



Concept Note

WEBINAR: CHALLENGES AND OPPORTUNITIES FOR SUSTAINABLE NITROGEN MANAGEMENT IN EAST ASIA

GPNM-INI Joint Webinar Series: Catalyzing Change: Global Case Studies on Sustainable Nitrogen Management

March 10, 2026, Time: 1430-1600 (Nairobi time); Language: English

1. Background and Rationale

East Asia occupies a pivotal position in the global nitrogen cycle. Rapid economic development, intensive agricultural systems, highly populated cities, and industrial expansion have resulted in both high nitrogen inputs and substantial nitrogen loss to the environment. Consequently, the region is simultaneously a major contributor to global nitrogen pollution and a key source of innovation in nitrogen management practices.

The region represents diverse historical pathways and governance arrangements for managing nitrogen use and pollution. Each country of the region has experienced different phases of agricultural intensification, industrialization, and environmental regulation, leading to distinct policy responses, institutional frameworks, and societal awareness of nitrogen-related challenges. At the same time, the countries share common pressures related to food security, water and air quality, ecosystem health, and climate change mitigation. Examining their experiences together provides a unique opportunity to understand how varied national contexts within East Asia have shaped nitrogen management outcomes, and how these lessons can inform global efforts toward sustainable nitrogen management.

This webinar positions East Asia within the global nitrogen context, highlighting regional nitrogen flows, country-specific challenges and achievements, and the implications for future international cooperation.

2. Objectives

The objectives of this regional webinar are to:

- Situate East Asia within the global landscape of nitrogen use and its environmental consequences.
- Present and compare national experiences, key achievements, innovations in the

region, focusing on historical developments, governance structures, and policy approaches to nitrogen management.

- Facilitate cross-country and cross-regional learning aligned with the goals of the Global Partnership on Nutrient Management (GPNM) and the International Nitrogen Initiative (INI).
- Strengthen linkages between regional action and global processes, including UNEA resolutions and the forthcoming International Nitrogen Assessment (INA), being prepared by the International Nitrogen Management System (INMS).

3. Webinar Structure and Format

Format: Virtual (Zoom or Teams), including live Q&A. Please click to [register](#)

Host: Jointly organized by GPNM and INI, with coordination by the INI East Asia Centre and partner organizations.

Tentative Agenda

Moderator: Dr. Tariq Aziz, Associate Professor (UAF), GPNM, INI, SANH

Time	Speaker	Title
1430-1440	Prof. Mark Sutton, Co-Chair GPNM, Director INMS, UKCEH	Opening Remarks
1440-1455	Baojing Gu (Professor, Zhejiang University, China)	"Nitrogen cycle, global change and sustainability"
1455-1510	Pil-Joo Kim (Professor, Gyeongsang National University, Korea)	Different management and trends in agricultural nitrogen balances among OECD countries with the highest nutrient surpluses
1510-1525	Chaopu Ti, (Associate Professor, Institute of Soil Science, Chinese Academy of Sciences)	Nitrogen flows, impacts and solutions in East Asia
1525-1540	Kentaro Hayashi (Professor, Research Institute for Humanity and Nature, Japan)	From Japan's Nitrogen Action Plan to advancing global nitrogen management
1540-1545	Ms. Stephanie Van Dar Poel	The Global Nutrients Hub
1545-1600	Q&A session moderated by Ms Andrea Perez, Senior International Affairs Manager, CIWF	
1600-1605	Closing Remarks by Heidi Savelli-Soderberg , UNEP	

Speakers (Short Bios)

Prof. Mark Sutton is Co-Chair of GPNM, Director International Nitrogen Management Systems (INMS) and Prof at UK Centre of Ecology and Hydrology, former Chair International Nitrogen Initiative and Co-Chair of Task Force on Reactive Nitrogen. He is the Lead Editor of International Nitrogen Assessment (INA).



Baojing Gu is a professor of sustainability at Zhejiang University, China. He received his training as an ecologist, specializing in biogeochemical nitrogen cycling analysis and economics, at Zhejiang University. Currently, he serves as the Executive Editor-in-Chief of Earth Critical Zone, Editor of The Innovation, and Associate Editor of Earth's Future. He is the deputy director of the East Asia Center of the International Nitrogen Initiative (INI). He has published over 160 papers in peer-reviewed journals, with notable contributions in Science, Nature, etc. In 2023, he was recognized as the international champion of the Frontiers Planet Prize.



Professor Pil Joo Kim served as vice-chairperson of Division 2, IUSS, from 2010 to 2014 and played a major role in the success of the 20th WCSS as Chair of the Editing & Academic Committee. He successfully organized the 8th symposium on soil organic matter in Seoul in June 2022 as chair and is currently serving as a referee for the IUSS Jeju Award. Professor Kim contributed to the development of the Korean Society of Soil Science & Fertilizer (KSSSF) as president in 2022.



Chaopu Ti, Ph.D. in Soil Science, is a specially appointed key staff member at the Chinese Academy of Sciences. Her research primarily focuses on soil nutrient cycling and agricultural sustainability, with expertise in assessing soil nitrogen cycle and developing sustainable management strategies for cropping systems. Her work aims to optimize nutrient use efficiency to balance agricultural productivity with environmental protection.



Dr. Kentaro Hayashi is a biogeochemist and soil scientist at the Research Institute for Humanity and Nature (RIHN), Japan. His research focuses on nitrogen cycling across diverse terrestrial ecosystems, including agricultural landscapes and polar regions, with a strong emphasis on sustainable nitrogen management in food and energy systems. He serves as Director of the East Asia Centre of the International Nitrogen Initiative and is a member of the Steering Committee of the Global Partnership on Nutrient Management. He is currently leading preparations for the 10th International Nitrogen Conference (N2026), to be held in Kyoto, Japan, in November 2026.



Dr. Tariq Aziz is an Associate Professor at University of Agriculture, Faisalabad, Regional Director International Nitrogen Initiative (INI), Lead partner for SANH (Pakistan), and Steering Committee member of Global Partnership on Nutrient Management (GPNM). Dr. Aziz is working on Nutrient Recycling and improving nutrient use efficiency in agronomic crops.



Andrea Perez, is a Senior International Affairs Manager at Compassion in World Farming International (CIWF), where she leads the organisation's climate and environmental portfolios, with a focus on sustainable nitrogen management. Prior to joining CIWF, she held policy roles at the United Nations Environment Programme (UNEP), the OECD (Organisation for Economic Co-operation and Development) and the Prime Minister's Office of Peru. She holds a Law Degree from the University of Lima and a Master's in Public Affairs, with a specialisation in Environmental Policy and Social Innovation, from Sciences Po, Paris.

