

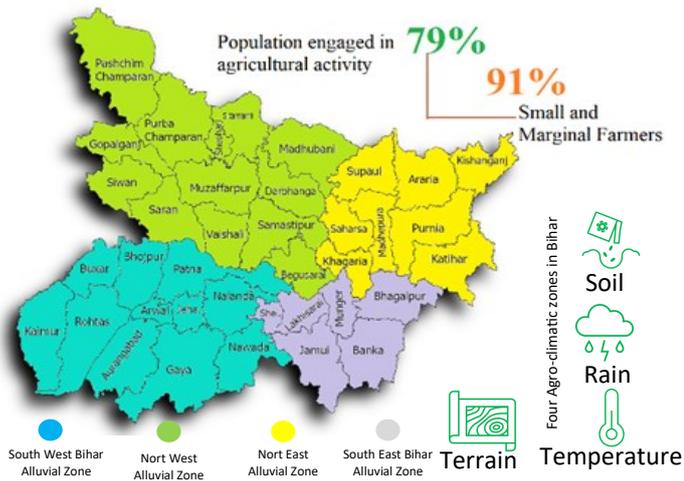


CLIMATE RESILIENT AGRICULTURE PROGRAM



INTRODUCTION

Agriculture is the backbone of Bihar's economy, 79% of the state's population is involved in agricultural activities, which is more than the national average. According to Agricultural Census, 2010- 11, Ministry of Agriculture, Government of India around 91% of farmers belong to the small and marginal category. Agriculture is the major feeder of rural economy remains to define both the potentialities and limitations to the progress of Bihar.



To help the small and marginal farmers cope with the changing climatic condition and provide stability to the agricultural sector in the state and increase income of these farmers, the government of Bihar launched Climate Resilient agriculture program in 8 districts as pilot project in 2019.



Later in 2020, based on the outcomes of the pilot project, the Honorable Chief Minister of Bihar, Shri Nitish Kumar launched the Climate Resilient Agriculture Program (CRA Program) in all 38 districts of Bihar.

The said program was prepared after consultation with scientists from prestigious institutions like:-

BISA	CIMMYT	BAU	RPCAU	ICAR RCER
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KEY STAKEHOLDERS

CRA Program is a multi-stakeholder and multi-disciplinary initiative where International, National and Subnational institutions are involved. The partnering institutions under the CRA Program are:

Institution	Role
Department of Agriculture, Government of Bihar	Funding Agency
BISA-CIMMYT, Pusa, Bihar (International)	Implementing Partner
ICAR-RCER, Patna, Bihar (National)	Implementing Partner
DRPCA, Pusa, Bihar (National)	Implementing Partner
BAU, Sabour, Bihar (State)	Implementing Partner
International Rice Research Institute (IRRI)	Expert Agency for Crop Residue Management
International Potato Center (CIP), Lima, Peru (International)	Expert Agency for Potato Seed Production

SCOPE

Geographical: 5 villages in each 38 districts (approx. 60000 demonstrations per year)

Financial: INR 299.14 Crore (USD 37.59 million) till 2024-2025.

Capacity building: 150000 per year

CRA PROGRAM TIMELINE



2010-2011
Program on Conservation Agriculture organized by BISA and demo farm set up in RPCAU



DG CIMMYT Dr. Martin Kropff and other CIMMYT scientist interacted with Hon'ble Chief Minister Nitish Kumar



11 March 2016
Honorable Chief Minister, Shri Nitish Kumar visited BISA farm at PUSA



November 2019
Hon'ble CM meeting with Bill Gates on climate change



CRA program launched in 5 villages each of 8 districts (Nawada, Nalanda, Munger, Banka, Bhagalpur, Madhubani, Gaya and Khagaria)

December 2020
CRA program scaled up to all the 38 districts in Bihar (190 villages)

THE PROCESS

One CRA village was established in 8 districts as a Project Hub. The program is being upscaled to 190 villages of 38 district (five villages in each district). Based on the existing climatic situations, different ecologies (low, mid and upland soils) and available resources, 14 different cropping systems have been identified to be demonstrated in all 38 districts of Bihar. In each district, one long-term field experiment having 8-10 combinations of suitable different cropping systems was established at KVK farms and in each district 5 villages were identified to demonstrate the suitable climate resilient cropping systems.

Total 38 Project Hubs have been established, one in each of the identified districts as below:

18 Project Hubs	11 Project Hubs	7 Project Hubs	2 Project Hubs	Overall project Guidance
Managed by	Managed by	Managed by	Managed by	Steering Committee headed by Secretary Agriculture
BAU	RPCAU	CIMMYT-BISA	ICAR-RCER	

TECHNOLOGIES FOR CROPPING SYSTEMS OPTIMIZATION



Suitable planting time



Suitable variety



Suitable planting method



Water management



Nutrient management



Crop residue management



Farm machinery

ACTIVITIES UNDER CRA PROGRAM



Baseline survey and village development plan



Demonstration of climate resilient technology



Crop diversification



Precision input management



Cropping system optimization



Crop residue management



Potato seed production



Farm mechanization



Capacity Building



Crop calendar based demonstration

Enhanced Productivity and Profitability through climate resilient Cropping Systems



Increased Adoption Rate through Demonstrations



Reduction in Crop Loss due to Extreme Weather events



Contribution towards Net Zero Emissions & NDC Goals



Improved Soil Organics



IMPACTS OF CRA INITIATIVES