



Seminar on

Transforming Indian Agriculture

Pathways for Agroecological Transitions

Background

Indian agriculture is at a crossroads. Rising grain reserves coexist with depleting natural resources, declining farmer incomes, and worsening hunger and malnutrition, making food security a paradox. Food safety concerns are mounting, while the impacts of climate change further exacerbate vulnerabilities. These challenges demand a fundamental transformation in how farming is practiced, food is marketed and consumed, and how policy frameworks support the food system.

Once a net food importer in the 1960s, India is now among the largest global producers of wheat, rice, milk, pulses, and sugar. However, this apparent success overlooks the growing pressures on Indian agriculture, which threaten its long-term sustainability. For one, although the sector supports around 45% of the workforce as of 2021, its contribution to the economy has been stagnating, at around 19% of GVA. More importantly, Indian farmers, a majority of them small and marginal, are in the throes of a multifaceted agrarian crisis.

The average monthly income of farm families remains around ₹10,000, significantly lower than their expenses. Despite the government's goal of doubling farmers' incomes, the actual increase has been less than 60% overall and only about 25% from crop production. Rising input costs, crop failures, debt and price volatility have pushed many farmers to take their own lives. Simultaneously, farmers are facing climate change impacts through erratic rainfall and unpredictable weather. Chemical intensive agriculture has degraded the soil and depleted groundwater, leading to yield declines and health impacts. Thus, while farmers have worked tirelessly to ensure national food security, they have lost their own income and nutritional security in the process. It is no surprise that farmer unions have been protesting agricultural policies and demanding a legal guarantee for the Minimum Support Price (MSP) over the past few years.

It's not only farmers but also poor consumers who are affected. Despite good crop production figures overall, food price inflation has become endemic due to climate change (RBI, 2024). India's rank in the Global Hunger Index has slipped to 105 out of 121 countries, with hidden hunger and malnutrition increasing among women and children. Pollution from chemical inputs

has leached into the soil and entered the food chain, causing health problems in even distant communities.

The siloed governance methods of the past are no longer as effective in dealing with these interconnected and systemic challenges. For instance, policies such as subsidies on fertilisers and electricity, initiated to support farmers, have ended up perpetuating soil degradation and groundwater depletion. Similarly, the MSP and procurement policies, which were instituted to ensure food security and provide price assurance to farmers, have ended up creating cereal crop monocultures due to selective procurement of wheat and rice. These policies have ended up creating path dependencies and lock-ins that make them resistant to change.

Nonetheless, change is more needed now than ever before. To address this mounting crisis, there is a need to adopt more sustainable agricultural practices, including natural farming and agroecology. Agroecological models are sustainable, equitable, participatory and make farmers less vulnerable to external disruptions. Scaling up the adoption of agroecology has been identified as a potential solution to the polycrises facing agriculture today.

Several CSOs and government agencies have been helping farmers adopt agroecological practices over the past several years. The government's recently revamped National Mission for Natural Farming (NMNF) scheme plans to bring together farmers, local institutions such as PACS and FPOs as well as KVKs and agricultural universities to help scale up natural farming adoption. However, the outlay of only Rs. 2481 crore (a fraction of the amount reserved for fertilizer subsidies or procurement), makes it difficult to achieve the scheme's goal of reaching 1 crore farmers.

Thus, despite these efforts, only 2.7% of our net sown area is under natural or organic farming. Our previous research has identified three main challenges to scaling up agroecological practices sustainably:

1. **Policy innovation barriers** - Policies are designed in a top-down manner instead of collaboratively. They also tend to take a programmatic approach, rather than a long-term and holistic view of change. This leads to small, incremental changes that fade away post the program/scheme.
2. **Market Innovation barriers** - Agricultural markets are currently designed for input intensive production and monoculture crops. The value chain is long and fragmented, with the farmer getting only a small share of the consumer rupee. Only a few states and crops benefit from government procurement at the MSP. Thus, institutional innovations are

required in agri markets, to enable them to benefit small and marginal farmers producing agroecological crops across states.

3. **Techno-scientific and socio-technical barriers** - Unlike the input intensive Green Revolution model, agroecology is a knowledge intensive method of production. Farmer friendly extension systems that integrate scientific and indigenous knowledge are a must to scale agroecology. Similarly, dynamic data collection and management systems that can provide evidence on agroecology for policymakers are the need of the hour.

Thus, while there is broad consensus that a food systems transition is essential, some key questions remain: who will bear the burden, and what pathways will lead this transformation? History has shown that the responsibility of ensuring national food security fell entirely on farmers, often at the cost of depleting natural resources, declining livelihoods, and deteriorating health. However, can this agroecological transition be more equitable and sustainable for farmers? Can a new policy ecosystem be designed to support farmers' well-being while ensuring a resilient food system?

These are the questions we will be asking at our seminar on Transforming Indian Agriculture: Pathways towards Agroecological Transitions. CSA has been working with over 50,000 farmers and local governments in AP, Telangana and Maharashtra for over 20 years on promoting agroecological practices. Through this seminar, we aim to bring together stakeholders working on agricultural policy, nutrition and agroecology to develop a consensus on viable pathways for agroecological transitions in India. We hope this will move us closer to the large-scale transformation of food systems that is needed to ensure India's food security, economic stability, and environmental sustainability.

Agenda

Date - 27th March 2025, Thursday

Time - 4:00 pm - 7:30 pm

Venue - Centre for Economic and Social Studies (CESS), Hyderabad

Session Time	Session Name	Discussants	Description
4:00 - 4:30 PM	Tea and Snacks		
4.30 - 5.00 PM	Felicitation of Padma Shri Subhash Sharma Organic Farmer, Yavatmal	Subhash Sharma	Felicitation - 15 minutes Opening Remarks - 15 minutes
5:00 - 5:30 PM	Speaker Presentation 1: Food Systems Transformation: need of the hour in the wake of food safety and nutrition crisis	Lindsay M Jaacks	Presentation - 20 minutes Q&A - 10 minutes
5:30 - 6:00 PM	Speaker Presentation 2: Status of Agriculture in Andhra Pradesh and Telangana: learning from the last two decades	G. V. Ramanjaneyulu	Presentation - 20 minutes Q&A - 10 minutes
6:00 - 6:30 PM	Speaker Presentation 3: Ensuring Income Security for Farmers: Key policy transitions	Devinder Sharma	Presentation - 20 minutes Q&A - 10 minutes
6:40 - 7:30 PM	Moderated Discussion	Participants	

About the Speakers

Subhash Khetulal Sharma - Hailing from Yavatmal district, Maharashtra, 73 year old Subhash Sharma has revolutionized agriculture through his dedication to sustainable practices, emphasizing soil health, water conservation, and biodiversity. He has worked tirelessly to create a harmonious balance between nature and farming, transforming his 16-acre farm into a model of natural farming. His innovative approach to farming, which prioritizes both environmental health and productivity, has earned him widespread recognition. His pioneering work was honored with the prestigious Padma Shri award as part of the Padma Awards 2025, celebrating his outstanding contribution to farming and his commitment to sustainability.

Lindsay M Jaacks - Dr. Lindsay Jaacks is Personal Chair of Global Health and Nutrition at the Global Academy of Agriculture and Food Systems at the University of Edinburgh. She has previously been a UKRI Future Leaders Fellow and Chancellor's Fellow. Dr. Jaacks has also been Assistant Professor of Global Health at Harvard University, where she established and led a research team working on global non-communicable diseases and developed the obesity transition framework. While at Harvard, she also developed and taught field-based classes on non-communicable diseases in India and Nepal.

Her current research projects broadly aim to advance the understanding of the nexus between agriculture, nutrition, and health. She is especially interested in studying the effects of pesticides on human health and the health co-benefits of sustainable agriculture approaches. Her research further involves improving the measurement of food environments and leveraging citizen science for public health nutrition. Dr. Jaacks holds a Ph.D. in Nutrition and Epidemiology and has been a Visiting Professor at the Public Health Foundation of India since 2016.

Devinder Sharma - Dr. Devinder Sharma is a distinguished food and trade policy analyst, award-winning journalist, writer, thinker, and researcher. Trained as an agricultural scientist, Sharma worked with the Indian Express, and then quit active journalism to conduct research on policy issues concerning sustainable agriculture, biodiversity, intellectual property rights, environment, food security, biotechnology, and the implications of the free trade paradigm for developing countries. He has been awarded the honorary degree of Professor at Large by the CSK Himachal Pradesh Agricultural University, Palampur (India), and has been a Visiting Fellow to the International Rice Research Institute (Philippines); Visiting Fellow at the School of Development Studies at the University of East Anglia, Norwich (UK); and a Visiting Fellow at the University of Cambridge (UK). Dr. Sharma is also a member of the CGIAR's Central Advisory Service on Intellectual Property Rights.

G.V. Ramanjaneyulu - Dr. Ramanjaneyulu is an Agriculture Scientist with a Ph.D. in Agricultural Extension from Indian Agricultural Research Institute, New Delhi. He is currently the Executive Director at Centre for Sustainable Agriculture, Krishna Sudha Academy for Agroecology and



Sahaja Aharam Producer Company. Dr. Ramoo has been working for over 20 years with farmers and local governments in AP, Telangana, and Maharashtra in establishing ecologically and economically sustainable agriculture models. CSA has been associated with large scale transitions in India, the NPM in Andhra Pradesh, Organic Sikkim, Organic Dantewada etc. Building self sustaining community institutions is another important area of work and currently supporting over 66 FPOs. Through TEDx talks, reports and numerous publications, Dr. Ramoo has helped build and popularise the discourse around the harmful effects of pesticides and fertilisers on health and ecology. He has worked on innovations in organic/natural farming practices, institutional systems, value chain studies, digital tools for extension, FPOs, agribusiness management and policy research.