Foundation For Agrarian Studies

November 6 to 9, 2025 | Thiruvananthapuram, Kerala

Day-wise Conference Proceedings

Report of Day 1 – November 6, 2025

After the inaugural session, the conference proceedings continued with a plenary session in the evening. The presentations provided international insights on agrarian change. The summary of the session follows.

Plenary Session: Some International Perspectives

Vizhinjam Hall, Time: 1730–1900

Chair:

Madhura Swaminathan *(Professor and Head, Economic Analysis Unit, Indian Statistical Institute (ISI), Bangalore)*

Speakers:

Shakuntala Haraksingh Thilsted *(Director, Nutrition, Health and Food Security Impact Area Platform, Consortium of International Agricultural Research Centres (CGIAR))*

Cao Đức Phát *(Vice-Chair, University Council, Vietnam National University of Agriculture)*

Shakuntala Haraksingh Thilsted: The Role of Modern Science and Technology in Advancing Agriculture

Shakuntala Haraksingh Thilsted outlined an approach to food production that, in her words, "places people at the centre" while caring for the planet through a comprehensive "food systems" framework. The framework emphasised multiple entry points for improving nutrition, challenged traditional supply chain approaches, and highlighted the critical role of women's agency and environmental sustainability. Key stakeholders driving this transformation include Consortium of International Agricultural Research Centers (CGIAR), one of the largest systems working on food, water, and land systems, and the EAT-Lancet Commission, which launched a report this year on healthy, sustainable, and just food systems, with "just" being a deliberately contested term that addresses fair wages for women and children. Despite these global commitments, current trends revealed worsening hunger and malnutrition, including the famine in Gaza, over 11 million malnourished people in South Africa, as well as rising obesity affecting one in five people globally. The presentation argued that governments and companies must be held accountable for promoting unhealthy, fat-rich foods. The core strategy for "nourishing people and the planet" centres on improving dietary diversity as the most important paradigm shift, incorporating diverse food sources from land and water. This included leveraging seasonality by consuming foods during times of plenty when they're affordable, such as fish during peak seasons, thereby reducing food loss and waste.

Several innovative methods, like biofortification programs, are reshaping food systems to better serve people and the planet. The application of big data and AI is enabling breakthrough innovations, like sequencing Tilapia subspecies in Africa to develop new species, with growing interest in Singapore

and China. She stated that the integration of indigenous knowledge and practices, which provide valuable insights into disease control and rainfall patterns, is considered essential and must be combined with modern technology to avoid a disservice to communities. Technology transfer initiatives, such as adapting African fish seed technology to Assam and Bihar in India, are successfully enhancing dietary diversity. Agricultural drones, with an estimated 7,000 operating in India through government programs like "Namo Drone Didi" in Kerala for rice sowing, represent new technological frontiers, though concerns remain about their impact on agricultural labour. Additionally, circular economy approaches are being explored to reduce waste, such as finding alternatives to using waste human food for fish feed.

Looking forward, the presentation emphasised that achieving sustainable, nutritious food systems requires a truly people-centred approach that considers demographic shifts like ageing populations, backed by strategic government investment for policy shaping and enhanced South-South collaboration. Most importantly, efforts must prioritise vulnerable populations, particularly young people, pregnant women, and lactating mothers, as the foundation for building food systems that genuinely nourish both people and the planet while holding all stakeholders accountable.

Cao Đức Phát: Income from Rice in Asia

Cao Đức Phát made the following points in his presentation. Rice serves as the cornerstone of Asian agriculture and food systems, functioning not merely as a staple crop but as a way of life across the continent. Asia dominates global rice production with 89 per cent of the world's output, concentrated primarily in eight countries, with India and China as the leading producers. However, production trends vary significantly across the region. While India, Bangladesh, the Philippines, and Thailand are experiencing growth in rice production, Indonesia, Myanmar, Vietnam, and China have registered a downward trajectory over the past three to four years. The sector's national importance is evident in countries like Bangladesh, where rice accounts for nearly 48 per cent of rural employment, half of

agricultural GDP, and one-sixth of national income; and Vietnam, where it represents 15 per cent of agricultural GDP despite declining parameters, though its social importance remains undiminished.

The economics of rice farming across Asia reveal stark disparities and mounting challenges. Most rice farmers operate on small parcels of land, typically less than one hectare, with the number of farmers ranging from 0.7 million in Japan to 67 million in India. Farmer income is influenced by multiple factors, including land ownership, market conditions, technology, infrastructure, labour costs, and policy support. While Japan shows very high producer prices compared to other Asian countries, with net income reaching USD 6,570 per crop versus India's USD 792, most small rice household growers across Asia earn only USD 500–1,000 annually per capita, providing little incentive for continued farming. Cost structures in countries like Vietnam and the Philippines hover around USD 1,000–1,200 per production cycle, with input costs occupying the largest share, though land, labour, and service costs are significant in some countries. The sector faces mounting pressures from industrialisation and urbanisation, which are drawing land, labour, and resources away from rice farming and diminishing the comparative advantage of rice production. Additional challenges include rice land conversion, escalating labour costs, market disturbances from diseases, natural calamities and wars, climate change impacts, and environmental degradation. Despite recent positive trends in technology improvement, better infrastructure, particularly for irrigation, and more efficient support services, the relative share of income from rice continues to decline moderately across several countries, threatening the sustainability of small-scale rice farming.

Moving forward, Cao Đức Phát urged policymakers to address critical issues, including land policy and control of rice land conversion, water use policy that avoids creating wrong incentives, emission reduction, and establishing enabling financial systems to assist all participants in the rice value chain. The emphasis must be on creating an open, liberalised, level-playing, transparent, market-oriented trade policy framework that can sustain both the economic viability of rice farming and its enduring social importance across Asia.