Adaptation without borders: Understanding indirect climate risk
Go to www.menti.com and use the code 23 03 5

How many years have you been involved in NAP planning and formulation?
IPCC Definition of adaptation

The process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects.
“Adaptation is not necessarily a benign process; effective adaptation... might increase vulnerability elsewhere or redistribute vulnerability and exposure between countries...”

“Climate risks cross national borders and affect all countries, irrespective of their location or level of development.”

http://adaptationwithoutborders.org/
Pathways of transnational climate risk
How can they be managed?
Responses can target different stages of a transboundary climate risk.
LiveSlides web content

Download the add-in.
Start the presentation.
New adaptation needs at the national level

New motivation to invest in adaptation globally

New opportunities for mechanisms under the Paris Agreement

New challenges for global governance beyond the UNFCCC

Source: Benzie et al. (2016)

Source: http://index.gain.org/
Sweden
Climate-sensitive FDI outflows

[Diagram showing data and analysis related to FDI outflows in Sweden, with indicators for small, large, low, and high risks.]
In a globalizing world, transboundary climate risks flow between countries, including through complex supply chains and international trade.
Managing Transboundary Climate Risks

At Origin

Along the Risk Pathway

At Impact

Kevin M. Adams – 2019 August 29 – Swedish Ministry of Foreign Affairs
Managing Transboundary Climate Risks

At Origin

At Impact

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At Origin

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An Assessment Approach

6 Globally Traded Commodities  ➔  2 Climate Emissions Scenarios, 3 Time Scales  ➔  Import Flow Dependency

232 Producers, 140 Consumers

Consuming Countries

Producing Countries
Share of Swedish Climate Risk Flow (Arabica, RCP8.5)

- Brazil: 4.11%
- Honduras: 7.52%
- Colombia: 9.51%
- Peru: 1.94%
- Guatemala: 9.33%

Less than 0.001%
Teleconnections

2011 Thailand Flood

Great East Japan Earthquake 2011

Figure 2. Other Types of Teleconnections: verv (a) Results on Japan’s precipitation index. verv (b) Electrical connections of Japan earthquakes.
Singapore's imports of Thai rice 'easily met' by alternative sources but climate change could affect food security
FOOD SECURITY VULNERABLE TO CLIMATE CHANGE

The Singapore Food Agency (SFA) noted that the country's food security is vulnerable to global driving forces and trends, such as population growth, rising urbanisation and incomes, disease outbreaks, resource scarcity and increasingly, climate change.

"Singapore imports over 90 per cent of our food. We are exposed to global price and supply fluctuations as well as threats of food supply disruption and food contamination internationally," said an SFA spokesman.

"These vulnerabilities will become more acute over time, as global crop and fishery yields are estimated to decline with the changing climate."
Senegal
Rice trade flows

- Climate variability in the country.

Senegal rice exports:
- India: 70% (2015-2020)
- Thailand: 20% (2015-2020)
- Vietnam: 10% (2015-2020)

Small | Larger | Low | High


Senegal rice imports:
- India: 70% (2015-2020)
- Thailand: 20% (2015-2020)
- Vietnam: 10% (2015-2020)
The Way Forward?
What opportunities exist to manage transboundary climate risks in the trade system?
Development
Cooperation &
Climate Adaptation
Diplomacy & Bilateral Relationships
International Organisations
Private Businesses & Supply Chain Risk Management
Increasing Complexity

What is being done to address this challenge?
The Wilton Park agenda on transboundary climate risk

"Transboundary climate risks are already detectable…
…but managing transboundary climate risk is currently no one’s job."

13-15th March 2019
The Wilton Park agenda on transboundary climate risk

“Our vision is that countries provide support and coordinate their adaptation efforts in ways that deliver global public goods, to achieve a resilient world in which all people are secure and can prosper.”
GROUP DISCUSSION
What is your country’s transnational climate risk story?
Adaptation without Borders is a new initiative bringing together the research capacities and convening powers of a range of partners to explore the global implications of transboundary climate risks – and to enhance cooperation in meeting the global adaptation challenge.

Convening partners:
- Raising awareness
- Shifting perceptions
- Changing narratives
- Conducting research
- Pooling knowledge
- Presenting analysis
- Bridging silos
- Convening stakeholders
- Forming partnerships
- Influencing policy
- Engaging practitioners
- Harnessing opportunities