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CLIMATE-RESILIENT AGRICULTURE (CRA) IN INDIA-II

Practical Implementation and Support

Key Outcomes of Climate-Resilient Agriculture (CRA)

ECONOMIC

Improved and stable crop yields

Diversified and enhanced farmer incomes

FOOD & NUTRITION SECURITY

Promotion of nutrient-rich crops (millets, pulses, organic vegetables, fruits, produce)

Kitchen gardens or Community-gardens for household and community nutrition

RESOURCE EFFICIENCY

Improved water-use efficiency

Soil fertility restoration

ENVIRONMENTAL BENEFITS

Reduced emissions and chemical use

Biodiversity conservation, which in turn aids farm fertility and pest control

Priority Practices for Promotion

Direct Seeded Rice (DSR), Climate-Adapted Seed Varieties, quick-maturing varieties for short-growing seasons

Crop diversification, multiple cropping and natural farming practices

Rainwater harvesting structures (farm ponds), Community Watershed Management

Ex-situ methods: Check dams, percolation tanks, and reservoirs.

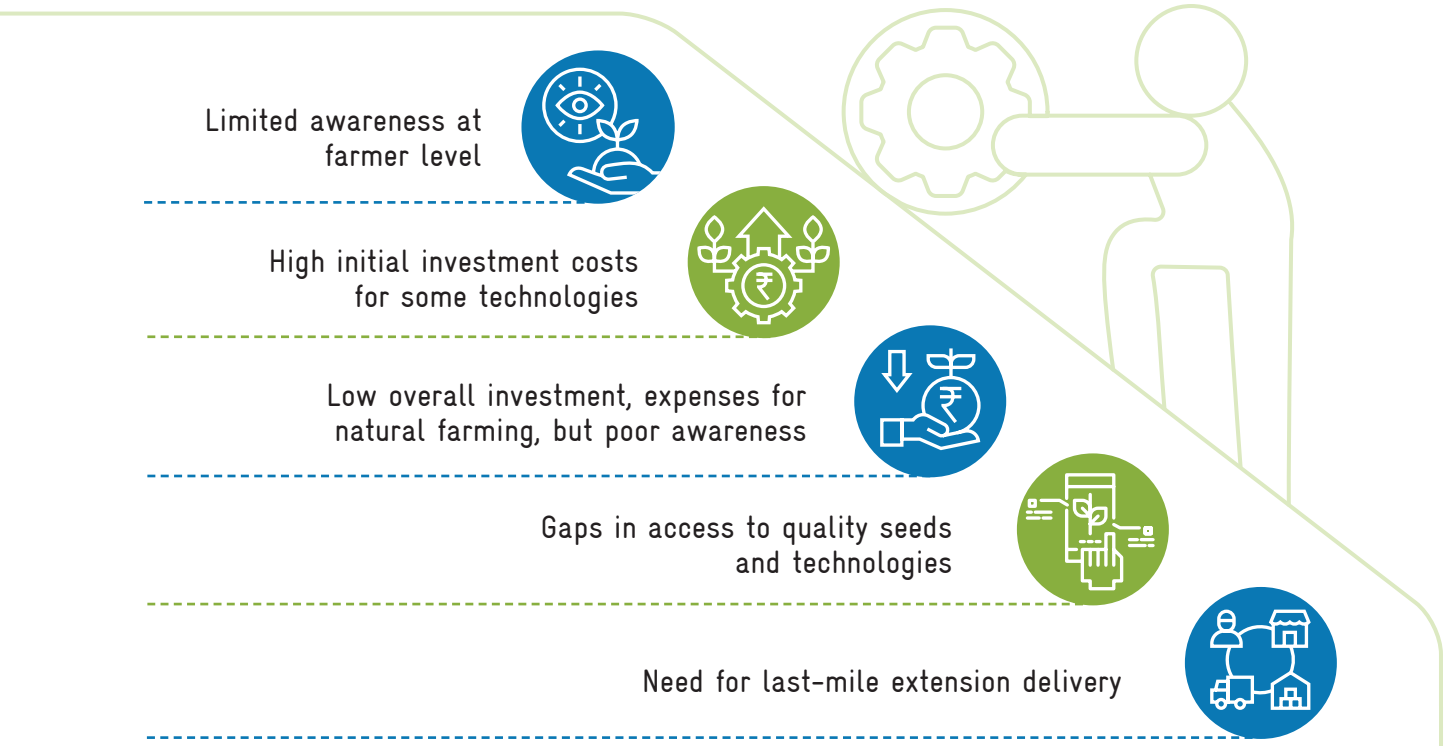
In-situ methods: Contour bunding, terrace building, and gully plugging.

Biological: Afforestation in catchment areas, around villages, habitations, agro-forestry and protection of natural pasturelands

Integrated farming and nutrient management systems

Livestock integration and manure, farm-waste recycling or use

Key Implementation Challenges



Major Government Initiatives

NICRA (National Initiative on Climate Resilient Agriculture): Climate-resilient technology demonstration at village-level

District Agriculture Contingency Plans (DACPs): Climate risk planning at district-level

National Mission for Sustainable Agriculture (NMSA): Sustainable agriculture mission to enhance productivity, soil health, and water use efficiency

PMKSY (Per Drop More Crop): Enhances water efficiency under the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)

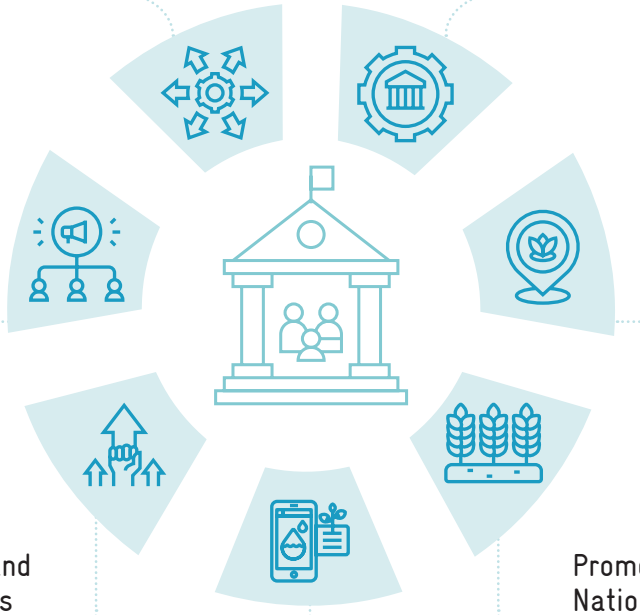
Seed Village Program (Beej Gram Yojana): Under the Sub-Mission on Seeds and Planting Materials (SMSP), strengthens quality seed production, distribution, certification , while improving farm-saved seeds

Role of Government Functionaries

Enable convergence across departments, develop local links with non-profits building rural, climate change resilience and initiatives such as Andhra Pradesh Community-managed Natural Farming (APCNF) and others, working in different states

Policy & Institutional Support: Understand NICRA components and help implement District Agriculture Contingency Plans (DACPs)

Support capacity building and awareness campaigns. Guide local groups on technology, sustainable resource-use, to set rules against open grazing, unregulated tree cutting



Promote Regional Crop Tailoring, location-specific CRA practices and Per Drop More Crop

Strengthen farmer institutions (FPOs, SHGs, Community Watershed Management Societies) to develop natural farming, and integrated farming systems linked to markets

Promote activities under National Millet Mission in rainfed-regions

Facilitate access to schemes, seeds, watershed and technologies

Final Takeaway- Seed the Change

Climate-Resilient Agriculture is essential for ensuring sustainable productivity, farmer resilience, and long-term food security in India.

FROM POLICY TO PLATE: BUILD CLIMATE-RESILIENT FARMING

Every suitable field intervention contributes to national climate resilience.

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