

Generating impact

A key imperative to adopting TDR projects is the expectation that their impacts will be socially relevant and sustained over the longer term, resulting in beneficial social-ecological change. For this expectation to be fulfilled, TDR researchers need to be aware that pathways to generate impacts can be multifarious. To achieve meaningful and sustained social impacts, TDR projects need to integrate three aspects: (a) indicators, dimensions, and criteria for assessing impacts and change; (b) the difference and relationship between process and outcomes; and (c) a lucid identification of impact-generation pathways, and the analytical tools to assess and refine them.

Mechanisms for generating relevant impacts include:

- Knowledge promotion;
- Social learning and changes in mindsets;
- Competence or capacity building; and
- Changes in actor constellations and relationships (e.g., power dynamics).

These mechanisms can lead to changes in behaviors, practices, policies, and resource flows that can ultimately lead to changes in social and environmental conditions. These mechanisms must then be broken down into strategies that can be adopted depending on the context and scale of the project, and the expected impact or output. In doing so, TD project teams need to be clear in their choice of pathways for impact generation, to critically engage with their own assumptions and to develop indicators to monitor processes and impacts. This requires using a relevant, contextual, and applicable theory of change.

TD researchers advocate the use of “outcome spaces,” which offer a structured approach to goal-setting pertaining to desired changes, knowledge advancement, knowledge co-production, and hybrid alliances. The outcome-spaces framework aligns multiple or contrasting objectives of societal actors and helps to clearly articulate and define project objectives in terms of intended impacts. This framework also has the potential to design processes that can be sustained and contribute to desired goals. An awareness of key actors with the ability to influence impacts is important (see discussion on identifying potential relevant societal partners).

Further reading:

- Lam, David P. M., Berta Martín-López, Arnim Wiek, Elena M. Bennett, Niki Frantzeskaki, Andra I. Horcea-Milcu, and Daniel J. Lang. 2020. [Scaling the Impact of Sustainability Initiatives: A Typology of Amplification Processes](#). *Urban Transformations* 2 (1).
- Mitchell, Cynthia, Fam, Dena, Cordell, Dana. 2017. [Designing for impact in transdisciplinary research](#). Integration and Implementation Insights. February 16, 2017.
- Penfield, T., M. J. Baker, R. Scoble, and M. C. Wykes. 2014. [Assessment, Evaluations, and Definitions of Research Impact: A Review](#). *Research Evaluation* 23 (1): 21–32.
- Schneider, Flurina, Markus Giger, Nicole Harari, Stephanie Moser, Christoph Oberlack, Isabelle Providoli, Leonie Schmid, Theresa Tribaldos, and Anne Zimmermann. 2019. [Transdisciplinary Co-Production of Knowledge and Sustainability Transformations: Three Generic Mechanisms of Impact Generation](#). *Environmental Science & Policy* 102 (December): 26–35.