

Partnering for Change: Link Research to Societal Challenges Video Transcript

Tackling water scarcity - part 1

[PD Dr. Flurina Schneider] Crans-Montana is a region in the Swiss Alps. Situated on a southern slope, it is one of the driest areas of Switzerland. In the past, the region has considerably suffered from water scarcity. This raises the question how the situation will evolve in the future. How will climate change affect this region? How will diverse scenarios of socioeconomic developments mark this zone?

The case is complex, as it involves intricate systems and multiple stakeholders. This glacier serves as an important water reservoir. How will it respond to global warming? How will its response influence water availability? Various agents use the water, including households, agriculture, tourism, or hydropower. All have different needs, priorities, and perspectives when it comes to the water issues. All answer the question differently what a more sustainable water governance would mean.

Water scarcity and sustainable water governance are topics that call for transdisciplinary approaches, as they are characterised by high complexity, urgency, and contestation. If we want to understand the basic issues, we need to combine different disciplinary approaches. Hydrologists and glaciologists help us to figure out the water supply. Sociologists or human geographers explain the topics of water use and governance.

In addition, we need to collect and grasp the perspectives of the different water users. This helps to figure out what water sustainability means for each of them. Thus, a picture evolves, how a more sustainable water governance might be reached. The big question is: how can all these actors create jointly new knowledge and action that are relevant for both science and stakeholders involved? In our project, we tested different approaches to achieve this goal.

We organised a multi-stakeholder learning group involving all the mentioned actors. It met regularly to create a shared understanding of the causes and the consequences of water scarcity and to discuss research insights. It also discussed desirable pathways for the future and the strategies to address them. Actors differing in their views needed to deliberate what kind of future they envisioned and which direction development should take.

To enhance this dialogue, we conducted a participatory visioning process. We worked with a dialogue tool called the 'sustainability wheel'. It visualised factors in four segments, rating them from very poor to very good. It helped to integrate and synthesise all the different knowledge created in the course of the project.



It supported the evaluation of scenarios. It also gave us an overall picture of the insights our project generated concerning sustainable water governance.

Our case describes how to address water scarcity. It is a good example of a transdisciplinary research project. We'd like to share with you how we designed and implemented it in order to develop sustainable water governance. What potentials and challenges did we encounter during the implementation process? Stay with it to find out.