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Ökológiai Mezőgazdasági Kutatóintézet

Research Institute of Organic Agriculture | Forschungsinstitut für biologischen Landbau



Documenting crop diversification experiences across Europe – the DiverIMPACTS Expert Survey

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CRAW, Centre wallon de Recherches agronomiques
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Why document CDEs?



- Lock-ins of crop diversification can prevent cropping systems from becoming more diversified.



Documenting Crop Diversification Experiences

- Survey was conducted with local experts (advisors, researchers, farmers, etc.) between **Januar-April 2018** to document CDEs
- **Rotation, Intercropping, Multiple Cropping** in arable production

Aims of analyses:

- a) List of success and failure factors of experiences**
- b) Understanding connections between these factors and the main characteristics of Crop Diversification Experiences**



About the survey

- Lime Survey tool was used
- Survey had 3 sections, 72 questions and subquestions:
 - a) Section A: **Description** of CDE (34 questions)
 - b) Section B: **Evaluation** of CDE (24 questions)
 - c) Section C: **Dynamics** of CDE (14 questions)

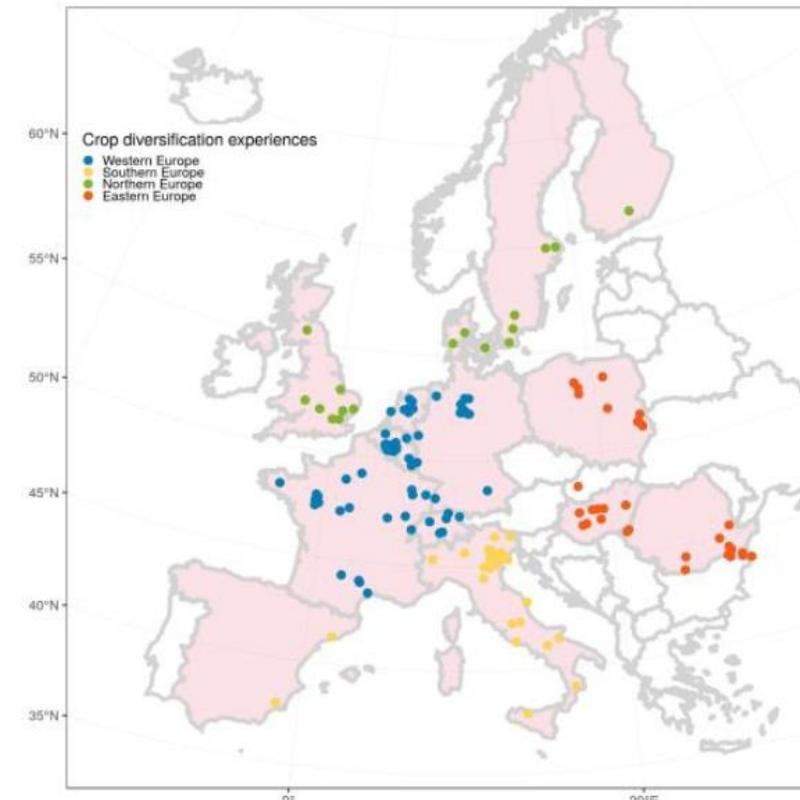
Lot of conditional questions, only few open-end questions.

- **128 valid responses** were received from **15 European countries**:

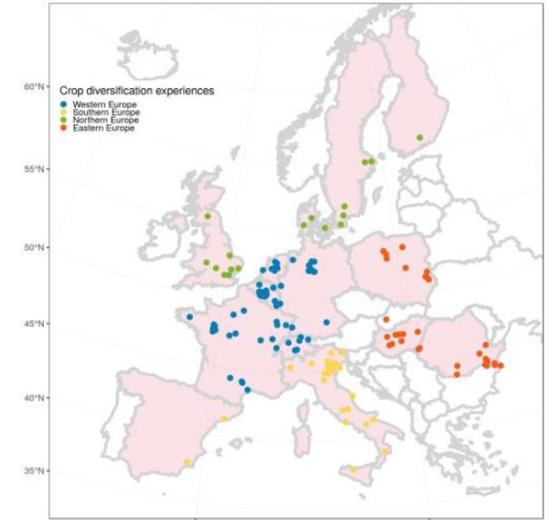
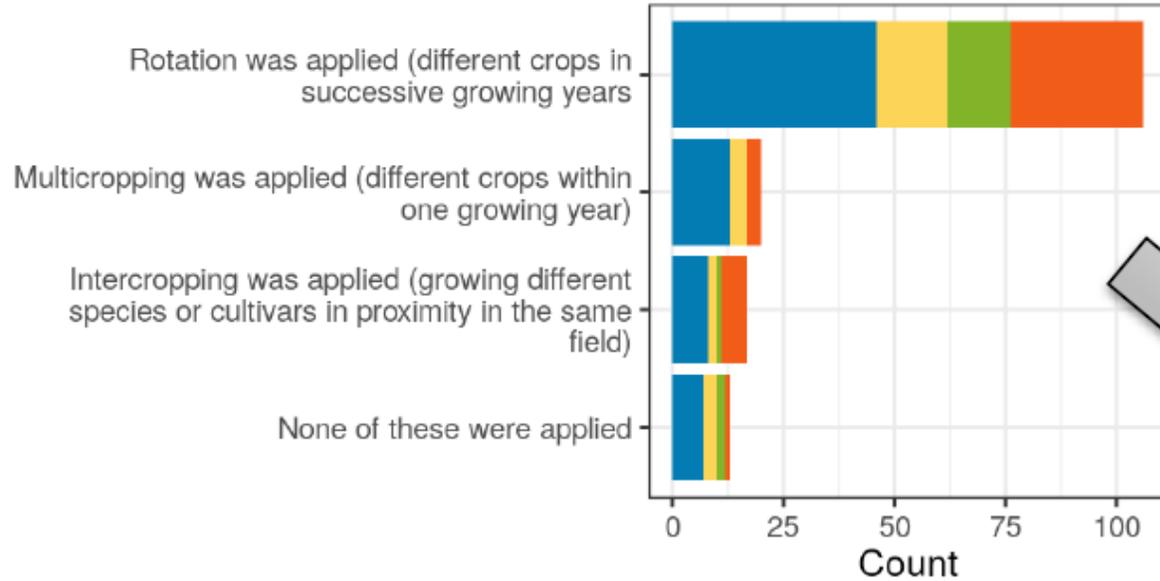
Belgium, France, Germany, Hungary, Italy, the Netherlands, Poland, Romania, Sweden, Switzerland, and UK, but also from Denmark, Finland, Luxemburg and Spain

- Statistics were performed with SPSS Version 22

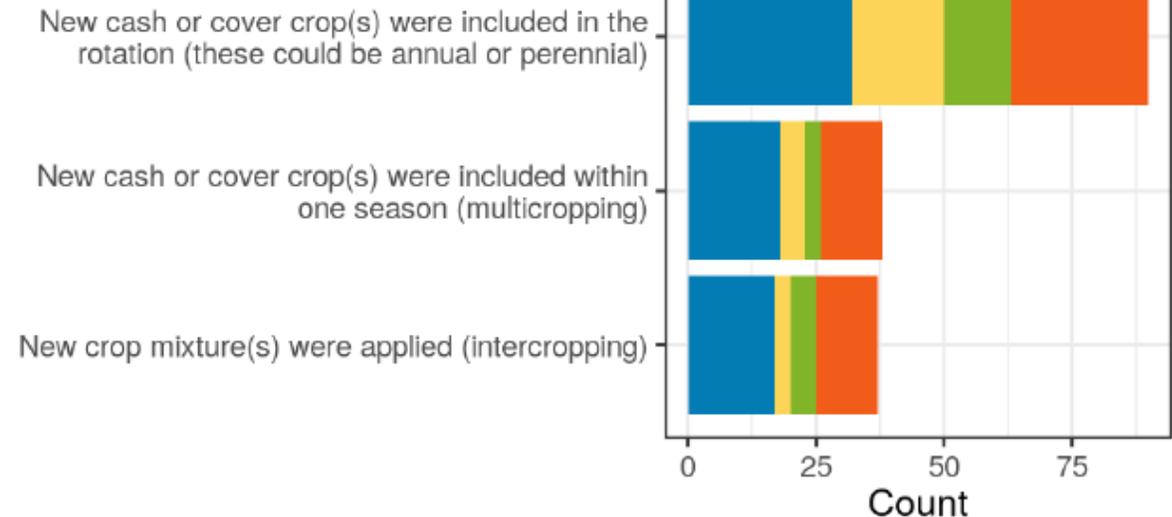
- a) Relations between variables
- b) Differences between variable groups
- c) Grouping of dataset according to specific factors



What were the reported experiences?



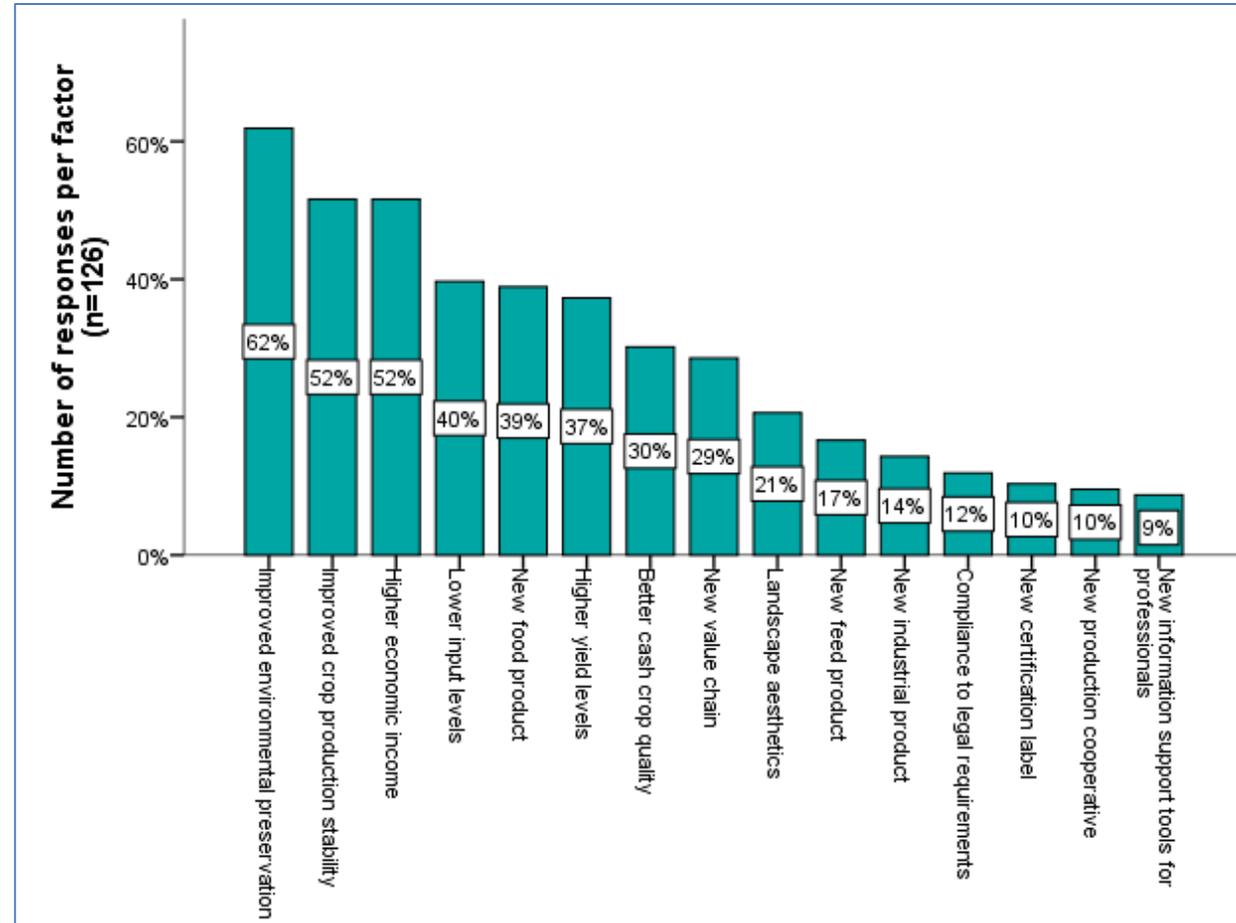
The most frequent crops added to the rotation were **cereals** and **oilseed crops**, **legumes** and **cover crops**.





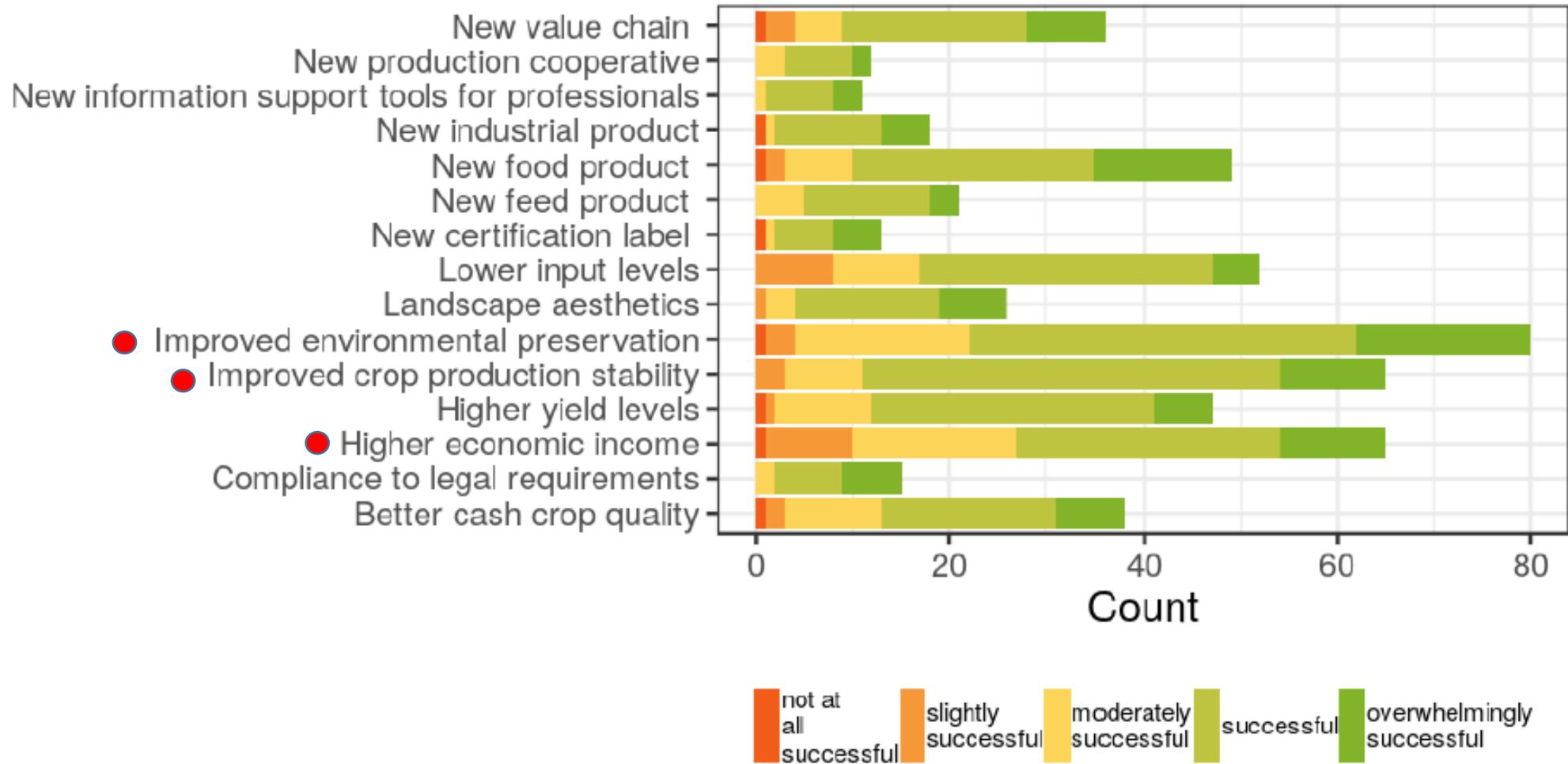
Most frequent targeted outcomes of CDEs

- 1. Environmental preservation**
(62% of CDEs)
- 2. Improved crop production stability** (52% of CDEs)
- 3. Higher economic income**
(52% of CDEs)



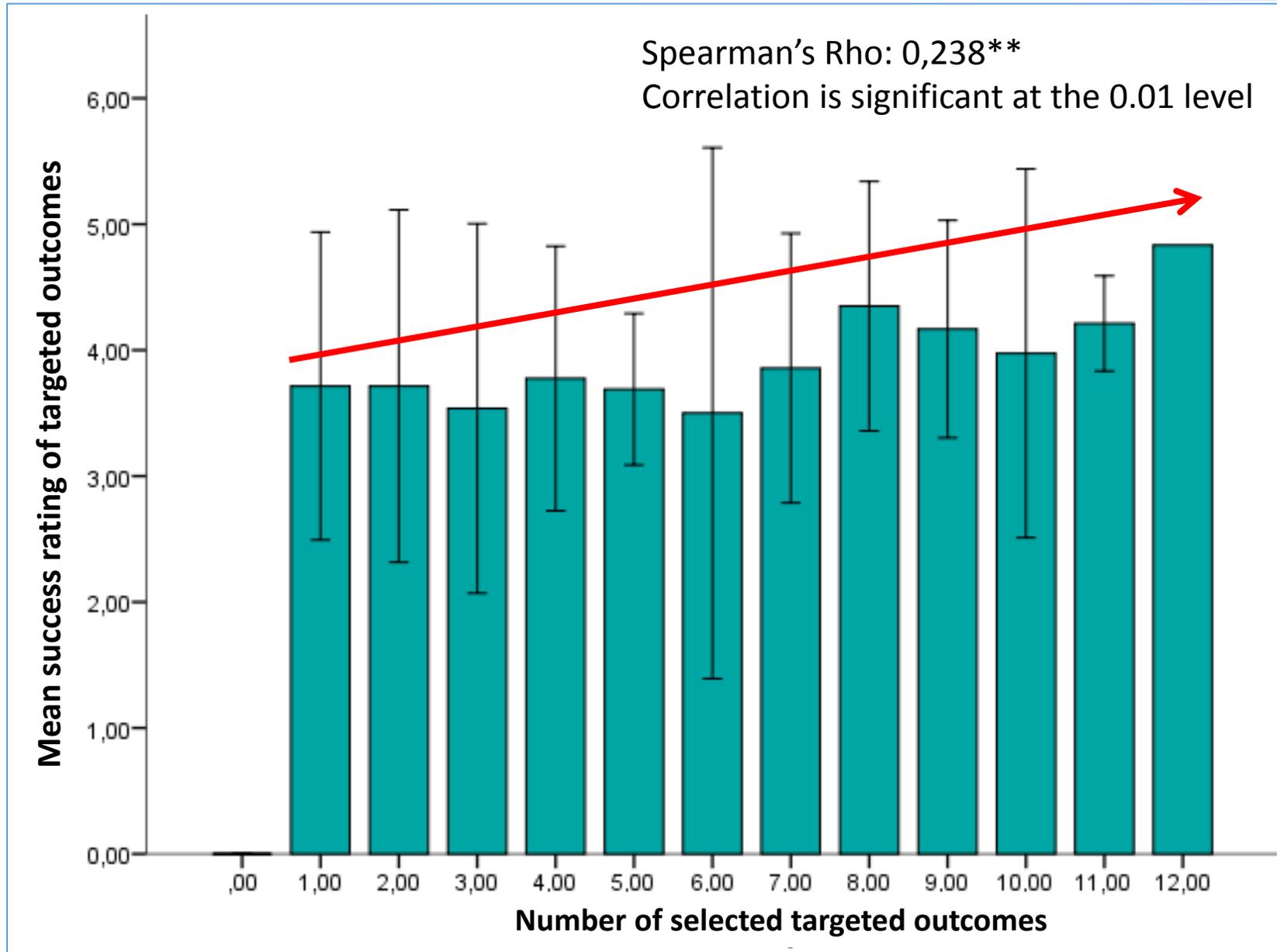


Was the CDE successful? Self evaluation



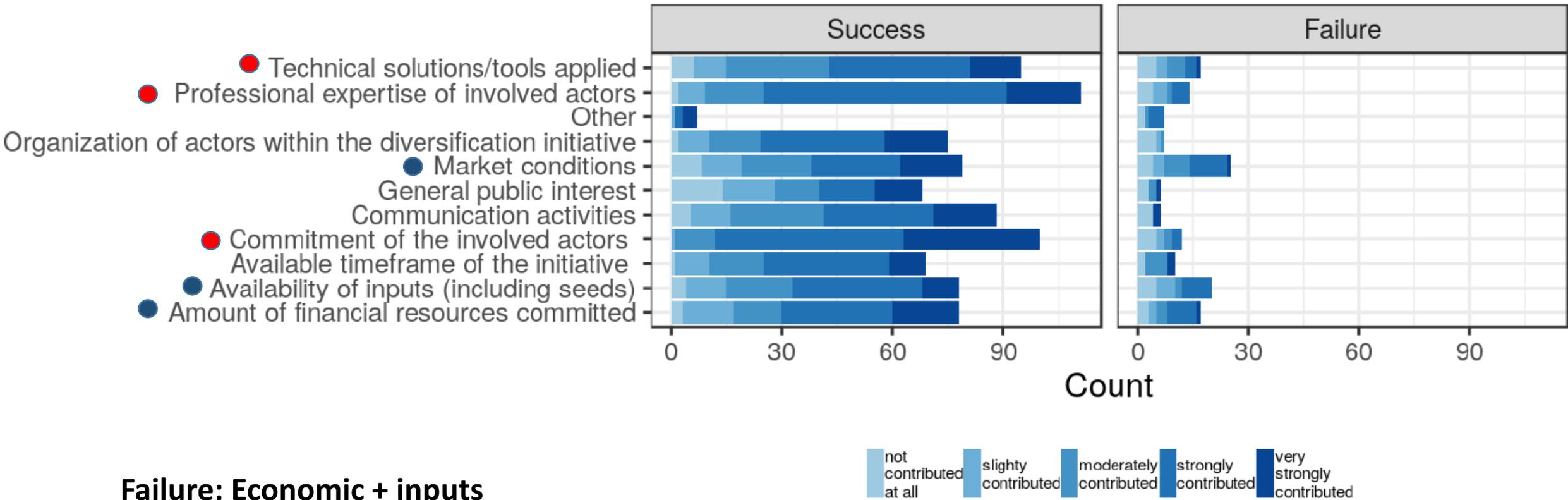


More targeted outcomes, higher success





Reported success and failure factors



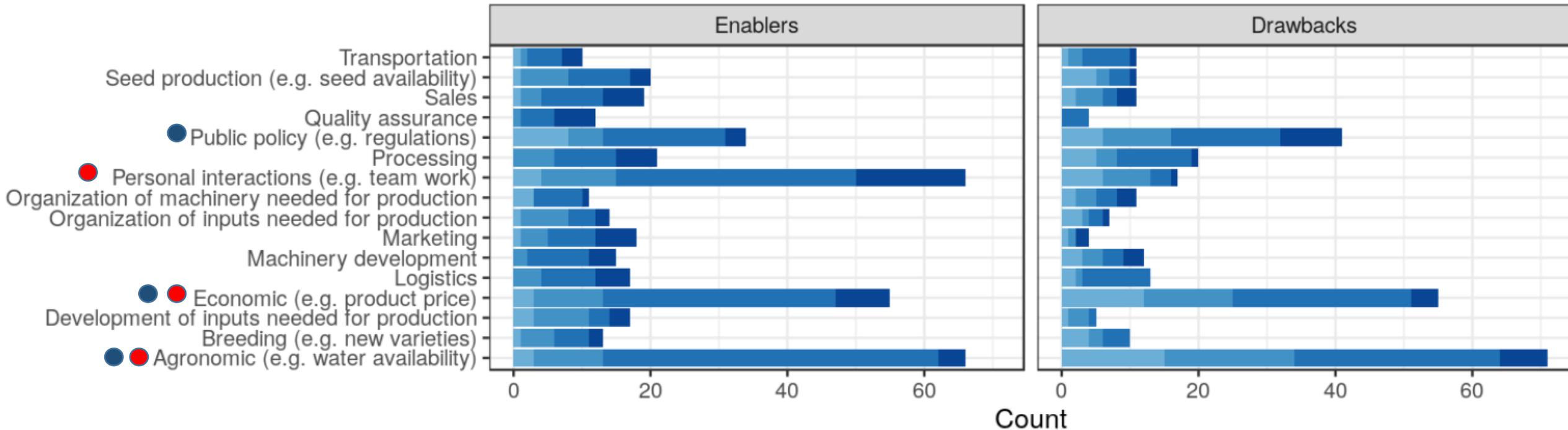
Failure: Economic + inputs

Success: Human resources + tools

The most important technical aspect, mentioned several times in open questions, was the challenge of **processing mixed or new crops**.



Experienced enablers and drawbacks



Economic and agronomic aspects, public policy and personal interactions are the key

Key drivers for success are thus **people**, their **knowledge**, **commitment** and **interactions**.



Conclusions

- **The more targeted outcomes, the higher success evaluation,** and the better distribution of results to practice
- **People are the most important success factors** – Professional knowledge, engagement, cooperation
- **Most important failure factors were economic** (market, financial resources)
- Key turning points are **economic and agronomic factors, and public policy**, that were experienced by experts as both important enablers and drawbacks.



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Thank you for your attention!

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 727482 (DiverIMPACTS)