



MAD- 2020

Day - 29

GEOGRAPHY

To Watch the Video, Click Here:

<https://youtu.be/g2LFgOpT04w>

Question:

The mineral endowment of disparate regions in the Indian Territory has still been unexplored? Comment.
(15 marks 250 Words)

Answer:

Convention wisdom and geological evidence suggest that India is richly endowed with mineral resources, with over 20,000 known mineral deposits and recoverable reserves of more than 60 minerals. However, mining contribution to the nation's GDP is stagnating at mere 2.2-2.5 %, which is 5-6% in major mining economies and also very low exploration spend per square kilometre around Rs. 400 which is around Rs. 5580 for Australia and Rs 5310 for Canada, thus showing the **unexplored mining potential especially of disparate regions and the reasons behind it are -**

1. Chaotic regulatory and policy landscape:

- a. Leading to severe lack of participation from private sector and drought of investment, with a large majority of work carried out by public companies like the Mineral Exploration Corporation.
- b. No regulatory mechanism and transparency in auctioning of mines and related activities. Mine allocation suffers from arbitrariness and non-transparency and the process manifests ad-hoc and casual manner. The issue of Captive Mining has always been a hindrance for the same. Also, the Coal Block Allocation Scam portrays the same.

2. Inefficient technology and its Usage:

- a. Today only 18% of the country's surface area has been mapped through air borne surveys thus limiting the explorations to only a handful of mapped areas and mines.
- b. India has been awarded license to extract poly metallic nodules from the Indian Ocean but the inefficient technology limits it thus making its exploration economically unviable.
- c. There are large coal reserves in Meghalaya and the regions surrounding but the technology is not that advanced thus limiting the mining to dangerous accidents such as Rathole Mining accident in Ksan Coal Mine in Meghalaya.
- d. Thorium is the basis of India's three-stage nuclear power programme, which utilises thorium as fuel for the third stage i.e. the advanced heavy water reactor (AHWR). India's eastern coast has vast reserves of Thorium but has not been used to its potential. Present knowledge of the distribution of thorium resources is poor because of the relatively low-key exploration efforts arising out of insignificant demand.

3. Environmental Concerns :

- a. This is one of the biggest concerns, pollution and the harm to the Environment due to the Mining activities is one of the biggest concerns of non-exploration in India
- i. Environmental pollution caused by Makrana marble mines in Rajasthan, Granite mines of Karnataka has severally polluted the adjacent water bodies.
- ii. Limiting the exploration and mining sand and other minerals in Western Ghats due to pollution and degradation of biodiversity is one of the biggest examples of this.

4. Issues caused to the displacement :

- a. Large scale displacement leads to grievances and with improper rehabilitation leading to people's alienation and distrust over the Government machinery.
- b. Not just a loss of land but loss of tribal way of life and their rich cultural heritage.
- c. Gives space to left wing extremism such as in resource rich areas of Chattisgarh, Jharkhand etc.

5. Health Issues:

- a. Dust inhalation or coal dust is one of the most common concerns for miners. "The ongoing inhalation of coal dust can cause what is colloquially known as 'miner's lung' or 'black lung'. Miner's lung is a form of the occupational lung disease group pneumoconiosis.
- b. There has been no consistent policy or initiatives from the private sector to adhere to medical safety for the same. Therefore; it's an industry with health hazard from the perspective of the people employed and often the mining companies are not able to provide health care services leading to very few people venturing into the same.

And in lieu of all this **National Mineral exploration policy 2019** has been brought with features like –

1. Enhancing resource and reserve base through exploration and international acquisition.
2. Reducing permit delays
3. Ensuring sustainable mining and sustainable development around mining.
4. Creating an information, education and communication strategy and undertaking measure to ensure implementation.
 - a. Has been brought up to incentivize private investment with states auctioning mineral blocks with pre embedded clearances increase the transparency in the allocation process – reduced corruption would invariably lead to more efficiency,
 - b. Seamless transition from Reconnaissance permits to Prospecting License to Mining lease.

Other initiatives like **star rating of mining leases, Mining surveillance system, District Mineral Foundation Fund, 100% FDI approval through direct route, National Mineral Exploration Policy** have been taken, with all these measures India can add around USD 250 billion or 6 to 7% of GDP and create 13 to 15 million jobs through direct and Indirect contribution by 2025.