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# GRAIN LEGUME RE-DIVERSIFICATION THROUGH TRANSDISCIPLINARY BREEDING APPROACHES

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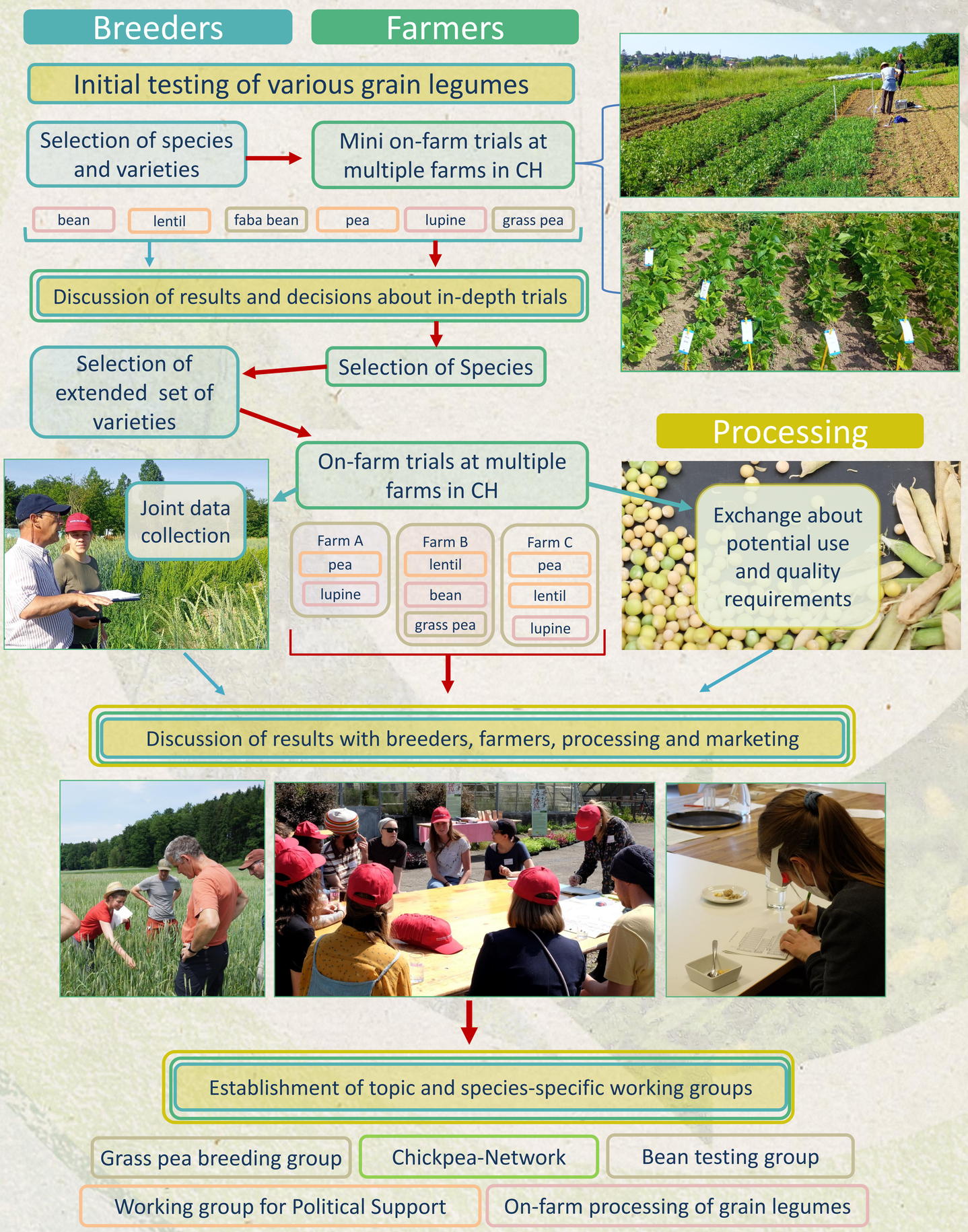
## Objectives 606 / 243

Agroecological transitions in Switzerland require the re-diversification of field crops. This especially concerns grain legumes. Adapted cultivars and knowledge about their cultivation and use for processing are lacking. The *integraL* project experiments with transdisciplinary action-research in cultivar testing and plant breeding; and brings together farmers, processing, and plant breeders.

## Working Process




## Main results

- **Participatory action research**: Focus on the process - adaptations possible according to identified needs and interests
- **Transdisciplinarity**: Multiple stakeholders and their concerns are involved from the beginning of the project
- *Breeders:* Receive information about performance of varieties in different environments under on-farm conditions and desired traits for improvement
- *Farmers:* Can select adapted varieties for their farms and marketing
- *Processing*: Can advise on variety selection and help determine quality characteristics

- Communication, meetings and documentation of results are beneficial but time-consuming
- Not all species are suitable for mini-on-farm trials

## Conclusions

For underutilized grain legumes, the continuous exchange between multiple stakeholders contributes to the joint definition of testing and development targets. Agronomic, breeding and quality issues can efficiently be dealt with together. The necessary work processes need to be optimized organizationally and technically.

## Bibilography

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