

GOVERNMENT OF INDIA  
MINISTRY OF AGRICULTURE AND FARMERS WELFARE  
DEPARTMENT OF AGRICULTURE AND FARMERS WELFARE

**LOK SABHA**  
**STARRED QUESTION NO. 130**  
TO BE ANSWERED ON THE 12<sup>TH</sup> DECEMBER, 2023

**STUBBLE BURNING INCIDENTS**

\* 130. SHRI RITESH PANDEY:

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि एवं किसान कल्याण मंत्री be pleased to state:

- (a) the details of raw data and materials on the basis of which the Commission for Air Quality Management in NCR and Adjoining Areas has relied on to reach its finding that “during the 45 days period in the current paddy harvesting season i.e., 15th September to 29th October, 2023, the total stubble burning incidents in Haryana, Punjab, NCR- UP, NCR-Rajasthan and Delhi have come down from 13,964 in the corresponding period in 2022 to 6,391 in 2023 and from 11,461 in the corresponding period in 2021 to 6,391 in 2023 i.e., a reduction of 54.2% & 44.3% respectively”;
- (b) whether the Government has taken any concrete steps towards further reducing and controlling stubble burning in the region;
- (c) if so, the details thereof; and
- (d) if not, the reasons therefor along with an indicative timeline for future planned actions?

**ANSWER**

MINISTER OF AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण मंत्री (SHRI ARJUN MUNDA)

(a) to (d): A statement is laid on the Table of the House

**STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) OF LOK SABHA STARRED QUESTION NO. 130 DUE FOR REPLY ON 12<sup>TH</sup> DECEMBER 2023.**

(a): The active fire events due to rice residue burning are monitored using satellite remote sensing, following the "Standard Protocol for Estimation of Crop Residue Burning Fire Events using Satellite Data" by the Consortium for Research on Agroecosystem Monitoring and Modelling from Space (CREAMS) Laboratory, Division of Agricultural Physics, Indian Council of Agricultural Research (ICAR) – Indian Agricultural Research Institute (IARI), New Delhi. As per their report, the burning events detected between 15 September to 29 October during 2021, 2022 and 2023 are indicated in below table:

State	Paddy stubble Burning Events detected between 15 September to 29 October			Percentage Reduction in Paddy Stubble Burning events during 2023	
	2021	2022	2023	In comparison to 2021	in comparison to 2022
Punjab	9001	12112	5254	41.6	56.6
Haryana	2413	1813	1094	54.7	39.7
NCR- Uttar Pradesh	45	33	39	13.3	+18.2
NCR - Rajasthan	2	1	2	0	-
NCT of Delhi	0	5	2	-	60.0
Total	11461	13964	6391	44.2	54.2

For the period from 15th September to 29th October, 2023, the total stubble burning incidents in Punjab, Haryana, NCR- Uttar Pradesh, NCR-Rajasthan and Delhi have come down to 6,391 numbers as compared to 11,461 numbers in 2021 and 13,964 number in 2022 as reported for corresponding period. The percentage reduction for the corresponding period in 2023 was 44.3% and 54.2% when compared with the corresponding period 2021 and 2022, respectively.

(b) to (d): The Commission for Air Quality Management (CAQM) through statutory directions dated 10.06.2021 had provided a framework for control/elimination of crop residue burning, based on which the State Governments of Punjab, Haryana and UP prepare detailed and monitorable state specific action plans. The action plan includes proper implementation of in-situ and Ex-situ management of paddy straw, IEC activities, effective monitoring / enforcement and prohibition of stubble burning

The Department of Agriculture & Farmers Welfare is implementing Crop Residue Management Scheme from 2018-19 in order to support the efforts of the Governments of Punjab, Haryana, Uttar Pradesh and NCT of Delhi to address air pollution and to subsidize machinery required for management of crop residue. The scheme promotes the usage of machines such as Super Straw Management Systems, Happy Seeder, Super Seeder, Smart Seeder, Super Seeder, Zero Till Seed cum Fertilizer Drill, Mulcher, Shrub Master/Rotary Slasher, Paddy Straw Chopper, Hydraulically Reversible Mould Board Plough, Crop Reapers and Reaper Binders for in-situ management of paddy straw and Balers & Straw Rakes for

ex-situ management of paddy straw. Financial assistance @ 50% of the cost of machinery is provided to the farmers for purchase of these identified machinery and financial assistance @ 80% of the project cost is provided to the Rural Entrepreneurs (Rural youth and farmer as an entrepreneur), Cooperative Societies of Farmers, Self Help Groups (SHGs), Registered Farmers Societies, Farmer Producer Organizations (FPOs) and Panchayats for establishment of Custom Hiring Centres of crop residue management machinery.

The scheme guidelines have been revised with a view to enable efficient ex-situ management of paddy straw generated in these States. Provisions have been made to establish techno-commercial pilot projects for paddy straw supply chain under the bilateral agreement of beneficiary/ aggregator (Farmers, Rural entrepreneurs, Cooperative Societies of farmers, Farmers Producer Organizations (FPOs) and Panchayats) and Industries utilizing the paddy straw. Financial assistance @ 65% on the capital cost of machinery costing up to Rs. 1.50 crores is provided by the Government. Industry as primary promoter of the project has to contribute 25% of the project cost and the balance 10% will be the contribution of beneficiary/aggregator. The intervention aims at establishing a robust supply chain of paddy straw for various end user industries in biomass power generation and biofuel sectors.

The use of Bio-Decomposer (a microbial consortium of fungal species), which accelerates the in-situ decomposition of paddy straw is also promoted under the scheme. During 2023 season, the bio-decomposer was used by the States in an around 7.00 lakh hectares area.

Under CRM scheme, a total of Rs.3333.17 Crore have been released to the States of Punjab, Haryana, UP and NCT of Delhi including Implementing agencies like ICAR etc. The States have established more than 40,000 Custom Hiring Centres (CHCs) of crop residue management machines and more than 2.95 lakh crop residue management machines have been supplied to these CHCs and individual farmers of these States. The State of Punjab has sanctioned 12 projects of paddy straw supply chain and the State of Uttar Pradesh has sanctioned 90 projects.

Apart from above, the ex-situ utilization of paddy straw is supported through various initiatives of the Government which include, Ministry of New and Renewable Energy (MNRE) programme of Biomass power & cogeneration which promote technologies for optimum use of country's biomass resources, Revised policy of Ministry of Power (MoP) for biomass utilization for power generation through co-firing in coal based power plants which mandates utilization of 5-7 percent biomass pellets in thermal power plants, Sustainable Alternative Towards Affordable Transportation (SATAT) initiative of the Ministry of Petroleum and Natural Gas (MoP&NG) aims at extracting economic value from bio-mass waste in the form of Compressed Bio Gas (CBG) and bio-manure, MoP&NG scheme to extend financial assistance to biomass aggregation equipment to the CBG plant owners, Central Pollution Control Board (CPCB) scheme for grant of one-time financial support for establishment of biomass Pelletisation and Torrefaction plants.

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