



Metrics to support Agroecological transitions

Insights from the TRANSITIONS Metrics Project

Mary Crossland & the Metrics Project team 4th October 2024









Levelling the playing field



A key challenge to up-scaling agroecology is providing policymakers, donors, development actors and farmers with ways of measuring performance that **allow fair comparison** with alternatives.

Current metrics of agri-food system performance often **fail to capture** environmental, social, livelihood impacts.

By developing holistic metrics that **account for multiple impacts**, we can create a level playing field for agroecological approaches and enable sustainable transitions.













Key characteristics of holistic systems assessment



Measures multiple dimensions

Includes multiple perspectives

Captures emergent properties

Reveals complexity, nuance and trade-offs





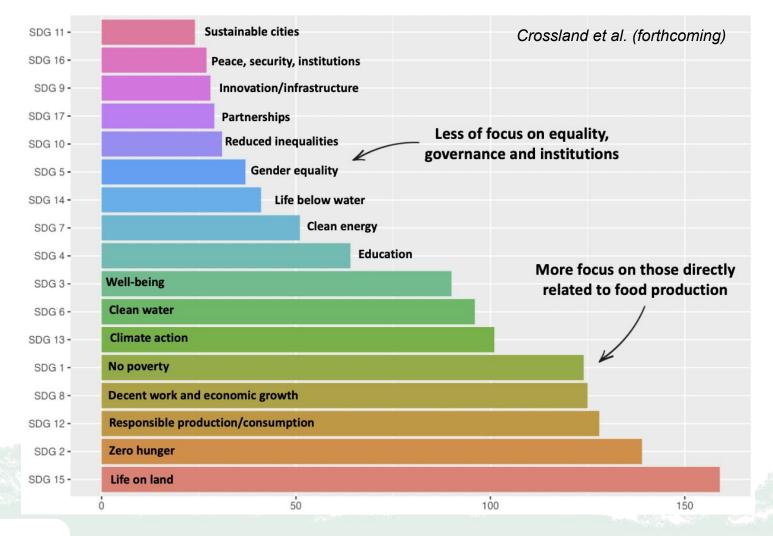






Characteristic #1 - Measure multiple dimensions













Characteristic #2 Include multiple perspectives

Co-designing assessments increases their relevance and utility.

Yet, assessments rarely involve stakeholders from the start. Instead, they elicit feedback once the goal and what to measure have already been decided.

- Only 6% were co-designed with stakeholders from the beginning.
- Most were either designed solely by developers (47%) or sought stakeholder feedback after the initial design of the assessment (47%).









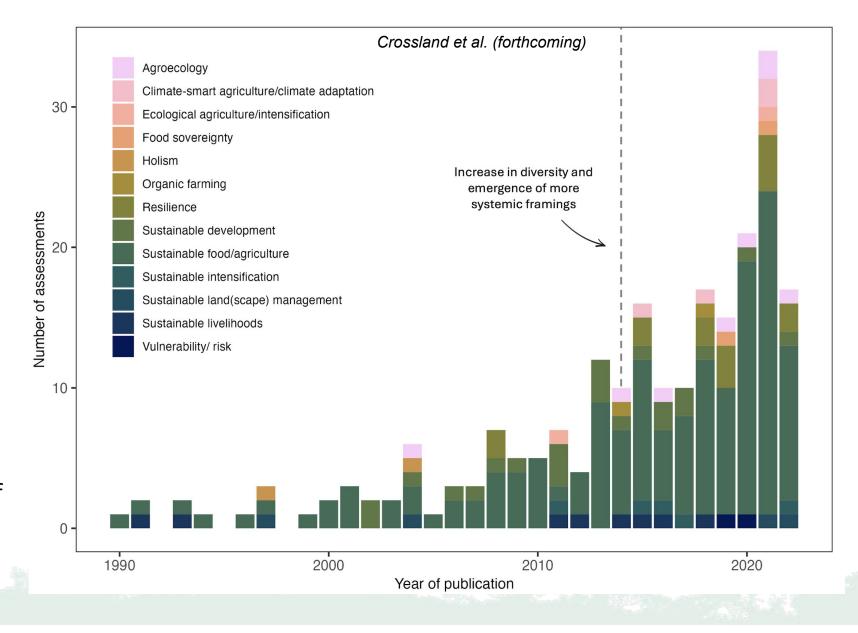




#3 Capture emergent properties

Emergent properties (resilience, circularity, and empowerment etc) arise from the complex interactions amongst components within systems.

- Only 26% of assessments included themes related to emergent system properties.
- But we see a trend toward more systemic framings such as agroecology and the inclusion of emergent properties







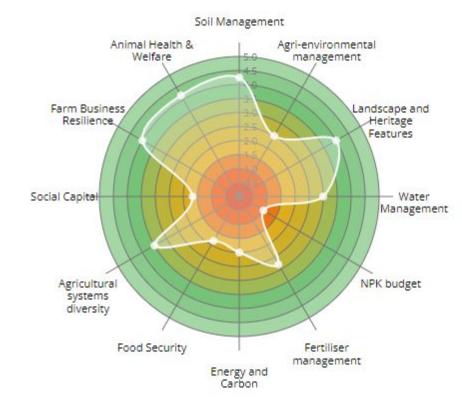






Characteristic #4 - Employ metrics in ways that reveal complexity

- While a systemic perspective is often acknowledged as important, only 14% of assessments considered synergies and trade-offs between metrics
- Many use **composite indexes and radar charts.** Both of these simplify the picture and overlook interactions.
- 73% of assessments had been used as one-off snap shots of the system, very few look at at change over time and trajectories.



OCIS Public Goods Tool (Gerrard et al., 2011)











Our take-home messages





To up-scale agroecology, we need to create a level-playing field.

To do this we need assessments that:

- Measure multiple dimensions.
- Include diverse perspectives and are inclusive.
- Capture emergent properties of the system, including equity.
- And use metrics and present data in ways that:
 - reveal complexity, nuance, and trade-offs
 - so that they can be understood and taken into account when designing solutions











Our take-home messages

But there is no one-size-fits-all!

Improving holistic assessment of agrifood systems is not a question of improving existing assessments. The gap to be addressed is the lack of methods for designing effective holistic systems assessments.

We need flexible guidance on how to navigate the maze of existing approaches, select metrics and develop assessments to reach our goals.





Developing holistic assessments of food and agricultural systems

A meta-framework for metrics users

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