

# CONTEXT PROFILE

 GERMANY



## FARMER

Jörg Schwarting



## INNOVATION

Automatic milk system, selection gate and grazing



[Video](#)



## MAIN DOMAIN OF THE INNOVATION

Animal management



## SOIL TYPE

Gley



## FINANCE/INVESTMENT

High



## AGROCLIMATIC AREA

Atlantic central



## MANAGEMENT

Pasture dairy



## MARKET

Global



## CLIMATE

Moderate rainfall



## TECHNICAL

Difficult



## SOCIAL

Full-time farmer

# CONTEXT PROFILE

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| Case Study: DE_06  | Agroclimatic Zone |                  |                |                |        |                   |                   |                     |                     |
|--|-------------------|------------------|----------------|----------------|--------|-------------------|-------------------|---------------------|---------------------|
| Item (Key Innovation Elements)   | Alpine            | Atlantic Central | Atlantic North | Atlantic South | Boreal | Continental North | Continental South | Mediterranean North | Mediterranean South |
| Selection gate for grazing in combination with an automated milking system | +++               | +++              | +++            | +++            | +++    | +++               | +++               | +++                 | +++                 |
| Grass availability to move dairy cows                                      | ++                | +++              | +++            | +++            | ++     | +++               | +++               | ++                  | ++                  |
| Rotational grazing system  | +++               | +++              | +++            | +++            | +++    | +++               | +++               | +++                 | +++                 |
| Use of legumes and herbs   | +++               | +++              | +++            | +++            | +++    | +++               | +++               | +++                 | +++                 |
| Good farm infrastructure   | ++                | ++               | ++             | ++             | ++     | ++                | ++                | ++                  | ++                  |

+++ Strong transferability
++ Slightly limited transferability
+ Very limited transferability
× Generic information/not relevant

## Implementation Gaps

- Grassland management knowledge
- Cost of investment in infrastructure
- Land near farmyard
- Two grazing blocks

## Research Gaps

- Grass intake of individual cows

## Suggestions to Adapt

- Selection gates could also be used for a three block system (ABC system)
- Choose grass mixtures that fit in the agroclimatic zone

# COST-BENEFIT ANALYSIS

## INVESTMENT COSTS

|   |                          |
|---|--------------------------|
| Total initial investment costs at start up:                                       | low                      |
| • Initial authorisation costs (e.g. sanitary, veterinary, etc.)                   | not applicable/not known |
| • Initial advisory costs  | not applicable/not known |
| • Initial buildings and machineries   | not applicable/not known |
| • Initial certification costs   | not applicable/not known |
| • Initial working capital (personal qualification, marketing and promotion, etc.) | not applicable/not known |

## ON-GOING COSTS

|  |                          |
|--|--------------------------|
| On-going advisory costs                | not applicable/not known |
| On-going certification costs           | not applicable/not known |
| On-going buildings and machinery costs | not applicable/not known |
| On-going working capital               | not applicable/not known |

## BENEFITS RELATIVE TO ORIGINAL SYSTEM

### ◦ Economic

|  |                          |
|--|--------------------------|
| Reduction in energy consumption (electricity; fuel consumption)                  | not applicable/not known |
| Reduction in input use (fertilizers; pesticides; feed) etc.                      | not applicable/not known |
| Payback period   | not applicable/not known |
| Product value added  | not applicable/not known |
| Additional farm income through agroecological/agri-environmental payment schemes | not applicable/not known |

### ◦ Environmental

|                                       |                          |
|---------------------------------------|--------------------------|
| Animal feed self-sufficiency increase | high                     |
| Biodiversity increase                 | not applicable/not known |
| Improved nitrogen cycling             | not applicable/not known |
| Soil regeneration                     | not applicable/not known |
| Animal health and welfare improvement | high                     |

### ◦ Social

|                                |      |
|--------------------------------|------|
| Workload reduction             | high |
| Engagement of young generation | high |

# Literature

## National Language

[https://www.stichtingweidegang.nl/images/downloads/Stichting\\_Weidegang\\_RobotWeiden.pdf](https://www.stichtingweidegang.nl/images/downloads/Stichting_Weidegang_RobotWeiden.pdf)

## English

<https://www.teagasc.ie/news--events/daily/dairy/getting-the-basics-right--robotic-milking>