

GOVERNMENT OF INDIA
MINISTRY OF MINES
RAJYA SABHA
UNSTARRED QUESTION NO. 1706
ANSWERED ON 03.08.2026

MONITORING MINING ACTIVITIES IN JHARKHAND AND GUJARAT

1706. SHRI NATHWANI PARIMAL:

Will the Minister of MINES be pleased to state:

- (a) whether satellite imagery, GIS, drones and Artificial Intelligence (AI) are being used for monitoring mining activities in the States of Jharkhand and Gujarat;
- (b) the districts covered under such monitoring;
- (c) the number of violations detected through technology during the last five years; and
- (d) the action taken thereon?

ANSWER

THE MINISTER OF STATE FOR COAL AND MINES
(SHRI SATISH CHANDRA DUBEY)

(a): Yes, satellite imagery, GIS, drones are being used for monitoring mining activities in the country including Jharkhand and Gujarat States. Moreover, a system named Mine Imagery Data Processing & Analysis System (MIDPAS) has been developed for processing and analysis of the data.

Under Rule 34 and 34A of the Mineral Conservation and Development Rules (MCDR) 2017, the Indian Bureau of Mines mandates that mine plans and sections be digitally prepared using Differential Global Positioning System (DGPS), Total Station, or drone surveys, duly certified by mining engineers or geologists. Lessees of large mines (≥ 50 ha or ≥ 1 million tonnes excavation) must conduct annual drone surveys and submit processed outputs like Digital Elevation Models (DEMs) and orthomosaics by July 1 every year, while smaller mines must provide high-resolution geo-referenced satellite images. The drone survey data/satellite imagery is submitted online on Drone Data Management System.

(b): All the districts having major mineral mines in the States of Gujarat and Jharkhand are covered under monitoring. A list of such districts where leases of major minerals exist is furnished below: -

State	Districts
Gujarat	Amreli, Aravali, Banaskantha, Bhavnagar, Devbhumi Dwarka, Gir Somnath, Jamnagar, Junagadh, Kheda, Kutchh, Porbandar, Rajkot, Sabarkantha, Surat, Vadodara.

Jharkhand	Gumla, Latehar, Lohardaga, Palamau, Ramgarh, Ranchi, Saraikela-Kharswan, Singhbhum (E), Singhbhum (W)
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(c) & (d): The Ministry of Mines has developed the Mining Surveillance System (MSS) to use space technology for curbing illegal mining activity in the country. Any discrepancy found is flagged off as a trigger. The trigger is sent to the respective State Government for field verification. The triggers are verified in the field through the district level officials of the respective State Governments. The system has been developed to facilitate the State Government for detection of illegal mining. The details of triggers generated in the States of Gujarat & Jharkhand in last 5 years (2021-22 to 2025-26) and action thereon is furnished below:

State /Phase	Triggers Generated	Triggers Verified	Unauthorized Mining confirmed
Gujarat	85	63	5
Jharkhand	36	0	0
