Illegal Coal Mining in India

Why in news?

Recently, three workers died of asphyxiation inside an illegal coal mine in Gujarat's Surendranagar district.

How coal mining is regulated in India?

> ***Coal*** *is a sedimentary deposit composed predominantly of carbon that is readily combustible. Anthracite, Bituminous, Lignite and Peat are different types of coal.*

- **Coal mining** – Extracting coal from open cast mines or underground mines.
- **NCDC –** National Coal Development Corporation (NCDC), was ***formed in 1956*** for *exploring new coalfields* & expediting development of new coal mines.
- **MMDR Act 1957 -** Mines and Minerals (Development and Regulation) Act *regulates mining* sector *except minor minerals and atomic* minerals in India.
- **Nationalisation of coal mines –** It was done in two phases
  - In 1971-72 - Coking coal mines
  - In 1973 - Non-coking coal mines
- **Coal Mines (Nationalisation) Act, 1973** – With this act, all coal mines were nationalized.
- It determines eligibility for coal mining in India.
  - *1993 amendment* enabled the *entry of the private sector* to mine coal for captive use.

Why is illegal coal mining rampant in India?

> ***Illegal mining*** *is defined under Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 as "any exploration or or mining operation undertaken in any area without holding a mineral license." It is often carried out using techniques like surface mining and rat-hole mining without safety equipment.*

- **Insufficient legal supply of coal** - Deficit in meeting high energy demand by legal supply of coal, illegal mining is carried out.

> *Coal is the most abundant fossil fuel in India, accounting for 55% of the country's energy needs.*

- **Economic deprivation** - Poverty & Unemployment in areas near to coal mining regions contributes to illegal mining in these areas.
- **Profitable business** - *Minimal operational costs* makes illegal mining lucrative for perpetrators.
- **Prevalence of unused mines** – It is carried out in abandoned mines in remote or isolated places.
- It is also done in mines which are not scientifically or economically feasible for coal extraction.
- **Weak mining regulations** – Inadequate monitoring and lack of resources leads to weaker enforcement.

What are the impacts?

- **Health issues** - Acute poisoning or long-term chronic medical conditions due to toxic gas release such as carbon monoxide, lead and arsenic poisoning.
- **Fatalities** – Higher number of deaths due to lack of safety equipment and protocols.
- **Structural damages** – It can cause *cave-ins, landslides*, and even collapse of the entire mines.
- **Law and Order issues** – It leads to *illegal activities, growth of mafias* and law and order problem in the regions.
- **Financial issues** - *Revenue loss* to State and Central government due to illegal sale of coal.

What are the measures taken?

- **Regulation** – The *Mineral Conservation and Development Rules, (MCDR) 2017* mandates the registration of mining activates with State Government(s) and Indian Bureau of Mines.
- **Surveillance –** Installation of *check-posts* at vulnerable points.
- A *task force* has been constituted at different level (block, sub-divisional, district, state) in some subsidiaries of Coal India Limited (CIL) to monitor different aspects of illegal mining.
    - **MSS** - Mining Surveillance System, a *satellite-based* monitoring system.
    - **CMSMS** – Coal Mine Surveillance and Management System, a *web app* for reporting unauthorized coal mining activities
    - **Khanan Prahari** - A *mobile app* for reporting illegal mining
- **Tracking** – State Governments to submit *quarterly reports* of illegal mining to Indian Bureau of Mines as per MMDR Act.
- **Preventing access** - *Concrete walls* have been constructed on the mouth of the openings of the underground abandoned mines to prevent access and illegal activities in these areas.
- **Capacity building** – Training of existing security/CISF personnel, refresher training and basic training of new recruits in security discipline for strengthening the security setup.
- **Punishment for non-compliance** – MMDR Act provides for punishing illegal mining activities with the
    - **Penalty** – Rs. 5 Lakh per hectares

    - **Imprisonment** – 5 years
- **Quick disposal of cases** – Special courts are formed in respective states for providing speedy trial of the offences.

What are the challenges in curbing illegal coal mining in India?

- High demand for coal as a fuel makes illegal mining rampant.
- Lack of coordination between Union and State governments.
- Complex legal framework in mining governance leads to bureaucratic hurdles and inefficiency in governance.
- Nexus among criminals, police, and politicians systemizes illegal mining in the region and it makes it difficult to curb.

What lies ahead?

- Adopting *alternatives to coal* in energy intensive industries.
- Promoting *private sector participation* to increase coal production.
- Increasing the *import* of coal to meet the rising the demands.
- Filling the unused mines with water or soil to prevent illegal mining or can be used for facilitating carbon capture and storage.
- Educating people about the hazards of illegal mining.
- Creating *alternative livelihood* for people in the coal mining regions.
- Monitoring the potential illegal mining regions with drones.

References

1. The Hindu| India's illegal coal mining problem
2. Mines.Gov| Regulating Illegal Coal Mining in India
3. PIB| Measures to Control Illegal Mining

SHANKAR IAS PARLIAMENT
Information is Empowering