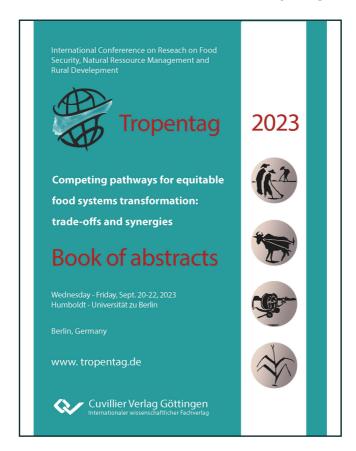


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# Tropentag 2023 International Research on Food Security, Natural Resource Management and Rural Development

Competing pathways for equitabl food systems transformation: trade-offs and synergies



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### Achieving resilient food systems

JOHAN SWINNEN

International Food Policy Research Institute (IFPRI), United States

For nearly a decade now, global progress against hunger and malnutrition has stagnated and begun to reverse. Countries around the world now grapple not only with rising food and nutrition insecurity but also with the three C's: Climate Change, COVID-19, and Conflict. While food and commodity prices have come down from their peak, they remain historically high. In fact, price shocks and other shocks may be the new normal. In his presentation, Dr. Johan Swinnen will discuss the impacts of climate change, the global pandemic, and the food and fertiliser crisis, as exacerbated by Russia's invasion of Ukraine. Different regions, countries, and segments of the population remain more vulnerable than others to these types of shocks. Dr. Swinnen will draw from IFPRI's latest research and modelling tools, to identify policy and technical innovations that can help policymakers transform food systems so they are resilient against shocks, inclusive of marginalised populations, and environmentally sustainable.

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# The interplay of agriculture, land use, climate change, and food security

CATHERINE NAKALEMBE

University of Maryland, Dept. of Geographical Sciences, United States

Food security in sub-Saharan Africa is a critical issue, with approximately 140 million people facing acute food insecurity, according to the 2022 Global Report on Food Crises. To address this challenge effectively, understanding the dynamics of land use, climate change impacts on agricultural productivity, and factors influencing food access and resource distribution is crucial. This talk delves into the complex interplay between agriculture, food security, land use, and climate change in sub-Saharan Africa, exploring sustainable pathways and the role of remote sensing and machine learning technologies in enhancing decision-making. We can identify opportunities for more sustainable and equitable solutions by utilising data-driven approaches, especially concerning regional food security. The talk emphasises the potential for these technologies to drive positive change on a large scale.

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# Food system transformation through the lenses of nutrition and equity

JODY HARRIS

World Vegetable Center, Food Systems East and Southeast Asia, Thailand

Food systems are currently not delivering food security and good nutrition for all. Classically, it is the most marginalised groups in a given society who are most malnourished and least able to engage with food systems to obtain a healthy diet. So we need to acknowledge this, and understand who is marginalised and why and how, in order to transform food systems to leave no-one behind.

Marginalisation is the key concept that underpins inequity. We know that much food systems and nutrition research concerns itself with aspects of marginalisation, for instance the disempowerment of women, or disparities in income. But other axes of marginalisation, such as age, ethnicity, disability, sexuality, and geographic marginalisation come up far less often in the food systems literature, when looking at who has these different outcomes. The interactions between these different aspects of marginalisation – intersectionality – are studied even less often. And the structural determinants of marginalisation – inequitable access to basic services, resources and political redressal; and power relations and social norms – are also under-explored in our field.

This keynote will present the Nutrition Equity Framework, to provide a logic for how researchers and practitioners can acknowledge, assess and address inequity in food systems; and offer insights from the new UN-CFS High Level Panel of Experts report on addressing inequality and inequity in food systems for food security and nutrition. The talk will argue not for a specific transformation approach, but rather for considering nutrition among key food system outcomes; and equity as key to the process of negotiating transformation and change.

**Keywords:** Food systems

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# Rethinking agricultural strategies for Africa: Moving beyond the green revolution to embrace agroecology

#### MILLION BELAY

General Coordinator, Alliance for food sovereignty in Africa and Panel Member IPES Food, Uganda

This presentation advocates for a fundamental shift in African agricultural strategies, urging a departure from the conventional Green Revolution approach and a move towards embracing agroecology. The limitations of the Green Revolution, including environmental degradation, high production costs, and vulnerability to pests and diseases, are discussed, highlighting the need for a more sustainable and inclusive alternative. Agroecology, grounded in ecological principles and local knowledge, offers a context-specific and climate-resilient pathway to transform African agriculture. By prioritising biodiversity, sustainable resource management, and farmer empowerment, agroecology can address food security challenges while promoting environmental sustainability and social equity. The speech presents successful examples and research findings that underscore the positive impacts of agroecology on food security, biodiversity conservation, climate adaptation, and rural livelihoods in diverse African contexts. Embracing agroecology enables Africa to create resilient and equitable agricultural systems that tackle climate change and resource constraints while safeguarding community well-being and ecological integrity.

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search.

### The roles and potentials of micro, small and medium scale enterprises for inclusive value chains in developing regions

LENIS SAWEDA LIVERPOOL-TASIE

Michigan State University, College of Agriculture & Natural Resources, United States In the last three decades, agri-food value chains (AVCs) have been growing and transforming rapidly in developing regions. This transformation is driven in part by urbanisation, population & income growth, and market deregulation. These have caused shifts in consumption patterns which have stimulated significant supply response; largely domestic. This transformation has been facilitated by enormous aggregate investment on the part of the many micro, small, and medium enterprises (MSMEs) in the "midstream" and "downstream" of AVCs, comprising the wholesale, logistics, processing, and retail segments of value chains. Despite their critical role in making nutritious and safe foods available to consumers, limited attention in research and national or international policy discussions has been directed toward these value chain segments. In this talk, I will draw from several research projects to reflect on the potential roles of these MSMEs (particularly in the midstream and downstream of food supply chains) in making the transformation of these value chains more inclusive and the associated implications for policy and re-

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### Competing narratives for livestock development and policy

IAN SCOONES

PASTRES, Institute of Development Studies, University of Sussex, United Kingdom

This presentation will offer a new narrative for livestock development and policy, focusing on extensive livestock and pastoral systems from across the world. Making use of half the world's land surface, rangelands are an important site for the production of animal-source foods and other products, generating livelihoods for millions. Yet extensive livestock systems are poorly understood, with herders and their livestock frequently cast as the villains of climate change and environmental destruction. The new narrative challenges these assumptions and suggests alternative pathways for development and policy around five intersecting themes: mobility, land and environment, climate, diets and markets. The new narrative highlights the potentials for livestock systems to enhance the environment and biodiversity, while limiting impacts on the climate. The narrative in turn means development pathways that recognise pastoralism and extensive livestock production as productive, modern systems based on mobility, flexibility and adaptability, and embedded in local social relationships and collective networks.

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