

GOVERNMENT OF INDIA
MINISTRY OF MINES
RAJYA SABHA
UNSTARRED QUESTION No. 2500
ANSWERED ON 11.08.2025

ESTIMATED RESERVES AND STATUS OF EXPLORATION OF KEY CRITICAL MINERALS

2500 SHRI A. D. SINGH:

Will the Minister of MINES be pleased to state:

- (a) the estimated reserves and status of exploration of key critical minerals such as lithium, cobalt, nickel, and rare earth elements in the country;
- (b) extent to which the current domestic requirement of these minerals is met through indigenous mining;
- (c) the quantity and value of imports of critical minerals during the last three years; and
- (d) efforts being made to reduce import dependence of these minerals?

ANSWER

THE MINISTER OF COAL AND MINES
(SHRI G. KISHAN REDDY)

- (a) As per the National Mineral Inventory (NMI) as on 01.04.2020, the reserves/resources of some of the critical minerals in the country is enclosed as **Annexure-I**.

Geological Survey of India (GSI) has intensified the exploration of critical and strategic minerals. GSI has carried out 195 critical mineral exploration projects in 2024-25. During 2025-26, GSI has taken up 230 projects for various critical minerals across the country.

- (b) As per available information, most of the critical minerals are not produced from primary sources in the country and the most of the demand is met through imports. A limited extent of domestic requirement is met through indigenous mining. Further, the mineral-wise production of critical minerals during 2022-23 to 2024-25 (Provisional) is given in **Annexure-II**.

- (c) The details of quantity and value of imports of critical minerals during the last three years are enclosed as **Annexure-III**.

- (d) The Government has made the following efforts to reduce India's import dependence of critical minerals:

- i. In order to enhance domestic production of critical and strategic minerals, Central Government has auctioned 34 blocks for critical and strategic minerals during 2024-25 and the current year.

- ii. To encourage private participation in exploration, the Ministry of Mines has notified 33 private exploration agencies (NPEAs) for taking up exploration projects through funding from National Mineral Exploration Trust (NMET).
- iii. The Notice Inviting Tenders (NITs) for the first tranche of auction of 13 mineral blocks for grant of Exploration Licence has been issued on 13th March, 2025. This comprises of some blocks for critical minerals like Rare Earth Elements (REE), Platinum Group of Elements (PGEs), Vanadium etc.
- iv. The Ministry of Mines has launched the First Tranche of Auction for 13 mineral blocks in the offshore areas including 7 blocks of polymetallic nodules and crusts which have several critical minerals.
- v. The Ministry of Mines is providing funding for Research and Development (R&D) projects related to critical minerals to various Institutions/Laboratories/Start-ups/MSMEs etc.
- vi. On 29 January 2025, the Government has approved setting up of the National Critical Minerals Mission (NCMM) to secure a long-term, sustainable supply of critical minerals and to strengthen India's value chains across all stages- from exploration and mining to beneficiation, processing, and recovery from end-of-life products. Promotion of recycling of critical minerals is also a part of this Mission.
- vii. The Ministry of Mines has recognized 7 institutes – 4 IITs and 3 R&D Labs – as Centres of Excellence (CoE) under NCMM.

Reserves/resources of Critical Minerals as per NMI as on 01.04.2020

S. No.	Mineral	Unit	Reserve	Remaining Resources	Total Resources
1.	Antimony				
	<i>Ore</i>	Tonne	7,503	11,180	18,683
	<i>Metal</i>	Tonne	75	180	255
2.	Cobalt (Ore)	Million Tonne	0	45	45
3.	Graphite	Tonne	85,63,411	20,30,60,176	21,16,23,587
4.	Molybdenum				
	<i>Ore</i>	Tonne	0	2,72,03,398	2,72,03,398
	<i>Contained MoS2</i>	Tonne	0	16,891	16,891
5.	Nickel Ore	Million Tonne	0	189	189
6.	Rock Phosphate	Tonne	3,08,76,093	28,03,77,392	31,12,53,485
7.	Platinum group of metals (PGM)	Tonne of Metal Contained	0	21	21
8.	Potash *	Million Tonne	0	23,091	23,091
9.	Rare Earth Elements (REE)	Tonne	0	4,59,727	4,59,727
10.	Tin				
	<i>Ore</i>	Tonne	2,101	8,37,20,794	8,37,22,895
	<i>Metal</i>	Tonne	974	1,02,783	1,03,757
11.	Titanium @	Tonne	1,59,98,625	41,11,08,526	42,71,07,150
12.	Tungsten				
	<i>Ore</i>	Tonne	0	8,94,32,464	8,94,32,464
	<i>Metal</i>	Tonne	0	1,44,650	1,44,650
13.	Vanadium				
	<i>Ore</i>	Tonne	0	2,46,33,855	2,46,33,855
	<i>Contained V2O5</i>	Tonne	0	64,594	64,594
14.	Zircon	Tonne	6,69,466	16,74,435	23,43,901

Figures rounded off

*contains glauconite, polyhalite, sylvite.

@ contains ilmenite, rutile, leucoxene and anastase.

Annexure-II

Production of Critical Minerals During 2022-23 to 2024-25 (P)

(Value in Rs. '000)

Year	Mineral	Unit	Quantity	Value
2022-23	Graphite	Tonne	94,789	1,80,152
	Phosphorite	Tonne	1,9,78,450	1,23,54,618
	Tin Concentrate	Kg	45,444	52,327
2023-24	Graphite	Tonne	1,69,080	2,18,403
	Phosphorite	Tonne	15,57,783	1,14,36,102
	Tin Concentrate	Kg	22,345	18,269
2024-25	Graphite	Tonne	85,329	1,33,163
	Phosphorite	Tonne	18,05,914	1,21,40,360
	Tin Concentrate	Kg	9,262	10,395

Source: MCDDR Returns; (P): Data is Provisional

Annexure-III

(Quantity in ton, Value in Rs. Crore)

#	Description	2022-23		2023-24		2024-25	
		Quantity	Value	Quantity	Value	Quantity	Value
1	Beryllium	1,206.3	81.0	2,542.76	127.85	3,254.6	261.1
2	Cadmium	725.1	24.7	14,943.91	382.5	14,585.1	383
3	Cobalt	915.4	199.7	893.6	185.3	1,512.7	194.9
4	Gallium	0.0	0.0	0.0	0.0	1.5	0.6
5	Graphite	1,28,714.4	1,494.8	1,56,669.8	1,600.0	1,58,609.10	1,433.60
6	Indium	0.0	0.0	0.0	0.0	1.5	0.6
7	Lithium	2,144.8	731.5	2,293.6	451.7	2,997.7	300.5
8	Molybdenum	20,458.7	2,580.0	21,719.5	3,770.9	29,344.7	4,536.1
9	Niobium	3,663.2	21.0	325.3	7.7	655.8	15.5
10	Nickel	39,602.0	7,338.0	1,31,417.9	6,557.3	46,779.9	5,536.8
11	PGE	31.5	12,289.2	30,656.8	268.0	234.4	46,307.3
12	Phosphorous	90,89,705.0	15,125.2	88,02,076.6	12,648.6	1,19,48,089	16,374.9
13,14	Potash, Glaucanite	23,347.3	269.4	30,656.8	268.0	28,288.9	207.3
15	REE	1,944.7	150.7	2,270.3	156.9	1,850	135.8
16	Rhenium	1,186.3	79.0	2,542.8	127.8	3,254.6	260.8
17	Selenium	386.6	69.0	506.9	88.8	451.8	108.8
18	Tantalum	2.7	3.6	0.4	0.7	1.1	2.6
19	Tellurium	2.4	2.1	6.6	4.5	6.3	4.5
20	Tin	13,202.4	3,096.0	11,967.1	2,664.4	14,524.2	3,976.92
21	Titanium	93,229.9	1,341.6	1,15,424.3	1,413.1	1,17,823.20	1,483.40
22	Tungsten	521.2	45.1	294.0	82.7	233	61.75
23	Vanadium	5,769.3	212.4	3,427.1	161.6	3,743.1	248.2
24	Zirconium	82,839.7	1,517.0	82,259.7	1,396.3	94,834.3	1,515.4