

Food system resilience and research & innovation in Europe

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This presentation

- Policy lens: ABCD of food system resilience building
- Reflect on EU R&I governance
- Horizon Europe Partnership on Sustainable Food Systems

Shocks and stressors: Warsaw example

- As a result of Ukrain war, Warsaw is home to 500.000 refugees
- 300.000 are forecasted to stay for 2 years
- Food aid, donations, emergency management
- Food system: adapt to emergency, reorient for long term benefits

Understanding food system resilience @WUR

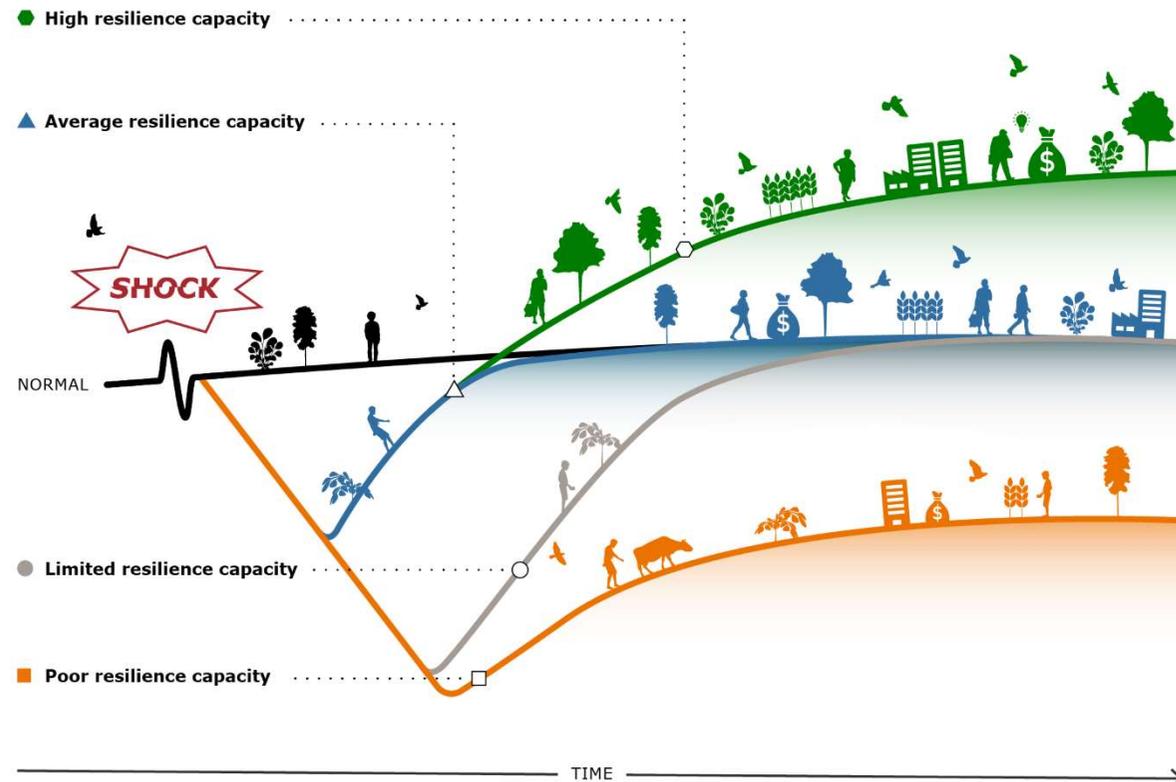
- **Towards a Future Research Agenda on Food System Resilience.** White Paper
- **Localising value chains and food system resilience: a systematic exploration.** Policy Brief
- **Strengthening resilience in Africa's food value chains.** Working Paper
- **Food system resilience: towards a joint understanding and implications for policy.** Policy Paper by Bart de Steenhuijsen Piters, Emma Termeer, Deborah Bakker, Hubert Fonteijn and Herman Brouwer.



We understand food system resilience as the capacity of food systems to deliver desired outcomes in the face of shocks and stressors.

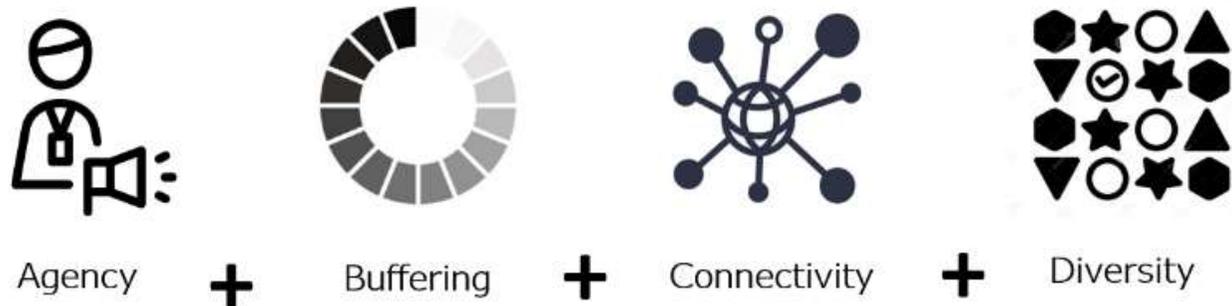
Resilience of food systems

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



Four food system resilience properties

The ABCD of food system resilience building



The A B C D of food system resilience building

- **A**gency: the means and capacities of people to mitigate risks and to respond to shocks.
- **B**uffering: resources to fall back on in the face of shocks and stressors.
- **C**onnectivity: the interconnection of and communication between actors and market segments.
- **D**iversity: diversity at different scales and in different places, from production to consumption and from farm level to regional diversity.

Governance of research & innovation (R&I) in EU

- How does R&I contribute to ABCD resilience building?
- Need to **R**eorient the R&I system

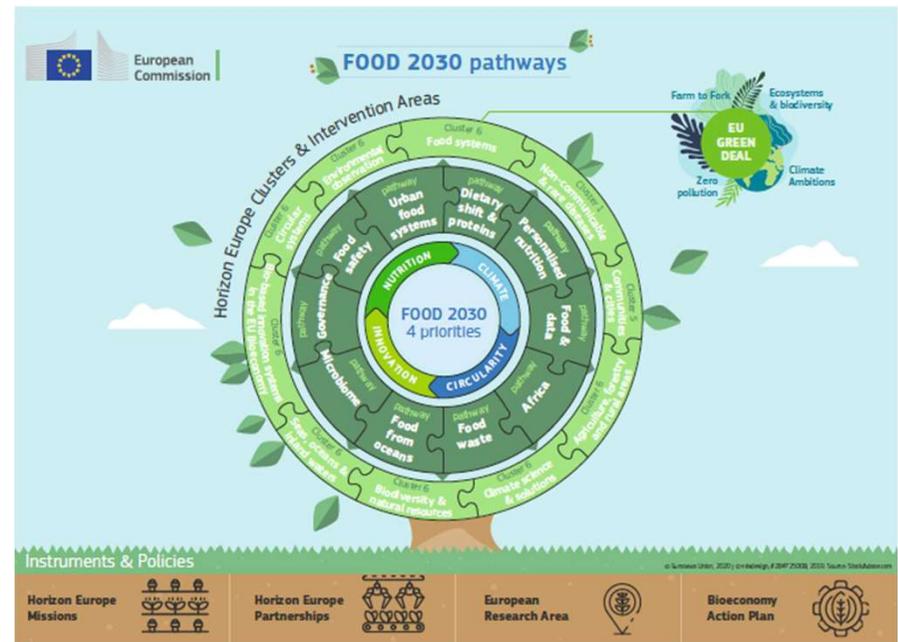
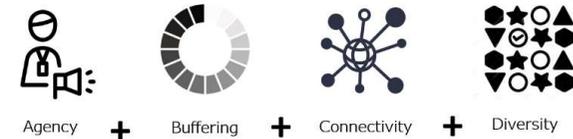


Figure 3: Illustration of Food 2030 pathways – linkages and interactions.

Agency

- Having a choice on how to respond to shocks & stressors
 - Individual choice but...
 - ...boundaries from the agency of firms
- Agency of food systems?
 - ...to respond to stressors in other systems and help resilience building in societies
- ● Place-based solutions!

The ABCD of food system resilience building



Cities of Funchal, Thessaloniki, Grenoble, etc:

Community gardens for maintaining agrobiodiversity and culture systems

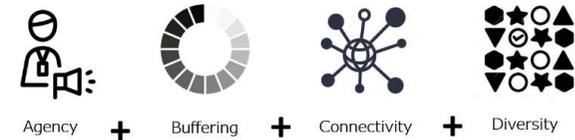
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Educational systems

FOOD TRAILS

Buffering

The ABCD of food system resilience building



- Little to no buffers in market systems.

Adaptive and transformative capability *is* the buffer (Darnhofer 2014?)

- Warsaw forecast: 300,000 refugees intend to stay 1-2 years.

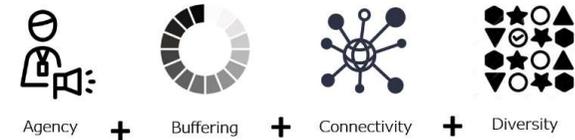
Buffering 15% of pop. in need of food aid, and...

Reorientation to improve food distribution mechanisms in Warsaw, for recovery phase after crisis: Curb food losses, logistical scheme to match food donations and food losses with recipient needs.

Transform how Warsaw deals with food loss in the future.

Connectivity

The ABCD of food system resilience building



- Market actors? Some inspirational examples
- Charge to R&I systems: foster non-market connections
 - Community supported agriculture CSA, niche farmers
 - Cities
 - Countries
 - Capital, investors
 - Etc.



Candidate HE Partnership: Sustainable Food Systems for People, Planet and Climate

**Collaborative EU-wide program for food systems research
& innovation on 4 themes:**

- Change the way we eat
- Change the way we process and supply food
- Change the way we connect to food systems
- Change the way we govern food systems

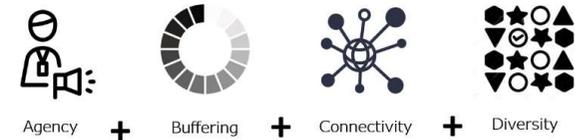
Duration: 2024-2030

Budget estimate: EUR 600 million incl. 30% EU cofunding

Developed under the auspices of SCAR (Strategic Working Group on Food Systems) and the European Commission

Diversity – will it deliver regime change in academia?

The ABCD of food system resilience building



- Charge to R&I systems to foster non-market connections
 - Work more with citizens, expert practitioners; with agents of power and money; with other R&I partners

- Reorientation towards
 - *Sustainable food systems science* (e.g. IPES Food)
 - Knowledge and Innovation systems for food systems transformation (e.g. FOSTER project 2022-26)

Concluding

Over time, progressive globalisation, maximisation of production and supply chain efficiency have resulted in a loss of resilience in food systems. Restoring food system resilience cannot be left (only) to the market and needs new governance, proper policy and incentives.

Reorient R&I systems to build food systems resilience. More research but even more: experimentation with new governance models and translation of learnings is needed.



Thank you for your attention

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<https://foodtrails.milanurbanfoodpolicypact.org/>