

Theories of change as tools for designing robust planetary solutions

Planetary solutions necessarily require a transdisciplinary research approach. Increasingly, policy, practice, and civil society actors call on researchers to **produce evidence of meaningful, enduring societal impact**. This demand is echoed within sustainability science, and funders now expect more than generic claims of “policy relevance” or “actionable outputs” or “stakeholder engagement.” Funding calls increasingly require convincing articulation of causal mechanisms by which a project will deliver on and measure its impact.

Theories of Change (ToCs) are widely regarded as a **gold-standard framework** for designing transformative initiatives (Augenstein et al., 2024; Claus et al., 2023). They are structured frameworks for **mapping how and why desired changes are expected to occur** in specific contexts, as a result of interventions (e.g., research activities). They help (re-)identify the **most effective intervention points** (e.g., policies, norms, behaviors, technology, knowledge, incentives) and ultimately help a team answer: **Are we doing the right things? Are we doing them well? Are we achieving impact?** (Salafsky et al., 2002).

ToCs are well established in philanthropy, international development, government, and the private sector (e.g., GIZ, Frankfurt Zoological Society, Government of Mongolia, US Fish & Wildlife Service, Gordon & Betty Moore Foundation), yet remain underused in research. **Momentum is now growing for applying ToCs in research and innovation** to design projects that spark and amplify societal transformation (e.g., Belcher et al., 2024; Deutsch, 2021; Dinges et al., 2022; Wiefek et al., 2024; Wuelser & Edwards, 2023). Still, many researchers are unfamiliar with or uncertain about using this approach.

This workshop will unite UFZ with local and international experts to explore the conceptual foundations and methodologies of ToCs for designing research projects. Its aim is to strengthen the research community’s capacity to apply ToCs in (strategic) **programme design, monitoring, evaluation, learning, and reflection**. *In this regard, there will also be a **special session on principles and practices for research with Indigenous Peoples and Local Communities** and integration of cultural knowledge side-by-side with Western knowledge in research projects.*

Organised by the Department of Systemic Environmental Biotechnology, this indicates the **relevance of ToCs not only for social scientists but also for natural scientists and engineers**. It will be especially valuable for **UFZ’s integrated project teams**. UFZ management’s decision to offer this training reflects foresight in understanding the future needs of sustainability science. This is a rare opportunity to learn from the best, gain practical expertise and join a growing community of practice. This workshop may also be useful for Hiwi, Masters & PhD students; the skills developed open career opportunities beyond academia.

Aims and Outcomes

- Introduce the conceptual foundations of ToCs and relevance for developing interdisciplinary and transdisciplinary research projects
- Provide guidance and tools for applying ToCs for research design in different contexts and scales
- Provide examples of best-practice ToCs developed in the conservation research (science) and practice communities
- Strengthen researchers’ ability to design impact-oriented projects that respond to societal needs, drafting impact pathways and articulating the impact of their initiative to funders, policy-makers and stakeholders
- Expand the network of researchers advancing the use of theories of change in sustainability science

AGENDA TOPICS

Topic 1: Foundations & Tools

- History of theory of change framework and impact evaluation in different sectors
- Increasing effectiveness in sustainability research: characterizing research quality for effective design, implementation, and assessment

Topic 2: Research Program Design

- Frameworks, methodologies and best practices
- Designing and monitoring impact-oriented sustainability research and innovation
- Applying the evidence-base and scaling strategies for projects

Topic 3: Tales from the Field: Case-studies of Transdisciplinary Projects

- Case-study: Research in collaboration with Indigenous Peoples & Local Communities in Australia
- Case-study: International Research-for-Development Projects – Center for International Forestry Research
- Case-study: Integrated Landscape Management at Conservation International

Applying Insights (optional for research teams) – 1 day (last day)

Participants, working in groups, develop advanced ToCs using the “Open Standards for the Practice of Conservation” (Conservation Standards) for their programmes and projects, with guidance of facilitators and interdisciplinary feedback from other teams. Post workshop, participants can practice writing a narrative theory of change - capturing details such as the context and nuances of the approaches. These can be used to articulate projects to partners and stakeholders. It helps move away from a focus on processes to describing why the research initiative is important and how it leads to change. Participation in the previous days’ sessions is required for the “applying insights” exercise (or contact organiser for alternative arrangements).

LOGISTICS & REGISTRATION

Date: December 3rd - 5th, 2025

Location: LEIPZIG - KUBUS Saal 2

The guest experts would like to get to preview of the profiles of attendees (area of expertise, projects) beforehand. Therefore, **please register here until November 24th** -- <https://forms.gle/MF6mhzKqhDZDZJJs5>

Agenda will be provided on Nov 17th

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Selected list guest experts (and expanding)



René Edwards - Technical Director, Conservation International - Guyana René has over 20 years’ experience designing and implementing conservation and development programs and projects. Including, managing a **sustainable livelihoods** project in the Rupununi region; leading a long-term **community planning and resource management initiative in Indigenous communities in Guyana** and leading the CI-Guyana **responsible mining initiative**, with is aimed at fostering greater responsibility and sustainability in the artisanal, small and medium scale gold mining sector. He has also supported the design and delivery of **multi-stakeholder consultation** processes providing feedback and advice to a major, province-wide, **transit policy initiative in Ontario, Canada** as well as a significant urban **re-naturalization project in the City of Toronto**. René has a bachelor’s degree in **Conservation and Environmental Studies** from York University, Canada and a master’s degree in **Local and Regional Development** from the Institute of Social Studies in The Netherlands.



Frank Weisenberger, Independent Consultant in Conservation Planning

Frank is a planning professional, specialised in **Indigenous issues, community consultations, stakeholder engagement**. Equipped with a tertiary background in **Applied Geography, Anthropology** and Tourism Management, Frank has spent twelve years working extensively with **Indigenous communities across Australia and globally** on conservation planning and strategic natural and **cultural resource management** programs. With a focus on community ownership, Frank uses the Conservation Standards and its adaptation **Healthy Country Planning** as tools to support decision making processes of a project. These frameworks help projects to **bring together indigenous/community knowledge and western science** in a highly participatory planning process for improved long term conservation outcomes.



Nick Salafsky, Executive Director – Foundations of Success. FOS is dedicated to improving the practice of conservation and development through enhanced **monitoring, evaluation, learning, and collaboration**. Nick works with conservation practitioners in the United States and around the world to define clear and practical measures of conservation success, determine sound guiding principles for using conservation strategies, and develop the knowledge and skills of individuals and organizations to do good adaptive management. Prior to starting FOS, Nick worked for the **MacArthur Foundation** and the Biodiversity Support Program, supporting conservation work across the Asia/Pacific Region. Nick also spent several years in West Kalimantan, Indonesia, conducting interdisciplinary research on a locally developed **agroforestry system** and the behavioral ecology of the red-leaf monkey. Nick is also currently a Thematic Chair for the **World Commission on Protected Areas** and an assigning editor for the **journal Conservation Science and Practice**.



Nico Boenisch, Director of Foundations of Success (FOS) Europe. Nico supports conservation teams and networks to strengthen the effectiveness and impact of their work through adaptive management, evidence-informed decision-making, and collaborative learning. With a background in climate change and biodiversity conservation, he works across scales and sectors to bridge the gap between knowledge and practice. He has over 15 years of experience supporting partners worldwide in developing strategies, designing learning systems, and improving conservation outcomes in complex and dynamic contexts. His work spans ecosystem conservation and restoration, protected area management, policy engagement, and nature-based solutions. Nico contributes to several international initiatives focused on learning and evidence use, including the Conservation Learning Initiative. He has mentored and trained hundreds of practitioners in the use of the Conservation Standards, co-founded the Conservation Coaches Network Europe, and continues to advise on learning processes and tools, including the Miradi software.



Brian M. Belcher - College of Interdisciplinary Studies, Royal Roads University. Brian's research has focused on understanding and improving the role and potential of natural resources to sustainably contribute to rural development and on research effectiveness. He has served as director of the Centre for Livelihoods and Ecology at Royal Roads University from 2007 to 2013, when he became the university's first Tier 1 Canada Research Chair. He was appointed Ashoka Research Chair in 2019 and is leading a program in sustainability research effectiveness that aims to develop **theory and methodology for evaluating sustainability research in complex transdisciplinary contexts and to conduct comparative analyses and evaluations of a series of sustainability research projects**. This work helps to demonstrate the **societal value and impact of research** and looks to improve future research. Belcher teaches in the Doctor of Social Sciences program. He is also a **senior associate scientist with the Centre for International Forestry Research (CIFOR) and the coordinator of the monitoring, evaluation, learning and impact assessment** theme of the international Consortium Research Program on **Forests, Trees and Agroforestry**. Prior to joining Royal Roads in 2007, Belcher worked at CIFOR, based at the headquarters in **Bogor, Indonesia**, for a decade. He served as senior scientist, leader of the forest products and people program, and director of the livelihoods program. Belcher led and contributed to a series of research projects including a **large international comparative analysis** of cases of non-timber forest products commercialization and the Poverty and Environment Network. He worked at Canada's International Development Research Centre in New Delhi, India, from 1994-97, and Ottawa, from 1989-92, and at Fisheries and Oceans Canada, doing research in Northern Manitoba and the Eastern Arctic.