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SUSTAINABILITY TRANSITIONS IN RURAL AUSTRIA

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Creating spaces and cultivating mindsets for learning and experimentation

International Transdisciplinarity Conference 2021

In this communication, we present the background and core elements of the 2021 edition of the International Transdisciplinarity Conference. Beginning with a brief history of how the event was initiated and the role played by saguf in supporting its development, we then detail the main features of the conference and its relevance for transdisciplinary sustainability research and education.

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The early period of transdisciplinarity in Switzerland

The concept of transdisciplinarity (td) gained visibility in Switzerland within the *Priority Programme Environment (SPPU)* in the mid-1990s, a 83 million Swiss franc research programme of more than 200 researchers. The first phase of *SPPU* (1992 to 1995) acquired international recognition for its broad approach, with researchers from the natural sciences, social sciences, humanities and engineering, all focusing on environmental problems (Roux 1997). Practitioners noted that research had not yet led to concrete actions, largely due to insufficient cooperation between science and practice. During the second phase of *SPPU* (1996 to 1999), the Swiss Academic Society for Environmental Research and Ecology (saguf) observed that scientists needed support to work more intensively with practitioners. Thus, a forum called *Transdisciplinary research process* was initiated to discuss, systematise, and find solutions to upcoming problems around td (Roux 1997).

One of the synthesis activities of *SPPU* was the organisation of the first *International Transdisciplinarity Conference (ITD)* in 2000 in Zurich, attended by nearly 800 participants from about 50 countries (Klein et al. 2001). As a follow-up to this conference, saguf launched the *sagufnet* (Förster et al. 2001), which was renamed as the *Network for Transdisciplinary Research (td-net)* and became part of the Swiss Academies of Arts and Sciences in 2003 (Hirsch Hadorn 2002). Professionalisation and institutionalisation of td began in Switzerland with the consolidation of the *td-net,* which developed design principles for transdisciplinary research (Pohl and Hirsch Hadorn 2006), compiled a handbook (Hirsch Hadorn et al. 2008) and ensured visibility and recognition by awarding a well-funded Swiss science prize (2004 to 2015).

The main goal of *td-net* is to advance transdisciplinary research and teaching in all thematic fields. As a cornerstone in its activities, *td-net* organises the *ITD* conferences jointly with partner institutions. These biannual conferences aim to build transdisciplinary communities, bringing together scholars and practitioners from different backgrounds to reflect on the state of td and to spark further development and cooperation. Between 2008 and 2012, the conferences have focused on the main challenges of td such as problem framing, integration, implementation, and evaluation. With a growing community, from 2015 onwards, the conferences were organised jointly with international partners. In 2015, relations between sustainability, health and td were explored in collaboration with the *European congress on tropical medicine and international health.* In 2017, the conference was held in collaboration with the Leuphana University

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of Lüneburg (Germany), emphasising the intercultural dimension of td. In 2019, *td-net* organised the conference *Joining forces for change* together with the University of Gothenburg and Mistra Urban Futures[1].

The *ITD Conference 2021*

Twenty years have passed since the first edition of the *ITD Conference*. Meanwhile it has become an internationally known event that offers a vibrant forum for dialogue on td. The *ITD Conference 2021 Creating spaces and cultivating mindsets for learning and experimentation* was co-organised by the *td-net* and the Transdisciplinarity Lab (TdLab) of ETH Zurich. It was an online conference taking place between 13 and 17 September 2021 (figure 1).

ITD 2021 illustrated the global nature and the diversity of thought within the td community within a virtual meeting space. Saguf organised its own annual conference as an integral part of the *ITD* (box 1), starting from the following question: "What are the implications, challenges and responsibilities for the growing prominence of transdisciplinarity in *Horizon Europe*?".

ITD 2021 provided a platform for engagement and action that linked transdisciplinary research, learning, and practice. Real-world labs, living labs, social innovation, Global South and Global North encounters and transition experiments served as inspirations for the design and implementation of this event. To strengthen the potential of td to address societal challenges, the conference welcomed educators, researchers, practitioners, industry and business representatives, funding agencies, decision makers and students across sectors and disciplines.

To reach this goal, we developed five thematic streams reflecting the current challenges of td. In order to advance transdisciplinary concepts and methodologies, the first stream – *Integrative td* – centred on how to integrate expertise from multiple fields of knowledge (i.e., systems thinking, participatory action research, humanities, arts, design, amongst others) and professions. While acknowledging differ-

FIGURE 1: Banner of the online *International Transdisciplinarity Conference 2021*.

ences and plurality in language and action, the conference sought to contribute to envisioning and co-producing alternative futures.

The second stream – *td-on-the-ground* – focused on making transdisciplinary processes more tangible and explicit to practitioners and researchers. Participants were invited to take a close look at transdisciplinary practices that took place on the ground to better understand their impact and effectiveness. We discussed how to improve existing transdisciplinary practices based on these examples, also with the aim to facilitate inclusive and equitable research in different regions.

In a third stream – *Global and virtual td* – we opened a platform for connecting diverse communities and practices. By enabling them to learn from each other, the *ITD Conference* offered a space for virtual environments to leverage transdisciplinary collaboration, especially reflecting on their impact on the Global South-Global North context.

The fourth stream – *td learning for transformation* – focused on the potential of transformation through transdisciplinary learning. Here, we highlighted collaborative learning, including the context of Education for Sustainable Development, that helps students to build the capacity and courage to creatively take on societal challenges. Participants shared experiences on how to better support approaches to various forms of transformative learning within diverse and intercultural contexts.

The fifth stream – *Institutionalising and funding td* – reflected on the increasing role td is playing in higher education institutions and in society and how to assess its benefits. Transdisciplinary career paths are being developed in different institutions, demanding specific support and infrastruc-

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1 More information on past conferences: *http://transdisciplinarity.ch/en/veranstaltungen/itd-conferences*.

tures. In line with this, we discussed funding schemes, programme designs and management structures and how these could attract financial support for transdisciplinary research.

A unique forum for transdisciplinarity

The *ITD 2021* had several unique features compared to previous editions. First, we adapted to pandemic realities by making the conference fully online. We used this as an opportunity to open new ways of engaging with one another by building a set of online formats that aimed at optimising participants' experience, both as a contributor and as a member of the audience. We tried to accommodate a wide swath of global time zones and languages. Attendees chose from 62 activities that spanned across the five topic streams. We offered both real-time workshops and the pre-crafted contributions that were produced in advance and made available throughout the event that allowed participants to share their work in a variety of mediums. Pre-crafted contributions were discussed in specific sessions (equivalent to poster sessions in a conventional conference). Real-time conference contributions included workshops and other forms of interactive events designed by participants. Live keynote talks and panel discussions complemented these formats. As an ensemble, keynotes and panels reflected diverse perspectives on and pathways through the history and the future of td.

A second special feature of the *ITD 2021* were three auxiliary events. On one hand, the EU-funded project *SHAPE-ID (Shaping interdisciplinary practices in Europe)* held two special sessions on *Building a culture of transdisciplinary research in Europe*. This event aimed at showcasting impactful transdisciplinary research projects and exploring how best practice can be encouraged by European policymakers and funders.

The second side event was organised by a group of doctoral students from the TdLab (ETH Zurich). It offered sessions tailored to support transdisciplinary early career researchers (ECR). ECRs explored the different understandings of td across sociocultural borders, exchanged experiences concerning capacity building for td, with an emphasis on how to network and publish in the field.

Finally, the *ITD Conference* hosted the first *General Assembly of the Global Alliance for Inter- and Transdisciplinarity (ITD Alliance)*. The *ITD Alliance* builds on partnerships developed around the previous *ITD* conferences. It was initiated in 2017 and officially founded in 2019. It offers a home base for all institutions and individuals engaged in inter- and transdisciplinary research and education, aiming at strengthening and promoting the global capacity of collaborative modes of boundary-crossing research and practice. The *ITD Alliance* held a public information event about its goals and working groups and the official General Assembly, together with the elections for the Leadership Board.

Outlook

Transdisciplinarity has gained increasing traction in the past few years contributing to address sustainability issues. It is currently promoted by many organisations and funding agencies (e. g., OECD 2020). Our conference deepened the understanding about the challenges and benefits of td, for research and for society. We are convinced that providing platforms for sharing knowledge and experiences is essential for building stronger links within the transdisciplinary community, as well as for jointly exploring ideas for future research and necessary improvements on concept, methods and theories of transdisciplinarity.

BOX 1: *saguf Annual Conference 2021: Horizon Europe* as a role model for funding transdisciplinary sustainability research? Prospects and limitations

Within *Horizon Europe,* the new research programme of the EU, problem-oriented research projects are to support and enable the European Green Deal and the societal transformation it envisions. The mission-oriented funding scheme offers vast opportunities for transdisciplinary sustainability research. Similar research has less funding opportunities in Switzerland and elsewhere. Taking this as starting point, the goal of the *saguf Annual Conference 2021* was to examine the extent to which *Horizon Europe* serves as a role model for funding transdisciplinary sustainability research.

Questions for discussion included:
- What is the meaning, role and relevance of transdisciplinary sustainability research in *Horizon Europe*?
- Does *Horizon Europe* serve as a programmatic role model for transdisciplinary sustainability research?
- What can be learned from *Horizon Europe* regarding funding of transdisciplinary sustainability research?

The *saguf Annual Conference* took the form of an expert panel discussion on 16 September, 2021. Panellists included *Jane Ohlmeyer* (Trinity College Dublin), *Jenny Lieu* (TU Delft), *Sven Schade* (European Commission, Directorate General for Research and Innovation), and *Max Bergman* (University of Basel, saguf president and member of SNF Research Council).

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