

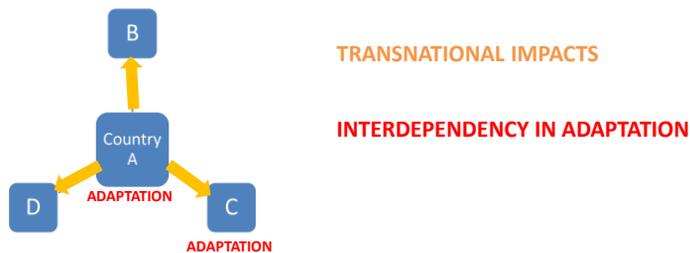
## Climate adaptation and world markets: governance implications of indirect, transnational climate impacts

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### The puzzle: national adaptation planning in a globalized world

- National adaptation planning is growing and consolidating (NAS, NAPA, NAP, NC)
  - Direct impacts, 'territorial' adaptation

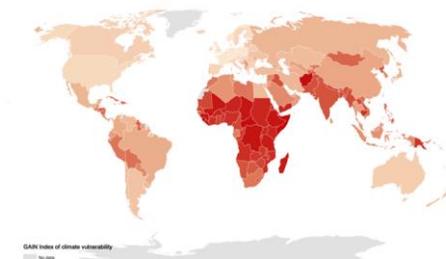


- What are transnational impacts and why has there been limited attention in adaptation planning?
- Assuming they are significant, what are the implications and options for global governance? In particular, implications for adaptation finance allocation?

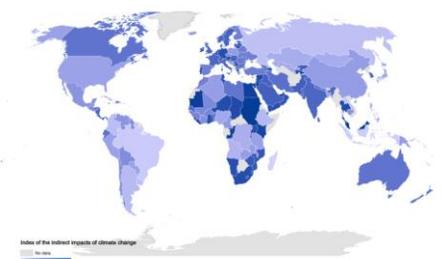
## Transnational impacts: conceptualisation and evidence

- Definition: "impacts expected in one place as the result of climate change or extreme events somewhere else"
- Terminology – teleconnections, telecoupling, long-distance, transboundary, indirect, secondary, spill-over, imported effects (Adger, Liu, Moser, Schenker, Watkiss, Lenschow)
- Pathways: trade, people, finance, biophysical (Benzie et al)
- Example: soy and wheat supply to UK -20% (AVOID2)
- Our review of six national assessments showed (UK, Canada, Sweden, Finland, Kenya, Nauru):
  - Quantification difficult, but they are **significant** compared with direct impacts – "as important as..", "an order of magnitude greater than.."
  - Reflect **different concerns** – trade disruption, export opportunities, security of supply
  - Do not result in concrete recommendations or uptake in national adaptation plans
  - Need for more research

## Comparing exposure to direct vs. transnational impacts



ND-GAIN index of vulnerability (to direct climate impacts), 2014  
Source: <http://index.gain.org/>



AwB index of exposure to transnational climate impacts  
Source: Benzie et al. (forthcoming)

## Why limited attention so far in national adaptation planning?

- Epistemic community institutionalized focus on direct impacts, studied through environmental modelling
- The norm that adaptation is a local/national-scale concern was institutionalized under the UNFCCC
- Interests converged on the importance of clear attribution of impacts and adaptation needs to climate change

## Implications for global governance

- I. Laissez-faire: trade is autonomous adaptation, improve information
- II. Existing, non-climate institutions to deal with transnational impacts through existing mechanisms
  - e.g. FAO early warning systems food security; WTO agreements; development assistance
- III. International climate institutions to use existing mandates to encourage countries to assess and adapt to transnational impacts:
  - e.g. guidance on NAPs
- IV. International climate institutions to modify existing mandates:
  - e.g. allocate adaptation funding differently for targeting of key 'source' countries or countries with 'double vulnerability'
- V. Strengthen mandate of international climate institutions to request or force countries to adapt to transnational impacts:
  - e.g. stronger review and enforcement of adaptation communications

Evidence of option II and III today – prospects for option IV?

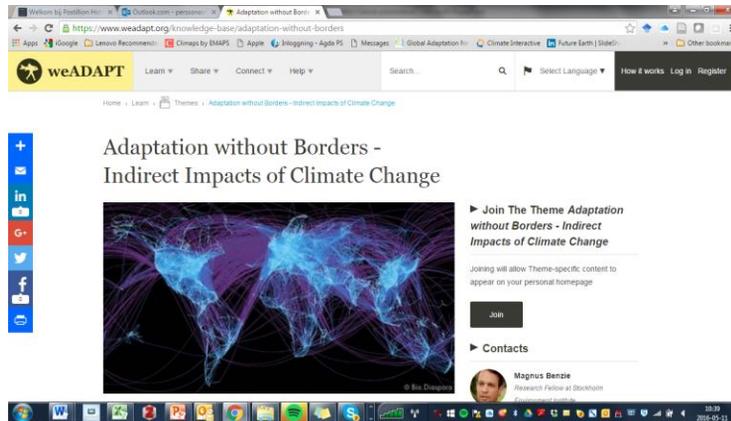
## Use of adaptation finance to address transnational impacts on food security

- Current flows of adaptation finance: \$10-23 bn in 2013-14 (OECD, CPI, UNEP)
- Assessing transnational impacts: Exposure to climate-induced food import price shocks determined by many factors
- Reallocate receptor countries' 'fair shares' to adaptation in source countries
- Use adaptation finance to reduce import dependency
- Use adaptation finance to reduce impact of global food price shocks

## Concluding remarks and future research

- National adaptation planning has focused on direct impacts for multiple reasons
- Stronger global governance around transnational impacts not likely in short term
- Future research
  - Large-N analysis of how transnational impacts addressed in existing national adaptation plans
  - Case studies of transnational impacts on food security in developing countries: contrast direct vs. transnational impacts, current adaptation spending patterns
  - Institutional complexity in global adaptation governance

# Thank you!



The screenshot shows a web browser window displaying the weADAPT website. The page title is "Adaptation without Borders - Indirect Impacts of Climate Change". The main content area features a world map with glowing blue and purple lines representing connections between different regions. To the right of the map, there is a "Join" button and a "Contacts" section. The "Contacts" section lists Magnus Benzie, a Research Fellow at Stockholm University, with a small profile picture. The weADAPT logo is visible in the top left corner of the page, and the browser's address bar shows the URL: <https://www.weadapt.org/knowledge-base/adaptation-without-borders>. The browser's taskbar at the bottom shows various application icons and the system clock indicating 15:39 on 2016-05-11.

<https://www.weadapt.org/knowledge-base/adaptation-without-borders>