



Fraunhofer  
FOOD



Agriculture and Food Industry Alliance

Raw Materials for  
Food and Feed



## Challenges

**Food and feed** producers are under great pressure: Growing demands regarding productivity, efficiency, and quality must be reconciled with sustainability and animal welfare requirements as well as changing regulations. General resource scarcity, disrupted supply chains, and increased energy prices further exacerbate this situation.

The **Fraunhofer Agriculture and Food Industry Alliance** brings together the expertise of its member institutes in a unique way to support companies and partners across the entire food and feed chain in mastering current challenges.

## Opportunities

Opportunities exist in...

- **modern breeding methods** and in the
- provision of **alternative sources of raw materials**
- from classical **agricultural production** with **smart farming** approaches to
- the efficient utilization of **side streams**.
- In the future, solutions will also be provided in the area of **Closed Environmental Agriculture**.



## Solutions

Possible solutions arise from the use of TILLING and genome editing in the field of **modern breeding methods**.

In the field of **alternative nutrient sources**, potentials arise from microbial production as well as alternative expression systems for secondary plant substances and proteins.

In **agricultural production**, novel and mobile sensors and actuators (for soil, climate, plants, and animals) are used.

By utilizing side streams, contaminations can be detected at an early stage, nutrient residues can be used efficiently, and the balance of electricity supply and demand can thus be optimized.



## Contact Agriculture and Food Industry Alliance

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