



Understanding Food System Resilience

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Objectives and methods

Food system resilience presents a paradox: even when global food markets prove to be quite resilient in the face of different shocks and crises, desired outcomes such as food and nutrition security are not ensured for all and all times. To ensure that desired food system outcomes are less fluctuating, policy makers and other important stakeholders need a common narrative on food system resilience. The purpose of this study was to work towards a joint understanding of food system resilience and its implications for policy making. Results included a white paper and a policy paper. The study was based on multi-stakeholder consultations and extensive literature review.

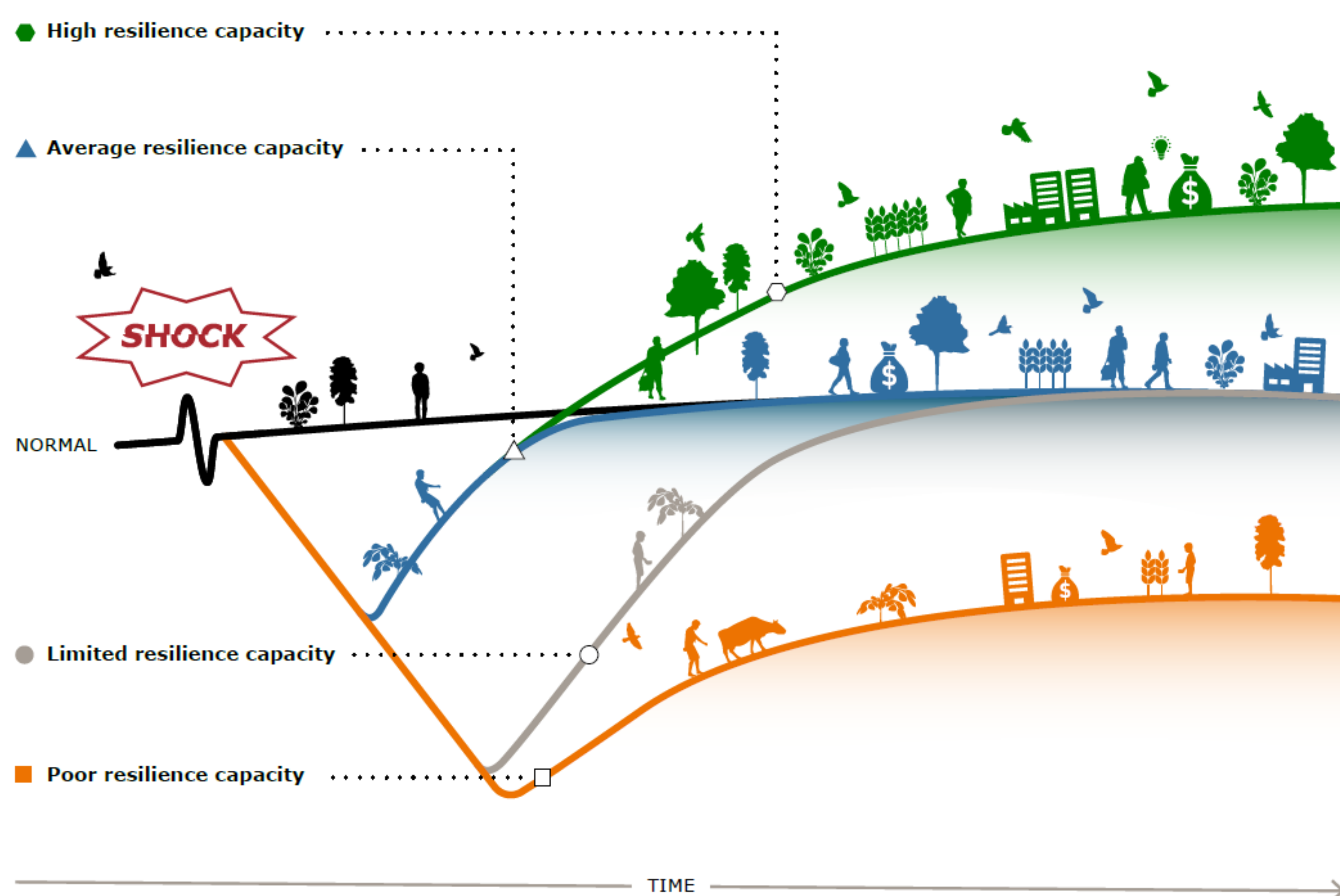
Results, solutions and contribution to transitions

Key messages

- Building food system resilience is necessary to withstand shocks and stressors and maintain progress towards desired outcomes: food and nutrition security and equitable livelihoods for all in a healthy ecosystem.
- We identify four key properties of building resilient food systems: ensuring **Agency**, creating **Buffers**, stimulating **Connectivity**, and enhancing **Diversity** throughout the system.
- Implementing these properties will enhance the capacity of food systems to anticipate, prevent, absorb, and adapt to the impacts of shocks and stressors.
- Building resilience through these key properties requires transformation of the entire system and this raises questions about the politics and governance of markets and broader food systems.

Resilience of food systems

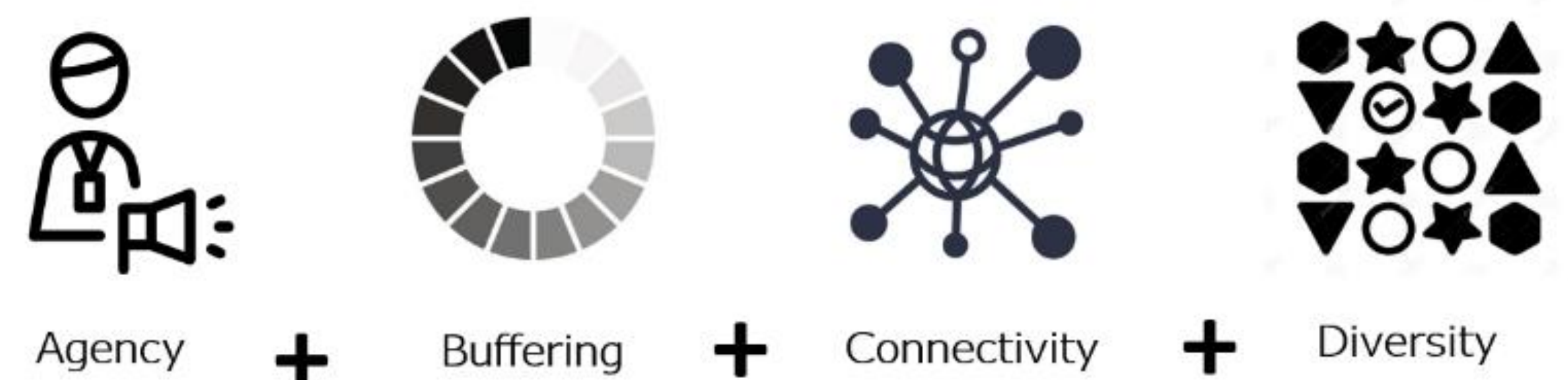
What happens to the food system outcomes, i.e. food security & employment, under shocks and stressors?



We refer to **food system resilience** as the capacity of food systems to deliver desired outcomes in the face of shocks and stressors. Based on our study we identified four key properties that are strongly associated with resilience building:

- Agency:** the means and capacities of people to mitigate risks and to respond to shocks.
- Buffering:** resources to fall back on in the face of shocks and stressors.
- Connectivity:** the interconnection of and communication between actors and market segments.
- Diversity:** diversity at different scales and in different places, from production to consumption and from farm level to regional diversity.

The ABCD of food system resilience building



An integrated and context-sensitive approach that focuses on strengthening these properties will certainly increase the capacity of food systems to anticipate, prevent, absorb, and adapt to the impacts of shocks and stressors. This requires tailor-made interventions with attention to potential trade-offs.

This study has highlighted the importance of more inclusive governance to direct food system transformation towards higher levels of resilience. We conclude that we cannot leave this to the market, but that democratic and before all independent, credible institutions are needed to create the necessary transparency between actors as to their interests, power and influence. Aligning these interests is never easy and must be accompanied by collective negotiation and conflict management processes especially in cases where interests strongly diverge. This is key to create the conditions for transformation towards sustainable, inclusive and resilient food systems.

What's next?

The policy paper (see below) served as input by The Netherlands to the United Nations Food Systems Summit. A next step includes an exploration how to measure the resilience of a food system. This will allow for the ex-ante assessment of the potential effects of policy measures, investments and other interventions that may impact on the resilience of a food system. This paper is due by April 2022.

Questions for audience

- Is the resilience of a food system equally important to you as compared to economic principles of efficiency and profitability?
- Do you recognise the ABCD properties of resilient food system?
- Is this narrative of food system resilience helpful to you and will it facilitate your communication with other stakeholders?

Two publications

<https://research.wur.nl/en/publications/towards-a-future-research-agenda-on-food-system-resilience>

<https://research.wur.nl/en/publications/food-system-resilience-towards-a-joint-understanding-and-implicat>

