GOVERNMENT OF INDIA

MINISTRY OF COAL

**RAJYA SABHA**

**UNSTARRED QUESTION NO. 58**

ANSWERED ON - 21/07/2025

# ECOLOGICAL RESTORATION AND RECLAMATION OF MINED-OUT COAL LANDS

58. SHRI SUJEET KUMAR:

Will the Minister of COAL be pleased to state:

(a) the total area of mined-out/barren coal mine land reclaimed for ecological restoration purposes over the last five years, State-wise and year-wise;

(b) the number of areas planned for reclamation and afforestation under new-age techniques such as drone-based seeding, Miyawaki plantations, and seed ball broadcasting during FY 2025-26;

(c) whether any coordination has taken place with the Ministry of Jal Shakti for hydrological restoration or water table improvement in reclaimed areas; and

(d) if so, the details of integrated land-water restoration efforts undertaken in coal-bearing districts?

**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) have undertaken progressive ecological reclamation of mined-out and barren coal mine lands through scientific reclamation, including biological and technical measures. The State-wise and year-wise details of the total mined area reclaimed for ecological restoration purposes during the last five years by these PSUs are as under:

| State-wise Coal mined land Reclaimed for Ecological Restoration Purposes in Last 5 Years (in Hectares) | | | | | | |
|---|---|---|---|---|---|---|
| State | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 | Total |
| Assam | 0.00 | 0.60 | 1.24 | 0.00 | 1.90 | 3.74 |
| Chhattisgarh | 138.85 | 183.50 | 198.94 | 245.84 | 305.44 | 1072.57 |
| Jharkhand | 125.64 | 211.08 | 240.15 | 129.17 | 119.40 | 825.44 |
| Madhya Pradesh | 262.81 | 286.05 | 203.50 | 284.74 | 366.65 | 1403.75 |
| Maharashtra | 61.11 | 186.67 | 200.13 | 210.13 | 146.10 | 804.14 |
| Odisha | 72.71 | 64.49 | 65.88 | 31.63 | 123.43 | 358.14 |
| Rajasthan | 23.00 | 6.00 | 5.00 | 8.00 | 6.00 | 48.00 |
| Tamil Nadu | 160.60 | 131.92 | 113.30 | 128.07 | 125.12 | 659.01 |
| Telangana | 809.00 | 580.00 | 557.50 | 562.00 | 551.00 | 3059.50 |
| Uttar Pradesh | 56.50 | 78.50 | 102.50 | 64.59 | 58.77 | 360.86 |
| West Bengal | 120.24 | 136.75 | 119.01 | 127.72 | 57.73 | 561.45 |
| Total | 1830.46 | 1865.56 | 1807.15 | 1791.89 | 1861.54 | 9156.60 |

(b) Coal and Lignite PSUs have a target of reclamation and afforestation of 2,800 hectares of land in and around coal and lignite mining areas during the financial year 2025-26. The afforestation by Coal and Lignite PSUs is done using appropriate techniques such as drone-based seed broadcasting, Miyawaki plantations and seed ball broadcasting.

(c) and (d) The Ministry of Coal is engaged in coordination with the Ministry of Jal Shakti and the State Governments of coal and lignite bearing states to facilitate the use of safe and treated mine water for domestic and irrigation purposes in areas surrounding the coal and lignite mines operated by the Coal and Lignite PSUs. Coal and Lignite PSUs have obtained No Objection Certificates (NoCs) from the Central Ground Water Authority (CGWA), Ministry of Jal Shakti for the withdrawal of groundwater in the mines operated by them. The following hydrological restoration and water table improvement measures have been implemented by the PSUs in coal-bearing districts:

- Rainwater Harvesting: Installation of rooftop and surface rainwater harvesting systems across coal mines, offices, and residential colonies to augment groundwater recharge.
- Eco-restoration through Plantation: Extensive plantation in and around mine areas has been adopted to control soil erosion, manage runoff, and enhance water retention capacity. Reclaimed mine pits are also developed as water storage structures.
- Construction of Water Management Structures: Development of garland drains, check dams, and gabion walls to ensure sustainable surface water management and reduce siltation.
- Hydrogeological Monitoring: Regular groundwater table monitoring and hydrogeological assessments are conducted through CGWA-approved agencies to track restoration progress and ensure long-term aquifer health.
- Rejuvenation of Traditional Water Bodies: Implementation of projects for rejuvenation of both new and traditional water bodies in and around mining areas to improve local water availability, support community needs, and promote ecological balance.

*****