ANNOUNCEMENT

34th Annual Conference
of the Agricultural Economics Research Association
on

Agricultural Transformation in India
Resource Use, Trade Dynamics, and Sustainability

12-14 October 2026
Venue: Pondicherry University, Puducherry

Organized by

Pondicherry University, Puducherry
&
Agricultural Economics Research Association, New Delhi

About the Association

The Agricultural Economics Research Association (AERA) is a prominent professional organization dedicated to advancing research, education, and policy analysis in agricultural economics and related fields. Established in 1987, AERA serves as a platform for researchers, policymakers, academicians, and practitioners to collaborate and contribute to the development of the agricultural sector. The association focuses on addressing the economic challenges faced by agriculture, including productivity, sustainability, market dynamics, rural development, and food security. The Association was one of the key hosts of the 32nd International Conference of Agricultural Economists in 2024.

AERA is known for its flagship publication, the Agricultural Economics Research Review (AERR), a peer-reviewed journal that publishes high-quality research articles, policy analyses, and reviews on various aspects of agricultural economics. Through this journal and its regular conferences, workshops, and seminars, the association promotes the dissemination of knowledge and innovative solutions to pressing agricultural issues.

The association also emphasizes capacity building by providing training and networking opportunities for young researchers and professionals in the field. Its initiatives aim to bridge the gap between research and policy implementation, ensuring that evidence-based solutions are effectively integrated into decision-making processes.

AERA plays a vital role in fostering interdisciplinary collaboration and contributing to the sustainable development of agriculture, rural livelihoods, and food systems, both in India and globally.

About the University

Pondicherry University is a Central University established by an Act of Parliament in October 1985. It is an affiliating University with a jurisdiction spread over the Union Territory of Puducherry, Lakshwadeep and Andaman and Nicobar Islands. The University's objectives are to disseminate and advance knowledge by offering teaching and research facilities, to make provisions for studies in French and integrated courses in Humanities and the Sciences, and to promote interdisciplinary studies and research. The University's motto is 'Vers la lumière' meaning 'towards the light'. The main campus is located at Kalapet, 10 kms from the town of Puducherry, in a serene and beautiful campus of 800 acres adjoining the scenic Bay of Bengal. The University also has campuses at Karaikal and Port Blair which currently offer P.G. and Doctoral programmes.

Conference President

Prof. S. Mahendra Dev

Prof. S. Mahendra Dev is presently Chairman, Economic Advisory Council to the Prime Minister (EAC-PM). He was the Director and Vice Chancellor, Indira Gandhi Institute of Development Research (IGIDR) in Mumbai for 12 years during 2010-2022. Prior to this position, he was Chairman of the Commission for Agricultural Costs and Prices, Ministry of Agriculture from 2008 to 2010. He was Vice Chairman of the Board of Trustees of International Food Policy Research Institute (IFPRI), Washington, D.C. He was also member of the Board of IFPRI for seven years from 2013 to 2019. He was member and Acting Chairman of the National Statistical Commission, Government of India. He got the prestigious Malcolm Adisesaiah Award in 2016. He was Director, Centre for Economic and Social Studies, Hyderabad, India for 9 years from 1999 to 2008. He is member of executive committee of International Economic Association. He did Ph.D. from the Delhi School of Economics and post-doctoral from Yale University, USA.

About the Conference

The 34th Annual Conference of the Agricultural Economics Research Association (India), to be held at Pondicherry University during 12–14 October 2026, is envisioned as a major intellectual convergence of leading economists, policymakers, researchers, students, industry stakeholders, and financing institutions. The conference takes place at a critical juncture as Indian agriculture navigates structural transformation, ecological stress, digital disruption, and a rapidly evolving & uncertain global trade environment.

As the sector moves from input-intensive growth toward sustainability, regenerative systems, and enhanced trade competitiveness, the conference will provide a premier platform for rigorous knowledge exchange and forward-looking policy dialogue. Anchored around the themes—Evolving Patterns of Input and Resource Use in Indian Agriculture: Issues and Policies for Sustainable and Inclusive Growth, Sustainable and Regenerative Agricultural Systems, and Transformation of India's Agricultural Trade Landscape—the deliberations will explore how productivity growth, ecological sustainability, and global market integration can be harmonized.

Discussions will critically engage with issues such as input-use efficiency, subsidy rationalization, soil and water sustainability, digital and precision agriculture, carbon markets, regenerative transitions, sustainability standards, export diversification, and smallholder integration into global value chains. Through evidence-based research and policy analysis, the conference aims to identify strategies for strengthening economic resilience, improving resource governance, and positioning Indian agriculture within an increasingly sustainability-driven global trade architecture.

Distinguished keynote speakers and thought leaders will provide strategic perspectives on India's agri-economic transformation, while technical sessions will showcase cutting-edge empirical and analytical research with strong policy relevance. Panel discussions will stimulate informed debate on institutional reforms, climate commitments, trade negotiations, and the role of public–private partnerships in building a future-ready agricultural economy.

Scholars, policymakers, and practitioners are invited to submit high-quality papers aligned with the conference themes. By bringing together academia, government, development institutions, and industry under a shared reform-oriented vision, the 34th Annual Conference at Pondicherry University aims to contribute meaningfully to shaping agricultural policy, strengthening research–policy–industry linkages, and accelerating the transition toward a more sustainable, regenerative, and globally competitive agricultural system for India. The brief outlines of the technical sessions are given below.

Outlines for Technical Sessions

Theme 1: Evolving Patterns of Input and Resource Use in Indian Agriculture: Issues and Policies for Sustainable and Inclusive Growth (Convener: Dr. D. Suresh Kumar, Director, Centre for Agricultural and Rural Development Studies (CARDS), Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu

1. Background and Rationale

The Green Revolution ushered Indian agriculture into a new era of input intensification, foodgrain expansion, and national self-sufficiency. While it significantly enhanced production and productivity, its benefits have not been equitably distributed across regions and farm categories. Today, Indian agriculture faces deep structural and emerging challenges: shrinking landholdings, low and volatile farm incomes, groundwater depletion, imbalanced fertilizer use, climate variability, labour shortages, uneven mechanisation, and regional yield stagnation.

Recent geopolitical and geo-economic shifts, coupled with rapid digitalisation, artificial intelligence (AI), precision agriculture, and evolving policy environments, are reshaping the agricultural landscape. These

transformations call for a systematic re-examination of input and resource-use patterns—how land, water, fertilizers, seeds, machinery, credit, and labour are deployed—and their implications for productivity, efficiency, sustainability, and inclusiveness.

Achieving the vision of *Viksit Bharat 2047* requires improving input-use and resource-use efficiency while ensuring ecological sustainability and social equity. This technical session seeks to integrate lessons from technological advances, institutional innovations, and policy reforms to inform evidence-based strategies for sustainable and inclusive agricultural growth.

The session aims to (i) Examine changing patterns of input and resource use across regions and farm categories, (ii) Assess efficiency, sustainability, and distributional implications of current input-use regimes, (iii) Identify technological, institutional, and governance innovations for improving productivity and resilience, (iv) Suggest policy reforms to enhance economic viability, environmental sustainability, and smallholder inclusion.

The session invites theoretical, empirical, methodological, and policy-oriented contributions. The indicative thematic areas are given below:

2. Thematic Areas

2.1 Land and Soil Health

Indian agriculture is increasingly dominated by small and marginal holdings, with continued land fragmentation limiting economies of scale and technology adoption. Simultaneously, land degradation, declining soil fertility, and reduced soil organic carbon threaten long-term sustainability.

Key issues include:

- Changing land-use patterns and agricultural land conversion
- Land governance reforms, consolidation, and tenure security
- Climate-resilient land-use planning
- Digital land administration and GIS-based monitoring
- Soil health management and evaluation of the Soil Health Card scheme

2.2 Irrigation and Water Use Efficiency

India possesses one of the world's largest irrigation systems, yet groundwater over-extraction, inefficient conveyance, pollution, and weak institutions undermine sustainability. Climate variability further intensifies water stress.

Key issues include:

- Micro-irrigation, precision irrigation, and sensor-based systems
- Conjunctive use of surface and groundwater
- Water–energy–food nexus
- Climate impacts on water availability
- Institutional reforms and collective action in irrigation governance

2.3 Fertilizer Use and Nutrient Management

India is a major fertilizer consumer, with rising subsidy burdens and persistent nutrient imbalances. Distorted price incentives have contributed to worsening N:P:K ratios, low fertilizer-use efficiency, and environmental externalities.

Key issues include:

- Trends in fertilizer use, prices, and subsidies
- Integrated Nutrient Management and fertilizer-use efficiency

- Environmental and health impacts of overuse
- Effectiveness of DBT and digitized fertilizer distribution
- Pathways for rationalizing fertilizer subsidy regimes

2.4 Organic and Natural Inputs

Concerns over soil degradation and environmental sustainability have revived interest in organic and natural farming. However, questions remain regarding productivity, market integration, and economic viability.

Key issues include:

- Determinants of adoption and yield dynamics
- Cost–benefit and risk comparisons with conventional systems
- Certification, market access, and price premiums
- Policy incentives and public procurement
- Ecosystem services and long-term sustainability outcomes

2.5 Agricultural Mechanization and Emerging Technologies

Mechanization enhances labour efficiency and productivity, particularly amid rural labour shortages. Yet small farm sizes and credit constraints limit adoption.

Key issues include:

- Regional disparities in mechanization
- Economics of machinery use and labour substitution
- Custom Hiring Centres and shared service models
- Drones, IoT, AI, and digital agriculture
- Climate-smart mechanization and smallholder inclusion

2.6 Seeds and Planting Material

Access to quality, climate-resilient seeds is central to productivity growth. Despite policy initiatives, regional disparities and reliance on older varieties persist.

Key issues include:

- Seed systems governance and certification frameworks
- Public–private roles in seed production and distribution
- Adoption of hybrid and climate-resilient varieties
- Integration of seed systems with credit and extension
- Digital traceability and emerging technologies

2.7 Agricultural Credit and Financial Inclusion

Timely and affordable credit is critical for input adoption and risk management. However, regional disparities, collateral constraints, and institutional bottlenecks limit effective access.

Key issues include:

- Farm-level credit demand and supply dynamics
- Performance of Kisan Credit Cards and interest subvention schemes
- Digital and fintech-based agricultural lending
- Risk mitigation instruments including crop insurance
- Inclusion of women, youth, and smallholders

2.8 Agricultural Labour and Structural Transformation

Labour scarcity, rural–urban migration, wage increases, and workforce ageing influence cropping patterns, mechanization, and production costs.

Key issues include:

- Trends in agricultural employment and wage dynamics
- Mechanization–labour interactions
- Migration and demographic transitions
- Social security and skill development
- Employment implications of automation and digitalisation

The theme seeks to generate evidence on efficiency and sustainability of current input-use patterns, distributional consequences across regions and farm sizes, technological and institutional innovations for resource optimization, and policy pathways for balancing productivity, resilience, and environmental sustainability. The deliberations are expected to inform national debates on input policy reforms, resource governance, climate resilience, and inclusive agricultural transformation.

Theme 2: Sustainable and Regenerative Agricultural Systems (Conveners: **Prof. Bidhan Chandra Roy,** Chair Professor, AKDCP&R, Visva-Bharati, West Bengal **and Dr. Pe. Jeyya Jeyanthi,** Principal Scientist (Agrl. Economics), ICAR-Central Institute of Fisheries Technology, Kochi, Kerala

1. Background and Rationale

Agriculture globally stands at a critical inflection point. While conventional intensification models have enabled remarkable gains in food production, they have also contributed to soil degradation, groundwater depletion, biodiversity loss, rising greenhouse gas (GHG) emissions, and increasing socio-economic vulnerabilities among smallholders. With the global population projected to approach nearly 10 billion by 2050, ensuring food and nutritional security without exacerbating ecological stress is an urgent imperative.

Agriculture currently contributes a significant share of global GHG emissions while remaining highly vulnerable to climate variability, extreme weather events, and resource degradation. In developing countries, including India, agriculture continues to underpin rural livelihoods, employment, and national economic stability. However, the legacy of input-intensive mono-cropping, excessive chemical usage, and over-extraction of natural resources has created structural, ecological and socio-economic imbalances.

In this context, **Sustainable and Regenerative Agricultural Systems (SRA)** offer a transformative pathway. Sustainable agriculture seeks to balance environmental health, economic viability, and social equity, ensuring inter-generational resource security. Regenerative agriculture goes further by actively restoring ecological functions towards enhancing soil organic matter, rebuilding biodiversity, improving water cycles, strengthening carbon sequestration, and revitalizing rural economies.

Globally and nationally, policy discourses are increasingly aligned with climate-resilient, carbon-neutral, and resource-efficient agricultural systems. In India, emerging priorities emphasize regenerative practices, smart agro-food systems, climate-smart technologies, and outcome-oriented convergence of policies. However, translating these ambitions into scalable, inclusive transitions requires robust research, institutional innovation, and policy coherence.

2. Key Emerging Challenges and Research Gaps

Despite growing interest and pilot initiatives, the transition to SRA systems faces multiple constraints:

a. Ecological and Scientific Gaps

- Limited long-term comparative evidence between regenerative and conventional systems across agro-

climatic zones.

- Insufficient robust data on soil carbon sequestration, biodiversity restoration, ecosystem resilience, and water-use efficiency.
- Weak integration of productivity, climate mitigation, and ecosystem services into unified assessment frameworks.
- Inadequate modelling of long-term resilience under climate uncertainty.

b. Economic and Transition Challenges

- High short-term transition costs and uncertain yield trajectories.
- Limited access to risk mitigation tools (credit, insurance, climate advisory).
- Absence of reliable price premiums and weak market infrastructure for regenerative produce.
- Insufficient valuation of ecosystem services in farm-level decision-making.

c. Social and Behavioural Dimensions

- Social norms, risk perceptions, and behavioural inertia influencing adoption decisions.
- Unequal access to information and institutional support across gender, caste, landholding size, and marginalized communities.
- Labour implications of low-input and diversified systems.
- Limited youth engagement in regenerative enterprises.

d. Knowledge and Extension Gaps

- Fragmented extension services and weak advisory support for integrated regenerative practices.
- Need for locally contextualized knowledge systems blending scientific innovation with traditional ecological knowledge.
- Digital divide limiting effective dissemination of climate and agronomic information.

e. Governance and Policy Misalignment

- Continued dominance of input subsidies that may inadvertently discourage resource-conserving practices.
- Fragmented implementation across ministries and schemes, leading to duplication and inefficiency.
- Limited institutional mechanisms for carbon markets, ecosystem service payments, and regenerative certification systems.

The transformation toward sustainable and regenerative agriculture is as institutional as it is technical. Therefore, addressing these gaps requires inter-disciplinary research that integrates agriculture, economics, sociology, ecology, behavioural science, digital technologies, and public policy.

3. Suggested Sub-Themes / Focus Areas for Deliberation

The session invites theoretical, empirical, methodological, and policy-oriented contributions under the following indicative sub-themes:

3.1 **Incentives, Markets, and Economic Viability**

- Economic viability and risk assessment of regenerative systems
- Cost–benefit and resilience analysis
- Ecosystem service valuation and carbon accounting
- Regenerative certification frameworks
- Consumer awareness, premium markets, and green value chains
- Carbon markets and integration within national climate strategies
- Reforming subsidies to incentivize ecological outcomes

3.2 Ecological Regeneration and Climate Resilience

- Soil carbon dynamics and nutrient cycling

- Biodiversity enhancement in diversified systems
- Nature-based agricultural solutions
- Climate-smart and regenerative synergies
- GHG mitigation and carbon-neutral pathways
- Scenario modelling under climate variability
- Precision nutrient/water management
- Remote sensing for monitoring regenerative indicators
- Measuring and standardizing regenerative indicators

3.3 Governance, Institutions, and Digital Systems

- Governance models integrating agriculture-water-climate policy
- Institutional innovations for scaling regenerative systems
- Digital advisory platforms and traceability systems
- AI-enabled farm decision support
- Inclusion of smallholders in digital and carbon finance ecosystems

3.4 Inclusive Transitions and Socio-Ecological Transformation

- Gender and social inclusion in regenerative transitions
- Behavioural determinants of adoption
- Youth engagement and rural entrepreneurship
- Participatory action research models
- Community-led regenerative landscapes
- Longitudinal socio-ecological studies
- Linking regenerative agriculture with nutrition security and diversified diets

This theme is conceived as a platform to critically examine the economic, ecological, technological, institutional, and social dimensions of sustainable and regenerative agriculture, with particular emphasis on inclusive and climate-resilient transformation. The deliberations will be helpful for the consolidation of knowledge, policy recommendations, prioritizing the research agenda, fostering institutional collaboration, and envisioning inclusive transition maps for sustainable and regenerative agricultural systems.

Theme 3: Transformation of India's Agricultural Trade Landscape (Convener: Dr. P. Shinoj, Principal Scientist, Fishery Resource Assessment, Economics & Extension Division (FRAEED), ICAR-Central Marine Fisheries Research Institute (CMFRI), Kochi, Kerala

1. Background and Rationale

Over the past three decades, India's agricultural trade landscape has undergone a significant transformation. It reflects structural shifts in the production system, policy framework, global market dynamics, and value chain integration. Traditionally known for exporting commodities such as rice, cotton, spices, tea, meat, and seafood, India is increasingly positioning itself as a diversified, competitive agri-exporter. The country remains one of the world's leading exporters of food and commercially important primary raw materials, while simultaneously expanding into high-value and processed segments, including ready-to-eat foods, organic products, millets, fresh fruits and vegetables, and speciality commodities with geographical indication (GI) recognition. This transition signals a gradual but decisive shift from volume-driven exports toward value-added, quality-oriented, and market-differentiated trade.

The evolving trade architecture is being shaped by targeted policy interventions, infrastructure development, and institutional reforms. The Agriculture Export Policy (AEP), 2018, has provided a strategic framework to promote product-specific clusters, strengthen export-oriented production systems, focus on novel, indigenous, organic, ethnic, traditional, and non-traditional agri exports, and integrate smallholders into global value chains by enabling a shift from consumer-centric to farmer-centric. Initiatives such as the district-as-export-hub approach, enhanced sanitary and phytosanitary (SPS) compliance mechanisms, digital documentation, and

improvements in port and logistics infrastructure have contributed to greater efficiency and market responsiveness. At the same time, India's engagement in bilateral and regional trade agreements is expanding market access and diversifying export destinations beyond traditional markets in West Asia and Southeast Asia toward Europe, Africa, and other emerging regions.

However, this transformation is unfolding in a complex and rapidly changing global environment. Geopolitical uncertainties, supply chain disruptions, climate variability, and heightened food security concerns–often leading to protectionist measures–have introduced new risks and opportunities. Increasingly stringent quality standards, sustainability requirements, traceability norms, and carbon footprint considerations are reshaping international trade regimes. Consumer preferences in many markets are shifting toward safe, sustainably produced, traceable, and ethically sourced food products. In this context, India's competitiveness will depend not only on the production volumes but also on its ability to ensure quality assurance, branding, value addition, and compliance with evolving global standards.

Despite notable progress, several structural challenges remain. Export policy unpredictability, non-tariff barriers, fragmented supply chains, logistics bottlenecks, limited cold chain infrastructure, and uneven quality compliance among small and marginal farmers constrain the sector's full potential. The recent disruptions linked to reciprocal tariff actions between the United States and India, along with their global ripple effects, illustrate the growing volatility and interconnectedness of agricultural trade flows. Balancing domestic food security imperatives with stable, predictable export policies continues to be a delicate policy challenge. Strengthening farmer-producer organizations (FPOs), promoting agribusiness enterprises, enhancing traceability systems through digital technologies, and investing in climate-resilient agriculture will be critical for sustained growth.

While the broad contours of this transformation are visible, important analytical and empirical gaps remain. There is a need for deeper examination of export competitiveness across commodities and states, smallholder participation in global value chains, sustainability-linked trade requirements, the political economy of export restrictions, and the long-term implications of climate variability and geopolitical uncertainty for agricultural trade resilience. Addressing these issues requires rigorous theoretical, empirical, and policy-oriented research."

This technical session seeks to examine the emerging contours of India's agricultural trade transformation, assess its evolving competitive position in global markets, and identify strategic priorities for deeper and more resilient engagement. The discussion will focus on advancing value addition and branding, improving contribution of agriculture and allied activities in the global value chains; strengthening SPS and certification systems, improving product traceability, leveraging trade agreements strategically, promoting sustainable and climate-smart production systems, improving logistics and infrastructure, and ensuring policy coherence and stability. It will also deliberate on green protectionism in trade. The session invites theoretical, empirical, methodological, and policy-oriented contributions. The indicative thematic areas are given below:

- Measurement of export competitiveness, diversification, and revealed comparative advantage
- Shifts from primary commodities to high-value and processed agri-exports
- Role of FPOs, SMEs, and export clusters in global value chains
- Distributional and regional dimensions of export growth
- Gender and smallholder integration in export supply chains
- Implications of FTAs, regional agreements, and WTO commitments
- Political economy of export bans, domestic support, and food security trade-offs
- Non-tariff measures (NTMs), SPS compliance costs, and quality standards
- Carbon footprint standards, green protectionism, and climate-linked trade measures
- Ecological trade-offs in water- and input-intensive export commodities
- Cold chain development, logistics efficiency, and digital trade facilitation
- Blockchain, traceability systems, and e-certification mechanisms
- Trade–price transmission, volatility, and welfare implications
- Risk, resilience, and diversification strategies under geopolitical and climate uncertainty

By bringing together policymakers, trade experts, agribusiness leaders, researchers, and development practitioners, the session aims to generate actionable insights and a forward-looking roadmap to strengthen India's role as a diversified, resilient, and sustainable agricultural trading nation in an increasingly complex global trade landscape.

These themes are indicative and not exhaustive. Contributions that deepen understanding of evolving input and resource-use dynamics, regenerative agricultural transitions, and their policy implications for sustainable, competitive, and inclusive agricultural growth, as well as the changing landscapes of Indian agricultural trade, are especially encouraged.

Conference also includes:

- Symposia:
- Panel Discussion:
- Dr GK Chadha Memorial Lecture
- Mentorship sessions

Submission Guidelines

- Papers must be original, unpublished, and aligned with the theme and objectives of the call. While submitting the paper, please certify that that paper has not been published elsewhere.
- Authors are encouraged to use evidence-based approaches, case studies, and practical examples to support their arguments.
- Abstracts should not exceed 200 words, and full papers should be between 4,000-5,000 words, including tables, figures and references.
- Submissions should follow [specified citation style] formatting guidelines.

Target Audience

- Academics, researchers, and students
- Policymakers and government officials
- Practitioners and development professionals in agriculture and gender equity
- Non-governmental organizations and advocacy groups
- Industry leaders and entrepreneurs in agribusiness

Dates to Remember

- Last date for submission of abstract and full paper is **30th June 2026**
- Acceptance of paper to be issued from **1st August 2026**

Submit the abstract and full paper to

Email: ceditoraerr@gmail.com