

Concept Note

Climate-resilient Agriculture- Practice, Policy, and Prospects

An International Review Workshop on Climate-resilience of the Primary Sector in the South Asian Context

Introduction

Agriculture and allied sectors in South Asia are under increasing stress from the accelerating impacts of climate change. From recurring floods and prolonged droughts to salinization and erratic rainfall patterns, the agro-ecological landscapes of the region, particularly in coastal, deltaic, and inland vulnerable zones, are experiencing widespread disruptions to livelihood and food security. Despite an increasing focus on climate-resilient agriculture at the policy level, substantial gaps persist between planning frameworks and ground-level implementation throughout South Asia.

In response to these complex challenges, two complementary research projects have been independently implemented in the region over the past year. While differing in geographical extent and emphasis, both projects converge on the shared objective of strengthening climate resilience in agriculture by integrating science, practice, and policy.

Objectives of the Project

1. The ESPAR Project (**Enabling Stakeholder Participation and Applied Research in Policy Comprehension to Mainstream Climate-Resilient Agro-farming Practices**), funded by the Asia-Pacific Network for Global Change Research (APN), has been implemented by the South Asian Forum for Environment (SAFE) in collaboration with the Progyan Foundation for Research and Innovation (PFRI) across selected coastal regions of South Asia. The objectives are:
 - i. Assessment of the convergence and divergence between climate-resilient agricultural policies and actual farming practices in vulnerable coastal landscapes across selected countries of South Asia.
 - ii. Identification of key policy-practice gaps through empirical field research, and using the findings to develop a Multi-Attribute Decision Advice Matrix for strategic and context-specific policy recommendations.
 - iii. Documentation and promotion of resilient community farming practices in coastal Socio-Ecological Production Landscapes (SEPLs), and supporting their mainstreaming through country-specific white papers and operational guidelines.
 - iv. Facilitating regional knowledge sharing, institutional dialogue, and awareness building through in-person workshops, virtual webinars, and digital dissemination.
2. The second initiative (**Climate Resilient and Sustainable Livelihood for Communities through Interventions in Aspirational Districts of India**), funded by the IndusInd Bank, and implemented jointly by the Indian Institute of Technology Madras (IITM) and the Progyan Foundation for Research and Innovation (PFRI), focuses on field-based innovations in agroforestry and nature-based solutions to strengthen the climate resilience of marginal communities in inland India. The objectives are:
 - i. Developing and piloting climate-resilient intervention models tailored to specific climate vulnerabilities and agricultural needs in selected flood- and drought-prone districts.
 - ii. Utilizing SSP-RCP scenario frameworks to generate long-term climate vulnerability forecasts and align agro-ecological planning accordingly.
 - iii. Identifying institutional, socio-economic, and policy gaps hindering climate-resilient transitions, and offering convergent policy solutions through a Multi-Criteria Decision Analysis (MCDA).

- iv. Facilitating community participation, knowledge co-production, and capacity building to ensure sustainability and upscaling.
- v. Value ecosystem services to create carbon-leveraging apparatus towards sustainability.

Objectives of the Workshop

- i. To disseminate research findings, adaptive practices, and scenario-based planning tools emerging from both inland and coastal agro-ecological systems in South Asia.
- ii. To engage policy actors, practitioners, and researchers in a structured dialogue on the feasibility, institutional relevance, and integration potential of climate-resilient agricultural approaches.
- iii. To identify and reflect upon the multi-level technical, policy, institutional, and socio-political barriers that hinder the mainstreaming of climate-resilient strategies in the primary sector.
- iv. To foster regional and inter-sectoral collaboration to facilitate uptake, adaptation, and wider replication of context-specific good practices.
- v. To document and co-create pathways for convergence between scenario-based planning, nature-based field interventions, and regional policy reform.

Expected Outcomes from the Workshop

- i. Consolidated dissemination of project outputs, including research findings, agroforestry models, community-driven adaptations, and SSP–RCP scenario tools through presentations, knowledge materials, and expert feedback.
- ii. Stakeholder-informed evaluation of the practical feasibility and institutional applicability of climate-resilient approaches, gathered through structured dialogues and policy roundtables.
- iii. Systematic mapping of the technical, policy, institutional, and socio-political barriers affecting mainstreaming, based on multi-stakeholder perspectives across national and regional contexts.
- iv. Initiation of cross-country and cross-sectoral collaboration, with identified opportunities for the uptake, contextual adaptation, and scaling of effective practices.
- v. Co-development of strategic pathways that align scenario-based planning, field-level innovations, and regional policy priorities, to inform future programming and collaborative research.