Impacts on the Climate Adaptation Policy Agenda of Introducing the Aspect of Transboundary Climate Risks

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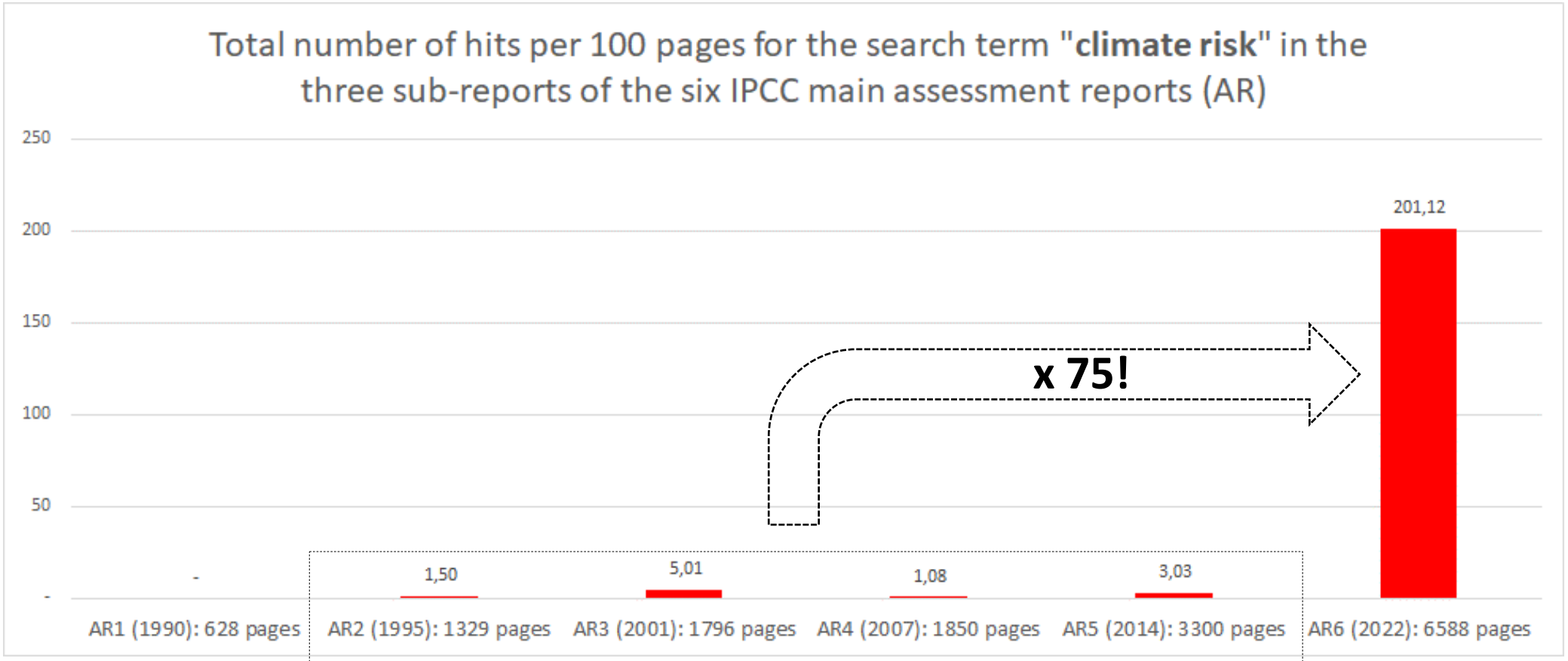
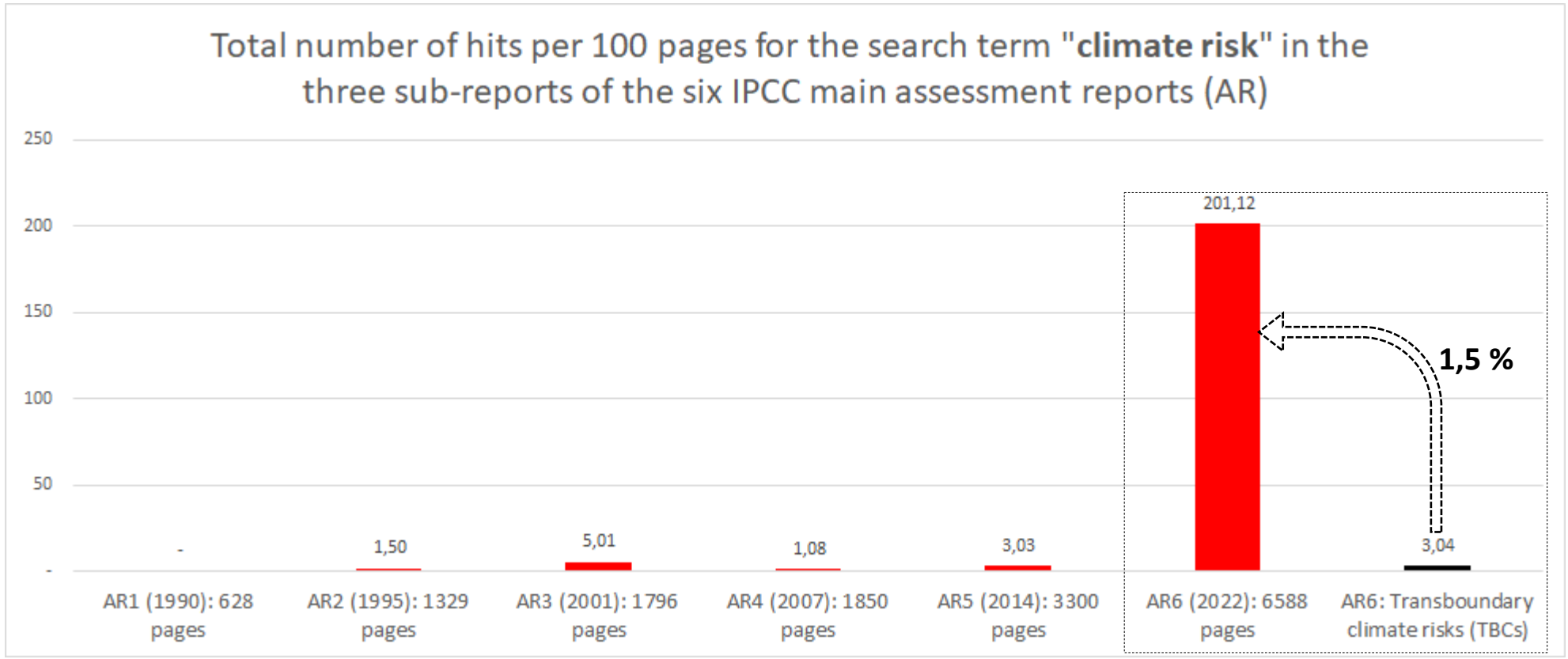
‘Climate risk’ is the new hot topic



..but transboundary climate risks (TBC) 'not'!



.. mentioned only once in the EU adaptation strategy

EUROPEAN
COMMISSION

Brussels, 24.2.2021
COM(2021) 82 final

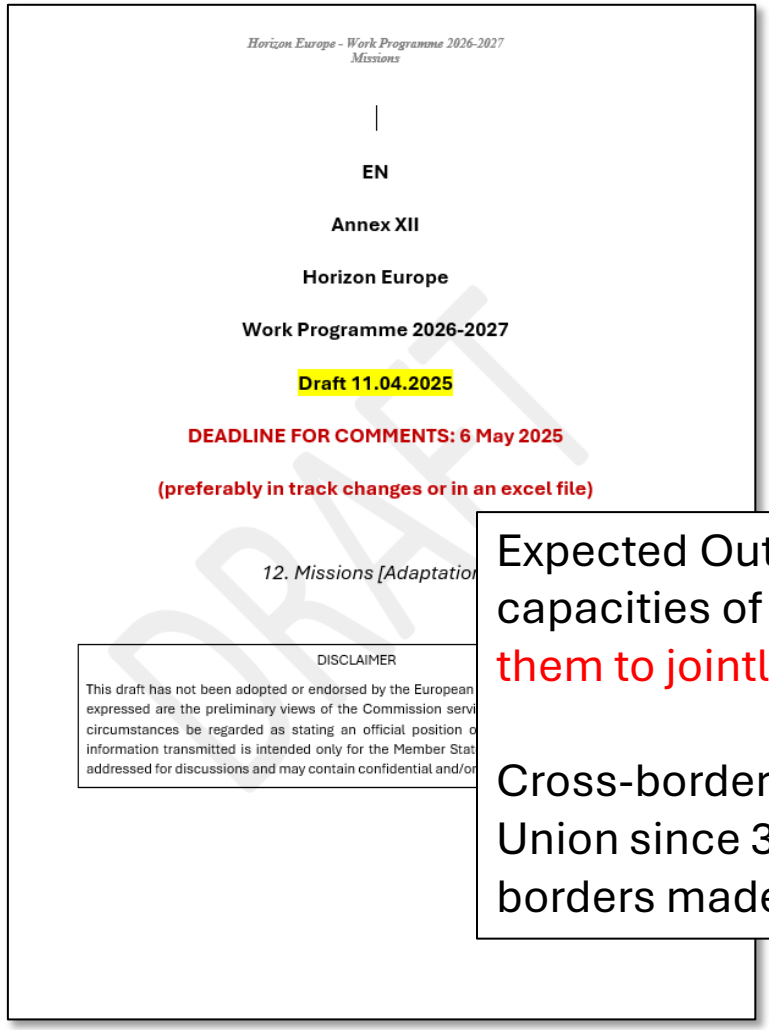
COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

Forging a climate-resilient Europe - the new EU Strategy on Adaptation to Climate Change

{SEC(2021) 89 final} - {SWD(2021) 25 final} - {SWD(2021) 26 final}

The impacts of climate change have knock-on effects across borders and continents. Even local climate impacts have regional or global repercussions, and such transboundary climate risk can reach Europe. For instance, the disruption of port infrastructure could hamper or even close down trade routes, both for commodities and goods, with potential cascading effects across international supply chains. To address the shared challenges of interconnected societies (e.g. migration, conflict, displacement), ecosystems (e.g. shared river basins, the ocean, and Polar Regions), and economies (e.g. global value chains), we will strengthen cooperation and dialogue on adaptation in our trade agreements.

..and mis-concepted in the last draft version of the EU mission call on climate adaptation



Horizon Europe - Work Programme 2026-2027
Missions

EN

Annex XII

Horizon Europe

Work Programme 2026-2027

Draft 11.04.2025

DEADLINE FOR COMMENTS: 6 May 2025

(preferably in track changes or in an excel file)

12. Missions [Adaptatio

DISCLAIMER

This draft has not been adopted or endorsed by the European
expressed are the preliminary views of the Commission servi
circumstances be regarded as stating an official position o
information transmitted is intended only for the Member Stat
addressed for discussions and may contain confidential and/or

DRAFT

Expected Outcome: ……project results are expected to improve adaptative capacities of European internal border regional and local authorities, allowing them to jointly address with their neighbors the pressing climate risks.

Cross-border risks and cooperation are of great importance in the European Union since 37.5% of the EU population live in border areas along 38 (intra EU) borders made up by both geographic and linguistic barriers

TBCs finally (2023) on the policy agenda in Norway

- **2010: The Government Green Paper on climate change adaptation**
  - TBCs only addressed in the context of Norway's export of risks: "Norway must ensure that the national work on climate adaptation does not directly or indirectly increase the adaptation challenges in more vulnerable countries" (NOU 2010, p. 23)

- **2013: First Government White Paper on climate change adaptation**
  - "In the work on this report to the Parliament, the consequences of a changed climate in Norway have been taken as a starting point. It has not been assessed how Norway may be affected indirectly by the effects of climate change in other countries and regions" (Gov. White paper no 33:2012/13, p 99)

- **2023: Second Government White Paper on climate change adaptation**
  - "With an open economy and extensive international trade and cooperation, Norway is vulnerable to the effects of climate change in other parts of the world" (Gov. White paper no 26:2022/13, p 5)

Impacts of including TBCs on the food and climate agenda in Norway

- **Stage 1 (up to 2010): Economic modelling of climate related opportunities - POSITIVE**
  - "In Norway, a moderate temperature increase is expected, and …. this could **increase production**"

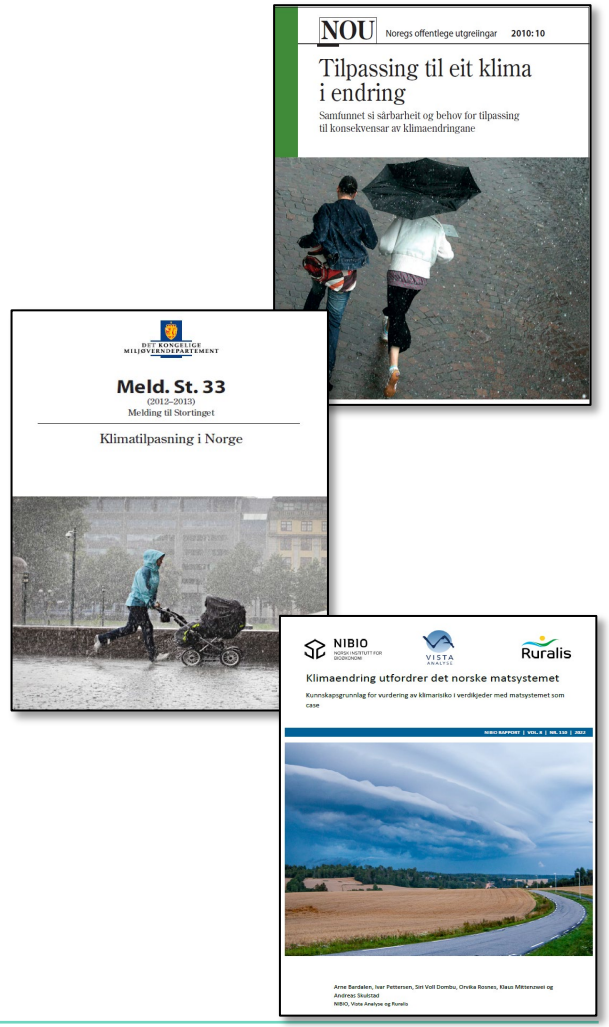
Government Green paper on climate change adaptation, 2010, p. 132

- **Stage 2 (after 2010): Inclusion of ecological assessments of climate risks – ZERO-SUM**
  - ".. increased temperature and rainfall [in Norway] 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 in assessing climate risks - NEGATIVE**
  - "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 on climate change and food security in Norway, 2022

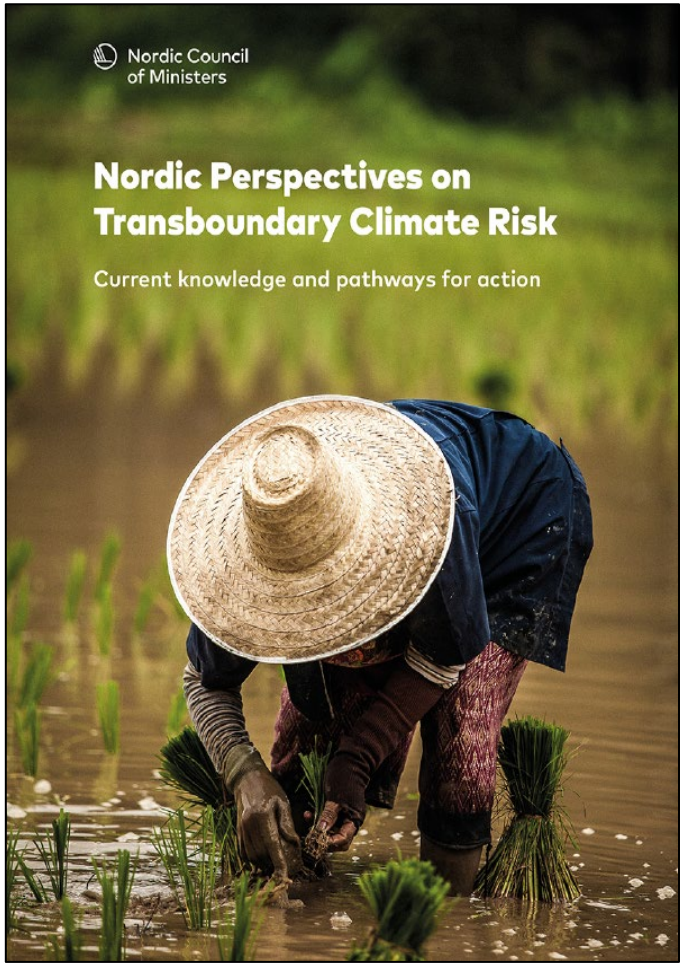


TBCs and the case of ‘food’ in a Nordic context

- “… there is a growing recognition that many of the **more serious impacts** may be indirect, cascading and cross-border. This is **especially** the case in **Nordic countries** that are both **less** vulnerable to **direct** impacts and **more exposed** to **international** connections than many other countries”
- “**All** the Nordic countries have identified risks to their **agriculture** and **food production sector** from this. **Soy** imports from **Brazil**, which are important for animal feed, are of **particular** concern. Climate impacts in Brazil that affect soy production could result in higher prices and increased costs for livestock production and aquaculture in the Nordic region”.

Berringer et al, 2022

https://pub.norden.org/temanord2022-531/

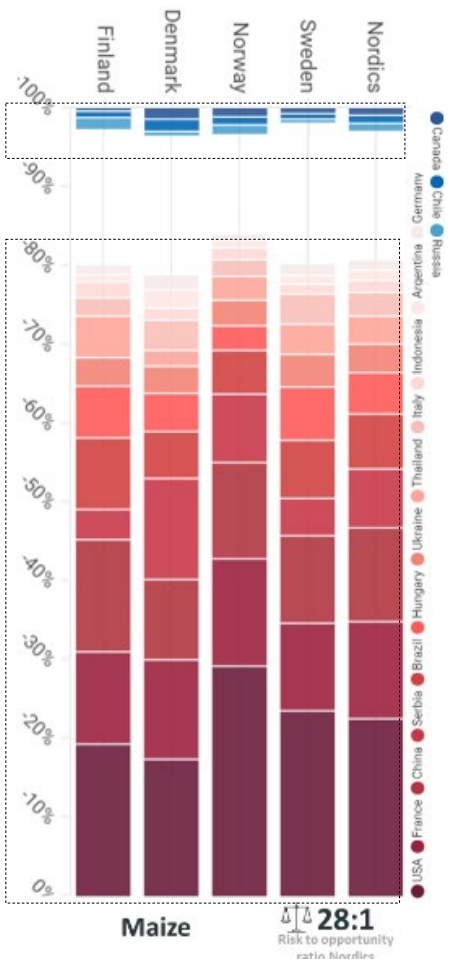


Example: Maize, wheat, and soy

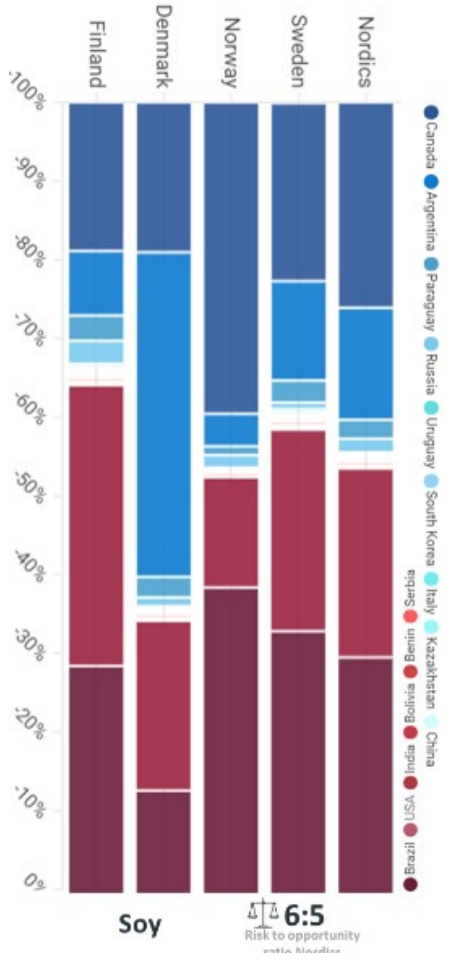
Low potential of alternative import from various countries with **low** levels of climate risks

High level of current import from various countries with **high** levels of climate risks

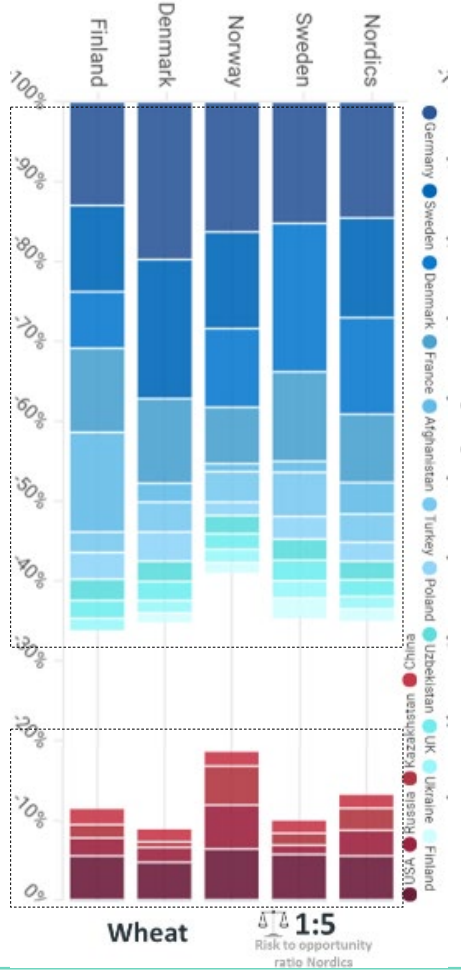
Maize: high TCR



Soy: medium TCR



Wheat: low TCR

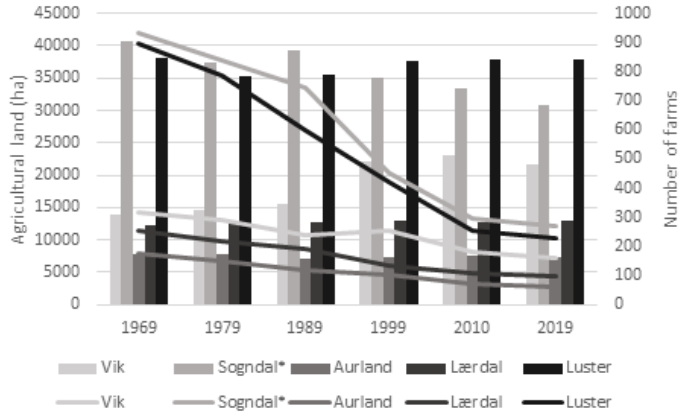


High potential of alternative import from various countries with **low levels** of climate risks

Low level of current import from various countries with **high** levels of climate risks

Introducing TBC on the local food and climate agenda: the case of small-scale livestock production

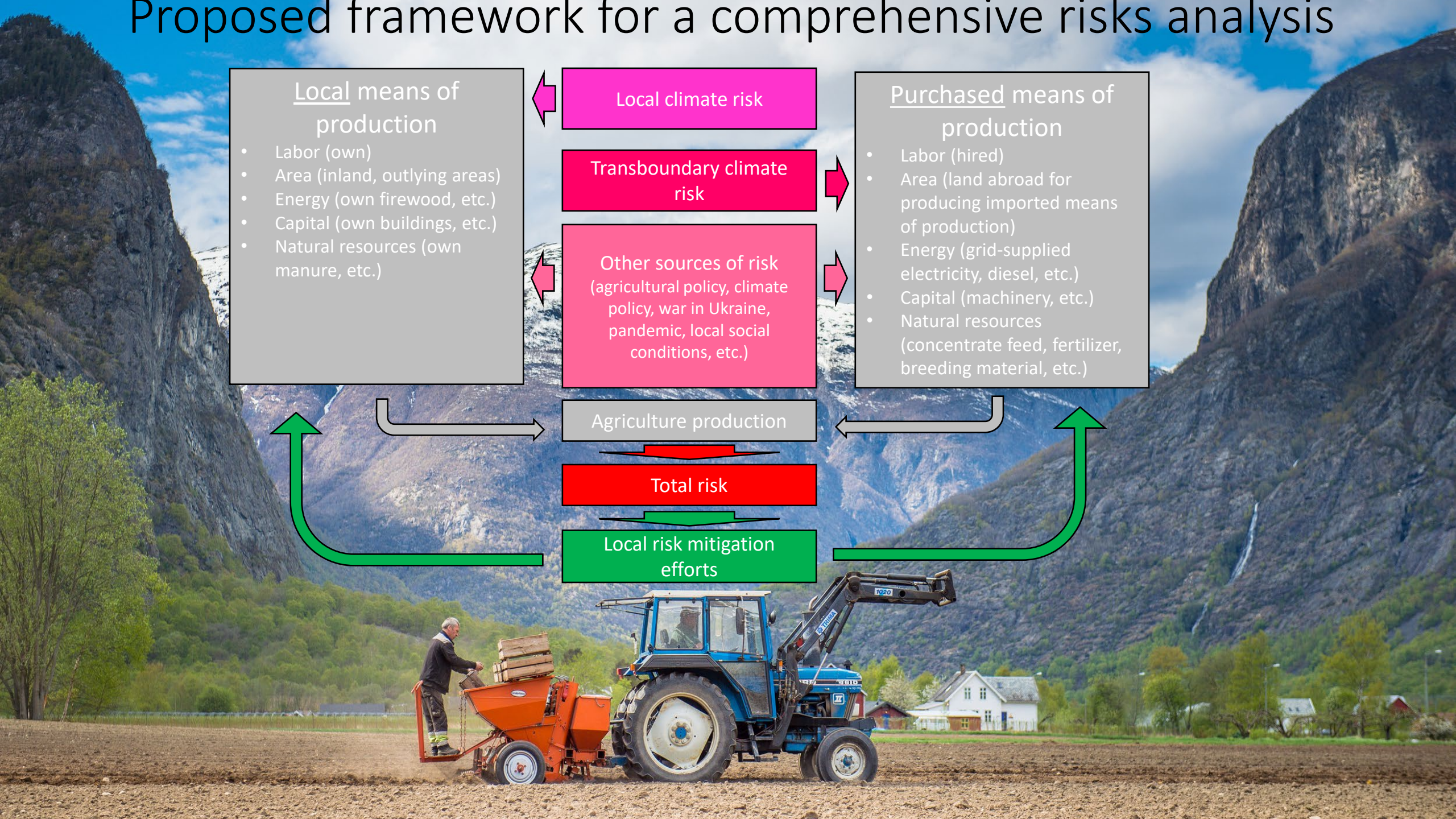
- **Research aim**
  - Exploring the problems and prospects of addressing TBCs at the local level of governance (Aall et al, 2023)
- **Research questions**
  1. How can transboundary climate risks be addressed in a local agricultural discourse?
  2. What are the possible outcomes of introducing TCRs to the local and national climate change adaptation policy agenda?
- **The case**
  - Region of 5 municipalities with large mountain grazing areas
  - Farming subject to structural rationalization (increased farm size, reduced number of farmers, reduced grazing, increased use of fertilisers and concentrated feed)
  - Applying the IPCC climate risk framework, the Impact Chain methodology for user-involvement, and the concept of Risk Ownership in discussing climate risks
  - Case study prolonging for 2 years involving 3 workshops and telephone interviews with representatives of local farmers, farmer organisations, and public servants on agriculture advice (aprox 20 persons)
  - Applying a case study protocol developed by Harris et al (2022)



Findings

- **TCRs as a <u>blind-spot</u> in the climate and food discourse**
  - Adapting to local climate risk is given far less emphasis than reducing GHG emissions in national agricultural policy and (therefore) in public agricultural advice to farmers.
  - Thus, a common perception among local actors in the agriculture sector - especially those involved in small-scale livestock production – is that of being a climate "villain" due to high methane emissions from ruminants (sheep-, goat-, and cattle production)
  - To the extent that the consequences of climate change are discussed locally, the question is as much about whether agriculture will "profit" (e.g., due to a longer growing season for livestock feed) as it will "lose" (e.g., poorer harvest conditions due to increased rainfall).
  - Addressing TCRs is so far virtually absent in local climate and agriculture discourses other than mirroring a general idea of increasing national food self-sufficiency; an idea that is just as much motivated by a desire to maintain the current level of government agricultural subsidies and tariff protection when it comes to food imports, recently strengthened in the wake of the Ukraine war and the tariff regime from the Trump administration
- **The <u>impacts</u> of introducing TCRs on the local climate and food discourse**
  - The local representatives of the agriculture sector showed a rapid acceptance of the relevance of TCRs, a rapid understanding of the consequences TCRs can have on local conditions for food production and consumption, and rapidly produced suggestions for local strategies and measures to reduce TCRs
  - The proposed local strategies and measures to address TCRs were partly in conflict with national agriculture policies
    - such as increasing the use of open-range grazing (versus increasing the use of concentrated feed), increasing the use of labor (versus increasing mechanization), extending the grazing season (versus taking animals off pasture early to ensure the highest possible price for the slaughtered animals), and establishing systems for local food sales (versus centralizing of the food industry and further strengthening nationwide food sales)
  - ..as well as with national climate adaptation policies
    - such as addressing TCRs by reducing import of soy versus addressing local climate risks related to poorer harvesting conditions due to increased precipitation by means of increasing import of soy)
  - ..and national GHG mitigation policies
    - such as addressing TCRs by reducing import of soy versus mitigating GHG emissions by means of increasing soy-dependent meat production (poultry and pigs with lor methane emissions) in favor of meat production with high methane emissions (sheep, goats, cattle which has the potential to replace soy-based concentrate feed with mountain pasture)
  - Thus, the incorporation of TCRs in the local climate and food discourse among local representatives of the agriculture sector led to a change in their perception of roles as merely being a climate "villain" – or even climate “profiteer” - towards being potentially a climate "hero" - and brought forward proposals more in line with the idea of transformative rather than incremental strategies of addressing climate risks

Proposed framework for a comprehensive risks analysis



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