



# Odisha Agriculture Drought Mitigation Programme

Building climate-resilient farming systems through science, community action and convergence. The programme is anchored by the **Department of Agriculture and Farmers' Empowerment (DAFE), Government of Odisha as Nodal Agency**, with implementation led by **ICRISAT** and co-led by **ICAR-CRIDA** and **IRRI**.

## From Drought-Prone Landscapes to Resilient Agriculture Clusters

A landscape-first programme integrating soil, water, crops, livestock, fish livelihoods, nutrition, institutions and digital monitoring.

Nuapada

Nabarangpur

Mayurbhanj

### Why this Initiative Matters

Rainfed farming systems in Odisha are increasingly affected by drought, dry spells, soil degradation and water scarcity, reducing productivity and livelihood security.

- Dry spells and climate variability
- Water scarcity and degraded resources
- Low and unstable farm productivity
- Fragmented interventions
- Vulnerability exacerbates high migration

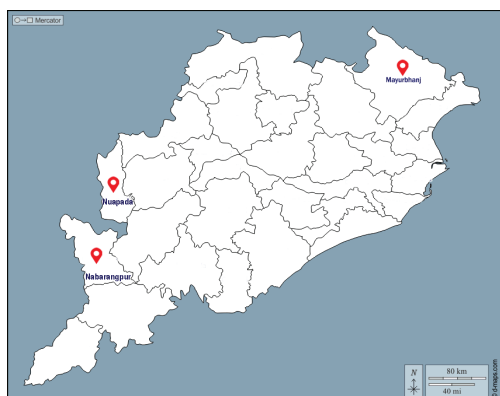
### About OADMP

A science-led, community-driven drought mitigation programme using Resilient Agriculture Village Clusters to deliver integrated interventions from farm-landscape-value chain scale.

**3**  
Target districts

**~24k**  
Households targeted

**50k+**  
Farmers expected to benefit



Cluster-based implementation in selected drought-prone landscapes of Odisha.



### Implementation Approach

A science-led, community-driven drought mitigation programme using Resilient Agriculture Village Clusters to deliver integrated interventions from farm-landscape value chain scale.



#### Sustainable Farming Systems

Climate-resilient crops, scale appropriate mechanization, diversified production, regenerative practices and integrated crop–livestock–tree approaches.



#### Soil & Water Management

Soil conservation, moisture retention, water harvesting and groundwater recharge, participatory governance.



#### Livelihoods & Markets

SHGs, FPOs, seed enterprises, processing, value addition, sustainable business models and market linkages.

Local capacity strengthening and convergence across all intervention area





# What Makes OADMP Innovative?



## 1. Landscape-Based Transformation

Saturates selected clusters with integrated interventions across soil, water, crops, livestock, fish, institutions and markets.



## 2. Science Driven, Community Led Planning

Uses land resource inventories, hydrological assessments, participatory multi dimensional assessment, social inclusion at all stages and field diagnostics and systems thinking for context-specific solutions and action.



## 3. Convergence-Driven Implementation

Align schemes, technical expertise, community institutions and financial resources for scale and efficiency.



## 4. Digital & AI-Enabled Monitoring

Uses geo-tagged dashboards, analytics, automated reporting and alerts to support adaptive decision-making.

## Integrated Monitoring & Decision Support System



Tracks activities, convergence, field progress and outcome indicators; supports data summaries, alerts and evidence-based programme management.

## Core Intervention Areas

### Natural Resource Systems

- Soil and water conservation
- Farm ponds and recharge structures
- Stream/nala rejuvenation
- In-situ moisture conservation
- Waste water recycling
- Agroforestry

### Enterprises and Value Chains

- Seed banks and seed enterprises
- Custom hiring centers
- Processing and value addition
- SHG/FPO enterprise linkages
- Community led nurseries
- Sustainable business models

### Climate-Resilient Agriculture

- Drought-resilient crops and varieties
- Climate informed agro-advisories
- Direct seeded and aerobic rice where suitable
- Pulses, millets, oilseeds and fodder
- Integrated crop-livestock systems
- Resource use efficiency
- Regenerative practices

### Nutrition & Local Food Systems

- Household and community nutri-gardens
- Millet-based food systems
- Nutrition-sensitive agriculture
- Diversified local diets

Converging existing public investments and project interventions together for integrated drought resilience

## Expected Outcomes

- Improved productivity and stability
- Improved soil and water management
- Stronger SHGs, FPOs and institutions
- Increased income of farmers
- Reduced drought vulnerability
- Diversified livelihoods and nutrition security
- Evidence-based model for scaling
- Create local jobs and reduce distress migration

## Project PIs and Technical Leads

**Dr. Shalander Kumar**  
ICRISAT

**Dr. Gajanan Sawargaonkar**  
ICRISAT

**Dr. Venkatesh**  
ICAR-CRIDA

**Dr. Ramesh Singh**  
ICRISAT

**Dr. K.V. Rao**  
ICAR-CRIDA

**Dr. Swati Nayak**  
IRRI

