



Tropentag, September 10-12, 2025, hybrid conference

“Reconcile land system changes
with planetary health”

NUS at the nexus of biodiversity, climate and nutrition

CÉLINE TERMOTE

The Alliance of Bioversity International & CIAT, Food Environment and Consumer Behaviour, Kenya

Abstract

Our food systems are grappling with multiple challenges simultaneously: under- as well as overnutrition, biodiversity loss, climate change, land degradation and injustice – which call for integrated approaches that address multiple food system challenges at the same time. This came out strongly during the Rio Convention COPs in 2024, where many were vocal about integrating food systems, diets, and nutrition into national plans on biodiversity, climate, and land. Integrated approaches are also needed to meet the 2030 Agenda for Sustainable Development, especially SDG 2 – Zero Hunger, SDG 13 - Climate Action, and SDG 15 - Life on Land.

Over 5500 crops have been used by humans for food throughout history, but nowadays only 3 (maize, rice and wheat) provide over 50% of the world's calories. Despite their interesting nutritional characteristics, their resilience to climate change and adaptation to local, often harsh circumstances many crops, such as traditional leafy vegetables in Africa, minor millets in India, etc. remain neglected or underutilised. Promotion of NUS production, marketing and consumption for local food systems provides an interesting avenue to foster transformation for more resilience, healthier diets and more equitable food systems. Community seed banking, seed and food fairs, co-created community action plans for better use of local biodiversity, home-grown school feeding programmes and other approaches to promote NUS have proven to improve farm resilience, diet quality and livelihoods of vulnerable populations.