



SUSTAINABLE
RESILIENT
EU FARMING
SYSTEMS



This project has received
funds from the European
Union's Horizon 2020
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Role of learning in adapting to changes

– *a case study regarding the
small mixed farms in
Nord-Est region of Romania -*

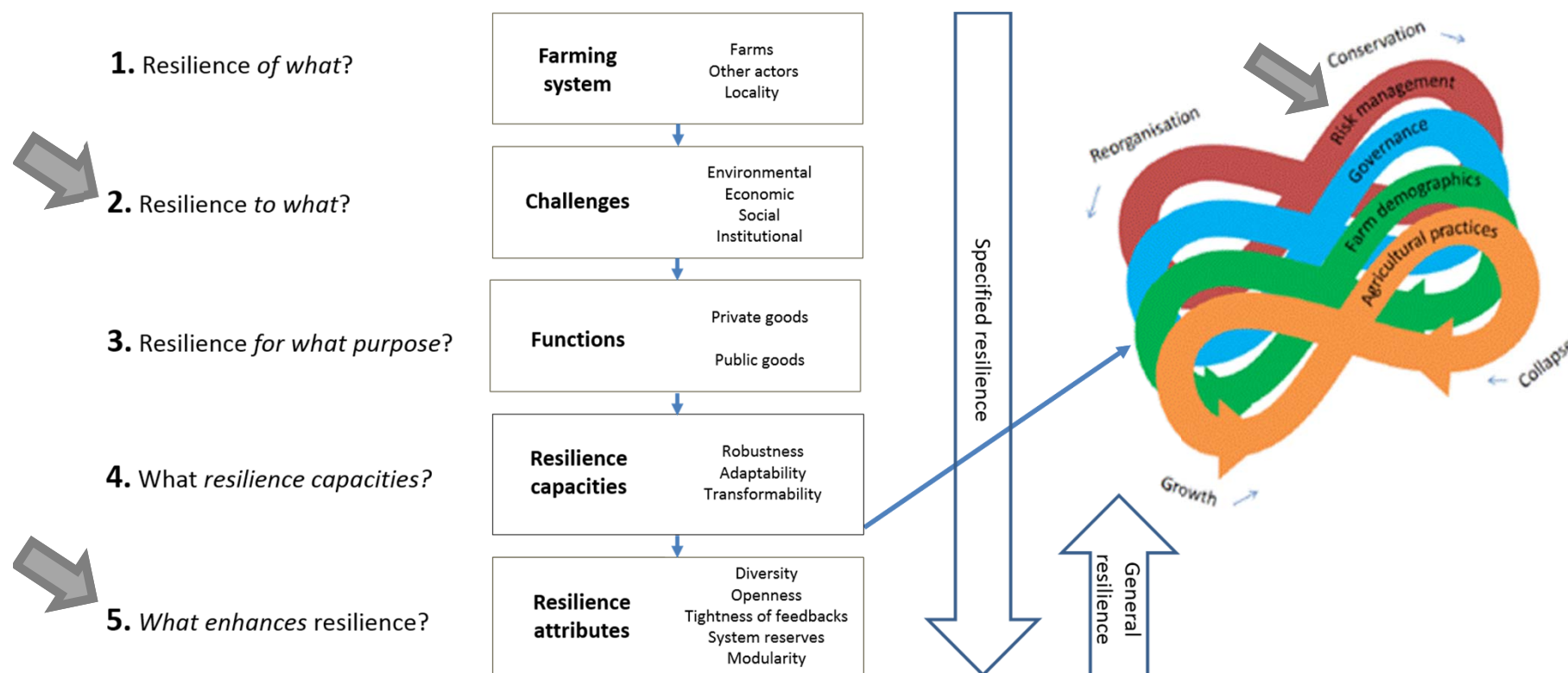
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The research question:

To what extent and how learning contribute to resilience capacities?



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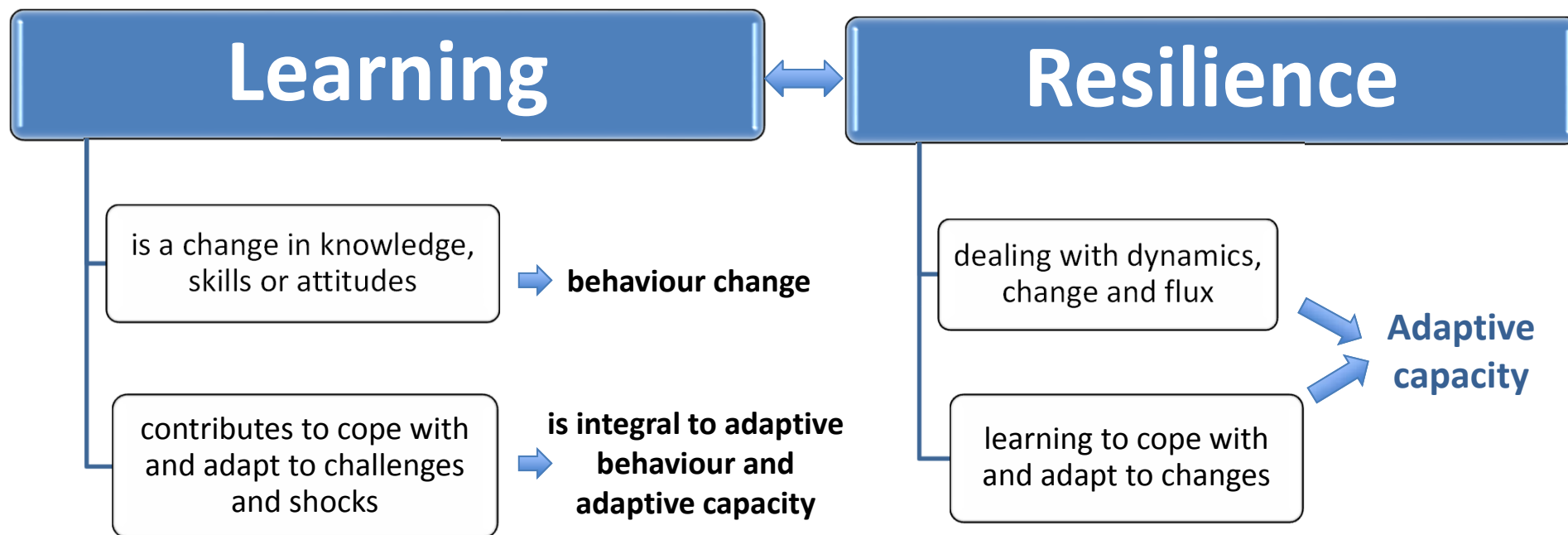
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I. Background



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I.1. Learning in the adaptive capacity cycle

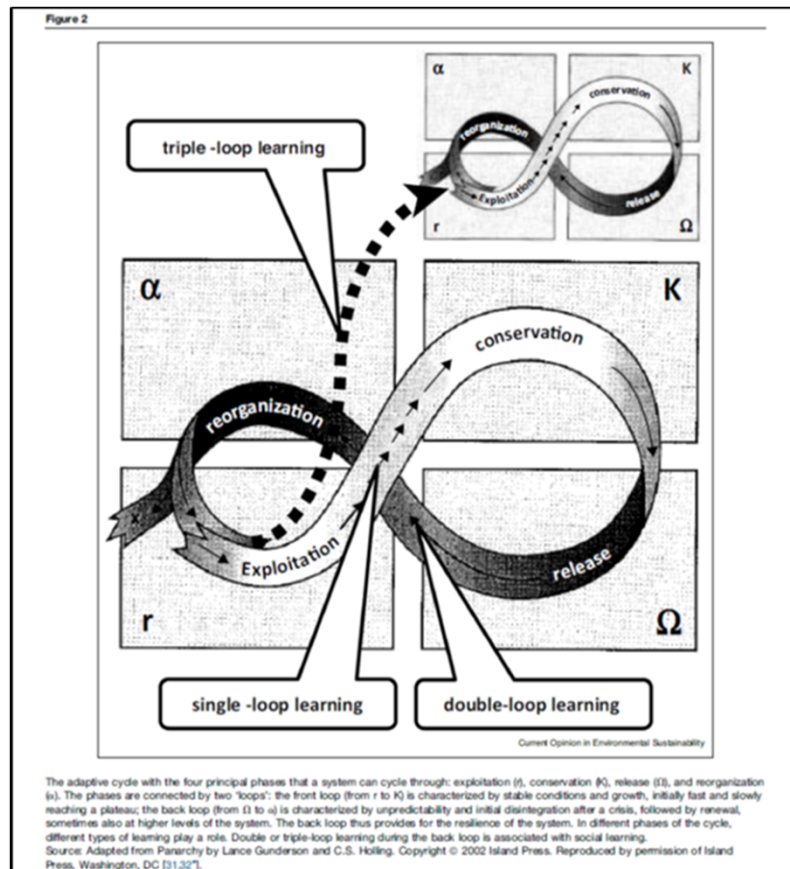


Figure 1 The role of learning in the adaptive cycle (from de Kraker 2017)

- Single-loop learning:** In the 'front loop' of cycle, *learning is associated with incremental innovation towards further growth.*
- Double-loop learning:** The 'back loop' involves *more radical innovation in adaptation to crises in the system.*
- Triple-loop learning:** When innovations developed in the 'back loop' lead to *a transformation in activity or thinking.*



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II. Aim

**To understand the role that learning plays
throughout the adaptive capacity cycle
in SMALL-MIXED FARMS in Nord-Est region (Romania)**

■ Objectives:

- identify which factors enable or hinder adaptive capacity;
- identify the networks of influence on farmer decision-making;
- identify what strategies promote learning.



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III. Methodological approach

❖ **Qualitative approach** - exploring farmers' experiences and approaches to risk management through farmers' 'stories'

❑ *Collecting data* : **Semi-structured interviews**

❑ *Target*: **14 farmers** that had different characteristics (age, gender, longevity in farming activities) and personal learning experiences (involvement/ or not in knowledge network or learning platforms)

❑ **Interview protocol**

- ✓ risk and challenges
- ✓ triggers of change - attitudes and beliefs
 - external (to the farm) factors influence decision-making
- ✓ influencers on farm decision-making
- ✓ learning processes and strategies



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IV. Farming system in Nord-Est region – an overview -



small-mixed farms

main farm types in NE region (typical farms)

- TF1: **Very small size, semi-subsistence** (1-2 ha)
/ family farms / **various crops + livestock**

77% no of farms
20% UAA
43% LSU
- TF2: **Small size** (2-5 ha)
/ family farms / **field crops + livestock**

18% no of farms
20% UAA
28% LSU
- TF3: **Medium size** (5-20 ha)
/ family farms / **field crops + livestock**

4% no of farms
14% UAA
18% in total LSU
- TF4: **Medium size** (≥ 20 ha) / farms with legal status (commercial farms) / **field crops**
- TF5: **Large size** (> 500 ha) / corporate farms / **field crops**

54%
UAA
89%
LSU



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V. RESULTS



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5.1. Key risks in “*small-mixed farms*” form NE region, as identified by farmers

- external risks & challenges -

■ economic risks:

- *low prices,*
- *high costs,*
- *non-integration of small farms in the food chains*

■ **extreme weather events and climate change** affecting the traditional crops in their vegetation period in the region – 2/3 of respondents

■ **pests and diseases** – ½ of respondents

■ **availability of labour** (skilled) – 2/3 of respondents

■ **bureaucracy** - rigid bureaucratic institutions tributary to rules and not to operation efficiency - **hinder farmers' chances to take advantage of some opportunities** (for instance, for organic re-certification procedure)



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5.1. Key risks in “*small-mixed farms*” form NE region, as identified by farmers

- internal risks & challenges -

- **risk of being too small** – affecting the chances of small farms to be integrated into the agri-food chains as they do not have the production and negotiating capacity enabling them to enter and stay on the agri-food market dominated by the large companies – 1/2 of farmers
- **lack of cooperation among farmers**, especially due to the ***negative perception of cooperation (distrust among cooperative members)***, makes the negative effects of low farm size perpetuate over time
- **uncertainty about successor** - affects the continuity of the business – 1/3 of farmers
- **lack of experience and knowledge** - adversely impacts the farm performance - 1/3 of farmers



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5.2. Triggers of change on “*small-mixed farms*” form NE region - Romania

● attitudes and beliefs as change drivers

- *Openness for novelty* - 50%
- *Farmers' willingness to be independent*, through the development of a business on their own *using the position rent they own* (high agricultural potential, uncovered market niches, access to land) – 50%
- *Risk-taking attitude* – 36%
- *Selfishness / reluctance of other (farmers) in sharing info* – 30%
- *Mistrust* (in the evolution of economic environment) – 20%
- *Attachment to the traditional way of doing agriculture in the area* – 20%



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5.2. Triggers of change on “*small-mixed farms*” form NE region - Romania

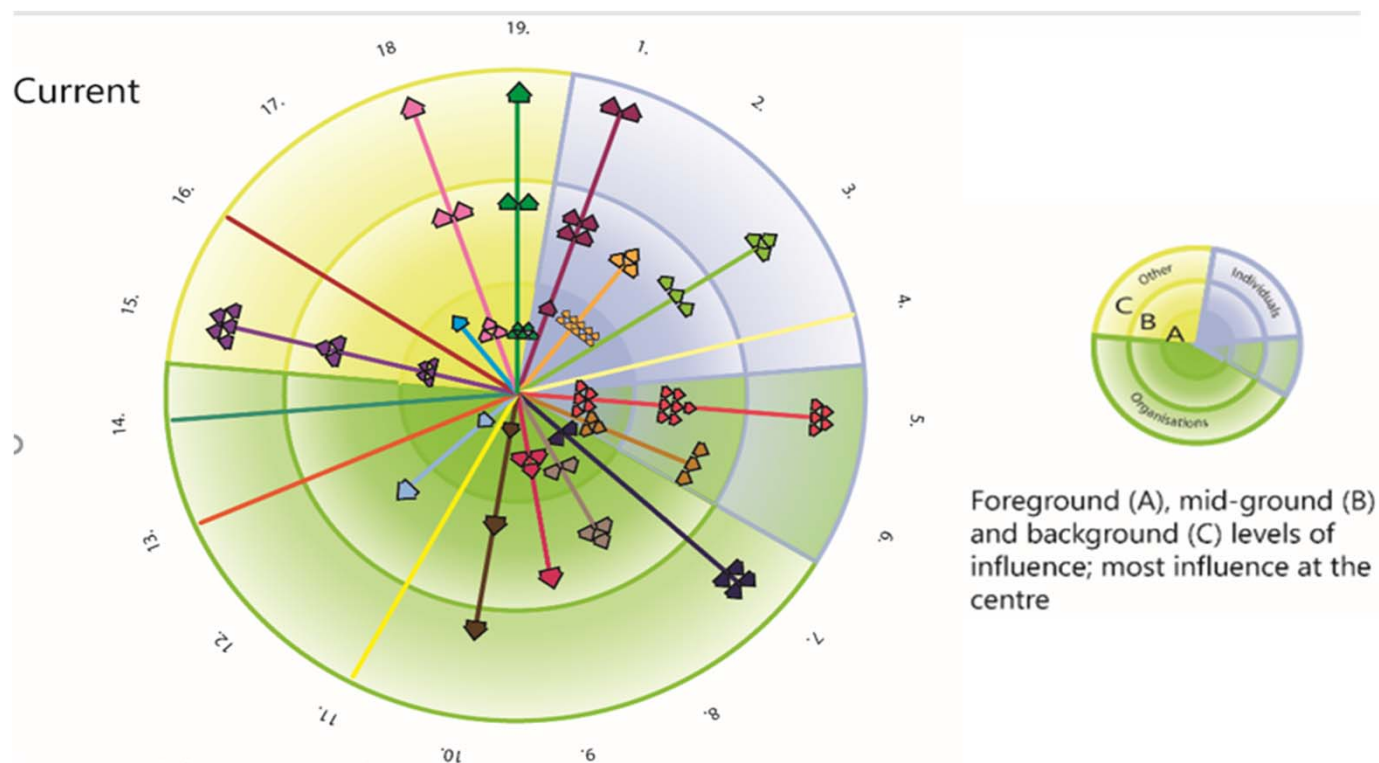
- **external (to the farm) factors influence decision-making**
 - ***Change their socio-economic status*** (transforming the subsistence or semi-subsistence farm into a market-oriented business and / or acquiring the businessman status) - **70%**
 - ***Having an off-farm job*** – **60 %**
 - ***Access/availability of labour*** at the region level, *especially skilled labour*– **40%**
 - ***Access to technology*** – **20%**



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5.3. Most important influencers on farm decision-making



Key - Farmer influencer categories

- | | | | |
|--------------------------|---|-------------------------|---------------------|
| 1. Farming advisors | 6. Research institutions | 11. Buying groups | 16. Media (general) |
| 2. People on the farm | 7. Government influencers | 12. Cooperatives | 17. Social media |
| 3. Other farmers | 8. NGO's / environmental / conservation organisations | 13. Farmer associations | 18. Internet |
| 4. Consumers | 9. Direct customers | 14. Processors | 19. Farming press |
| 5. Financial influencers | 10. Suppliers | 15. Local influencers | |

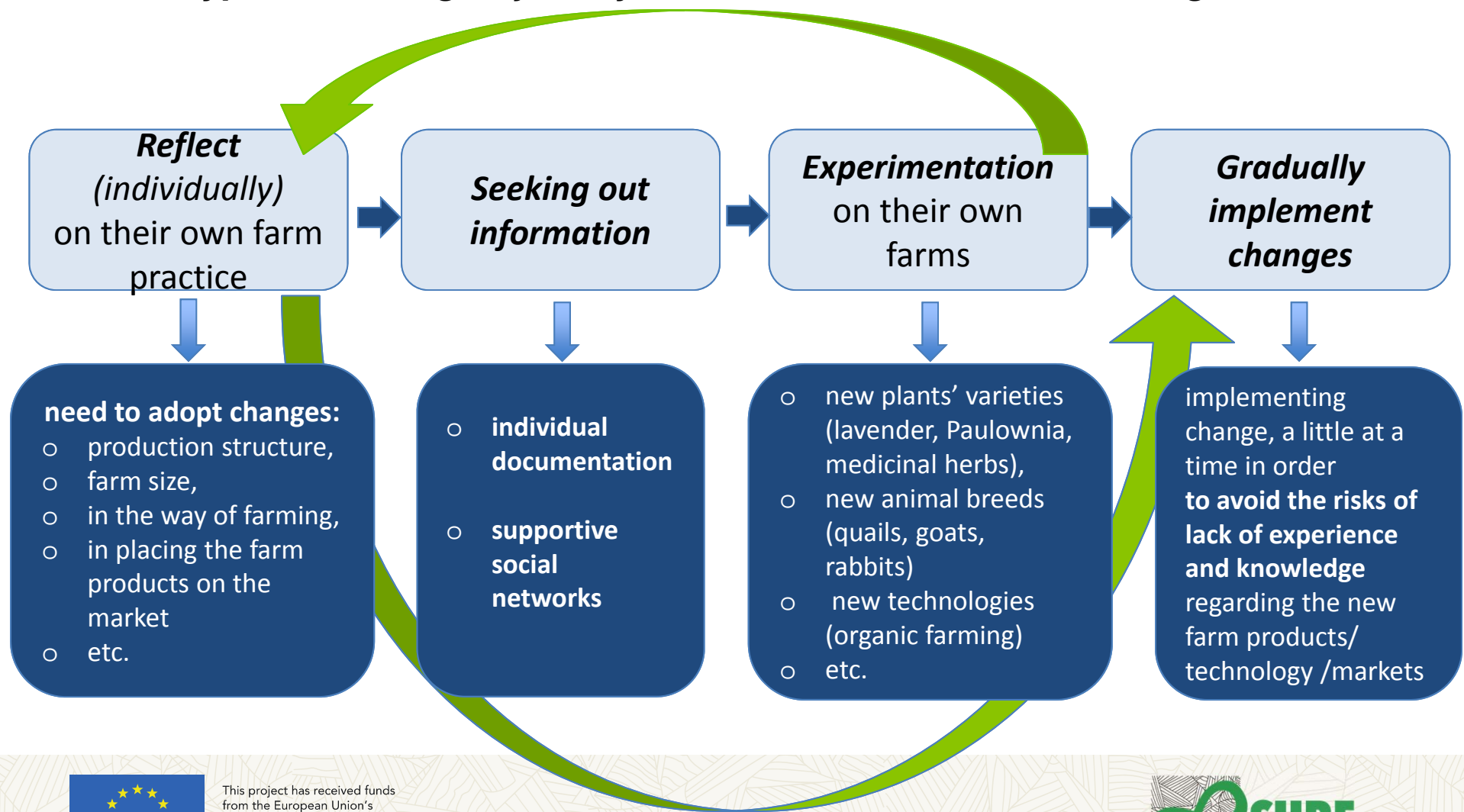


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5.4. Learning processes and strategies

Typical learning trajectory for a small-mixed farm in NE region



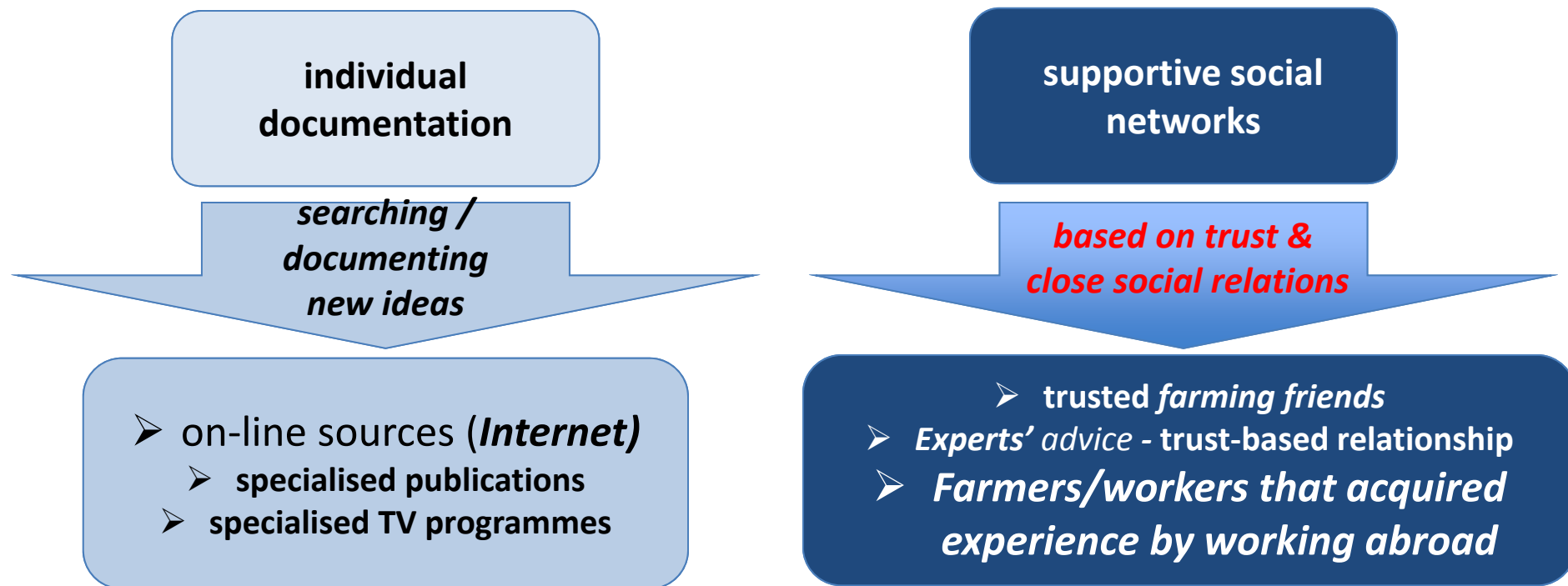
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5.4. Learning processes and strategies

Ability to seek out information

and to **choose the proper and reliable channels** to find out the necessary knowledge for the implementation of changes at farm level



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VI. Conclusions

The three most important factors identified as enabling farmers' learning across the adaptive capacity cycle in NE region

- their ***willingness to change the socio-economic status*** (determined by their need to become economically independent and have an activity aligned with their self-identity and values)
- their ***ability to seek out new ideas and information on how to implement these ideas at farm level*** (especially young farmers who may have different views to their parents and are willing to experiment with new technologies)
- ***having an alternative income source (such as an off-farm job)*** provided farmers with the financial resources for experimenting, implementing new ideas, and investing in them without depriving the farm's current activity



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VI. Conclusions

PROACTIVE LEARNERS

- *Risk takers*
- *Open to new ideas*
- *Seek out new information*
- *Early adopters*
- *Experiment*
- *Reflexive & flexible*
- *Able to convert knowledge into action*

YOUNGER FARMERS

BUT

**it is struggling with the
older generation**

REACTIVE LEARNERS

- *Risk averse*
- *Deal with consequences as they occur*
- *Rely on tried and tested methods*
- *Prefer to let others experiment first*
- *Reluctant to change*
- *Focus centred on their specific farm situation*

OLDER FARMERS

BUT

not all of them



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Thank you for your attention!

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