How do food systems change (or not)?

Governance implications for system transformation processes

Cees Leeuwis (based on a paper with Birgit Boogaard & Kwesi Attah Krah)

Presentation for online workshop on Food System Governance in South Sudan, Netherlands Food Partnership, November 9, 2023







How do food systems change (or not)?

Governance implications for system transformation processes

- Food system features
- Systems thinking and system change
- Implications for policy & intermediaries



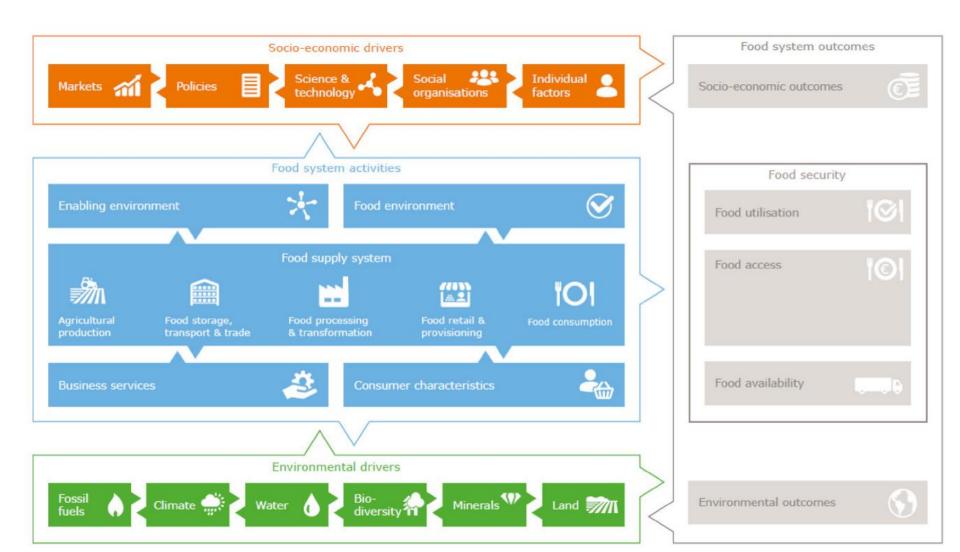
A representation of a Food System

By: High Level Panel of Experts on Food Security and Nutrition (HLPE) / UN Committee on World Food Security (WFS)

Figure 1 Conceptual framework of food systems for diets and nutrition Innovation, Political and Socio-cultural Demographic technology and environmental economic drivers drivers drivers nfrastructure drivers drivers Leadership Population growth Culture Globalization and trade Changing age distribution Religions & rituals Natural resource capital Innovation Conflicts and humanitarian crises Urbanization Social traditions Ecosystem services Technology Food prices and volatility Migration& forced Women's empowerment Climate change Infrastructure displacement Food supply chains environments Food availability and Farmers, indigenous peoples, Production agribusiness, land and plantation Nutrition physical access (proximity) systems owners, fisheries, financial entities Consumer and health Diets behaviour Economic access outcomes Storage and Transporters, (affordability) Quantity agribusiness, distributors distribution Choosing where Quality and what food to Promotion, advertising and Packing plants, food and acquire, prepare, Diversity Processing information beverage industry, small and cook, store and eat Impacts and packaging Safety medium enterprises Food quality and safety Retail and Retailers, vendors, food Social outlet owners, traders markets resauranters, wholesealers Economic Environmental Political, programme and institutional actions Sustainable Development Goals AVAILABILITY **ACCESS** UTILIZATION

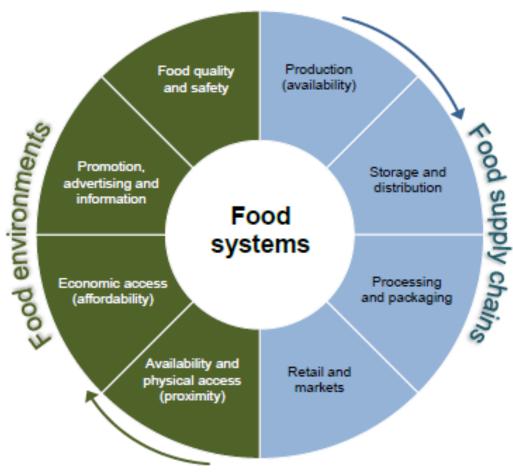
Another representation of a Food System

By: Van Berkum et al., 2018



Another representation of a Food System

Figure 3 Food supply chains and food environments

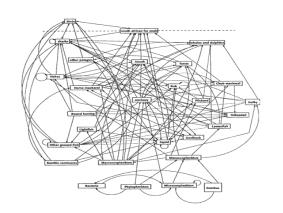




Source: Adapted wheel concept from Ranganathan et al. (2016).

What can we learn from this?

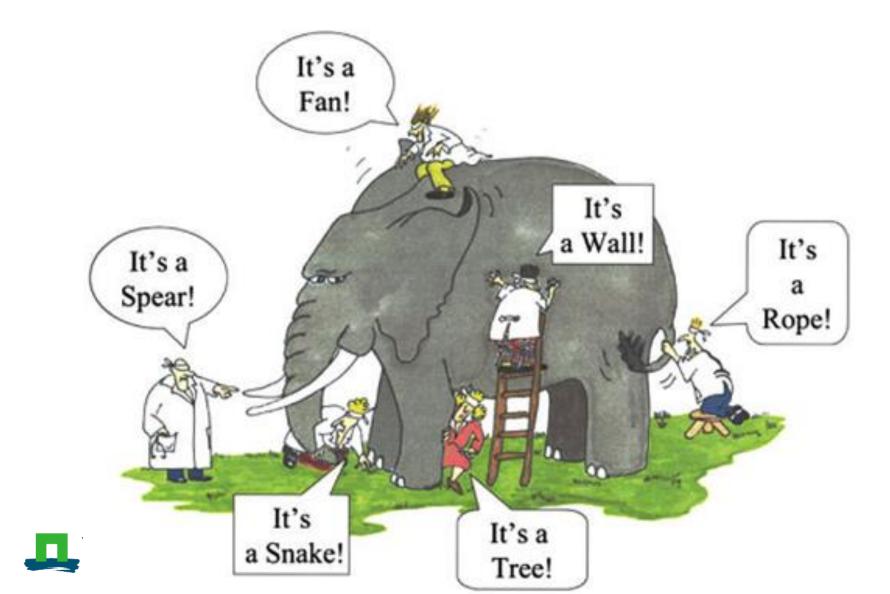
We are dealing with complex wholes



- Composed of different entities: Actors, Activities
 Organisations, Technology, Drivers, Regulations,
 Policies, Processes, Behaviours, Chains,
 Environments, Outcomes, Impacts etc.
- We use 'systems thinking' to make them more tangible
- We can think about systems in different ways!

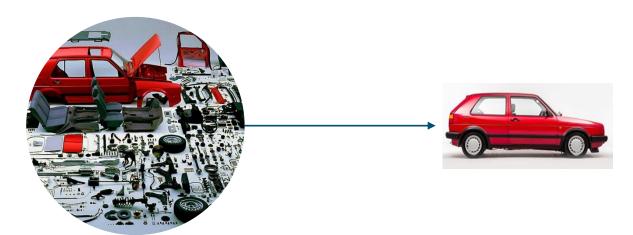


This is also true for stakeholders who constitute the system!



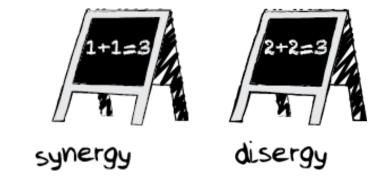
Systems thinking: interactions result in 'emergent properties'

Systems: 'The whole is more than the sum of the parts'



Pollution Climate change Poverty War

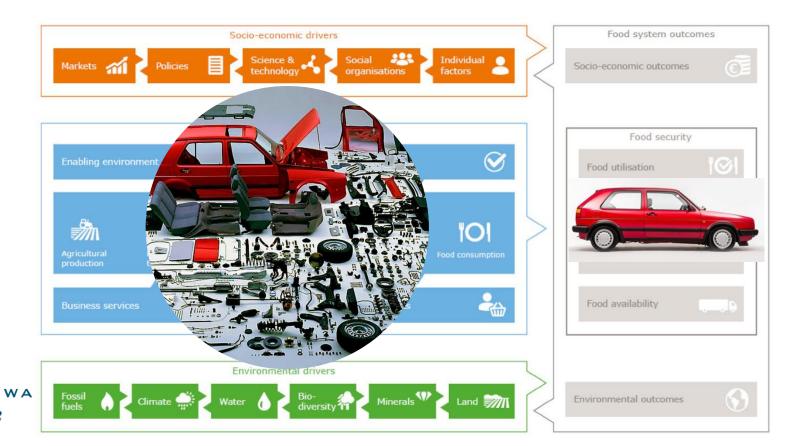
Emergent properties can be <u>desirable</u> or <u>undesirable</u>





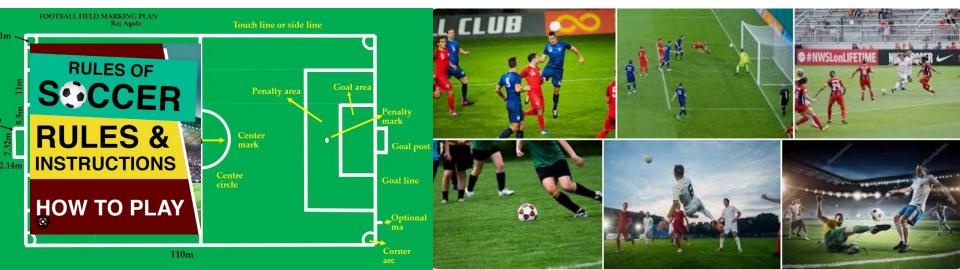
Systems thinking: interactions result in 'emergent properties'

• How do systems develop 'emergent properties' that are more desirable?



Transformative system change – e.g. towards market-based economy / integrated HDP funding & action

- Reconfiguring the existing 'rules of the game' that govern interactions (or even: change the game!)
 - procedures, regulations, markets, policies, incentives
- To alter coordination and alignment between actors/players

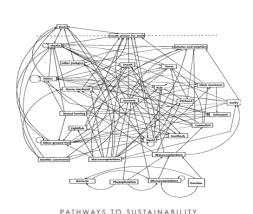


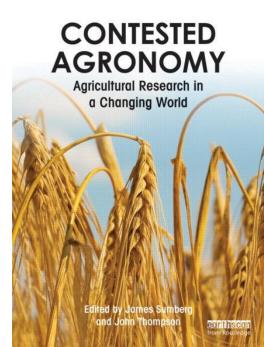
Achieving system change is far from easy! Relevant system features:

- multiple levels, siloes and spheres
- diversity (e.g. among farmers, formal and informal markets & governance)
- competing views, goals and trade-offs
- existing systems are resilient
- no actor in full control

It is not a matter of simple 'engineering'!







Historians: system change emerges from interactions between

Initiatives for change that start small and need to mature (<u>niches</u>) ...
Commercial livestock pilot / Integrated HDP pilot

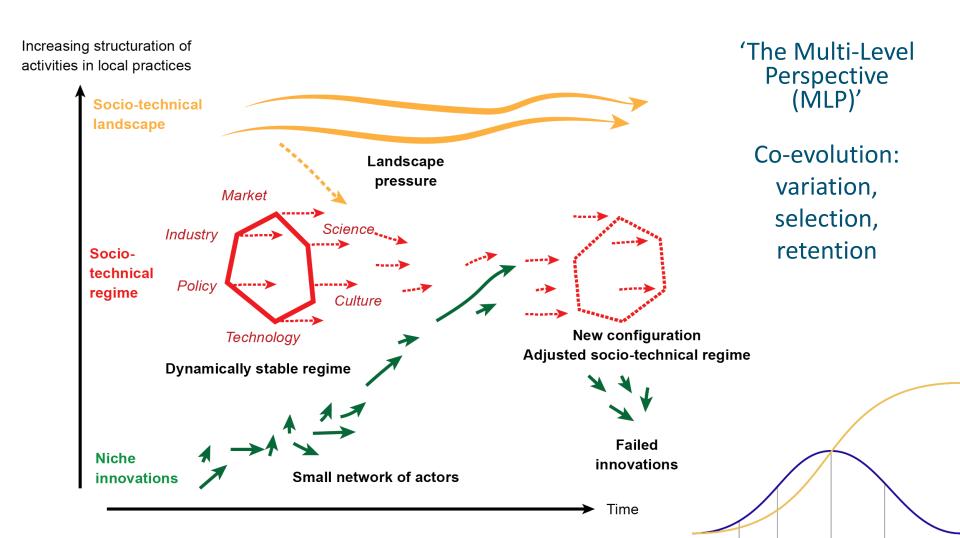
• ... before they can compete with and replace the existing dominant system (<u>regime</u>) ...
Subsistence economy / Siloed HDP

with wider global trends potentially serving as pressures and opportunities for change (<u>landscape</u>)

> Climate change Geo-political tensions Population growth Globalisation Digitization



Historians: system change emerges from interactions between (Geels, 2002)



Creating and supporting variation



Joint technical experimentation

Joint institutional experimentation



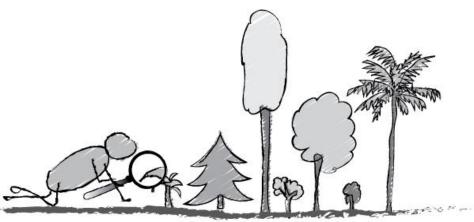


Alternative:

- market incentives
- regulations
- taxation
- business models
- pricing systems
- land tenure
- cooperative models
- certification



Capturing & supporting existing diversity



Capturing and supporting existing diversity

- Existing initiatives
- Local solutions
- Positive deviants
- Self-organisation





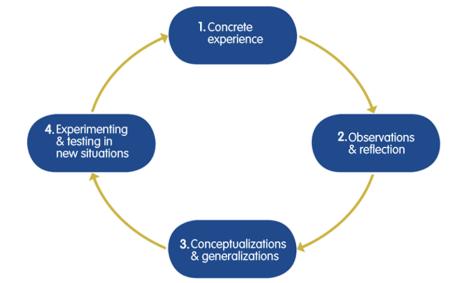
Temporary protection of niche initiatives



Temporary protection of niche-level initiatives

- Investments
- Insurance
- Safe space for learning from 'failure'

= Allowing initiatives to mature and compete



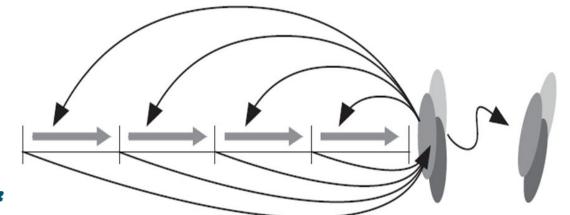


Analysis of landscape trends and visioning



Analysis of landscape trends and visioning

- Past trends
- Future projections
- Overlapping long term goals
- Desired properties
- Visioning
- Backcasting





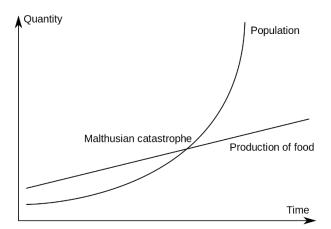


Creating landscape level pressures



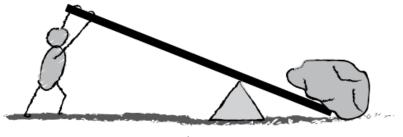
- Advocacy campaigns
- Support pressure groups
- Creating urgencies
- Imposing deadlines





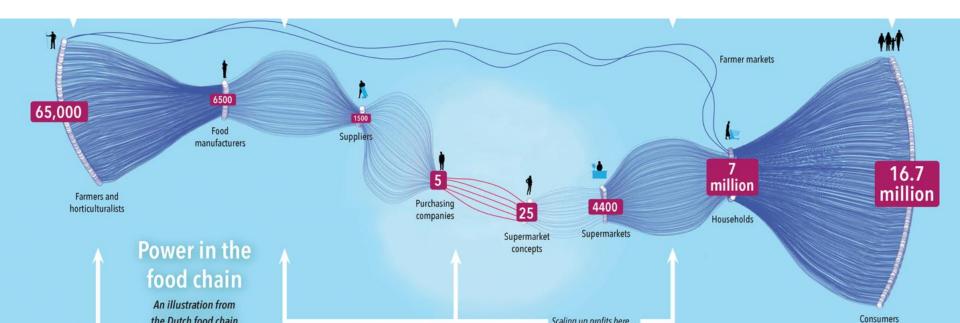


Identifying plausible leverage points

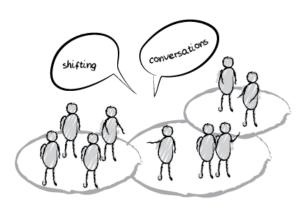


Identifying plausible leverage points

- Where is the power? What are key bottlenecks?
- What changes have leverage over others?



Building (discourse) coalitions



Process investment in coalition building, collaborative research and media presence

Connecting to existing initiatives

and movements

Enrolling parties who feel interdependent

Conflict management & collaborative research

Developing & sharing narratives













Concluding remarks

- Fostering conducive conditions (pressure, variation, strong coalitions) may require new types of interventions
 - dealing with social, political, institutional dimensions
- Research can become a vehicle for change



Powerful public and private actors are likely to be part of the counter-coalition



Thank you for your attention!



