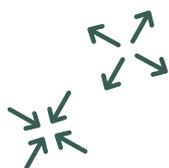


# DEVELOPING LEGUME-SUPPORTED AGRI-FOOD SYSTEMS THROUGH KNOWLEDGE COMPILATION

INKA NOTZ, JOHANNES SCHULER, MORITZ RECKLING



Pods of narrow-leaved lupine.



European agriculture is focused on intensive cereal production and features an increasing trend for specialization, leading to several negative environmental impacts. Legume production is marginal, occupying only < 2 % of the arable land. This creates a deficit in the European protein balance, which is mainly met by substantial soybean imports. In order to address these challenges, LEGUMES TRANSLATED aims to support the production and use of legumes in Europe as part of an overall protein transition. As there is already a significant amount of knowledge and initiatives available at local, regional and international levels, the project's goal is to embed and connect the research- and practice-based actors and to thereby stimulate the compilation, validation and dissemination of knowledge and best practices. The project concept builds on the interaction of groups of farmers and other innovators within international thematic networks, which are supported by research. A strong focus is set on the empowerment of decision-makers within the whole value chain through the production of communication outputs such as videos and practice notes and the development of a multi-lingual knowledge internet platform – the Legume Hub.

At ZALF, we connect economic analyses with the co-design and assessment of cropping systems. Following a multi-actor approach, we explored options for improving current cropping systems by integrating legumes and in consideration of economic, environmental and agronomic effects. A Europe-wide network allowed incorporating the knowledge of a range of legume-experienced actors representing value chains with soybean, pea, faba bean, lupine and forage crops. We evaluated

A transition to more legume-based farming in Europe can help to reduce negative environmental impacts and increase protein self-sufficiency. The European thematic network LEGUMES TRANSLATED is dedicated to legume production and use. By linking research- and practice-based knowledge, the project supports the innovation potential of already existing resources and initiatives. A solid base for Europe-wide exchange among experts and practitioners designing legume-supported cropping systems and value chains allows for transnational and cross-border knowledge interaction. The multi-actor approach provides a knowledge platform that empowers actors in developing legume-supported agri-food systems.

practice-based cropping systems from 17 study areas in nine European countries from Ireland in the West to Ukraine in the East. Analysing these systems allowed transforming practice-related experiences into synthesized information that supports local and European decision-makers. Legume-supported systems showed clear benefits for environmentally friendly production systems and protein self-sufficiency, but the economic performance and particularly the competitiveness of legumes pose a considerable challenge for integration in European farming.

LEGUMES TRANSLATED demonstrates how the focus on experiences and needs of users and practitioners based on an efficient networking approach allows validating and communicating crucial knowledge and innovation for legume-based farming for food and feed systems.

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