

Mines and Minerals (Development and Regulation) Amendment Bill, 2023

Why in news?

Recently, the Mines and Minerals (Development and Regulation) Amendment Bill, 2023, (MMDR) which aims to attract private sector investment in the exploration of critical and deep-seated minerals, was passed.

Status of Critical and Deep Seated Minerals in India

World Bank study suggests that the demand for critical metals such as lithium (Li) and cobalt is expected to rise by nearly 500% by 2050.

- **Critical minerals-** Minerals which are essential for *economic development and national security*, the lack of availability of these minerals, extraction or processing of these minerals in few geographical locations may lead to *supply chain vulnerability and disruption*.
- India is endowed with and produces over 85 minerals.
- Some of the required critical mineral assets are not yet ready to be mined.
- India is dependent on China and other countries to meet its requirement of critical minerals including Rare Earth Elements (REE).
- Recently, the Ministry of Mines came out with a list of 30 minerals critical to the country's economic development.
- India has joined the elite critical minerals club, [Mineral Security Partnership](#) to secure critical mineral supply chains.
- **Deep seated minerals-** Minerals which occur at a *depth of more than 300 meters* from the surface of land with poor surface manifestations.
- Deep-seated minerals such as gold, silver, copper, zinc, lead, nickel, cobalt, platinum group of minerals, diamonds, etc. are high value minerals.
- It is difficult and expensive to explore and mine these minerals as compared to surfacial/ bulk minerals.

To know more about status of critical minerals in India click [here](#)

What is MMDR Amendment Bill, 2023?

- **Omission of minerals-** It omits of 6 minerals from the list of 12 atomic minerals specified in Part-B of the First Schedule of the Act.

Minerals Omitted in MMDR Amendment Bill

Lithium bearing minerals	Titanium bearing minerals and ores	Beryl and other beryllium bearing minerals
Niobium	Tantalum bearing minerals	Zirconium bearing minerals

- **Central Government-** It empowers the Central Government to exclusively auction mineral concessions for critical minerals.
- Revenue from these auctions will accrue to concerned State Government.
- **Exploration license-** It introduces exploration licence for *deep-seated and critical minerals*.
- The blocks explored by the Exploration Licence holder can be directly auctioned for mining lease, which will fetch better revenue to the State Governments.
- The exploration agency would also benefit by getting a share in the auction premium payable by the lease holder.

What is the significance of the move?

- **Allows prohibited activities-** It allows pitting, trenching, drilling, and sub-surface excavation as part of reconnaissance, which was prohibited earlier.
- **New type of license-** To encourage reconnaissance-level and or prospective stage exploration by the private sector.
- **Maximum area for exploration-** Single exploration licence activities is allowed up to 1,000 sq kms.
- It also states that the licence will be allowed to retain up to 25% of the originally authorised area after the first three years.
- **Conduct of auctions-** In earlier act, most auctions were reserved for State Government, now it is also reserved for Central Government.
- **Net Zero by 2070-** It would help India to achieve carbon net neutral by 2070 that was committed at *COP26 Glasgow summit*.
- **Import bill** -Private players in mineral exploration would reduce import bill of India due to discovery of minerals.
- **Economic growth-** This amendment is expected to provide conducive legal environment for attracting FDI and junior mining companies in the country.

What is the need for private participation?

As per a report India has explored just 10% of its Obvious Geological Potential (OGP), less than 2% of which is mined and the country spends less than 1% of the global mineral exploration budget.

- **Potential for India-** India's unique geological and tectonic setting is conducive to hosting potential mineral resources.
- The geological history similar to the mining-rich regions of Western Australia and Eastern Africa.
- **Low private participation-** Most of the exploration is carried out by Geological Survey of India and other PSUs like Mineral Exploration Corporation Limited (MECL).
- **Need of technical requirements-** It requires aerial surveys, geological mapping, and geochemical analyses.
- The exploration is a highly specialised, time-intensive and monetarily risky operation with less than 1% of explored projects becoming commercially viable mines.
- **Australia model-** Junior private explorers, engage in risk-taking by putting their expertise and limited financials into explorations to find potential mines.
- This helps multiply exploration projects and accelerate the pace of exploration owing to private participation.

Australia produces almost half of the world's lithium, is the second-largest producer of cobalt and the fourth-largest producer of rare earths elements.

What are the issues with the bill?

- **Slow government clearance-** Revenue generation for the private players is finalised only after a successfully discovered mine is auctioned and operationalised.
 - Ghorabhurani-Sagasahi Iron Ore Mine was auctioned in 2016. It took 6 years for the production to start due to delay in clearances.
- **Auction premium-** It will be known only after the successful auction of the mine.
- **Exploration license-** It is difficult to auction for which exploration has not begun.
- **Auction by government-** Only the government can auction what an explorer has discovered and the latter would only get a share of the premium at an unknown stage.
- In global jurisdictions private explorers can sell their discoveries to miners.

References

1. [The Hindu- Explained private sector in mineral exploration](#)
2. [PIB-Amendment to the mines act](#)
3. [Business Line- Deep seated lithium mining to private player](#)