PR06 / Shaping Just Climate Food Futures in India: Science, Policy, and Practice in Dialogue

Topic : Practice

Chair : Anita Pinheiro (WASSAN (Watershed Support Services and Activities Network))

GENERAL OBJECTIVES, RESEARCH QUESTIONS AND SCIENTIFIC RELEVANCE

Context

India's food systems are increasingly vulnerable to climate change, with marginalised communities disproportionately affected. These communities hold rich ecological knowledge and longstanding adaptive practices, offering significant potential to strengthen scientific assessments, policy design, and program implementation (FAO, 2018; IPCC, 2022). Yet, despite growing scientific recognition of differentiated climate impacts, gaps persist in translating this knowledge into locally grounded, actionable policy measures (Agarwal & Narain, 2021; IPCC, 2023).

These gaps are often linked to technocratic and standardised scientific approaches that may not fully reflect place-based realities or local knowledge central to climate adaptation and food system resilience (Cramer et al., 2018; Scoones, 2016; Nightingale et al., 2020). Scholars argue for rethinking the science–policy interface as a co-produced and participatory space where scientific and experiential knowledge are valued equally (Jasanoff, 2004; Tengö et al., 2014). Strengthening the interactions between science, policy, and practice is therefore essential for advancing just climate food futures in India that integrate adaptation, resilience, and mitigation in socially equitable ways.

Objective

This panel aims to examine the dynamics between scientific research, policy frameworks, and on-ground practice in India's climate-impacted food systems. It will explore how these domains can work together to strengthen climate adaptation, build resilience, and contribute to low-emission pathways while ensuring justice for communities living at the margins. Key questions include:

- How do dominant scientific approaches, policy frameworks, and development sector practices address—or overlook—justice considerations and local knowledge systems in climate adaptation, mitigation, and resilience planning?
- How can we facilitate and institutionalize a bi-directional flow of knowledge between scientists and communities to co-create inclusive, just, and climate-responsive adaptation, resilience, and mitigation strategies grounded in both scientific evidence and lived experience?
- What mechanisms exist to recognise and integrate local and Indigenous knowledge into climate adaptation, resilience-building, and low-emission (mitigation) strategies for food systems?
- How can scientists, policymakers, practitioners, and communities co-develop and co-design climate-responsive food system solutions at the local level?
- How are existing policy and legal structures in India enabling this process, and what structural changes are needed to overcome barriers and enhance justice-oriented outcomes?
- What does the current landscape reveal about gaps, disconnections, or missed opportunities in aligning science, policy, and practice for an inclusive and just food system transformation in the context of climate change—particularly for communities living at the margins?

The panel invites empirical studies and analytical examples from across India, encompassing diverse food systems, including but not limited to coastal, pastoral, tribal, and indigenous contexts. We aim to bring together perspectives from researchers, policymakers, and practitioners to examine how interconnections in science-policy-practice can be strengthened in order to ensure just food futures in the time of climate change.

Significance of the panel

The panel emphasizes the importance of integrating marginalized voices and local knowledge systems into decision-making processes, ensuring that climate adaptation and mitigation strategies are not only scientifically sound but also socially just and practically feasible. Ultimately, this panel aims to advance a

shared understanding of locally grounded, justice-centred approaches to India's climate-impacted food systems. The panel aims to generate practice-informed recommendations for strengthening science–policy–practice linkages and advancing climate-just food futures in India.

References

Cramer, L. K., Thornton, P. K., Dinesh, D., Jat, M. L., Khatri-Chhetri, A., Läderach, P. R., ... & Veeger, M. (2018). Lessons on bridging the science-policy divide for climate change action in developing countries.

FAO. (2018). The State of Food Security and Nutrition in the World: Building Climate Resilience for Food Security and Nutrition. Food and Agriculture Organization of the United Nations.

IPCC. (2022). Sixth Assessment Report, Working Group II: Impacts, Adaptation, and Vulnerability. Summary for Policymakers.

Jasanoff, S. (Ed.). (2004). States of knowledge. Abingdon, UK: Taylor & Francis.

Nightingale, A. J., Eriksen, S., Taylor, M., Forsyth, T., Pelling, M., Newsham, A., ... & Whitfield, S. (2020). Beyond technical fixes: Climate solutions and the great derangement. Climate and development, 12(4), 343-352.

Scoones, I. (2016). The politics of sustainability and development. Annual Review of Environment and Resources, 41(1), 293-319.

CALL FOR PAPERS

This panel invites contributions that critically and constructively examines the interactions between science, policy, and practice in shaping climate responses within India's food systems. We are particularly interested in work that foregrounds justice, equity, and inclusion, and explores how knowledge—scientific, experiential, and Indigenous—is produced, valued, mobilised, and contested in climate-impacted food system transitions.

Key questions include:

- How do dominant scientific approaches, policy frameworks, and development sector practices address—or overlook—justice considerations and local knowledge systems in climate adaptation, mitigation, and resilience planning?
- How can we facilitate and institutionalize a bi-directional flow of knowledge between scientists and communities to co-create inclusive, just, and climate-responsive adaptation, resilience, and mitigation strategies grounded in both scientific evidence and lived experience?
- What mechanisms exist to recognise and integrate local and indigenous and local knowledge into climate adaptation, resilience-building, and low-emission (mitigation) strategies for food systems?
- How can scientists, policymakers, practitioners, and communities co-develop and co-design climate-responsive food system solutions at the local level?
- How are existing policy and legal structures in India enabling this process, and what structural changes are needed to overcome barriers and enhance justice-oriented outcomes?
- What does the current landscape reveal about gaps, disconnections, or missed opportunities in aligning science, policy, and practice for an inclusive and just food system transformation in the context of climate change—particularly for communities living at the margins?

The panel invites empirical studies and analytical examples from across India, encompassing diverse food systems, including but not limited to coastal, pastoral, tribal, indigenous, and fisheries contexts. We aim to bring together perspectives from researchers, policymakers, and practitioners to examine how interconnections in science-policy-practice can be strengthened in order to ensure just food futures in the time of climate change.

Indicative Thematic Areas

Contributions may address one or more of the following themes:

- Science–policy–practice interfaces in climate adaptation, resilience, and mitigation
- Integration (or exclusion) of local and Indigenous knowledge in climate and food system governance
- Justice, equity, and power in climate knowledge production and policy design

- Co-production of knowledge and participatory approaches in food system transitions
- Institutional and legal frameworks shaping climate-responsive food systems in India
- Gaps, disconnections, and missed opportunities in aligning diverse knowledge systems with policy and practice

Types of Papers and Contributions

Submissions may include, but are not limited to:

- Empirical papers
- Policy-oriented analyses
- Case studies and field notes
- Intervention-focused contributions
- Policy briefs or practice notes
- Photo or video stories (original contribution)

Interdisciplinary and collaborative submissions involving researchers, practitioners, policymakers, and community actors are especially encouraged.

Submission Guidelines

- Abstracts should be no more than 500 words and clearly indicate the nature of the contribution, methodology or approach, and relevance to the panel theme.
- Extended abstracts (for accepted abstracts, including photo/video stories) should be a maximum of 1,500 words, reflecting the practice-oriented focus of the track.

    Extended abstracts and the final versions of the photo and video stories need to be submitted before the conference

The panel seeks to foster dialogue across research, policy, and practice, and to generate grounded insights and recommendations for advancing just climate food futures in India.