

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

RAJYA SABHA
UNSTARRED QUESTION NO. 189
TO BE ANSWERED ON THE 03/02/2023

INCREASING AGRICULTURAL SUSTAINABILITY

189. SHRI AYODHYA RAMI REDDY ALLA:

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

- (a) whether Government is aware that the depleting quantum of water and loss of soil fertility hamper the sustainability of increased production of foodgrains in the country;
- (b) if so, the measures Government is taking to combat this and ensure food sustainability in the country;
- (c) whether Government is considering a scheme to promote organic farming to make agriculture more sustainable, such as by incentivizing crop-diversification and the use of bio fertilizers;
- (d) if so, details thereof; and
- (e) if not, reasons therefor?

ANSWER

MINISTER OF AGRICULTURE AND FARMERS WELFARE

(SHRI NARENDRA SINGH TOMAR)

(a) to (b): Soil fertility depletion occurs when the quantities of nutrients removed from the soil in harvested products exceed the quantities of nutrients being applied. Off-site losses of nutrients can also occur through soil erosion, run off, leaching and burning of crops residues. Government is implementing Soil Health Card (SHC) scheme since 2015 to soil sample collection, analysis and Soil Health Cards distribution to all the farmers in the country. Soil health card provides nutrient status of the soil along with prescription about balanced and integrated use of inorganic and organic fertilizers to maintain good soil health. Soil health card based fertilizer use advisories are issued to farmers through State Government from time to time. Demonstrations about balanced use of fertilizers based on soil health card recommendations and training to the farmers on proper and integrated use of fertilizers are integral part of the scheme. Financial assistance is provided to State Governments for training of farmers, demonstrations on farmer fields and organizing farmer melas. Since 2015, around 6.45 lakh demonstrations, 93781 farmer's trainings and 7425 farmers melas and 79 workshops have been organized/conducted through the State Governments under the Scheme at Panchayat and village level. The ICAR is recommending soil test based balanced and integrated nutrient management through conjunctive use of both inorganic and organic sources (manure, biofertilizers, green manuring, in-situ crop residue recycling etc.) of plant nutrients, inclusion of leguminous crops, crop residue recycling to improve soil health and fertility. Besides, ICAR has developed location specific bio-engineering soil & water conservation measure, watershed management interventions, soil reclamation measures for saline, alkali, waterlogged and acid soils, selection of suitable crop including agro-forestry interventions to conserve water and prevent deterioration of soil moisture. Government is implementing Centrally Sponsored Scheme of Pre Drop More Crop (PDMC) in the country from 2015-16. The PDMC focuses on enhancing water use efficiency at farm level through Micro Irrigation viz Drip and Sprinkler Irrigation Systems.

(c) to (e) For development of sustainable agriculture Government is promoting organic farming in the country since 2015-16 through the schemes of Paramparagat Krishi VikasYojana (PKVY) and Mission Organic Value Chain Development for North Eastern Region (MOVCDNER). Both the schemes stress on end to end support to farmers engaged in organic farming i.e. from production to processing, certification and marketing and post-harvest management support including processing. PKVY is being implemented in all the States other-than North Eastern (NE) States, across the country. MOVCDNER scheme is implemented exclusively in the NE States. Under PKVY, farmers are provided financial assistance of Rs.50000/ha for 3 years out of which, Rs.31000/ ha / 3 years is provided as incentives directly to farmers through DBT for on-farm and off-farm organic inputs including bio-fertilizers. Whereas, under MOVCDNER, an assistance of Rs.46575/ha for 3years is provided for creation of FPO, support to farmers for organic inputs, quality seeds/ planting material and training, hand holding and certification, out of which Rs.32500/ ha for 3years is provided as incentives to farmers for off-farm and on-farm organic inputs including bio-fertilizers.

Indian Council of Agricultural Research (ICAR) through its Plan Scheme “Network Project on Organic Farming” (NPOF) is undertaking research in 20 centres covering 16 states to develop location specific organic farming package of practices for crops and cropping systems. Organic farming package of practices for 51 crops/cropping systems have been developed to provide technical backstopping to Parampragat Krishi VikasYojana (PKVY) scheme being implemented in the country. Besides, the Council has developed improved and efficient strains of bio-fertilizers specific to different crops and soil types under Network project on Soil Biodiversity-Bio-fertilizers. Liquid Bio-fertilizer technology with higher shelf-life has also been developed. The Council has also developed technology to prepare various types of organic manures such as phosphocompost, vermi-compost, bio-enriched compost, municipal solid waste compost, etc. from various organic wastes. Indian Council of Agricultural Research (ICAR) suggests diversification of cropping systems for cost effective, eco-friendly and sustainable agricultural development in the country. Accordingly, ICAR has identified and documented efficient alternative cropping systems having higher productivity potential for different agro-climatic zones for inclusion in the Crop Production Guide /package of practices of different states.
