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Creating Spaces for Transdisciplinary Learning

Dear reader,

The German Federal Ministry of Education and Research (BMBF) hosted the first status seminar of the Sustainable Development of Urban Regions (SURE) funding priority in Berlin on 4-5 May 2022. The status seminar was a snapshot of SURE's ongoing research activities in Southeast Asia and China. Together, participants discussed ways to achieve a resilient and climate-friendly transformation in urban regions. Without the continuous exchange between stakeholders from politics, business and society, application-oriented research is hardly successful in practice. Participants agreed that not only the ongoing participation but also the mutual learning processes between stakeholders are central to the implementation of successful transformation projects.

In particular, the role of transdisciplinarity for a sustainable future was demonstrated on the basis of scientific and practical perspectives. However, not only success stories regarding transdisciplinary cooperation were highlighted at the status seminar. Challenges are evident wherever the political situation hardly offers any fertile ground for transdisciplinary cooperation and learning. To at least partially overcome these challenges prudent formats and techniques for transdisciplinary learning can be used.

Transdisciplinarity is an essential component of the SURE funding priority. Within the SURE collaborative projects it is important to establish dialogue between science and the various actors from practice. This is already laid out in the research design of our collaborative projects where all stakeholders work closely together for a sustainable future. Through the cooperation and participation of local decision-makers and managers, knowledge for action is generated and instruments are developed. In this way, solutions are stimulated that not only meet with a high level of acceptance and implementability, but also have a transfer potential.

The collaborative projects are thus aware that research and learning must also take place outside the institutional boundaries of the university. For this reason, methods such as living labs are already applied. These dispense with hierarchies and power structures between science and practice and, in contrast, promote an equal dialogue. Scientific knowledge, practical knowledge and situated knowledge thus become equally central sources of knowledge for the sustainable development of urban regions. If you were unable to attend our status seminar 2022, you now have the opportunity to find out more about living labs and the relevance of transdisciplinary learning.

Kind regards

The SURE Facilitation and Synthesis Research Project

Living Labs



A Living Lab is a method for promoting cooperation and transdisciplinary learning between science and civil society. Knowledge is shared and tested at eye level in a transdisciplinary setting with political, scientific and civil society actors. In addition to the exchange of knowledge, the main focus of Living Labs is to cooperatively develop solutions for a sustainable development. Through their transformative character and their concrete and socially accepted contributions, Living Labs thus contribute directly to sustainability research and design (Schmohl / Philipp 2021).

The research results of the SURE research projects is also developed, tested and communicated through transdisciplinary work in Living Labs. Local actors from politics, business and civil society thus jointly generate know-how and equally profit from it. The aim is to develop locally implementable and accepted strategies for sustainable urban development processes. Urban areas in Southeast Asia and China are supported on their way to sustainability through Living Labs by applying transferable results from planning and implementation and enabling access to decision-making processes.

As part of the PolyUrbanWaters research project three Living Labs (Sam Neua, Laos; Sleman, Indonesia and in Kratie, Cambodia) impart knowledge and develop strategic management approaches for a transition to water-sensitive cities. In addition to the development of practice-oriented tools, capacity building is the focus of these Living Labs. The URA research project uses the Living Lab method to examine the interrelationships, including challenges and potentials, between urban and rural regions in China. In this context, Living Labs serve as transdisciplinary testing fields for strengthening ecologically oriented urban-rural integration. The project Build4People also makes use of Living Labs with the aim of promoting a shift in urban planning from purely design-oriented approaches towards integrated urban development. As part of the Ecocity Transition Lab 2022, the project has hence already organised a variety of transdisciplinary activities, including expert interviews with representatives of various ministries and private construction companies. The activities also included workshops with local authorities and urban planning students, and several site visits. With the opening of three Living Labs in the city of Hué, the GreenCityLabHué project aims to stimulate discussions and collaboration as well as knowledge exchange on green infrastructure. Citizens, scientists, private and public institutions as well as decision-makers are thus encouraged to jointly generate new knowledge, ideas and concrete strategies for sustainable and resilient urban development.

Although the knowledge and ideas generated in the Living Labs are fairly contextual, all projects aim to transfer their findings and solutions to other regions. Thereby they address challenges faced by fast-growing secondary and tertiary cities with different governance in Southeast Asia and China.

Reference

Schmohl, Tobias/ Philipp, Thorsten (Eds.) (2021): Handbuch Transdisziplinäre Didaktik. Bielefeld: transcript Verlag.

Interview with Dr. Thorsten Philipp on the Role of Transdisciplinarity in Sustainable Development Research

Dr. Thorsten Philipp, political scientist and Romance scholar, is responsible for promoting transdisciplinary didactics at the Technische Universität Berlin. He pursues the strategic promotion of inter- and transdisciplinary teaching projects at the interface between university, economy, culture, politics and civil society. Moreover, he is a research fellow at the Institute for Language and Communication at the Technische Universität Berlin and a lecturer at Leuphana University Lüneburg. The SURE Facilitation and Synthesis Research Project carried out an interview with Dr. Thorsten Philipp to collect more insights from him.



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Question

Initiatives for the sustainable development of fast-growing cities and urban regions will only be effective in the long term if decision-makers on the ground have solid know-how. What contribution can transdisciplinary cooperation make in this context?

TP

Transdisciplinary work is based on the belief that knowledge must also be tapped beyond disciplinary, university-based structures to deal with current challenges. It is always about promoting the cooperative interaction of different knowledge carriers. In addition to scientific knowledge, we also need practical, professional, everyday and physical knowledge to solve problems. The circle of those who participate in knowledge production is widening. With their fundamentally participatory orientation, transdisciplinary methods are thus a key to working on sustainability issues, also in the field of urban development.

Question

For SURE, close cooperation with actors from politics, administration, civil society and business in China and Southeast Asia is crucial. Which formats of transdisciplinary learning are particularly suitable for exchange at eye level? How do you assess the added value of equal partnerships for successful cooperation with stakeholders?

TP

The range of didactic approaches at universities is enormous. Service learning, for example, offers students interested in sustainability the opportunity to take part in demand-oriented research projects in which civic engagement (service) and academic learning (learning) are combined. On the one hand, the learning experiences are in the service of society; on the other hand, they are part of the students' personality development, value formation and reflection on their own responsibility. Living labs, project-oriented learning and, above all, the many variations of open source and open science are also enabling cross-cutting cooperation on eye level – as long as the diversity of ways of knowing and ways of learning, but also the diversity of roles of responsibility, are recognised. The cooperation of equal partners can also help to avoid legitimacy crises in science and ensure increased efficiency and acceptance of the work results in implementation.

Question

The SURE collaborative projects are active in seven Southeast Asian countries and in China. The country-specific influence of cultural and political particularities is noticeable in collaborations for sustainable and resilient regional developments. In your experience, how can these particularities be dealt with productively when planning and implementing transdisciplinary exchange formats?

TP

Cross-border cooperation requires a particularly high level of feedback literacy due to the diversity of interests represented in it. If the groundwork is laid for unprejudiced and respectful communication and if all participants use their skills for giving and receiving feedback, the prospects for successful communication and an efficient solution process increase. Art and culture can also help: Many contributions to the documenta fifteen in Kassel show how artistic methods and artistically processed knowledge can facilitate the understanding of regional peculiarities, concerns and attempts to cope, strengthen intercultural experiences and enrich the panorama of approaches to problems.

Question

The SURE collaborative projects are currently in the R&D phase. Transdisciplinary formats such as living labs are among the central research methods for developing sustainable strategies and practical applications. What "lessons learned" would you give the SURE collaborative projects for a successful implementation phase?

TP

SURE is already an impressive example of the institutionalisation of transdisciplinary perspectives. It will be crucial to ensure a sensitive understanding of goals and methods among the participating actors in all their diversity in the early phase. In the end, this will also enable a reliable impact and effectiveness analysis, which, as research has shown, is particularly challenging in transdisciplinary phases. Transdisciplinary work requires increased time and financial resources, distinctive network structures, but also strong communicative skills to overcome jargons and national languages – and finally a strong ability to deal with conflict in order to counter the legitimate divergence of interests with creativity, understanding, patience and humour.