

The role of trade in climate change adaptation

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October 19, 2022

Adaptation

Preparing for and protecting against the negative impacts of climate change

Structural and physical measures

- **Engineered / built environment:** Sea walls, cyclone shelters
- **Application of technologies:** New crop and animal varieties
- **Use of ecosystem services:** Wetland restoration, green roofs
- **Delivery of specific services:** Social safety nets, vaccination

Social measures

- **Educational:** Awareness raising
- **Informational:** Hazard mapping, early warning
- **Behavioural:** Migration, changing cropping practices

Institutional measures

- **Economic:** Taxes, subsidies, insurance
- **Laws and regulations:** Zoning, codes, property rights
- **Government policies and programs:** National plans



Barriers and needs

The growing adaptation gap

Not adapting fast enough

- Most current efforts are fragmented, small in scale, incremental, sector-specific, respond to near-term risks

Soft and hard limits to adaptation

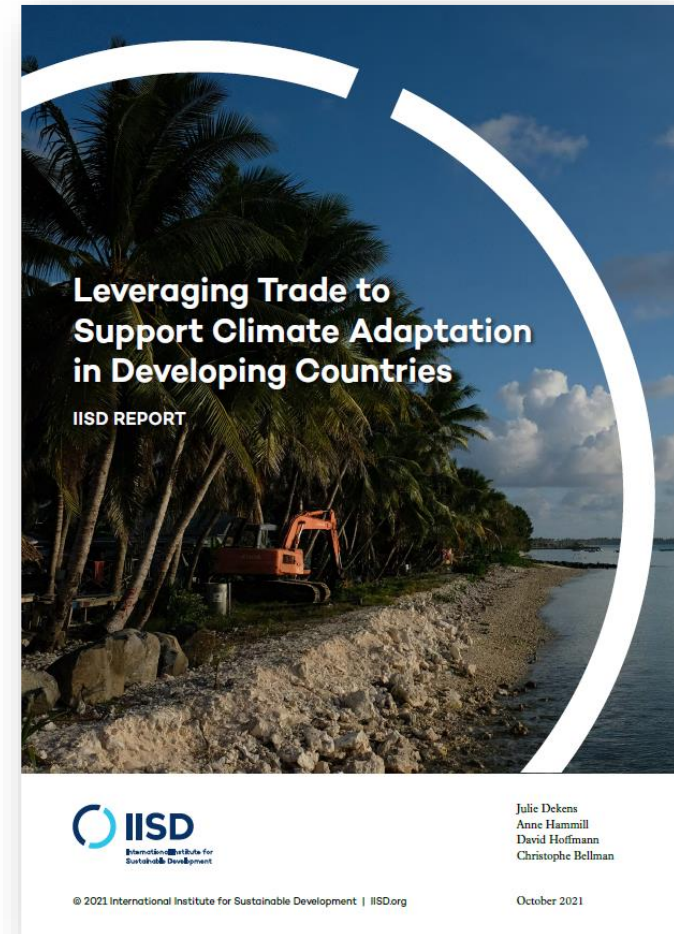
- Hard – no additional adaptive actions possible,
- Soft – options not currently available but can become so in future
 - **Financial:** Lack of finance, access to credit
 - **Informational:** Monitoring slow-onset events
 - **Technological:** Outdated infrastructure
 - **Human capacity:** Skills to analyse climate information
 - **Governance:** Coordination between levels of government
 - **Institutional:** Land tenure
 - **Policy:** Lack of plan, conflicting strategies



Role of trade in supporting adaptation

Three general pathways

1. Domestic trade policy measures that enhance access to adaptation goods and services;
2. Access to trade-related financing mechanisms that support climate adaptation; and
3. International collaborative frameworks on trade in support of climate adaptation



Pathway 1

Domestic trade policy measures that enhance access to adaptation goods and services

- Trade policy measures can be designed to facilitate the availability and accessibility of particular goods and services required to adapt to climate change
- Adaptation – and therefore adaptation goods and services – is highly context specific and priorities may change over time with shifting climate conditions; trying to develop comprehensive and static checklists of goods & services won't work → maladaptation
- **Trade policy instruments to remove barriers to trade in adaptation goods and services:** Tariffs, subsidies, government procurement, intellectual property rights, private, voluntary sustainability standards, labels, and certification schemes, trade and investment facilitation

Adaptation goods

Goods produced in a manner that explicitly manage climate risks (along whole VC)



Flood-resistant maize using specially bred species, use of cover crops and no-till farming to manage water in increasingly flooded areas



Clothing produced with special fibers that consume less water from a cotton-sourcing region experiencing drier conditions



Food / beverages processed using recycled water to minimize water consumption in a region affected by more droughts

Adaptation goods (2)

Goods used or consumed to reduce the negative impacts of climate change

Final goods



Climate-resilient seeds and **water efficient irrigation** technologies for use in drier conditions



Desalination technologies to ensure freshwater supplies in the face of sea level rise



Early warning systems in context of more extreme events

Intermediate goods: Machinery, spare parts, technologies needed to produce abovementioned final goods

Adaptation services

Range of activities necessary to support the production and use of adaptation goods



- Qualified labour for collecting / analyzing climate data
- Engineering services to design and build climate-resilient infrastructure
- Climate impact modelling and sector-specific data analysis
- Climate change vulnerability and risk assessments
- Research and development
- Agricultural extension services to farmers (including on climate-smart agriculture)
- Provision of weather index insurance



Pathway 2

Access to trade related financing mechanism that support climate adaptation

- **Global adaptation finance gap is large:** annual costs estimated to reach USD 300 and 500 billion in 2030 and 2050, respectively; about USD 30 billion went to adaptation in 2017-18
- **Aid for Trade**, two entry points:
 - **Leveraged** as co-financing to secure climate finance from Green Climate Fund or Adaptation Fund – especially in agriculture and infrastructure (Ghisu and Ancharaz, 2013)
 - **Integrate adaptation** into trade-related ODA to ensure trade supports adaptation
- **Enhanced Integrated Framework**
 - Integrate adaptation considerations into tools such as Diagnostic Trade Integration Studies, which are then translated into specific technical assistance and capacity building programs

Pathway 3

International collaborative frameworks on trade in support of climate adaptation

- Trade agreements as entry points to identify and advance mutual areas of interest through targeted cooperation
- **Possible avenues to integrate trade and adaptation provisions in trade agreements**
 - Broader policy cooperation on adaptation
 - Information sharing and dialogue
 - Cooperative capacity building
 - Liberalization of climate adaptation goods and services
 - Working towards harmonization or mutual recognition of environmental standards and regulations
 - Fostering climate-resilient foreign direct investment
 - Incentivizing adaptation through subsidies

Thank you

<https://www.iisd.org/system/files/2021-10/trade-support-climate-adaptation-developing-countries.pdf>