ICRISAT and CGIAR Champion Multifunctional Landscapes Approach at AERA Annual Conference

ICRISAT Session at AERA Annual Conference calls for systems thinking, governance reforms and stronger inter-departmental coordination

December 23, 2025

At the 33rd Annual Conference of the Agricultural Economics Research Association (AERA), held at ICAR–National Academy of Agricultural Research Management (ICAR-NAARM), Hyderabad, ICRISAT and CGIAR's Multifunctional Landscapes (MFL) Science Program convened a high-level session on "Scaling Pathway for Multifunctional Landscapes Approach for Transforming Agri-Food Systems."

The session brought together over 150 researchers, practitioners and policymakers to explore how landscape-scale, systems-based approaches can drive sustainable and equitable transformation of agri-food systems, particularly in dryland and rainfed regions.

Joining the inaugural session and the guest of honour, Dr Himanshu Pathak, Director General, ICRISAT, underscored the centrality of climate-resilient varieties, women's leadership, and innovation ecosystems to the future of agriculture.

Dr Himanshu Pathak, Director General, ICRISAT delivering his address at the 33rd AERA annual conference

"If we are serious about transforming agri-food systems, we must invest simultaneously in climate-resilient varieties, empowered women farmers and entrepreneurs, and vibrant agribusiness innovation ecosystems," said Dr Pathak.

MFL as a strategic shift for fragile regions

As convener of the session, Dr Shalander Kumar, Principal Scientist – Economist, ICRISAT, framed Multifunctional Landscapes as a necessary strategic shift for rainfed and ecologically fragile regions.

"In many drylands and rainfed areas, isolated interventions at farm or plot level have reached their limits," noted Dr Kumar.
"Multifunctional Landscapes is about integrated resource planning, multi-sectoral convergence and looking beyond hydrological and administrative boundaries. It compels us to design solutions at landscape and value-chain scale, not in silos."

Delivering the keynote address, Dr Ramesh Singh, Principal Scientist – Multifunctional Landscapes, ICRISAT, shared success stories from ICRISAT's

landscape work with farmers and governments in Odisha, Maharashtra and the Bundelkhand region of Uttar Pradesh.

Dr Singh emphasized "In Odisha, Maharashtra and Bundelkhand, we have seen that when communities, line departments, researchers and markets work together at landscape scale, we can simultaneously restore natural resources, increase productivity and enhance livelihoods."

Dr Ramesh Singh Delivering Keynote Address

Dr Shalander Kumar moderated the panel discussion

A call for a new cadre of 'systems professionals'

A high-level panel discussion co-chaired by Dr N. K. Tyagi, Agricultural Scientist Recruitment Board and Director, ICAR-Soil Salinity Research Institute, Karnal and Dr S.

S. Kalamkar, Director, Agro-Economic Research Center, Anand, Gujarat and moderated by Dr Shalander Kumar, ICRISAT called for a new cadre of systems professionals.

The panel comprising Dr K. H. Anantha, Principal Scientist, ICRISAT, Dr C. A. Ramarao, Principal Scientist, CRIDA, Dr Gopal Kumar, Deputy Country Representative, IWMI and Dr Yella Reddy, Vice President, ICID, broadened the debate, stressing that the main bottlenecks to scaling landscapes are not only technological, but institutional and human.

They agreed that the biggest gap is the lack of inter-departmental coordination and the absence of a new cadre of professionals trained in systems thinking, hydrology, data analytics and socio-institutional processes.

An interactive Mentimeter-based policy reflection, facilitated by Dr Abhishek Das and Dr Nagarjuna Reddy of ICRISAT, captured real-time perspectives from the audience on strategic shifts, governance innovations and institutional capabilities required to advance the landscape approach at scale.

Key signals from the polling included:

- Strong agreement that landscape planning must be embedded into national and state development processes.
- A clear call to strengthen systems-thinking capacity across PMKSY, extension systems and panchayats to move from farm-level interventions to true landscape-scale transformation.
- Preference for decentralised decision-making with local autonomy and the creation of inter-departmental coordination platforms to bridge institutional silos.
- Recognition that weak coordination, limited capacity for systems thinking and short project cycles remain the most critical barriers to scaling.

Participants shared their insights during the session

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This interactive component strongly validated the panel's insights, reinforcing that the wider community views MFL not as another scheme to be replicated, but as a system-level reform agenda that must align policies, institutions and financing.

The session closed on an optimistic note, reaffirming that MFL is emerging as a new development grammar for drylands and rainfed regions in the Global South—one that goes well beyond earlier watershed programmes. As a systemic, governance-anchored and evidence-driven approach, it offers a powerful pathway to simultaneously enhance livelihoods, regenerate natural resources, harness markets and build resilience. Building on this momentum, ICRISAT and CGIAR's MFL Science Program will continue to collaborate with national and state stakeholders to co-develop and scale credible blueprints for landscape-based transformation.