

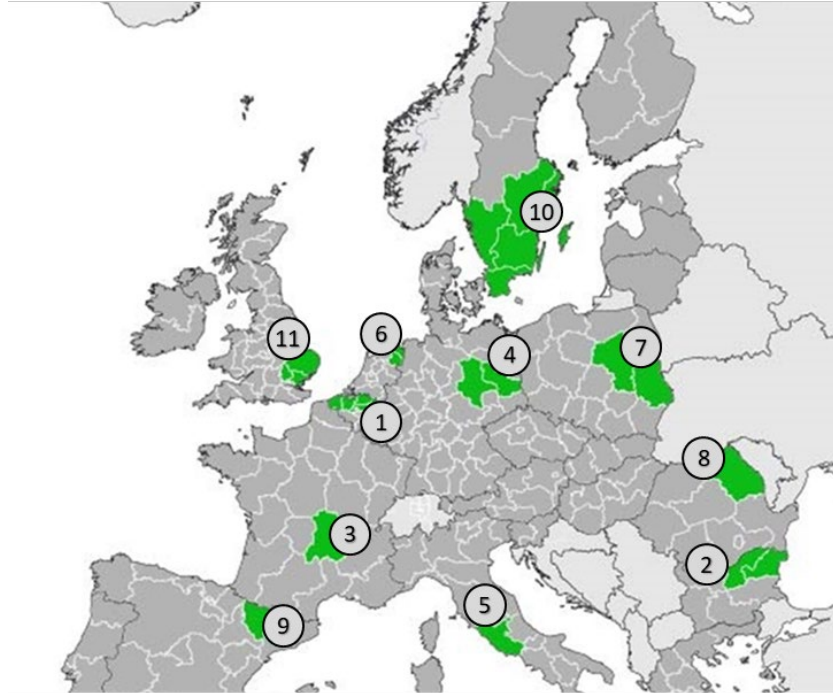
# Towards sustainable & resilient farming systems

Miranda Meuwissen & SURE-Farm & Mixed & Soilvalues

Technical workshop on resilience, 11 December 2023



# Tour d'Europe



Agency

Buffers

Connectivity

Diversity

# Use resilience framework to reflect on disc paper

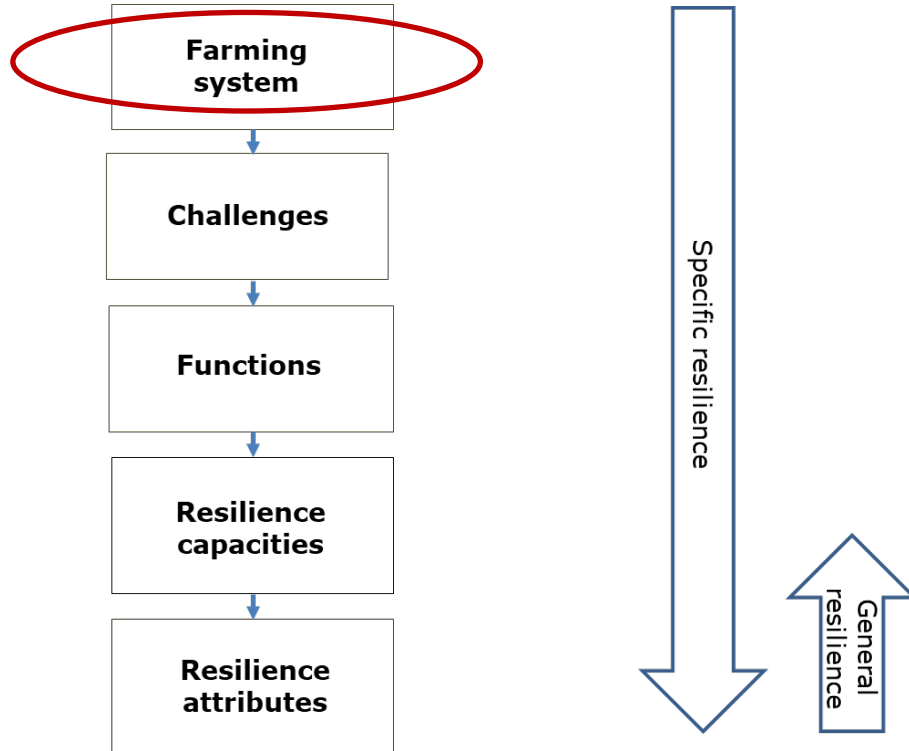
1. Resilience *of what?*

2. Resilience *to what?*

3. Resilience *for what purpose?*

4. What *resilience capacities?*

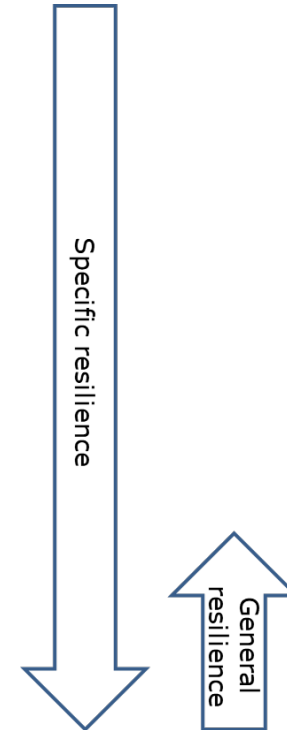
5. What *enhances* resilience?





# Resilience framework

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# Think the unthinkable

## Accumulating challenges

Geopolitics

A new pandemic

Extreme weather

Lack of farm  
succession

Price peaks

## Deep uncertainties

A series

of 'never-thought-of'

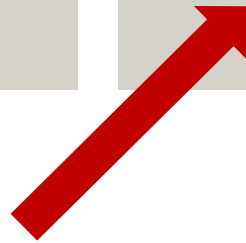
events

## Strategies stay behind

Based on vulnerabilities

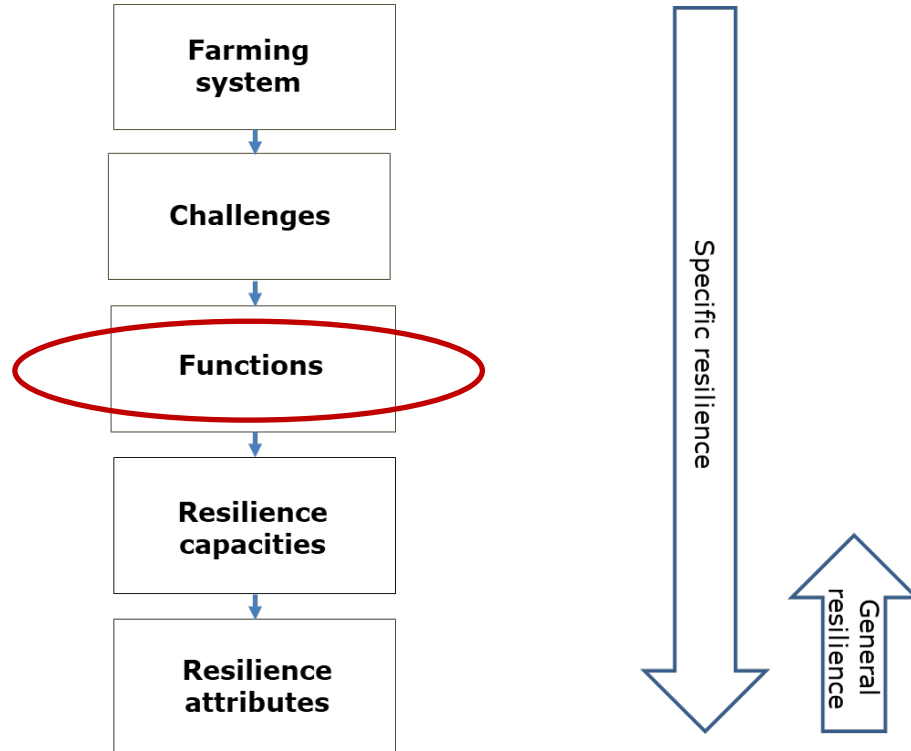
& drivers of the past

Feindt et al., 2022



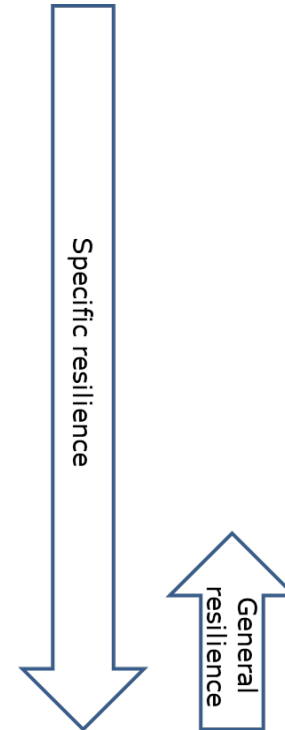
# A lot of attention for functions ("no empty shelves")

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# Resilience framework

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# Robustness: for which farms?



a. Robustness



b. Adaptability



c. Transformability

# Resilience framework

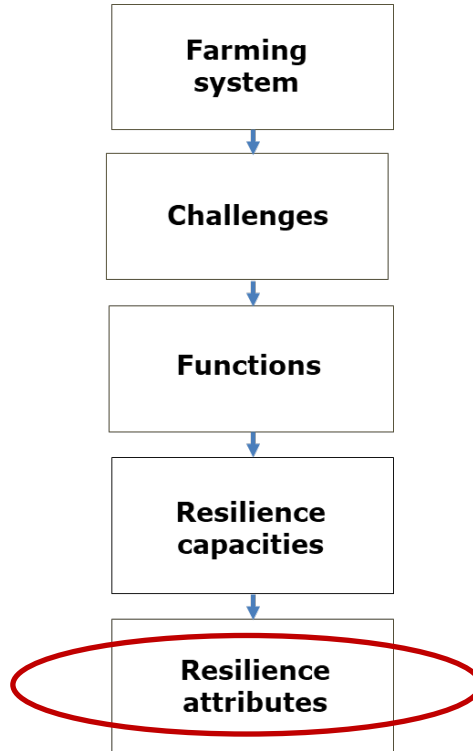
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Agency

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# The most important challenge

- Resilience is a latent concept (Meuwissen et al., 2020)
- Limited attention for uncertainties (Hardaker et al., 2015)
  - Availability bias
  - Underestimation of low-probability-high-consequence risks
  - Narrow perceptions of imaginable futures
- Resilience attributes (agency, buffers, connectivity, diversity) differ substantially from attributes of current food systems (De Steenhuijsen Piters et al., 2022)

Hardaker, J.B., Huirne, R.B.M., Anderson, J.R. and Lien, G. (2015). *Coping with Risk in agriculture*. CABI, 289.

Meuwissen, M.P.M., Feindt, P.H., Midmore, M., Wauters, E., Finger, R., Appel, A., Spiegel, A., Mathijs, E., Termeer, K.J.A.M., Balman, A., de Mey, Y. and Reidsma, P., 2020. The struggle of farming systems in Europe: looking for explanations through the lens of resilience. *Eurochoices* 19(2), 4-11, <https://onlinelibrary.wiley.com/doi/epdf/10.1111/1746-692X.12278>.

De Steenhuijsen Piters, B., Termeer, E., Bakker, D., Fonteijn, H., & Brouwer, H. (2022). Perspective Chapter: Food System Resilience—Towards a Joint Understanding and Implications for Policy. In Ribeiro-Barros, A. I., Tevera, D.S., Goulao, L.F., Tivana, L. D. (Eds) *Food Systems Resilience* (pp. 3-21). London: Intechopen Limited.

# The greatest opportunity

- Make resilience-building part of transformation
  - For farms & other actors: Good Resilience Practices
  - More broadly: Resilience governance
- Also include beyond-farm actors

# Thank you

