

**GOVERNMENT OF INDIA
MINISTRY OF COAL**

**LOK SABHA
UNSTARRED QUESTION NO. 744
ANSWERED ON 04.02.2026**

Coal Mine Safety Technology

744. Shri Arvind Dharmapuri:

Will the Minister of COAL be pleased to state:

- (a) the data on coal mining accidents, fatalities and compliance actions during the last five years, year-wise;
- (b) the status of mine safety technology deployment;
- (c) the expenditure on rehabilitation and Corporate Social Responsibility (CSR) in coal mine districts; and
- (d) the steps taken by the Government for sustainable mining, including land reclamation and livelihood support?

ANSWER

**MINISTER OF COAL & MINES
(SHRI G. KISHAN REDDY)**

(a) & (b): Number of coal mining accidents and fatalities during 2021-2025 are as follows:-

Year	No of Fatal Accidents	Fatalities
2021	43	51
2022	24	28
2023	38	41
2024	38	49
2025*	44	54

*Data of year 2025 is provisional.

Directorate General of Mines Safety (DGMS) in the Ministry of Labour and Employment, examines the causes of accidents and issues circular for compliance by the coal companies.

The following technologies are deployed for safety in coal mines:

1. **Adoption of blast-free and eco-friendly mining methods**, including Continuous Miners (underground mines), Surface Miners & Vertical-Rippers (Opencast mines), and High Wall Mining, for safer and cleaner operations.
2. **Mechanised strata control systems**, comprising advanced roof drilling machines such as Quad bolter, Twin Bolter and Universal Drilling Machine (UDM), resin capsule for anchoring roof bolting, and advanced strata monitoring instrumentation.

3. **Advanced mine air analysis** using gas chromatographs (GC) for improved accuracy.
4. **Real-time mine air monitoring** through Environment Tele-Monitoring System (ETMS) and Local Methane Detectors in selected UG mines.
5. **Slope monitoring systems** deployed in opencast mines to assess dump and bench stability.
6. **Enhanced transport safety**, through GPS-enabled Vehicle Tracking Systems (VTS), Operator Independent Truck Dispatch Systems (OITDS), and geo-fencing.
7. **Real-time safety surveillance** via video-analytics-based Integrated Command and Control Centres (ICCCs).
8. **Modern training**, including simulator-based training for HEMM operators and VR-based safety training.
9. **Advanced dust suppression measures**, such as fog cannons, mist spray systems, wheel washing, and mechanical sweepers.

(c): The expenditure on rehabilitation and Corporate Social Responsibility (CSR) in coal mine districts by Coal PSUs is placed at Annexure-I.

(d): The Government has taken several steps for sustainable mining, including land reclamation and livelihood support. The major steps include:

1. **Blast-Free, Eco-Friendly Safe Mining Technologies:** Surface miners have been deployed in opencast mines; advanced mass production technologies (MPT) deployed such as Continuous Miners in underground (UG) mines; and High Wall Mining in mines to ensure safer, cleaner, and more efficient operations.
2. **Establishment of First Mile Connectivity:** Setting up of First Mile Connectivity (FMC) projects to ensure mechanisation of coal transportation and rake loading operations, leading to environment-friendly operations with higher efficiency.
3. **Bio-Reclamation/ Plantation:** Progressive as well as final mine closure activities like stabilisation of Overburden dumps, backfilling of de-coaled areas, extensive plantation on OB dumps and vacant lands with native plant species for eco-restoration of mined out areas.
4. **Development of Eco-Parks:** Development of eco-parks in reclaimed mining areas for land restoration and sustainable development initiatives.
5. **Development of water bodies:** Use of water body in the final mine void for irrigation, pisciculture and ground water stabilisation and also for domestic use after treatment.
6. **Skill Development and Livelihood Programmes:** Skill development and livelihood enhancement programmes are regularly undertaken for project affected families. Beneficiaries are trained in handicrafts, poultry farming, mushroom cultivation, garment and apparel making, solar system installation and maintenance, welding and fabrication, food & beverage steward training, mobile repair etc.

Annexure-I

Coal India Limited (CIL)

The details of expenditure on rehabilitation by CIL and its subsidiaries during the last five years in coal mine districts are mentioned below.

Year	Expenditure on rehabilitation (₹ Crore)
2020-21	47.672
2021-22	26.396
2022-23	69.036
2023-24	119.266
2024-25	21.9612
CIL Grand Total	284.3312

Expenditure on CSR: CSR expenditure in coal mine districts of subsidiaries of CIL during the last five financial years (2020-21 to 2024-25) is furnished below:-

S. No.	State	District	CSR Expenditure during FY 20-21 to 24-25 (₹ Crores)
1	Assam	Tinsukia	3.01
	TOTAL - Assam		3.01
2	Chattisgarh	Balrampur - Ramanujganj	4.17
3	Chattisgarh	Bilaspur	33.01
4	Chattisgarh	Korba	41.18
5	Chattisgarh	Korea	4.24
6	Chattisgarh	Manendragarh-Chirimiri-Bharatpur	0.00
7	Chattisgarh	Raigarh	20.91
8	Chattisgarh	Surajpur	6.35
9	Chattisgarh	Surguja	8.31
10	Chattisgarh	Expenditure on projects running in multiple mining districts	28.42
	TOTAL - Chattisgarh		146.59
11	Jharkhand	Bokaro	20.39
12	Jharkhand	Chatra	27.53
13	Jharkhand	Deoghar	5.01
14	Jharkhand	Dhanbad	53.66
15	Jharkhand	Giridih	6.75
16	Jharkhand	Godda	16.28
17	Jharkhand	Hazaribagh	13.78
18	Jharkhand	Latehar	10.44

19	Jharkhand	Ramgarh	13.33
20	Jharkhand	Ranchi	56.58
21	Jharkhand	Pakur	0.00
22	Jharkhand	Palamu	4.86
23	Jharkhand	Expenditure on projects running in multiple mining districts	68.37
	TOTAL - Jharkhand		296.98
24	Madhya Pradesh	Anuppur	14.87
25	Madhya Pradesh	Betul	6.32
26	Madhya Pradesh	Chhindwara	9.47
27	Madhya Pradesh	Shahdol	2.70
28	Madhya Pradesh	Singrauli	474.31
29	Madhya Pradesh	Umaria	4.28
30	Madhya Pradesh	Expenditure on projects running in multiple mining districts	0.08
	TOTAL - Madhya Pradesh		512.03
31	Maharashtra	Chandrapur	26.16
32	Maharashtra	Nagpur	89.98
33	Maharashtra	Yavatmal	2.07
34	Maharashtra	Expenditure on projects running in multiple mining districts	0.00
	TOTAL - Maharashtra		118.21
35	Odisha	Angul	306.37
36	Odisha	Jharsuguda	146.20
37	Odisha	Sundargarh	100.68
38	Odisha	Sambalpur	96.88
39	Odisha	Expenditure on projects running in multiple mining districts	0.00
	TOTAL - Odisha		650.13
40	Uttar Pradesh	Sonbhadra	152.91
	TOTAL - Uttar Pradesh		152.91
41	West Bengal	Bankura	0.00
42	West Bengal	North 24 Parganas	5.41
43	West Bengal	Paschim Bardhaman	18.69
44	West Bengal	Purulia	1.13
45	West Bengal	Expenditure on projects running in multiple mining districts	2.88
	TOTAL - West Bengal		28.11

46	TOTAL - Expenditure on projects running in multiple mining districts		2.10
	GRAND TOTAL - CIL		1910.07

Neyveli Lignite Corporation India Limited (NLCIL)

The expenditure on rehabilitation in NLCIL Mines is as follows:

- In respect of lands acquired for projects at Neyveli region, the expenditure on R&R provided by NLCIL upto 25.01.2026 (under NRRP-2007& Current NLCIL's R&R Policy as per RFCTLARR Act, 2013) is furnished in the following table.

S.No.	Nature of R&R benefits	Amount
1	Ex-gratia payment made towards Resettlement Allowance	Rs 348.23 Lakhs
2	Ex-gratia payment made for house structures on Government Lands	Rs 493.82 Lakhs
3	Cost of construction in lieu of house	Rs. 3750 Lakhs
4	Transportation, Maintenance and Subsistence allowance paid	Rs 638.32 Lakhs
5	Cattle Shed, Petty shop Allowance paid	Rs 3.30 Lakhs
6	Expenditure for development of Resettlement Centres.	Rs.1364.38 Lakhs
7	Recurring expenditure including current consumption for maintenance, amenities and up-keeping of Resettlement Centres	Rs 300.00 Lakhs per annum (approx)
8	One time rehabilitation grants in lieu of employment (1457 persons)	Rs. 3989 Lakhs

- Further, in NLCIL's Talabira II & III OCP, the total expenditure towards rehabilitation of Sambalpur District is ₹61.81 Cr.

CSR expenditure by NLCIL in coal mine districts up to January 2026 In FY 2025-26, is as under:

Coal Mine State/District	Expenditure (up to January 26) (Rs in Crore)
Cuddalore (Tamil Nadu)	16.42
Bikaner (Rajasthan)	2.81
Sambalpur, Jharsuguda (Odisha)	1.84
Total	21.07

The Singareni Collieries Company Limited (SCCL)

CSR expenditure of SCCL over the last three years is as follows:

S. No.	Financial Year	CSR budget sanctioned (₹)
1	2022-23	43.05 Cr
2	2023-24	38.08 Cr
3	2024-25	107.88 Cr

For the FY 2025-26, the approved CSR budget is Rs. 156 Crs.

Major CSR works by SCCL during the FY 2025-26 are as follows:

- Financial assistance to UPSC-cleared Civil Services aspirants – ₹2.02 Cr
- Army recruitment rally at Jawaharlal Nehru Stadium, Hanumakonda – ₹0.20 Cr
- Organising Job Mela at 7 locations - Rs. 1.48 Cr.
- Material/Equipment procurement & cosmetology training at Mandamarri – ₹0.07 Cr
- Infrastructure facilities at Govt Junior College, Govt High School & CHC, Luxettipet (Mancherial) – ₹2.00 Cr
- Infrastructure development & renovation of Govt BC Girls Hostel, Jaipur – ₹0.1645 Cr
- De-silting of major nallas (Kattuvagu&Motlavagu) – Manuguru Municipality - ₹0.83 Cr
- Creation of new water bodies in Manuguru Area – ₹0.413 Cr
- De-silting of 3 water bodies in Samithi Singaram, Thirlapuram&Besthagudem villages – Manuguru Area – ₹1.13 Cr
- Desilting of Kodipunjulavagu – Manuguru Area – ₹0.547 Cr
- Rejuvenation of water bodies in Jaipur Mandal near STPP – ₹0.508 Cr
- Infrastructure development in Penagadapa village near Kothagudem – ₹1.555 Cr
- Rural development works – Wyra Constituency – ₹2.00 Cr
- Rural development works – Sathupalli Constituency – ₹2.00 Cr
- Rural development projects at Thummalapalli village (Penuballi Mandal) – ₹0.92 Cr
- Central lighting works – Bhupalpalli Constituency – ₹1.50 Cr
- Rural development works – Bhupalapalli Constituency – ₹2.00 Cr
- Rural development works – Asifabad Constituency – ₹2.00 Cr
- Development works in Chhendipada village of Naini Area – ₹5.00 Cr
