



About transdisciplinarity and why it should be more emphasised

Transdisciplinarity is conceptualized as a co-construction of knowledge involving scientific and non-scientific sources or practice; and a new form of learning and problem-solving involving co-inquiry and cooperation among *different parts of society*, including academia². A transdisciplinary approach in research recognises that, in any given context, there may be several valuable ways of knowing, and that accommodating this plurality can lead to more successful integrated understanding³. Thus, it acknowledges the short-comings of scientific knowledge alone to address current complex sustainability challenges. Transdisciplinarity emphasizes moving away from prescriptive solution-based interventions to pluralistic, fluid ways of ‘knowing through doing’. A transdisciplinary approach thus enables a dialogue and weaving of different types of knowledge(s) (e.g. scientific, vernacular, local) and diverse values through the cooperation of both formal and informal networks of knowledge holders. By using appropriate methodologies, a transdisciplinary approach facilitates the cross-fertilization of ideas, the co-creation of knowledge, and co-ownership of both the research process and results, and advances translating co-created knowledge into action. Transdisciplinarity approach can also advance creating usable knowledge that can result in just action including multiple voices and interests.

Transdisciplinary research - like the RECOMS Marie-Sklodowska Curie Innovative Training Network - can provide relevant answers for complex social-ecological challenges, including for instance climate change, which the EU is currently facing, and which otherwise are difficult to tackle. In spite of this, transdisciplinarity research is not sufficiently highlighted in the Horizon Europe program.

RECOMS case study

The RECOMS Marie Sklodowska-Curie Action Innovative Training Network - supported by the Horizon 2020 programme - has been training 15 transdisciplinary sustainability researchers with the inclusion of partners like PeerGrouP, the Netherlands, which uses theatre to involve local stakeholders or Shared Assets, UK, which helps local communities e.g. by co-creating maps on common good land use. Cooperating with such partners as well as learning about creative and arts-based methods will enable RECOMS researchers to work with local communities giving them voice, focusing on their concerns bringing them visible and navigating between various management levels in order to co-create more sustainable urban and rural spaces, green economies and resilient societies. Their research potentials and results already underpin our claims that such scientific work does not only need more appreciations, but due to their impacts, need further expansion in horizontal EU policies and the next EU research agenda.

² MacGregor, S. (2014) Transdisciplinarity and Conceptual Change, *World Futures: The Journal of New Paradigm Research* 70:3-4; 200-232.

³ Miller, T.R., T.D. Baird, C.M. Littlefield, G. Kofinas, F. Chapin, and C.L. Redman (2008) Epistemological pluralism: reorganizing interdisciplinary research. *Ecology and Society* 13(2): 46.

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Recommendations

This example shows that transdisciplinarity deserves more emphasis on a horizontal level as well as being embedded into specific programs within the frame of Horizon Europe. Especially so because the key clusters within the Horizon Europe, such as “climate, energy, mobility” or “culture, creativity and inclusive society” can only be tackled by a transdisciplinary approach. Therefore, we recommend the following considerations:

- Within the Strategic Plan of the Horizon Europe, a horizontal element among clusters for transdisciplinary research that addresses more than one cluster.
- Within each cluster an emphasis on transdisciplinarity, calling for projects in each section addressing more than one challenge in their complexity by various methods.
- During project selection, additional criteria that measure incorporating both a wide range of academic disciplines and non-academic knowledge brokers.
- Ensured transdisciplinarity being mirrored adequately not only in applications but in implementation, as well.
- Encouragement of small scale stakeholders’ participation that can serve as local knowledge practice mobilizers.
- Supporting transdisciplinarity training within Horizon Europe programs similarly to the Marie Skłodowska-Curie innovation networks.

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