

# SLU Partnerskap Alnarp

SLUTREDOVISNING: 2025-09-15



Pea-barley crop. Photo Raj Chongtham

Fleraktörsworkshop för att identifiera hinder och möjligheter vid inför ande av baljväxt-spannmålssamodling för ett hållbart livsmedelssystem i Sverige.

SLU Partnerskap Alnarps projekt nr: 1589/VO/2024

Projekttitel på svenska enligt projektansökan: Fleraktörsworkshop för att identifiera hinder och möjligheter vid införande av baljväxt-spannmålssamodling för ett hållbart livsmedelssystem i Sverige.

Projekttitel på engelska enligt projektansökan: Multi-stakeholder workshop to identify obstacles and opportunities for introducing legume-cereal co-cropping for a sustainable food system in Sweden.

Projektledare:Raj Chongtham, Chandra Venables

Författare till rapporten: Chandra venables

Fakultet: Department of Research and Development

Institution: Hushållningssällskapet Skåne

Projekttid: December 2024-February 2025

Projektpartners: SLU, HSS

### Projektsammanfattning

The EU Horizon funded IntercropVALUES project, specifically the Swedish case study (CICS2) and the "Bönan till Bordet" project, completed an information and brainstorming session during the workshop "Hur får vi bönan till bordet?" held on 29 January 2025 at SLU Alnarp.

The workshop gathered 25 participants from across research, advisory services, regional authorities, farming, and the food industry, and focused on identifying barriers and opportunities for the adoption of intercropping systems in Sweden. With the generous support of Partnerskap Alnarp, we were able to facilitate a productive and interactive session that generated valuable insights and momentum for further collaboration.

The following short report outlines the workshop's objectives, participation, key outcomes, and use of funds. We believe the results contribute meaningfully both to the IntercropVALUES project and to the broader agroecological dialogue in Sweden.

#### **Abstract**

This report provides an account of the workshop "Hur får vi bönan till bordet?" held on 29 January 2025 at SLU Alnarp, which received financial support from Partnerskap Alnarp. The workshop was organized under the Swedish IntercropVALUES CICS2 case study in collaboration with the "Bönan till Bordet" project. The aim was to identify barriers to intercropping adoption in Sweden and explore potential levers to promote wider use, particularly of legume-cereal systems.

# **Bakgrund**

Cropping systems in Skåne are highly specialized, with arable farmers primarily focusing on a limited range of commodity crops such as cereals, rapeseed, and sugar beet. These crops typically rely on significant external inputs, including chemical fertilizers, pesticides, and herbicides. Grain legumes such as peas, beans and lentils, however, represent an important crop to these systems. When incorporated into current cropping practices, either through intercropping (IC) or in crop rotations, they can deliver multiple agronomic benefits, such as breaking disease cycles, suppressing weeds, and fixing atmospheric nitrogen<sup>1,2</sup>. Additionally, they contribute to environmental improvements by enhancing biodiversity, promoting soil health, reducing GHG emissions, and supporting healthier, climate-smart diets in Sweden.

One of the main challenges in growing legumes, such as peas and lentils, is their high yield variability due to both biotic and abiotic stresses. They are also

vulnerable to weed infestation and lodging, which complicates harvesting. Intercropping grain legumes with cereals has been demonstrated by several researchers<sup>3,4</sup> as a viable strategy to overcome these challenges. This approach can help maximize the agronomic and environmental benefits of grain legumes in cropping systems while supporting their integration into Swedish diets.

However, IC is not widely adopted by farmers in Sweden, despite its potential benefits. Therefore, it is crucial to understand the bottlenecks and levers influencing the acceptance of intercropping in Sweden, from both practical and scientific perspectives.

## Syfte

The objectives of the workshop were to gather a wide range of actors in agrifood system, such as farmers, advisors, processors, traders and researchers are to a) co-identify priority barriers that hinder the adoption of intercropping legumes and cereals, and b) explore potential levers that, when accessed, can result in positive change towards greater acceptance of intercropping. The participants were invited from the existing local legumes network (LoBa: a Horizon 2020 funded project Lokala Baljvaxter that was established in 2018) as well as being open to the general public and other /interested actors, including SLU faculty and students. We engaged with actors from across the food value chain, including primary producers, processors, wholesalers, sellers, consumers, agricultural advisors, and researchers.

## Metod

The program was structured as a compact, interactive session. It began with an introduction to intercropping and the IntercropVALUES project, including presentation of pre-identified barriers. Participants worked in small groups to assess and prioritize these barriers, followed by a plenary consolidation and participatory ranking exercise. The second part of the workshop focused on identifying possible solutions, exploring whether intercropping could act as a lever for increasing legume production and consumption, and outlining potential measures to overcome constraints. The session concluded with participants completing a data form, including options for continued involvement in the project.

The workshop gathered **25 participants from 14 organizations**, representing universities and research institutions (SLU, RISE), regional authorities (Region Skåne), advisory services, civil society (Livsmedelsakademin), farmers, and the food industry (Lantmännen). Additional insights were collected through complementary interviews with farmers, advisors, and supply chain actors.

### Resultat

The workshop highlighted both **barriers** and **leverage points** for intercropping adoption: **Workshop Summary: Prioritized Barriers** 

Participants first reviewed and discussed five pre-identified barriers to intercropping. In breakout groups and a follow-up ranking exercise, the following hierarchy emerged (1 = most critical):

- 1. Low Consumer Demand for Local Legumes: Weak demand reduces processor, retailer, and supply chain interest.
- 2. On-Farm Complexity and Uncertainty: Includes limited access to suitable seed, risk of disease, and lack of integration support.
- 3. Low Awareness of Intercropping Benefits: Despite scientific support, awareness among farmers, advisors, and buyers remains low.
- 4. Infrastructure Constraints: Small and medium-scale operators face drying, sorting, and storage limitations.
- 5. Other Context-Specific Barriers: Profitability concerns, limited added value for intercropped crops, and inconsistent fertilizer performance were also noted.

**Key messages:** Adoption of intercropping legumes and cereals requires coordinated solutions across research, policy, advisory, and commercial domains. Consumer demand and procurement practices are pivotal in shaping incentives across the value chain. In summary:

- There is strong cross-sectoral interest in intercropping, but adoption is hindered by systemic barriers, particularly at the market and farm levels.
- Consumer demand and procurement practices play a critical role in signaling value for the entire value chain.
- Solutions must be coordinated across policy, research, advisory, and commercial domains to support widespread implementation.
- Existing initiatives around legume promotion could provide an entry point for more targeted support of intercropping systems.

#### Referenser

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