

## International Transdisciplinarity Conference 2019

### Pathways to Impact of Transdisciplinary Research: The Role of Contexts, Goals, and Epistemological Assumptions

#### Contributors

Flurina Schneider<sup>1</sup>, Claudia Binder<sup>3</sup>, Tobias Buser<sup>1,5</sup>, Livia Fritz<sup>3</sup>, Sabine Hoffmann<sup>2</sup>, Christian Pohl<sup>4</sup>, Isabelle Providoli<sup>1</sup>, Thorsten Schilling<sup>3</sup>, Theresa Tribaldos<sup>1</sup>

<sup>1</sup> Centre for Development and Environment CDE, University of Bern, Switzerland

<sup>2</sup> EAWAG

<sup>3</sup> EPFL

<sup>4</sup> TD-Lab, ETHZ

<sup>5</sup> Td-net, Swiss Academies of Arts and Sciences

#### Keywords

Pathways to impact, theories of change, empirical experiences

#### Abstract

Transdisciplinary research is considered as a promising research approach when aiming to producing knowledge that can contribute to sustainable development. But so far, empirical evidence showing to what extent it is actually advancing sustainable development is scarce and relies on individual case studies: some studies show potentials, others challenges and limitations. Acknowledging that sustainability transformations can unfold in many different ways with different involvement of knowledge, knowing and learning, this mixed result is not surprising, and points to the need for differentiation. The question arises in which situations and for which impact goals what kind of transdisciplinary research and related pathways to impact holds promise. Answers to this question will enable researchers to tailor transdisciplinary approaches to specific situations and to reflect on and enhance its contributions for sustainable development.

In recent years, scholars started to conduct meta-level studies of multiple cases in order to differentiate distinct pathways to impact and to search for patterns between transdisciplinary approaches, envisioned or achieved goals, and context conditions. Results give indications for promising transdisciplinary impact goals and designs. However, increasing research also points out that links between transdisciplinary research and sustainability transformations are by no means linear and often beyond the area of influence of the researchers involved. Moreover, epistemological assumptions and expectations underpinning the different transdisciplinary research designs and activities, as well as the conceptualised pathways to impact can vary greatly, making it challenging to compare the different approaches.

Against this background, the goal of this session is to discuss insights from meta-level studies that focus on different pathways to impacts of transdisciplinary research, taking into account distinct impact goals, context conditions and epistemological assumptions. By doing so, we aim to unravel the potential and limitations of transdisciplinary approaches for effectively contributing to sustainability transformations.

The session starts with 5 talks (about 10min each), followed by a structured discussion with all session participants on the guiding questions below.

### **Impulse talks:**

**Expected and experienced effects of participation – a systemic analysis of perceptions of researchers and practitioners in sustainability research.** Claudia R. Binder, Livia Fritz and Thorsten Schilling will present the results of an interview study on expected and observed effects of participation in seven transdisciplinary research projects aiming to contribute to sustainability development. The focus will be put on the diversity of perceived pathways from participation to societal effects.

**Promises and potentialities of transdisciplinary practices in African cities: Learning from LIRA 2030:** Zarina Patel and Flurina Schneider will give insights on a study of the LIRA 2030 programme that fosters transdisciplinary research in African cities with the aim of co-producing knowledge leading to effective and sustainable urban transitions. The study illustrates the variety of approaches and assumptions employed by individual projects – shaped by local contexts. Close examination of the projects illustrate that the lack of uniformity in approach and assumptions resonates with experiences in the global North, raising questions about the potential for a uniquely African approach to transdisciplinary research.

**From transdisciplinary knowledge production to societal transformations: Pathways explored by projects on urban development.** Tobias Buser et al. will explore, how stakeholders link back from transdisciplinary projects to their organisations. Based on interviews and workshops with practitioners participating in TD-projects in Sweden and Switzerland, we found a wide range of approaches, ranging from the use of the organisation's communication channels to changing whole planning processes based on experiences with TD-processes and methods. We see a large potential in actively reflecting within TD-projects on promising pathways to achieve the potential for organisational learning and change in participant's organisations.

**Change Theory Thinking for Investigating Pathways to Impact of Transdisciplinary Sustainability Research.** Flurina Schneider et al. will present insights of a study investigating pathways to impact and underlying theories of change of 20 transdisciplinary research projects aiming to contribute to sustainability transformations in the global North and South. The study revealed 11 distinct components of theories of change that are used and combined by projects in different ways.

### **Guiding questions for the discussion:**

The discussion will be structured with the following guiding questions:

- What pathways to impact are intended and pursued by different transdisciplinary projects?
- Do different sustainability impact goals or contexts affect the choice of the transdisciplinary designs and pathways to impact?
- What epistemological assumptions and theories of change underpin the chosen transdisciplinary designs?