

**GOVERNMENT OF INDIA**  
**MINISTRY OF COAL**  
**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 1221**  
**TO BE ANSWERED ON 10.03.2025**

**Coal and Lignite PSUs**

**1221 Dr. Ashok Kumar Mittal:**

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

- (a) the progress that has been made by coal and lignite PSUs in contributing towards target of creating an additional carbon sink of 2.5 to 3 billion tonnes of CO<sub>2</sub> equivalent to forest cover by 2030;
- (b) the mechanisms in place to monitor the effectiveness of greening initiatives in coal mining areas;
- (c) measures being taken to address ecological imbalance caused by ongoing coal mining activities, and steps taken by PSUs to ensure adequate compensation for environmental impact of extraction; and
- (d) steps that are being taken to involve local communities and ensure their participation in afforestation projects?

**ANSWER**

**MINISTER OF COAL AND MINES**

**(SHRI G. KISHAN REDDY)**

**(a):** Coal & Lignite Public Sector Undertakings (PSUs), namely Coal India Limited (CIL), NLC India Limited (NLCIL) and Singareni Collieries Company Limited (SCCL) are actively contributing to the national target of creating an additional carbon sink of 2.5 to 3 billion tonnes of CO<sub>2</sub> equivalent through large-scale afforestation in and around coal and lignite mining areas. Since FY 2019-20, Coal and Lignite PSUs have brought about 13,317 hectares under green cover through afforestation efforts. The estimated carbon sink potential of these plantation efforts is about 6.68 lakh tonnes CO<sub>2</sub> equivalent per year considering factor of 50.16 tonnes of CO<sub>2</sub> equivalent per hectares of plantation as per the Indian Council of Forestry Research and Education (ICFRE) report. Ministry of Coal has set target of 15,350 Ha for land reclamation and afforestation for Coal/Lignite PSUs under Vision Viksit Bharat for next 5 years.

**(b):** To ensure the effectiveness of greening initiatives in coal mining areas, multiple monitoring mechanisms are in place such as scientific reclamation, biodiversity conservation, and socio-economic integration. Afforestation activities are generally carried out by the State Forest Departments and State Forest Development Corporations in the Coal/Lignite PSUs, which includes maintenance upto 5 years and when the plants becomes self-sustaining and joint enumeration of survival is also conducted.

**(c):** Before commencing any new or expansion coal mine project, Environmental Clearance (EC) is obtained, which involves the preparation of an Environmental Impact Assessment (EIA) and an Environmental Management Plan (EMP) to safeguard the environment. These plans are implemented across all mines to effectively mitigate the environmental impact of mining activities. Coal and lignite PSUs also undertake several measures to mitigate the ecological impact of mining activities:

- Progressive mine closure plans (PMCP) with mandatory land reclamation and greenbelt development.
- Eco-restoration of degraded land through bio-reclamation and plantation of native species.
- Utilization of overburden (OB) material for infrastructure projects, reducing land degradation.
- Sustainable mine water management, including supply for irrigation and community use.
- Implementation of Environment Management Plans (EMPs), including air, water, and biodiversity conservation measures along with compliance of Environment Clearance, Forest Clearance, Consent to Establish and Consent to Operate.

**(d):** Afforestation activities undertaken by Coal and Lignite PSUs are primarily implemented through State Forest Departments and State Forest Development Corporations. These agencies actively involve local communities in afforestation initiatives. The majority of the workforce for nursery development, plantation, maintenance, and security is sourced from the local community, ensuring their active participation and employment opportunities. Through these efforts, Coal and Lignite PSUs ensure that afforestation initiatives not only contribute to environmental restoration but also provide economic and social benefits to the local population.

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