

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

**RAJYA SABHA**  
**UNSTARRED QUESTION NO-3209**  
ANSWERED ON- 28/03/2025

**STEPS TO ADDRESS SOIL SALINITY IN BIHAR**

3209. DR. BHIM SINGH:

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

- (a) the measures implemented by the Indian Council of Agricultural Research - Central Soil Salinity Research Institute (ICAR-CSSRI) in collaboration with Government of Bihar to address the issue of soil salinity affecting agricultural productivity; and
- (b) the measures taken by ICAR in collaboration with Government of Bihar to promote agricultural activities and improve crop yield in the State, the details thereof, district-wise?

**ANSWER**

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

(a): Indian Council of Agricultural Research– Central Soil Salinity Research Institute (ICAR – CSSRI) in collaboration with Dr. Rajendra Prasad Central Agricultural University (RPCAU), Pusa, diagnosed and mapped salt affected soils of Bihar. In order to improve the agricultural productivity technologies such as salt-tolerant varieties of paddy (CSR 46), wheat (KRL 210), halophilic microbial formulations (Halo-Mix), pressmud and PGPR-enriched manure, and water hyacinth compost were implemented in Samastipur, Muzaffarpur and Vaishali districts of Bihar.

(b): ICAR (Institutes, regional station, Krishi Vigyan Kendras (KVKs) and All India Coordinated Research Projects) in collaboration with the Government of Bihar has developed and demonstrated various technologies related to natural resource management, crop and fruit production, fisheries production and management for improving the agricultural production and productivity which are as follows;

- Technology for rice-fallow management, efficient alternative cropping system, Integrated Farming System model comprising crop-livestock-fish-secondary income generating activities for irrigated eco-system, Rice-fish-vegetable farming system for low-land ecosystems have been developed and promoted.
- Under ICAR flagship network project NICRA, climate resilient agricultural technologies are promoted in 11 districts viz., Bhagalpur, Buxar, West Champaran, Darbhanga, Kishanganj, Lakhisarai, Nalanda, Saharsa, Sitamarhi, Siwan and Supaul and are shared with the State Government for further upscaling and convergence with various on-going schemes in the State.
- Soil type wise crop plans have been prepared and given to Bihar Watershed Development Society (BWDS), Dept. of Agriculture, Govt. of Bihar under PMKSY2.0 for 89 villages of Gaya district.
- Standardized groundwater recharge-cum-drainage structure and solar tree-based irrigation system for the state of Bihar.

- Developed high yielding makhana, thornless water chestnut varieties and makhana-cum-fish integrated farming system model. Equipment/ machines for makhana processing and value-added products was developed and commercialized.
- ICAR developed and disseminated 45 horticultural crops technologies through trainings, front line demonstrations, exhibitions, Kisan Mela/ Gosthi, social media, etc. Nine high-yielding, short-duration, and disease-resistant varieties of different spice crops (2 in turmeric, 3 in coriander, and 1 each in fenugreek, fennel, ajwain, and nigella); three new tuber crops varieties (one each in arvi, mishrikand and sakarkand) and twelve flower varieties (4 in gladiolus, 3 in marigold and 5 in tuberose) have been developed and released for the benefit of Bihar farmers.
- ICAR-Central Institute for Freshwater Aquaculture provided support to the hatcheries in Nalanda, Champaran, Mujaffarpur and Sitamarhi district for producing 12.5 crore quality carp seed. Also stoked over 19.0 lakh advance fingerlings in Ganga River at Patna, Buxar, Sultanganj, Munger and Bhagalpur for stock enhancement.
- ICAR has set up 44 KVKs in Bihar for promotion of new technologies of agriculture and allied sectors through technology assessment, demonstration and capacity development among the state extension functionaries and farmers. The KVKs in the State of Bihar have trained 5.90 lakh farmers on climate resilient agriculture practices in the last 5 years.

\*\*\*\*\*