#### **GOVERNMENT OF INDIA**

# MINISTRY OF AGRICULTURE AND FARMERS WELFARE DEPARTMENT OF AGRICULTURE AND FARMERS WELFARE

# RAJYA SABHA UNSTARRED QUESTION NO. 2

TO BE ANSWERED ON 02/02/2024

#### PROMOTION OF SUSTAINABLE AGRICULTURE

# 2. SHRI RAGHAV CHADHA:

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

- (a) the measures being taken by Government to promote sustainable agriculture in the country;
- (b) the initiatives or incentives currently in place to encourage natural farming practices among farmers;
- (c) the strategies being implemented to increase the income of farmers through sustainable and natural farming methods; and
- (d) the impact of these measures on overall agricultural productivity and environmental sustainability?

## **ANSWER**

## THE MINISTER OF AGRICULTURE AND FARMERS WELFARE

(SHRI ARJUN MUNDA)

(a) to (d): The Government is taking several measures to promote sustainable agriculture in the country. The National Mission for Sustainable Agriculture (NMSA) is one of the Missions within the National Action Plan on Climate Change (NAPCC) which is being implemented by Ministry of Agriculture and Farmers Welfare. The Mission aims to evolve and implement strategies to make Indian agriculture more resilient to the changing climate. NMSA was approved for three major components i.e. Rainfed Area Development (RAD); On Farm Water Management (OFWM); and Soil Health Management (SHM). Subsequently, new programmes such as namely Soil Health Card (SHC), Paramparagat Krishi Vikas Yojana (PKVY), Mission Organic Value Chain Development in North Eastern Region (MOVCDNER), Per Drop More Crop, National Bamboo Mission (NBM) etc. were also included.

The Government is implementing Soil Health Management & Soil Health Card Schemes under the National Project on Soil Health & Fertility of National Mission for

Sustainable Agriculture since the year 2014-15. Soil health card provides information to farmers on nutrient status of their soil along with recommendations on appropriate dosage of nutrients to be applied for improving soil health and its productivity. So far, 23.74 crore soil health cards have been distributed to farmers. Based on the recommendations on Soil Health Card (SHC), the trainings & demonstrations are conducted to create the awareness among the farmers for adopting the recommendations on judicious use of chemical fertilizers including secondary and micronutrients in conjunction with organic manures & bio-fertilizers. So far, 93781 farmer's trainings, 6.45 lakh demonstrations, 7425 farmer's melas/campaigns on soil health card recommendations have been organized across the country. The Government has introduced flagship yield based Pradhan Mantri Fasal Bima Yojana (PMFBY) along with weather index based Restructured Weather Based Crop Insurance Scheme (RWBCIS) from Kharif 2016. Government is promoting Natural Farming since 2019-2020 through Bharatiya Prakritik Krishi Paddhati (BPKP) programme under Paramparagat Krishi Vikas Yojana (PKVY). The scheme mainly emphasizes on exclusion of all synthetic chemical inputs and promotes on-farm biomass recycling with major stress on biomass mulching, use of cow dungurine formulations and other plant based preparations. Rs. 70.13 Crore has been released for natural farming in 8 states under BPKP across the country. Under BPKP, Natural farming is being promoted in cluster of 500 ha and Rs. 12200.00 is provided per ha for three years, in which Rs. 2000 is provided as incentives to farmers through DBT.

The Department of Agriculture & Farmers Welfare (DA&FW) is implementing National Food Security Mission (NFSM) with the objective of increasing foodgrains production through area expansion and productivity enhancement in all the 28 states and 2 Union Territories (Jammu & Kashmir and Ladakh) of the country. Under (NFSM) assistance is given through state governments to farmers for interventions like cluster demonstrations on improved package of practices, demonstrations on cropping system, distribution of seeds of High Yielding Varieties (HYVs)/hybrids, improved farm machineries/resource conservation machineries/tools, efficient water application tools, plant protection measures, nutrient management/soil ameliorants, processing & post-harvest equipment, cropping system based trainings to the farmers etc.

Indian Council of Agricultural Research (ICAR) under All India Coordinated Research Project (AICRP) on Integrated Farming Systems (IFS) at 74 centres in 25 States/UTs has developed 64 prototype of integrated farming system models for 26 States/UTs. ICAR also implemented All India Network Programme on Organic Farming (AINP-OF) with 20 cooperating centres covering 16 States to develop package of practices for organic production

of crops in cropping and farming systems perspective. The scheme involves 11 State Agricultural Universities, 8 ICAR institutes/centres and 1 special heritage university. Package of practices for organic production of crops in cropping systems perspective have been developed for 72 cropping systems suitable for 16 states. Also eight integrated organic farming system models has been developed for 7 states.

Also, ICAR has launched a flagship network project namely National Innovations in Climate Resilient Agriculture (NICRA) to promote climate resilient agricultural practices. The achievements of ICAR in the field of research on climate resilient agriculture include the following;

- In total, 1888 climate resilient crop varieties including 891 of cereals, 319 of oilseeds, 338 of pulses, 103 of forage crops, 182 of fibre crops, 45 of sugar crops, and 10 of other crops have been developed.
- ii. Participatory technology development of climate resilient practices has been undertaken involving farmers in risk assessment, demonstration and adaptation techniques in 151 clusters covering 454 villages, with a footprint of 2.13 lakh households, on 2.36 lakh hectares of land.
- iii. 68 climate resilient technologies have been demonstrated in 454 villages on 15857 farmers' fields during 2014-23.
- iv. 88 biocontrol agents, 31 biopesticides and 41 Biofertilizers have been documented and circulated. Also District Agriculture Contingency Plans (DACPs) for 650 Districts have been developed.
- v. To protect the farmers from abnormal weather conditions ICAR in collaboration with India Meteorological Department (IMD) is issuing Agromet advisories twice a week (Tuesday and Friday) to around 6 crore farmers of the country through Gramin Krishi Mausam Seva program.

As a result of the steps taken by the Government, the food grains production has continuously increased in the country during last 5 years can be seen in the below table.

(In million tonnes)

Year	2019-20	2020-21	2021-22	2022-23	2023-24
Production of food grains	297.50	310.74	315.72	329.68	332.07 (Target, as per 1 <sup>st</sup> Advance estimate)