)	Value (Rs. Crore)		
Copper Ore & Concentrates	2014-15	5	3505	108	529	12	3473
	2015-16	5	3908	152	655	42	3285
	2016-17	5	3846	135	651	38	2791
	2017-18	5	3678	142	771	40	2442
	2018-19	5	4135	144	885	38	3449
	2019-20	5	3952	125	845	64	3928
	2020-21	5	3273	109	853	23	2829
	2021-22	5	3570	115	1102	1	2794
	2022-23	2	3326	113	1021	3	1187
	2023-24(P)	5	3782	125	1314	8	3302

Source: MCDR Returns.

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Table-12 (contd...): Mineral Overview

Mineral	Year	No. of Mines	Gold Ore	Gold Primary		Closing Stock (TH. Tonne)	Labour Employed (Av. Daily)
			Quantity (TH. Tonne)	Quantity (Kg)	Value (Rs. Crore)		
Gold Ore & Gold Primary	2014-15	5	447	1441	360	122	3429
	2015-16	5	563	1323	321	106	3426
	2016-17	5	582	1595	436	110	3451
	2017-18	5	550	1650	477	68	3235
	2018-19	7	567	1672	527	89	3258
	2019-20	6	596	1742	650	151	3216
	2020-21	5	438	1127	548	101	3247
	2021-22	6	475	1407	676	15	3128
	2022-23	5	634	1437	765	32	3034
	2023-24(P)	6	760	1603	967	61	3063

Source: MCDR Returns and individual plants.

Table-12: Mineral Overview (contd...)

Mineral	Year	No. of Mines	Lead & Zinc Ore	Lead Concentrates		Zinc Concentrates		Closing Stock (TH. Tonne)	Labour Employed (Av. Daily)
			Quantity (TH. Tonne)	Quantity (TH. Tonne)	Value (Rs. Crore)	Quantity (TH. Tonne)	Value (Rs. Crore)		
Lead & Zinc Ore and Concentrates	2014-15	8	9363	198	564	1489	3157	116	7222
	2015-16	8	10453	262	789	1474	3494	42	7018
	2016-17	8	11881	268	967	1484	4339	1028	7337
	2017-18	8	12614	306	1143	1540	4980	237	8056
	2018-19	10	13752	358	1632	1457	5608	39	8223
	2019-20	10	14479	352	1826	1447	6044	83	10396
	2020-21	10	15455	377	1881	1514	6313	83	8535
	2021-22	10	16339	368	2203	1594	7873	99	14876
	2022-23	10	16744	377	2449	1670	9122	144	10249
	2023-24(P)	10	16521	381	2547	1710	8565	127	12254

Source: MCDR Returns.

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Table-12: Mineral Overview (contd...)

Mineral	Year	No. of Mines	Production		Closing Stock	Labour Employed (Av. Daily)
			Quantity (Kg)	Value (Rs. '000)		
Tin Concentrates	2014-15	6	24685	18528	8093	34
	2015-16	6	13541	9231	3683	32
	2016-17	6	12121	8736	6989	19
	2017-18	6	16758	11347	5136	16
	2018-19	6	21212	14627	9315	6
	2019-20	6	15530	10337	10809	9
	2020-21	3	16865	10413	8520	9
	2021-22	6	26292	31979	260	12
	2022-23	4	45432	52285	313	7
	2023-24(P)	4	22345	17341	4903	8

Source: MCDR Returns.

Table-12: Mineral Overview (contd...)

Mineral	Year	Production	
		Quantity (Kg)	Value (Rs. Crore)
Silver	2014-15	327647	1195
	2015-16	426443	1521
	2016-17	460811	1832
	2017-18	557691	2118
	2018-19	679386	2582
	2019-20	609340	2562
	2020-21	705796	4266
	2021-22	647156	4213
	2022-23	713768	4381
	2023-24(P)	745980	5356

Source: MCDR Returns.

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Table-12: Mineral Overview (contd...)

Mineral	Year	No. of Mines	Production		Closing Stock	Labour Employed (Av. Daily)
			Quantity	Value ('000Rs.)		
Apatite (tonne)	2014-15	2	930	2065	6581	118
	2015-16	2	110	387	6691	95
	2016-17	2	-	-	6641	58
	2017-18	2	-	-	6306	45
	2018-19	1	-	-	6306	1
	2019-20	-	-	-	6306	-
	2020-21	-	-	-	6306	-
	2021-22	-	-	-	6306	-
	2022-23	-	-	-	6306	-
	2023-24(P)	-	-	-	6306	-
Asbestos (tonne)	2014-15	-	-	-	11	-
	2015-16	-	-	-	-	-
	2016-17	-	-	-	-	-
	2017-18	-	-	-	-	-
	2018-19	-	-	-	-	-
	2019-20	-	-	-	-	-
	2020-21	-	-	-	-	-
	2021-22	-	-	-	-	-
	2022-23	-	-	-	-	-
	2023-24(P)	-	-	-	-	-
Diamond (carat)	2014-15	2	36107	613504	15303	176
	2015-16	2	36044	621441	14084	156
	2016-17	2	36491	639562	24102	157
	2017-18	2	39699	374110	25637	135
	2018-19	2	38437	539062	39163	131
	2019-20	2	28816	352472	33938	161
	2020-21	2	13917	147696	25329	142
	2021-22	3	266	18051	73	699
	2022-23	3	388	61473	260	871
	2023-24(P)	3	349	23858	412	645

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Table-12: Mineral Overview (contd...)

Mineral	Year	No. of Mines	Production		Closing Stock	Labour Employed (Av. Daily)
			Quantity	Value ('000Rs.)		
Flint Stone (tonne)	2014-15	2	244	79	-	7
	2015-16	1	253	76	-	2
	2016-17	1	26	8	-	3
	2017-18	-	-	-	-	-
	2018-19	-	-	-	-	-
	2019-20	-	-	-	-	-
	2020-21	-	-	-	-	-
	2021-22	-	-	-	-	-
	2022-23	-	-	-	-	-
	2023-24(P)	-	-	-	-	-
Fluorite (tonne)	2014-15	2	2946	13761	94296	53
	2015-16	2	2333	12965	96619	58
	2016-17	2	1175	6733	97794	46
	2017-18	1	1314	8646	97359	43
	2018-19	1	1079	8117	97597	44
	2019-20	1	1315	8844	97749	44
	2020-21	1	1052	8018	97818	46
	2021-22	1	1237	9430	97141	36
	2022-23	4	1155	6224	98177	52
	2023-24(P)	2	6042	5716	1195592	55
Garnet (tonne)	2014-15	6	91394	800998	63608	1864
	2015-16	7	82001	648124	62908	1890
	2016-17	7	85413	787302	67953	1894
	2017-18	7	158277	1618903	78008	863
	2018-19	10	123404	1746756	95784	1267
	2019-20	7	568	1775	45947	39
	2020-21	9	7114	26378	3832	66
	2021-22	7	8182	29880	3259	52
	2022-23	5	9859	36217	13895	64
	2023-24(P)	8	23836	95837	454737	124

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Table-12: Mineral Overview (contd...)

Mineral	Year	No. of Mines	Production		Closing Stock	Labour Employed (Av. Daily)
			Quantity	Value ('000Rs.)		
Graphite (tonne)	2014-15	10	116712	83996	115526	231
	2015-16	11	135528	106487	139589	253
	2016-17	9	122438	94158	186603	162
	2017-18	9	33649	28229	177914	249
	2018-19	11	39030	36233	177944	237
	2019-20	12	34674	55908	179191	219
	2020-21	13	35386	87147	182564	167
	2021-22	14	62888	122147	179193	131
	2022-23	11	94789	180152	191057	132
	2023-24(P)	10	168341	224542	271933	131
Iolite (Kg)	2014-15	-	-	-	2241	-
	2015-16	-	-	-	2204	-
	2016-17	-	-	-	2204	-
	2017-18	-	-	-	2220	-
	2018-19	3	73	684	2321	33
	2019-20	2	90	579	2411	24
	2020-21	3	16	73	2427	8
	2021-22	3	27	191	2454	61
	2022-23	3	-	-	2439	12
	2023-24(P)	3	-	-	2439	8
Kyanite (tonne)	2014-15	3	6255	12185	14280	57
	2015-16	5	2901	14180	14519	98
	2016-17	5	3253	13458	12891	69
	2017-18	5	7818	23277	12340	80
	2018-19	4	4889	15757	12384	64
	2019-20	5	3498	12728	9622	69
	2020-21	4	4925	9251	11265	61
	2021-22	5	9320	17267	13745	95
	2022-23	5	2765	5319	12194	87
	2023-24(P)	5	3324	10515	12643	61

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Table-12: Mineral Overview (contd...)

Mineral	Year	No. of Mines	Production		Closing Stock	Labour Employed (Av. Daily)
			Quantity	Value ('000 Rs.)		
Lime Shell (tonne)	2014-15	7	16353	37137	2468	533
	2015-16	7	10353	28613	996	534
	2016-17	7	12344	34774	2719	483
	2017-18	6	14765	51445	18492	511
	2018-19	5	7534	27780	4408	290
	2019-20	2	4600	18730	6921	244
	2020-21	-	-	-	608	1
	2021-22	1	100	231	590	9
	2022-23	2	250	656	696	1
	2023-24(P)	2	891	2633	9162	17
Moulding Sand (tonne)	2014-15	3	6383	1671	411	29
	2015-16	3	26042	6117	1148	34
	2016-17	4	27685	6623	6241	31
	2017-18	4	7100	1804	261	18
	2018-19	3	14805	4145	66	11
	2019-20	3	12905	3766	2293	11
	2020-21	4	14363	4150	5697	24
	2021-22	4	17583	5256	4598	23
	2022-23	3	17260	5373	7172	38
	2023-24(P)	4	24494	7386	164465	23
Salt Rock (tonne)	2014-15	0	0	0	0	0
	2015-16	0	0	0	0	0
	2016-17	1	0	0	0	14
	2017-18	1	47	421	1	25
	2018-19	1	17	160	2	27
	2019-20	1	130	1447	3	24
	2020-21	1	486	14156	113	23
	2021-22	1	286	712	38	23
	2022-23	1	1002	4849	561	22
	2023-24(P)	1	0	0	295	21

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Table-12: Mineral Overview (contd...)

Mineral	Year	No. of Mines	Production		Closing Stock	Labour Employed (Av. Daily)
			Quantity	Value ('000 Rs.)		
Selenite (tonne)	2014-15	2	207	456	-	12
	2015-16	3	3103	6206	-	20
	2016-17	3	4328	8656	-	24
	2017-18	4	469	939	-	21
	2018-19	3	2906	5812	-	16
	2019-20	2	2154	4206	825	14
	2020-21	3	402	602	763	15
	2021-22	4	716	902	494	18
	2022-23	2	327	442	94	11
	2023-24(P)	3	14136	19566	13742	21
Silicious Earth (tonne)	2014-15	-	-	-	-	-
	2015-16	13	47386	20735	45029	89
	2016-17	16	77270	55340	72980	92
	2017-18	15	86662	53164	93014	106
	2018-19	16	80237	50205	86493	133
	2019-20	12	19367	11710	80622	85
	2020-21	12	23823	14686	81530	48
	2021-22	13	33898	22837	71321	47
	2022-23	12	32070	17360	38543	66
	2023-24(P)	10	58047	33735	502634	66
Sillimanite (tonne)	2014-15	4	66273	456050	21239	1720
	2015-16	4	69942	509314	24430	1759
	2016-17	5	68131	535949	28555	1776
	2017-18	5	81638	671690	21635	1678
	2018-19	6	69919	564498	15804	2042
	2019-20	2	13221	37903	10113	36
	2020-21	1	11110	13987	1463	2
	2021-22	-	3432	7973	2906	-
	2022-23	2	1437	3757	3898	-
	2023-24(P)	2	771	2648	4193	-

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Table-12: Mineral Overview (contd...)

Mineral	Year	No. of Mines	Production		Closing Stock	Labour Employed (Av. Daily)
			Quantity	Value ('000 Rs.)		
Vermiculite (tonne)	2014-15	8	19336	12479	17899	107
	2015-16	7	23279	10556	29045	106
	2016-17	6	9042	8162	27570	78
	2017-18	5	6054	7075	26915	71
	2018-19	5	2992	3709	25693	63
	2019-20	5	2774	3347	16786	61
	2020-21	5	1260	2157	7806	43
	2021-22	6	3060	3765	16476	43
	2022-23	9	2303	1610	7871	52
	2023-24(P)	10	1129	781	11139	74
Wollastonite (tonne)	2014-15	6	186524	162113	3417	333
	2015-16	5	175348	150313	13896	309
	2016-17	4	166186	158823	17782	306
	2017-18	4	153049	126025	25518	279
	2018-19	3	184063	172013	82594	265
	2019-20	4	124757	139695	103115	244
	2020-21	4	103902	122210	118407	219
	2021-22	5	108335	149156	137695	191
	2022-23	5	110793	151761	157198	222
	2023-24(P)	3	110596	156108	165968	239

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Table-12: Mineral Overview (contd...)

Mineral	Year	No. of Mines	Production		Closing Stock	Labour Employed (Av. Daily)
			Quantity	Value (Rs. Crore)		
Lime Stone ('000 tonne)	2014-15	785	293273	5800	13077	23801
	2015-16	807	307001	6867	12633	23987
	2016-17	832	314669	7388	14615	23892
	2017-18	758	340417	8100	18238	22019
	2018-19	725	379974	8958	22493	21633
	2019-20	691	359464	8889	24775	21335
	2020-21	665	349120	8648	24195	20470
	2021-22	676	392034	10202	27235	20343
	2022-23	696	405664	11124	21519	21940
	2023-24(P)	735	452009	11891	359317	21765
Magnesite ('000 tonne)	2014-15	19	285	75	71	935
	2015-16	20	328	83	66	1258
	2016-17	19	299	75	83	1331
	2017-18	10	195	59	78	937
	2018-19	11	147	41	80	811
	2019-20	12	103	35	62	711
	2020-21	12	75	31	67	642
	2021-22	10	113	55	54	656
	2022-23	10	108	50	46	675
	2023-24(P)	10	132	61	44	664
Marl ('000 tonne)	2014-15	-	2179	26	1022	-
	2015-16	-	2390	32	1227	-
	2016-17	-	2204	32	1321	-
	2017-18	-	1970	33	1226	-
	2018-19	-	1890	35	1042	-
	2019-20	-	2149	41	881	-
	2020-21	-	2216	42	600	-
	2021-22	-	1853	33	469	-
	2022-23	20	1462	32	478	744
	2023-24(P)	20	1606	30	672	688

SECTION - 2
MINERALS

Table-12: Mineral Overview (contd...)

Mineral	Year	No. of Mines	Production		Closing Stock	Labour Employed (Av. Daily)
			Quantity	Value (Rs. Crore)		
Phosphorite/ Rock Phosphate (’000tonne)	2014-15	5	1607	376	2356	1111
	2015-16	5	1572	376	2568	1129
	2016-17	6	1124	300	2491	1222
	2017-18	6	1516	367	2735	1277
	2018-19	7	1421	388	2347	1200
	2019-20	6	1400	473	2300	961
	2020-21	6	1456	469	2231	951
	2021-22	7	1395	665	2331	756
	2022-23	8	1978	1235	2426	698
	2023-24(P)	8	1558	1131	2945	895

Table-12: Mineral Overview (contd...)

Mineral	Year	Production
		Quantity
Sulphur (tonne)	2014-15	464672
	2015-16	473322
	2016-17	560826
	2017-18	825173
	2018-19	890400
	2019-20	900942
	2020-21	737337
	2021-22	880858
	2022-23	925663
	2023-24(P)	976615

SECTION - 3

Metal & Alloys

Production of	Iron & Steel, 2014-15 to 2023-24 &	41-42
Metal & Alloys	Ferro-Alloys, 2014-15 to 2023-24	
	Alumina & Aluminium and Copper, 2014-15 to 2023-24	43
	Gold, Silver and Lead & Zinc, 2014-15 to 2023-24	44

SECTION - 3

Metal & Alloys

FERROUS METALS:

The output of finished steel increased from 123 million tonnes in 2022–2023 to 139 million tonnes in 2023–2024, marking the highest level achieved during the last decade. This represented a 13% increase compared to the previous year. Over the decade, the production of finished steel exhibited a fluctuating trend. Similarly, the production of semi-finished steel reached a record high of 144 million tonnes in 2023–2024, rising from 127 million tonnes in 2022–2023. This also reflected a 13% increase over the previous year. The production of semi-finished steel was showed a fluctuating trend throughout the decade.

FERRO-ALLOYS:

The production of ferro-chrome increased from 1,126 thousand tonnes in 2022–23 to 1,322 thousand tonnes in 2023–24, reaching the highest level recorded during the decade. This represented a 17% increase over the previous year. Over the decade, ferro-chrome production remained relatively stable, averaging about 944 thousand tonnes during the five-year period from 2014–15 to 2018–19.

Production data for ferro-manganese and ferro-silicon were not available for the years 2019–20 to 2023–24. However, during the preceding five-year period, production levels had stabilized at approximately 518 thousand tonnes for ferro-manganese and about 90 thousand tonnes for ferro-silicon, respectively.

NON-FERROUS METALS:

India has achieved self-sufficiency in key non-ferrous metals, particularly aluminium and zinc. The production of alumina and aluminium increased steadily during the period from 2014–15 to 2018–19. Thereafter, alumina production exhibited a fluctuating trend over the last five years of the decade. In 2023–24, alumina production was at 4,971 thousand tonnes, which was increased 0.9% over the previous year.

The production of aluminium reached 4,159 thousand tonnes in 2023–24, the highest level achieved during the decade. This represented an increase of over 2% compared to the previous year.

The production of copper (blister/anode) showed a mixed trend during the decade; however, data have not been available from 2020–21 onwards. In 2023–24, the production of copper (cathode) and copper (CCWR) was at 509 thousand tonnes and 469 thousand tonnes, respectively. While copper (cathode) production declined by about 8% compared to the previous year, copper (CCWR) production increased by more than 11% during the same period.

SECTION - 3

Metal & Alloys

Gold production, including by-product recovery from imported copper cathodes, exhibited a fluctuating trend during the decade. In 2023–24, gold production reached 16,639 kg, the highest level recorded during the decade, reflecting a 20% increase over the previous year. Similarly, silver production, a by-product, peaked at 745 tonnes in 2023–24, marking an increase of 5% over the previous year. Overall, silver production showed a generally rising trend during the decade, except for declines observed in 2019–20 and 2021–22.

The output of primary lead showed a mixed trend during the decade ending 2023–24. Production reached a peak level of 216 thousand tonnes in 2023–24, representing a 2% increase over the previous year. The production of zinc ingots was also showed fluctuate during the decade. In 2023–24, zinc ingot production stood at 817 thousand tonnes, reflecting a marginal decline of 0.5% compared to the previous year.

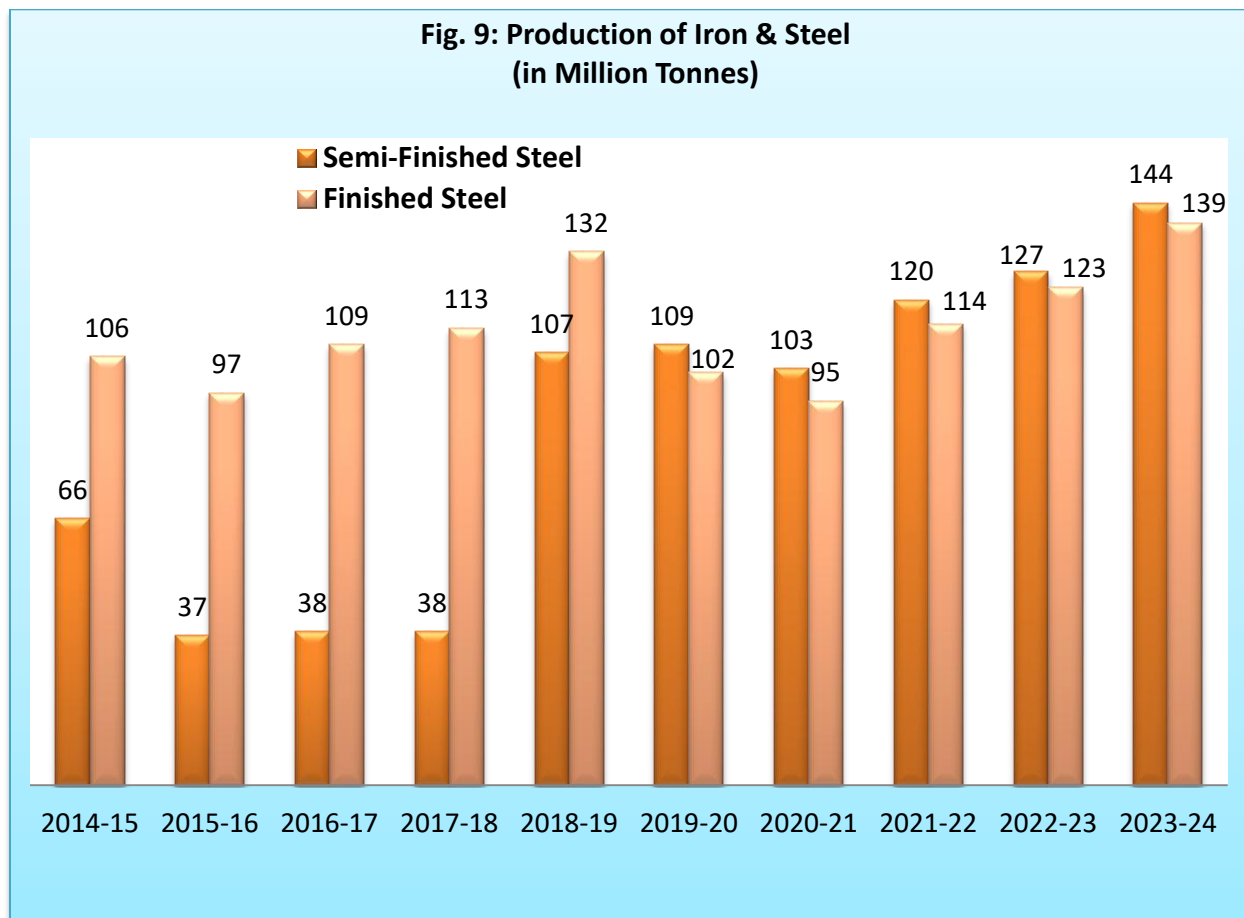


Table-13: Production of Iron & Steel, 2014-15 to 2023-24

SECTION - 3 Metal & Alloys

('000 tonne)

Year	Semi-finished Steel ^{\$}	Finished Steel [#]
2014-15	65793	106052
2015-16	37445	97340
2016-17	38236	108950
2017-18	38357	112783
2018-19	106565	131573
2019-20	109216	102058
2020-21	103044	95122
2021-22	120007	113596
2022-23	127197	123197
2023-24(P)	144300	139152

Source: Joint Plant Committee, Kolkata

\$: Semi-finished steel includes Steel Ingots

#: Finished Steel includes C.R. Sheets

Table-14: Production of Principal Ferro-Alloys, 2014-15 to 2023-24

('000 tonne)

Year	Ferro-Chrome	Ferro-Manganese	Ferro-Silicon
2014-15	944	518	90
2015-16	944	518	90
2016-17	944	518	90
2017-18	944	518	90
2018-19	944	518	90
2019-20	921	NA	NA
2020-21	868	NA	NA
2021-22	1113	NA	NA
2022-23	1126	NA	NA
2023-24(P)	1322	NA	NA

Source: Joint Plant Committee, Kolkata

SECTION - 3

Metal & Alloys

Table-15: Production of Alumina & Aluminium, 2014-15 to 2023-24

('000 tonne)

Year	Alumina	Aluminium
2014-15	4024	2027
2015-16	4172	2355
2016-17	4576	2897
2017-18	4620	3401
2018-19	4893	3696
2019-20	4978	3635
2020-21	4878	3619
2021-22	5208	4017
2022-23	4928	4066
2023-24(P)	4971	4159

Table-16: Production of Copper, 2014-15 to 2023-24

('000 tonne)

Year	Blister/Anode	Cathode	CCWR
2014-15	16	766	338
2015-16	17	790	390
2016-17	15	788	372
2017-18	15	831	380
2018-19	13	454	354
2019-20	4	408	349
2020-21	NA	364	342
2021-22	NA	484	351
2022-23	NA	554	423
2023-24(P)	NA	509	469

CCWR: Continuous Cast Wire Rod

SECTION - 3
Metal & Alloys

Table-17: Production of Gold & Silver, 2014-15 to 2023-24

(Kilograms)

Year	Gold*	Silver*
2014-15	9988	402467
2015-16	10412	426443
2016-17	10082	460811
2017-18	12500	557691
2018-19	12623	679386
2019-20	8382	609340
2020-21	7387	705796
2021-22	10087	647156
2022-23	13854	713768
2023-24(P)	16639	745980

*: Includes production reported from HINDALCO Industries Ltd

Table-18: Production of Lead & Zinc, 2014-15 to 2023-24

('000 tonne)

Year	Lead (Primary)	Zinc Ingots
2014-15	127	733
2015-16	145	759
2016-17	142	672
2017-18	168	791
2018-19	198	696
2019-20	181	688
2020-21	214	715
2021-22	191	776
2022-23	211	821
2023-24(P)	216	817

Source: Individual plants.

SECTION - 4

Foreign Trade

Export/Imports of Minerals/ Metals	Value of Exports of Minerals, 2023-24	47
	Value of Exports of Metals, 2023-24	48
	Value of Imports of Minerals, 2023-24	49
	Value of Imports of Metals, 2023-24	50
	Value of Export & Imports of Minerals & Metals, 2014-15 to 2023-24	51
	Exports, Imports and Net Trade in Minerals and Metals, 2014-15 to 2023-24	52
	Share of Principal Minerals in the Value of Mineral Exports and Imports, 2014-15 to 2023-24	53
	Share of Principal Countries in the Value of Exports & Imports of Diamond, 2014-15 to 2023-24	54
	Production, Exports/Imports and Apparent Consumption as Percentage of Total Availability, 2023-24	55

SECTION - 4

Foreign Trade

EXPORT

The value of mineral exports from India (excluding fuel minerals) showed a fluctuating trend during the decade ending in 2023–24. In 2023–24, the export value was at ₹211689 crore, representing a decline of around 11.40% compared to the previous year (2022–23). Diamonds accounted for 65.90% of the total mineral export value in 2023–24, followed by iron ore (15.32%), granite (5.31%), alumina (3.04%) and Salt (other than common and rock salt) (1.16%).

The value of metals exports in 2023-24 was at ₹280286 crore, which is a decline of 3.47% compared to the previous year. The top five countries for mineral exports from India in 2023–24 were the USA (24.02%), China People's Republic (18.11%), Hong Kong (17.69%), UAE (8.86%), and Belgium (7.84%). The top five countries for metal exports from India in 2023–24 were the USA (13.57%), Italy (7.29%), Saudi Arabia (5.31%), Korea Republic (5.26%), and UAE (4.81%).

The value of export of Diamond (mostly cut) in 2023-24 was ₹139425 crore. USA (33.25%), Hong Kong (25.91%), UAE (12.27%), Belgium (11.83%), and Israel (4.48%) were the top importing countries of Diamond (mostly cut) from India.

IMPORT

The value of mineral imports from India (excluding fuel minerals) showed a fluctuating trend during the decade ending in 2023–24. In 2023–24, the import value was at ₹276742 crore, representing a decrease of around 15.29% compared to the previous year (2022–23). Diamonds accounted for 64.58% of the total mineral import value in 2023–24, followed by Copper Ores and Conc (9.38%), Rock Phosphate (4.58%), alumina (3.02%), Manganese Ore (2.80%), and Limestone (2.39%).

The value of metals imports in 2023-24 was at ₹791014 crore, which is an increase of 18.23% compared to the previous year, i.e., 2022-23 (Table 23). The top five countries for mineral imports to India in 2023–24 were UAE (30.1%), USA (10.6%), Hong Kong (10.2%), Belgium (8.3%), and Indonesia (4.8%).

The top five countries for metal imports to India in 2023–24 were the Switzerland (18.97%), UAE (11.93%), China Peoples Republic (7.63%), South Africa (5.33%), and Japan (4.77%).

The value of import of Diamond (mostly cut) in 2023-24 was Rs 177169 crore. UAE (41.22%), USA (15.58%), Hong Kong (14.46%), Belgium (12.78%), and Russia (5.23%) were the top exporting countries of Diamond (mostly cut) to India.

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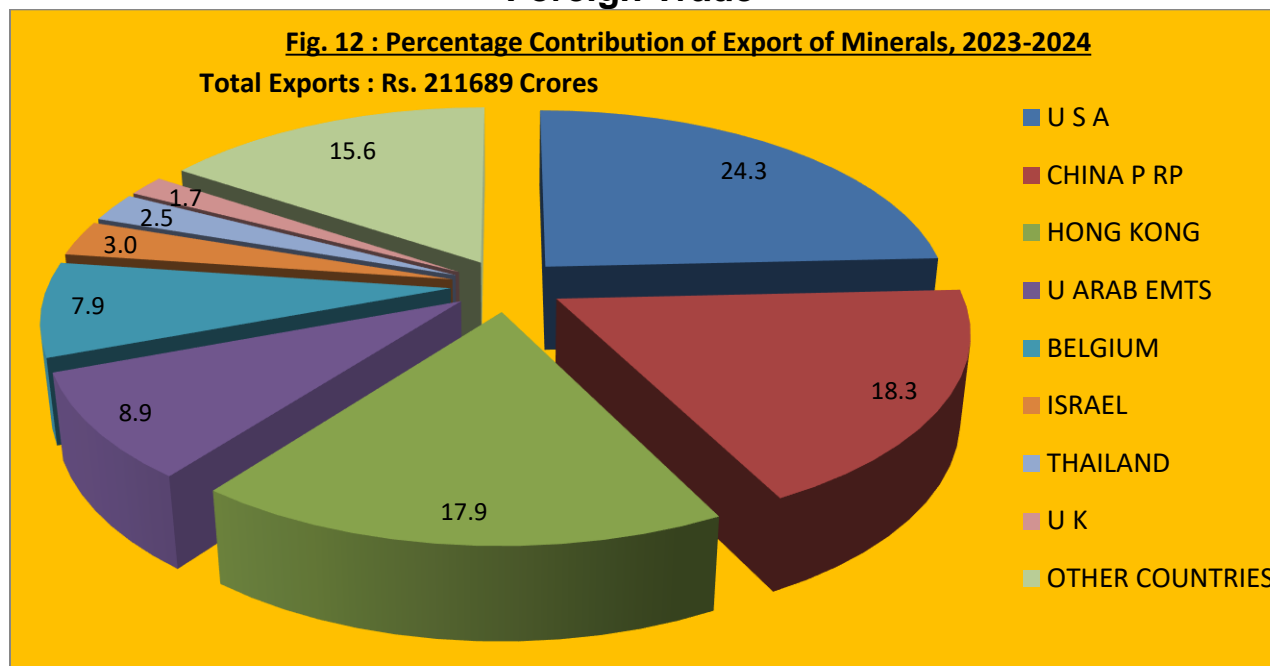


Table-19: Value of Export of Minerals ^{1*}, 2023-24

Countries	Value (Rs. Crores)	Percentage Contribution
All Countries	211689	100.0
U S A	51337	24.3
CHINA P RP	38709	18.3
HONG KONG	37819	17.9
U ARAB EMTS	18840	8.9
BELGIUM	16753	7.9
ISRAEL	6334	3.0
THAILAND	5191	2.5
U K	3701	1.7
JAPAN	2532	1.2
OMAN	2451	1.2
SWITZERLAND	2360	1.1
INDONESIA	1993	0.9
ITALY	1667	0.8

Countries	Value (Rs. Crores)	Percentage Contribution
RUSSIA	1552	0.7
FRANCE	1510	0.7
VIETNAM SOC REP	1509	0.7
BANGLADESH PR	1499	0.7
SAUDI ARAB	1294	0.6
KOREA RP	1269	0.6
AUSTRALIA	1074	0.5
GERMANY	905	0.4
MALAYSIA	860	0.4
SINGAPORE	840	0.4
CANADA	737	0.3
TURKEY	677	0.3
Other Countries	8278	3.9

Source: DGCIS, Kolkata
(Excluding Fuel Minerals)

^{1*}: Coal, Lignite, Coke, Natural Gas and Petroleum Crude

SECTION - 4 Foreign Trade

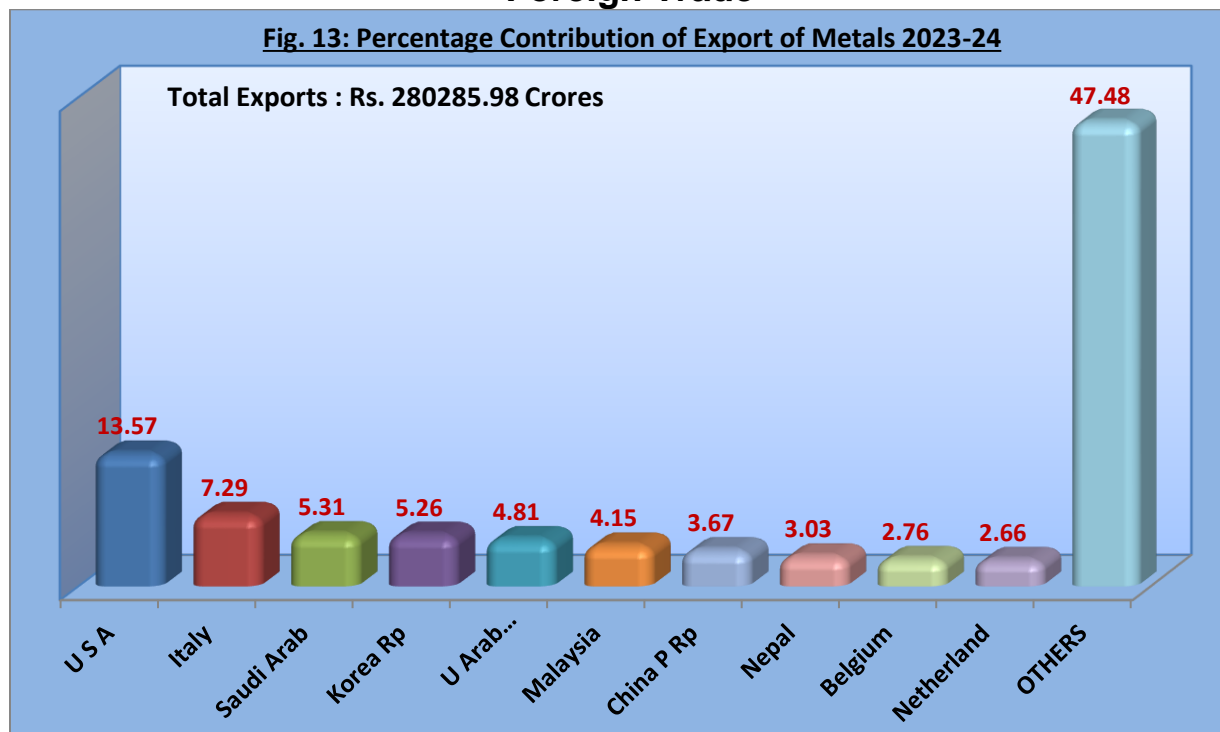


Table-20: Value of Export of Metals, 2023-24

Country	Value (Rs. Crores)	Percentage Contribution
All Countries	280285.98	100.00
U S A	38042.02	13.57
Italy	20431.29	7.29
Saudi Arab	14882.73	5.31
Korea Rp	14731.45	5.26
U Arab Emts	13470.27	4.81
Malaysia	11640.16	4.15
China P Rp	10289.29	3.67
Nepal	8494.24	3.03
Belgium	7746.63	2.76
Netherland	7466.52	2.66
U K	7423.53	2.65
Spain	7012.79	2.50

Country	Value (Rs. Crores)	Percentage Contribution
Germany	6995.88	2.50
Bangladesh Pr	6212.34	2.22
Mexico	6166.02	2.20
Japan	5928.62	2.12
Vietnam Soc Rep	5459.38	1.95
Turkey	5335.36	1.90
Thailand	4970.14	1.77
Singapore	4839.12	1.73
Taiwan	4267.66	1.52
Canada	3924.71	1.40
Brazil	3882.82	1.39
Indonesia	3758.30	1.34
Poland	3407.10	1.22
Other Countries	53507.65	19.09

Source: DGCIS, Kolkata

SECTION - 4 Foreign Trade

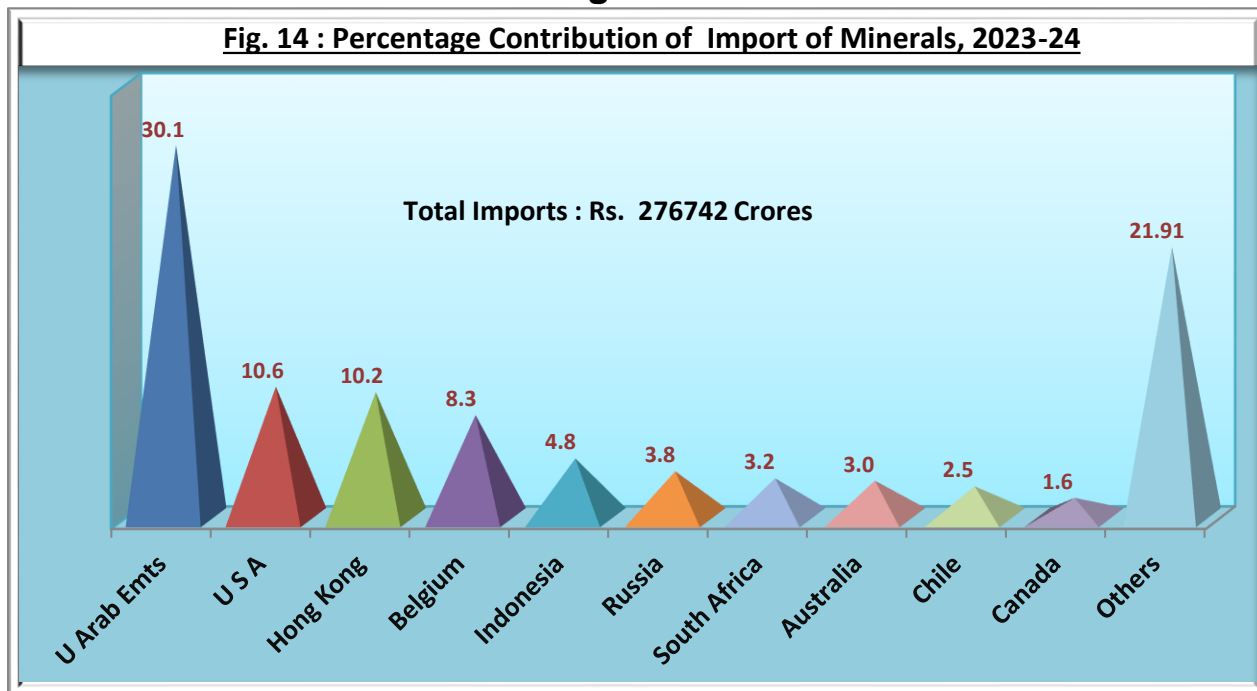


Table-21: Value of Import of Minerals, 2023-24

Country	Value (Rs. Crores)	Percentage Contribution
All Countries	276742	100.0
U Arab Emts	83376	30.1
U S A	29378	10.6
Hong Kong	28131	10.2
Belgium	23005	8.3
Indonesia	13268	4.8
Russia	10396	3.8
South Africa	8833	3.2
Australia	8290	3.0
Chile	7009	2.5
Canada	4429	1.6
Jordan	4075	1.5
China P Rp	4022	1.5

Country	Value (Rs. Crores)	Percentage Contribution
Israel	3891	1.4
Thailand	3512	1.3
Oman	2688	1.0
Botswana	2661	1.0
Turkey	2374	0.9
Togo	2308	0.8
Guinea	2302	0.8
Morocco	2274	0.8
Brazil	2236	0.8
Switzerland	1928	0.7
Peru	1837	0.7
Vietnam Soc Rep	1822	0.7
Other Countries	22696	8.2

Source: DGCIS, Kolkata

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Fig. 15 : Percentage Contribution of Import of Metals, 2023-24

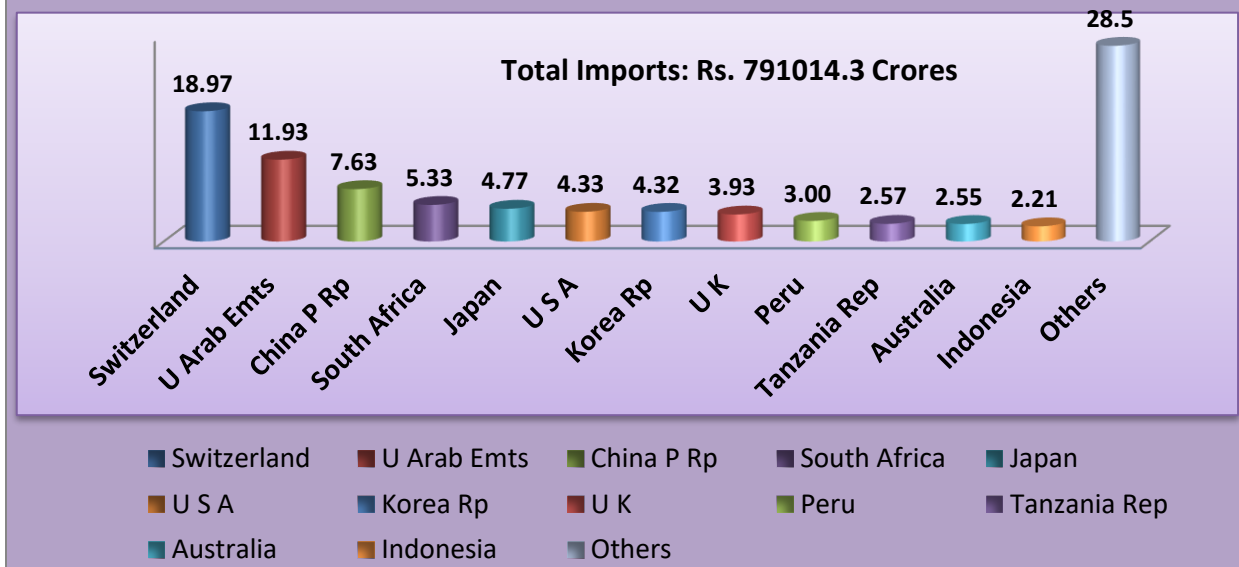
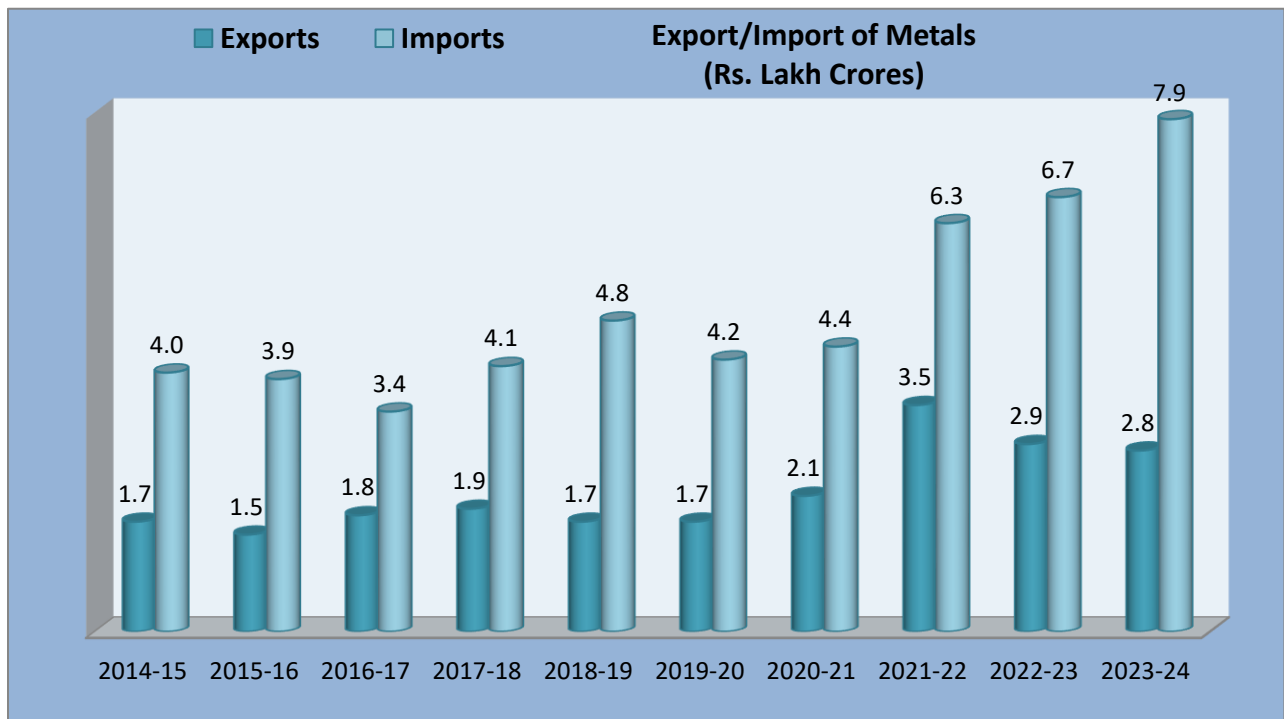
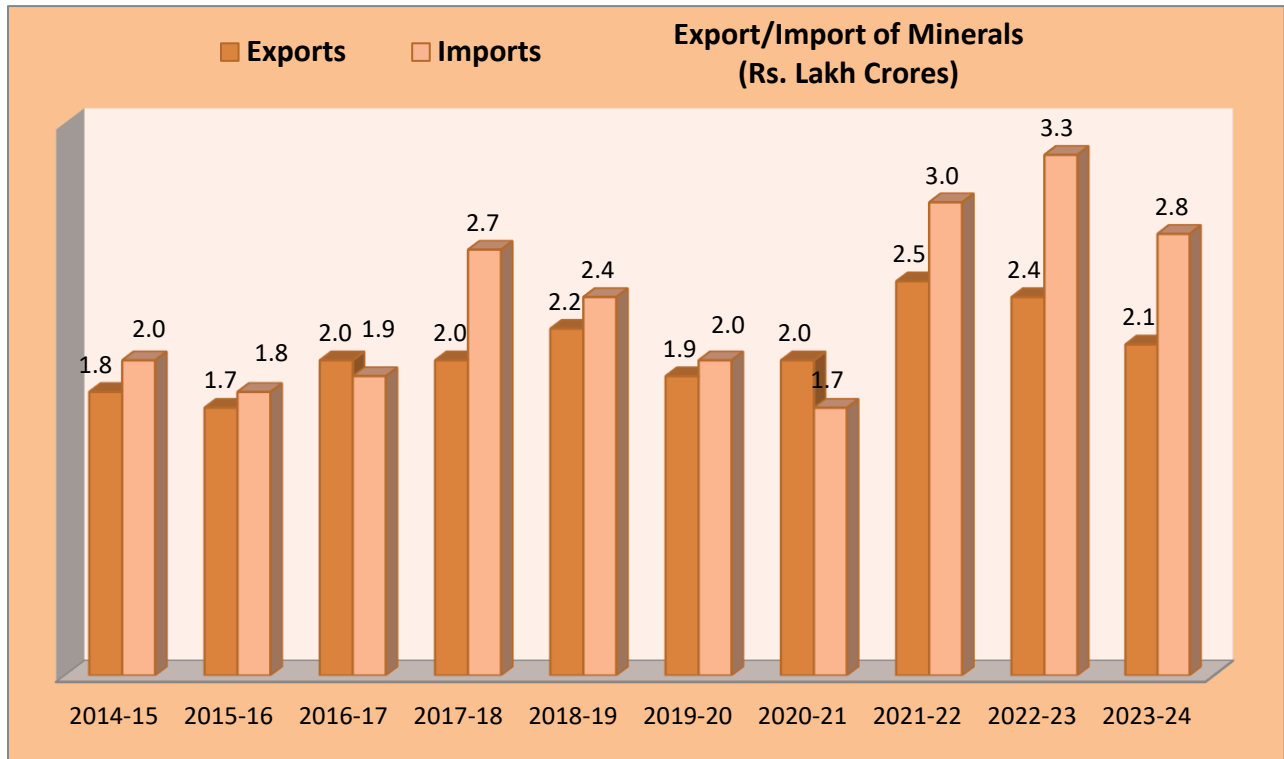


Table-22: Value of Import of Metals, 2023-24

Country	Value (Rs. Crores)	Percentage Contribution	Country	Value (Rs. Crores)	Percentage Contribution
All Countries	791014.34	100.00	Singapore	16079.68	2.03
Switzerland	150049.73	18.97	Vietnam Soc Rep	12248.47	1.55
U Arab Emnts	94342.31	11.93	Malaysia	11901.05	1.50
China P Rp	60370.75	7.63	Saudi Arab	10318.91	1.30
South Africa	42166.42	5.33	Thailand	10068.93	1.27
Japan	37742.29	4.77	Germany	9972.61	1.26
U S A	34228.14	4.33	Bolivia	8914.96	1.13
Korea Rp	34156.39	4.32	Ghana	8860.01	1.12
U K	31113.64	3.93	Guinea	8086.81	1.02
Peru	23738.47	3.00	Uganda	6995.89	0.88
Tanzania Rep	20320.93	2.57	Colombia	6616.91	0.84
Australia	20167.59	2.55	Netherland	5810.39	0.73
Indonesia	17478.25	2.21	Other Countries	93101.36	11.77
Hong Kong	16163.46	2.04			

Source: DGCIS, Kolkata.

SECTION - 4 Foreign Trade



SECTION - 4
Foreign Trade

**Table-23: Exports, Imports and Net Trade in Minerals and Metals,
2014-15 to 2023-24**

(Rs. Crore)

Year	Minerals *			Metals		
	Exports	Imports	Difference	Exports	Imports	Difference
2014-15	176567	197107	-20539	167288	401141	-233853
2015-16	169467	176302	-6835	152953	390270	-237317
2016-17	198808	189225	9583	182179	337686	-155507
2017-18	197612	265425	-67813	190331	411667	-221336
2018-19	217174	244131	-26957	174281	477593	-303313
2019-20	188291	196306	-8015	166831	417296	-250464
2020-21	195253	173019	22234	207602	436207	-228605
2021-22	252395	300253	-47858	348451	627097	-278646
2022-23	238934	326709	-87775	290358	669065	-378708
2023-24	211689	276742	-65053	280286	791014	-510728

Source: DGCIS, Kolkata.

*Excluding Fuel Minerals,

SECTION - 4

Foreign Trade

Table-24: Share of Principal Minerals in the Value of Mineral Exports, 2014-15 to 2023-24

Year	Exports of Minerals* (Rs. Crores)	Percentage Share of Principal Minerals				
		Diamond@	Iron Ore	Granite	Alumina	Salt (other than common salt & rock salt)
2014-15	176567	83.88	1.78	5.57	1.87	0.36
2015-16	169467	84.23	0.75	5.47	1.53	0.39
2016-17	198808	81.84	5.18	4.70	1.51	0.37
2017-18	197612	81.99	4.80	4.68	1.67	0.46
2018-19	217174	80.96	4.27	4.70	2.16	0.66
2019-20	188291	74.37	9.88	5.43	1.64	0.70
2020-21	195253	64.44	18.57	5.80	1.45	0.52
2021-22	252395	75.03	9.57	5.01	1.88	0.52
2022-23	238934	76.89	6.04	5.25	2.69	0.99
2023-24	211689	65.90	15.32	5.31	3.04	1.16

Source: DGCI &S, Kolkata.

*Excluding Fuel Minerals @Includes mostly cut, industrial and powder

(exc. Sublimed Precipitated and Colloidal)

Table-25: Share of Principal Minerals in the Value of Mineral Imports, 2014-15 to 2023-24

Year	All Minerals* (Rs. Crores)	Percentage Share of Principal Minerals						
		Diamond@	Copper Ores And Conc.	Rock Phosphate	Alumina	Manganese Ore	Limestone	Iron Ore
2014-15	197107	63.53	14.46	3.14	1.08	1.76	1.12	3.35
2015-16	176302	62.71	14.92	3.70	1.30	0.99	1.35	1.81
2016-17	189225	68.53	9.67	2.62	1.77	1.27	1.29	1.14
2017-18	265425	71.66	10.49	1.71	2.28	1.91	1.09	1.59
2018-19	244131	72.90	4.98	2.31	4.22	1.99	1.50	2.42
2019-20	196306	75.77	4.42	2.76	2.54	2.10	1.91	0.48
2020-21	173019	74.18	3.41	3.10	3.32	3.19	1.90	0.49
2021-22	300253	68.49	7.45	3.49	2.75	3.21	1.63	1.18
2022-23	326709	63.59	8.38	4.63	2.73	2.53	1.92	0.49
2023-24	276742	64.58	9.38	4.58	3.02	2.80	2.39	1.59

Source: DGCI&S, Kolkata

*Excluding Fuel Minerals,

@:Includes mostly cut, industrial and powder

SECTION - 4

Foreign Trade

Table-26: Share of Principal Countries in the Value of Exports of Diamond, 2014-15 to 2023-24

Exports of Diamond (Mostly Cut)							
Year	Value of Exports (Rs. Crores)	Percentage Share of Principal Importing Countries					
		USA	Hong Kong	U Arab Emts	Belgium	Israel	Others
2014-15	148056	26.6	38.0	10.5	10.9	4.9	9.2
2015-16	142664	29.9	36.1	10.0	10.2	4.6	9.2
2016-17	162567	30.4	37.8	9.1	9.8	4.1	8.8
2017-18	161931	30.0	39.6	7.8	9.2	4.1	9.3
2018-19	175733	32.8	37.7	6.1	9.4	4.0	10.0
2019-20	139974	35.0	32.5	6.5	10.6	4.6	10.8
2020-21	125735	36.4	34.1	6.5	7.4	4.8	10.8
2021-22	189219	38.6	25.4	7.8	10.3	5.6	12.3
2022-23	183607	34.7	24.3	9.8	11.2	5.3	14.7
2023-24	139425	33.2	25.9	12.3	11.8	4.5	12.3

Source: DGCI&S, Kolkata

Table-27: Share of Principal Countries in the Value of Imports of Diamond, 2014-15 to 2023-24

Imports of Diamond (Mostly Cut)							
Year	Value of Imports (Rs. Crores)	Percentage Share of Principal Exporting Countries					
		U Arab Emts	USA	Hong Kong	Belgium	Russia	Others
2014-15	125035	19.7	2.9	10.8	43.8	3.7	19.0
2015-16	110378	22.1	2.9	11.5	38.6	6.5	18.4
2016-17	129443	23.0	2.1	10.9	26.3	11.7	26.1
2017-18	189913	15.4	1.4	10.5	13.9	11.8	47.0
2018-19	177377	22.2	21.7	13.8	25.9	2.0	14.3
2019-20	147952	23.4	20.8	13.0	24.4	2.5	15.8
2020-21	127725	28.5	20.6	13.4	20.1	3.9	13.5
2021-22	204273	34.6	20.6	6.5	20.8	2.9	14.6
2022-23	205786	37.6	19.9	7.1	17.9	4.5	13.0
2023-24	177169	41.2	15.6	14.5	12.8	5.2	10.7

Source: DGCI&S, Kolkata

SECTION - 4
Foreign Trade

**Table-28: Production, Exports/Imports and Apparent Consumptions, Percentage of Total Availability, 2023-24
(By Selected Minerals)**

Mineral	Total Availability* ('000 tonne)	Percentage Share of			
		Production	Imports	Exports	Apparent Consumption
Bauxite	28461	84	16	1	99
Chromite	3320	95	5	++	100
Iron Ore	282291	98	2	16	84
Kyanite	5	62	38	++	100
Limestone	485818	93	7	++	100
Magnesite	612	22	78	1	99
Manganese Ore	8974	38	62	++	100
Phosphorite	10369	15	85	++	100
Sulphur	2686	36	64	44	56

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

++: Negligible

SECTION-5
EMPLOYEMENT IN MINES

Average Daily Employment	Average Daily Employment in Mines, (By Groups), 2014-15 to 2023-24	58
	Average Daily Employment in Mines, (By Ownership/ Mine Category), 2018-19 to 2023-24	59-63

SECTION-5

EMPLOYEMENT IN MINES

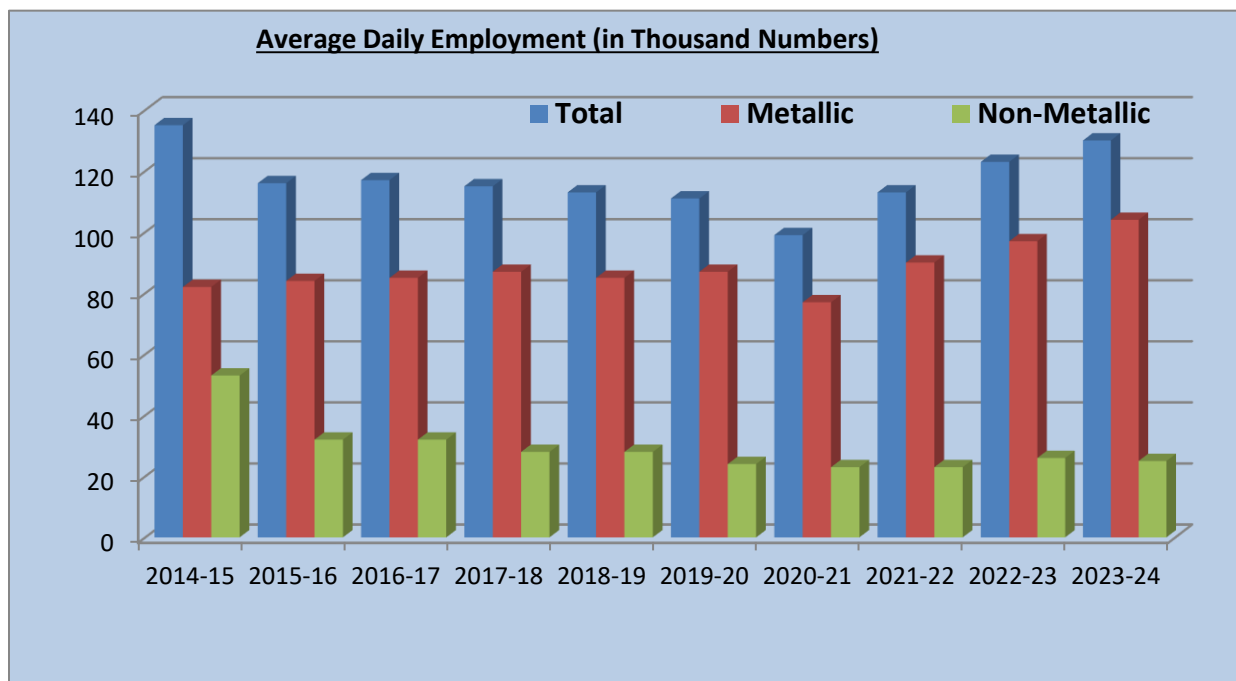
During the year 2023–24, the average daily employment of labour in the MCDR minerals group was approximately 1.29 lakh persons (129,661 employees). This represents an increase of about 5.40% compared to the previous year.

The average daily employment in the metallic mineral sector during 2023–24 was 104,164 persons, while the non-metallic mineral sector employed 25,497 persons.

Within the metallic mineral group, Iron Ore accounted for the highest share of employment at 57%, followed by Manganese Ore (13%), Lead & Zinc Concentrates (12%), and Chromite and Bauxite (6% each). Employment in Gold mining and Copper Ore & Concentrates each accounted for 3%, while Tin Concentrates contributed a negligible 0.008% of total employment in the metallic minerals category (104,164).

In the non-metallic mineral group, the majority of labour was engaged in Limestone mining, which accounted for 85% of total employment in this category (25,497). This was followed by Phosphorite (3.5%), Magnesite (2.6%) and Diamond (2.5%), etc. The remaining 6.4% of labour was employed in the mining of other non-metallic minerals.

SECTION-5 EMPLOYMENT IN MINES



**Table-29: Average Daily Employment in Mines, 2014-15 to 2023-24
(By Groups)**

Year	Total Minerals	Metallic Minerals	Non-metallic Minerals
2014-15	135115	82375	52740
2015-16	115890	84113	31777
2016-17	116574	84936	31638
2017-18	114863	86506	28357
2018-19	112831	84563	28268
2019-20	111345	87063	24282
2020-21	99491	76563	22928
2021-22	113281	90098	23183
2022-23	122995	97308	25687
2023-24(P)	129661	104164	25497

Source: MCDR Returns.

SECTION-5

EMPLOYEMENT IN MINES

**Table-30: Average Daily Employment in Metallic Mineral Mines,
2019-20 to 2023-24 (contd...)**

Mineral	Year	Total	Ownership		Mine Category	
			Public Sector	Private Sector	A	B
Bauxite	2019-20	6162	2164	3998	4079	2083
	2020-21	5041	1687	3354	3736	1305
	2021-22	5275	1609	3666	4004	1271
	2022-23	7857	2820	5037	5038	2819
	2023-24(P)	6243	4484	1759	4716	1527
Chromite	2019-20	5845	1337	4508	5501	344
	2020-21	4289	1116	3173	4228	61
	2021-22	4480	1193	3287	4434	46
	2022-23	5912	1333	4579	5868	44
	2023-24(P)	6253	1595	4657	6184	69
Copper Ore & Concentrates	2019-20	3928	3928	-	3928	-
	2020-21	2829	2829	-	2829	-
	2021-22	2794	2794	-	2794	-
	2022-23	1187	1187	-	1187	-
	2023-24(P)	3302	3302	-	3302	-
Gold	2019-20	3261	3223	38	3261	-
	2020-21	3247	3113	134	3247	-
	2021-22	3128	3028	100	3128	-
	2022-23	3034	3015	19	3034	-
	2023-24(P)	3063	2876	187	3063	-
Iron Ore & Concentrates	2019-20	45687	13286	32401	36018	9669
	2020-21	42422	14150	28272	34506	7916
	2021-22	48934	17594	31340	40345	8589
	2022-23	56102	31976	24126	46394	9708
	2023-24(P)	59620	31898	27722	43812	15808

Source: MCDR Returns.

Category 'A': i) Fully Mechanised Mines, or
ii) No. of average employment >150 in all, or >75 workings below ground, or Mining operations is carried out with the help of heavy machinery.

Category 'B': Other than 'A'

SECTION-5

EMPLOYEMENT IN MINES

**Table-30: Average Daily Employment in Metallic Mineral Mines, 2019-20 to 2023-24
(Contd...)**

Mineral	Year	Total	Ownership		Mine Category	
			Public Sector	Private Sector	A	B
Lead & Zinc Concentrates	2019-20	10396	-	10396	10396	-
	2020-21	8535	11	8524	8534	1
	2021-22	14876	3	14873	14875	1
	2022-23	10249	3	10246	10249	1
	2023-24(P)	12254	9	12245	12254	-
Manganese Ore	2019-20	11775	7338	4437	9266	2509
	2020-21	10191	6219	3972	8076	2115
	2021-22	10600	6484	4116	8415	2185
	2022-23	12960	8000	4960	10778	2182
	2023-24(P)	13422	8336	5086	11548	1874
Tin Concentrates	2019-20	9	-	9	-	9
	2020-21	9	-	9	-	9
	2021-22	11	-	11	-	11
	2022-23	7	-	7	-	7
	2023-24(P)	8		8		8

Source: MCDR Returns.

Category 'A': i) Fully Mechanised Mines, or
ii) No. of average employment >150 in all, or >75 workings below ground, or Mining operations is carried out with the help of heavy machinery.

Category 'B': Other than 'A'

SECTION-5

EMPLOYEMENT IN MINES

Table-31: Average Daily Employment in Non-Metallic Mineral Mines, 2019-20 to 2023-24

Mineral	Year	Total	Ownership		Mine Category	
			Public Sector	Private Sector	A	B
Apatite	2019-20	-	-	-	-	-
	2020-21	-	-	-	-	-
	2021-22	-	-	-	-	-
	2022-23	-	-	-	-	-
	2023-24(P)					
Diamond	2019-20	161	161	-	105	56
	2020-21	142	142	-	112	30
	2021-22	699	699	-	212	487
	2022-23	871	871	-	196	675
	2023-24(P)	645	645	-	148	497
Fluorite	2019-20	44	44	-	-	44
	2020-21	46	46	-	-	46
	2021-22	36	36	-	-	36
	2022-23	52	51	1	12	40
	2023-24(P)	55	53	2	18	37
Garnet	2019-20	39	-	39	-	39
	2020-21	66	-	66	-	66
	2021-22	52	-	52	-	52
	2022-23	64	-	64	-	64
	2023-24(P)	124	-	124	44	80
Graphite	2019-20	219	16	203	8	211
	2020-21	167	20	147	12	155
	2021-22	131	26	105	25	106
	2022-23	132	30	102	24	108
	2023-24(P)	131	49	82	11	120
Iolite	2019-20	24	-	24	-	24
	2020-21	8	-	8	-	8
	2021-22	61	-	61	-	61
	2022-23	12	-	12	-	12
	2023-24(P)	8	-	8	-	8

Source: MCDR Returns.

Category 'A': i) Fully Mechanised Mines, or

ii) No. of average employment >150 in all, or >75 workings below ground, or Mining operations is carried out with the help of heavy machinery.

Category 'B': Other than 'A'

SECTION-5

EMPLOYEMENT IN MINES

**Table-31: Average Daily Employment in Non-Metallic Mineral Mines, 2019-20 to 2023-24
(contd...)**

Mineral	Year	Total	Ownership		Mine Category	
			Public Sector	Private Sector	A	B
Kyanite	2019-20	69	16	53	-	69
	2020-21	61	13	48	-	61
	2021-22	95	22	73	-	95
	2022-23	87	13	74	-	87
	2023-24(P)	61	19	42	-	61
Lime Shell	2019-20	244	-	244	200	44
	2020-21	1	-	1	-	1
	2021-22	9	-	9	-	9
	2022-23	1	-	1	-	1
	2023-24(P)	17	-	17	-	17
Limestone	2019-20	21335	1864	19471	14179	7156
	2020-21	20470	1726	18744	14137	6333
	2021-22	20343	1747	18596	14208	6135
	2022-23	21940	2174	19766	17742	4198
	2023-24(P)	21765	2415	19350	18202	3563
Magnesite	2019-20	711	420	291	634	77
	2020-21	642	444	198	596	46
	2021-22	656	435	221	614	42
	2022-23	675	456	219	639	36
	2023-24(P)	664	449	215	630	34
Moulding Sand	2019-20	11	-	11	-	11
	2020-21	24	-	24	-	24
	2021-22	23	-	23	-	23
	2022-23	38	-	38	5	33
	2023-24(P)	23	-	23	10	13
Phosphorite/ Rock Phosphate	2019-20	961	916	45	907	54
	2020-21	951	912	39	904	47
	2021-22	756	722	34	715	41
	2022-23	698	662	36	652	46
	2023-24(P)	895	854	41	846	49

Source: MCDR Returns.

Category 'A': i) Fully Mechanised Mines, or
ii) No. of average employment >150 in all, or >75 workings below ground, or
Mining operations is carried out with the help of heavy machinery.

Category 'B': Other than 'A'

SECTION-5

EMPLOYEMENT IN MINES

**Table-31: Average Daily Employment in Non-Metallic Mineral Mines, 2019-20 to 2023-24
(Contd...)**

Mineral	Year	Total	Ownership		Mine Category	
			Public Sector	Private Sector	A	B
Salt (Rock)	2019-20	24	24	-	-	24
	2020-21	23	23	-	-	23
	2021-22	23	23	-	-	23
	2022-23	22	22	-	-	22
	2023-24(P)	21	21	-	-	21
Selenite	2019-20	14	14	-	-	14
	2020-21	15	15	-	-	15
	2021-22	18	12	6	6	12
	2022-23	11	5	6	7	4
	2023-24(P)	21	15	6	13	8
Siliceous Earth	2019-20	85	0	85	42	43
	2020-21	48	-	48	20	28
	2021-22	47	0	47	25	22
	2022-23	66	-	66	38	28
	2023-24(P)	66	-	66	52	14
Sillimanite	2019-20	36	36	-	25	11
	2020-21	2	2	-	-	2
	2021-22	-	-	-	-	-
	2022-23	-	-	-	-	-
	2023-24(P)	-	-	-	-	-
Vermiculite	2019-20	61	35	26	-	61
	2020-21	43	24	19	8	35
	2021-22	43	20	23	6	37
	2022-23	52	2	50	11	41
	2023-24(P)	74	2	72	11	63
Wollastonite	2019-20	244	-	244	237	7
	2020-21	219	-	219	210	9
	2021-22	191	-	191	186	5
	2022-23	222	-	222	200	22
	2023-24(P)	239	-	239	226	13

Source: MCDR Returns.

Category 'A': i) Fully Mechanised Mines, or
ii) No. of average employment >150 in all, or >75 workings below ground, or Mining operations is carried out with the help of heavy machinery.

Category 'B': Other than 'A'



Report of Study Group to reorganize Indian Mineral Yearbook and other Publications of IBM

July, 2024

Report of Study Group to reorganize Indian Mineral Yearbook and other Publications of IBM

1. Background

The objective of IBM is to promote systematic and scientific development and optimum utilization of mineral resources of the country. In order to achieve this objective one of the charter of functions of Indian Bureau of Mines is “to collect, collate and organize into a database, all information on exploration, prospecting, mines and minerals in the country in the shape of a National Mineral Information Repository and take steps to publish and disseminate the same” through publications. The various publications of IBM are as follows:

- a) Indian Mineral Yearbook (IMYB) is a flagship publication of Indian Bureau of Mines and its preparation & publication is the outcome of collective & coordinated efforts of the Mineral Economics Division and Mining & Mineral Statistics Division. The IMYB published in three volumes titled General Reviews (Vol. I), Reviews on Metals & Alloys (Vol. II) and Mineral Reviews (Vol. III).
- b) Monthly Statistics of Mineral Production, (MSMP) – a monthly publication of mineral statistics.
- c) Indian Mineral Industry at a Glance (IMIG) – a yearly publication of mineral statistics for ten years.
- d) National Mineral Industry (NMI) – a quinquennial publication for information on mineral resources in India.
- e) Statistical Profile of Mineral (SPM) – a yearly publication of mineral statistics for five years.
- f) Bulletin of Mineral Information (BMI) – a half yearly publication for recent amendments/notifications, Summary of court cases and Highlights related to mineral sector.
- g) Bulletin of Mining Leases and Prospecting License – a publication of statistics on mining leases in India.

2. Objective of the committee

The Secretary (Mines) envisioned formulating a Study Group by drawing eminent persons from the academia, industry and R&D Organization for reorganization of Indian Mineral Yearbook and other publications/ reports of IBM, in order to increase its readability with efforts to bring in the latest information. In continuation of same a Study Group has been constituted vide letter dated 07.05.2024 under the chairmanship of Sh. B. L. Gurjar, COM, IBM (the copy of Office Memorandum is attached as **Annexure**) with an objective as below:

- To review the publications of IBM such as IMYB, IMIG, SPM, MSMP, NMI, BMI, etc. with a view to increase its readability.
- To review the comprehensive foundation of the publication, current state of knowledge & content.
- To identify gaps in the existing publications for potential future era of digitization.
- To identify the shortcomings in data presentation & information clarity, also to suggest the methodologies & techniques for improvement.
- To identify the specific areas in a publication to be more in detail and concise to include relevant points only, for better understanding of the reader.
- To analyse possibility for including visual and graphical content, this helps a reader to accumulate information faster and easier.

3. Methodology for deliberation

The committee has made deliberations on the content of the present publications and discussed in length the utility of data, its limitation, availability, frequency of updating and significance in the present scenario. The committee has also focused to make publications more of data centric and less of theoretical/academic. The suggestions/modifications in the publications have been suggested to keep in mind the Reader's perception of more of information/data analytics with less of speculations. Publication-wise deliberations/modification/suggestions of the committee have been divided into two parts as below:

- (a) **Generic** modifications/ deletions/ suggestions, which are applicable to complete list of reviews in a volume and its part thereof.
- (b) **Specific** modifications/ deletions/ suggestions, which are applicable to specific part/ review/ chapter of the publications.

4. The Recommendations for Modifications/ Suggestions in Publications of IBM

4.1 Indian Mineral Yearbook

The Indian Minerals Yearbook (IMYB) comprises three Volumes titled ‘General Reviews’ i.e. first Volume, ‘Metals & Alloys’ is the second Volume and ‘Mineral Reviews’ is the third Volume. It encompasses country-wide & macro-level information related to minerals sector. An attempt has been made to comprehensively depict the Indian Mineral Industry and National Economy, along with concise portrayal of Policy & Legislation, Research & Development and Exploration & Development, Production, Prices, Foreign Trade, Mineral-Based Industries, reviews on mineral/metal, etc. for the corresponding year of publication. Volume wise suggestions/modifications/deletions needed to enhance the readability are described below:

4.1.1 Volume-I: General Review

I. Generic:

- a) The information in the Reviews should not be of repetitive in nature such as policy (steel policy, NMP, etc), amendments in Acts and Rules, etc. The recent (for corresponding year only) amendments in Acts, Rules and Policy should be included and it should be concise & summarized (not elaborative in nature).
- b) The information already covered in other specific review may be provided as a summary.
- c) Information, where no correction is suggested, may be updated as per practice and try to make it brief or more readable.
- d) Try to avoid carried forward information until unless it is confirmed during the review year.

II. Specific: Review wise suggestions/ modifications/ deletions are given below-

1. Indian Mineral Industry & National Economy:

- a) National Mineral Policy should not be repeated every year and only brief on legislative framework or steps to boost Indian economy may be given.
- b) In Star Rating, legislative framework and MSS, etc., only summary or brief may be given, as it is already covered in the review of “Mineral Policy & Legislation”.
- c) Exploration & Development should be limited to short note on only results or summary.
- d) Research & Development should be deleted, as included in corresponding reviews.
- e) Only summary or brief of Foreign Trade is to be included.

2. Mineral Policy And Legislation:

- a) Brief about legislative framework covering NMP, MMDR Act 1957 and Rules made thereunder may be given as a introduction of review.
- b) Only recent amendments/notifications (year under review), preferably summary, may be included.

3. Status of Reconnaissance Permits, Prospecting Licences and Mining Leases in India:

- a) It may be renamed as Status of **Mineral Concession in India** and the existing information may be retained/ updated as per availability.
- b) Information in respect of mineral wise and state wise successfully Auctioned block (ML, CL, EL) during the review year may be included.

4. Exploration & Development:

- a) National Mineral Policy should not be deleted from this review.

- b) Information pertaining to coal and Petroleum & Natural Gas may be deleted, as not under the purview of IBM and information is mostly from publication of other Ministry/Departments.
- c) Exploration & Development activities by DMGs, GSI, MECL, PSUs and other exploration agencies may be given in tabulated form (preferably agencies, state, district, location/block, geological mapping, drilling sampling, results, etc. as per available data) only.
- d) Results obtained/Remarks column in tables should be limited to 7-10 lines covering type of exploration, sampling and chemical analysis, outcome in terms of assay of mineral found (analytical results) and reserves/resources established, as most the information taken from GSI report which is available in public domain.

5. Research & Development: No Change.

6. Port facilities:

- a) This review may be deleted.
- b) The information under Table 1, 3, 4 & 7, inland waterways, recent initiatives, summary of Major/minor port (excluding port wise review), future outlook (if any) may be accommodated in Infrastructure in review on Indian Mineral Industry & National Economy.

7. Mineral based Industry:

- a) The information may be limited to summary and the historical or repetitive information may be avoided as far as possible.
- b) As far as possible data on industry may be given in tabular form to enhance the readability.
- c) The detail of company may be avoided to make more readable.

8. Production: Graphical representation instead of table may be included wherever it is possible, otherwise no change.

9. Prices: No change.

10. Foreign Trade: Graphical representation instead of table may be included wherever it is possible, otherwise no change.

11. State Review:

- a) **Mineral Resources:** In table (State wise and grade wise Reserves/Resources), UNFC code wise information may be replaced with Reserves, Remaining Resources and Total Resources.
- b) Details of Exploration Activities in corresponding state may be deleted, as it is already covered in review on Exploration & Development and this is also not available in the mineral reviews.

4.1.2 Volume-II: Metal Reviews

I. Generic

- 1. As far as possible Graphical representation of data may be included to enhance the readability of publication.
- 2. Review on Ferro-alloys may be deleted, as very limited information is available for updation and most of the information is carried forward (repetitive in nature and validation of information is also very difficult.
- 3. Information about slag may be deleted from the review of “Iron Steel & Scrape and Slag”, as most of the information is not received regularly and is mostly carried forward (repetitive in nature). The NSP policy may also be deleted from the said review, as already covered in Vol-I.
- 4. Try to avoid carried forward information until unless it is confirmed during the review year.

II. Specific

The following modification/deletion/suggestion may be applicable to respective topic/heading in individual review on metals.

- 1. **Image of ore/metal:** Collage of ore/metal images may be given at first page (not more than half page) and salient features, like, reserves/resources with metal content, R/R ratio, production of ore & conc., metal content, reporting

mines, installed capacity of metal, metal production, export/import, world ranking, etc. (as applicable for that metal/ore) may be given in box embedded in Collage.

2. **Introduction:** It may be summarized and limited to about half of 1st page in single column.
3. **Reserves/Resources:** Almost half page note in single column on reserves/resources may be limited (collected from the latest NMI).
 - In table (State wise and grade wise Reserves/Resources), UNFC code wise information may be replaced with Reserves, Remaining Resources and Total Resources.
 - Graphical representation (Pie Chart depicting % share) for Ores (Reserves, Remaining Resources, and Total Resources) with metal content may be included.
 - Bar chart for State wise and Grade wise distribution of Reserves, Remaining Resources, Total Resources with metal content may be included for graphical representation (wherever possible). If resources are located in 5 or more states then it may be prepared by using distribution of top 5 states and others.
4. **Exploration & Development:** It may be deleted, as information has already covered in review on Exploration & Development in Vol. I.
5. **Production:** It may be renamed as **Mining Leases & Production** by including total number of mining lease of respective metal/ore/mineral with area as on _____. A short note on mineral production covering sector, owner (captive & non captive mines), reporting mines (private & public sector), major producer, etc. may be provided. State wise and Grade wise Analysis of ore production may also be included. Under topic of average employment, existing short note is sufficient
 - Pie Chart or Bar chart or Table for State wise distribution of no. of mining leases with area as on _____ may be provided.

- Table for detail of producer mines in current year may be limited to top 5 – 10 covering name of mine/company, State, district, location. The corporate address of the producers should be deleted.
 - Bar chart for State wise production in Last 3 yrs (All states other than major states may be considered as “other states”) may be included for graphical representation.
 - Table for State/Sector/Grade wise production (Qty & Value) in Last 3 yrs (whenever 3 yrs is not possible to adjust then 2 years)
 - Table for State wise ore produced, Ore treated and Concentrate produced along with metal content in Last 3 yrs (whenever 3 yrs is not possible to adjust then 2 years)
 - Pie chart or Table (whatever possible) for State/Industry/Plant/Sector wise installed capacity (smelting and refining) and production of metal and/or mineral based product in Last 3 yrs (whenever 3 yrs is not possible to adjust then 2 years).
 - Bar chart for Sector wise distribution of mineral production in last 3 yrs may be included for graphical presentation, if possible.
- 6. Mining & Milling:** This information may be summarized, as mostly repetitive (every year) in nature. Plant wise or mine wise updated information is only kept and try to avoid the redundant information.
- 7. Smelting:** It may be may be summarized and limited to process technology, plant location and installed capacity (history or product/plant specific detail may be avoided) to keep it more readable.
- 8.** The industry details should be concise (brief/summary) and tabular with information limited to end product only. It should be compiled in half column only. Capacities and details of semis, downstream product may be deleted. Information related to downstream products should be deleted, as these details are depends upon market conditions and demand of the downstream product.

9. **Recycling:** A short note covering latest facts instead of history may be given, as history or lengthy information and lack of data reduces the readability. This is mostly repetitive in nature, hence, it may be concise and summarized.
10. **Development & Expansion:** Separate chapter on Development & expansion may be deleted and information in this context, mostly limited to set up of Greenfield project and capacity expansion in brownfield project, may be included in brief under industry details.
11. **Research & development:** Detail of Research & development may be deleted, as already covered in R & D Review and information in respect of most of minerals & metal is not complete.
12. **Uses & Specification:** In this topic, detail of Specification may be deleted as mostly carry forwarded (or not updated) and it may be renamed as Uses & Consumption by combining information of consumption with it. Uses may be summarised and provided in tabular form, if possible. The apparent consumption (in place of consumption) may be given in table by considering opening & closing stock, production, export and import.
13. **World Review:** A summary note on world reserves and world production of metal/ore/mineral including India's ranking in world may be provided. **Country-wise text/details may be deleted**, as the information is taken from different source and lags behind the year of information of World production and world reserves. Also the dependency of world review on USGS Mineral yearbook reviews make IMYB delayed.
 - a) The information in Table for World reserves and world production may be as per existing practice. The information may be limited to top 10 countries and others (collective information of countries other than top 10 countries). If information for India is included in others in the table than the same may be provided as a footnote of table.
 - b) Graphical representation for world reserves and world production may be included, if possible.

14. Foreign Trade: A summary note on export/import of Metal & Alloys alongwith table containing country wise export/import of Metal & Alloys including waste & scrap (qty & value) for last 3 years (maximum Top 10 country and others) may be retained.

- a) Country-wise tables may be given only for primary metal or any other important product, if any (not for all commodities/products).
- b) Table containing country-wise export of import of product/commodities other than primary metal (or any other important product) may be deleted. As in the absence of HS codes/ commodity details in the table, information is not complete in nature. Country wise information of various product/articles/alloys of metal makes the review lengthy and the same may not be useful on most of the times.
- c) The information of export & import of rest of the products/alloys/articles of respective metal may be given in a separate single table containing product-wise detail (single table for all other products/alloys/articles).

15. Health and safety: It is not a domain of IBM and information is mostly repetitive since long, hence the Health and safety should be deleted.

16. Technical Possibilities: This topic may be deleted as most of the information is not updated regularly.

17. Future Outlook: Brief of future information related to production, demand, expansion, etc. in respect of metal may be included and the historical information may be updated.

4.1.3 Volume-III: Mineral Reviews

I. Generic:

1. As far as possible Graphical representation of data may be included to enhance the readability of publication
2. The Review on **coal & lignite** may be deleted, as not under the purview of IBM and its most of the information is from Ministry of Coal Reports and

publications, which is already in public domain. The validation of information is also very difficult.

3. The Review on **Petroleum and Natural Gas** may be deleted, as not under the purview of IBM and its most of the information is from other Ministries Reports and publications, which is already in public domain. The validation of information is also very difficult.
4. The Review on **Cement** may be deleted, as it is not a ore/mineral or metal and very limited information is available for updating, hence validation of information is also very difficult. **The important statistics may be included in the review on Mineral based Industry.**
5. The Review of “**Minor Mineral**” may be deleted, as not under the purview of IBM and very limited information is available for updating, hence validation of information is also very difficult.
6. Separate information on Development & expansion may be deleted. The information, mostly limited to set up of Greenfield project and capacity expansion in brownfield project, may be included in brief under industry details.
7. Try to avoid carried forward information until unless it is confirmed during the review year.

II. Specific

The following modification/deletion may be applicable to individual review on minerals.

1. **Image of ore/metal:** Collage of ore/mineral images may be given at first page (not more than half page) and salient features, like, reserves/resources with, R/R ratio, production of ore, reporting mines, export/import, world ranking, etc. (as applicable for that ore/mineral) may be given in box embedded in Collage.
2. **Introduction:** It may be summarized and limited to about half of 1st page in single column.
3. **Reserves/Resources:** Almost half page note in single column on reserves/resources may be limited (collected from the latest NMI).

- In table (State wise and grade wise Reserves/Resources), UNFC code wise information may be replaced with Reserves, Remaining Resources and Total Resources.
 - Graphical representation (Pie Chart depicting % share) for Ores (Reserves, Remaining Resources, and Total Resources) with metal content may be included.
 - Bar chart for State wise and Grade wise distribution of Reserves, Remaining Resources, Total Resources with metal content may be included for graphical representation (wherever possible). if resources are located in 5 or more states then it may be prepared by using distribution of top 5 states and others.
- 4. Exploration & Development:** It may be deleted, as information has already covered in review on Exploration & Development in Vol. I.
- 5. Production & Stocks:** It may be renamed as **Mining Leases & Production** by including total number of mining lease of respective metal/ore/mineral with area as on _____. A short note on mineral production covering sector, owner (captive & non captive mines), reporting mines (private & public sector), major producer, etc. may be provided. State wise and Grade wise Analysis of ore production may also be included.
- A Pie Chart or Bar chart or Table for State wise distribution of no. of mining leases with area as on_____ may be provided.
 - Table for detail of producer mines in current year may be limited to top 5 – 10 covering name of mine/company, State, district, location. The corporate address of the producers should be deleted.
 - Bar chart for State wise production in Last 3 yrs (All states other than major states may be considered as “other states”) may be included for graphical representation.
 - Table for State/Sector/Grade wise production (Qty & Value) in Last 3 yrs (whenever 3 yrs is not possible to adjust then 2 years)

- Bar chart for Sector wise distribution of mineral production in last 3 yrs may be included for graphical presentation, if possible.
 - Under topic of closing stock at mine head, a Table for State/Sector/Grade wise closing stock at mines head in last 2 yrs.
 - Existing short note on average employment may be retained.
6. **Mining, Marketing and transport:** It may be deleted as mostly carry forwarded or not updated (mostly repetitive every year). If updated information of mining is available, then a short note on mining may be included in half of column of page.
 7. **Mining & Processing:** It may be deleted as mostly carry forwarded or not updated (mostly repetitive every year). If updated information on mining & processing is available, then a short note on it may be included in half of column of page.
 8. **Grading & Marketing:** It may be deleted as mostly carry forwarded or not updated (mostly repetitive every year).
 9. **Classification:** It may be deleted as mostly carry forwarded or not updated (mostly repetitive every year).
 10. **Environment Factors:** It may be deleted as mostly carry forwarded or not updated (mostly repetitive in nature) and not under the purview of IBM. The validation is also difficult.
 11. **Pollution Control & Environmental Management Efforts:** It may be deleted as mostly carry forwarded or not updated (mostly repetitive in nature) and not under the purview of IBM. The validation is also difficult.
 12. **Beneficiation:** It may be may be summarized and limited to process technology, plant location and installed capacity (history or product/plant specific detail may be avoided) to keep it more readable.
 13. The industry details should be concise (brief/summary) and tabular with information limited to end product only. It should be compiled in half column only. Capacities and details of semis, downstream product may be deleted.

Information related to downstream products should be deleted, as these details are depends upon market conditions and demand of the downstream product.

- 14. Research & development:** Detail of Research & development may be deleted, as already covered in R & D Review and information in respect of most of minerals is not complete.
- 15. Uses & Specification:** The detail of Specification may be deleted as mostly carry forwarded (or not updated) and BIS specifications are on chargeable basis, which are not available in open sources. This chapter may be renamed as Uses & Consumption by combining information of consumption with it. Uses may summarise and provided in tabular form, if possible, for ease of understanding. The apparent consumption (in place of consumption) may give in table by considering opening & closing stock, production, export and import, as the consumption has not been updated since long.
- 16. Technical Possibilities:** This topic may be deleted as most of the information is not updated regularly.
- 17. Substitutes:** A short note on possible substitute, if available, may be included.
- 18. Trade Policy:** The policy condition and tariff, if available, for the respective ore/mineral may be included as a short note or table.
- 19. Health and safety:** It is not a domain of IBM and information is mostly repetitive since long, hence the Health and safety should be deleted.
- 20. World Review:** A summary note on world reserves and world production of metal/ore/mineral including India's ranking in world may be provided. Country-wise text/details may be deleted, as the information is taken from different source and lags behind the year of information of World production and world reserves. Also the dependency of world review on USGS Mineral yearbook causes delay in IMYB schedule.
 - a) The information in Table for World reserves and world production may be as per existing practice. The information may be limited to top 10 countries and others (collective information of countries other than top 10 countries). If

information for India is included in others in the table than the same may be provided as a footnote of table.

- b) Graphical representation for world reserves and world production may be included, if possible.

21. Foreign Trade: A summary note on export/import of ore & minerals alongwith table containing country wise export/import of ore & minerals for last 3 years (maximum Top 10 country and others) may be retained.

- a) Country-wise tables may be given only for primary ore & minerals or any other important product, if any (not for all commodities/products).
- b) Table containing country-wise export of import of product/commodities other than ore & minerals (or any other important product) may be deleted. As in the absence of HS codes/ commodity details in the table, information is not complete in nature. Country wise information of various products makes the review lengthy and the same may not be useful on most of the times.
- c) The information of export & import of rest of the products may be given in a separate single table containing product-wise detail (single table for all other products).

22. Future Outlook: Brief of future information related to production, demand, expansion, etc. in respect of mineral may be included and the historical information may be limited to reference only (mostly latest information may be provided).

4.2 Bulletin on ML, CL, EL and Auction

1. The Bulletin of ML & PL and Bulletin of Mineral Information should be merged as the set of information in both the publications is output of same set of information in different forms.
2. The name of the combined publication should be changed to “**Bulletin of ML, CL, EL and Auction**”.
3. The structure and information to be given in the following manner as below:

Existing Format		Suggestion/Modification
Heading	Sub Heading	
	1. Introduction	Introduction Half page brief on mining lease distribution and land use in country Pie chart of land use (table may be deleted)
	2. Land Use Scenario	
Section I: Distribution of Mining Leases	3. Mining Leases	State/Mineral wise Analysis: Retain Table 1, 2 & 4 (Blank space may be compressed) and delete Table 3 Insert pie chart for mining lease distribution in mineral rich state & others District wise Analysis: Retain Table 5, 6 & 7 Mineral wise Analysis: Delete Table 8 & 9 Frequency Distribution: Delete Table 10 and retain Table 11 (category classification as footnote of table) Sector wise Distribution: Pie chart instead of text Merge Table 12 & 13 (by inserting CPSU & SPSU under Public sector of Table 12) and retain Table 14
	3.1 State wise Analysis	
	3.2 District wise Analysis	
	3.3 Mineral wise Analysis	
	3.4 Frequency Distribution	
3.5 Sector wise Distribution		
Section II: Trend in Mining Leases during year	2.1 Trend in Mining	Mining Lease Granted/Executed: Table having following detail Mineral, State/District/Village, Area, Date of grant, Date of Execution, Period, Name & Address of lessee
	A. Mining Leases Granted	
	B. Mining Leases Executed	
	C. Mining Leases Lapsed	Mining Lease Lapsed/Terminated/Determined/Cancelled: Table having following detail Mineral, State/District/Village, Area, Whether mining lease Lapsed/Terminated/Determined/Cancelled, Date of Lapsed/ Terminated/Determined/Cancelled, Name & Address of lessee
	D. Mining Leases Transferred	Mining Leases Transferred: Table having following detail Mineral, State/District/Village, Area, Name & Address of Transferor, Name & Address of Transferee, Valid Upto, Date of Transfer order or Transfer deed
	E. Mining Leases Extended	Mining Leases Extended: Table having following detail Mineral, State/District/Village, Area, Date of extension, Date up to

		Which lease period extended, Name & Address of lessee
	2.2 Trend in Prospecting A. Prospecting Licences Granted	May be deleted or included in next section
Section III: Prospecting Licences or Composite Licences	4. Prospecting Licences or Composite Licences 4.1 State wise Distribution of Prospecting Licences or Composite Licences	State wise Distribution of Prospecting Licences or Composite Licences or Exploration Licence: Compress table by deleting rows where all information in respect of state is nil
	4.2 Mineral wise Distribution of Prospecting Licences	Mineral wise Distribution of Prospecting Licences or Exploration Licence: Compress table by deleting rows where all information in respect of mineral is nil
Recommended for New insertion		
Section IV: Auction Regime	Successful Auction since inception (as on date_____):	Detail of State wise and Mineral wise summary of auction since inception State, Mineral, Type of Concession, No. of successfully auctioned blocks
	Auction Trend	Successful auction during the year: Table having following detail State, Mineral, Date of Auction, Type of Concession, Area, Status, Name of Bidder

4.3 National Mineral Inventory at a Glance: The National Mineral Inventory at a Glance is a publication designed to provide a quick and broad qualitative scenario of mineral resources of the country. The publication provides reserves/resources as per United Nations Framework Classification (UNFC) which has been adopted in the Indian Mineral Sector. The resource data has been provided in the form of tables. These tables give mineral wise distribution of resources in different states and vice versa along with codes and terminologies as per UNFC. *The data presentation, information clarity and current state of knowledge are at par with any other National & International publication and hence may be retained as it is.*

4.4 National Mineral Inventory an Overview: The National Mineral Inventory an overview is a publication, which is aimed to disseminate of updated data of mineral resources in the country. It covers information on mineral resources in category of ferrous, non-ferrous, precious & semi-precious minerals, strategic minerals, fertilizer minerals, refractory minerals,

ceramic & glass minerals, other industrial minerals and all India resource summaries. The publication also encompasses a comparative mineral-wise/ state-wise/ grade-wise data on reserves, remaining resources and total resources as on 1.4.2020 vis-a-vis 1.4.2015. It also provides details about the significant increase or decrease of mineral resources over the previous inventory, particularly in respect of their grades, lease status with break up into Private & Public sector. *The data presentation, information clarity and current state of knowledge are at par with any other National & International publication and hence may be retained as it is.*

4.5. Mineral Statistics of Mineral Production (MSMP): MSMP is a monthly publication that presents important statistics on mineral production in all the States and Union Territories of India. The publication also comprises statistics on Index of Mineral Production; value of mineral production by states; details of production by minerals, by state for each mineral, by mineral in each state; state-wise average sale price of minerals by grades; average sale price of metals and metal production. The publication is complete in all sense and may be retained as it is. *The data presentation, information clarity, graphical content and current state of knowledge is at par with any other National & International publication and hence may be retained as it is.*

4.6 Indian Mineral Industry at a Glance

1. The Statistical profile of Minerals and Indian Mineral Industry at a Glance should be merged as the set of information in both the publications is output of same set of information in different forms.
2. The structure of Indian Mineral Industry at a Glance and Statistical profile of minerals is given as below:

Part A: Mineral Industry at a Glance

Existing Format		Suggestion/Modification
Heading	Sub Heading	
Section – 1 General	Reserves and Resources as on 01.04.2020 Mineral Reserves/Resources	Table 1 may retain
	Mining Leases as on 31-3-2021 Mining Leases (By Principal Minerals) Mining Leases (By Principal States)	Table 2 to Table 7 including chart may be deleted Two Table for State wise

	Concentration of Mining Leases (By Potential) Distribution of Lease Area (By Sectors) Distribution of Leases (By Lease Groups) Distribution of Leases (By Area Groups)	and Mineral wise no. of mining leases with area may be provided
	Reporting Mines Number of Reporting Mines (By Mineral Groups) Number of Underground Mines (By Principal Minerals)	Table 8 to Table 9 may retain
	Value of Mineral Production Decennial Growth in the Value of Mineral Production 1958 to 2018-19, 1959 to 2019-20 & 1950 to 2020-21 Value of Mineral Production (By Mineral Group) Value of Mineral Production (By Minerals) Value of Mineral Production (By States) Value of Mineral Production (By Sectors) Value of Mineral Production & Number of Mines (By Sectors)	Table 10 to Table 16 may retain
	GDP and Indices Index of Mineral Production (By Mineral Groups) Wholesale Price Index (By Groups) Gross Domestic Product (GDP) at Current Prices	Table 17 to Table 19 including chart may retain
	Exports and Imports Exports: Total Merchandise: Minerals & Metals Imports: Total Merchandise: Minerals & Metals	Table 20 to Table 21 including chart may retain
	Explosives Consumption of Explosives, 2018-19, 2019-20 & 2020-21 (By Minerals)	Table 22 to Table 24 may be deleted
	Afforestation Afforestation in Metalliferous Mines During 2020-21 (By Principal Minerals)	Table 25 may be deleted
Section – 2 Mineral	Production, Value, Employment and Reporting Mines, 2009-10 to 2020-21,	Table 26 to Table 29 may be deleted (as it related to Coal,

Productions, 2009-10 to 2020-21	(Principal Minerals) (Coal, Lignite, Petroleum (Crude), Natural gas (Utilised), Bauxite, Chromite, Copper Ore & Concentrates, Gold Ore and Gold, Iron Ore, Lead & Zinc Ore and Concentrates, Manganese Ore Apatite & Phosphorite, Diamond, Kyanite, Limestone, Magnesite and Sillimanite are covered)	Lignite, Petroleum and Natural gas) and Table 30 to Table 42 including chart may retain (similar information for 5 years are also provided in Statistical profile)
Section – 3 Productions of Metals & Alloys, 2009-10 to 2020-21	Production of Metals and Alloys, 2009-10 to 2020-21 (Iron & Steel, Ferro-Alloys, Alumina and Aluminium, Copper, Gold and Silver and Lead & Zinc are covered)	Table 43 to Table 48 including chart may retain
Section – 4 Foreign Trades, 2009-10 to 2020-21	Exports of Principal Minerals, 2009-10 to 2020-21 (Chromite, Granite, Value of Exports of Granite (By Principal Countries), Iron Ore, Value of Exports of Iron ore (By Principal Countries), Manganese Ore, Marble, Mica are covered) Imports of Principal Minerals, 2009-10 to 2020-21 (Asbestos, Coal, Petroleum (Crude), Rock Phosphate, Sulphur are covered)	Table 49 to Table 61 may be deleted (very few minerals are covered)
	Direction of Trade Value of Exports of Minerals, 2018-19 to 2020-21 Value of Exports of Metals, 2018-19 to 2020-21 Value of Imports of Minerals, 2018-19 to 2020-21 Value of Imports of Metals, 2018-19 to 2020-21 Exports, Imports & Net Trade in Minerals & Metals Share of Principal Minerals in the Exports Value of Minerals, 2014-15 to 2020-21 Share of Principal Minerals in the Imports Value of Minerals, 2014-15 to 2020-21 Share of Principal Countries in the Value of	Table 62 to Table 74 including chart may retain

	Exports of Diamond, 2014-15 to 2020-21 Share of Principal Countries in the Value of Imports of Diamond, 2014-15 to 2020-21 Production, Exports/Imports & Apparent consumption as Percent of Total Availability 2018-19 to 2020-21	
Section – 5 Average Daily Employments in Mines, 2009-10 to 2020-21	Employment in Mines Average Daily Employment in Mines (By Groups), 2009-10 to 2020-21 Average Daily Employment in Metallic Minerals Mines 2018-19, 2019-20 & 2020-21 (By Sectors) Average Daily Employment in Non Metallic Minerals Mines 2018-19, 2019-20 & 2020-21 (By Sectors) Average Daily Employment in Mines (By Category/Sector) 2018-19, 2019-20 & 2020-21	Table 75 to Table 79 may retain
Section – 6	Consumption of Minerals, 2009-10 to 2020-21 (Only Iron & Steel Industry, Cement Industry and Refractory Industry are covered)	Section – 6 including Table 80 to Table 82 may be deleted (Coverage of industries are not encouraging)
Section – 7	Productions of Mineral-based Products, 2009-10 to 2020-21 (Only Cement and Asbestos-Cement Products, Ceramic Products, Fertilizers and Sulphuric Acid are covered)	Section – 7 including Table 83 to Table 86 may be deleted (Products are very limited)
Section – 8	Mining Machinery, 2009-10 to 2020-21	Section – 8 including Table 87 to Table 112 may be deleted
Appendix Appendix-I(a) Decennial Growth in Production, 1958 to 2018-19 Appendix-I(b) Decennial Growth in Production, 1959 to 2019-20 Appendix-I(c) Decennial Growth in Production, 1950 to 2020-21 Appendix-II Decennial Mineral Production, 2009-10 to 2020-21		Table 113 to Table 116 may retain

Part B: Statistical Profiles of Minerals

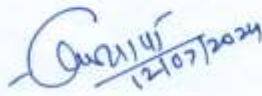
Mineral wise profile covering following information

Existing Format	Suggestion/Modification
A) Total Resources: Reserves, Remaining Resources and Total Resources	Retain
B) Mining Leases as on ____: No. of Leases and Lease Area	Retain
C) Mines Reporting Production: Sector wise, Owner wise, State wise and Grade wise no. of mines and production during last 2 years	As far as possible accommodate information for 5 years
D) Production Trend: Production (Qty & Value) during last 5 years	Retain
E) Closing Stock: Closing stock during last 5 years	Retain
F) Employment: Average Number of Persons Employed per Day during last 2 years	As far as possible accommodate information for 5 years
G) Domestic Consumption Trend: Consumption during last 5 years	Deleted or Apparent consumption may be provided (mostly not available)
H) Exports/Imports Trend: Exports/Imports (Qty & Value) during last 5 years	Retain
I) Exports/Imports by Country in ____: Exports/Imports (Qty & Value) by 5 major countries	Retain
J) Five Principal Mines in ____:	Retain
K) Contribution of above Mines in ____: Quantity and % share	Retain

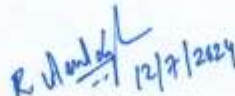
5 Other Recommendations:

The data dissemination is one of the prime objectives of Indian Bureau of Mines and to enhance the readability and accessibility of information to the public, the following data analytics may be provided on IBM's portal in respect of:

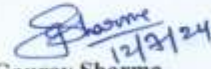
1. State-wise, mineral-wise, sector-wise, frequency-wise number of leases.
2. State-wise, sector-wise, grade-wise, mineral-wise statistics, leasehold/ freehold on National Mineral Inventory.
3. State-wise, mineral-wise, grade-wise production of Minerals.
4. Survey of viewership of IBM's publication.
5. The location of Mines address can have Google map link so that directly reader can see the location on Google map.
6. Glossary should be added hyperlinked.



Deepak Thapa
AME (S), IBM



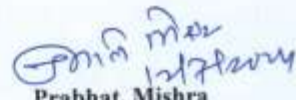
Anil Singh Rajput
Sr. Manager, MOIL



Gaurav Sharma
Mineral Economist (I), IBM



Dr. Sandeep Panchal
Asstt. Professor, VNIT



Prabhat Mishra
Sg. Mineral Economist (I), IBM



B. L. Gurjar
Controller of Mines,
IBM

***** End of Report *****

207-IR022/1/2024-TS-IBM_HQ

I/32016/2024

By E-mail

	<p>भारत सरकार Government of India खान मंत्रालय Ministry of Mines भारतीय खान ब्यूरो Indian Bureau of Mines मुख्य खान नियंत्रक कार्यालय (एमईएस) Office of CCOM (MES) No.: 207-IR022/1/2024-TS-IBM_HQ</p>	 <p>एक ही धरती - एक ही परिवार - एक ही भविष्य ONE EARTH - ONE FAMILY - ONE FUTURE Block 'D', Second Floor, Indira Bhawan, Civil Lines, Nagpur 440 001 Phone/ Fax No.: 0712 2565136 E mail: ccom- mes@ibm.gov.in Date :07.05.2024</p>
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Office Memorandum

Subject: Constitution of the Study Group to reorganize Indian Mineral Yearbook and other Publications of IBM, to increase its readability with efforts to bring in the latest information

The IBM's objective is to promote systematic and scientific development and optimum utilisation of mineral resources of the country. In order to achieve this objective one of the charter of functions of Indian Bureau of Mines is "to collect, collate and organise into a database, all information on exploration, prospecting, mines and minerals in the country in the shape of a National Mineral Information Repository and take steps to publish and disseminate the same".

Indian Mineral Yearbook (IMYB) is a flagship title of Indian Bureau of Mines and its publication & release is the outcome of collective & coordinated efforts of the Bureau's Mineral Economics Division and Mining & Mineral Statistics Division. The IMYB published in three volumes titled General Reviews (Vol. I), Reviews on Metals & Alloys (Vol. II) and Mineral Reviews (Vol. III).

The other important publications of IBM are Monthly Statistics of Mineral Production, (MSMP) - a collection of monthly mineral statistics, Indian Mineral Industry at a Glance (IMIG) - a collection of mineral statistics for ten years, National Mineral Industry (NMI) - a collection of information on mineral resources in India, Statistical Profile of Mineral (SPM) - a collection of mineral statistics for five years, Bulletin of Mineral Information (BMI) - a collection of amendments/ notifications and summary of court cases in mineral sector and Bulletin of Mining Leases and Prospecting License - a collection of statistics on mining leases in India.

In continuation of the same the Secretary (Mines) directed to formulate of a Study Group by drawing eminent persons from the academia, industry and R&D Organization for reorganization of Indian Mineral Yearbook and other publications/ reports to increase its readability with efforts to bring in the latest information. In this context, a Study Group has been constituted in order to reorganize Indian

1/32016/2024

Mineral Yearbook and other Publications of IBM, of following members:

S. No.	Name of Member	Designation
1	Shri B. L. Gurjar, Controller of Mines, IBM	Chairman
2	Shri P. Mishra, Sg. Mineral Economist (I), IBM	Member
3	Prof. Sandeep Panchal, Asst. Professor, VNIT	Member
4	Shri. Anil Singh Rajput, Sr. Manager, MOIL	Member
5	Shri. Deepak Thapa, AME (S)	Member
6	Shri Gaurav Sharma, ME (I), IBM	Member Secretary

-

Terms of Reference:-

1. To review the publications of IBM such as IMYB, IMIG, SPM, MSMP, NMI, BMI, etc. with a view to increase its readability.
2. To review the comprehensive foundation of the publication, current state of knowledge & content.
3. To identify gaps in the existing publications for potential future era of digitization.
4. To identify the shortcomings in data presentation & information clarity, also to suggest the methodologies & techniques for improvement.
5. To identify the specific areas in a publication to be more in detail and concise to include relevant points only, for better understanding of the reader.
6. To analyse possibility for including visual and graphical content, this helps a reader to accumulate information faster and easier.
7. The committee should submit its report latest by **30.06.2024**.

(Pankaj Kulshreshta)
Chief Controller of
Mines (MES)
Indian Bureau

of Mines

Copy to:-

S. No.	Name of Member	Contact Details
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