

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

**LOK SABHA**  
**UNSTARRED QUESTION NO. 2375**  
TO BE ANSWERED ON 10<sup>TH</sup> DECEMBER, 2024

**DEVELOPMENT OF CLIMATE RESISTANT CROP VARIETIES**

2375. SHRI PUTTA MAHESH KUMAR:

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

- (a) whether the Government has initiated/conducted/carried out any research/study/survey into the development of climate resistant crop varieties;
- (b) if so, the details regarding the crop varieties that have been developed during the last five years, especially the major crops;
- (c) the details of total amount of funding allocated and utilised for the purposes of research, development and production of such crop varieties during the last five years;
- (d) the details of the distribution of seed/seedlings of such crops in the country, State-wise, especially to Andhra Pradesh during the last five years;
- (e) whether the Government sells such seeds/seedlings in a subsidised manner for all farmers, if so, the details thereof especially in Andhra Pradesh; and
- (f) whether the Government has conducted any promotional activities to raise awareness of climate resistant crop varieties, if so, the details thereof?

**ANSWER**

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE  
कृषि और किसान कल्याण राज्य मंत्री (SHRI BHAGIRATH CHOUDHARY)

(a) & (b): National Agricultural Research System (NARS) under the aegis of Indian Council of Agricultural Research (ICAR) including the State and Central Agricultural Universities (SAU/CAU), and ICAR Institutes, are continuously engaged in the research for development of high yielding and biotic/ abiotic stress resistant region-specific field crop varieties and as a result, a total of 2005 varieties have been released during the last five years (2019-20 to 2023-24) and the current year. Out of these 2005 varieties, 1840 field crop varieties are of climate resilient.

These 1840 climate resilient have 329 varieties with resilience for extreme abiotic stresses including drought/moisture stress/ water stress tolerance (183), flood/ water submergence/ water logging tolerance (49), salinity/ alkalinity/ sodic soils tolerance (51), heat stress/ high temperature tolerance (33), cold/ frost/ winter chilling tolerance (13) and have been developed using the precision phenotyping tools.

(c): Since 2019-20 to 2023-24; total budget of Rs. 3254.01 crores has been utilized for development of high yielding, climate resilient and improved quality varieties; and improved production and protection technologies. Rs. 930.22 crores have been allocated for the current financial year.

(d) & (e): During the last five years (2019-20 to 2023-24), 542891.9 q breeder seed of more than 2000 varieties of 60 field crops have been produced as against an indent of 372147.4 q and supplied to various public and private seed producing agencies for its faster dissemination through downstream multiplication to foundation and certified seed which include more than 80% seed of climate resilient varieties including resistance/ tolerance to various biotic and/or abiotic stresses.

Further, total of 2122.86 lakh q of certified/ quality seed distribution (including climate resilient crop varieties) across the country has been done during the last five years for the benefit of farming community.

In the state of Andhra Pradesh, ANGRAU, Guntur is involved in production of breeder and quality seed under All India Coordinated Research Project on Seed (Crops). During the last five years, 1,930.4 quintals of breeder seeds of climate resistant crop varieties has been produced against the indent of 786.6 quintals in Andhra Pradesh.

Under the Seed Village programme, an assistance of 50% for distribution of cereals and 60% for distribution of pulses, oilseeds and green manure crops including climate resistant crops' varieties is available for farmers of the country including Andhra Pradesh.

(f): Government conducts the large-scale demonstrations of climate resilient varieties through Front Line Demonstrations conducted by All India Coordinated Research Projects; Cluster Front Line Demonstrations by the Krishi Vigyan Kendras (KVKs); Mini Kits by the Department of Agriculture of different states.

The flagship network project on 'National Innovations in Climate Resilient Agriculture (NICRA)' launched during 2011, also focusses on climate resilient technological innovations including climate resilient varieties. Climate Resilient Village (CRV) have been developed under this project and location specific Climate Resilient Technologies (CRTs) have been demonstrated in 446 villages covering 2,13,421 households and 2,35,874 ha area and Village climate risk management committees (VCRMC), custom hiring centers, seed and fodder production systems and community nurseries enabled wider adoption of climate resilient technologies. In addition, the government has initiated several schemes under National Mission on Sustainable Agriculture (NMSA) to deal with the adverse climate situations in the agriculture sector.

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