



**NASA - SARI Meeting**  
**Synthesis Meeting on Scientific Foundations of Natural Climate Solutions**  
**in Tree Based Systems of LCLUC in South Asia**  
**April 9-11, 2024**  
**Ashoka University**

This synthesis meeting for South Asia is focused on understanding LCLUC patterns and processes related to agricultural landscapes of smallholder tree-based systems and their potential as natural climate solutions. The synthesis shall provide an observation-based evaluation of the degree to which these landscapes are increasing in terms of cover and biomass, and then evaluate what conditions lead to increases in tree and forest cover in South Asia, and under what conditions do improvements in tree and forest cover contribute to improving rural livelihoods. The objective of the proposed SARI South Asia Synthesis Consortium (SARI-SAS) is twofold: 1) synthesize current and recent NASA research on LCLUC to contribute to a fundamental understanding of their patterns and drivers and 2) translate fundamental science into evidence-based contributions to important climate mitigation and adaptation policy for the region.

Time	Session	Speaker	Title	Venue
<b>Day 1: 9th April, 2025</b>				
9:00-9:15	Opening and Welcome	Gautam Menon Dean Research, Ashoka University		Dr. Reddy's Auditorium
9:15-9:45	Overview of the SARI Network	Krishna Prasad Vadrevu, Remote Sensing Scientist, NASA Marshall Space Flight Center, Huntsville, Alabama		Dr. Reddy's Auditorium
9:45-10:00	Charge to the Meeting	David Skole, Professor, Michigan State University		Dr. Reddy's Auditorium
10:00-11:30	Theme 1: Leveraging Trees Inside and Outside of Forest, Integration of Social and Biophysical Data	Forrest Fleischman ( <i>Session Chair</i> ) Associate Professor, University of Minnesota	Human well-being outcomes of trees outside of forests: What we know, what we don't know, what we think we know	Dr. Reddy's Auditorium
		Mahesh Sankaran Professor, National Center for Biological Sciences	Savanna Dynamics: Balancing Tree Cover for Ecosystem Resilience and Community Well-Being	
		Sarika Khanwilkar Head of Partnerships, Rainforest Connection	Assessing Forest Health and Degradation in Agricultural Landscapes: A Case Study from the Central Indian Highlands	
		Vijay Ramprasad Senior Fellow, CEDAR	Opportunities for community participation in restoration	
		Sudha Vasani Professor, Department of Sociology, University of Delhi	Trees, Tenures, and the Field/Forest Boundary: Navigating the Nexus of Agricultural Landscapes and Forest Restoration in South Asia	
11:30-11:45	Tea Break			Auditorium Corridor
11:45-13:15	Theme 2: Observations of Forest Cover and Trees Outside of Forest: Trends and Drivers	Randolph H. Wynne ( <i>Session Chair</i> ) Professor, Virginia Tech University		Dr. Reddy's Auditorium
		Valerie Thomas Professor, Virginia Tech University		
		Aditya Singh, Associate Professor, University of Florida	TBD	
		Josh Gray, Associate Professor, North Carolina State University	Mapping ToF: opportunities and challenges with modern data and algorithms	
		Sunil Chandra, Deputy Director General, Forest Survey of India, Dehradun	Latest Assessment of Forest Resources in India & Data Collection of Trees Outside Forest (TOF) Inventory	
Atul Jain, Professor, University of Illinois Urbana Champaign	Agricultural Land and its contribution to GHG emissions			
14:15-15:45	Theme 3: Nature Based Solutions (NBS) in South Asia.	Kruthika Ravishankar Co-Founder, Farmers for Forests	Role of multispectral drone technology and open-source AI play in enhancing the adoption of agroforestry models by farmers in India	Dr. Reddy's Auditorium
		Ruth DeFries ( <i>Session Chair</i> ) Professor, Columbia University	Outcomes of VCM afforestation projects in India for livelihoods and tree cover	
		Subhash Ashutosh IFS Meghalaya Basin Development Authority, Government of Meghalaya	Unlocking the Potential of Trees Outside Forests: Restoration, Ecosystem Services, and Agricultural Adaptation	
		Ashwini Chhatre Associate Professor, Indian School of Business, Hyderabad	Trees on farms grow under the shadow of forest management priorities	
		Milind Bunyan Fellow, Ashoka Trust for Research in Ecology and Environment (ATREE)	Catalyzing Tree Cover Expansion in South Asian Agricultural Landscapes: The TOFI Project and Perspectives on Trees Outside Forests	
Chandan Singha Associate Professor, Delhi University	Understanding economic and market pathways for Agroforestry in India			
15:45-16:15	Tea Break and Teatime with Students			Auditorium Corridor
16:15-17:00	Panel Discussion Day 1 Synthesis	Skole, Fleishman, DeFries, Wynne		Dr. Reddy's Auditorium
17:30-18:30	Cultural Performance			Blackbox Theatre
<b>Day 2: 10th April 2025</b>				
9:00-10:30	Theme 4: Evidence-based Net Zero Policy Using NBS	David Skole ( <i>Session Chair</i> ) Professor, Michigan State University	More Carbon Growing on Trees Outside of Forest: carbon intelligence for Nbs	Dr. Reddy's Auditorium
		Hari Priya Gundimeda, Professor, Department of Economics, IIT-Bombay	Incentives for Rural Households to Establish Tree Cover on Agricultural Lands in India	
		Jayashree Ratnam Program Director, Wildlife Biology and Conservation Program, National Center for Biological Sciences	Challenging Assumptions: Reevaluating Tree Planting Strategies in Low Tree Cover Ecosystems for Sustainable Land Management and Livelihood Preservation	
		Sudhira HS, Director, Gubbi Labs	Enhancing methods for monitoring trees outside forests – Investigating Biodiversity outside forests and landownership patterns	
		Pushpendra Rana Chief Conservator of Forests (CCF), Himachal Pradesh Forest Department	Decision Support Systems Case Study from Himachal Pradesh	
Siddhartha Krishnan Senior Fellow and Convenor, ATREE	An accidental agro-forest- Intentional introductions of trees into a pastoral system, and unintentional livelihood and conservation consequences in the Nilgiris, Western Ghats			
10:30-11:00	Tea Break			Auditorium Corridor
<b>Day 3: 11th April, 2025</b>				
9:30-10:30	Panel Synthesis	Skole, DeFries, Others TBD	Synthesis of the Meeting discussions: What we know, what we think we know, what we don't know.	Dr. Reddy's Auditorium
10:30-11:30	Panel Discussion	Krishna Prasad Vadrevu ( <i>Session Chair</i> ) Remote Sensing Scientist, NASA Marshall Space Flight Center, Huntsville, Alabama	Harnessing Trees Beyond the Forests: Remote Sensing Insights into Net Zero Nature-Based Solutions	Dr. Reddy's Auditorium
		Bhaskar Sinha Associate Professor, IIFM	TBD	
		Satyam Verma Assistant Professor, Dr Harisingh Gour Central University	Harnessing Trees Outside Forests for Climate Resilience: Integrating Socioeconomic and Biophysical Data	
		J. K. Garg, Director, Tribhuvan College of Environment and Development Sciences	Nature based Solutions and critical ecological role of Trees Outside Forests	
Narendran Kodandapani, Director, Research, Center for Advanced Spatial and Environmental Research	Socializing the pixel: Human dimensions of TOF, insights from the Sathyamangalam landscape, southern India			
11:30-12:00	Closing Session	Krishna Prasad Vadrevu, Remote Sensing Scientist, NASA Marshall Space Flight Center, Huntsville, Alabama		Dr. Reddy's Auditorium
		Meghna Agarwala Assistant Professor, Ashoka University		
12:00-13:00	Lunch and Learn Workshop	Sarika Khanwilkar Head of Partnerships, Rainforest Connection	Using Soundscapes to Quantify Biodiversity - a Workshop on Soundscape Analysis with Dr. Khanwilkar	TBD
		David Skole, Professor, Michigan State University	Using Satellites to Monetise Carbon - an Interactive Session with Professor Skole	