

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

LOK SABHA
UNSTARRED QUESTION NO. 1018
TO BE ANSWERED ON THE 13TH DECEMBER 2022

STUBBLE BURNING

1018. SHRI THIRUNAVUKKARASAR SU.:
SHRI B.B. PATIL:
SHRI RAVNEET SINGH BITTU:

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

- (a) whether the Government has taken note of the issue of stubble burning in agricultural fields in various northern States in the country and if so, the estimated number of incidents reported so far during each of the last three years and the current year especially in the State of Punjab and if so, the details thereof;
- (b) the steps taken to deal with stubble burning and reducing environmental pollution;
- (c) whether spraying of bio-decomposer in fields including the long term action plans initiated to eliminate stubble burning have not yielded the desired results and if so, the details thereof;
- (d) the details of financial assistance proposed to States/farmers to remove the stubble in their farms to avoid burning and to control the pollution;
- (e) whether the Government is providing any subsidy on the machines used for stubble cutting and if so, the details thereof; and
- (f) the steps taken by the Union Government for promotion of small scale industries making product from stubble?

ANSWER

MINISTER OF AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण मंत्री (SHRI NARENDRA SINGH TOMAR)

(a) Stubble burning is mainly practiced in Indo-gangetic plains of the States of Punjab, Haryana and Uttar Pradesh to clear the fields for Rabi Crop sowing. As per the satellite data generated by the Consortium for Research on Agroecosystem Monitoring and Modeling from Space (CREAMS) Laboratory, Division of Agricultural Physics, ICAR – Indian Agricultural Research Institute, New Delhi, the active fire events due to rice residue burning during each of the

last three years and the current year in the States of Punjab, Haryana and Uttar Pradesh were as under:

S. No.	State	Number of active fire events of paddy residue burning			
		2019-20	2020-21	2021-22	2022-23
1	Punjab	50738	83002	71304	49922
2.	Haryana	6364	4202	6987	3661
3.	Uttar Pradesh	4230	4631	4242	3017

(b) 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.

(c) 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.

(d) and (e) The scheme as indicated in part (b), promote 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 & 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. During the period from 2018-19 to 2022-23, funds amounting to Rs. 3138.17 crores have been released for these States and more than 37000 Custom Hiring Centres(CHCs) have been established and more than 2.30 lakh crop residue management machines have been supplied to these CHCs and individual farmers of these States.

(f) In order to promote the usage of bi-products made from crop residue including paddy stubbles, the Ministry of Power has brought "Revised Policy for Biomass Utilization for power generation Through Co-firing in Coal based Power Plants" which mandates co-firing of 5-7 % of suitable biomass pellets

along with coal in coal based power plants. The Ministry of New and Renewable Energy has notified Bioenergy Programme which promote the conversion of biomass and other waste material into other useful forms of energy. The Oil Central Public Enterprises have set up Second Generation (2G) ethanol bio-refineries for production of ethanol using agricultural crop residue as feedstock. Sustainable Alternative Towards Affordable Transportation (SATAT) initiative of the Ministry of Petroleum and Natural Gas involves extracting economic value from bio-mass/waste including rice straw to generate Compressed Bio-Gas (CBG) as an alternative, green transport fuel.
