

GOVERNMENT OF INDIA
MINISTRY OF COAL

RAJYA SABHA
UNSTARRED QUESTION NO. 845
ANSWERED ON- 08.12.2025

COAL PRODUCTION, TRANSPORT BOTTLENECKS AND SAFETY OF WORKER

845. SHRI AKHILESH PRASAD SINGH:

Will the Minister of COAL be pleased to state:

- (a) whether Government has reviewed production shortfalls arising in CIL subsidiaries operating in the States of Jharkhand–Bihar coal belt, particularly due to equipment ageing, land acquisition delays, and mine saturation;
- (b) measures taken to modernize coal evacuation infrastructure through conveyor systems, rapid loading, rail link upgrades and mechanized handling; and
- (c) new safety technologies introduced during 2024–25 for miners, including real-time monitoring sensors, gas alerts and underground communication systems?

ANSWER

THE MINISTER OF COAL AND MINES
(SHRI G. KISHAN REDDY)

(a) Ministry of Coal reviews production shortfalls in Jharkhand and other states, with CIL and its subsidiaries on regular basis at various levels including at the level of the Minister of Coal.

Policy regarding life of equipment and their utilization norms is in place. As and when replacements are required, equipments are procured and, therefore, the age of equipment does not have a bearing upon the production loss. Tapering of mine capacity due to exhaustion of mineable reserves is a factor that affects coal production and overall capacity. However, to offset this impact and further augment the coal production capacity, CIL is pushing capacity expansion through expansion of its operational mines and operationalization of new projects which is a continuous process.

As regards land, acquisition and possession are two different aspects. While acquisition is change in ownership/ vesting of land (but not actual possession) by invoking provisions of relevant Acts and Rules, possession is as per the Rehabilitation & Re-settlement Policy. As such, there is no delay in land acquisition, but there are issues in possession of land. The subsidiaries of CIL do face difficulties in obtaining physical possession of land acquired under CBA (A&D) Act, 1957.

(b) The Ministry of Coal has undertaken comprehensive measures to modernize coal evacuation infrastructure, emphasizing first-mile connectivity (FMC) projects that integrate conveyor systems, rapid loading mechanisms, rail link upgrades, and mechanized handling.

The Ministry of Coal has planned to set up 139 first-mile connectivity projects having 1319 MT capacity by FY 2030, comprising of CIL – 92 projects, SCCL – 15 projects, NLCIL – 5 projects and Captive/Commercial – 27 projects. The planning and commissioning schedule

of FMCs are as per production envisaged in the mine plans. The FMCs are planned for mines with 2 MT and above capacity. By FY 2029–30, about 90% of the total projected coal output is expected to be transported through FMC. Presently, 65 FMC projects (CIL – 43, SCCL – 12, Captive/Commercial – 10) having capacity of 552 MTY are operational.

Additionally, the Ministry of Coal, through its coal companies, has undertaken the planning of 8 major railway line projects. Out of these 8 projects, 5 railway lines are already commissioned and remaining projects are anticipated to be commissioned by FY 2026-27.

(c) The following new safety technologies were introduced, including real-time monitoring sensors, gas alerts, and underground communication systems to enhance safety.

- i. Application of AI-enabled video-analytic-based Integrated Command and Control Centres (ICCCs) featuring advanced surveillance and video analytics such as crowd and intrusion detection, unauthorized parking, number plate recognition, etc.
- ii. Application of 5G technology use case in OC mines.
- iii. Introduction of Electronic Detonators in Blasting in UG mines.
- iv. Introduction of Digital Technology (Digi-coal) in seven mega OC mines to promote safety awareness and enable AI-driven monitoring of key mine parameters.
- v. Strata monitoring devices and systems, including Real-Time Tell-Tale (RTT), Digital Tell-Tale (DTT), and Auto Warning Tell-Tale (AWTT), are installed and in use.
- vi. Environmental Tele-Monitoring System (ETMS) for continuous monitoring of UG mine ambience.
- vii. Use of Total Stations, 3D Terrestrial Laser Scanning (3D TLS), and Slope Stability Radars for monitoring stability in benches and OB dumps.
- viii. GPS-based OITDS and Geo-fencing in large OC to track HEMM movements.
