



INTERNATIONAL YEAR OF
RANGELANDS AND
PASTORALISTS
2026



தொழுவம் உழவர் உற்பத்தியாளர் நிறுவனம் **Thozhuvam Farmer Producer Company Ltd.**

(Initiated & Supported by NABARD and MABIF)

8, Nabard-Mabif, Agricultural College & Research Institute, Madurai – 625104
thozhuvamfpcl@gmail.com, www.thozhuvam.org, Mobile: +91 98944 06111

CONVENTION ON SUSTAINABLE PASTORALISM, AGRICULTURE AND CARBON FINANCE 2026

Theme: From Pastoralism and Agriculture to Carbon Finance: Sustainable Rangelands, Regenerative Agriculture and Climate-Resilient Livelihoods

Date: Friday, 11 December 2026, **Time:** 9:00 AM – 6:00 PM

Venue: Thiagarajar School of Management (TSM), Madurai, Tamil Nadu, India

1. Background and Context

Agriculture and pastoralism are vital to Tamil Nadu's rural livelihoods, food security and biodiversity. The state has approximately 34 lakh farmers, 3 lakh pastoralists and 50 lakh indigenous livestock, supported by around 49.09 lakh hectares of net sown area and 1.08 lakh hectares of permanent pastures and other grazing lands. However, climate variability, land degradation, declining soil fertility, water stress and shrinking grazing commons pose significant challenges. Sustainable pastoralism, regenerative agriculture, grassland restoration and soil-carbon improvement offer opportunities for climate resilience and rural development. Carbon finance, supported by scientific methodologies, digital monitoring and institutional partnerships, can further strengthen these initiatives.

Grasslands and rangelands are important natural assets that support livestock, biodiversity, soil health and rural livelihoods. Their sustainable management can also contribute to climate mitigation and adaptation through improved land management, carbon sequestration where measurable, nutrient recycling and water conservation.

2. Rationale

Traditional pastoralism, regenerative agriculture and eco-penning offer opportunities for soil restoration, sustainable land management and climate-resilient livelihoods. Amid the global challenges of Fuel, Food, Fertilizer and Finance (4F), the convention will connect traditional knowledge, scientific research, technology and carbon finance to promote community-led climate solutions, equitable benefit-sharing and a pathway towards Net-Zero Carbon 2040 in Tamil Nadu.

3. Objectives

- Promote sustainable pastoralism, regenerative agriculture and rangeland restoration.
- Explore carbon-finance opportunities for farmers and pastoralists.
- Advance carbon measurement, MRV and digital monitoring.
- Strengthen FPOs and institutional partnerships for carbon projects.
- Identify pilot projects for climate-resilient livelihoods in Tamil Nadu.
- Explore pathways towards Net-Zero Carbon 2040.

4. Global and Indian Developments in Carbon Finance

Carbon markets offer opportunities to finance climate action, sustainable agriculture and ecosystem restoration. Global initiatives, such as the Northern Kenya Grassland Carbon Project, highlight the importance of community participation and equitable benefit-sharing.

In India, the Carbon Credit Trading Scheme (CCTS) and voluntary carbon markets create opportunities for farmer- and pastoralist-led carbon projects. Organisations such as Verra, Boomitra, Earthbanc, Kosher Climate and Grow Indigo contribute to emerging carbon-finance approaches, emphasising credible methodologies, scientific monitoring and transparent benefit-sharing.

5. IYRP 2026 Alignment

The convention supports the objectives of the International Year of Rangelands and Pastoralists (IYRP) 2026, highlighting the vital role of pastoralists and rangelands in biodiversity conservation, climate resilience, sustainable livelihoods and carbon finance. It aims to strengthen collaboration among pastoral communities, farmers, researchers, policymakers and carbon-market stakeholders to promote sustainable rangeland management and inclusive climate solutions.

6. NABARD–FAO Collaboration

The NABARD–FAO collaboration promotes climate-resilient agriculture, carbon finance and sustainable investments. It focuses on strengthening FPOs and cooperatives as potential carbon-project developers and improving access to climate finance. This collaboration provides a relevant institutional framework for exploring farmer- and pastoralist-led climate initiatives, capacity-building and sustainable investment opportunities in Tamil Nadu.

7. Verra Standards and Carbon Methodologies

Verra's Verified Carbon Standard (VCS) provides methodologies for quantifying and verifying carbon benefits from eligible projects. Relevant methodologies include VM0042 (Improved Agricultural Land Management), VM0044 (Biochar Utilization in Soil and Non-Soil Applications) and VM0051 (Improved Management in Rice Production Systems), subject to project eligibility and applicable MRV requirements.

8. Key Directions for Tamil Nadu

- Sustainable Pastoralism: Restore rangelands and conserve community grazing lands.
- Regenerative Agriculture: Improve soil health through eco-penning and farmer–pastoralist collaboration.
- Carbon Finance: Develop eligible farmer- and pastoralist-led carbon projects.
- Institutional Finance: Strengthen FPOs and cooperatives to access climate finance.
- Digital Technology and MRV: Apply satellite monitoring, GIS and digital platforms.
- Pastoral Bio-Economy: Promote manure-based bio-inputs, Bio-CNG and rural enterprises.
- Policy and Benefit-Sharing: Ensure community participation and equitable carbon-finance benefits.
- Net-Zero Carbon 2040: Explore pathways for emission reduction and climate resilience.

9. Thozhuvam FPCL: A Pastoral Bio-Economy Model

Established in May 2021 with support from NABARD and MABIF, Thozhuvam Farmer Producer Company Limited (FPCL) is a pastoralist-led enterprise promoting sustainable livelihoods through livestock-based value addition, organic bio-inputs, Bio-CNG, eco-penning and market linkages.

Thozhuvam is also developing TUNAI, a digital platform with BONbLOC Technologies, to support livestock management, veterinary services, grazing resources, pastoral mobility and market access. Its experience offers a practical model for connecting pastoral livelihoods with regenerative agriculture, circular bio-economy initiatives and community-led climate action.

Thozhuvam's initiatives provide a foundation for exploring how pastoral institutions can participate in grassland restoration, carbon-project development, scientific monitoring and equitable climate-finance opportunities.

10. Research Initiative: Pastoral Practices, Soil Restoration and Carbon Finance

The convention will initiate a collaborative research initiative between Dr. Birgit Habermann (Social Scientist, Kenya) and Dr. P. Kabilan (Pastoral Bio-Economist, Thozhuvam, India) to scientifically assess traditional pastoral practices, particularly eco-penning and manure management.

The research will examine soil carbon, soil fertility, nutrient cycling and climate resilience, integrating pastoral knowledge with scientific assessment and community-participatory MRV systems to explore equitable carbon-finance opportunities for pastoralists and smallholder farmers.

11. Proposed Tamil Nadu Carbon Federation (TNCF)

The convention will explore the formation of a Tamil Nadu Carbon Federation (TNCF) as a collaborative platform to strengthen farmer- and pastoralist-led participation in carbon finance and climate-resilient development. It will aim to connect FPOs, cooperatives, pastoral organizations, research institutions, financial agencies and technology partners.

The proposed federation may support capacity-building, carbon-project development, scientific assessment, MRV, institutional partnerships, market access and transparent benefit-sharing. Its membership, governance and operational framework will be developed through stakeholder consultation. The convention will serve as an initial platform to assess the feasibility of the federation, identify potential partners and develop a preliminary roadmap for future action.

12. Expected Outcomes

- Identify pilot projects for sustainable pastoralism, regenerative agriculture and carbon finance in Tamil Nadu.
- Strengthen partnerships among FPOs, pastoralists, research institutions and carbon-market stakeholders.
- Explore suitable carbon methodologies, MRV systems and climate-finance opportunities.
- Promote rangeland restoration, farmer–pastoralist collaboration and a sustainable bio-economy.
- Develop a working group and roadmap for the proposed Tamil Nadu Carbon Federation.
- Strengthen community participation and equitable benefit-sharing.
- Identify pathways towards Net-Zero Carbon 2040.

13. Target Participants and Collaborative Institutions

The convention will bring together around 150 participants, including farmers, pastoralists, FPOs, government agencies, universities, researchers, carbon-market stakeholders, NGOs, entrepreneurs, youth and women's groups. Organised by Thozhuvam FPCL with support from NABARD and MABIF, the convention will seek national and international partnerships to advance sustainable land management and inclusive carbon finance.

14. Conclusion

Sustainable pastoralism and regenerative agriculture promote soil restoration, biodiversity and climate-resilient livelihoods. The Convention will strengthen collaboration to advance community-led carbon finance, integrate the **4F framework—Fuel, Food, Fertilizer and Finance**, and explore a pathway towards **Net-Zero Carbon 2040**.

Steering Committee and Distinguished Advisors

Patrons

1. Padma Shri Dr. N. Punniyamoorthi – Pioneer in Ethno-Veterinary Medicine
2. Mr. P. Viveganadan – Chair, South Asia IYRP Group, SEVA
3. Mr. Pamayan (M. Balasubramanian) – Organic Farming Specialist
4. Mr. Durai Appadurai – Managing Director, BONbLOC Technologies
5. Dr. P. Ravichandran – Expert in Plant Science

Strategic Advisors and Development Partners

1. Mr. Krishnan Pallassana – Senior Specialist - Strategy and Partnerships, FAO India
2. Mr. Vishal Rajeswaran – Climate Finance Specialist, FAO India
3. Mr. A.S. Sakthibalan – Assistant General Manager, NABARD
4. Mr. K. Ganeshamoorthi – Chief Executive Officer , MABIF

Climate, Carbon and Technology Experts.

1. Dr. Birgit Habermann – Social Scientist, Kenya
2. Ms. Christina Irvén and Dr. Carolina Cardoso Lisboa – Verra, USA
3. Ms. Sharyn Rossrakesh – Strategic Planning, Earthbank, Australia
4. Mr. Narendra Kumar Ramaraj and Ms. B. Priyanka – Kosher Climate, India
5. Mr. R. Premkumar and Mr. M. Manimaran – Pasukootam Pvt. Ltd., India

Research & Academic Partners

1. Dr. Lydia Dhanammal – Professor & Head, RIVER, Puducherry
2. Dr. K. Jagadeesan – Associate Professor, Animal Genetics and Breeding, TANUVAS
3. Dr. K. Saravanan – Associate Professor, CSE, Anna University, Chennai
4. Dr. V. Senthil – Associate Professor, Systems & Analytics, TSM, Madurai
5. Dr. M. S. Saravanan – Deputy Director, Animal Husbandry, Virudhunagar, Tamil Nadu

Pastoralism & Rangeland Expertise

1. Mr. Ramesh Bhatti – Programme Director, Centre for Pastoralism, New Delhi
2. Mr. M. Mathivanan – Senior Research Associate, ATREE, Tirunelveli
3. Mr. Harshit Mishra – Foundation for Ecological Security (FES), Hyderabad

Convenor

Dr. P. Kabilan

Pastoral Bio-Economist, THOZHUVAM

Associate Professor, Department of Computer Science

Madurai Kamaraj University College, Madurai, Tamil Nadu

kabilanmkuc@gmail.com, +91 98944 06111

PROGRAMME SCHEDULE (Tentative)

Time	Programme Details	Speaker
09:00 - 09:30 AM	Registration	Organising Team
09:30 - 11:00 AM	Inaugural Session	
11:00 - 11:15AM	Tea Break	
11.15 - 11.55 AM Session 1	Topic: Verra Carbon Methodologies: VM0042 and VM0051 – Opportunities for Farmers and Livestock Systems	Carolina Cardoso Lisboa, Senior Manager, Agriculture Innovation, Verra
11:55 - 12.35 PM Session 2	FAO–NABARD Collaboration: Advancing Climate-Resilient Agriculture through Innovative Finance and Carbon Markets	Mr.Krishnan & Mr.Vishal, FAO Indian Team
12:35 - 01:05 PM Session 3	Topic: Digital MRV, Satellite Technology and AI for Carbon Finance and Agriculture	Mr.Rishabh and Mr.Atul Earthbanc, Australia and
01.05 – 02.05 PM	Lunch	
02.05 - 02.45 PM Session 4	Topic: VM0042 regenerative agriculture practices for carbon project development	Mr.Narendra Kumar.R and Ms.Priyanka.B, Kosher Climate
02.45 - 03.20 PM Session 5	Topic: Pastoral Practices, Soil Restoration and Carbon Finance: Scientific Research and Community-Based MRV	Dr. Birgit Habermann, Social Scientist, Kenya
03.20 - 03.50 PM Session 6	Topic: Tamil Nadu Carbon Finance: From Policy and Technology to Implementation and Partnerships	Mr.R.Premkumar Mr.M.Manimaran, Pasukootam Pvt. Ltd.
03:50 - 04:40 PM Session 7	Topic: Institutional Perspectives on Agriculture, Pastoralism and Carbon Finance	TANUVAS, RIVER, TSM-IA, Anna University
04.40 - 05.40 PM Session 8	Topic: Voices from the Ground: Challenges and Opportunities	SEVA, ATREE, FES, CfP, FPOs, farmers, pastoralists
05:40 - 6:00 PM	Valedictory Remarks & Vote of Thanks	Organising Team

Organised By

Thozhuvam Farmer Producer Company Ltd.

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