Implemented by

In cooperation with

Innovative Climate Risk Insurance in Rural Areas of India (ICRI)

Project name	Innovative Climate Risk Insurance in Rural Areas of India (ICRI)
Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)
Lead executing agency	Ministry of Environment, Forest and Climate Change (MoEFCC), Government of India
Project Region	Tamil Nadu and Karnataka
Implementation Partners	• Tamil Nadu Agricultural University (TNAU) • Department of Agriculture, Tamil Nadu • Department of Environment, Science and Technology, Himachal Pradesh
Duration	09/2020 – 09/2023

Context

Increasing frequency and intensity of extreme climate-related events leading to extreme weather in India have resulted in economic losses upward of USD 68 billion in 2019 alone (Global Climate Risk Index, 2021). The Intergovernmental Panel on Climate Change – IPCC's Climate Risk Management (CRM) framework focuses on climate risk as a function of exposure, hazard, and vulnerability that is being further compounded by its non-linear proliferation. The adverse effects of climate risks in the form of loss of livelihood, business disruptions, capital investment losses, and infrastructure breakdown, to name a few, are already visible across several socio-economic groups, industries, and regions.

A range of mitigation and adaptation measures have been proposed to address climate risks. Insurance, as a market-based financial instrument, has emerged as a viable risk transfer mechanism and a key component of adaptation measures as outlined in Article 8 of the 2015 UN Paris Agreement.

Objective

Climate Risk Insurance (CRI) was identified as a potential approach for climate risk transfer in key sectors at the national level. The ICRI mission acknowledges this subsequent integration in the planning and/or implementation of selected programmes at the state level for the enhanced resilience of vulnerable target groups in rural areas of India.

Approach

The key areas for project support at the national level and the state level are as follows:

At national level, a **Climate Risk Dialogue Platform** will be set up with the Ministry of Environment, Forest & Climate Change (MoEFCC), Government of India to provide a space for main-streaming CRI, and for fostering initiatives at national level as well as stimulating international exchange.

At state level, provide **capacity-building** support for nodal agencies, selected departments, and research institutions to integrate CRI in planning and implementation in selected states.

Use of Drone in Climate Resilient Agricultural Practices

Soil Mapping Exercise for the Generation of Real-Time Crop Statistics

Validation exercise of Remote Sensing Data by Crop Cutting Experiment

Photos : © GIZ/ICRI

Activities

- **Feasibility study** and ground-truthing: Conducting a feasibility study for CRI in the context of Disaster Risk Management in India and developing proposals for intervention areas.
- **Facilitating interaction** between representatives of the Government of India and global initiatives, such as the *InsuResilience Global Partnership*, the *Global Commission on Adaptation*, the *Coalition for Disaster Resilient Infrastructure*, and others focusing on climate risk insurance and fostering the exchange of best practices.
- Developing a **Climate Risk Dialogue Platform** to connect and support stakeholders and farmers on climate risk insurance and climate related agricultural disasters.
- Supporting the **integration of CRI approaches** at the subnational level in selected states.
- **Building capacity** and raising **awareness** with a focus on climate risk transfer instruments like CRI in selected states.
- **Profiling vulnerability to climate risks** and extending support for policy development in the context of vulnerability in selected states.
- Supporting the implementation of India's crop insurance scheme Pradhan Mantri Fasal Bima Yojana (PMFBY) with remote sensing technology in cooperation with the Tamil Nadu Agricultural University (TNAU): **remote sensing, GIS, drone, and mobile application**.
- Creating a **spatial platform** and mobile application to transfer knowledge on crops, soil, water, and climate for effective decision making.
- Developing and piloting **Smart Sampling Plan** for **Crop Cutting Experiments (CCEs)**.
- Pilot study to assess the **impact of climate change on temporal soil properties** in agricultural land over years, to sustain soil and crop productivity.

Women farmers using Drip Irrigation for watering the field
Photos : © GIZ/ICRI

Contributions to the 2030 Agenda

The ICRI project contributes to the Sustainable Development Goal (SDG) 13: Climate Action and Targets 13.1, 13.2, and 13.3 with its focus on awareness raising on climate change, building resilience and adaptive capacity of rural households. Additionally, it also contributes to SDG 2: Zero Hunger through climate-resilient practices and developing innovative technologies.

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Innovative Climate Risk Insurance in Rural Areas of India
A2/18, Safdarjung Enclave
New Delhi 110029
Phone +91 49 49 5353
Fax +91 49 49 5391
E: info@giz.de
www.giz.de/india

Responsible
Jochen Ramcke,
Head of Project, ICRI, GIZ India
Jochen.ramcke@giz.de

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