Agenda

- Welcome & introduction
- Global burdens associated with current Swiss production and consumption, international trade relations and the food system
- Focused discussion on levers and barriers for more sustainability in international trade relations
- Closing panel with representative from the public administration, WTO and private industry
NRP 73: Facts & figures

• 20 million Swiss Francs
• 4 complementary modules
• 5 research years as of September 2017
• **29 research projects**
• **Cooperation projects with practical partners**
• National & international cooperation
• **Use-inspired basic research**
• Coordinated research through systematic monitoring and success monitoring
• Knowledge exchange with stakeholders and technology transfer
• Final product(s) 2023
NRP 73: 29 projects
NRP 73: 29 projects
NRP 73: Programme timetable
Global burdens associated with current Swiss production and consumption, international trade relations and the food system

- Switzerland’s sustainable footprint
- Open assessment of Swiss economy and society
- Environmental impact of trade relations
- Sustainable trade relations for diversified food systems
Switzerland’s Sustainability Footprint NRP73

Global burdens associated with current Swiss production and consumption

Joseph F. Francois
University of Bern, WTI, CEPR, CESifo

October, 2019
Switzerland’s sustainability position

- Switzerland’s environmental footprint is much larger from a consumption-based than from a production-based perspective.
- Switzerland is very resource-efficient, but the scale of consumption implies large per capita footprints.
Switzerland’s resource footprint increased for most environmental inventories between 1997 and 2014.

The increase is larger for consumption-based inventories.
Most European countries are net-exporters of GHG emissions
Switzerland shows the highest consumption/production ratio (2.14)
Bilateral trade in embodied inventories

- Switzerland is a net importer of embodied resources. Imports are 5 to 10 times larger than embodied resource exports.
- The largest shares of Swiss embodied resource trade occur with EU countries.
Switzerland’s Sustainability Footprint NRP73

Thank you!

Joseph F. Francois
University of Bern, WTI, CEPR, CESifo

October, 2019
Top-down economic data

Open data and tools

Social and resource indicators

Bottom-up technology models (LCA)
Need better data for decision support

Use as many factual statements as possible
But need data to know when e.g. different prices/commodities are important

Need better data for strategic planning

Can do global sensitivity analysis for 500,000 parameters on the cloud
Use to prioritize future data collection (depending on input quality)

Need better data for distinguishing social differences

Lots of data for country totals
Hard to use when deciding between firms
Global standards vs. independent labels?
Openness unlocks the value of information, giving more bang for buck
• Can’t have dessert without your vegetables
  – Ecolabelling, etc. require strong support for foundations of results
  – Reward data, models, and *quality* papers
• Have to face privacy tradeoffs
  – Business process and economic data
  – Consumers and loyalty programs
• Citizen science and informed democracy work well together
  – Data gathering and trust building
  – Involve all stakeholders
Does trade liberalization lead to environmental burden shifting in the global economy?

Dennis Kolcava & David Presberger

World Resources Forum 2019
October 23, 2019
Is the focus on production misleading?
What causes environmental burden shifting?

- Income

- Political
  - Regime Type
  - Regulation
  - International Environmental Agreements
    - Kolcava, Nguyen, & Bernauer (2019)
Political and Economic Effects

Effects on Environmental Burden Offloading

- GDP per capita
- Democracy
- PTA Depth
- PTA Env Provisions
- Int Env Agreements
- Resource Abundance
- Democracy on GDP

Env. Impact
- Climate Change Impact
- Blue Water
- Energy Use
- Land Use
- Material Footprint
Takeaways

- Environmental burdens offloaded from rich to poor

How to deal with it?
- Environmental provisions
- Promote technology diffusion

Future Research
- Consumer preferences
- Policy-makers’ decision making
Thank you for your attention!
Contact information and credits

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WORKSHOP ‘TRADE RELATIONS AND SUSTAINABILITY’

SUSTAINABLE TRADE relations FOR
SUSTAINABLE FOOD SYSTEMS

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Sustainable Trade Relations for Diversified Food Systems

Food systems are interdependent. Transforming them into sustainable food systems thus requires a joint effort. In this project, we examine how governments can create more sustainable trade relations in order to promote diversified food systems of a high sustainability value.

Project description (ongoing research project)

With this project we want to support diversified food systems by framing trade relations in a nuanced way. Diversified food systems perform in a more sustainable way than specialized systems, primarily focusing on the quantity of food production. They support ecological and economic diversification, equitably distribute social benefits, and contribute to a diversified food basket. A core research question is: If a domestic government seeks to grant tariff preferences for sustainability produced food, how can it do so in an effective, proportionate, context-sensitive, non-discriminatory, and reliable way complying with its international obligations and the objectives enshrined in its Constitution? We combine in-depth legal analysis with analysis of best-practice examples, current challenges in private-sector certification, farmers' perceptions, and emerging innovations. Workshops in Bolivia, Laos, and Switzerland will help us to generate transdisciplinary knowledge, and a critical historical

Contact

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Start:
1. July 2019
About what?
Trade Relation for Sustainable Food Systems

Art. 104 a, d of the Swiss Constitution (new, 2017)
Requires the government to create conditions for
“trade relations that contribute to the sustainable development of the agriculture and food sector”

Implementation?
Public Sector & Product Differentiation

If domestic government seeks to e.g. grant tariff preferences for sustainably produced food from abroad

how to draw a line between sustainable and unsustainable food systems?
Draw a line

- beyond an ‘either...or’
- ‘food systems of high sustainability value’
- weak framework conditions

‘Expansion of large-scale industrialized, monoculture-based systems often occurs at the expense of more diversified farming systems’ (Kremen 2012)
Draw a line

Law requires generalization  

\[ \text{versus} \]

dual perspective

‘Diversified farming systems’ versus ‘specialized, monoculture-based agricultural systems’
Non-discriminatory and inclusive?

- complying with international obligations and constitutional objectives?

**WTO member states**

**PPM issue:** Product differentiation alongside ‘processes and production methods’

**WTO jurisprudence:**

“political orientation of the WTO is changing: it is gradually shifting from a trade liberalization paradigm to a more complex trade regulation paradigm” Bürgi, Musselli, 2019.
Non-discriminatory and inclusive?

- proportionate (least restrictive)
- non-discriminatory (inclusive)
- legitimate (international standards)

s. also Human Rights principle of non-discrimination

How to implement? Design cooperative cross-border procedures
Examples of government involvement in product differentiation
Nexus with production methods (new)

* = Products of HS heading 15.11 und 15.13 (palm oil) imported into Switzerland under this Agreement shall meet the sustainability objectives as set out in Article 8.10 [...] of the Agreement.

8.10 Sustainable Management of the Vegetable Oils Sector and Associated Trade

2. [...] (a) effectively apply laws, policies and practices aiming at protecting primary forests, peatlands, and related ecosystems, halting deforestation, peat drainage and fire clearing in land preparation, reducing air and water pollution, and respecting rights of local and indigenous communities and workers;
TRADE AGREEMENT ‘CEPA EFTA-Indonesia’

Coupled with Chapter on Cooperation

- Technology transfer
- Scope to be defined
- Landscape approach?

Stands and falls with mode of implementation in parliament

Bürgi Bonanomi, Elisabeth Die Nachhaltigkeit im Handelsabkommen mit Indonesien, mit besonderem Fokus auf die Regulierung des Palmöl-Imports, CDE 2019.
http://www.cde.unibe.ch/EFTA-IndonesienCEPAi.a.palmoilAnalyseausNachhaltigkeitsperspektiveebfinal04042019_eng.pdf
Timber and further commodities

Swiss Environmental Protection Act, EPA

New Art. 35e: Import of illegally produced timber: prohibited (see also EU timber regulation)

Art. 35e,d: Federal Council can prohibit import of commodities produced in an environmentally unfriendly way

Further:

- Public procurement
- Biofuels policy etc
- Mercosur
Timber and further commodities

- non-discriminatory?
- effectively improve market access for sustainably produced products?
- In order to offer (better) alternatives

- Market access as a Human Rights and Sustainable Development Concern
- SDG agenda requiring ‘high value’ trade: less volume, higher value
- Make use of leverage of trade
How proceed?
Inter- and transdisciplinary research setting
Thank you

Questions?

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Levers and barriers for more sustainability in international trade relations – group discussions

- Policy debate
- Trade & diversified food systems
- Private sector efforts
Panel discussion

Kate Dassesse, FOAG international
Ankai Xu, World Trade Organization
Daniel Weston, Nestlé Nespresso

• How can governments create more sustainable trade relations complying with international obligations?
• What are the impacts of trade liberalization on sustainability and on food security?
• What’s the role of the private sector?
Thank you for your active participation!