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FOODPathS

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A food systems approach in the context of FOODPathS

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Exercise in pairs



Please take a moment to answer the following question and then discuss this with the person next to you for about 5 minutes:

When was the last time you spoke or thought about a Food Systems Approach and why or in which context?

Going back: Why a food systems approach?



- **FIT4FOOD2030 project from 2017 – 2020 (led by VU, Amsterdam)**

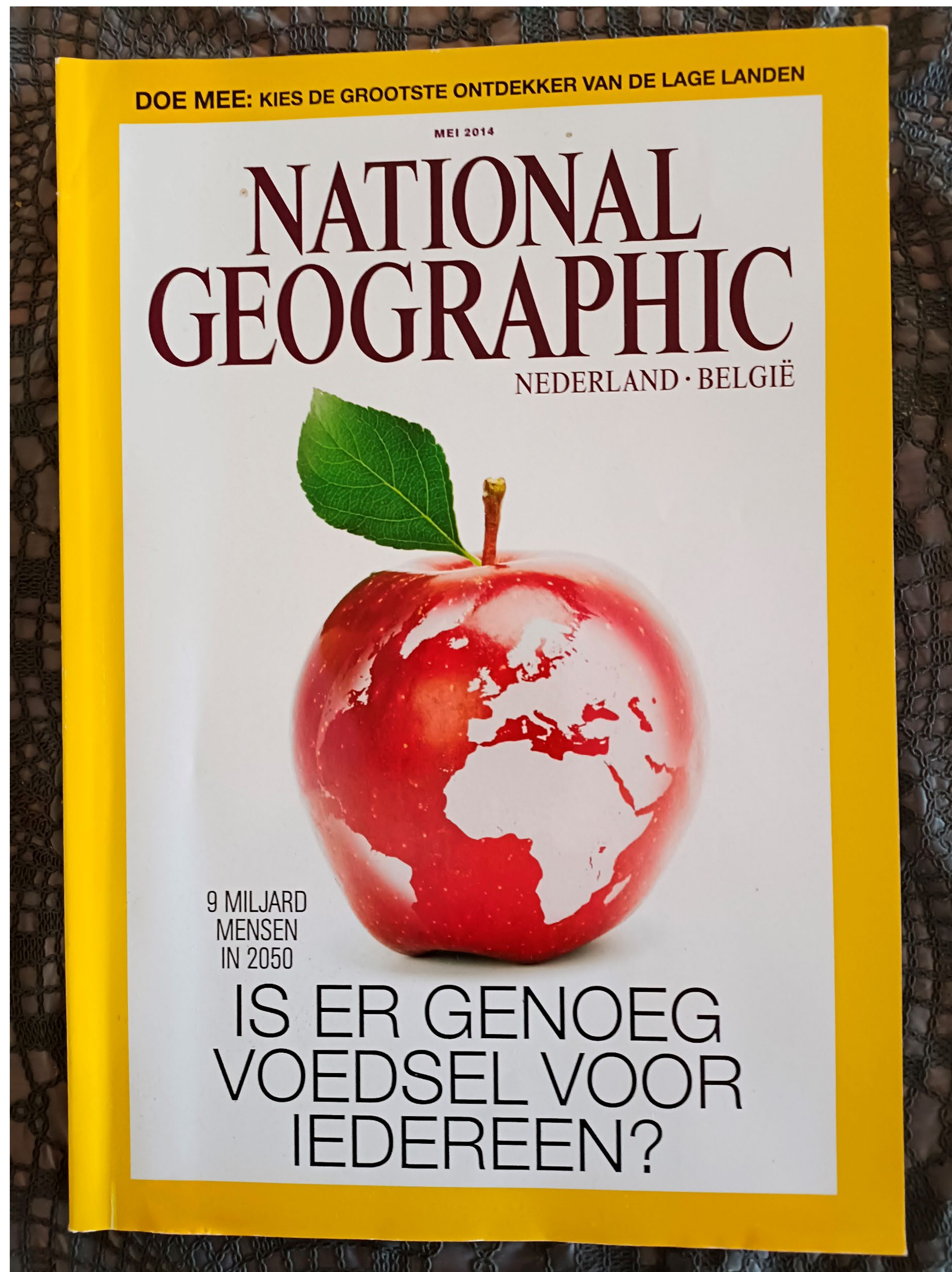
“Our food systems **face severe, urgent and persistent challenges**, and so do we as humanity. Therefore, we need to strengthen the systems approach to Research and Innovation (R&I) in order to **inform policy and decision makers** to foster the **transformation** of EU food systems, **in line with societies’ needs**” (Gill, Den Boer et al.)

- **SCAR SWG Food Systems Policy Brief (Halberg and Westhoek, 2019)**

“There is a **growing evidence and consensus** that a food systems-based approach to Research and Innovation **in the combined fields** of agriculture, fisheries, food, environment (including climate change mitigation and adaptation), human nutrition and health **is crucial for effectively addressing the large and systemic challenges the European food systems are facing**”

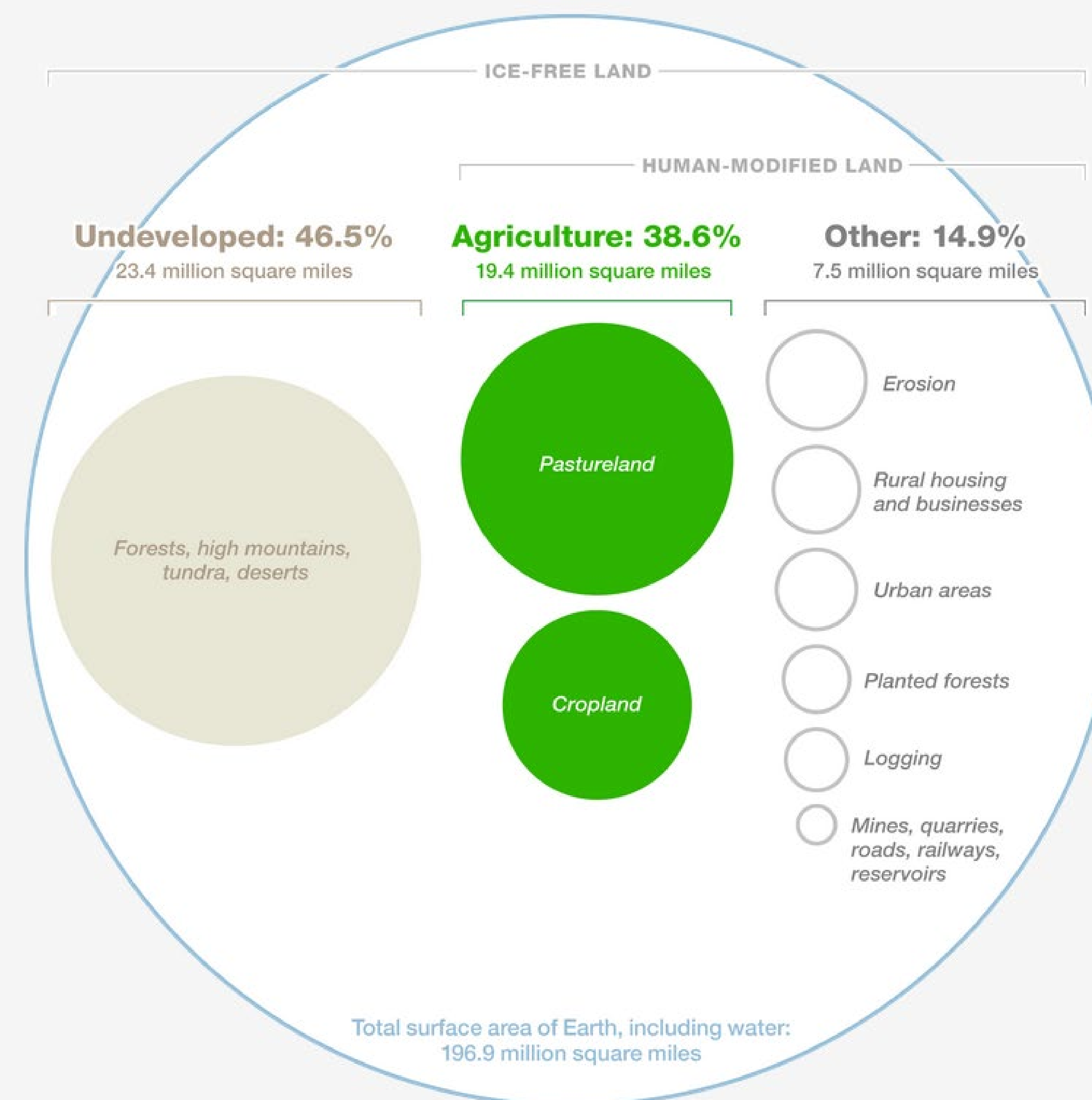
- **FOOD2030**: the EU’s research and innovation policy framework – 11 Pathways for Action supporting the transition towards sustainable, healthy and inclusive food systems, that respect planetary boundaries, **because our food systems today are unsustainable.**

Ten years of urgency – National Geographic special on Food Systems for 9 billion people, May 2014



A Five-Step Plan to Feed the World

When we think about threats to the environment, we tend to picture cars and smokestacks, not dinner. But the truth is, our need for food poses one of the biggest dangers to the planet.



Step 1: Freeze agriculture's footprint

Step 2: Grow more on farms we've got

Step 3: Use resources more efficiently

Step 4: Shift diets

Step 5: Reduce waste

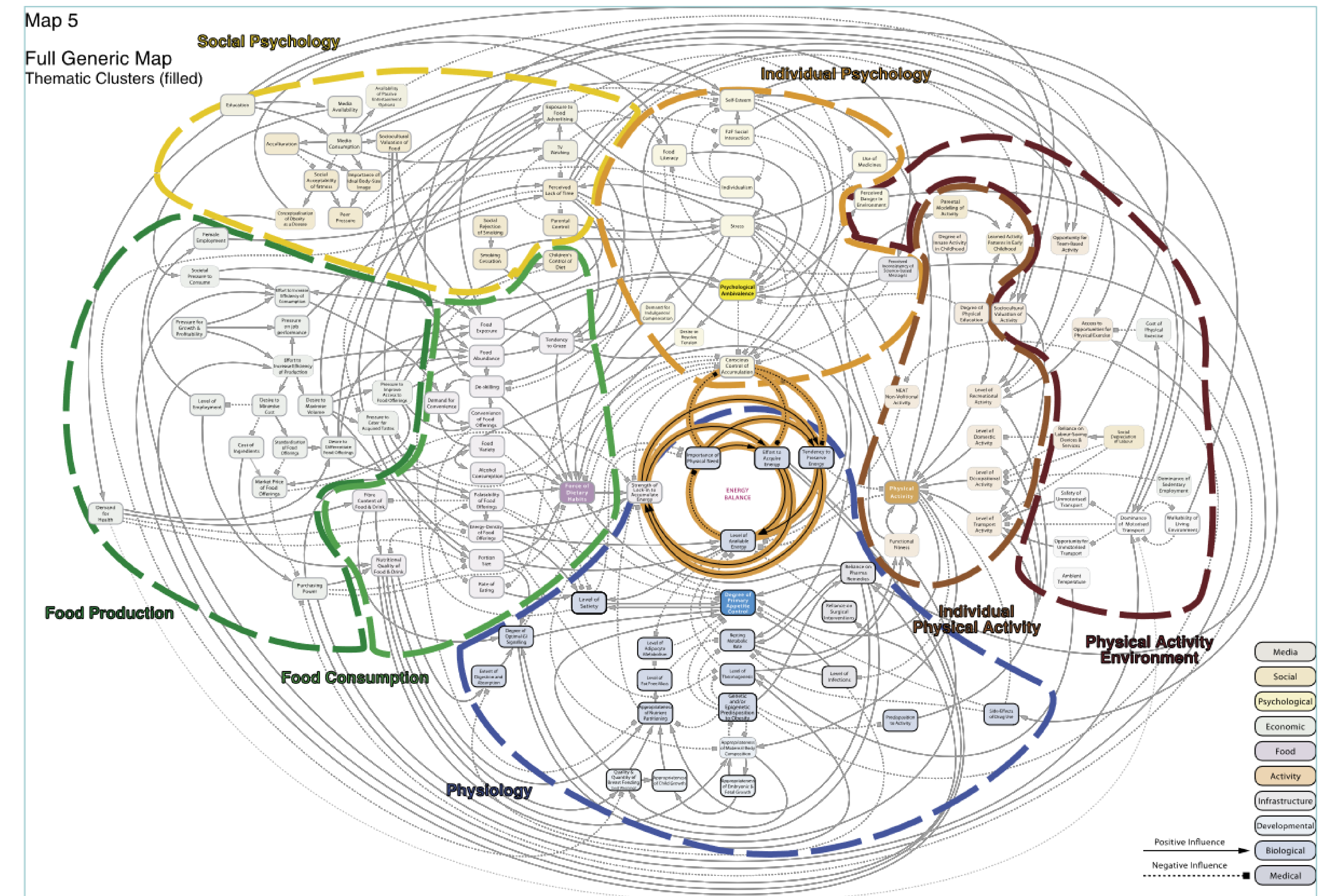
What can we learn from others?



Action Scales Model for Complex Adaptive Systems (Nobles, 2022)

“Programs that focus on **individual** goals in isolation are likely to **miss opportunities for increasing the impact of limited resources** (via synergies and reinforcing feedbacks).”

“A systems-based approach recognizes that progress on one goal, in one place, could either undermine or enhance progress on other goals, there or elsewhere. **Interactions and feedbacks** among the SDGs can be both **negative** (producing trade-offs or diminishing efforts) and **positive** (producing synergies or reinforcing efforts).”



FS approach as a framework for change

(by Susanne Hansen, DCA)



SRIA

1. **Synergies** - where transformations in parts of the system may lead to improvements in several outcomes and for **several stakeholders**. (Multi stakeholder)
2. **Trade-offs** between desirable outcomes.
3. Identifying **drivers for change**. This also includes pressure from citizens or other stakeholder groups, innovations and niches with strong potential
4. **Leverage points**, where changes in one part of the system may produce large transformations across the whole system and its outcomes.
5. **Lock-ins**, like established structures and strong economic or cultural interests of some stakeholders that block desirable transformations for others.

FAO UN

1. **Multi-disciplinary research**
2. **Multi stakeholder**
3. Understanding of the structures of the system, and how they influence conduct
4. **Linkages** between **actors**/product flow (production to consumption)
5. **Governance** of the system, including **power structures between stakeholders**, and how it influences behaviour
6. Binding constraints (**lock-ins**)
7. **Leverage points**

Fit4Food2030

1. A paradigm shift within academia towards **transdisciplinary research** approaches (multi-disciplinary)
2. **Include interactions between multiple stakeholders**, such as researchers, societal actors, and decision makers, in both agenda setting and research implementation
3. **Multi-stakeholder engagement** to shift thinking from linear thinking to holistic approaches.
4. **Public and independent R&I**
5. **Investment in social sciences**
6. **Investment in social innovation**
7. Understanding **connections** and **interactions** of EU food system (with food systems external to the EU)
8. **Capacity development**

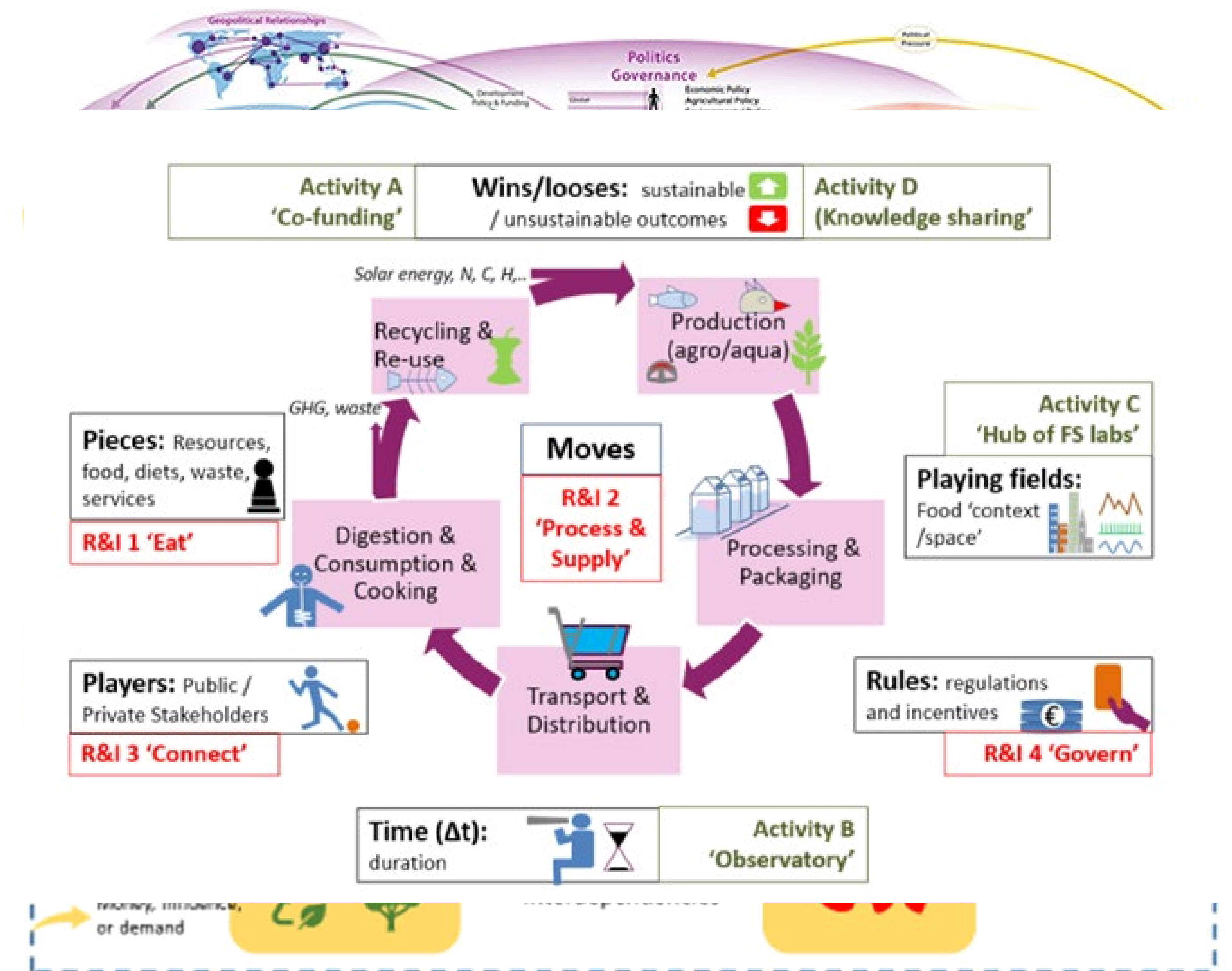
Reflections on a food systems approach

(by DCA team FOODPathS)



Complex systems, like the food system, are by definition:

- Non-linear
 - Interconnected
 - Multivariable
 - Self-evolving, and dynamic
- making them difficult to predict and control.
- Intervening requires continuous reassessments, readjustments, adaptations and iterations to counter biases, unexpected consequences, unforeseen reinforcing feed-back loops and other perverse effects (SAPEA 2020, shortened)

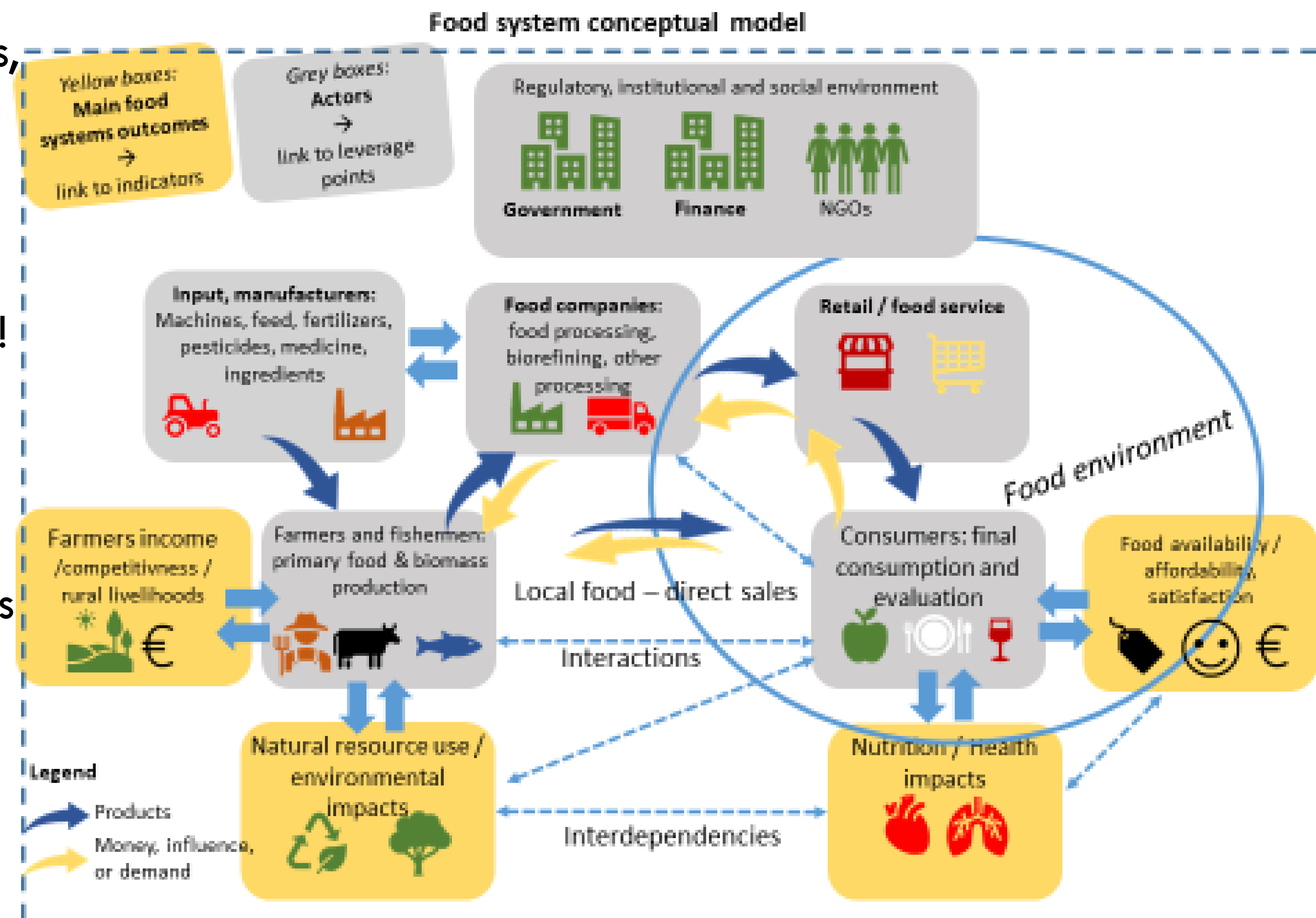


Understanding food system characteristics: Drivers, components, outcomes

(By Susanne Hansen, DCA)



- **Interactions** between actors with specific objectives, roles and interests
- Key **decision** makers
- **Power dynamics**
- Resulting feed-back loops => **level of complexity!**
- The resulting **interdependencies** of outcomes – including consequences for different stakeholders?
- Drivers for change
 - Pressure from stakeholders, policies Innovations in technologies, self-governance, niche development, ...
- Identifying barriers to change:
 - negative feed-back loops
 - Lock-ins ..
 - Unaccepted trade-offs....



But remember:

- Something that is complex is not (necessarily) impossible!
 - Start from what is possible and build on what we have
 - Visualise what kind of FS we want to have 10+ years from now and what role the future SFS Partnership will have played
 - Be creative and not be hindered by current barriers
 - If we keep doing what we did, we get what we always got!
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- And let's keep in the back of our mind always this question: How do we make sure the world of food systems reflects the real world of people (and their real life (food) experiences)?

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Thank you for your attention.

