

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

RAJYA SABHA
UNSTARRED QUESTION No. 535
TO BE ANSWERED ON 04.12.2025

Contributing of stubble burning to air pollution

535. DR. M. DHANAPAL:

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

- (a) whether Government is aware of significant contribution of stubble burning to air pollution in various parts of the country;
- (b) the steps taken or proposed to be taken by Government to promote alternatives for stubble disposal among farmers; and
- (c) details of financial/technical support provided by Government for crop residue management with a view to reducing incidents of stubble burning?

ANSWER

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

(a) to (c): Air pollution is a collective result of multiple factors including high level of anthropogenic activities in the high-density populated areas in NCR, arising from various sectors viz. Vehicular Pollution, Industrial Pollution, Dust from Construction & Demolition Project activities, Road and Open Areas Dust, Biomass Burning, Municipal Solid Waste burning, Fires in Landfills, air pollution from dispersed sources, etc. as well as various meteorological factors. Stubble burning has also been identified as an episodic event which aggravates the Air Quality Index.

To support the efforts of the Governments of Punjab, Haryana, Uttar Pradesh and NCT of Delhi to address air pollution caused due to paddy stubble burning and to subsidize machinery required for management of crop residue, a Central Sector Scheme on Crop Residue Management has been implemented by Ministry of Agriculture and Farmers Welfare since 2018-19.

Under this scheme, financial assistance @ 50% is provided to the farmers for purchase of crop residue management machinery and financial assistance @ 80% is provided to Rural Entrepreneurs (Rural youth and farmer as an entrepreneur), Cooperative Societies of Farmers (Agriculture/ Horticulture/Makhana etc.), Day-NRLM Cluster Level Federations and Self Help Groups (SHGs), Farmer Producer Organizations (FPOs) and Panchayats for establishment of Custom Hiring Centres of crop residue management machines.

Financial support of 65% up to a maximum of Rs. 1.50 Crore is also provided to paddy supply chain projects on the capital cost of machinery and equipment like higher HP Tractors, Cutters, Tedder, Medium to large Balers, Rakers, Loaders, Grabbers & Tele handlers.

Financial assistance to the States and Indian Council of Agricultural Research (ICAR) is also provided for undertaking Information, Education and Communication activities for mass awareness of farmers on crop residue management. The scheme promotes the usage of machines and equipment recommended by ICAR for management of crop residue for in-situ management as well as ex-situ utilization.

During the period from 2018-19 to 2025-26 (as on 27.11.2025), an amount of Rs.4,090.84 crores has been released to States of Punjab, Haryana, Uttar Pradesh, Madhya Pradesh, NCT of Delhi by the Central Government under the above mentioned scheme. More than 3.45 lakh Crop Residue Machines (CRM) have been provided to the individual farmers and more than 43,270 Custom Hiring Centres (CHC) have been established in these States.

Central Pollution Control Board (CPCB) provides one-time financial support for establishment of pelletization and Torrefaction plants to promote utilisation of paddy straw. In case of setting up of pelletisation plant, Rs. 28 lakhs per tonne per hour (TPH), or 40% of the capital cost considered for plant and machinery of a 01 TPH plant, whichever is lower, is provided with a maximum financial support of Rs. 1.4 crore per proposal. In case of setting up of torrefaction plants, Rs. 56 lakhs per TPH, or 40% of the capital cost considered for plant and machinery of a 01 TPH plant, whichever is lower, is provided with a maximum financial support of Rs. 2.8 crore per proposal.

Ministry of Power has established National Mission of Use of Biomass in Coal based thermal power plants to address the issue of air pollution due to farm stubble burning. A comprehensive policy for co-firing of biomass pellets in Coal based Thermal Power Plants has been issued on 7th November, 2025.

Ministry of New and Renewable Energy (MNRE) provides Central Financial Assistance (CFA) for setting up of Waste to Energy plants for generation of Biogas, Bio-CNG/enriched Biogas/Compressed Biogas, Power/ generation of producer or syngas, from urban, industrial, agricultural wastes and municipal solid waste. Details of financial assistance are as below:

- Briquette manufacturing plant: Rs. 9 lakh/TPH with a maximum of Rs. 45 lakhs per project.
- Non-torrefied pellet manufacturing plant: Rs. 21 lakhs/TPH production capacity or 30% of the capital cost considered for plant and machinery of 1 MTPH plant, whichever is lower (Maximum Rs. 105 lakhs per project).
- Torrefied pellet manufacturing plant: Rs. 42 lakhs/TPH production capacity or 30% of the capital cost considered for plant and machinery of 1 MTPH plant, whichever is lower (Maximum Rs. 210 lakhs per project).

Ministry of Petroleum and Natural Gas (MoPNG) has launched a scheme to provide financial assistance to Compressed Bio-gas producers for procurement of biomass aggregation equipment for ex-situ management of paddy straw.

Ministry of Petroleum and Natural Gas has launched 'Pradhan Mantri JI-VAN (Jaiv Indhan-Vatavaran Anukool fasal awashesh Nivaran) Yojana' to provide financial support for integrated bio-ethanol projects for setting up Advanced Biofuels projects in the country using lignocellulosic biomass and other renewable feedstock, i.e. agricultural and forestry residues, industrial waste, synthesis (syn) gas, algae etc. The aims to provide remunerative income to farmers for their agriculture residue, address environmental pollution, create local employment opportunities, and contribute to India's energy security and self-reliance.

CAQM through Direction 90 dated 09.05.2025 directed the States to plan for rent-free availability of CRM machines for small / marginal farmers.

With the 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.
