

Robustness (and antifragility) in food systems redesign

from value chains to value networks

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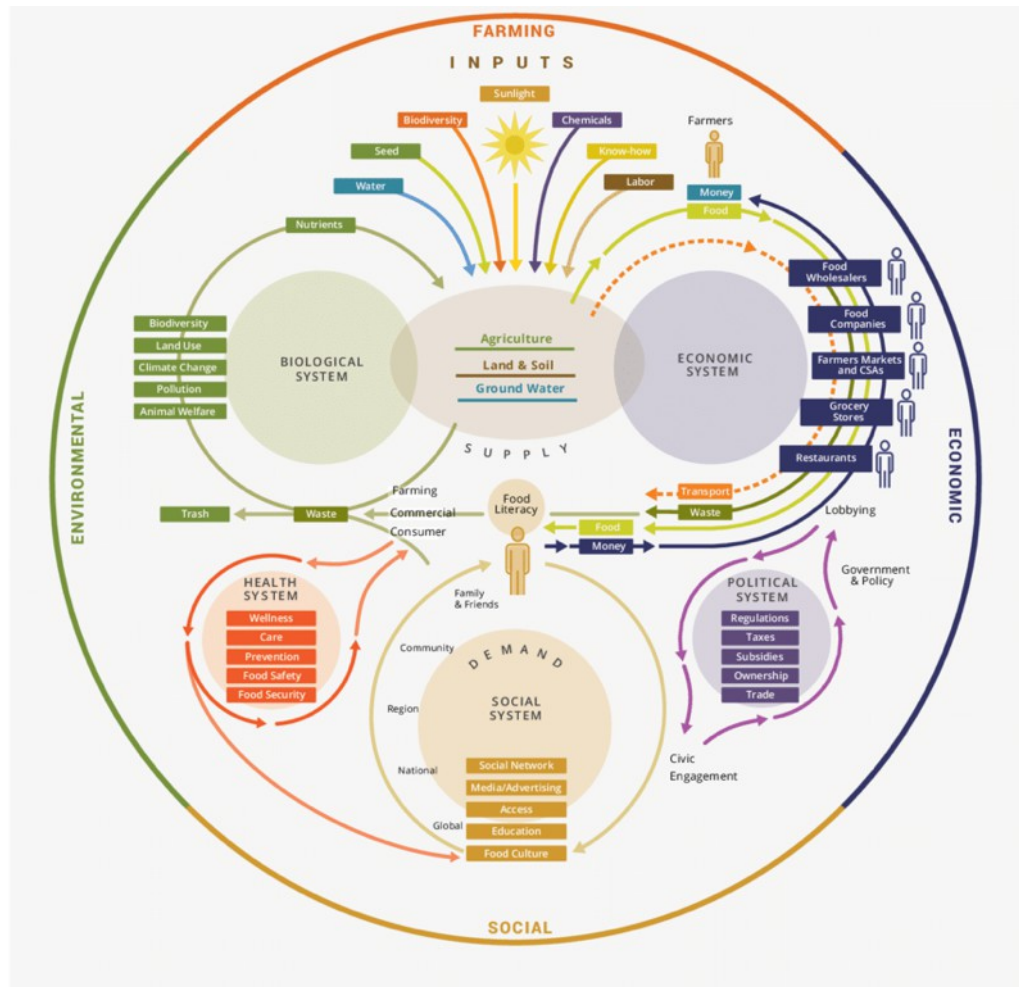


WWF Professor Resilient Landscapes for Nature and People
Groningen University, The Netherlands

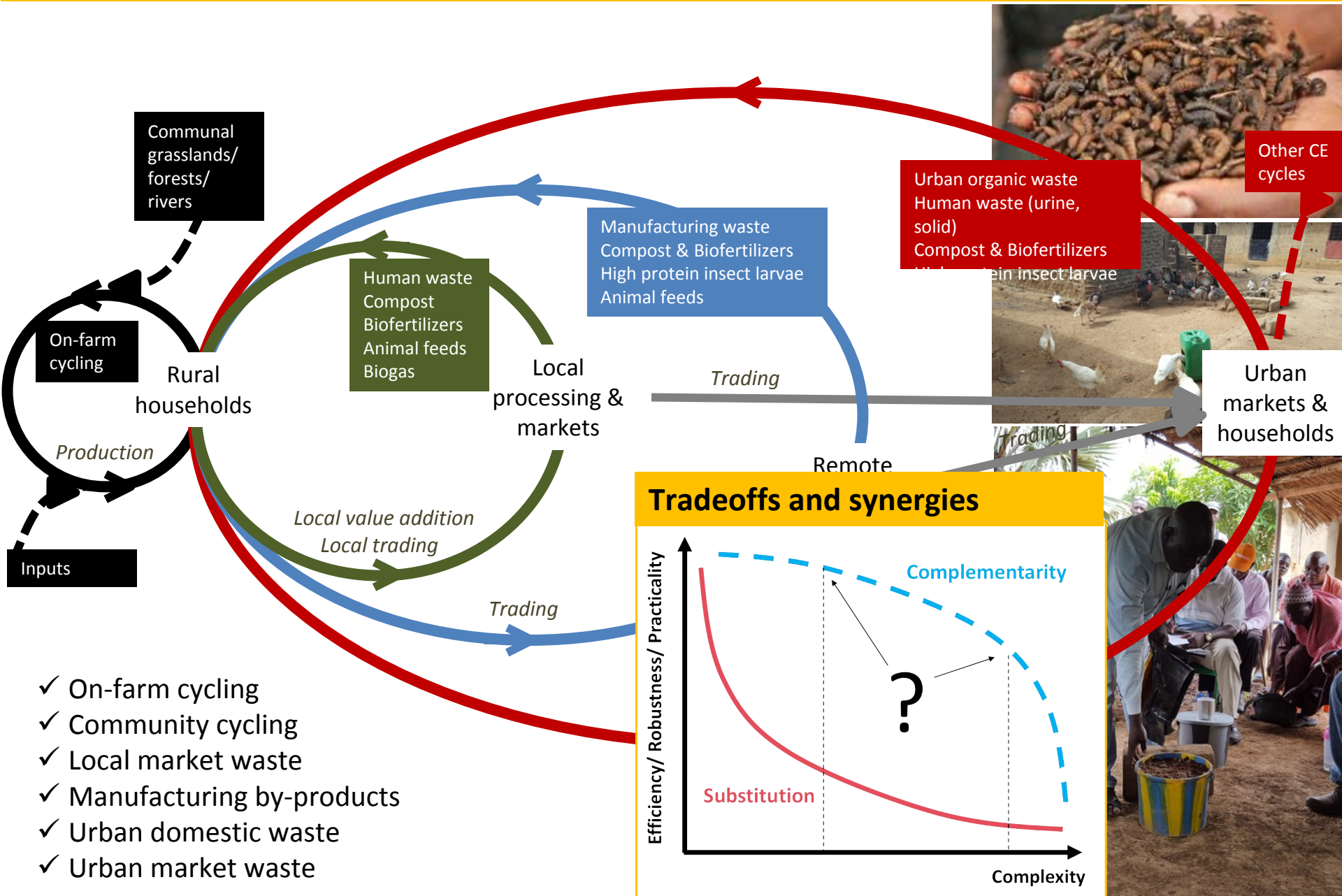


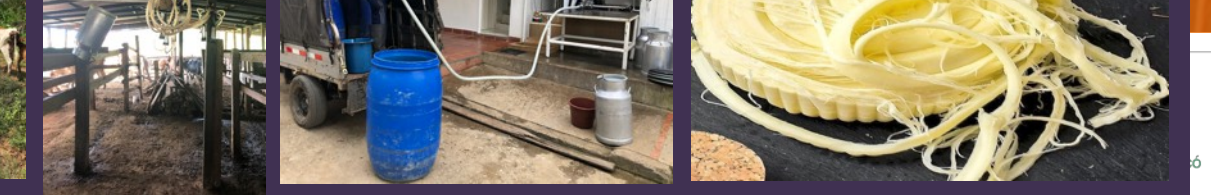
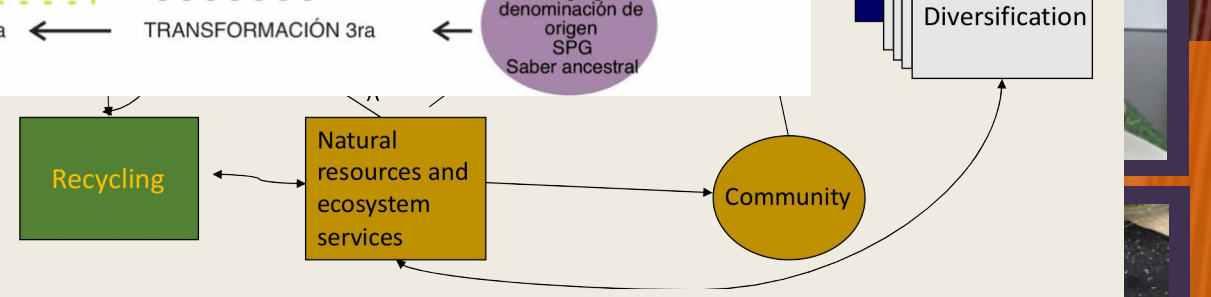
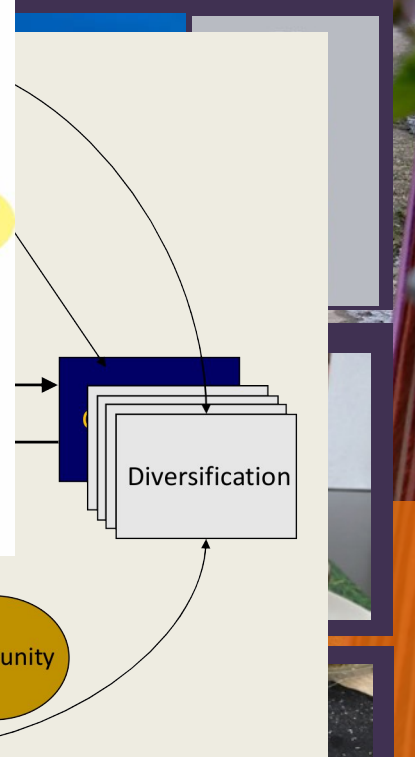
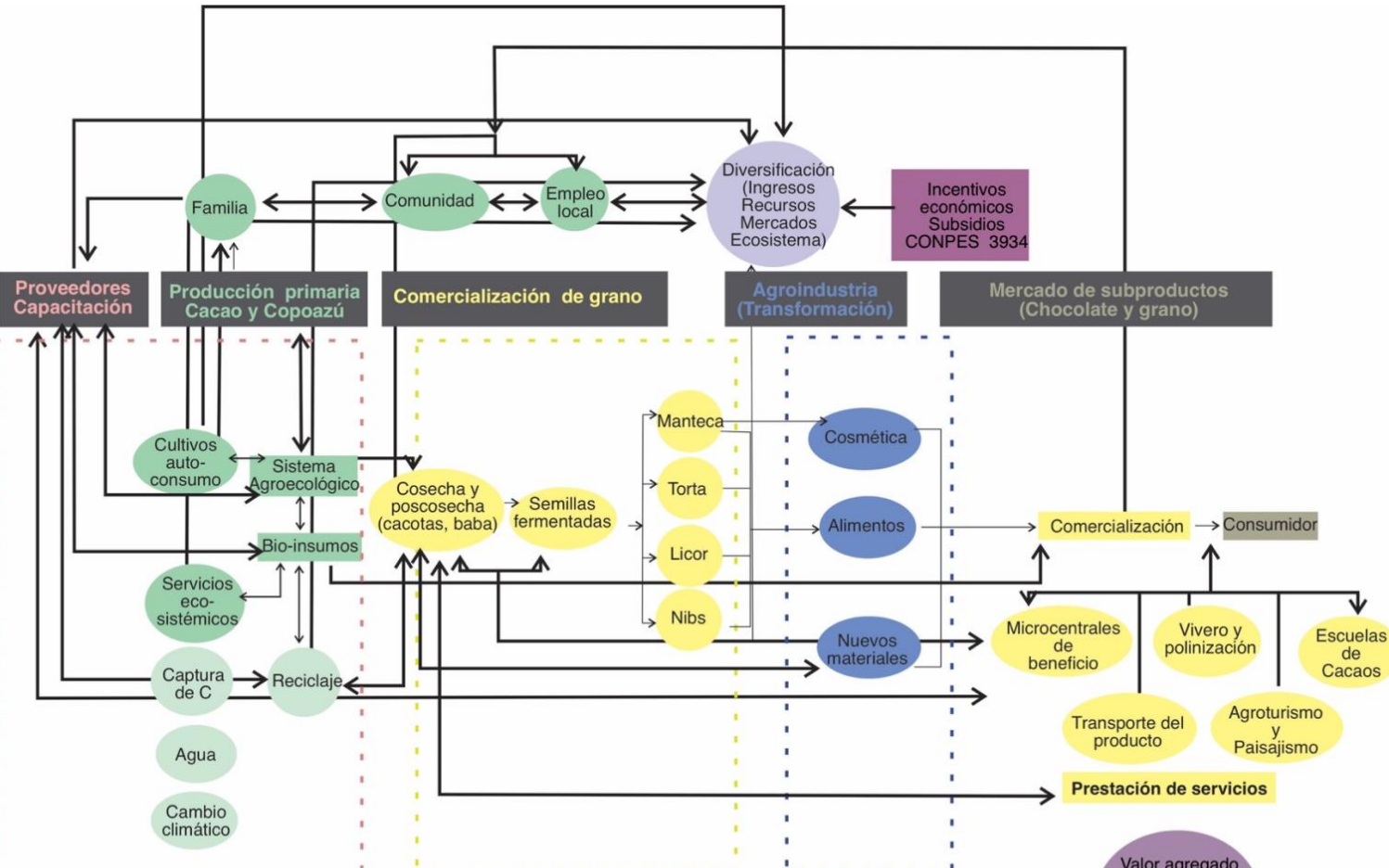
food system

the chain of activities connecting food production, processing, distribution, consumption, and waste management



Circular economy: less waste, more value (Kenya)





Farmer training on Agroecology



Pro



412

Selling points

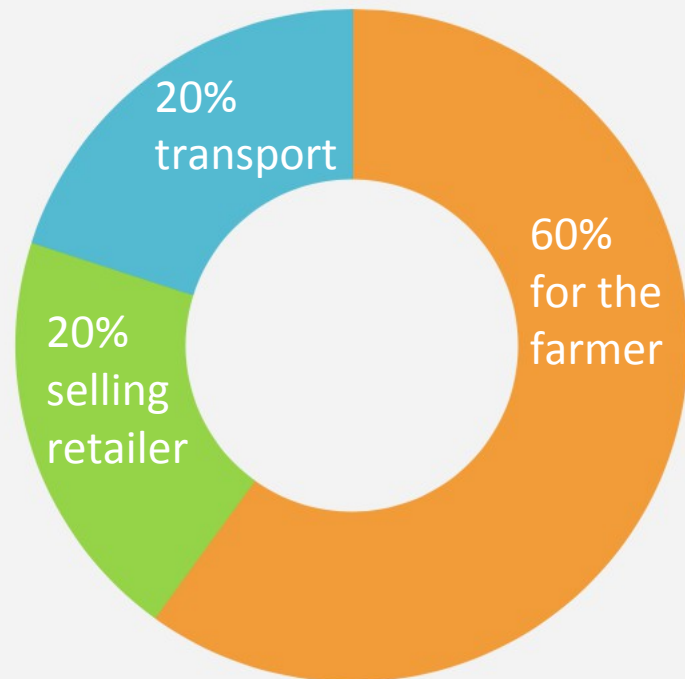
Healthy, pesticide free

poorest



Business

Prod



Agroecology networks and COVID19 in Latin America

Resilience of food systems

What happens to the food system outcomes, i.e. food security & employment, under shocks and stressors?

● High resilience capacity

Antifragility

Elements that sustain food systems resilience & antifragility



Agency

+



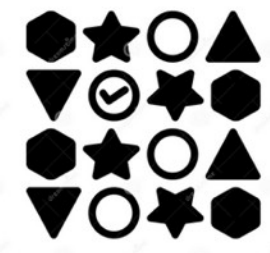
Buffering

+



Connectivity

+



Diversity

Antifragile

Things That Gain

From Disorder

High resilience capacity

Low resilience capacity

TIME

Vulnerability

Questions to the FSD community

- How can systems analysis tools & methods help at:
 - identifying appropriate levels of complexity in cycling networks that minimize tradeoffs and maximize synergies?
 - designing robust and adaptable (bioeconomic) value networks?
 - understanding and quantifying the relationship between value network structures, functions and performances?
 - inform (co-)innovation systems and contribute to monitoring, evaluation and (local) learning?
- What type of systems analysis tools, if any, can we offer to:
 - explore alternative food systems and assess their contribution to rural development, ecosystem services and food/nutritional security?
- Or, are some of the above levels of complexity/scales/actors beyond our scope as an FSD community?

1 postdoc; 4 PhD theses; 14 MSc theses; 17 articles; #conferences; 1 million us\$; 6 years

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