

GOVERNMENT OF INDIA
MINISTRY OF MINES
RAJYA SABHA
STARRED QUESTION NO. 151
ANSWERED ON 18.12.2023

DISCOVERY OF NEW MINERAL DEPOSITS

*151. SHRI SATISH CHANDRA DUBEY:

Will the Minister of MINES be pleased to state:

- (a) the details of new mineral deposits found, if any, in the last three years; and
- (b) the manner in which Government is overcoming the challenges and taking up the opportunities for mineral exploration in the country?

ANSWER

THE MINISTER OF MINES, COAL AND PARLIAMENTARY AFFAIRS
(SHRI PRALHAD JOSHI)

(a) and (b): A Statement is laid on the table of the House.

STATEMENT REFERRED IN REPLY TO PARTS (a) AND (b) OF RAJYA SABHA STARRED QUESTION NO.151 ANSWERED ON 18.12.2023 ASKED BY SHRI SATISH CHANDRA DUBEY REGARDING 'DISCOVERY OF NEW MINERAL DEPOSITS'

(a): Geological Survey of India, an attached office of Ministry of Mines has been carrying out mineral exploration in the country with an aim to augment resource for various mineral commodities like Iron ore, Manganese, Chromite, Gold, PGE, Base metals, Rare Earth Elements, Molybdenum, Nickel, Tungsten, Lithium, Limestone, Bauxite, Graphite, Potash, Phosphorite etc. The details of mineral exploration projects undertaken by GSI different parts of the country during the last three years and current year are given in Annexure-I. Further, the details of the resources augmented by GSI in different parts of the country since amendment of Mines and Minerals Development and Regulation Act, 2015, are given in Annexure-II.

Further, National Mineral Exploration Trust of Ministry of Mines has also funded 270 of mineral exploration projects in the country out of which 162 projects have been completed. Out of completed 162 projects, in 88 projects mineral deposits have been found and the details are at Annexure-III.

The Central Government has undertaken several initiatives to promote mineral exploration. This has resulted in the increase of Obvious Geological Potential (OGP) and area under exploration. India's OGP has increased from 5.71 Lakh Sq Km to 6.88 Lakh Sq. Km. Area under exploration is almost touching 2 Lakh Sq. Km out of 4.5 Lakh Sq. Km, thus achieving more than 30% exploration.

Over the years, several amendments have been made to the MMDR Act that has led to a more competitive mining sector. So far, a total of 335 mineral blocks have been auctioned by States (since MMDR Act 2015), out of which 227 (68%) have been auctioned since 2021-22 (since MMDR Amendment Act 2021).

(b): The following measures have been taken by the Central Government to overcome the challenges and taking up opportunities for mineral exploration in the country:

(i) Amendment in the Mines and Minerals (Development and Regulation) Act, 1957 (MMDR Act) in 2021 has empowered the Central Government to notify private sector entities to undertake prospecting operations. The notified agencies are eligible for funding from National Mineral Exploration Trust (NMET). So far, a total of 16 private agencies have been notified to take up mineral exploration in the country. These agencies can submit proposals of critical minerals and deep-seated mineral projects directly to NMET and through State Government for other minerals. Further, an Exploration Incentive (EI) of 25% of the approved cost of the project for G4 items in Greenfield areas for gold, base metals, other precious minerals, strategic/ critical minerals, and fertilizer minerals have been introduced by NMET. Exploration Incentive will be paid if the block is successfully auctioned or upgraded from G4 to G3 Stage.

(ii) Given the importance of critical and strategic minerals including Rare Earth Elements, the MMDR Act has been further amended in 2023 empowering the Central Government to conduct auction for grant of mining lease or composite license in respect of 24 minerals listed in Part D of First Schedule. The amendment also introduced provision of Exploration Licence (EL), to undertake reconnaissance and prospecting operations for critical and deep-seated minerals for 29 minerals listed in the Seventh Schedule of the Act.

(iii) Moreover, GSI is generating baseline geoscience data e.g. geological mapping, geochemical mapping, geophysical mapping and aero-geophysical survey pan India which are of paramount importance for effective planning of mineral exploration. GSI has targeted to complete National Geochemical and Geophysical mapping of the accessible part of the country on priority. GSI is also executing “National Aero-Geophysical Mapping Programme (NAGMP)” to acquire uniform aero-geophysical data over the pre-identified Obvious Geological Potential areas (7.78 lakh sq km) and other areas.

(iv) A National Geoscience Data Repository is being established for the benefit of all stakeholders wherein all geoscientific data will be made available at one platform.

The details of mineral exploration (G2/G3/G4) by GSI during last 3 years and current year 2023-24

A. Non Energy Mineral:

State	No. of exploration Projects taken up				Commodity
	2020-21	2021-22	2022-23	2023-24	
Meghalaya	5	4	6	9	Bauxite, Limestone, REE, Phosphate, Lithium-REE & RM, Tungsten, Molybdenum, Sillimanite, Phosphate, Basemetal.
Assam	3	2	6	5	REE, Limestone, Molybdenum, Gold
Arunachal Pradesh	7	8	5	6	Graphite, Gold, Basemetal, Vanadium, REE & Associated Precious And Basemetal, Lithium, Tantalum, Phosphorite
Nagaland	1	0	3	3	Iron, Nickel, Gold, Lithium & REE, Nickel-Chromite & PGE, Limestone
Sikkim	1	0	0	1	Graphite, Basemetal, Gold
Manipur	1	2	1	0	Copper-Nickel & PGE, Chromium
Chhattisgarh	5	15	20	23	Bauxite, Limestone, Iron, REE, Glauconitic Shale/Sandstone, Graphite, Gold, REE & RM, Lithium, Molybdenum, Tungsten, Basemetal, Phosphorite, Diamond, Potash, Copper, Barium, Manganese
Maharashtra	8	8	13	13	Copper, Basemetal, REE & RM, Vanadium, Chromite-Nickel & PGE, Bauxite, Tungsten, Lead-Zinc, Gold, Pyrophyllite
Madhya Pradesh	14	20	28	24	Copper, Basemetal, Barite & Basemetal, Scandium & Lithium, Phosphorite, Nickel-Chromite & PGE, Laterite & Bauxite, Gold, Graphite, Ree, Molybdenum, PGE, Silica & Basemetal, Hafnium-Niobium-Yttrium & Ree, Tungsten, Gold, Diamond, Rm, Vanadium, Iron, Bauxite, Limestone, Phyrophyllite, Diaspore, Potash, Manganese, Nickel
Haryana	1	2	2	3	Copper, REE, RM, Tin, Basemetal
Himachal Pradesh	1	2	6	2	Phosphorite, Gypsum, Vanadium, Tungsten, REE, Lead-Zinc
Uttar Pradesh	5	4	7	11	Bauxite, Gold, Potash, Basemetal, Tin-Tungsten, REE & RM, Diamond, Iron, Limestone, Potash, Heavy Minerals, Nickel-Molybdenum, Vanadium, Titanium
Uttarakhand	2	6	4	4	Tungsten-Tin, RM & REE, Basemetal, Molybdenum, Gold, Vanadium, Phosphorite, Potash
Ladakh UT	0	0	2	2	Chromite, Nickel, Lithium, PGE
Jammu and Kashmir UT	2	5	2	4	Graphite, Bauxite, REE, Lithium, Tin, Tungsten, Chromium, Nickel, PGE, Gold, Basemetal, Sapphire, Limestone
Punjab	1	0	1	0	Potash
Andhra Pradesh	13	16	24	26	Copper, Manganese, Diamond, Silver, Gold, Tungsten, Barite, Molybdenum, Lead-Zinc, Graphite, Phosphorite, REE, Lithium, Rm, Basemetals, Nickel & Cobalt,
Karnataka	13	14	17	24	Gold, Copper, REE, Chromium-Nickel & PGE, RM, Cobalt, Manganese, Molybdenum, Tungsten, Basemetal, Lead-Zinc, Silver, Iron, Manganese, Phosphorite, Limestone, Bauxite, Diamond, Lithium
Telangana	3	4	7	11	REE, Basemetal, Chromite, PGE, Gold, Bauxite, Rm, Limestone, Copper, Diamond
Tamil Nadu	1	8	10	15	Molybdenum, Diamond, Graphite, Phosphorite, REE & RM, PGE-Nickel-Chromium, Gold, Limestone, Iron, Dunite, Basemetal
Goa	0	0	0	1	Nickel
Kerala	3	3	4	7	Gold, Bauxite, REE, REE & RM, Molybdenum, Vanadium, PGE & Graphite, Chromium- Vanadium- Nickel & PGE, REE-Molybdenum- Rare metals.

Jharkhand	12	20	18	18	Tungsten, Gold, Copper, Manganese, Lithium, Ceasium, REE & RM, Bauxite, Titanium, Vanadium, Gallium, Zinc, Graphite, Rock Phosphate, Basemetals, Diamond, Chromite, Iron
Odisha	13	15	22	26	Iron, Manganese, Copper, Graphite, RM, Phosphorite, Diamond, Bauxite, Nickel-Cobalt-Chromium
Bihar	6	8	6	5	Gold, REE & RM, Lithium, Potash, Fireclay, Alluminus Laterite, Iron (Magnetite), Basemetal
West Bengal	6	3	6	9	Tin, Tungsten, Gold, Basemetal, REE, Manganese, Copper, Niobium, RM
Rajasthan	39	51	64	67	Basemetal, Copper, Gold, Iron, REE & RM, Potash, Manganese, Phosphorite, Tungsten, Lithium, Limestone, Niobium, Barilium, Neodymium, Dysprosoum, Silver, Graphite, Vanadium, Emerald, Tellurium, Scandium, Nickel-Chromium& PGE, Ceasium, Strontium
Gujarat	4	6	5	6	REE & RM, Tin, Tungsten, Tantalum, Niobium, Baemetals, Gold, PGE, Nickel, Chromium, Lithium, Ceasium, Graphite
Total	170	226	289	325	

B. Energy Minerals

State	No. of exploration Projects taken up				Commodity
	2020-21	2021-22	2022-23	2023-24	
Assam	0	0	0	0	Coal
Nagaland	1	1	1	1	Coal
Andhra Pradesh	0	0	0	0	Coal
Telangana	2	1	0	1	Coal
Chhattisgarh	2	2	2	3	Coal
Madhya Pradesh	3	1	1	2	Coal
Maharashtra	2	2	2	2	Coal
Bihar	3	1	2	1	Coal
Odisha	5	2	3	4	Coal
West Bengal	0	0	0	2	Coal
Jharkhand	3	0	1	0	Coal
Rajasthan	1	0	0	0	Lignite
Tamil Nadu	2	1	1	1	Lignite
Total	24	11	13	17	

Annexure-II

The details of resource augmented by GSI since MMDR Amendment Act, 2015

Sl. No.	Commodity	Resource (in million tonnes)	Sl. No.	Commodity	Resource (in million tonnes)
1	Iron ore	1833	10	REE ore*	136
2	Manganese ore	25	11	Lithium*	5.9
3	Gold ore	11	12	Glauconitic ore/Potash*	812
4	Copper ore	202	13	Gallium ore*	45
5	Lead-Zinc Ore	8	14	Graphite ore*	21
6	Bauxite ore	93	15	Niobium*	200
7	Limestone	16640	16	Vanadium*	35
8	Coal	23011	17	Cobalt*	275 tonnes
9	Lignite	1912			

* critical and strategic minerals

Details of successful NMET funded projects where mineral deposits have been found

Sl.no.	State	No. of Project Successful	Remarks/Commodities
1	Andhra Pradesh	8	Basemetal, Coal, Diamond, Limestone,
2	Chhattisgarh	11	Nickle, Copper, Gold, Coal, Limestone, Bauxite & Associated minerals
3	Jharkhand	2	Bauxite, Copper, Limestone, Iron Ore, Gold & Basemetal, Andalusite, Tin, Lead, Zinc
4	Karnataka	4	Basemetal, Kyanite, Limestone, Iron Ore, Gold, Copper, Lead, Zinc, Nickle, Graphite
5	Madhya Pradesh	7	Limestone, Basemetals, Gold, Manganese Phosphorite, Graphite, Coal
6	Maharashtra	1	Manganese, Iron Ore Nickel Chromium & Gold, PGE Mineralization, Barium Gold Lead Copper & Tungsten
7	Nagaland	2	Limestone, Magnetite/Ni-Co-Cr
8	Odisha	21	Iron, Copper, Manganese, Limestone, Bauxite, Graphite
9	Rajasthan	8	Manganese, Iron, Copper, Basemetal & Silver, Potash, Magnesite, Molybdenum, Emerald, Gold & REE
10	Tamilnadu	10	Lignite, Dunite, Nickle, Chromium & PGE, Limestone, Magnesite
11	Telangana	11	Limestone, Molybdenum, Manganese, Copper
12	Uttar Pradesh	2	Phosphorite, Copper, Lead-Zinc
13	West Bengal	1	Coal
	Total	88	