



Towards a harmonized framework for assessing the sustainability of agricultural value chains: identification of key challenges and perspectives for research

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Background

- Coexistence of research and expertise on agri-chain within CIRAD
 - Initial focus on technical and economic performances of CIRAD mandate crop's commodity chains.
 - Shift toward non cost/ non price attributes of value chain performances (quality and governance process)
 - Capacities built in environmental assessment: LCA
 - Lately, investment in social impact assessment (Impress impact method, sLCA)



Issues and objectives

- Renewed interest on VC as an engine/vector of development and inclusion into the global economy
- Promoting value chains generating added value and growth versus sustainable goals: compatible? trade off?
- How to address sustainability issues, measuring effects, understanding interactions?
- Pooling segmented expertise to select, propose, mastered, test methodologies



Brain storming process

- Is there any method readily available and applicable?
- Reviewing publications on methodological options
- Rounds of interactions among CIRAD experts
- Looking for converging points among experts' practices

References:

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Seuring S. and Muller M, 2008, From a literature review to a conceptual framework for sustainable supply chain management, Journal of Cleaner Production 16 (2008) 1699–1710

Sala, S. et al., 2013, Progress in sustainability science: lessons learnt from current

FAO (2014). SAFA, Sustainability assessment of food and agriculture systems. Guidelines, version 3.0.



Going beyond value chain/ CSR

- In the "supply chain" literature strong emphasis on norms, indicators and Corporate Social Responsibility mechanisms.
 - issue is the enforcement of the norms and governance
 - scope is limited to VC where players have a reputational stake
 - → analytical framework does not fit to systems with limited formal rules of governance i.e. informal economy
 - → weak or unexplicit analytical framework: how RSE leads to sustainable development?



Challenges for defining a metric 1/2

- Which conception of sustainability
 - Integrating or combining the various dimensions of sustainability. Weak and strong sustainability debate.
- At which scale...
 - VC cannot be considered as a closed system so it cannot be sustainable as such
 - → assessing contribution of VC to sustainability
 - Mapping systems boundaries and how it connects to the whole socio-biosphere.
 - Strong methodological convergence among CIRAD experts practices



Challenges for defining a metric 2/2

Dynamic versus static approach

- Sustainability is a dynamic process but modeling is demanding in resources (data and expertise)
- At least assessment criteria should rely on explicit linkages/hierarchy between resources level, allocation mechanisms and social values.
- Unequal development of available metrics for assessing environmental, economic and social dimension.

Applicability of the method

- Data and resources required to apply the methodology
- Assessing value chain contribution to SD: what for? For whom?
- Feasible decision making process and interaction with VC players
- Social learning process endogenous to the analysis?



Road map for CIRAD contribution to metric development

- Characterizing commonalities in the respective field of expertise (LCC, LCA and sLCA)
 =>ontologies
- Formulating an integrated conceptual framework starting with system mapping
- Sharing knowledge with the academic community
 summer school
- Working on case studies for testing methodological options.



