

# ENHANCING BIODIVERSITY AND RESILIENCE IN CROP PRODUCTION

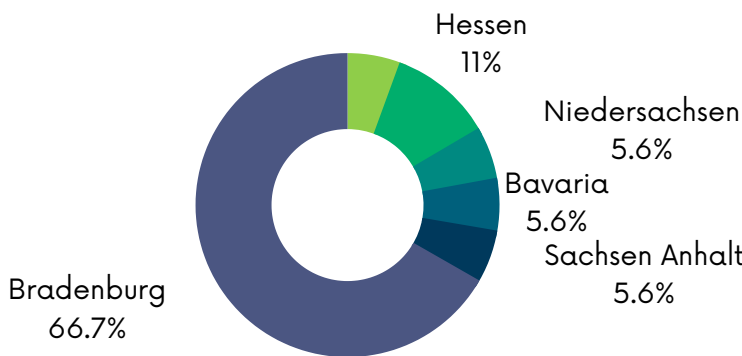
GERMAN CASE STUDY

## RESPONDENTS' INFO

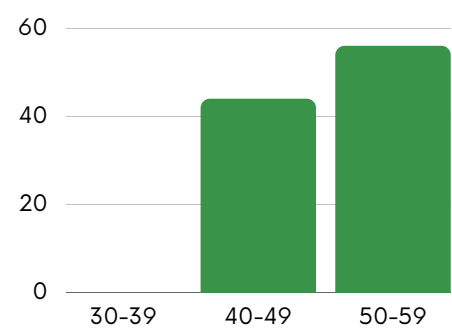
### GENDER



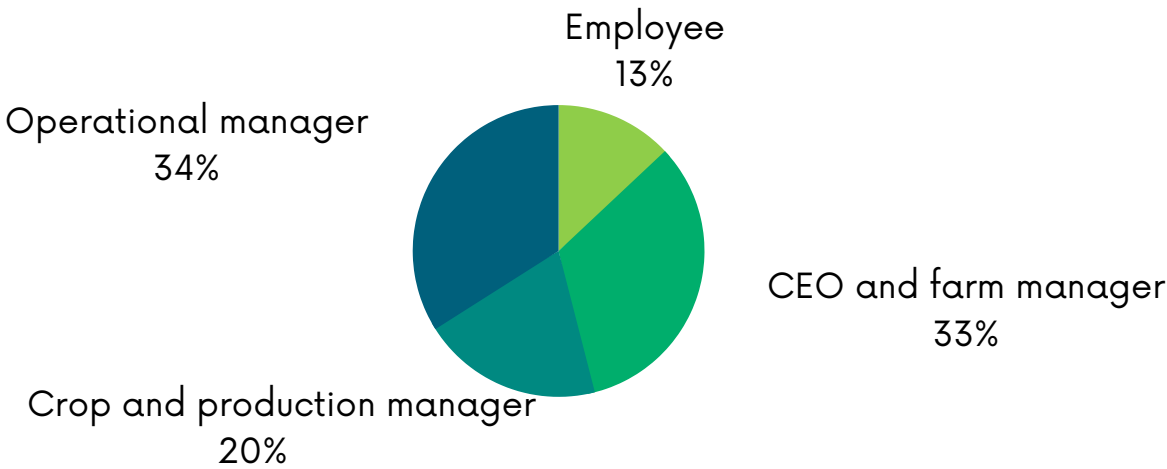
### DISTRIBUTION PER REGION



### AGE DISTRUBUTION (%)



### ROLE ON THE FARM

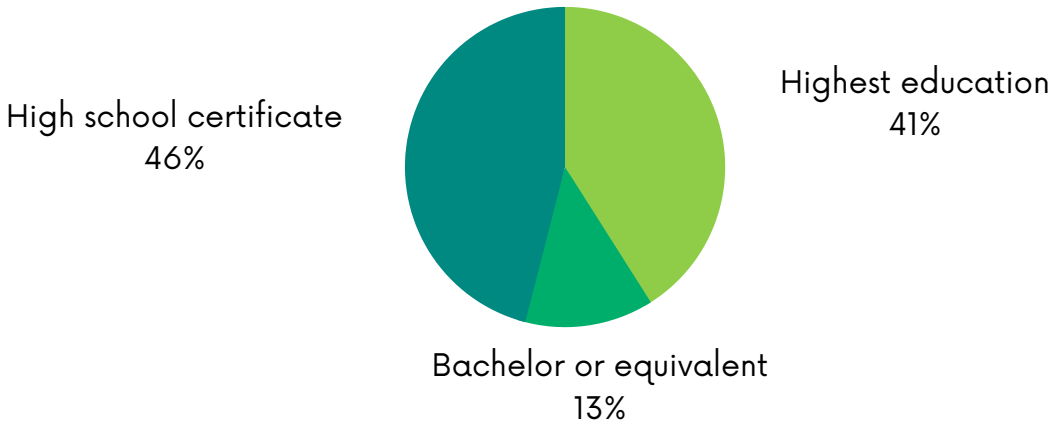


All farms are mostly conventional farms. However, some farm had some organic livestock or pastureland

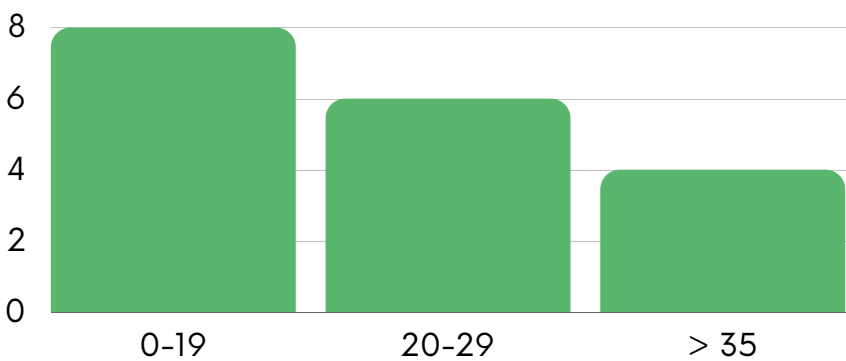
### FARM SIZE



### EDUCATION

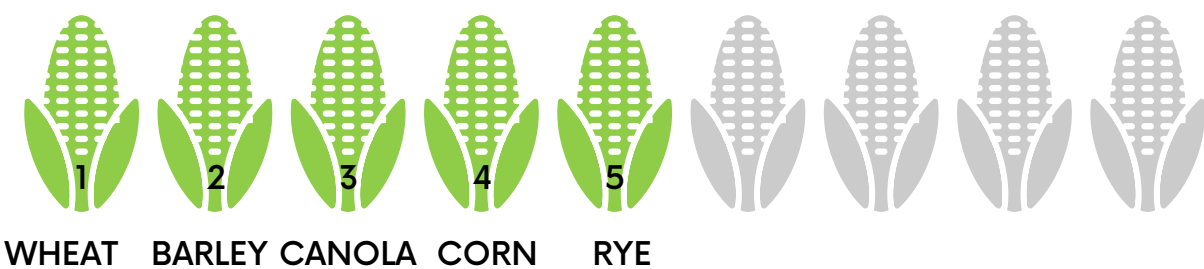


### YEARS EXPERIENCE IN AGRICULTURE



55 % FAMERS HAVE A WORK EXPERIENCE ABOVE 20 YEARS

### AVERAGE CROP GROWN



# ENHANCING BIODIVERSITY AND RESILIENCE IN CROP PRODUCTION

## PERCEPTION OF BIODIVERSITY

BIODIVERSITY is related to farm management & crop diversification:

- flowering strips
- intercrops
- crop rotation
- Diversity of soil organisms, insect, animals and plants
- Diversity of crops

**Disadvantages** of an increase in biodiversity: pest insects, wolves and economic disadvantages

Increasing the diversity of crop rotations is something most farmers want to do but **lack marketing opportunities**

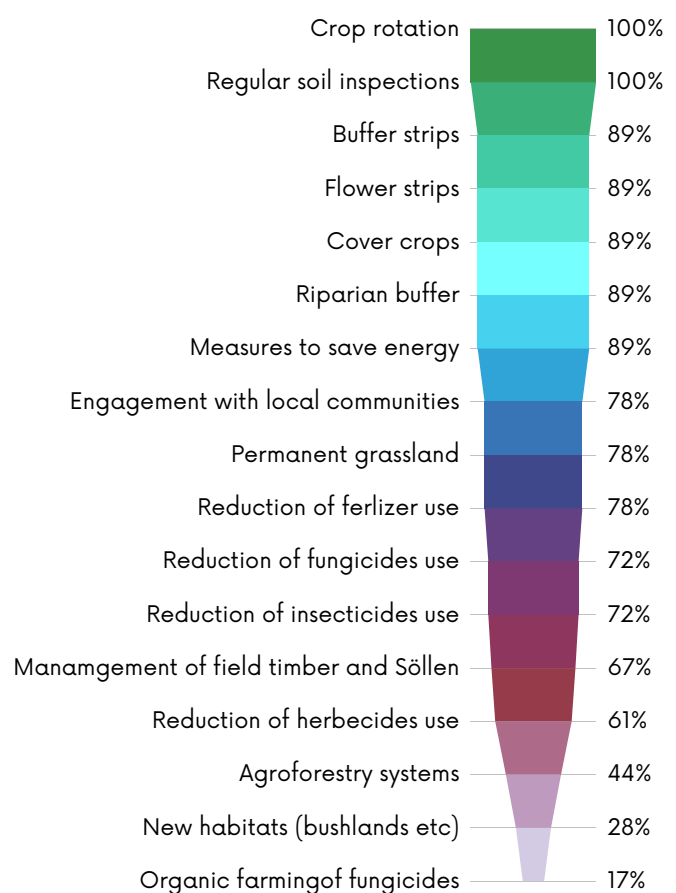
" And what is important is marketing. There has to be a market for everything."

**Cover crops** are perceived to have a positive effect on soil fertility, but farmers mention difficulties in finding the right crops and establishing a system that works for them:

"About cover crops, you also have to be careful with the species which can survive in our region, whether it works or not in our region"

## BIODIVERSITY IN PRACTICE

**What biodiversity measure is considered as highly effective according to farmers?**



## PUBLIC POLICIES & PROGRAMS

### SUBSIDIES

Almost all farmers receive subsidies for **flowering strips**. Some farmers are additionally involved in **local/regional programs** (KULAB, Verein Rheinische Kulturlandschaft, other state funded programs)

### ADVANTAGES



Respondents acknowledge that these new programs and regulations **have improved agricultural practices** a lot compared to previous generation, in regards of sustainability.



Farmers take into account the type of subsidies, the costs, the practicability of a program when deciding to join.



Farmers see their involvement in the **local community** (e.g. school visits) and **knowledge sharing** with the neighboring farms as an **important** part of their work. Farmers in Brandenburg often see people from Berlin as their target group.



Time spent in the office for administration is constantly increasing

"All this paperwork has to be kept as light as possible"



Stricter monitoring and little flexibility

"In terms of control, we are flown over once a week and they record everything we do or do not do on the field or how does it look or does not look like."



Fast changes in regulations (nearly every year)

"Now for every little thing there is a new regulation and again an innovation and everything is pulled tighter"

### SOLUTIONS

Respondents call for more freedom, autonomy and independence when implementing biodiversity enhancing practices. They call for **objective-oriented policies & flexible funding applications**.

## ORGANIC AGRICULTURE

Respondents are **not against** organic agriculture but choose conventional for:

- Financial reasons
- They believe organic agriculture can not feed the world.
- They choose the **land sparing approach** (vs land sharing). Preference for intensive agriculture to leave plots for flowerings strips.



## DRIVERS OF CHANGE

### MOTIVATIONS

- **Economic reasons:** monetary gains
- **Healthy ecosystems**
- **Generational changes:** handing over healthy soils to next generations

### LIMITATIONS

- Increasing level of bureaucracy
- High prices for local mixtures seeds
- Financial losses (inputs, investments, lower yields)
- Lack marketing opportunity
- Practicability
- Availability of seeds

## ASPIRATIONS & CHALLENGES

Success was mostly defined in **financial terms**. **Personal happiness** was also considered very important.

### Levers to success:

Technical innovation, policy changes, changing market prices, direct marketing & the establishment of local production chains

### CHALLENGES

