

Lock-in system maps for discussing barriers and levers

Problem

A lock-in—emerging from the interactions between barriers—hampers the use of intercropping (IC) in Europe. Understanding lock-ins will help design solutions to foster IC.

Solution

Identify constituent barriers of the lock-in and the interactions between these barriers through interviews and workshops with system actors. Visualise them as cognitive maps (Figure 1), with barriers as nodes and interactions as arrows linking nodes.

Applicability box

Theme

Agroecology, Cropping systems, Food chain management, People and skills

Keywords

Diversification, Farm management, Sustainability

Context

Europe

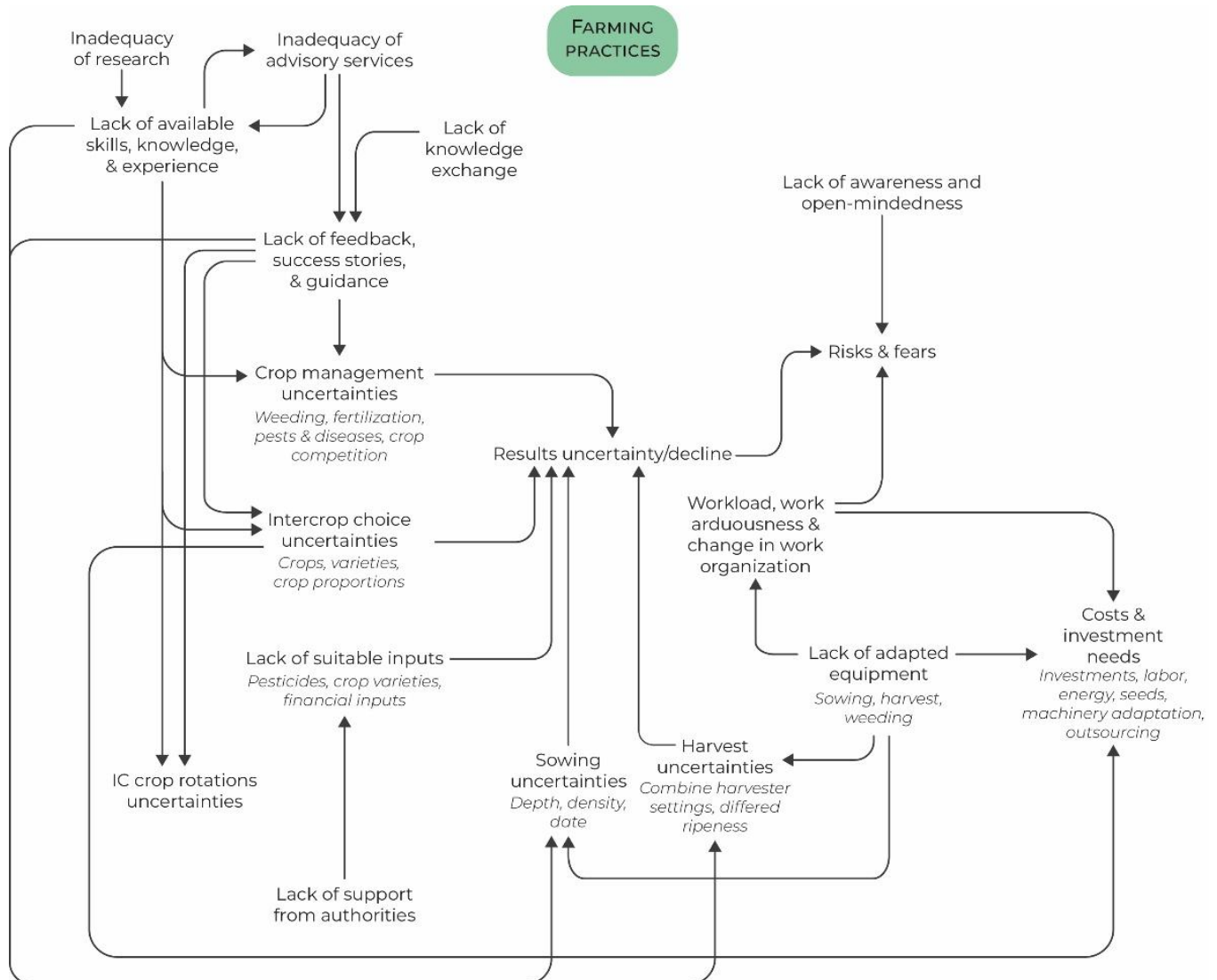


Figure 1 – Lock-in system map focused on barriers to farming practices in intercropping.

Benefits

Highlighting interactions between barriers helps understanding how targeted interventions on specific barriers may affect others.

Practical recommendations

For barrier and barrier interaction identification:

- Rely on interactions with a diversity of system actors to identify barriers comprehensively
- Unravel the causal roots of barriers, e.g., through iterative questioning such as “Why?”

For barrier and barrier interaction analysis:

- Ensure the readability of lock-in system map by:
 - Grouping barriers to decrease the number of nodes
 - Dividing the lock-in system map into thematic, sub-lock-in system maps
 - Avoiding arrows overlapping
 - Using short, explicit terms for nodes
- Once barrier analysis is complete, validate the identification of barriers and their interactions with actors.

Further information

Further readings

- [Chevalier, C., Justes, E., Morelle, C., & Baret, P. \(2023\). Compilation of lock-ins, encompassing the whole value-chain and its actors \[IntercropVALUES Horizon Project Deliverable\].](#)
- [Simoens, M. C., Leipold, S., & Fuenfschilling, L. \(2022\). Locked in unsustainability: Understanding lock-ins and their interactions using the case of food packaging. Environmental Innovation and Societal Transitions, 45, 14-29.](#)

Weblinks

- <https://intercropvalues.eu/>
- Check the [Organic Farm Knowledge Platform](#) for more practical recommendations.

About this practice abstract

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IntercropVALUES aims to exploit the benefits of intercropping to design and manage productive, diversified, resilient, profitable, environmentally friendly cropping systems acceptable to farmers and actors in the agri-food chain. As a multi-disciplinary and multi-actor project, it brings together scientists and local actors representing the food value chain. It includes 27 participants from 15 countries (3 continents) from a wide diversity of organizations and stakeholders. The project will run for four years and started in November 2022.

Project website: <https://intercropvalues.eu/>