TRANSBOUNDARY IMPACTS - MAKING THE TOPIC RELEVANT FOR LOCAL GOVERNANCE

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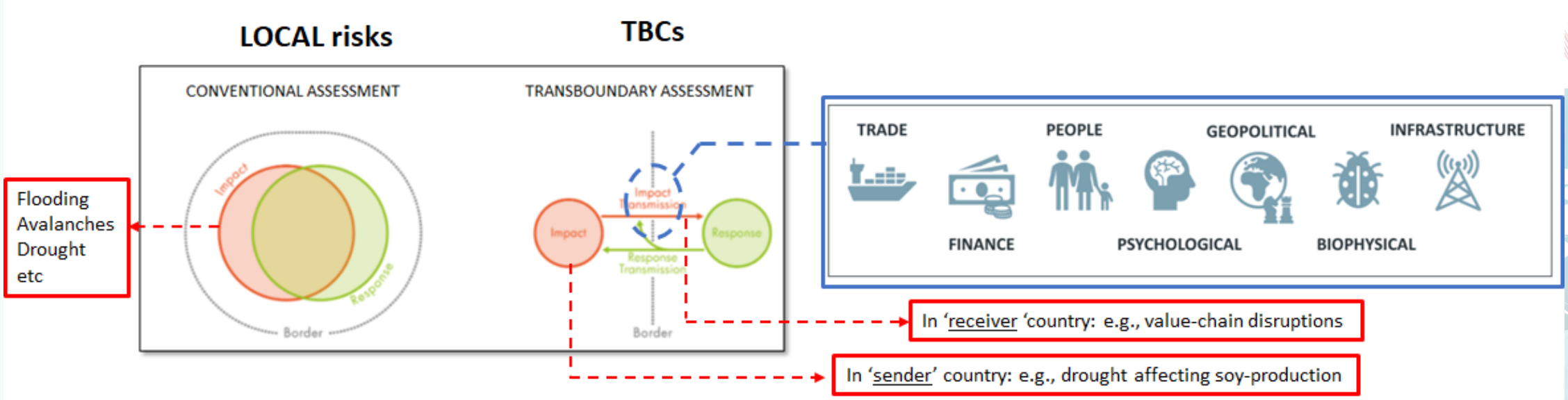
NOCCA

BACKGROUND

- The idea of transboundary climate risks (TBCs)



- The content of this presentation
  - Noradapt and Climate Monitor (www.noradapt.info, www.klimamonitor.no)
  - The UNCHAIN project (www.unchain.no)
  - The Transadapt project (https://klimatilpassingssenter.no/prosjekt/transadapt)

INCLUDING TBCS CAN TRANSFORM THE ADAPTATION AGENDA:

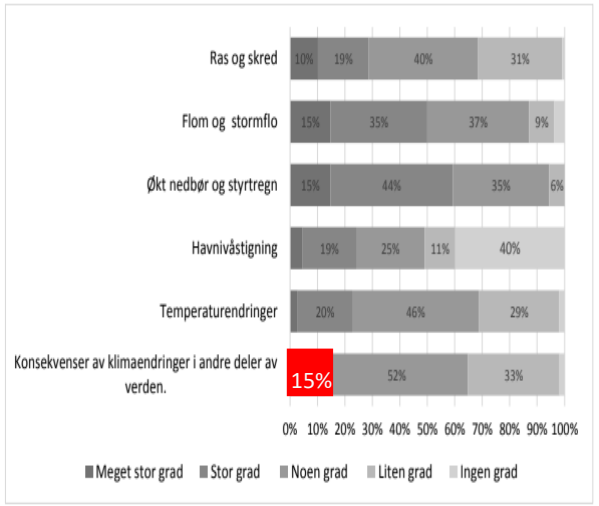
The case of assessing climate risks affecting the agriculture and food sector in Norway

- **Stage 1 (up to 2010): Economic modelling of climate related opportunities**
  - "In Norway, a moderate temperature increase is expected, and …. this could increase production" (Government Green paper on climate change adaptation, 2010, p. 132)
- **Stage 2 (after 2010): Inclusion of ecological assessments of climate risks**
  - ".. increased temperature and rainfall could cause greater damage caused by existing and new plant pests such as insects,viruses and fungi" (Government White paper on climate change adaptation, 2013, p. 21)
- **Stage 3 (2022): Inclusion of TBCs**
  - "Climate change combined with other events may in extreme cases require rationing of food, also in Norway" (press release from the Norwegian Environment Agency in connection with the launch of a report from NIBIO et.al.)

TBCs ARE RISING ON THE CLIMATE AGENDA IN NORWAY

Q: TO WHAT EXTENT DO YOU THINK THAT YOUR MUNICIPALITY (COUNTY IN 2022) WILL BE AFFECTED BY VARIOUS ASPECTS AND EFFECTS OF CLIMATE CHANGE?

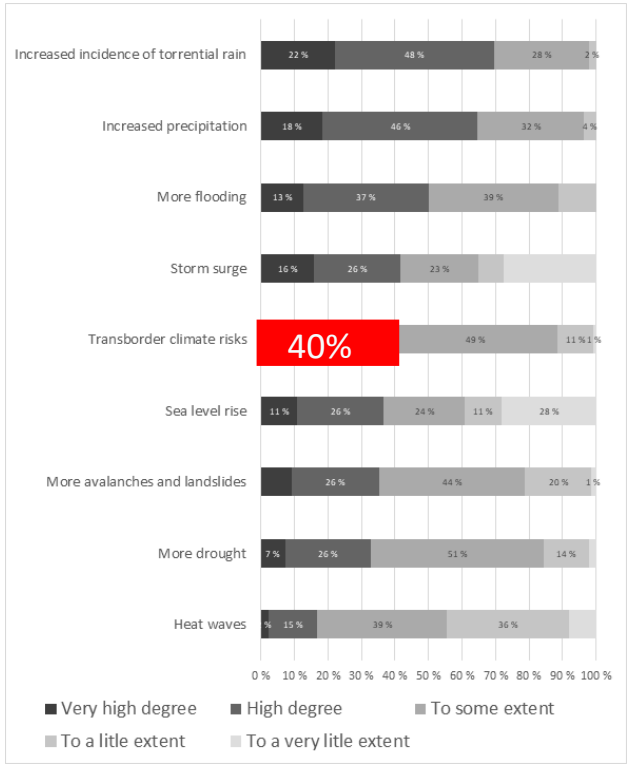
2015



(representatives of local authorities; response rate 27%)

https://www.ks.no/contentassets/87146f43e9f346e18991ceb748236ac9/klimatilpasning_nasjonal_sporreundersokelse_april2018.pdf?fbclid=IwAR2-CIHN-1FF5wW12aQrZLwNrjZ0UrSvHvq8BzI-Tgbe0tol7RWhJkpADi8

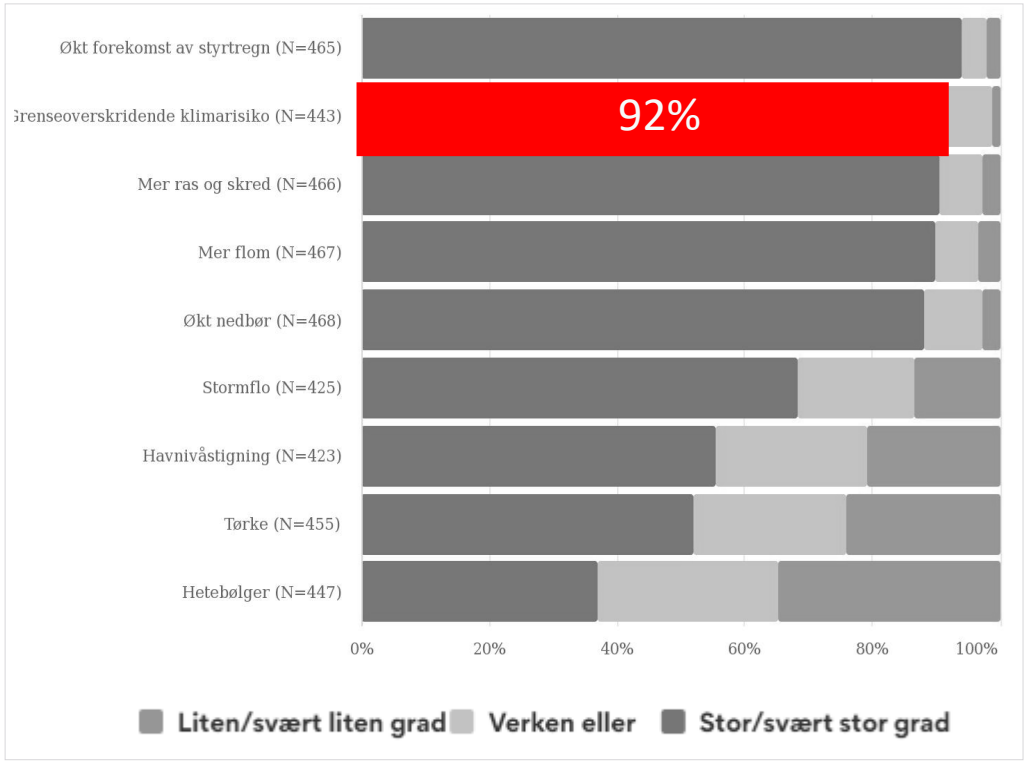
2020



(representatives of local authorities; response rate 42%)

https://www.vestforsk.no/sites/default/files/2021-12/R-KS-kommuneunders%C3%B8kelsen2021.pdf

2022



(representatives of all counties and county governors; n=423-468)

https://klimamonitor.no/publikasjonar/klimakonsekvensar-fra-andre-land-kan-bli-den-storste-trusselen

TBSs: MESSING UP OR STRENGTHENING THE LOCAL ADAPTATION DISCOURSE?

The conventional local climate risk discourse

		Problem generation	
		Local	**Global**
Manifestation of effects	**Local**	1) Direct local effects of climate change (e.g. local flooding problems caused by increase in local precipitation)	2) Indirect local effects of climate change (e.g. local flooding problems caused by 'imported' increase in precipitation)
	Global	3) Proliferation problems (e.g. increase in local precipitation causing an 'export' of flooding problems to down-stream locations)	4) Problems of the commons (e.g. reduced global food security causing negative consequences in export as well as import countries)

Different versions of TBCs

- **Expectations of local action based on political science theories**
  - **Local-local** will be prioritized over the other three options; the rest is a responsibility that national authorities must take
- **Findings from research on Local Agenda 321 / local sustainability / local GHG mitigation action**
  - **Local-local** is prioritized in **most** cases, but under certain conditions local authorities can **also** prioritize the other three options – sometimes also in conflict with priorities from national authorities
- **Expected effect of including TBCs in the local adaptation discourse**
  - (1) A **transformation** of adaptation into becoming a **truly global** environmental problem and thus strengthen the link between the adaptation and mitigation part of the climate discourse; **OR** (2) a topic that falls outside the local adaptation discourse and thus must be addressed by other policy actors

THE UNCHAIN CASES

	The climate refugees case of France	The livestock production case of Norway	The river transportation case of France
'Risk-receiver' location	City of Paris,	Municipality of Klepp, Norway	Upper Rhine region, France
'Risk-sender' location	Senegal	Brazil	Switzerland and Germany
Risk pathway	People ('climate refugees')	Trade (soy used in the production of concentrated feed)	Trade (transportation of freight)
Policy sector	Migration and integration	Agriculture and livestock production	River regulation
Main actors involved	Municipality (climate division, delegation for resilience strategy, social action center)	Local authority, county, local agricultural organisations	Central Commission for the Navigation of the Rhine, the French navigation authority, local authorities (ports management)
Policy instruments	Climate change adaptation plan, climate change adaptation strategy, resilience strategy	Municipality master plan, municipal agriculture plan	International and EU rules for transportation on Rhine, EU regulations on infrastructure investments & funds
Case process	Connected to a follow-up of the city climate plan on climate vulnerabilities	Connected to ongoing processes of updating the municipal master plan, and developing a new municipal agriculture plan	Initiated by the researchers taking part in the UNCHAIN project

TBCs CHALLENGING THE ROLE OF SUB-NATIONAL AUTHORITIES IN CLIMATE CHANGE ADAPTATION?

- **TBCs are rising on the climate policy agenda**
  - A growing number of countries are in the process of considering TBCs in their national adaptation policy agenda (Beringer et al, 2022)
  - The attention towards TBCs are also rising on the sub-national agenda (Climate Monitor, 2022)
- **Should local authorities play an equally central role as in the case of local climate risks?**
  - Leaving the responsibility **exclusively** to **national** authorities may increase the risk of **conflicts** between measures to reduce local climate risks (frequently developed and implemented by sub-national authorities) and TBCs (e.g., adapting locally to drought affecting husbandry production by increasing the use of soy-based concentrated fodder)
  - On the other hand, assigning responsibility for managing TBCs to **sub-national** authorities to the same extent as for local climate risks may lead to a situation that far **too little** is done, since addressing TBCs must also involve national and supranational governance and international cooperation, particularly on issues like migration and trade
- **The middle way solution**
  - In the ongoing updates of National Adaptation Strategies, allocate **sufficient financial resources and institutional capacity** to create a **strong** multi-level governance and private/public **partnership** (stronger than is the case for managing local climate risks)

REFERECES

- Aall, C., Holm, T.B., Jansen, M., Julie Gobert, Florence Rudolf, Katy Jarris, Frida Lager (2023): Think global – act local: The challenge of producing actionable knowledge on transboundary climate risks for the local level of governance, submitted to *Frointers in climate, Climate Risk Management*
- Beringer, K., Lager, F., Holm, T.B., Tynkkynen, O., Klein, R.J.T., Aall, C., Dristig, A-, Määttä, H., Perrels, A. (2022): Nordic Perspectives on Transboundary Climate Risk. Current knowledge and pathways for action. TemaNord 2022:531. Copenhagen, Nordic Council of Ministers.
- Climate Monitor (2022). Survey of regional authorities in Norway (https://klimamonitor.no/publikasjonar/klimakonsekvensar-fra-andre-land-kan-bli-den-storste-trusselen)
- Rothstein, B. (1992), The co-operative state (In Swedish), Stockholm: Nordstedts.

THANK YOU FOR YOUR ATTENTION! ☺

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