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

LOK SABHA
UNSTARRED QUESTION NO. 4160
TO BE ANSWERED ON THE 19TH AUGUST, 2025

CLIMATE RESILIENT SEEDS AND IRRIGATION

4160. ADV GOWAAL KAGADA PADAVI:

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

(a) whether agricultural zones are being remapped based on climate resilience, if so, the details thereof;
(b) the details of schemes in place to support farmers adapting to erratic rainfall;
(c) whether there is funding for climate-resilient seed varieties and irrigation, if so, the details thereof;
(d) whether district level disaster mitigation plans are being integrated with farming needs; and
(e) the steps taken to educate farmers on climate-smart agriculture?

ANSWER

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE
कृषि एवं किसान कल्याण राज्य मंत्री (SHRI RAM NATH THAKUR)

(a) to (c): Indian Council of Agricultural Research (ICAR) is implementing a project, National Innovations in Climate Resilient Agriculture (NICRA) that studies the impact of climate change on agriculture including crops, livestock, horticulture and fisheries. It also develops and promotes climate resilient technologies, which helps the regions prone to extreme weather conditions like droughts, floods, frost, heat waves, etc. Under NICRA, risk and vulnerability assessment of agriculture to climate change has been carried out at district-level for 651 predominantly agricultural districts as per Intergovernmental Panel on Climate Change (IPCC) protocols. Out of 310 districts identified as vulnerable, 109 districts have been categorized as 'very high' and 201 districts as 'highly' vulnerable. Further to address the impact of climate change, ICAR has released 2900 varieties during last 10 years (2014-2024). Out of these 2661 varieties are tolerant to one or more biotic and/or abiotic stresses.

Government of India is implementing Sub Mission on Seeds and Planting Materials (SMSP) from the year 2014-15 to promote production and multiplication of quality seeds of agricultural crops to make availability of required quantities of seed to farmers across the country. During 2024-25, an amount of Rs. 270.90 crore was allocated under the seed scheme of SMSP (now merged with NFSNM) wherein an amount of Rs. 206.86 crore had been released to the States/UTs out of which 141.46 crore has been provided under Seed Village Programme. Government is also implementing Per Drop More Crop (PDMC) in which financial assistance @ 55% for small and marginal farmers and @ 45% for other farmers for installation drip and sprinkler irrigation systems. Since 2015–16, the Central Government has released a total financial assistance of ₹24,789.16 crore, covering an area of 102.56 lakh hectares under micro-irrigation as on 30.06.2025.

(d) & (e): ICAR also has prepared District Agriculture Contingency Plans for these 651 districts to address weather aberrations and recommended location specific climate resilient crops and varieties and management practices. For enhancing the resilience and adaptive capacity of farmers to climate variability, the concept of “Climate Resilient Villages” (CRVs) has been initiated under NICRA. Location-specific climate resilient technologies have been demonstrated in 448 CRVs of 151 climatically vulnerable districts covering 28 states / UTs for adoption by farmers. Climate resilient technologies such as system of rice intensification, aerobic rice, direct seeding of rice, zero till wheat sowing, cultivation of climate resilient varieties tolerant to extreme weather conditions such as drought and heat; in-situ incorporation of rice residues; etc. have been developed and demonstrated. Capacity building for establishing village level seed banks and community nurseries is being undertaken under NICRA project that enable availability of seeds in the adopted villages. Drought and flood tolerant climate-resilient varieties of rice, wheat, soybean, mustard, chickpea, sorghum, gram, and foxtail millet were demonstrated in several NICRA villages. Besides, training programmes are conducted under Agricultural Technology Management Agency (ATMA) on various issues of agricultural practices including the awareness of using quality seeds among the farmers.

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