

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

**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 1620**

TO BE ANSWERED ON 13/02/2026

**CHALLENGES IN IMPLEMENTATION OF CROP RESIDUE  
MANAGEMENT SCHEME**

1620. DR. LAXMIKANT BAJPAYEE:

Will the Minister of AGRICULTURE & FARMERS WELFARE be pleased to state:

- (a) the various challenges being faced by Government, and farmers for the smooth and efficient implementation of Crop Residue Management Scheme (CRMS);
- (b) whether there is a lack of sufficient skilled labour and established markets for residue by-products, making the process less economically viable; and
- (c) the various machine specific, logistical, economic, social cultural and knowledge challenges pertaining to usage of this machinery and the various steps taken/ being taken by Government to overcome such challenges?

**ANSWER**

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE

(SHRI RAMNATH THAKUR)

(a) to (c): Paddy stubble burning particularly in the rice-wheat cropping systems of the States of Punjab, Haryana, Uttar Pradesh and Madhya Pradesh is driven by the need for rapid field clearance for next Rabi crop sowing within a narrow window. Sustainable solutions to eliminate paddy stubble burning such as, in-situ crop residue management and ex-situ utilization, required specialized machines and equipments and enhanced knowledge about these alternatives to shift the perception of paddy straw from a waste product to a valuable, marketable resource.

To support the efforts of the Governments of Punjab, Haryana, Uttar Pradesh, Madhya 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 scheme on Crop Residue Management (CRM) is being implemented by the Department of Agriculture & Farmers Welfare (DA&FW). Under this scheme, the farmers are facilitated to adopt measures for in-situ crop residue management and ex-situ utilization of paddy straw in various applications. Financial assistance @ 50% for purchase of machines by the farmers on individual ownership basis are intended to enable farmers to easily access and purchase agricultural equipment they might not otherwise be able to afford. Higher subsidy (@80%) is provided to the CHCs that benefits the farmers by making crop residue management machines more accessible on rental basis and the farmers incur lower costs than when purchasing machinery themselves.

In-situ crop residue management strategy involves promoting technologies and machinery to incorporate, retain, or mulch crop residues directly in the field. Machines like Super Straw Management Systems, Happy Seeder, Super Seeder, Smart Seeder, Surface 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 are used to mix the residue back into the soil to improve soil health, rather than burning it. The use of bio-decomposers supplements to accelerate the in-situ decomposition of paddy straw.

Ex-situ Crop Residue Management strategy focuses on establishing a supply chain through a cluster-based approach, collecting, baling, and transporting straw from the field for its further use in industries such as bio-energy, thermal power plants, bio-CNG, and for fuel. Financial assistance @ 65% on the capital cost of machinery costing up to Rs. 1.50 crores is provided for establishing paddy straw supply chains.

Information, Education, and Communication (IEC) are conducted to raise awareness among stakeholders, farmers, and the public regarding the adverse effects of burning and the benefits of management practices. This includes large-scale demonstrations, training, and education programs.

During the period from 2018-19 to 2025-26 (as on 10.02.2026), Rs. 4173.84 crores have been released under the scheme (Punjab - Rs. 2026.45 crores, Haryana - Rs. 1156.71 crores, Uttar Pradesh - Rs. 838.67 crores, Madhya Pradesh - Rs. 45.00 crores, NCT of Delhi - Rs. 6.05 Crores, ICAR- Rs. 93.235 crores & others Rs. 7.7205 Crores). The farmers are adopting crop residue management machines and during the period from 2018-19 to 2025-26 (as on 10.02.2026), more than 3.50 lakh machines have been supplied in these States.

The overall objective of reducing the burning of paddy straw through the initiatives under CRM scheme is getting realized as it is evident from the reports published 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. There is a visible reduction in the paddy residue burning events and the same have reduced by 92.4% in Punjab, 94.9% in Haryana & 17.0% in Uttar Pradesh in year 2025 when compared with the year 2017.

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