Co-evaluating and -designing a Sustainable Agriculture Matrix for Austria in an international context

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Background

Zhang et al., 2021. *One Earth*
Project scope

Stakeholder engagement to
• co-evaluate indicators
• co-design analyses and improvements
• co-develop narratives of sustainable ag
Stakeholder engagement – Austrian case

• One-day in-person workshop
• Detailed information on existing indicators upfront
• Highly interactive exercises to elicit
  • definitions and perceptions of agricultural sustainability
  • relevance and soundness of existing indicators
  • suggestions for improvements and additions
  • feasibility of interpretations
Rich pictures of sustainable ag systems
Evaluation of indicators and further suggestions

Ambiguity
Original purpose → loss of biodiversity
Stakeholder → carbon balance
in-situ

Farmland bird index, extensive grassland, …
Evaluation of indicators and further suggestions

- Stability (production, income, governance, trade, value chain)
- In-situ biodiversity indicators, e.g.
  - High nature value farmland
  - Farmland bird index
  - Extensive grassland
- Soil fertility/organic matter
- Cropland abandonment
- Trade resilience (e.g. number of trade partners)
- Climate resilience (e.g. yield variability, resilience to shocks)
- (Crop) productivity
- Side-income dependence of farmers
- Feed conversion ratio (and resource use efficiency in general)
- Education (e.g. state, access) and innovation
- Rural livelihoods
- Labour rights
- Self-sufficiency
- Animal well-being
- Role of women in farming
- Governance (targeted payments, regulations, fairness)
Evaluation of indicator performance for Austria
Next steps

Global SAM

Adjusted SAM

Regionalized SAM

Assessment of synergies and trade-offs, rankings, etc.

Regional environmental indicators

Regional social indicators
Thank you!

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