4th International workshop on System Innovation towards Sustainable Agriculture (SISA-4)

Transitions towards sustainable agriculture and food systems: Connecting research and practice

To be held in Kassel at the University of Kassel (Germany), 07.-09. October 2024





Overview

Transitions towards sustainable agriculture and food systems: Connecting research and practice

Despite earlier and more recent scientific evidence, societies are facing enormous and persisting sustainability challenges. The field of agri-food transition research is characterized by different – mainly only incremental – change patterns and the theoretical perspectives to describe, explain and foster them range across different scholarly fields. Furthermore, research insights often are not well tuned to the needs and challenges of agricultural practices and policies. This workshop invites researchers and practitioners to co-generate an integrative overview on contemporary issues in agri-food transitions and future avenues in research, policy making as well as in innovation and transition practice.

Organizing Committee

Prof. Dr. Bettina König (Chair) - University of Kassel, Germany

Dr. Renée van Dis - INRAE-LISIS, France

Dr. Boelie Elzen - Wageningen University and Research, The Netherlands

Dr. Christine Hvitsand - Telemark Research Institute, Norway

Dr. Katharina Schiller - The International Maize and Wheat Improvement Center (CIMMYT), Mexico

Dr. Alvaro Romera - AgResearch Ltd, New Zealand

Contact: SISA-4@uni-kassel.de

Download the CfP template: www.uni-kassel.de/go/ninte

Important Dates

February 2024: Call for Papers

22nd of March: deadline for abstract submission

15th of April: Notification of acceptance and participation

1st of July: deadline full paper submission

07.-09. October 2024: Workshop in Kassel, Germany

Rationale of the Workshop and scientific targets

Societies are facing enormous and persisting sustainability challenges. Research, international negotiations, EU and national policies try to address these with different degrees of ambition and direction across societal fields. One of the fields that has increasingly drawn attention is the system around agricultural production and food consumption. Research insights from agricultural knowledge and innovation system (AKIS) studies' insights have led to new forms for research and development at national and international level. These are giving participatory, inter– and transdisciplinary research approaches more promi– nence in order to take the multifaceted and complex nature of agri–food knowledge and innovation systems, their interconnections to other systems and the systemic characteristics of change into account (Elzen et al. 2004 and 2012, Cornell et al. 2013, Leach et al. 2020, Brouwer et al. 2020, Hebinck et al. 2021, Kok and Klerkx 2023, Knierim and Birke 2023).

However, progress to make agri-food systems around the globe more sustainable and resilient is overall complex and slow. Moreover, sustainability transition efforts have become confronted with the impacts of disturbance and disruptions such as societal conflicts and crisis events. Developments in the EU and the Global South, not least due to recent crises in the last years, leave actors somewhat without directionality. The present European movement of farmers in Germany, Belgium, Netherlands, France and India particularly echoes the importance of developing research and studies about transitions when they at the same time ground societal expectations, political promises and critiques from farmers.

To address these challenges, the planned workshop deals with the following overarching question: What have we actually achieved and learned so far through the many initiatives in research, policy and practice around agrifood sustainability transitions? What knowledge is needed to inform actors and society on feasible pathways to feed the changing world in a sustainable manner and how can we stimulate these?

Existing agri-food systems and the required transitions are studied and analyzed by a range of different scholarly fields, using a range of perspectives, including rural sociology, human geography, transition studies, agricultural economics, institutional economics, science and technology studies, science and society studies, sustainability sciences and others (Köhler et al. 2019, Hebinck et al. 2021). This variety reflects a multidisciplinary fragmentation of knowledge within the socio-economic sciences, but also between other natural sciences disciplines, and leads to very dispersed insights on whether and how agri-food systems should and could be transformed. This constitutes a transition barrier in itself, as it provides insufficiently actionable knowledge and technologies to actors despite promising approaches (Seppelt at al. 2020, Schaltegger et al. 2023, IPCC 2019). Hence, agri-food transition scholars with their holistic systems and process view are called to engage theoretically and methodologically with neighboring perspectives aiming at contributing knowledge for sustainability transitions (Hebinck et al. 2021). While on the one side, the need for further developing a network of agri-food transition research is recognized, the scholarly field needs to mobilize existing knowledge, discuss, refine and redirect research for the coming decade.

To address these challenges, the fourth workshop on System Innovation towards Sustainable Agriculture (SISA-4) shall bring together research insights and practical experiences in making agriculture and food systems more sustainable. After the first edition of the SISA workshop 14 years ago in Lelystad (SISA-1; cf. Barbier and Elzen, 2012), this workshop intends to collect, integrate and reflect on the effects of more system-oriented science and practice, on research and innovation, inter- and transdisciplinary funding formats and policies for more sustainable agri-food systems. The Agro-Food Thematic Group of the Sustainability Transitions Research Network (STRN-AFTG) will stimulate indepth dialogues and co-develop integrative system views on how to govern, manage, analyze and sustain transitions towards sustainable agri-food systems. To achieve this, the preparation process and the workshop will integrate practitioner views besides traditional academic procedures to develop the program.

The meeting seeks to realize four main objectives:

1) Develop an overview of key insights in the dynamics of agri-food transitions;

2) Integrate what we have learned on the governance of such transitions at local and (inter)national levels, including policies, standards, initiatives and business models to stimulate them;

3) Provide a co-created systemic view on contemporary transition challenges and provide discussion input for policy and other strategic action to stimulate such transitions;

4) Develop a research agenda (using co-creative approaches with various stakeholders) for the transition research community and other research communities for the coming decade to contribute to agri-food transitions.

To catalyze such joint reflection and co-create future avenues, we invite practitioners and scholars from different domains of the agri-food system, to submit proposals for contributions addressing one or more of the following four main topic bundles:

1. On the practicalities of theories in agri-food systems

We see a need for consolidating agri-food transition research to integrate insights from different contexts. How adequate are theories, methodological approaches, researcher's positionalities and how fruitful are their efforts to foster more sustainable outcomes of agri-food systems? How can researchers produce problem solving knowledge for practical transition situations?

2. 'Old' and 'new' transition possibilities and barriers

Since normative questions continue to play a role for agri-food controversies, we invite contributions to understand both old and new fostering or hindering factors and constellations. These might address the complexities emerging from sectoral strategies against sustainability transitions, interdependencies with other sectoral transition strategies and developments, discursive cultures, social cohesion, multiple crises, greenwashing, activism, populism, fake news etc. in agri-food transitions.

3. Outcome and impacts of transition initiatives, work and research

Which 'positive' (i.e. leading to a more sustainable system) impacts can be expected from different kinds of initiatives, work and research on transitions in agri-food systems? Change processes and their impacts could be related to all sustainability aspects, including economic, social, political, health and environmental. This includes questions of long-term assessment of impacts, funding and (real-time) approaches for generating impact as well as questions related to what happens after research funding and academic engagement ends. Furthermore, which unintended and 'negative' impacts arose from research and transition initiatives?

4. Transition policy and governance in-themaking

Taking stock and looking ahead, this topic addresses the impacts of current policies that attempt to make agri-food systems more sustainable, in relation to ongoing sustainability transition processes. We invite contributions on how a transition ambition could give a different twist to those policies, and which 'implementation' issues are related to more ambitious, effective and context specific policies that target a transition of agri-food systems. We also invite contributions and how the interplay between policy and research can be strengthened.

Target of the workshop and its follow-up:

- The workshop is part of a longer-term process with activities to develop an international research and practitioner network, possibly linked to the aforementioned Agro-Food Thematic Group.
- An edited volume (two have been published after the earlier SISA workshops; Barbier and Elzen 2012; Elzen et al. 2017) and/or a special issue of a scientific journal of the papers and discussions;
- A policy report with recommendations for policy makers and other stakeholders based on the dialogues and reflections at the workshop;
- A research agenda and network action plan for the transition research community for the coming decade, specifying key areas of research and key areas of transdisciplinary work involving various types of stakeholders.

Participation

Invited participants. Participation of researchers is by invitation only, based on submitted abstracts covering one or more of the four topics above, and from a variety of disciplinary backgrounds (30 persons). Between 15 to 20 papers will be selected, but participants without a paper can still be invited as discussant and contributors to workshop outcomes. PhD students are invited to present their research in the form of a poster during a poster session. We also seek participation from policymakers and representatives of cooperative and professional networks to bring in their experiences and ways of framing insights. With their submission, contributors are invited to recommend actors from diverse fields of AKIS, who can contribute substantially to the planned future-oriented workshop discussions on day 2.

Funding decisions are still pending. Upon approval of abstracts, we will inform participants on occurring costs. Our aim is that local costs (venue, catering, and lodging) will be covered by the organizers. We also aim for solutions for travel costs for researchers in need. However, some funding applications are still pending so it is still uncertain to what extent support for travel will be feasible.

Submission of abstracts

To apply for participation you are requested to submit an abstract of your contribution by 22 March at latest. The abstract should use the format that can be downloaded from the workshop website and be no longer than 2 pages in that format.

On the second day we want to have some in-depth interaction with policy makers and practitioners (app. 10 separately invited people). Please give suggestions for whom we might invite and why, also in not more than two pages. Download the CfP template including optional suggestions for policy maker/ practicioner invitations: <u>www.uni-kassel.de/go/ninte</u>









Pictures: Bettina König (1); Stefan Sieber (2); Anett Kuntosch (3); Rico Defila (4)

Format of the Meeting – draft will be defined upon contributions

The format of the meeting seeks to stimulate in-depth discussion of various issues rather than having many presentations and only brief discussions. To achieve this, the workshop creates space for various kinds of interactions concerning knowledge-sharing and co-creation:

Day 1) Paper discussion sessions, clustering papers around a number of themes related to the four topics, incl. a poster session for PhD students;

Day 2) Experience and knowledge 'harvesting' and co-creation sessions on views on transition challenges with policy makers and practice actors;

Day 3) Through co-creative processes, obtain input to the development of a research agenda and a summary documentation.

The details of the program will be established after the selection of papers and participants.

Key characteristics

- 30 researchers
- 10 policy makers and practitioners from different levels and domains of agri-food transitions
- 07.-09. October 2024
- The workshop will be held in English
- Traveling by train possible for participants from most places in Europe
- In case of need for travelling by plane, the route via Frankfurt/ Main Airport, taking the train to Kassel is suitable
- Targeted venue: Campus Kassel University (optional field visit and collaborative writing format on day 3 in rural Frankenhausen field trial farm with a Bus, t.b.d.)

Literature

Barbier M., Elzen B. (eds) (2012): System Innovations, Knowledge Regimes, and Design Practices towards Transitions for Sustainable Agriculture. INRA [http://www.sad.inra.fr/Ressources/Transitions-vers-une-agriculture-durable]

Brouwer, I.D., McDermott, J., Ruben, R. (2020): Food systems everywhere: Improving relevance in practice, Global Food Security, Volume 26, <u>https://doi.org/10.1016/j.qfs.2020.100398</u>.

Cornell, S., Berkhout, F., Tuinstra, W., Tàbara, J.D., Jäger, J., Chabay, I., de Wit, B., Langlais, R., Mills, D., Moll, P., Otto, I.M., Petersen, A., Pohl, C., van Kerkhoff, L. (2013): Opening up knowledge systems for better responses to global environmental change, Environmental Science & Policy, Volume 28, https://doi.org/10.1016/j.envsci.2012.11.008.

Elzen, B., Geels, F.W. and Green, K. (Eds.), 2004. System Innovation and the Transition to Sustainability. Edward Elgar Publishing Ltd. Cheltenham.

Elzen, B., Mierlo, B.C. van, Leeuwis, C. (2012): Anchoring of innovations: Assessing Dutch efforts to harvest energy from glasshouses, Environmental Innovation and Societal Transitions, 5, p. 1–18, <u>https://doi.org/10.1016/j.eist.2012.10.006</u>.

Elzen, B., Augustyn, A. M., Barbier, M., van Mierlo, B. (2017): AgroEcological Transitions: Changes and breakthroughs in the making, Wageningen University & Research, <u>10.18174/407609</u>, http://library.wur.nl/WebQuery/wurpubs/fulltext/407609.

Hebinck, A., Klerkx, L., Elzen, B., Kok, K. P., König, B., Schiller, K., Tschersich, J., van Mierlo, B., & Wirth, T. von (2021). Beyond food for thought – Directing sustainability transitions research to address fundamental change in agri-food systems. *Environmental Innovation and Societal Transitions*, *41*, 81–85. <u>https://doi.org/10.1016/j.eist.2021.10.003</u>.

IPCC (2019): P.R. Shukla et al. (eds.) Technical Summary, 2019. In: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial. <u>https://doi.org/10.1017/9781009157988.002</u>.

Köhler, J., Geels, F. W., Kern, F., Markard, J., Onsongo, E., Wieczorek, A., Alkemade, F., Avelino, F., Bergek, A., Boons, F., Fünfschilling, L., Hess, D., Holtz, G., Hyysalo, S., Jenkins, K., Kivimaa, P., Martiskainen, M., McMeekin, A., Mühlemeier, M. S., . . . Wells, P. (2019). An agenda for sustainability transitions research: State of the art and future directions. *Environmental Innovation and Societal Transitions*, *31*, 1–32. https://doi.org/10.1016/j.eist.2019.01.004. Knierim, A., Birke, F.M. (2023), Visualised AKIS Diagnosis – an Instrumental Approach to Support AKIS Appraisal. EuroChoices, 22: 59–70. https://doi.org/10.1111/1746-692X.12397

Kok, K.P.W., Klerkx, L. (2023): Addressing the politics of mission-oriented agricultural innovation systems, Agricultural Systems, Volume 211, <u>https://doi.org/10.1016/j.agsy.2023.103747</u>.

Leach, M., Nisbett, N., Cabral, L., Harris, J., Hossain, N., Thompson, J. (2020): Food politics and development, World Development, Volume 134, <u>https://doi.org/10.1016/j.worlddev.2020.105024</u>.

Schaltegger, S., Loorbach, D., & Hörisch, J. (2023). Managing entrepreneurial and corporate contributions to sustainability transitions. Business Strategy and the Environment, 32(2), 891–902. <u>https://doi.org/10.1002/bse.3080</u>.

Seppelt R, Arndt C, Beckmann M, Martin EA, Hertel TW (2020) Deciphering the Biodiversity-Production Mutualism in the Global Food Security Debate. Trends in Ecology & Evolution, November 2020, Vol. 35, No. 11, https://doi.org/10.1016/j.tree.2020.06.012.



Pictures: Bettina König (1,3); Anett Kuntosch (2)