

11th Sustainability Transitions Conference, 18 - 21 August 2020

Dialogue session

Promising research approaches for supporting food systems transformations

Track: Transitions in Practice, 19th August 2020, 12:00-13:30 h

Session organizers: Dr. Carmen Priefer, Charlotte Beckh, Dr. Eva Hummel, Dr. Alexandra Heyer, and Prof. Dr. Ingrid Hoffmann

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Key words: sustainable nutrition, transformations, food systems, promising approaches, complexity, power relations, behavioural changes, transdisciplinarity, systems science, modelling, nutritional behaviour

Fundamental transformations of today's food systems are urgently needed for increasing human well-being and respecting our planetary boundaries (WBGU 2011). The Sustainable Development Goals can only be achieved through a new orientation of food systems towards sustainability. Although vast knowledge about sustainable nutrition exists, it is not sufficiently implemented and lived in practice by consumers, producers, and politicians. Thus, nutrition related problems are still prevailing. Following the developments made so far, a range of unsolved challenges hamper major breakthroughs towards improved human well-being and quality of life, including in particular:

- insufficient consideration and tackling of complexity, e.g. multiple factors in their interrelatedness, feedbacks, dynamics, and side effects in food systems;
- unequal power relations and conflicting interests, e.g. between agribusiness and environmental protection or between farmers and retailers;
- lack of behavioural changes fulfilling both individual interests and sustainability demands, e.g. with regard to meat consumption or wastage of food.

Science is increasingly addressing these challenges by breaking new ground. In recent years, various projects and initiatives were undertaken or have been started that investigate and/or initiate food systems transformations, bringing together scientists from different disciplines, involving practitioners, combining methodologies and experimenting with new research approaches. Systems science, transdisciplinarity and empirical social research as well as their combination are of particular importance for food systems transformations. Mutual learning from the experiences gained in these and other fields is assumed to be crucial for bringing transformation processes in the field of nutrition forward.

Against this backdrop, the Dialogue Session invites to discuss promising methods, concepts and ideas that address the above-mentioned unsolved challenges for food systems transformations towards improved human well-being and quality of life. The session offers the possibility to mutually learn from various experiences and jointly reflect on workable paths for real change and on points for future research.

The session aims to answer the key question: What are promising research approaches for supporting food systems transformations in line with sustainable development?

After an introduction into major challenges for food systems transformations by the session hosts, three speakers will share their experiences with promising research approaches. These inputs will open the moderated discussion with all participants.

Agenda

15 min

Welcome

Moderation: Charlotte Beckh and Dr. Eva Hummel, Max Rubner-Institut (MRI), Karlsruhe, Germany

Introductory note “Major challenges for food systems transformations”

Dr. Carmen Priefer, Charlotte Beckh, Dr. Eva Hummel, Dr. Alexandra Heyer, and Prof. Dr. Ingrid Hoffmann, Max Rubner-Institut (MRI), Karlsruhe, Germany

65 min

Roundtable

▪ Inputs (each 10 min)

- **How can participatory modelling support considering and tackling complexity?**

Dr. Veronika Gaube and Dr. Barbara Smetschka, Institute of Social Ecology (SEC), University of Natural Resources and Life Sciences (BOKU), Vienna, Austria

- **How to deal with unequal power relations and conflicting interests to support just food systems transformations?**

Prof. Dr. Stephan Rist, Professor of Human Geography, Unit of Critical Sustainability Studies of the Institute of Geography and UNESCO Chair on Cultural and Natural Heritage and Sustainable Mountain Development, University of Bern, Switzerland

- **How to support long-term behavioural changes that fulfill both individual interests and sustainability demands?**

Dr. Stephanie Moser, Centre for Development and Environment (CDE), University of Bern, Switzerland

▪ Moderated discussion (35 min)

Between speakers and audience

10 min

Wrap-up

Session Hosts

The session is organized by the Department of Nutritional Behaviour of the Max Rubner-Institut, Federal Research Institute for Nutrition and Food, Germany.

Dr. Carmen Priefer: Environmental scientist, research associate at the Department of Nutritional Behaviour at the Max Rubner-Institut. Her current research focuses on sustainable nutrition and transformation processes, with main interest in interdisciplinary perspectives on complex societal challenges, sustainability, and systemic interrelations. Before joining the Max Rubner-Institut in 2018, she was research associate at the Institute for Technology Assessment and Systems Analysis (ITAS) of the Karlsruhe Institute of Technology (KIT), Germany.

Charlotte Beckh: Sustainability scientist with a specialization in environmental governance, research associate at the Department of Nutritional Behaviour at the Max Rubner-Institut. Her current research focuses on transformations and transdisciplinary learning processes in the area of sustainable nutrition. Before joining the Max Rubner-Institut in 2018, she conducted transdisciplinary research at the Institute for Advanced Sustainability Studies (IASS Potsdam), Germany.

Dr. Eva Hummel: Nutritionist, research associate at the Department of Nutritional Behaviour at the Max Rubner-Institut. Her current research focuses on the complexity of nutritional behaviour, the application of instruments from systems science, especially modelling in the field of nutrition, and transformations towards sustainability. Before joining the Max Rubner-Institut in 2010, she was research associate at the working group Nutrition Ecology, University of Giessen, Germany.

Dr. Alexandra Heyer: Ecotrophologist, research associate at the Department of Nutritional Behaviour at the Max Rubner-Institut. Her current research focuses on nutritional behaviour of vulnerable groups (in particular children with migration background and seniors) and qualitative methods of empirical social research. Before joining the Max Rubner-Institut in 2003, she was amongst others research associate at the professorship for nutritional counselling and consumer behaviour, University of Giessen, Germany.

Prof. Dr. Ingrid Hoffmann: Nutritionist, head of the Department of Nutritional Behaviour at the Max Rubner-Institut. Her current research focuses on nutritional behaviour, sustainability, modelling of complex nutrition aspects, and nutrition epidemiology. Before joining the Max Rubner-Institut in 2009, she held the professorship for Nutrition Ecology, University of Giessen, Germany.

Speakers

Dr. Veronika Gaube: Social Ecologist with a diploma in Ecology, senior scientist at the Institute of Social Ecology, BOKU, Vienna. Her research focuses on land use and land-use change, agricultural practices and time use in sustainability studies. Methodologically, she works with integrated socio-ecological land-use models based on agent-based modelling, whereby the models are in many cases developed in a transdisciplinary research process together with experts and stakeholders.

Dr. Barbara Smetschka: Social Ecologist with a diploma in Social Anthropology, senior scientist at the Institute of Social Ecology, BOKU, Vienna. Her current research focuses on sustainable urban development, sustainable agriculture, time-use studies, participatory research, inter- and transdisciplinary research, gender and sustainability research. One research topic is participatory modelling, mostly using agent-based models or developing integrated systemic models in cooperation with stakeholders.

Prof. Dr. Stephan Rist: Stephan Rist is associate professor for human geography at the Institute of Geography of the University of Bern. He is holder of the UNESCO Chair 'Natural and Cultural Heritage of Sustainable Mountain Development', and also works at the Centre for Development and Environment (CDE) of the University of Bern, where he works in the Cluster on Sustainability Governance of Land and Natural Resources. The geographic focus is on Latin America and Africa being involved in several international research projects, dealing with critical sustainability assessments of large scale land investments, food sustainability, local knowledge, social movements and transdisciplinary approaches of research aiming at the enhancement of societal transformation in view of environmental justice.

Dr. Stephanie Moser: Environmental psychologist, head of the socio-economic transitions cluster at the Centre for Development and Environment (CDE) at the University of Bern, Switzerland. In her research she focuses on transformation processes towards sustainable consumption patterns and lifestyles. Before her current position at CDE she held a senior assistant position at the Interdisciplinary Centre for General Ecology (IKAOE) at the University of Bern, Switzerland.

References

WBGU (Wissenschaftliche Beirat der Bundesregierung Globale Umweltveränderungen): *Welt im Wandel. Gesellschaftsvertrag für eine große Transformation. Hauptgutachten [World in Transition – A Social Contract for Sustainability. Flagship Report]*. WBGU, Berlin 2011