

GOVERNMENT OF INDIA
MINISTRY OF MINES
RAJYA SABHA
UNSTARRED QUESTION NO. 1544
ANSWERED ON 02.08.2021

MINERAL EXPLORATION AND MINING ACTIVITIES

1544. SHRI IRANNA KADADI:

Will the Minister of MINES be pleased to state:

- (a) whether Government has enhanced the mineral exploration and mining activities in the country recently and if so, the details thereof;
- (b) whether Government has identified eleven Research and Development (R&D) projects under its science and technology programme from academic institutions/ Public Sector Undertakings (PSUs) and if so, the details thereof;
- (c) whether the outcomes of these projects will pave the way for discovery of new minerals in the country; and
- (d) if so, the details thereof?

ANSWER

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

(a) Yes, Sir. Geological Survey of India [GSI], an attached office of Ministry of Mines [MoM] and Mineral Exploration Corporation Limited [MECL], a Public Sector Undertaking under MoM, have taken up many initiatives to enhance the exploration activities in the country.

I. Geological Survey of India:

- i. The exploration activities have been prioritized keeping in view the thrust accorded by the Government of India and geological potentiality of the region. GSI has been carrying out 'reconnaissance survey' [G4], 'preliminary exploration' [G3] and general exploration [G2] mineral exploration. GSI has shifted its priority from exploration of surfacial minerals to exploration of deep-seated, strategic and critical minerals. During the Field season program (FSP) 21-22, GSI has taken up 172 items for deep seated minerals out of 225 mineral exploration programmes.
- ii. Baseline Data Generation covering ground surveys [Geo-physical Mapping (GPM) and Geo-chemical Mapping (GCM) programmes] has been completed in Obvious Geological Potential (OGP) area and extended to other than OGP area. The aerial surveys [National Aero-Geophysical Mapping Programme (NAGMP)] is under progress in OGP area.

II. Mineral Exploration Corporation Limited:

MECL has also been pursuing the mineral exploration activities in the country. Recently, MECL has taken up 98 no. of mineral blocks for exploration (G4, G3 & G2 Stages) through National Mineral Exploration Trust and has completed exploration work in 82 of these blocks.

Further, Mines and Mineral (Development and Regulation) Act 1957 was amended in year 2015, which *inter alia* introduced transparent and non-discretionary auction of mineral

blocks in the country. Further, through these amendment a non-profit body called as National Mineral Exploration Trust (NMET) to boost mineral exploration activity in the country was established through a notification.

Recently, MMDR Act, 1957 has been further amended through MMDR Amendment Act, 2021, which has been notified on 28.03.2021. The amendment Act consist the following provisions for bringing structural reforms in mineral sector for enhancing exploration & mineral production:-

- Removed the distinction between captive and merchant mines. It allows all captive mines to sell upto 50% of the minerals produced during the year after meeting the requirement of attached plant subject to the payment of additional amount as prescribed under sixth schedule of the MMDR Act. Further, all future auctions will be without any end use restrictions.
- Provide for grant of composite licence (CL) wherein the holder of CL shall be granted mining lease seamlessly upon completion of prospecting/exploration.
- Fixed timeline for starting production and dispatch after execution of lease.
- Resolved all pending cases under section 10A(2) (b) of the Act. All the blocks released as per the amendment can be auctioned immediately.
- Statutory clearances to be valid even after expiry or termination of mining lease and shall be transferred to the successful bidder in the auction.
- To ensure ease of doing business, restriction on transfer of mineral concessions are removed and now mineral concession can be transferred without any transfer charge.
- Central Government is empowered to conduct auction in cases where the States face challenges in conduct of auction or fail to conduct auction within prescribed time fixed in consultation with State Government. The revenue from auctions will accrue to State Government.
- Private entities may be notified under Section 4(1) of the MMDR Act for conducting exploration.
- NMET shall be made non-profit autonomous body

In addition to the above, the Mineral (Evidence of Mineral Contents) Rules 2015 have been amended and notified on 18.06.2021 whereby Mineral Blocks for Composite Licence can be auctioned at G4 level of exploration instead of G3 level as per the earlier standard. Similarly, Mineral Block for surfacial mineral can be auctioned for grant of Mining Lease at G3 level instead of G2 level.

(b) to (d) Ministry of Mines, Govt. of India provides funds to academic institutions, Universities, national institutes, and R&D institutions recognized with the Department of Scientific and Industrial Research, Government of India, for implementing Research & Development projects under Science and Technology Programme Scheme of Ministry of Mines.

The following are the details of these 11 projects indicating the title of project and related Agency/Institution:

1. Recovery Studies of Gold and other values using non cyanide reagents from Tailing Dump of Bharat Gold Mines Ltd. - Nonferrous Materials Technology Development Centre [NFTDC], Hyderabad.
2. Process Feasibility studies for the development of High Purity Aluminium through segregation process - NFTDC, Hyderabad

3. Processing of spent and natural graphite for energy and aerospace application - Institute of Minerals & Materials Technology, IMMT, CSIR, Bhubaneswar.
4. Production and certification of certified reference materials (CRMs) for the analysis of aluminium alloy - Jawaharlal Nehru Aluminium Research Development & Design Centre [JNARDDC], Nagpur.
5. Optimization of digestion efficiency in Bayer process by ascertaining the ideal size fraction of bauxite feed - JNARDDC, Nagpur.
6. Utilization of aluminium dross to achieve zero waste, a bench scale study - JNARDDC, Nagpur.
7. Value addition of calcined bauxite for possible use as abrasives in water jet cutting applications - SSN College of Engg, Chennai.
8. Mineral chemistry, isotope geochemistry, geochronology, and metallogeny of rare and rare-earth metals present in the alkaline-carbonatite complexes associated to the Narmada-Son rift zone, western India - Banaras Hindu University [BHU] Varanasi.
9. Development of Novel Nanoporous hollow Fibre membrane based unit for the effective treatment of Mine waste water National Institute of Technology Karnataka, NIT Surathkal.
10. Direct production of Fe-Cr-Ni-Mn stainless alloy from mine waste by thermal plasma process - IMMT, CSIR Bhubaneswar.
11. Identification and Investigation of efficacy of potential biochemical molecules for extraction of gold and other noble metals from tailings and waste sources Indian Institute of Technology, IIT Madras.

These outcome of these projects will pave way for discovery of new minerals in the country by promoting research in applied geosciences, mineral exploration & mining and allied areas.
