# How can the new CAP improve farmers resilience in the post COVID era?

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Presentation at the 11th AIEAA Congress

CAP, Farm to Fork and Green Deal: policy coherence, governance and future challenges

University of Tuscia - Viterbo, Italy

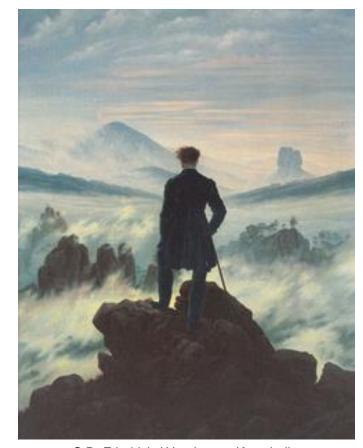
16<sup>th</sup> – 17<sup>th</sup> June 2022

Plenary session 2



### Overview

- The resilience concept for farming systems
- Challenges and critical thresholds for EU farming systems
- Performance of EU farming systems
- Resilience strategies found in EU farming systems
- The CAP as part of the enabling environment
- Assessing how the CAP support the resilience of EU farming systems
- Conclusions and recommendations



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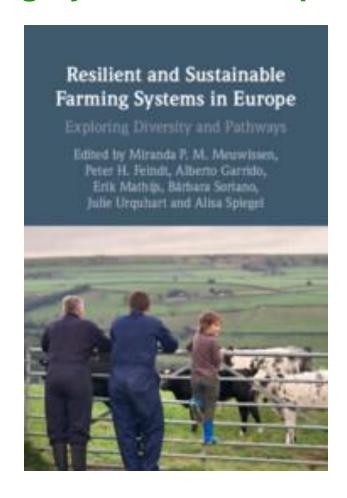
#### Resilient and Sustainable Farming Systems in Europe

Summary and lessons from the SURE-Farm project.

Cambridge University Press, April 2022, open access,

https://doi.org/10.1017

/9781009093569



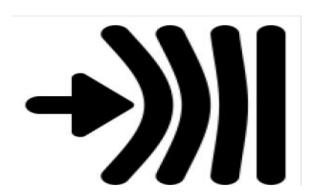




#### What is resilience?

- The capacity of individuals, businesses, communities, or systems
- to respond to perturbations (shocks or persistent stress, natural or anthropogenic origin),
- that can push a system towards a tipping point where it can no longer maintain its previous state and fulfil its functions (collapse).









#### Three dimensions of resilience



Robustness: the capacity of a system to resist/withstand perturbations and to maintain previous levels of functionality without major changes to its internal elements and processes



Adaptability: the capacity of a system to change internal elements and processes in response to changing external circumstances and thereby to continue its development along the previous trajectory while maintaining functionalities



Transformability: the capacity of a system to radically change, including its identity, paradigms and logics





#### **SURE-Farm Adaptive Cycle framework concept**

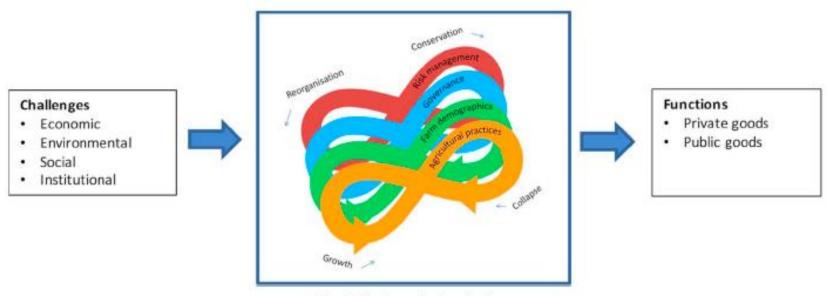


Fig. 1. Adaptive cycles in agriculture.

Source: Meuwissen, Feindt et al. (2019)





## Characterization of a farming system and its enabling environment

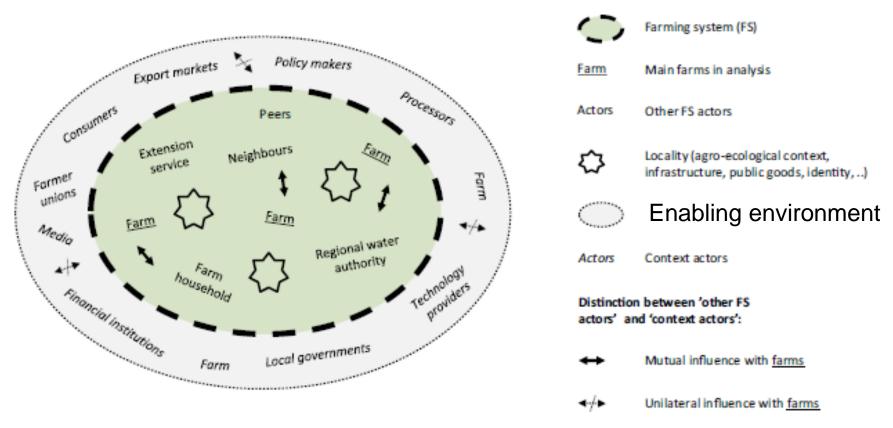


Fig. 3. Characterization of a farming system including example actors.

Source: modified after Meuwissen, Feindt et al. (2019)





### Framework to assess the resilience of farming systems

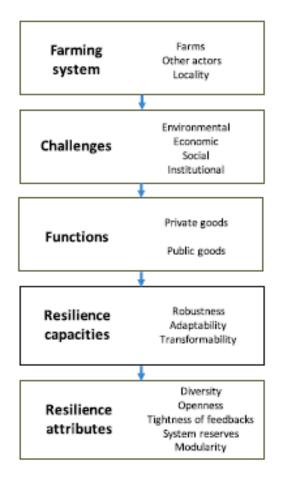
Resilience of what?

2. Resilience to what?

3. Resilience for what purpose?

4. What resilience capacities?

5. What enhances resilience?



+ interlinkages with broader food system, health, energy etc.

Stress & shocks vs. noise &cycles Critical thresholds

Empirically distinguished: 22 different functions

+ Anticipation

- + Vision, leadership, agility, shared learning and experimentation
- + Enabling environment
- Source: Meuwissen, Feindt et al. (2019), Feindt, Meuwissen et al. (2022)





## Impact of Covid-19 on farming systems through the lens of resilience thinking

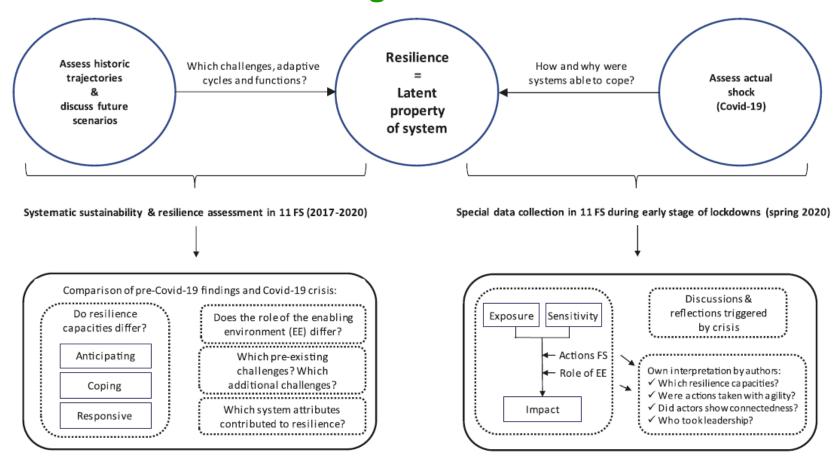


Fig.: Combination of different approaches to assess the resilience of farming systems (FS) and to understand Covid-19 impacts. Source: Meuwissen, Feindt et al. (2021), in: Agricultural Systems 191, 103152.





### **Caveats and reflections (1)**

- Resilience is a latent characteristic of a system. However, resilience attributes and critical thresholds are good predictors of resilience.
- Vision, leadership, shared learning and experimentation, and agility are important resilience attributes.
- General resilience in farming systems requires more than financial buffer resources.
- Non-resilience is difficult to study.
- Resilience is context specific, and so are resilience needs.
- Resilience capacities, needs and strategies differ across scales.

Source: Feindt, Meuwissen et al. (2022)





### **Caveats and reflections (2)**

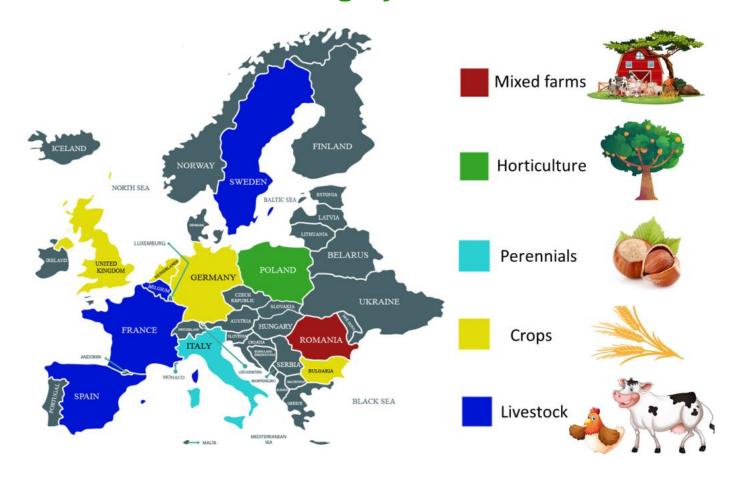
- A focus on farming systems rather than food systems risks reproducing the productivist fallacy.
- More need for a critical assessment of the functions provided by farming systems
- Small number of indicators to measure the resilience of farming systems still missing
- Scope for further methodological integration
- Need to reflect and address how actors understand resilience problem of "triple hermeneutics" (Giddens)
- Need to further develop foundations of resilience governance

Source: Feindt, Meuwissen et al. (2022)





### **Case studies: 11 farming systems**







### **Challenges of farming systems (1)**

Table 17.1. Overview of the main challenges in the SURE-Farm case studies and their closeness to critical thresholds according to stakeholders' perception

Туре	Challenge	BG- Arable	DE- Mixed&Arable	UK- Arable	BE- Dairy	FR- Beef	ES- Sheep	PL- Horticulture	IT- Hazelnuts	NL- Arable	RO- Mixed	SE- Poutlry
Economic	Low prices and price fluctuation	С	A	С	P	P	P	s	S	P	N	P
	High production costs			С			A			С		
	Unbalanced value chain		P	P	P	P		P	P		P	P
	Competition with foreign markets		P	P	P	P		P	P		P	
	Technology adaptation			P								P
	Limited use of insurance	P		P				P				
	Dependency on alternative off-farm income			P				P			P	
	Import competition			P				P			P	
	Production failure											P
Environmental	Climate change (extreme weather events)	С	С	P	P	P	P	s	N	S	Λ	v
	Plant or cattle diseases			P		P		P	S	С	v	
	Conflicts with wild fauna						N					
	Low soil fertility quality		P	P	P							
	Water scarcity		P		P			P	P			
	Excess of nutrients	P			P							P
	Soil erosion							P		P		P





### **Challenges of farming systems (2)**

#### Table 17.1. (cont.)

Туре	Challenge	BG- Arable	DE- Mixed&Arable	UK- Arable	BE- Dairy	FR- Beef	ES- Sheep	PL- Horticulture	IT- Hazelnuts	NL- Arable	RO- Mixed	SE- Poutlry
Social	Depopulation/lack of labour	С	P	P			A	S			P	P
	Changing consumer preferences	P	P	P			A	P				P
	Low attractiveness		A									
	Poor infrastructure		A									
	Change in technology											С
	Lack of successors	P	P	P		P	P	P			P	P
	High societal expectations	P	P		P	P						
	Poor quality of life		P				P					
Institutional	Continuous change of laws and regulations	s	s	P	P	P	P	С	S	С	P	
	Economic laws and regulations			Λ					S		s	Λ
	Environmental and animal welfare regulations			S				P	С		P	A
	Complicated administrative procedures		P			P		P				P
	Lack of long-term vision in policy	P		P	P			P				
	High land prices		P		P		P					





## Challenges pushing farming systems towards critical thresholds (based on stakeholder assessment) (1)

Economic challenges: critical for seven case studies

- Price fluctuations and low prices (all cases)
- Unbalanced value chains (8)
- International competition (7)
- Technology adaptation
- Inadequate insurance
- Dependence on off-farm income





## Challenges pushing farming systems towards critical thresholds (based on stakeholder assessment) (2)

#### Institutional challenges

- Changing policy regulations (10)
- High standards and strict regulations (5)
- Complicated administrative procedures and lack of long-term vision (4)
- High land prices (3)





## Challenges pushing farming systems towards critical thresholds (based on stakeholder assessment) (3)

Environmental challenges: critical for all case studies

- Climate change (all)
- Soil fertility, plant and animal diseases
- Soil erosion, water scarcity, nutrient excess





## Challenges pushing farming systems towards critical thresholds (based on stakeholder assessment) (4)

Social challenges: critical for five case studies

- Lack of successors
- Lack of labour
- Rural depopulation
- Changing consumer expectations
- Poor quality of life
- Insufficient infrastructure





### Further general findings on challenges

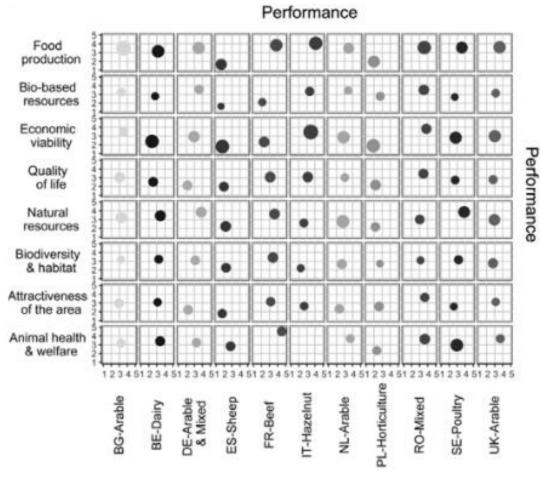
- Many resilience challenges have not been translated into manageable risks
- Financial risk management rarely linked to adaptation or transformation
- Attracting skilled, highly motivated and entrepreneurial people is a major challenge.
- Fewer farm successors and limited supply of qualified labour lead to adaptation in farm organization, production programme, IT, robotics
- Many EU farming systems are locked in on developmental trajectories that combine strong reliance on chemical and/or biological inputs with an orientation towards global commodity food systems.
  - Global competition reduces profitability
  - Response: Intensification with more external inputs
  - → generally at the expenses of environmental sustainability

Source: Feindt, Meuwissen et al. (2022)





#### Performance of farming systems - overview



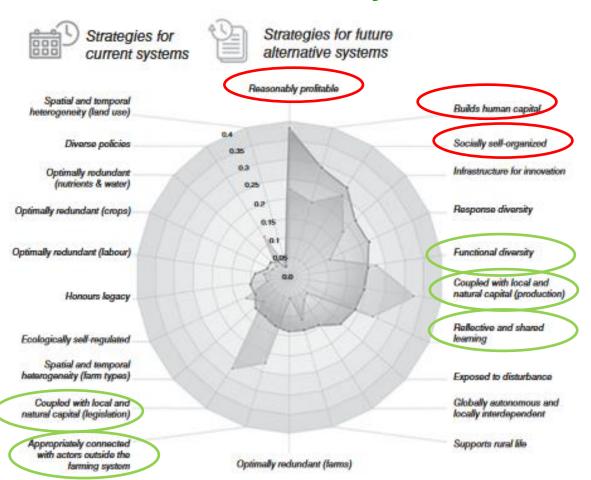
Perceived performance and importance of functions as assessed by stakeholders in the SURE-Farm case studies. Perceived performance is indicated on both the x- and y-axis to allow comparability among functions within a case study (vertically), and among case studies for a function (horizontally). The radius of the circles is proportional to the importance assigned. Source: Elaborated from Reidsma et al. (2020b)

Source: Accatino et al. (2022)



SURE Farm

## Strategies to enhance resilience attributes for current and future alternative systems



The contribution to resilience attributes of the identified strategies implemented and proposed in farming systems. The green line shows the ratio of (past) strategies implemented for current systems contributing to an attribute, and the orange line the ratio of future strategies for alternative systems contributing to an attribute. Attributes are ordered, starting with the attribute to which most past strategies contributed (based on Reidsma et al., 2020a).





### Patterns in the enabling environment

#### Method:

- analysis of reactions of farming systems and their environments to resilience challenges
- pattern analysis (archetypes)
- cross-case analysis

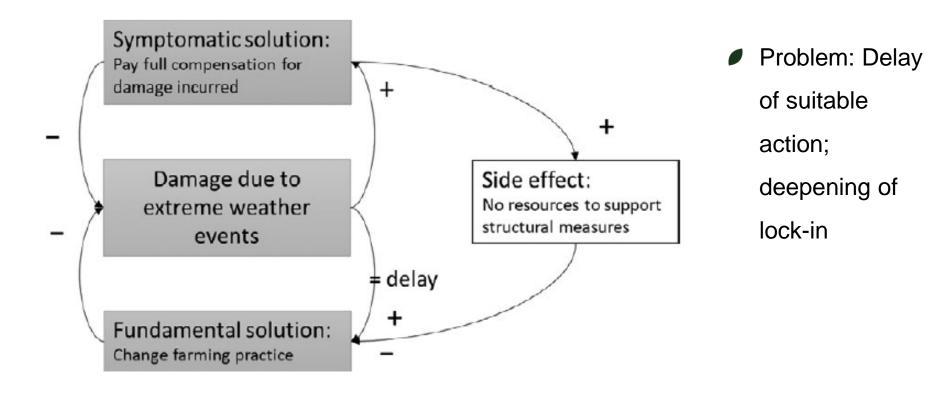
Four recurring patterns (seen next slides):

- Shifting the burden
- Eroding goals
- Self-limiting solutions
- Success to the successful





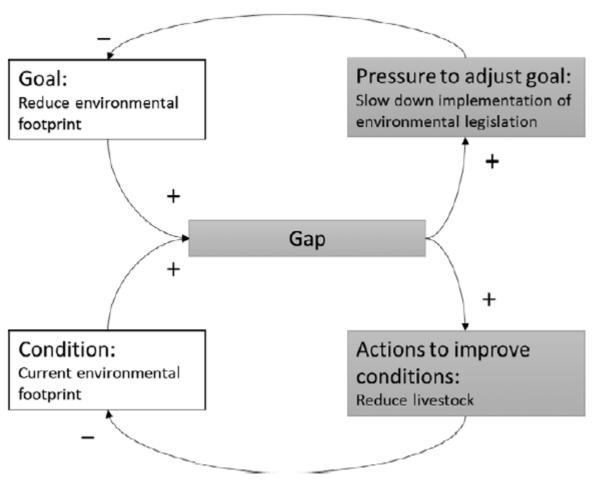
#### Pattern 1: Shifting the burden







#### Pattern 2: Eroding goals

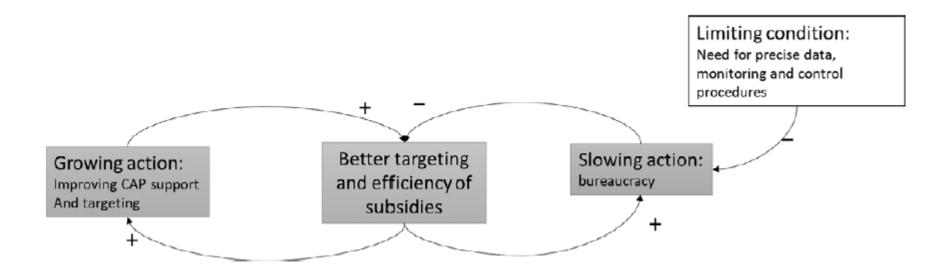


 Problem: Delay of solution, higher costs of adjustment in the future





### Pattern 3: Self-limiting solutions (limits to growth)

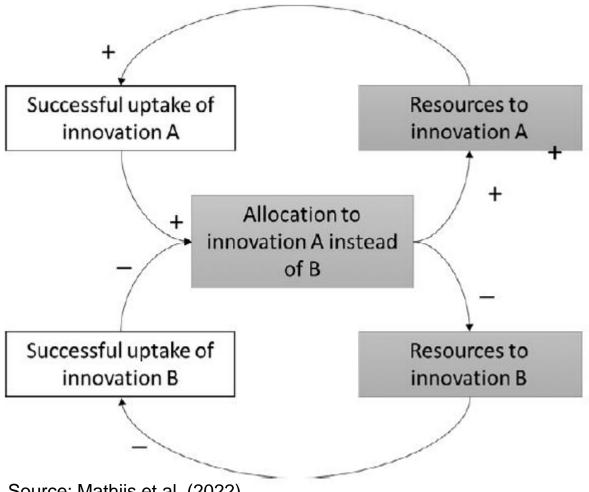


Problem: Suitable solutions are delayed or diminished due to design implications





#### Pattern 4: Success to the successful



Problem:

Allocation of resources to a small number of well-known solutions





### Guiding principles for resilience-enabling environment

- 1. If a FS cannot cope with a shock, the EE should provide temporary resources to ensure robustness.
- 2. Before shocks occur, the EE should help to build anticipatory and responsive capacity.
- 3. The EE should assist the FS to detect, assess and address long-term challenges.
- 4. The EE should foster the potential diversity of responses rather than focusing on a limited number of actions.
- 5. FS and EE should together develop ambidexterity, i.e. a balance in allocating resources to meet immediate vs. future challenges.





#### Good public policies are essential for resilience

- 1. Public policies can moderate or reinforce pressure to change
- e.g. lax or tight regulations
- closing down or opening up policy networks,
- influencing public and professional debates.
- 2. Public policies can enhance or constrain the capability of farming systems to deal with challenges
- Robustness
- Adaptability
- Transformability



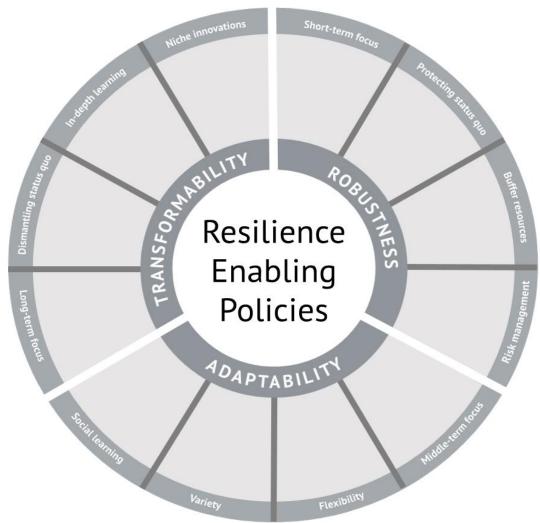


#### **SURE-Farm Policy work package**

- Question: To what extent do current policies at the EU and member state level enable or constrain the resilience of (European farming) systems along the dimensions of robustness, adaptability and transformability?
- Assessment tool and bottom-up case studies: To assess policies (goals and instruments) in terms of strengths and weaknesses, and to provide entry points for policy improvements
- The aim is not: To assess the resilience of the policies themselves, but
   the extent to which these policies influence the resilience of (European
   farming) systems.



#### **Resilience Assessment Tool**







#### **Method**

- Starting point: Specific farming system and its challenges
- Identification of relevant policies: national implementation of CAP and other relevant agricultural policies (issued by a Ministry of Agriculture)
- Document analysis: Identify policy goals and instruments
- Scoring the resilience characteristics based on identified text elements, supported by argument
- Overall analysis of resilience strengths and weaknesses colouring the wheel
- Stakeholder check (a set of interviews or focus group)
- Second phase: 5 bottom-up in-depth case studies





#### **CAP** policy instrument and their resilience orientation

Resilience

Enabling

**Policies** 

ADAPTABILI

Many measures constrain Transformability: Implied in goals but not specific. Support for organic and new rural value chains EIP-Agri Direct payments
Greening payments
Market safety net
Crisis reserve
Insurance schemes
Coordination
of production
GI

AECM
Investment support
Leader and Leader Plus
Flexibility: modulation, etc.
Regional measures





## CAP 2014-2020: too focussed on robustness with uneven success, and constraining transformability

- Most financial resources go into payments that provide buffer resources
  - little access for small-scale farms and less land-intensive systems
- Government-supported risk management schemes struggle with effectiveness and acceptance by the target groups.
- Undesirable effects of robustness-enabling policies:
  - disincentives to adapt or transform,
  - in the long run, even the unlearning of adaptability of transformability,
  - wrong illusion of stability.
- Much fewer resources are devoted to programs that enhance adaptability.
- Support for transformability is generally underdeveloped.





# **GOALS** Resilience Enabling **Policies** DAPTABILL

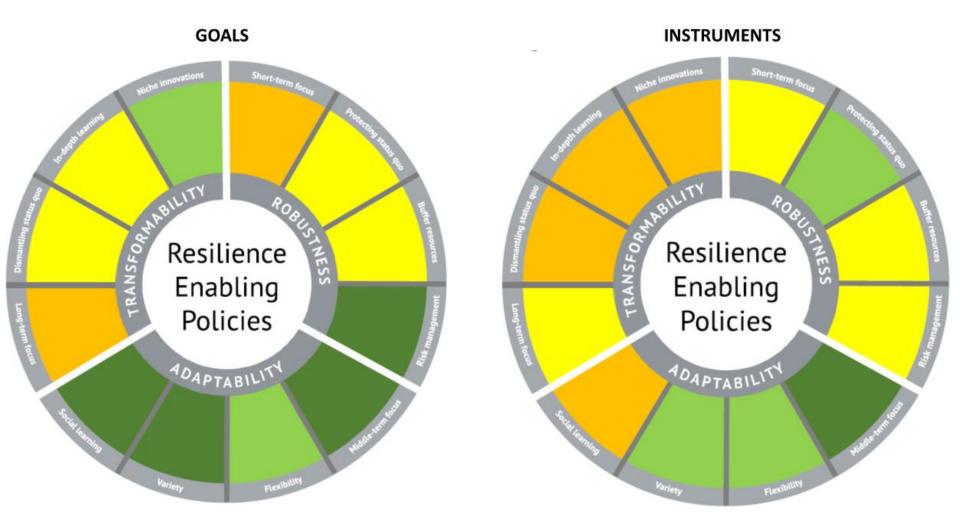
# **INSTRUMENTS** Resilience Enabling **Policies** ADAPTABIL

Arable crop system in the Netherlands (Veenkolonie)

Source: Buitenhuis, Dutch case study



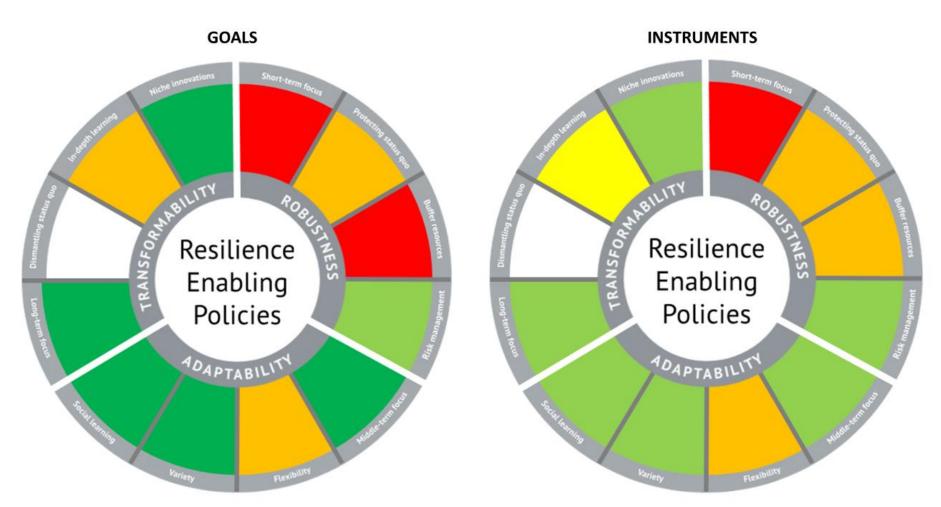




Hazelnut production in Lazio, Italy Source: Sorrentino, Severini & Sidorini, Italian case study







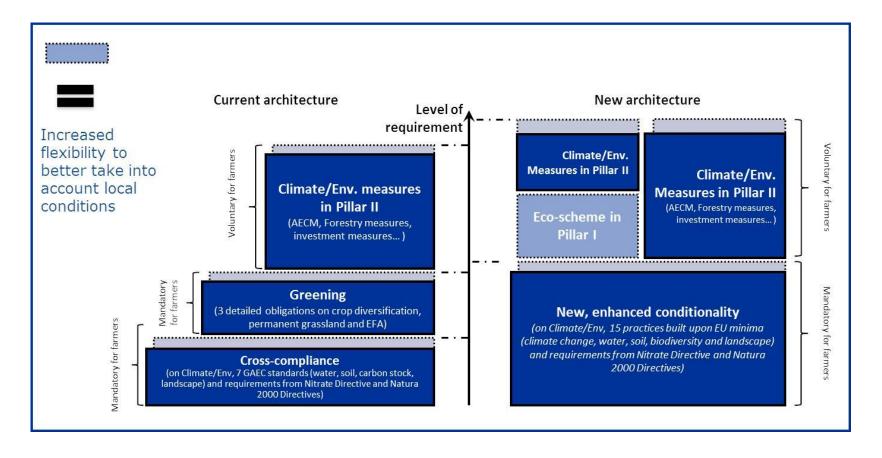
Egg and broiler production in Sweden

Source: Manevska-Tasevska, Swedish case study





#### Comparing CAP 2014-2022 vs. CAP 2023-2027



Source: European Commission (2018)





# CAP 2023-2027 vs. guiding principles for resilience-enabling environment

Principle	CAP				
Provide temporary resources to ensure robustness after shock.	<ul><li>+ Crisis reserve.</li><li>- Direct payments 'permanent'</li></ul>				
Before shocks, build anticipatory and responsive capacity	~ Foresight exercise, market outlooks etc.				
assist the FS to detect, assess and address long-term challenges	<ul><li>+ European Green Deal, FtF</li><li>Strategy, Biodiversity Strategy</li><li>- Not sufficiently translated in CAP</li></ul>				
Foster the potential diversity of responses rather than focusing on a limited number of actions.	- Strong path dependency of policy instruments and policy mix.				
FS and EE should together develop ambidexterity, i.e. a balance in allocating resources to meet immediate vs. future challenges.	- Unbalance allocation of resources towards immediate income support.				





#### Resilience frames in the CAP debate

	Income resilience		Farmers' supply chain position resilience		Climate change impact resilience		Disease resilience		Ecological	resilience
Resilience of what?	Farmers & farms		Farmers & farms		Farmers & farms, agricultural sector		Farmers & farms, farming sub-sectors, agricultural sector, agri- food chains, food systems		Agro-ecosystems	
Resilience to what?	Low & volatile income due unstable prices & market or weather shocks		Low market power & rewards of primary producers in supply chain		Environmental & weather shocks linked to climate change	linked to climate plants & animals, challenges (e.g. c		e.g. climate		
Resilience for what purpose?	Providing income with aim to ensure food security		Increasing income with aim to ensure food security		Climate change resilient food production & availability		Food security		Protecting & maintaining public goods, climate change action	
How to enhance resilience	Income support measures (Direct payment schemes)  Risk & crisis management tools		Support for producer groups, cooperatives, inter-branch organisations  Quality schemes & labels  Local markets, local food supply chains		Risk management tools & weather risk management  Adaptive practices (e.g. diversifying agri-practices & natural resource management)		Risk management tools  Diversification of agripractices  Innovation & research		Performance-based support schemes  Diversification of agripractices  Conversion to alternative agripractices  Innovation & research	
Resilience for what reason(s)	Equity in distribution of income support		Competitiveness of farmers, equity in rewards						Environmental sustainability, remuneration	
Resilience according to whom?	European Traditional & young farmers' organisations  MEPs of EPP, S&D Agricultural research, Flanders, Ireland, The Netherlands Agricultural training services agency		European Traditional & young farmers' organisations  MEPs of GUE/NGL, S&D, Greens-EFA, EPP		European Commission  MEPs of ECR, EPP, ID, Renew, S&D  Flanders, France, Ireland, The Netherlands  University  Traditional farmer's organisation, few sustainable farming organisation  Agritechnological organisation  University  Plant research	,	European Commission  MEPs of Renew, GUENGL, S&D, Greens-EFA Food producer & processers organisation.  Environmental NGOs & organisation.		European Commission MEPs of Greens- EFA, GUE/NGL, S&D, EPP Ireland, advisory council Flanders Churches & religious	Sustainable farming organisation Environmental NGOs & advocacy groups Civil Society NGOs & advocacy groups.
Source: Buitenhuis et al. (2022); Sociologica Ruralis, based on analysis of 127 policy documents							Research & academics			





#### CAP 2023-2027 vs. resilience frames in the CAP

Resilience frame	CAP elements
Income resilience	+ Direct payments + Income component of eco-schemes and RDP measures
Farmers supply chain position resilience	~ support in RDP for producer organizations ~ outside CAP: unfair competition legislation
Climate change impact resilience	- Not sufficiently addressed through eco-schemes and AECM
Disease resilience	~ mostly coping strategies through crisis reserve and RDP
Ecological resilience	<ul> <li>Probably not sufficiently addressed through ecoschemes and AECM</li> <li>Lack of programs at farm system scale</li> </ul>





#### How the CAP post 2020 could enable resilience better

#### **Starting points**

- Meet the need for more tailored policy mixes that address the specific resilience needs of Europe's farming systems
- Develop a long-term vision for the CAP



#### Policies to enable robustness

- enhance the ability and willingness to anticipate stresses and shocks, to cope with them and to respond
- foresight exercises linked into strategy development and outreach and engagement schemes



#### Policies to enhance adaptability

- Coherent and sufficient remuneration of public goods;
- Increase flexibility and variability through reducing red tape along tree dimensions:
  - requirements for access to supportive policy schemes, in particular RDP
  - more flexible or better aligned regulations and inspections;
  - integrated approach to the multitude of monitoring and control systems.
- Close the gap between reflection/innovation and practice more support for
  - project-type funding rather than predefined measures;
  - AKIS and advisory services to integrate advice for production and provision of public goods;
  - collaboration for opening up and reconnecting agriculture with society;
  - fostering farmers' adaptive capacity, e.g. by paying them for time spent in research projects





#### Policies to enhance transformability

- Formulate a coordinated long-term vision
- Support deep learning
- Adopt reflexive modes of governing that influence people's assumptions about the future, their self-perceptions and identities – dialogue, co-design, communication of role models and positive examples
- Develop EIP-Agri and LEADER into cross-sectoral support for rural cooperation
- Programs for rural cooperation should:
  - adopt integrated approaches across sectors,
  - change the rules of state aid to allow more flexibility and innovation;
  - provide funding for the creation, facilitation and integration of multi-actor networks;
  - develop training schemes for facilitators of integrative rural development;
  - encourage links to other policy areas to enhance connections.





### **Key points for the future CAP (1)**

- Reduce direct payments with a view to phasing out by 2028 ...
- ... and divert the budget into those CAP measures that specifically address resilience needs
- Use eco-schemes to foster public services (e.g. biodiversity, attractive landscapes) and adaptation to environmental and climate change
  - points-based system to enable regional differentiation, flexibility and diversity;
  - enable equivalence of established certification schemes;
  - define three or four tiers of payment levels aligned with public or private certification schemes of corresponding levels of ambition.
- Ensure that member states' national strategic plans support
   adaptability to meet the ambitions of the Green Deal, the Farm-to-Fork
   Strategy and the Biodiversity Strategy.





### **Key points for the future CAP (2)**

- Ensure that MS provide ample support for cooperation and crosssectoral networking in rural development programmes.
- Enable producer organisations to coordinate adaptation to shifting markets and changing environments.
- Strengthen AKIS through more project-type funding, more funding for advisory services to integrate advice for production and provision of public goods.
- Enable transformative innovation, reflexivity, deep learning through more support for LEADER and EIP-Agri, with European networks around key challenges.
- Replace young farmers' premium with support for start-ups in rural areas.
- Provide support for fast internet in rural areas as a precondition for connectivity.

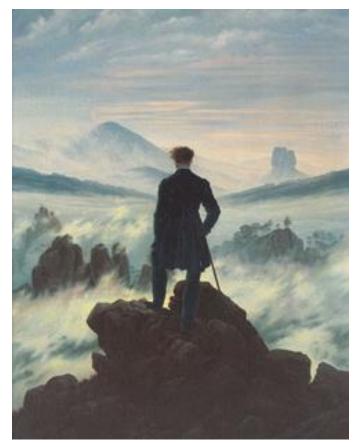




#### Thank you very much for your attention!

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- For more information and to follow the project, please check:

www.surefarmproject.eu



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#### **Reserve slides**







#### WHY THE CAP SHOULD WIDEN ITS APPROACH TO RESILIENCE

TOWARDS A RESILIENT CAP FOR RESILIENT FARMING SYSTEMS



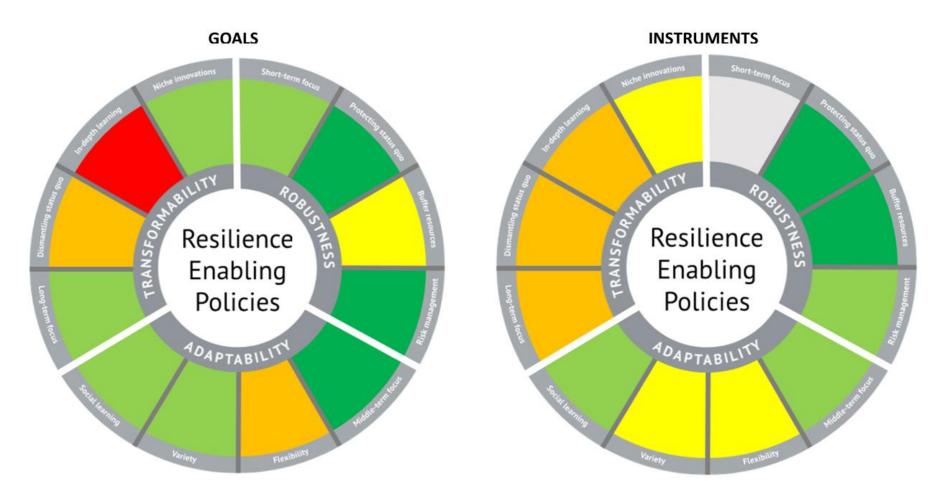
#### Sources cited

- Buitenhuis, Y., Candel, J, Termeer, K., Feindt, P.H. (2022): Reconstructing the framing of resilience in the European Union's Common Agricultural Policy post-2020 reform, Sociologia Ruralis, accepted on 2<sup>nd</sup> May 2022.
- European Commission (2018): Commission Staff Working Document. Accompanying the document. Proposals for a Regulation of the
  European Parliament and of the Council establishing rules on support for strategic plans to be drawn up by Member States under the
  Common agricultural policy. SWD(2018) 301 final. <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52018SC0301&rid=4">https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52018SC0301&rid=4</a>



# Cluster 1: Robustness-oriented policy, often impeding adaptability and transformability





Source: Lievens & Mathijs, Belgian case study

#### Dairy farming system in Flanders, Belgium





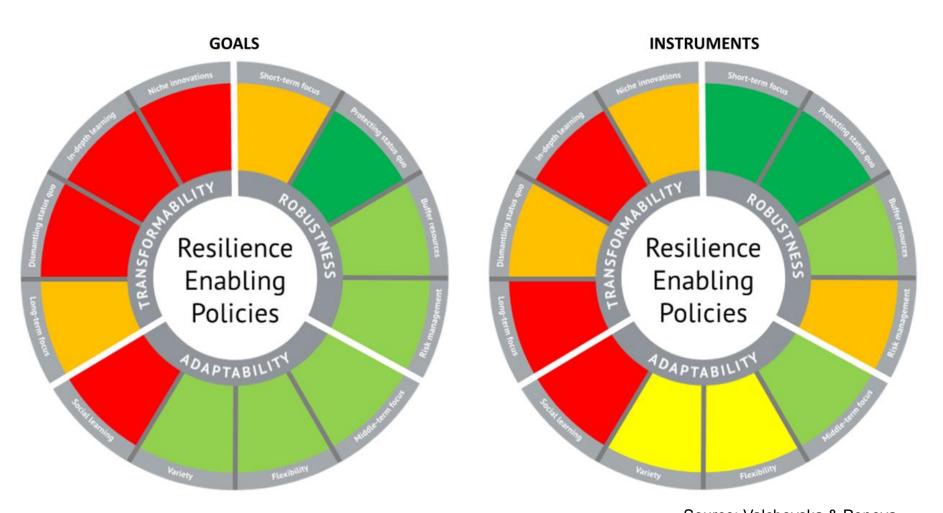
#### **Example: Crop farming system in Bulgaria**

Challenges: depopulation of rural areas, changing consumer preferences, lack of organized markets and market infrastructure, lack of financial and management skills among farmers, extreme weather conditions and climate change, the implementation of nitrate regulations, fragmented national and regional governance structures, ongoing problems with the post-socialist land ownership regime, the Russian embargo.

- Robustness: supporting the status quo through area-based direct payments and providing additional buffer resources in case of natural disasters.
- Adaptability: agri-environmental measures, producer groups and socioeconomic development. However, some of these elements are not readily available to crop farmers and social learning is not a goal.
- Transformability: no ambition to dismantle incentives that maintain the status quo, no consideration of in-depth learning and little support for niche innovations.







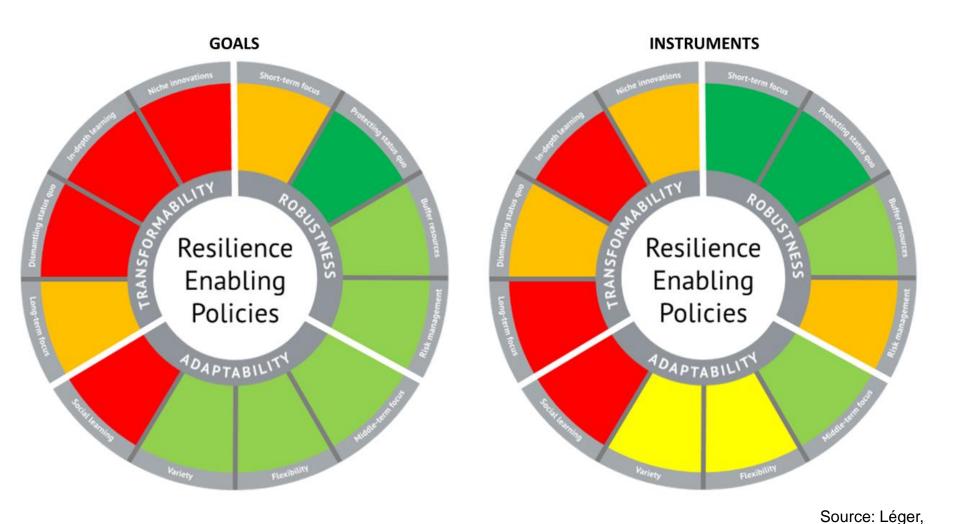
Crop farming system in Bulgaria

Source: Valchovska & Peneva,
Bulgarian case study

(focus on large family and corporate producers)





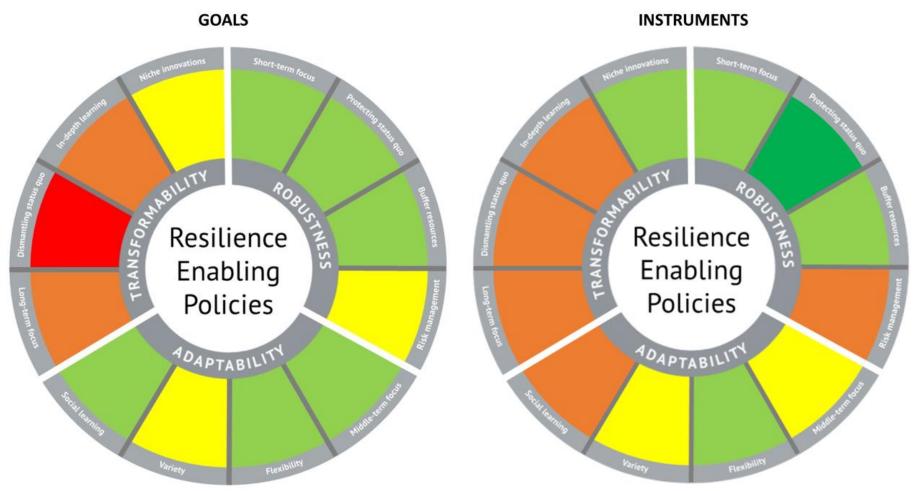


Cattle breeding system in Bocage Bourbonnais in the Massif Central in France





French case study

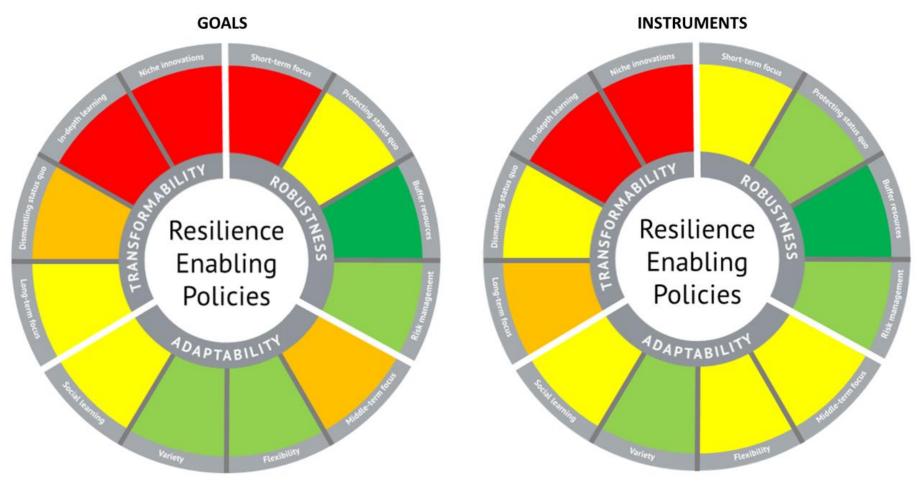


Source: Daskiewicz & Balman, German case study

Arable farming system in Saxony-Anhalt, Germany







Source: Ciechomska Polish case study

Private fruit and vegetable farms in Poland





# **GOALS** Resilience Enabling **Policies** DAPTABILL

# **INSTRUMENTS** Resilience Enabling **Policies** ADAPTABIL

Arable crop system in the Netherlands (Veenkolonie)

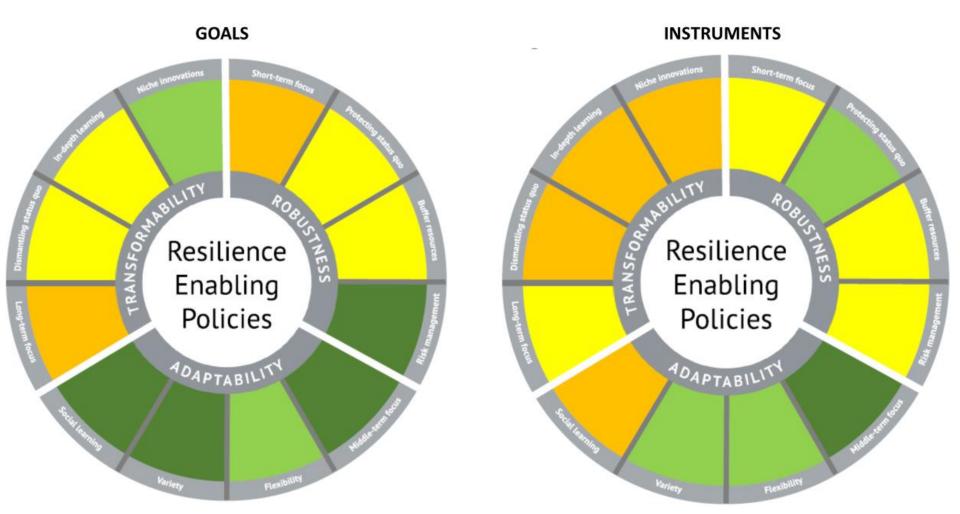
Source: Buitenhuis, Dutch case study

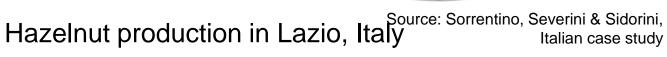




### **Cluster 2: Adaptability-enhancing policy**

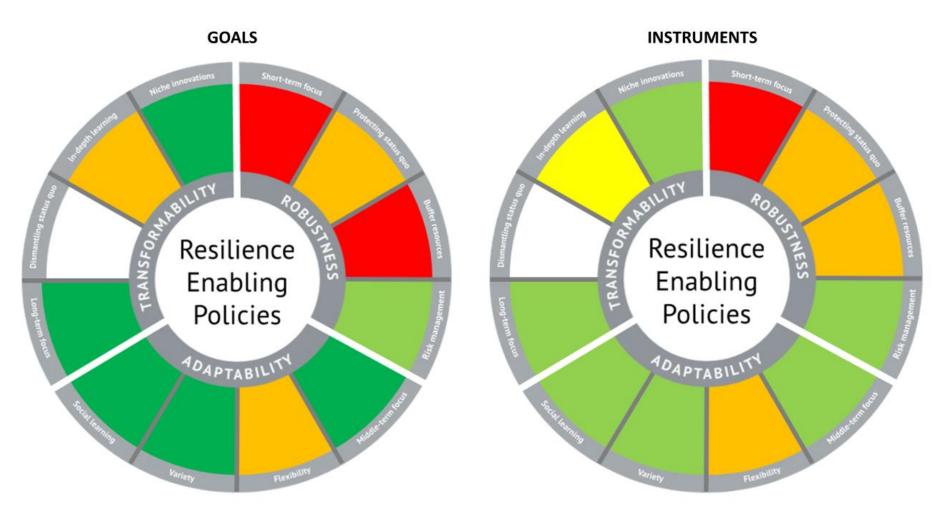












Egg and broiler production in Sweden

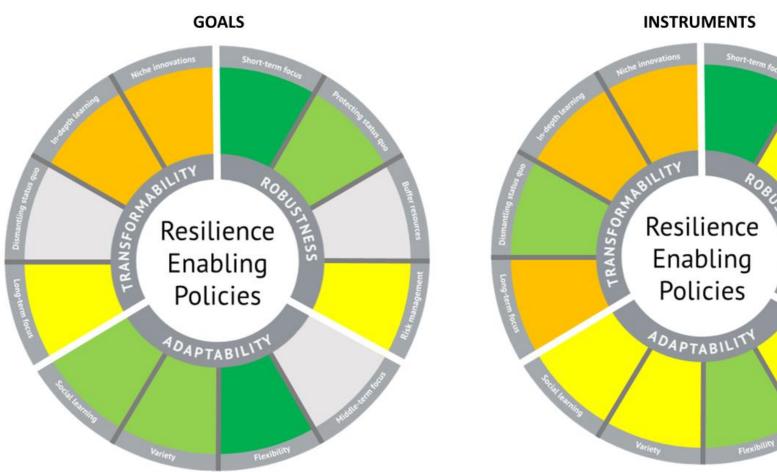
Source: Manevska-Tasevska, Swedish case study





### **Cluster 3: Resilience-constraining policy**





Source: Bardají, Soriano & Bertolozzi, Spanish case study

Extensive sheep grazing system in the Huesca region in Northeast Spain





### **Transformability-oriented policy**

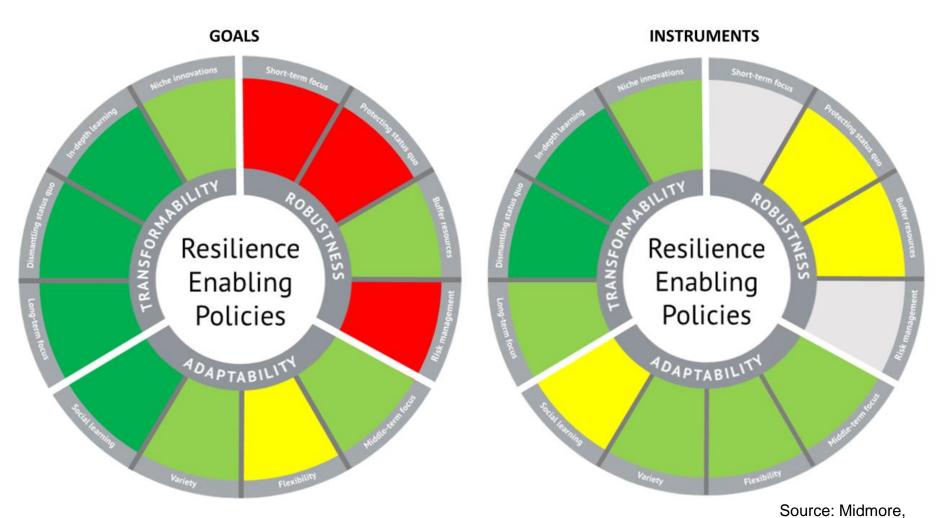


#### **Arable farming system in East Anglia, UK**

Challenges: In preparation for the British farm policy after Brexit, the UK government has announced a policy that promises to provide the same level of resources to the farm sector but with different patterns of incentives

- Robustness: -
- Adaptability and transformability: The new policy framework is geared towards the provision of public goods and the enhancement of competitiveness through agro-environmental schemes, capital grants, skills and training programs, and emphasis on participatory and peer-to-peer learning. Long-term policy goals are clearly articulated and transformative ambitions are supported by planned measures to support in-depth learning, science-technology adoption processes, farmer access to innovations, in particular innovations to support the provision of public goods.





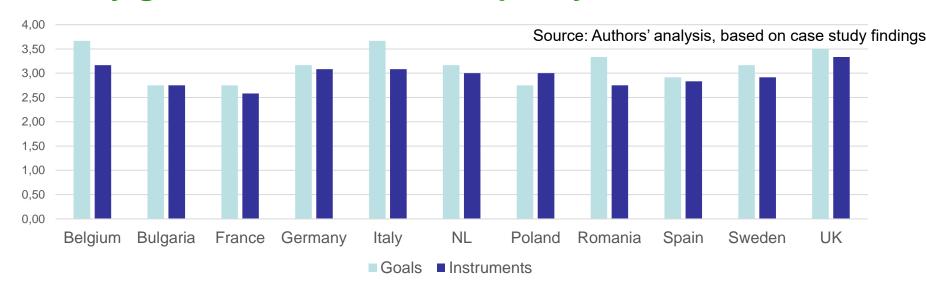
Arable crop system in East Anglia, UK Post-Brexit policy outline





British case study

#### Policy goals score better than policy instruments

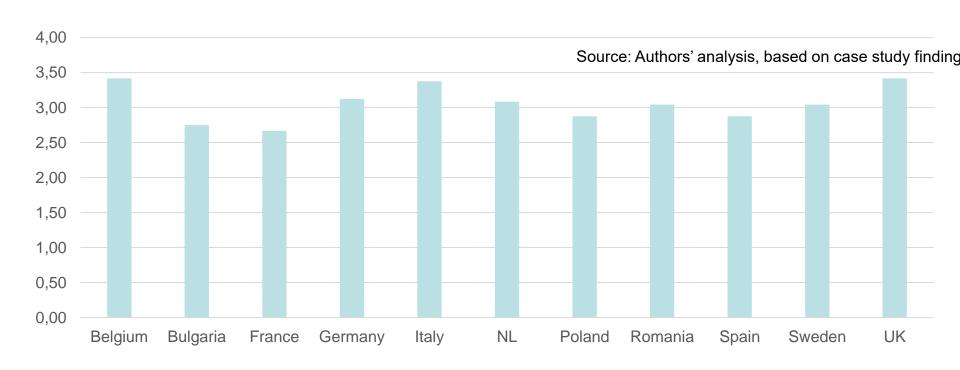


- Average score: policy goals 3.17, policy instruments 2.95
- Possible explanations
  - Financial constraints
  - Administrative constraints
  - Symbolic dimension of policy-making
  - Time gap between goal development and implementation





# Significant differences in the resilience-enabling capabilities between the case studies

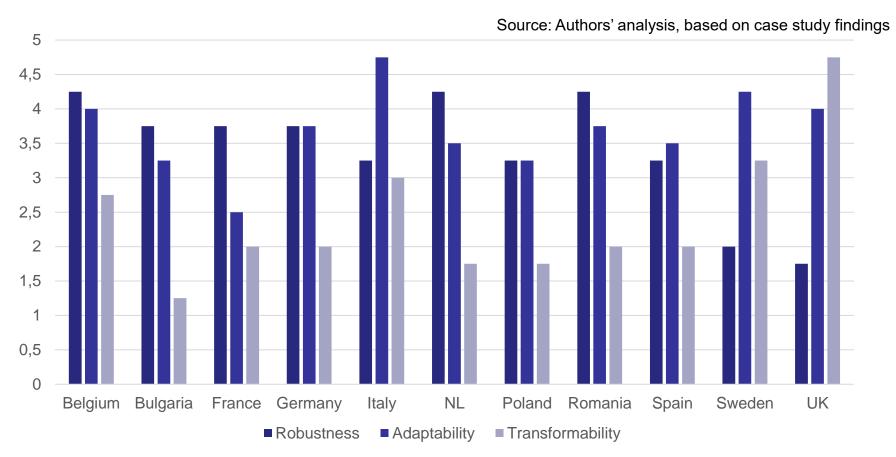


Total average ResAT score per case study





# Mixed ability to enhance resilience: some resilience dimensions are more supported than others

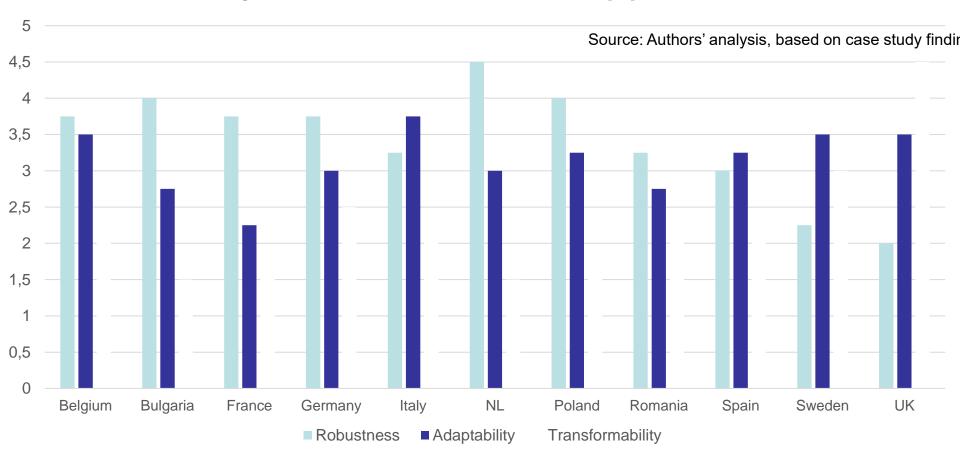


Average ResAT scores per resilience category – goals





### Mixed ability to enhance resilience (2)

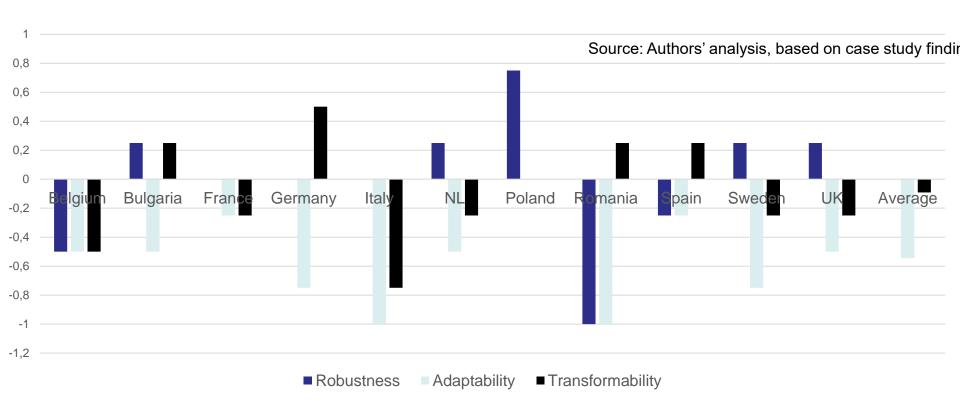


Average scores per resilience category – instruments





# Instrumentation and implementation bias towards robustness and against adaptability



Difference of the average ResAT scores for instruments vs. goals per case





#### **ResAT conclusions**

- CAP enhances resilience of most farming systems, but bias towards a robustness-cum-adaptability orientation.
- Support for transformability generally underdeveloped.
- National or regional policy design choices can have large resilience effects.
- Eastern European cases score much higher on robustness and much lower on transformability – reflection of recent major transformations and interplay with national policy context?

