

GOVERNMENT OF INDIA
MINISTRY OF COAL
RAJYA SABHA
STARRED QUESTION NO. *139
ANSWERED ON 09.12.2024

Promotion of underground coal mining in the country

†*139. **Shri Manas Ranjan Mangaraj:**

Will the Minister of **COAL** be pleased to state:

- (a) whether Government is considering promoting underground coal mining in light of its environmental benefits compared to open-cast mining;
- (b) the percentage of coal mined through underground methods in the country as compared to countries like China, where underground mining constitutes approximately 98 per cent;
- (c) the steps being taken to modernize and expand underground coal mining technologies to reduce pollution and increase efficiency; and
- (d) whether Government has evaluated the environmental and social impacts of open-cast coal mining and the potential benefits of shifting to underground mining, and if so, the details thereof?

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

(a) to (d): A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) OF THE RAJYA SABHA STARRED QUESTION NO. 139 ANSWERED ON 09.12.2024 ASKED BY SHRI MANAS RANJAN MANGARAJ, HON'BLE MP REGARDING 'PROMOTION OF UNDERGROUND COAL MINING IN THE COUNTRY'.

(a): Government is promoting underground coal mining due to its comparatively lower environmental impact, ensuring that the country's coal needs are met in an eco-friendly manner.

(b): During 2023-24, approximately 3.44% of total coal production was through underground coal mining.

(c): The steps taken to modernize and expand underground coal mining technologies to reduce pollution and increase efficiency are:

1. Coal companies under Ministry of Coal have introduced Mass Production Technology (MPT) in their UG coal mines using Continuous Miners (CM), Highwall (HW), Longwall (LW) wherever feasible which is a continuous cutting technology without blasting having high efficiency and less polluting method of mining.

2. Ministry of Coal has envisaged to enhance UG coal production from the current level of production of about 34.33 MT during FY 2023-24 to the level of 100 MT (Million Tonne) by FY 2030.

(d): Central Mine Planning & Design Institute Limited (CMPDI) has undertaken an exercise on environmental and social impacts of OC and UG mining, where it has been concluded that UG mining has lesser environmental and social impacts. The environmental and social impacts of open-cast coal mining and the potential benefits of shifting to underground mining are as under: -

(i) Environmental and Social Impacts of Opencast Coal Mining: -

Open-cast coal mining involves removing layers of earth to expose coal seams, which has impact on ecosystems such as air, water and noise pollution, carbon emissions, soil erosion and waste generation. To mitigate these effects, the coal companies comply with the environment impact assessment and take mitigation measures as per the MoEF&CC guidelines.

(ii) Potential Benefits of Shifting to Underground Mining:

Underground mining is environmentally sustainable and has relatively minimal environmental and social impact. Some of the key potential benefits of underground mining are reduced impact on surface, air, water and noise with reduced carbon emissions.
