



SUSTAINABLE
RESILIENT
EU FARMING
SYSTEMS

Resilience of farming systems in the EU under current conditions and future scenarios

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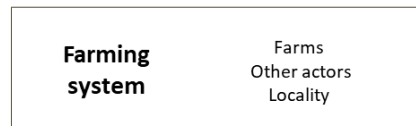


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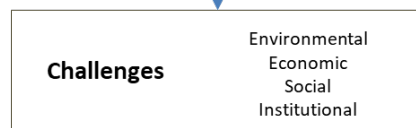


Integrated assessment

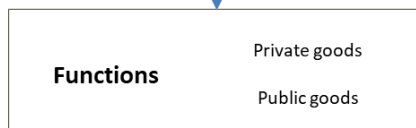
1. Resilience *of what?*



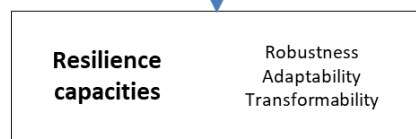
2. Resilience *to what?*



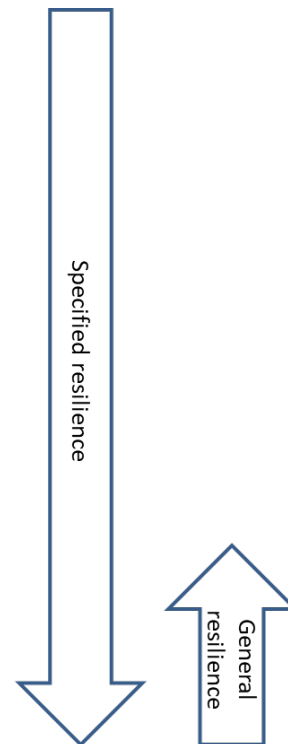
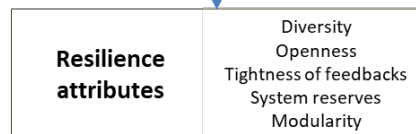
3. Resilience *for what purpose?*



4. What *resilience capacities?*



5. What *enhances resilience?*



Qualitative

methods:

workshops,
interviews

Quantitative

methods: system
dynamics modelling,
ecosystem services
assessment, farm
structural change
modelling



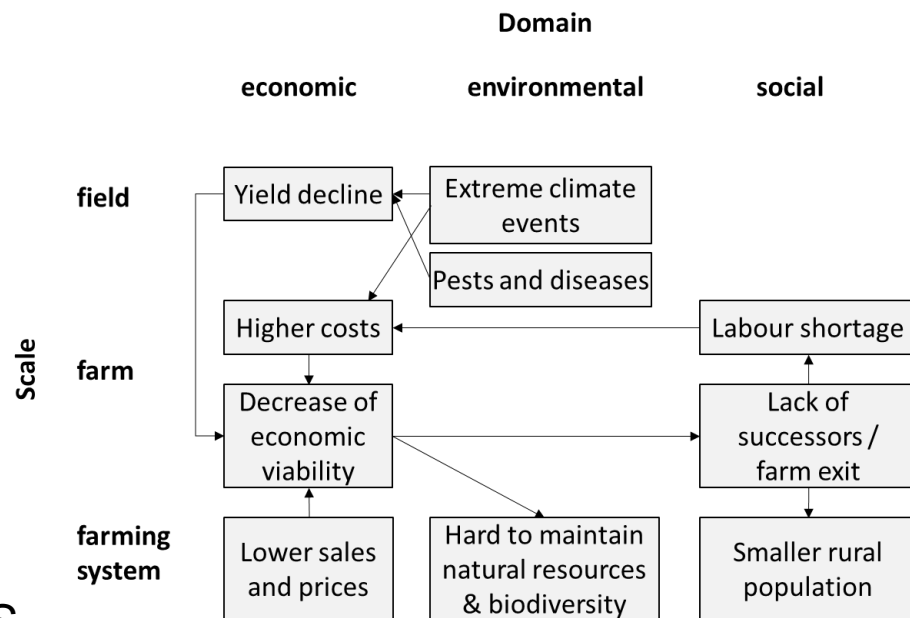
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Accumulating challenges cause farming systems to approach critical thresholds

- Many FS are perceived to be close to critical thresholds
 - low economic viability leading to farmer exits, making it hard to maintain the social fabric, natural resources and biodiversity
 - E.g., extensive sheep production in Huesca, Spain

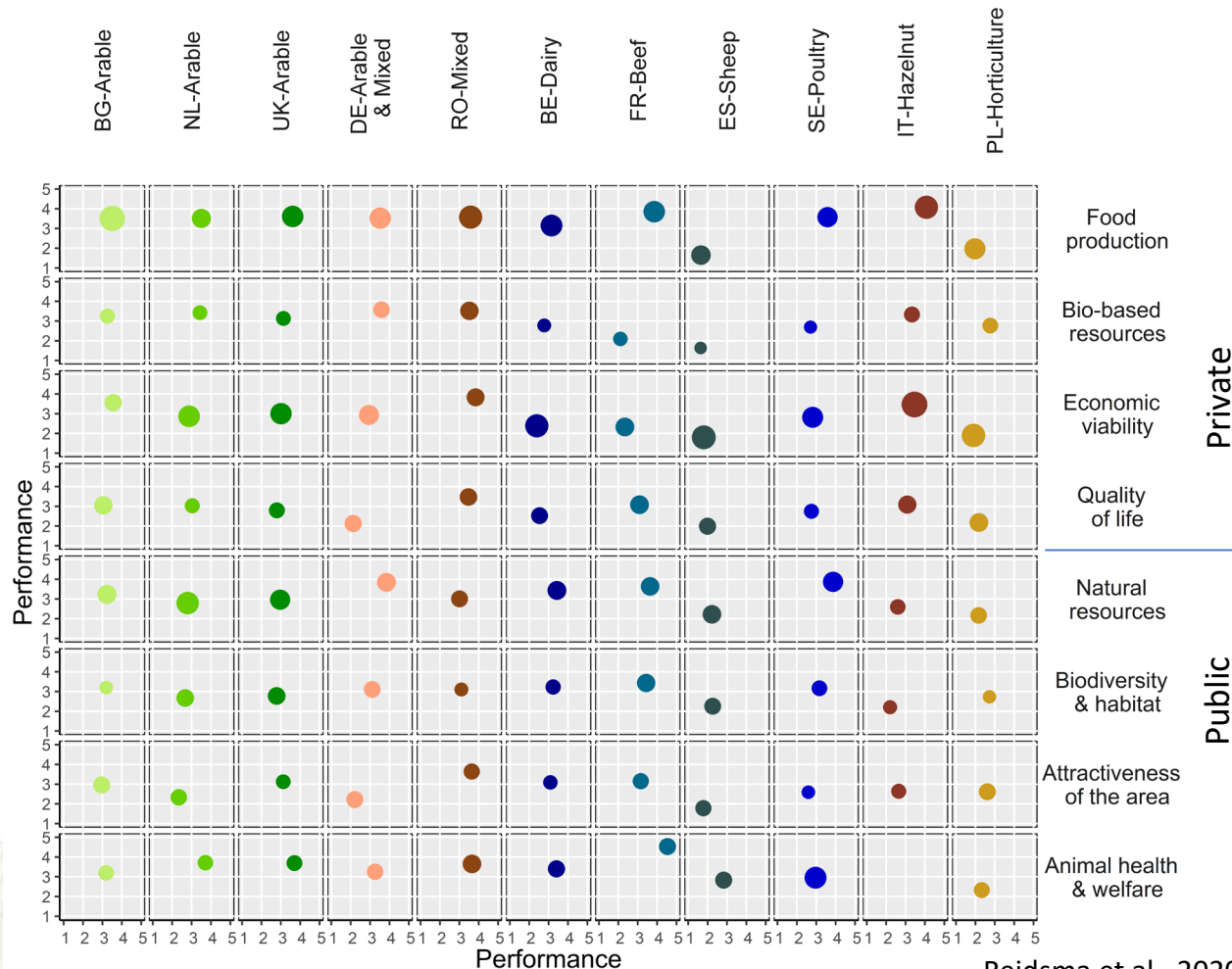


- Continuous change of laws & regulations critical in 5 out of 11 FS



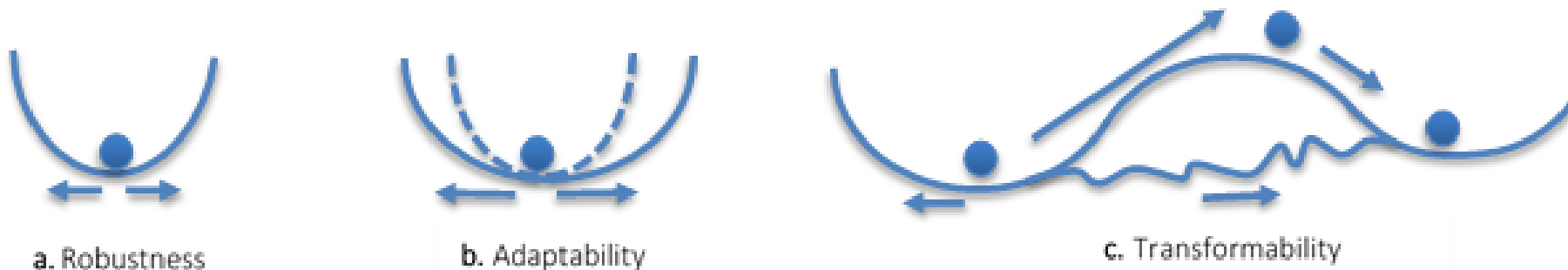
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Past strategies mainly focused on remaining economically viable, leading to a decline in the provision of public goods



- Importance (size):
 - Economic viability (farmers)
 - Food production (all)
 - Natural resources (other stakeholders)
- Performance (level)
 - Food production high
 - Economic viability moderate
 - Public goods lower
 - Variability among FS & stakeholders

The resilience of the farming systems is perceived as low to moderate, with robustness prevailing over transformability



- Presence of resilience attributes & historical dynamics of main functions
 - FS generally robust (although close to critical thresholds)
 - trade-offs with transformability (into desired directions)
 - adaptability mostly employed for keeping stability and realizing (slow) incremental improvements
- However, adaptation or even transformation is necessary

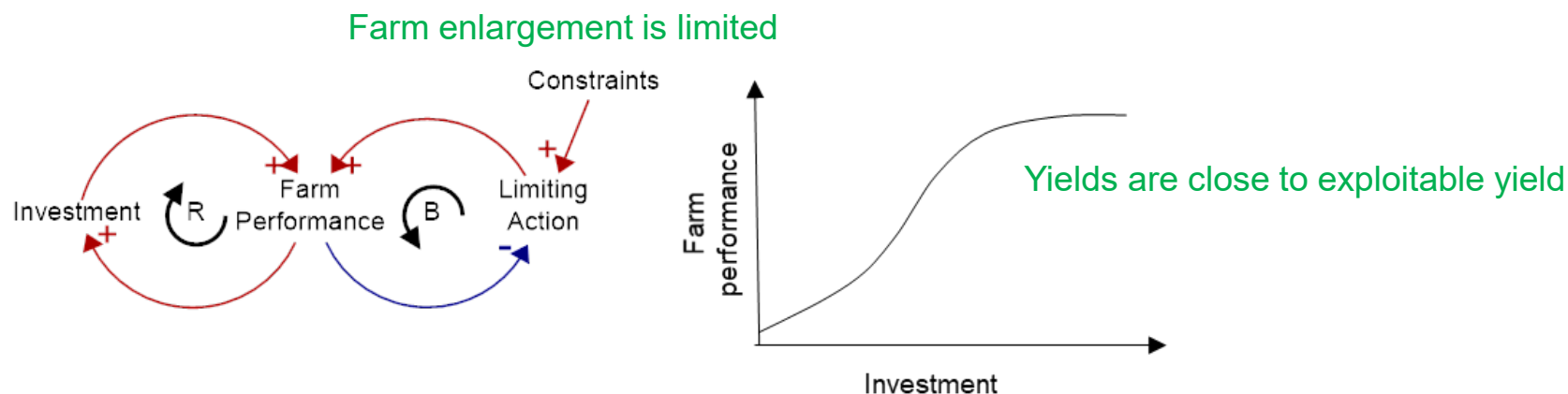


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Strategies from the past are not sufficient to bring the desired social, economic and environmental change

● Past strategies

- kept farming systems robust, but adaptation and transformation are required
- have led to the erosion of the social fabric and reduced the maintenance of natural resources and biodiversity
- have **limits to success** (e.g., increasing farm size and intensity)



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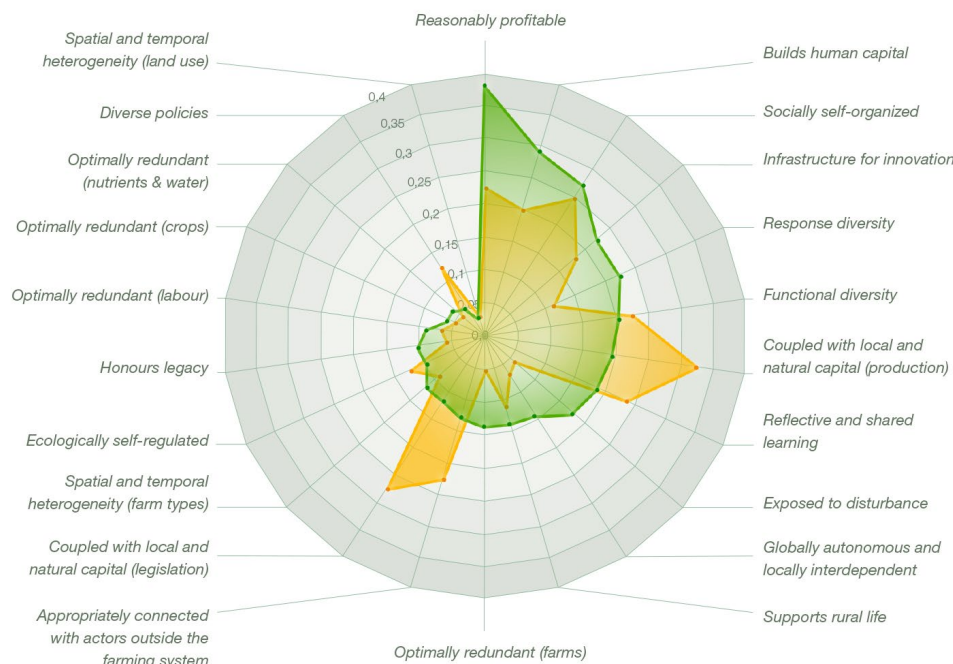
Sustainability and resilience can be improved when strategies improve multiple functions and attributes at once



Strategies for
current systems



Strategies for future
alternative systems



- From strategies
 - enhancing mainly 'reasonably profitable'
 - to 'coupled with local and natural capital'
- Strengthening
 - ecological processes
 - stakeholder collaboration
 - institutional environment
 - while ensuring 'reasonably profitable'



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Policies should be based on a long-term vision, ensuring economic viability of farming systems that ensure the provision of public goods



- All involved actors inside and outside the farming system need to collaborate in order to make a change towards business models that tackle long-term challenges



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Policy brief D5.7:

<https://www.surefarmproject.eu/wordpress/wp-content/uploads/2021/03/D5.7-Policy-Brief-Resilience-of-FS-under-current-conditions-and-future-scenarios.pdf>

Coordinated by:

Partners:



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