GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA UNSTARRED QUESTION No. 2519 TO BE ANSWERED ON 18.12.2023

Alternative to Stubble-Burning

2519. SHRI KHAGEN MURMU: SHRI RAJIV PRATAP RUDY:

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

- (a) the measures initiated by the Government to reduce stubble-burning incidents in the country;
- (b) the steps taken/proposed to be taken, periodic targets and mechanism of accountability and compliance;
- (c) the details of technologies and collaborations employed for finding alternatives to stubble-burning in the country;
- (d) whether the Government has promoted alternatives to stubble-burning in rural areas, specially in Saran District of Bihar and if so, the details thereof; and
- (e) the details of funds allocated towards R&D for alternatives to stubble-burning in the country?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (SHRI ASHWINI KUMAR CHOUBEY)

(a) to (e)

In order to eliminate stubble burning during harvesting season various measures have been identified for In-situ and Ex-situ management of crop residue for the country including the state of Bihar. In-situ Crop Residue Management is done through the Crop Residue Management Machinery and use of PUSA bio-decomposers. Pusa Decomposer is developed by Indian Council of Agricultural Research (ICAR). It is a microbial consortium of fungal species (both in liquid and capsule forms) for rapid decomposition of paddy straw. Use of this consortium supports the degradation process of stubble which is cut and spread evenly on the field and accelerates process of paddy straw decomposition in the field itself. Pusa Decomposer plays an important role in in-situ and ex-situ decomposition of paddy straw.

Under Ex-situ Crop Residue Management alternate use of the crop residue is promoted like use of paddy straw as an economic resource in Biomass Power Projects, Co-firing in Thermal Power plants, Feed stock for 2G Ethanol plants, Feed stock in Compressed Biogas plants, Fuel in Industrial Boilers / Waste to Energy plants / Brick Kilns, Packaging materials, Agripanels, Compost and Processed cattle fodder etc. The issue of stubble burning is predominant in the Delhi NCR states and special measures have been taken for prevention and control of the same. The measures taken to address the Stubble burning are given as **Annexure-I**.

The measures taken to address the Stubble burning are:

- 1. Ministry of Agriculture and Farmers' Welfare (MoA&FW) in 2018 launched scheme for providing subsidy for purchase of crop residue management machinery and establishment of custom hiring centres (CHCs) in the States of Punjab, Haryana, Uttar Pradesh and NCT of Delhi. During 2018-2022, total fund released to the states under the said scheme is Rs. 2440.07 crores using which, over 2 lakh crop residue machineries have been delivered to individual farmers and CHCs, and over 39,000 CHCs have been established.
- 2. Central Pollution Control Board (CPCB) has framed guidelines for providing one-time financial assistance for setting up of paddy straw based pelletization and torrefaction plants which may help in addressing the supply chain issues and the issue of open burning of paddy straw in agriculture fields in Northern Region. A maximum amount of Rs. 28 lakhs or 40% of the capital cost considered for plant and machinery of a 1 TPH pellitisation plant, whichever is lower, shall be given as onetime financial support by CPCB, subject to a maximum total financial support of Rs. 1.4 crore per proposal. Similarly, a maximum amount of Rs. 56 lakhs or 40% of the capital cost considered for plant and machinery of a 1 TPH torrefaction plant, whichever is lower, shall be given as onetime financial support by CPCB, subject to a maximum total financial support of Rs. 2.8 crore per proposal. A corpus of Rs. 50 crores have been earmarked for utilisation through the guidelines. A total of 10 plants have been approved so far.
- 3. CPCB has also issued an addendum to the guidelines under which one-time financial assistance is provided to Municipal Corporations, Municipal Councils and Zilla Parishads of the states of Punjab, Haryana, NCT of Delhi and NCR districts of Uttar Pradesh and Rajasthan, for establishing paddy straw based briquetting plants for use of briquettes for cremation purpose only.
- 4. Directions issued by Commission for Air Quality Management in National Capital Region and Adjoining Areas (CAQM) to State governments of Punjab, Haryana and Uttar Pradesh to strictly and effectively implement framework and revised action plan to eliminate and control stubble burning.
- 5. From 10.11.2023 onwards, 33 scientists of CPCB were deployed as flying squads by the CAQM for intensifying monitoring and enforcement actions towards prevention of paddy stubble burning incidents in 22 districts of Punjab and 11 districts of Haryana. The flying squads have coordinated with the state Government/ nodal officers/ officers from respective Pollution Control Boards towards prevention and control of stubble burning in their respective districts and sent reports to CAQM.
- 6. CAQM has issued directions permitting use of PNG or biomass as industrial fuel in NCR except Delhi where only PNG is permitted as industrial fuel. CAQM has also issued directions for co-firing of 5-10% biomass with coal in thermal power plants located within 300 kms of Delhi, and, in captive power plants of industrial units located in NCR.