

Success and failure factors of European diversification experiences

Problem

Lock-ins of crop diversification can prevent cropping systems from becoming more diversified. Identification of success and failure factors, as well as enablers and drawbacks of crop diversification initiatives are thus important for upscaling crop diversification.

Solution

If current lock-ins of crop diversification are well assessed, and workable solutions are provided, it can help farmers overcome them. Results from an expert survey about existing crop diversification experiences help focus on key issues when planning diversification strategies, taking into account the different needs of various actors, or geographical regions of Europe. This knowledge can help new diversification initiatives achieve their goals.

Applicability box

Theme

Diversification experiences

Geographical coverage

Across Europe

Application time

Any time

Period of impact

Strategy building phase

Equipment

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Best in

Planning diversification initiatives

End users

Researchers and developers

Outcome

A database was built from the 128 valid responses of the survey performed in 12 European countries. While the most important **failure factors** were **economic** (e.g., market conditions and amount of financial resources), the **technological factors** (e.g., availability of inputs, technical solutions) were also very important. The most important **success factors** were related to **social factors** (e.g., professional expertise and commitment of actors, general public interest) (Fig. 1). The three most frequently mentioned target outcomes of European crop diversification experiences were **improved environmental sustainability, improved agricultural production stability and increased income**.

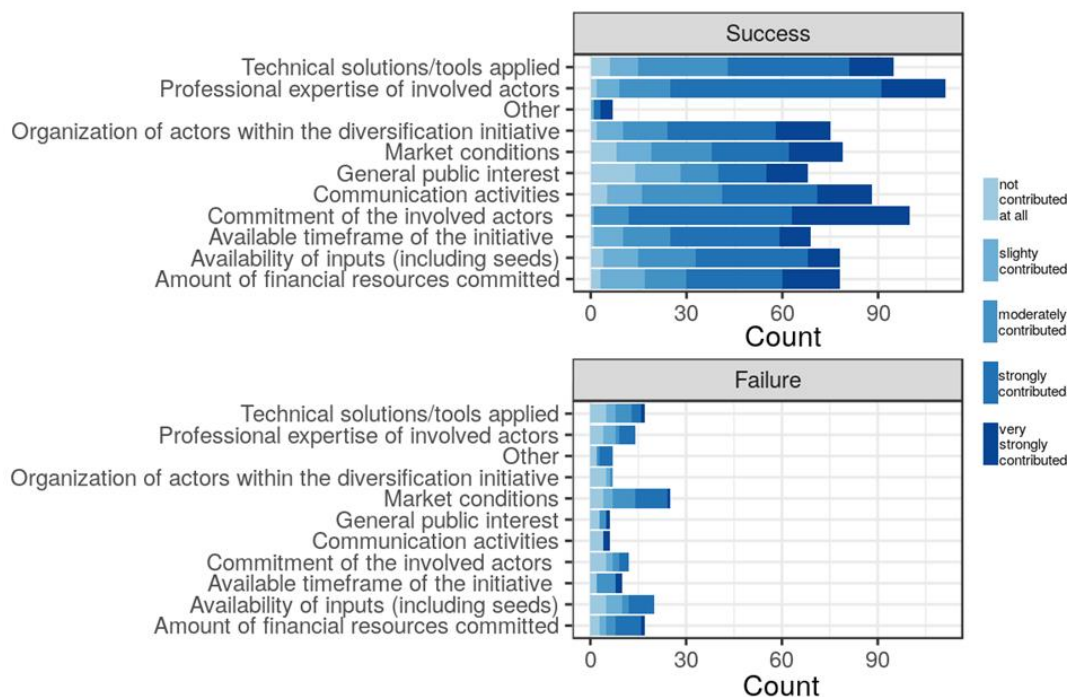


Fig. 1: Success and failure factors highlighted by European diversification experiences (Drexler et al., 2019)

Key findings and recommendations

- Most of the surveyed diversification experiences, covering both organic and conventional systems, **added new crops** to the rotation. The number of **multicropping** and **intercropping** experiences was also remarkable.
- The most frequent crops added to the rotation were **cereals** and **oilseed crops**, **legumes** and **cover crops**.
- The **upstream value chain levels** involved most often in initiatives were **seed production**, **machinery development**, **breeding** and **development or organisation of inputs**
- The most important aspect, mentioned several times in open questions, was the challenge of processing mixed or new crops.
- Successfully involving the downstream value chain level therefore plays an important role. **Involving sales, logistics and marketing is necessary** to make an initiative successful.
- Two thirds of the surveyed initiatives were self-funded; nevertheless, **initiatives needing adapted material** and downstream value chain development might require investments higher than 100,000 €. In such cases, funding through EU and/or national and regional projects as well as **policy played an important role**. Policies can be either a key enabler or a drawback, depending on their implementation.
- Human resource-related aspects, like **professional expertise**, **commitment of actors** and **personal interactions**, **were crucial for the success** of crop diversification initiatives. Key drivers for success are thus people, their knowledge, commitment and interactions.
- During the implementation of an initiative, **involving experts** or **training and motivating actors** is essential.
- The upgraded crop rotation systems can be more sustainable and successful if the new crop has no common diseases and pest, but can be cultivated with the existing machinery.
- Do not forget the **market conditions**, which were considered **more important for rotation-only diversification initiatives**, while they were hardly relevant for the majority of the crop diversification initiatives, which included multicropping and/or intercropping.
- Remember that **rotation alone did not really improve the status of the environment** according to respondents; try to combine it with other practices, such as avoiding pesticides, or with other diversification strategies.

Use the comment section on the [DiverIMPACTS discussion forum](#) to share your experiences with other farmers, advisors and scientists! If you have any questions concerning the method, please contact the first author of the practice abstract by e-mail.



Further information

Weblinks

- Survey of European Crop Diversification Experiences: [First results of the DiverIMPACTS Project](#).
- [Diversification des systèmes de cultures: les défis](#)

About this practice abstract and DiverIMPACTS

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based on a survey on crop diversification experiences in Europe, which was conducted in the DiverIMPACTS project.

DiverIMPACTS: The project is running from June 2017 to May 2022. The overall goal of DiverIMPACTS - Diversification through Rotation, Intercropping, Multiple Cropping, Promoted with Actors and value-Chains towards Sustainability - is to achieve the full potential of diversification of cropping systems for improved productivity, delivery of ecosystem services and resource-efficient and sustainable value chains.

Project website: www.diverimpacts.net

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