

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

RAJYA SABHA
UNSTARRED QUESTION NO. 1328
TO BE ANSWERED ON 11.12.2025

Air pollution in NCR

1328. DR. LAXMIKANT BAJPAYEE:

Will the Minister of Environment, Forest and Climate Change be pleased to state:

- (a) the details of measures taken by the Commission for Air Quality Management in NCR and adjoining areas on preparedness to prevent incidents of stubble burning during paddy harvest season 2025, component-wise; and
- (b) the details of achievements made so far thereby?

ANSWER

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

(a) to (b) : To address air pollution in Delhi-NCR, Government has established the Commission for Air Quality Management (CAQM) under the Commission for Air Quality Management in NCR and Adjoining Areas Act, 2021 for better coordination, research, identification and resolution of problems of air pollution in Delhi- NCR and adjoining areas. CAQM has been provided powers under the Act to take measures and issue directions to the various agencies in the National Capital Region for protecting and improving air quality. So far, CAQM has issued 95 statutory Directions and 17 Advisories to concerned stakeholders for control of air pollution in Delhi NCR.

For Paddy stubble Management, based on the deliberations and discussions held in series of meetings with the State Governments of Punjab, Haryana, UP, Rajasthan, Government of NCT of Delhi, State Pollution Control Boards of NCR States and Delhi Pollution Control Committee (DPCC) and various other stakeholders viz. Indian Space Research Organization (ISRO), Indian Council of Agricultural Research (ICAR), Indian Agricultural Research Institute (IARI), etc., the Commission developed a framework for effective prevention and control of Paddy Stubble Burning

Based on the framework advised by CAQM, through direction dated 10.06.2021 and on learnings from the years 2021, 2022, 2023 and 2024, State Governments of Punjab, Haryana and UP prepared state specific action plans for 2025. Accordingly, a statutory Direction No. 90 dated 09.05.2025 was issued to the respective States for strict implementation of the

framework and action plan for prevention and control of paddy stubble burning during the year 2025, targeting to eliminate the practice through strict enforcement. The Action Plan includes measures like in-situ crop residue management, ex-situ utilization of paddy straw, strict monitoring and enforcement, and extensive awareness campaigns, all aimed at reducing the practice of burning agricultural residue after harvest. Salient features of the State Action Plans are at **Annexure-I**.

The Commission has issued directives & advisories to establish an ecosystem and robust supply chain mechanism to boost ex-situ utilisation of straw for tackling the problem of stubble burning. It has mandated 11 thermal power plants located within 300 km of Delhi, State Governments of Punjab, Haryana and Uttar Pradesh for co-firing of biomass pellets (up to 5 to 10%). Similar direction has also been issued to coal based Captive Thermal Power Plants in the NCR.

CAQM, through Direction No. 92 dated 03.06.2025, directed the State Governments of Punjab and Haryana to mandate use of paddy straw-based bio-mass pellets / briquettes in all brick kilns located in the districts beyond NCR.

CAQM has issued Direction No. 95 dated 01.10.2025 authorizing the Deputy Commissioners / District Collectors / District Magistrates in the States of Punjab, Haryana, NCR areas of Rajasthan and Uttar Pradesh and in the NCT of Delhi to file a complaint before jurisdictional judicial magistrate, in case of inaction in respect of officials, including nodal officers and supervisory officers at various levels and Station House Officers, responsible for effective enforcement towards ensuring elimination of paddy stubble burning in their respective jurisdiction.

A team of Flying Squads from CPCB has been deputed from 01-10-2025 to 30-11 2025 in identified hotspot districts in Punjab and Haryana to closely monitor the actions and coordinate with the concerned authorities / officers at the district level, officers of the Pollution Control Boards/CAQM cell.

The monitoring and enforcement is done through appointment of officers at different administrative levels and Parali Protection Force. Farmers resorting to the stubble burning are imposed with Environmental Compensation as per Commission for Air Quality Management in National Capital Region and Adjoining Areas (Imposition, Collection and Utilization of Environmental Compensation for Stubble Burning) Rules, 2023.

Consistent efforts have been made by various stakeholders under the direction of the Commission to raise awareness about the environmental impacts of stubble burning by undertaking extensive IEC activities /Awareness programs.

Commission has prepared Graded Response Action Plan (GRAP) which provides set of emergency response actions, depending on severity of air pollution levels, to be implemented by identified agencies for minimizing air pollution, a situation that generally persists in the Delhi-NCR during the peak winter months.

Based on the dynamic model and weather forecast provided by IMD (Indian Meteorological Department) / IITM (Indian Institute of Tropical Meteorology) on a day-to-day basis, actions

under Stages I, II, III and IV of the GRAP are invoked in advance in anticipation of the AQI of Delhi reaching to the projected levels of that stage based on the overall meteorological conditions and anthropogenic activities.

The Commission has recently conducted comprehensive review of the contours of the existing GRAP and made the actions more stringent under the various stages of the GRAP.

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:

- i. Regular review meetings have been held on 08.08.2025, 16.09.2025, 10.10.2025 11.11.2025, 26.11.2025 and 03.12.2025 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;
- ii. 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.

A centralised air quality portal and mobile app-SAMEER are functional for tracking and dissemination of near real time air quality data and hourly Air Quality Index to the public. CPCB issues a daily bulletin at 04:00 PM comprising AQI of various cities in the country including Delhi-NCR. SAMEER app also serves as a grievance redressal mechanism which allows the citizens to report pollution related complaints for quick resolution by the concerned agencies.

PRANA- 'Portal for Regulation of Air Pollution in Non-Attainment Cities' has been operationalised for managing and monitoring the progress of implementation of activities implemented by 130 targeted cities under NCAP.

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.

With coordinated efforts, number of good days (AQI<200) in Delhi have increased to 200 days in 2025 from 110 days in 2016. While there is an overall improvement in the AQI this year, very poor days (AQI: 301-400) and severe days (AQI more than 401) have reduced from 71 days in 2024 to 50 days in 2025. Delhi has observed lowest average AQI in the past 8 years i.e., from 2018 to 2025 (barring 2020 – COVID lockdown).

Annexure I

Salient features of State Action Plans of Punjab and Haryana

Parameters	Punjab		Haryana	
	2024	2025	2024	2025
Area under Paddy (Lakh ha)	31.54	30.79	15.73	16.7
Basmati Paddy Straw Generation (Million Ton)	3.42	3.85	4.06	4.67
Non –Basmati Paddy Straw Generation (Million Ton)	16.1	15.46	4.04	3.88
Total Quantity of Straw Generated (Million Ton)	19.52	19.32	8.10	8.55
Through in situ management (Million Tonnes)	12.7 (65%)	11.4 (59%)	4.35 (54%)	4.44 (52%)
Utilisation as fodder (Million Tonnes)	0.86 (4%)	0.86 (4%)	2.20 (27%)	2.20 (26%)
Through ex-situ measures (Million Tonnes)	5.96 (31%)	7.06 (37%)	1.55 (19%)	1.91 (22%)
Availability of CRM Machines (Nos)	1,48,451	1,49,203	1,00,882	1,00,882
CHCs for machinery (Nos)	24,736	26,023	6,794	6,794
