

## **Anexo I**

### ***Foundations of inter- and transdisciplinary research - ITEMS Wageningen University and Research Centre, WUR, Wageningen, Holanda***

#### **Scope**

Urgent and complex environmental and sustainability research often needs a combination of scientific insights, as well as the support and knowledge of those who can implement the findings or are affected by the changes required. This requires researchers to transcend their disciplinary knowledge and seek collaboration and knowledge integration both among different academic disciplines (interdisciplinary) and with people outside academia (transdisciplinary). Implementing inter- and transdisciplinary research approaches is not easy, nor straightforward.

This type of research not only requires different skills and competencies from researchers, but also a different approach to how they design the research process, with whom and how they collaborate, and what type of societal and scientific impact and outcomes the research endeavors to achieve.

So which factors come into play now that you are taking an inter- or transdisciplinary approach, how do you plan, reflect on, and adjust your process?

This interactive course is designed to provide participants with foundational concepts, tools, and experiences to translate inter- and transdisciplinary approaches to their own research. Five themes help participants to consider the various aspects of interdisciplinary and transdisciplinary approaches: the individual, collaboration, outcomes, the research process and reflection.

#### **Learning goals**

At the end of the course, participants are expected to be able to:

- Develop conceptual foundations for the individual, collaboration, outcomes, process, and reflection for interdisciplinary (ID) and transdisciplinary (TD) research approaches
- Experience and reflect on practical implications of applying these concepts and related tools
- Translate ID and TD concepts and techniques related to the individual, collaboration, outcomes, process, and reflection to their own research.

#### **Principal themes**

The course will explore the concepts of interdisciplinary and transdisciplinary approaches to research, by providing participants with the theory, practical considerations, tools and experience in order to apply their learnings to their own research.

During the course we focus on 5 different themes:

- The Individual (Positionality, individual skills and competencies needed)
- Collaboration (Working with people from different backgrounds, why, who, and how)
- Outcomes (How to envision various outcomes and include different people's needs)
- Process (Process design, forms of collaboration, integration of various data etc.)
- Reflection (Various forms for different purposes for iterative processes and learning)

We will approach the themes by grounding them scientifically, providing practical tools and real world examples. Participants will work on real-life cases where case givers present questions they would like to gain deeper insights in.

**Programme**

Each day combines conceptual background, practical tools, opportunities to gain experience in the five themes, and exercises to help participants translate the learned material to their own work. Embedded in the course are real-life cases that the participants will work on to gain experiences in inter- and transdisciplinary approaches. After the course, there will be opportunities to reconnect and discuss practical experiences and challenges encountered.

**Day 1 The Individual**

Why interdisciplinary or transdisciplinary approaches in my research?

Complexity, positionality (what does a researcher come in with), relationality

Skills and competencies related to inter- and transdisciplinarity

**Day 2 Collaboration**

How to develop an inter- and transdisciplinary community

Reasoning behind selecting different forms of collaborations

Ideal vs practical limits and the ethics of deciding who is in and who out - Making collaborative processes explicit, e.g. building trust and team development

**Day 3 Outcomes**

Vision creation (making of, alignment), what kind of transformation (shared starting values or shared horizon), goal-setting

Shared vision-making

Perspective-taking practice

Ethical implications of outcomes

**Day 4 Process -**

Inter- and transdisciplinary process design

Practical tools and experience for structuring collaborative moments

**Day 5 Reflection**

Exploring forms and purposes of different modes of reflection

Practice and experience with using and designing different forms of reflection