

SBSTA Research Dialogue

Transformational Adaptation:

Definitions, operationalization and assessment – accounting for transboundary climate risks and cascading climate impacts

Three dimensions of transformational adaptation



1

Adaptation that is strategic: it responds to the risks that climate change presents to our economies, societies and ecosystems through a holistic and coherent approach.

- National risk assessments that distil the projected impacts of climate change to all sectors of the economy and society: how climate change is putting at risk health plans and strategies, trade relationships, agricultural goals, diplomatic relations and partnerships, investment portfolios, shared ecosystems, and jobs and wellbeing.
- Reformed institutional architectures (within regional bodies and governments) to give adaptation more political prominence and centrally decide on trade-offs and synergies between powerful policy domains, in line with strategic objectives towards societal resilience.
- Adaptation plans drafted and implemented not only by environment ministries, but by trade, agriculture, finance, social and foreign ministries too: a whole-of-government approach, with multiple 'risk owners'.
- Adaptation actions that include but go beyond small-scale and timebound projects and that aim to manage risks across entire systems and sectors, with associated levels of funding and support (see Browne et al. (2022) 'Multilateral Adaptation Finance for Systemic Resilience', SEI Brief).



Three dimensions of transformational adaptation



2

Adaptation that is cross-scale: it responds to the transboundary and cascading risks climate change presents.

- National risk assessments that account for the impacts of climate change beyond a country's borders and consider how these impacts could put national development plans and strategies at risk:
 - *Might a country face risks from climate change because of the high levels of food they import, which might be harder to grow or transport in a warmer world? Or because of its foreign direct investments or reliance on remittances from areas where climate change is projected to have adverse impacts? Or because climate change could increase inbound migration or decrease numbers of tourists? Or because climate change will disrupt a shared ecosystem (mountains, rivers, deserts, seas)?*
- Regional bodies and organizations with mandates to support the coordination of adaptation efforts between their members.
- International organizations enhancing cooperation on adaptation to build resilience to global and systemic risks.

Three dimensions of transformational adaptation

3

Adaptation that is socially just: it goes beyond aiming to maintain the ‘status quo’ and instead aims to tackle the root causes of vulnerability and inequality, particularly for marginalised groups.

- Risk assessments that evaluate the structural dynamics that drive system inequalities and power asymmetries.
- Adaptation projects that involve the meaningful participation of the most exposed and vulnerable, and evaluate adaptation outcomes with a specific focus on the resilience, rights and wellbeing of those groups.
- Adaptation actions that strengthen procedural, distributive and recognition justice.
- **Also:** Adaptation that builds ‘just resilience’: it considers the unintended consequences it could have for others (both within a country and beyond it) to avoid the redistribution of risk to other regions, groups or sectors, which is a form of maladaptation.

Latest research findings & additional research needs

cascades.eu: a Horizon2020 research project that considers the risks of cross-border and cascading climate change impacts facing Europe. **Emerging finding:** New institutions might be needed to coordinate transformational adaptation, ensure policy coherence with powerful Ministries (like Trade, Finance and Defence) and align with resilience agendas beyond climate change (e.g. pandemics, cyber, AI, etc.).

adaptationwithoutborders.org: a global partnership that builds international cooperation on adaptation to manage the cross-border and cascading impacts of climate change. **Emerging finding:** New research report indicates transboundary climate risks are affecting 10 key sectors around the world.

sei.org: a growing body of work on ‘just resilience’ and ‘just transitions to adaptation’. **Emerging finding:** A just transition to adaptation reduces systemic climate risk while addressing existing inequalities and avoiding adverse political, economic and social effects of adaptation.

Additional research needs: (1) models that account for the complexity of cross-border risks and how other actors will respond to climate shocks; (2) empirical research to assess how cross-border climate risks are affecting countries around the world (particularly LDCs); (3) exploration of who ‘owns’ systemic climate risks.

