

The BioValue project aims at:

- increasing biodiversity along the agri-food value chain through the optimal introduction of underutilised genetically diverse crops by
- developing a dynamic and adaptable tool for analysing the links between biodiversity, the agri-food value chain, the environment and consumer preferences and health.

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## 1. Introduction

- The diversity of crop species and varieties in Europe has declined.
- The role of value chains in promoting or restraining biodiversity and sustainability is important to study to reverse this process [1,2].
- Underutilised crops and varieties have the potential to increase biodiversity in value chains and improve ecosystem resilience and human nutrition [3].

### Objectives of the Study:

- exploring the perceived constraints of value chain actors to introducing biodiversity – underutilised crops and varieties – into value chains.
- identifying the entry points for intervention that would increase biodiversity in the entire value chain.

## 2. Methodology

### December 2022 – January 2023: Qualitative, semi-structured interviews:

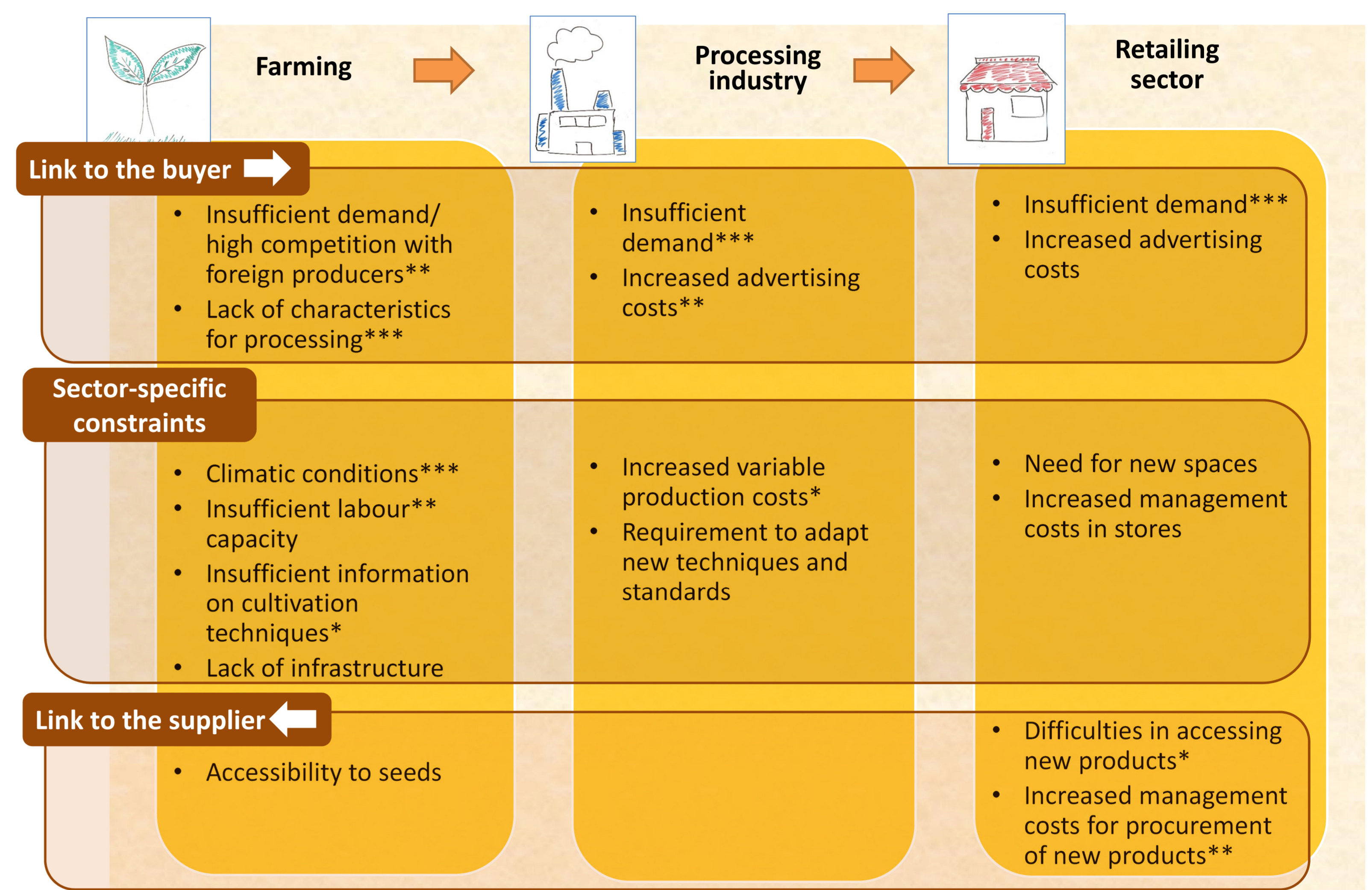
- Target: German farmers, processors, and retailers representing the value chains of dry lentils, fresh eggplant, and buckwheat flour – 20 interviews (Table 1).
- Focus 1: perceived constraints in different aspects related to crop diversity – specifically for the selected crops – and their importance:
  - "What are the main constraints that you face within production and marketing of the target product/underutilised crop?"
- Focus 2: perceived limitations of introducing a new crop or variety into activity.
- Focus 3: current or potential coping strategies.

**Table 1: Description of the sample:** Number of interviewed value chain actors (n =20).

Value chain actors / Products	Dry lentils	Fresh eggplant	Buckwheat flour
Farmers (n = 12)	5	5	2
Processors (n=4)	2	-	2
Retailers (n=4)	2	1	1

## 3. Results

**Figure 1: Constraints to introduction of underutilised crops / varieties in German value chains.**



\*\*\*highest importance; \*\* 2nd position in importance evaluation; \* 3rd position in importance evaluation

**Table 2: Constraints and prioritised coping strategies: value chain perspective.**

Constraints related to...	Prioritised coping strategies
Insufficient demand/ link to the buyer	<ul style="list-style-type: none"> <li>• Raising consumer awareness</li> <li>• Scientific research on the effects on health</li> </ul>
Link to the supplier/ insufficient supply (e.g. of seeds, crops, new products)	<ul style="list-style-type: none"> <li>• Vertical and horizontal collaboration</li> <li>• Public incentives</li> </ul>
Sector-specific constraints	<ul style="list-style-type: none"> <li>• Range of approaches – crop and industry specific</li> </ul>

## 4. Discussion and Conclusion

- Tackling insufficient demand for existing or newly introduced underutilised crops and varieties is crucial for the successful value chain development.
  - Increasing and disseminating available information within value chains can address this constraint (raising consumer awareness, research, etc.).
- The link to the previous stage of the value chain (insufficient supply) was also seen as an important constraint.
- The lack of quality standards to regulate supply throughout the value chain is another important issue.
  - Public incentives and support of collaboration between value chain actors can improve the links between the actors and help coordinate the creation of necessary quality standards.
- **Future actions and policies should consider the existing constraints and the potential coping strategies.**

### Acknowledgements

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**References:** 1. De Leeuw, J., Carsan, S., Koeh, G., Yaye, A., & Nyongesa, J. (2018). Biodiversity-Based Value Chains: A review of best practices for selected biodiversity-based value chains that promotes pro-poor conservation in the Horn of Africa. Nairobi, Kenya.  
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