ISSCA

Scalable Technology and Innovations



Name of Solution:

District Level Agriculture Contingency and Drought Proofing Plan for Mitigation and adaptation to climate change

Submitter: ICAR

Solution Overview: What is it, and what problem does it solve? Brief 2–3 sentence description.

The District Agricultural Contingency Plans (DACP) are to be ready reckoners for line departments, and it's a policy planner containing all information and guidance needed to manage various weather-related contingent situations such as droughts, floods, cyclones, hailstorms, hot weather, frost, etc., not only for agricultural crops but also for animal husbandry and fisheries. The DACPs are useful for preparedness and real time interventions to reduce losses to farmers due to weather aberrations.

Key Features & Benefits: Main components and why it is useful? Bullet points summarizing methods, tools, and value added.

- CRIDA developed a draft template along with guidelines for preparing the district plans in a uniform manner across India.
- In consultation with all stakeholders representing diverse agro-ecological situations, a contingency template was designed toward district as an implementing unit with several possible contingencies and adaptive strategies based on available technological options.
- The first part provides information on agricultural profile of the district
- The second part provides the detailed strategies for weather related contingencies anticipated in crops/cropping systems such as late monsoon; onset of variable duration; inter-droughts; midseason monsoon breaks resulting in drought both in rainfed or irrigated situations; and adaptive technological strategies for weather related extreme events.
- The template was then filled at the district level by multidisciplinary teams drawing information from all available sources.

- The drafts were then sent to the nodal officer of the concerned ICAR institute, and then to CRIDA for scrutiny and vetting.
- At present, 650 district agriculture contingency plans are prepared and are hosted on ICAR/DAC websites.
- To make use of plans on near real-time basis, interface meetings are organized with concerned line departments of the State Governments before the commencement of rainy season.
- It was found that implementation of DACPs helped in reducing agricultural losses due to weather aberrations considerably.

Where It Works and Where It Can Work: Existing and potential target regions, agroecologies, or farming systems. Include examples if available.

- Though climate change impacts are observed all over the world, developing countries like India and South Asia are more vulnerable in view of high population dependent on farming and low risk bearing capacities.
- DACPs have been prepared for all the rural districts of India. Similar contingency plans can be prepared for particularly for countries such as Bangladesh, Indonesia, Malaysia, Myanmar, Vietnam and African countries to better address weather aberrations and enhance adaptation potential of agriculture sector.

Evidence & Impact: What results has it shown? Stats, pilot outcomes, or testimonials

- The impact of contingency plans implementation in farmers' fields on crop yields particularly during the years of weather aberrations like drought, seasonal dry spells, floods, etc. has been documented:
- Srinivasarao, Ch., Rao, K.V., Gopinath, K.A.,
 Prasad, Y.G., Arunachalam, A., Ramana, D.B.V.,