International Spillover Effects

Side-event to the High-Level Political Forum by GIZ on behalf of BMZ

Zach Wendling, Ph.D., Project Manager
Salma Dahir, Economist

05 July 2022
Overview

• International Spillover Effects
• Latest data
• Policy leverages
Did you know?

Carbon Footprint
of the average inhabitant of the European Union

- Spillover impact
- Domestic impact
## Measuring spillovers in the SDG Index

<table>
<thead>
<tr>
<th>Environmental and social spillovers embodied into trade</th>
<th>International economic and financial flows</th>
<th>Peace keeping and security</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports of hazardous pesticides</td>
<td>Official development assistance</td>
<td>Exports of major conventional weapons</td>
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<tr>
<td>Scarce water consumption embodied in imports</td>
<td>Corporate Tax Haven Score</td>
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<tr>
<td>Fatal work-related accidents embodied in imports</td>
<td>Financial Secrecy Score</td>
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<td>SO₂ emissions embodied in imports</td>
<td>Shifted profits of multinationals</td>
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<tr>
<td>Nitrogen emissions embodied in imports</td>
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<td>CO₂ emissions embodied in imports</td>
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<tr>
<td>Marine biodiversity threats embodied in imports</td>
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<tr>
<td>Terrestrial and freshwater biodiversity threats embodied in imports</td>
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</tbody>
</table>
Spillovers in the European Union

Textiles

Social spillover effects in the EU’s textile supply chains
Anasmina Malik, Guillaume Lafontaine, Sarah Carter, Mengyu Li, Manfred Lenz
October 2020

Food Supply

Making globalisation and trade work for people and planet: International spillovers embodied in EU’s food supply chains
Anasmina Malik1, Guillaume Lafontaine1, Sahma Dahle2, Zachary A. Weddell2, Sarah Carter1, Mengyu Li1, Manfred Lenz1
1UNSW, School of Management, The University of New South Wales, NSW, Australia
2University of Sydney, NSW, Australia

SUSTAINABLE DEVELOPMENT SOLUTIONS NETWORK
A GLOBAL INITIATIVE FOR THE UNITED NATIONS
• 99 countries + EU27
• 33 Indicators
• Trajectories
• 2 detailed features
  • Japan
  • EU27
Tracking impacts to the Global Commons

<table>
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<tr>
<th>GfS Index Sub-pillars</th>
<th>Impacts</th>
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<tbody>
<tr>
<td>Water Cycle Disruptions</td>
<td>Land Biosphere</td>
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<tr>
<td>Terrestrial Biodiversity Loss</td>
<td>Climate System</td>
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<tr>
<td>Aerosol Emissions</td>
<td>Ice Sheets &amp; Glaciers</td>
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<td>Greenhouse Gas Emissions</td>
<td>Ozone Layer</td>
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<td>Nutrient Cycle Disruptions</td>
<td>Oceans</td>
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<tr>
<td>Marine Biodiversity Loss</td>
<td></td>
</tr>
</tbody>
</table>

Global Commons Domains:
- Land Biosphere
- Climate System
- Ice Sheets & Glaciers
- Ozone Layer
- Oceans
Global Commons Stewardship Index

Domestic Pillar
- Water Cycle Disruptions
- GHG Emissions
- Marine Biodiversity Loss
  - Terrestrial Biodiversity Loss
  - Nutrient Cycle Disruptions
  - Aerosol Emissions

Spillover Pillar
- Water Cycle Disruptions
- GHG Emissions
- Marine Biodiversity Loss
  - Terrestrial Biodiversity Loss
  - Nutrient Cycle Disruptions
  - Aerosol Emissions
Example of Transboundary Spillover

Air pollution from tire production in Mexico

Final consumer of tire in United States

Biodiversity impacts from rubber production in Thailand
Objectives of the Global Commons Stewardship Index

1. Raise awareness and attention to *Global Commons*
2. Identify global trends and priorities
3. Motivate better national policies
   - National, Sub-national, Civil society
   - International/global
4. Highlight and help close data gaps
Contrasting scores & economic development

Domestic Pillar

Spillover Pillar
Germany

Overall impact on the Global Commons and trajectory: Very high

Impacts and trajectory by pillar and sub-pillar:

**Domestic**

- Pillar: 20.5
- Acresoils: 45.1
- GHG Emissions: 116
- Terrestrial Biodiversity: 41.8
- Marine Biodiversity: 74.5
- Nutrient Cycles: 5.8
- Water Cycle: 186

**Spillover**

- Pillar: 53.0
- Acresoils: 91.5
- GHG Emissions: 28.7
- Terrestrial Biodiversity: 75.3
- Marine Biodiversity: 75.2
- Nutrient Cycles: 67.8
- Water Cycle: 55.0
Insights for Action

- Major transformations are urgently needed
- Rich countries drive most spillovers
- Decouple environmental impacts from development
- Persistent data gaps
Policy Levers

Domestic

- Public procurement
- Carbon border adjustments
- Corporate reporting requirements
  - Disclosure
  - Due diligence
Policy Levers

Domestic

International

• Trade agreements
  • Existing
  • Future
• Technical cooperation
• Financing mechanisms
Policy Levers

Domestic

International

Data systems

- Investment in collection & reporting
  - Impacts
  - Trade data
- Timely
- Open source
- International organizations
- National statistics offices
Policy Levers

Domestic

International

Data systems

Policy coherence
International Spillovers
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Thank you for your attention.

More about our work:

05 July 2022