

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURAL RESEARCH & EDUCATION

RAJYA SABHA
UNSTARRED QUESTION NO- 1286
ANSWERED ON- 02/08/2024

R&D FOR CLIMATE-RESILIENT CROP TECHNOLOGIES

1286. SHRI SUDHANSHU TRIVEDI:

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

- (a) the steps that have been taken for investing in Research and Development (R&D) of climate-resilient crop technologies;
- (b) the initiatives taken for developing and distributing seeds that thrive in unpredictable weather patterns;
- (c) the measures being taken for research in drought-resistant varieties of staple crops like rice and wheat; and
- (d) whether Government have drawn any plan to make Atmanirbhar Bharat in the production of pulses and oilseeds in the next five years?

ANSWER

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE
(SHRI BHAGIRATH CHOUDHARY)

(a) to (c): Indian Council of Agricultural Research (ICAR) is leading the National Agricultural Research System (NARS) which include 113 ICAR Research Institutes, 76 Agricultural Universities (including 3 Central Agricultural Universities and 4 Universities with Agriculture Faculty), 74 All India Coordinated Research Projects/ All India Network Projects and other special projects. NARS is now focussing on development of high yielding and climate resilient varieties with improved nutritional quality. During 15th Financial Cycle the total scheme budget of ICAR is Rs. 13034.26 crores where development of climate resilient technologies is a major thrust area of all schemes.

‘National Innovations in Climate Resilient Agriculture (NICRA)’, a flagship project of ICAR launched in 2011 is working on development of climate resilient technologies. Under this project, District Agriculture Contingency Plans (DACPs) for 650 districts in India covering extreme weather aberrations like drought (early, mid and late-season droughts), floods, unseasonal rains, heat wave, cold wave, frost, hailstorm, cyclone etc. and recommended location specific climate resilient crops, varieties and management practices for use by the State departments. In addition, location-specific climate resilient technologies have been tested and validated at on-farm sites of one village cluster from each of the 151 climatically vulnerable districts for adoption by the farmers through farmer participatory approach.

During 2014-24, total 2593 varieties of different field crops have been released of which 2177 varieties are having climate resilience trait(s) for one or more biotic and abiotic stresses. Out of which, 445 varieties are extreme climate resilient including 249 drought/ less water requiring varieties including 57 of rice and 26 of wheat. To ensure the quality seed availability of oilseeds and pulses, total 150 seeds hubs in case of pulses and 35 seed hubs in oilseeds have been established in the country. During last five years 80204.7 q breeder seed of pulses and 153704.3 breeder seed of oilseeds has been produced and supplied to the various public and private sector seed producing agencies for its downstream multiplication to foundation and certified seed.

(d): Plan has been drawn for making Atmanirbhar Bharat in oilseeds and pulses through: i) Area Expansion under Oilseeds and Pulses including new avenues, crop diversification, exploring non-traditional areas and enhancing cropping intensity. ii) Improving Oilseeds Productivity through high yielding hybrids/varieties and their seed availability, better crop, soil and moisture management and iii) Policy Support through ensured procurement, development of value chain and infrastructure support (Irrigation, processing, storage etc.).

National Food Security Mission on Oilseeds and Pulses (NFSM-OS and Pulses) initiated in 2018-19 in 26 States and three Union Territories in case of oilseeds, and 28 States and two Union Territories in case of pulses is promoting the oilseeds and pulses production in the country. A new scheme namely, National Mission on Edible Oil-Oil Palm (NMOEO-OP) is implemented since 2021-22 for increasing coverage of Oil Palm and to enhance the availability of vegetable oils by boosting productivity and expanding cultivated areas.

Under NFSM-Pulses and Oilseeds, the incentives are provided to the farmers, through the States/Union Territories, on crop production and protection technologies, cropping system based demonstrations, production & distribution of certified seeds of newly released varieties/hybrids, Integrated Nutrient and Pest Management techniques, improved farm implements/tools/resource conservation machineries, water saving devices, capacity building of farmers through trainings during cropping season etc. Initiatives like distribution of seed minikits of newer varieties of pulses, production of quality seed, creation of seed hubs at Indian Council of Agricultural Research (ICAR) Institutes / State Agricultural Universities (SAUs) / Krishi Vigyan Kendra (KVKs), technological demonstration by KVKs have also been included under NFSM for enhancing pulses and oilseeds production and productivity.
