



**Introduction – case study**

📍 Tuscany, Italy

🌾 Bread wheat population **FURAT**



**The main objectives were to**

- (1) evaluate the full range of benefits of organic breeding (in this case OHM) and
- (2) define strategies and tools to communicate them to consumer-citizens

**Methods**

**Interviews with all stakeholders of the value chain and external experts:**

5 breeders, 1 seed producer, 4 farmers, 1 processor, 1 seed certifier, 4 researchers (by main profession)  
11 internal experts, 6 external experts

**Participatory workshop** with value chain actors to validate results from interviews and quantify them

**Communication:** development of a publication for explaining the importance of organic breeding, agrobiodiversity and OHM to consumers



Figure 1: View of a **FURAT** field in the organic farm Floriddia (2023, Tuscany, Italy). © Marlene Sander

# Organic from the start – why does it matter?

## Benefits and costs of Organic Heterogeneous Material (OHM) in organic wheat cultivation

The use of **Organic Heterogeneous Material (OHM)** for organic wheat cultivation shows a number of benefits for breeders, farmers, processors and consumers. The stakeholders of the case study value chain working with OHM cultivars and researchers see a **great potential of OHM cultivars for marginal farming areas and organic farming**. The absence of IPRs is a great chance for **seed sovereignty and independence** of the whole value chain. **Agrobiodiversity** can be strengthened with the use of OHM.

Benefits	Results	Challenges
Local adaptation		Traceability management
Agrobiodiversity and diversity of diets		Knowledge intensive for stakeholders
Buffer against abiotic stressors (climate change)		Seed conservation and maintenance
Nutrient and water use efficiency		Losing genetic diversity through strong adaptation
Yield and quality stability		No maximized performance (yield and quality)
Good taste, nutritional value and digestibility		
Seed sovereignty, independence from global markets		
Community building, local value chains		

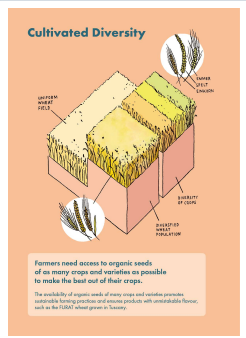


Figure 2: Infographic about agrobiodiversity (more materials at [biobreeding.org](https://biobreeding.org))

**Conclusions**

- OHM cultivars are **highly suitable for marginal farming conditions**, as they can often be found in organic farming
- **Local value chains** is important for stakeholders to benefit from using OHM cultivars
- High potential for a broader adoption of OHM cultivars in organic farming, as their use is **aligning with long-term goals of organic agriculture and agrobiodiversity conservation**
- Figure 2 and 3 are part of the flyer *Cultivated diversity - Organic Seeds for tasty food*, based on the these research results

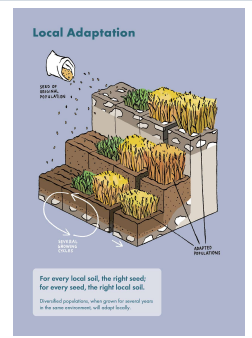


Figure 3: Infographic about local adaptation (more materials at [biobreeding.org](https://biobreeding.org))