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

RAJYA SABHA UNSTARRED QUESTION NO. -1949 TO BE ANSWERED ON 23/12/2022

PROMOTING ALTERNATIVES TO STUBBLE BURNING

1949. SHRI AYODHYA RAMI REDDY ALLA: SHRI RAGHAV CHADHA:

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

- (a): whether Government has taken any steps to use tech solution and subsidise the machinery required for better management of crop residue including Pusa bio-decomposer technique to control stubble burning, if so, details thereof and if not, reasons therefor;
- (b): the allocation of fund provided by Government to control stubble burning;
- (c): whether Government is planning to introduce any schemes to help the farmers of the country, including Punjab for crop diversification and producing other crops in place of paddy; and
- (d): if so, the details thereof and if not, the reasons therefor?

ANSWER

MINISTER OF AGRICULTURE AND FARMERS WELFARE (SHRI NARENDRA SINGH TOMAR)

Paddy stubble burning is mainly practiced in Indo-gangetic plains of the (a) & (b): States of Punjab, Haryana and Uttar Pradesh to clear the fields for Rabi Crop sowing. 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, a Central Sector Scheme on 'Promotion of Agricultural Mechanization for In-Situ Management of Crop Residue in the States of Punjab, Haryana, Uttar Pradesh and NCT of Delhi' is being implemented from 2018-19. The scheme promotes the usage of machines for stubble management such as Super Straw Management Systems, Happy Seeder, Super Seeder, Smart 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 crop residue and Balers & Straw Rakes which are used for straw collection in the form of bales for other ex-situ uses of straw. Financial assistance @ 50% of the cost of machinery is provided to the farmers for purchase of these identified crop residue management machinery and financial assistance @ 80% of the project cost is provided to the Cooperative Societies of Farmers, Farmers Producers Organization (FPOs) and Panchayats for establishment of Custom Hiring Centres (CHCs) of these identified crop residue management machinery. The States have established more than 37000 Custom Hiring Centres (CHCs) and more than 2.30 lakh crop residue management machines have been supplied to these CHCs and individual farmers of these States. The details of State-wise funds released during each of the last five years is as under:

Year	Funds Released (Rs. in Crores)					
	Punjab	Haryana	Uttar	NCT of	ICAR &	Total
			Pradesh	Delhi	Others	
2018-19	269.38	137.84	148.60	0.00	28.51	584.33
2019-20	273.80	192.06	105.28	4.52	18.48	594.14
2020-21	272.50	170.00	120.20	0.00	8.00	570.70
2021-22	331.94	193.35	159.59	0.00	6.02	690.90
2022-23	278.83	223.46	180.00	1.53	14.28	698.10
Total	1426.45	916.71	713.67	6.05	75.29	3138.17

The Indian Council of Agricultural Research has developed Pusa Decomposer, a microbial consortium of fungal species (both in liquid and capsule forms) for rapid decomposition of paddy straw. Use of this consortium accelerates process of paddy straw decomposition in the field itself in 20-25 days. In the year 2021, decomposer has been used in the States of Punjab, Haryana, Uttar Pradesh and NCT of Delhi in an around 5.7 lakh hectare area and through satellite imaging and monitoring, it was observed that 92% area of the decomposer sprayed plots has been managed through decomposition and only 8% area in these plots was burned. During the year 2022-23, the bio-decomposer has been used by the States in more than 7.15 lakh hectare area.

(c) & (d): The Department of Agriculture & Farmers Welfare is implementing a Crop Diversification Programme (CDP) in Original Green Revolution States viz. Punjab, Haryana and Western Uttar Pradesh since 2013-14 to divert the area of water guzzling paddy crop to alternate crops like pulses, oilseeds, coarse cereals, nutria cereals, cotton and agro forestry. The interventions covered under CDP include alternate crop demonstration, farm mechanization & value addition, site specific activities and awareness & training. During the period from 2013-14 to 2021-22, the central funds amounting to Rs. 735.37 crores have been released to the States which also include funds amounting to Rs. 353.87 released to the State of Punjab.
