

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

RAJYA SABHA UNSTARRED QUESTION NO. 1501

TO BE ANSWERED ON 15/12/2023

CLIMATE RESILIENT AGRICULTURE PRACTICES IN KERALA

1501. SHRI JOSE K. MANI:

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

- (a) the initiatives undertaken to promote climate-resilient agricultural practices and provide assistance to farmers affected by extreme weather events in Kerala given the vulnerability of the State to climate change; and
- (b) the manner in which Government is promoting integrated farming systems in Kerala and the measures taken to encourage agroforestry and allied activities for holistic farm development?

ANSWER

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE

(SHRI ARJUN MUNDA)

(a) & (b): The Government is taking several steps to promote climate resilient agriculture in the country including Kerala State. 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.

To protect the farmers from climate hazards, 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. The scheme aims at supporting sustainable production in agriculture sector by way of providing

financial support to farmers suffering crop loss/damage arising out of unforeseen natural calamities, adverse weather incidence and to stabilize the income of farmers to ensure their continuance in farming. Comprehensive risk insurance to farmers is provided against unpreventable natural calamities such as drought, dry-spells, flood, hailstorm, inundation etc. under the scheme for entire crop cycle including pre-sowing to post-harvest losses.

Indian Council of Agricultural Research (ICAR) has launched a flagship network project 'National Innovations in Climate Resilient Agriculture' (NICRA) with an aim to develop and promote climate resilient technologies in agriculture which will address vulnerable areas of the country. As per Intergovernmental Panel on Climate Change (IPCC) protocol, risk and vulnerability assessment was performed for 573 out of 650 predominantly agriculture districts in the country. In Kerala, Kasaragod, Kozhikode, Ernakulam, Kottayam, Alappuzha, Pathanamthitta, Kollam and Thiruvananthapuram districts are categorized under 'very high' risk category and Kannur, Wayanad, Malappuram, Palakkad and Thrissur districts are categorized under 'high' risk category. Of these, five districts viz., Kannur, Kottayam, Kozhikode, Palakkad and Wayanad and one village from each of these districts selected for technology adoption.

Four integrated farming system (IFS) models (rice, banana, coconut and homestead based IFS models of 0.20 ha each), tuber and spice crop based Integrated Organic Farming System models of one acre each have been developed by integrating various components such as dairy, poultry, fishery, plantation, tuber and spices crops including the value addition. Farmer participatory refinement of existing farming systems practiced by farmers are also undertaken in Alappuzha district. Thiruvananthapuram and Pathanamthitta districts are also covered under On-Farm Research component of All India Coordinated Research Project (AICRP) on Integrated Farming Systems for refinement of existing farming systems. In addition to this ICAR-Central Plantation Crops Research Institute also developed one ha IFS model suitable for Kerala. Developed IFS models are being promoted by Kerala State Government through various schemes such as Centre of Excellence on IFS & Urban agriculture, Subiksha Keralam, Integrated Farming Systems and Rebuild Kerala schemes covering all the districts in Kerala.
