

learning processes are facilitated through joint reflection between representatives of Future Earth, its members, transdisciplinary experts, and societal actors. Discussions between these actors are nurtured by their own experiences and insights from new research which will be jointly defined with the participants. In this presentation, we like to present the project and first experiences with its implementation.

## **WHAT TYPE OF KNOWLEDGE IS TRANSFERRED ACROSS TRANSDISCIPLINARY CASE STUDIES? PRELIMINARY RESULTS FROM A STUDY ON TRANSFERABILITY IN TRANSDISCIPLINARY RESEARCH**

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Keywords: Transdisciplinary research, Transferability, Case studies, Arguments by analogy, Quality

In transdisciplinary research, researchers work with actors from civil society, the public and private sectors. Together they investigate a socially relevant problem in a concrete case. On the one hand, it is important to learn from each of these cases in their unique context. On the other hand, however, it is unclear under what conditions the knowledge gained from a specific case on a given problem can be transferred to another case. In this study, we investigate how researchers and stakeholders think about this transferability of knowledge. First, we ask if considerations for knowledge transfer are present, and if so, which specific findings or research outcomes are considered transferable by researchers and stakeholders involved in the project. In this presentation, we outline preliminary results and analyses to identify and reveal the types of knowledge considered transferable, and considerations that researchers and stakeholders make for transferability across cases. Overall, the social significance of this research is a critical view on how co-production of knowledge about a problem in a specific case applies to another case. This research aims to show whether researchers and stakeholders make such claims on knowledge transfer, and if they do what considerations they apply. For transdisciplinarity, we expect that these results contribute to an ongoing discussion of quality in transdisciplinary research results, specifically on the question of conditions under which results can be applied to other cases.

Key readings:

Adler, C., Hirsch Hadorn, G., Breu, T., Wiesmann, U., Pohl, C. (2017). Conceptualizing the transfer of knowledge across cases in transdisciplinary research. *Sustainability Science*. <https://doi.org/10.1007/s11625-017-0444-2>

## **PRODUCTIVE IRRITATION – INSTITUTIONAL DYNAMICS IN NATURE CONSERVATION**

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Keywords: transdisciplinarity, institutional theory, nature conservation

Managing differences and dealing with heterogeneity is a core element in td-research. As we know, it is both, a chance and a risk. Plurality and diversity might cause fragmented processes and difficulties in reaching common goals, but it also entails a productive form of irritation and the opportunity for fruitful collective learning. Especially in the context of sustainability research and intervention the variety of perspectives, interwoven interests and influencing factors is enormous. Research is facing wicked problems. The differences that hold the chance of productive irritation and collective learning can be observed in the different problem descriptions, different stocks of knowledge, different interests, goals and the ways to reach them. Not least the different system logics have to be mentioned, which are brought into td-processes by the actor groups. Continuing the scientific discourse on heterogeneity, which mostly addresses the question of integration, against the background of a transdisciplinary research project on processes of institutionalization in nature conservation in this contribution the systems logics themselves are focused on and a closer look is taken to the (inter-)institutional dynamics and their consequences in the field of nature conservation and the administrative and legal processes going along with it. The main focus of the research project lies on Red Lists. It deals with the societal and institutional processes, which have the effect that endangered animal and plant species are included in Red Lists, it is analyzed how the lists are maintained and what the significance and practical consequences of Red Lists are. The analysis is carried out on the example of the *Vertigo moulinsiana* (Desmoulin's Whorl Snail), a snail, which is only a few millimeters in size and still has the potential to strongly influence the implementation of construction projects. The species is anchored in national Red Lists, it is listed in Annex II of the European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora and the IUCN Red List and it is protected by various legislations. The topic is analyzed and discussed from the point of view of several relevant subject areas and public institutions. The starting hypothesis is that Red Lists have the character of values and norms. They derive from the need for standards in administrative and legal procedures and in political

decision making. Referring to institutional theory the following research questions are focused on:

- What are the societal and institutional processes that lead to the high significance of a specific animal species?
- Which societal and institutional processes are represented in the declaration of a species as vulnerable or protected?
- What are the societal and institutional consequences of the declaration as vulnerable or protected?
- Which general conclusions can be drawn from the results of the analysis for theory and practice of nature conservation work and for political, administrative and legal processes on an international, national and a regional level?

The contribution first focuses on the project design, in which the organization of transdisciplinary cooperation is part of the research process. Secondly it gives insight into intermediate results of the research concerning institutional logics and their consequences (for transdisciplinary processes and beyond). As so often the science system reveals as an important player and the question of interface management between the various spheres of acting still seems to be a hot topic.

## **TRANSCENDING THE LOCAL AND ALTERNATIVE FEATURES OF GRASSROOTS INNOVATIONS. WHAT CAN TRANSDISCIPLINARY RESEARCH CONTRIBUTE TO DIFFUSION OF SUSTAINABLE INNOVATIONS?**

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*Keywords: grassroots innovations, innovation diffusion, mutual learning sessions, transdisciplinary research formats*

Grassroots innovations are discussed as spaces in which community-level action for sustainability take stake in the creation and diffusion of novel ways to cope with sustainability challenges. The strengths as well as the challenges of grassroots innovations appears to rest on two of their main features: A) They rely on the utilization of contextualized knowledge, which implies better fit to local conditions of the communities involved; yet it also hampers wide scale diffusion and influence. B) They emerge as alternative ways of advancing solutions in civil society motivated by social justice or environmental concerns (in contrast to rent-seeking market base innovations), which allow for practicing stronger understandings of sustainability. Though, this often leads to critical demands for wider structural change that are beyond influence of single grassroots initiatives. The aim of the study is to explore how transdisciplinary (Td) formats that promote mutual learning can contribute to overcome the difficulties emerging from the local and alternative features of grassroots innovations. For this aim I elaborate on processes of mutual learning to transfer and extrapolate case-based experiences that are conceptualized as Td methodologies. Further the focus is on one specific Td format (*case-based Mutual Learning Session, cbMLS*) and conceptualize how it can promote the generation and flow of knowledge beyond the spatial and structural restrictions of grassroots innovations. The implementation of a cbMLS is presented, which aimed at strengthening the transformative capacity of civil society initiatives advancing sustainable family farming practices in Colombia. On the transfer axis, the research facilitated the reinterpretation and transfer of lessons from/to different cases, i.e. among the diverse types of organizations involved in the cbMLS. Moreover, it contributed to the consolidation of knowledge on a couple of aspects which had received - until then - little attention by existing knowledge exchange and systematization processes in the community of initiatives. On the extrapolation axis the results were more modest. Critical issues were jointly articulated in two directions: 1) Specific topics by which formalized networks supporting the work of single initiatives can better contribute to the common aim of strengthening family farming. 2) The rather low ability to engage and influence relevant political processes at different administrative levels. Reflecting on the methodological implications of the example two indications can be highlighted. First, the composition of the team for the cbMLS is of crucial relevance and challenging. For the Td research described, it was not possible to engage actors from any relevant administrative level, although extrapolation in that direction was considered during the preparation process. One central difficulty was the rather low level of trust in public officials and politicians among the civil society actors involved in the grassroots initiatives. However, one outcome of the research was that it induced greater awareness and openness among the participants about the importance to tackle the interaction with administrative and political actors. Second, the Td research comprised only one cbMLS. This arguably reduces the possibility to achieve greater contribution to the diffusion dynamics, e.g., to capitalize on the mentioned rise of awareness and openness towards further work on the extrapolation axis. Moreover, additional and more focused discussions turned out to be of importance in order to tackle more deeply those aspects identified as still scarcely consolidated.