

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

RAJYA SABHA
UNSTARRED QUESTION NO. 711
TO BE ANSWERED ON 05.02.2026

Detection of stubble burning

711. DR. LAXMIKANT BAJPAYEE:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) the details of methods of multi-layered mechanism used by Government for monitoring the stubble (parali) burning in the North Indian States;
- (b) the extent to which monitoring through satellites and other methods is successful and percentage of cases of stubble burning still not detected and the reasons therefor; and
- (c) the details of challenges faced by Government to reach hundred per cent detection of stubble burning cases and the measures taken to achieve it?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI KIRTI VARDHAN SINGH)

(a) to (c) : Government has adopted a multi-layered mechanism for monitoring paddy stubble burning in the States of Punjab, Haryana, Uttar Pradesh, Rajasthan and the NCT of Delhi for control of air pollution from stubble burning.

A Standard Protocol for Estimation of Crop Residue Burning Fire Events using Satellite Data was developed by ISRO in consultation with State Remote Sensing Centers & Indian Agricultural Research Institute (IARI) and issued by CAQM in August, 2021. Active fire locations of stubble (parali) burning are detected operationally during the satellite overpasses. In addition to it, burn scar (area) was also assessed using suitable satellite data. Reporting of paddy stubble burning incidents as per standard protocol during the paddy harvesting season through Remote Sensing Centre and ensure that alert is sent to field functionaries to take immediate action on incidents of stubble burning.

The said protocol is used for monitoring of crop residue burning fire events and IARI through its CREAMS Laboratory, publishes daily fire event data for the States of Haryana, Delhi, Punjab, Uttar Pradesh, Madhya Pradesh and Rajasthan, based on this protocol.

Regional monitoring of stubble burning using satellite data has been successful. However, Satellite overpasses at sub-daily level helps increase the efficiency of detection. To further strengthen the detection of stubble burning cases, patrolling by enforcement agencies during late evening hours has been enhanced.

During stubble burning season of 2025 (01.10.2025-30.11.2025), 31 flying squads by CPCB were deployed for assisting CAQM for intensified monitoring and enforcement actions towards

prevention of paddy stubble burning incidents in 18 districts of Punjab and 13 districts of Haryana. These teams provide daily updates, photographic evidence, and compliance status. The flying squads coordinated with State Govt./nodal officers//officers from respective districts and sent their daily reports to CAQM.

Monitoring is also carried out through appointment of officers at different administrative levels, deployment of the Parali Protection Force. In the State of Punjab, 10,500 field functionaries have been appointed to monitor and contain the stubble fire incidents in the year 2025. Further, Parali Protection Force (PPF) of 1700 personal has been deputed at Block level over and above the nodal/cluster officers for effective enforcements of measures to prevent and control stubble burning. Regular monthly review at the level Chief Secretary, Govt. of Punjab with DCs/SSPs was conducted to monitoring stubble burning incidents. Similarly, 10,000 nodal officers have been appointed in Haryana State for effective enforcements of measures to prevent and control stubble burning.

In addition to the above-mentioned measures/action, the Government has regularly reviewed and monitored the actions taken to address air pollution including stubble burning related issues in Delhi-NCR and adjoining areas. Some of the recent key meetings are as below:

- Minister level Inter-Ministerial meeting was held on 07.10.2025 under the Co-chairmanship of Hon'ble Minister for Environment, Forest and Climate Change and Hon'ble Minister for Agriculture & Farmers' Welfare on the issues of management of Crop Residue Burning;
- Regular review meetings have been held on 08.08.2025, 16.09.2025, 10.10.2025, 11.11.2025, 26.11.2025, 03.12.2025, 15.12.2025, 16.12.2025, 17.12.2025, 19.12.2025, 06.01.2026, 12.01.2026 and 20.01.2026 under the chairmanship of the Hon'ble Minister for Environment, Forest and Climate Change, on the issues relating to air pollution control in Delhi-NCR, to deliberate upon the undertaking of air pollution abatement measures and strategies for further strengthening air quality management across the region

Due to coordinated efforts, the States of Punjab and Haryana have collectively recorded about 90% reduction in fire incidences during paddy harvesting season in the year 2025 in comparison to the same period in the year 2022.
