CONTEXT PROFILE

GERMANY

FARMER
Stilla Seemann

INNOVATION
Restructuration, clover grass cultivation on arable land

Video

MAIN DOMAIN OF THE INNOVATION
Improvement of nutrient cycle

SOIL TYPE
Peat

FINANCE/INVESTMENT
Mid

AGROCLIMATIC AREA
Atlantic central

MANAGEMENT
Pasture dairy

MARKET
Global

CLIMATE
Moderate rainfall

TECHNICAL
Easy

SOCIAL
Full-time farmer

All contents of this document are expert opinions of the G4AE Scientific Technical Working Group

CONTEXT PROFILE

GERMANY

Case Study: DE_15	Agroclimatic Zone								
Item (Key Innovation Elements)	**Alpine**	**Atlantic Central**	**Atlantic North**	**Atlantic South**	**Boreal**	**Continental North**	**Continental South**	**Mediterranean North**	**Mediterranean South**
Convert full housing management to a grazing system	++	+++	+++	+++	+++	+++	+++	+++	+++
Convert maize to grass clover	X	+++	+++	+++	X	+++	+++	X	+
Change genetics from Holstein Frisian to Jersey	+++	+++	+++	+++	+++	+++	+++	+++	+++

+++ **Strong transferability** ++ **Slightly limited transferability** + **Very limited transferability** X **Generic information/not relevant**

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Implementation Gaps

- Economic, cultural and socioeconomic issues (motivation and values of the farmer)
- Regional constraints, like
  - Steep landscape with limits on grazing for cows
  - Wild animals (predators)
  - Short grazing period, hard winter
  - Dry summer period (no grazing during summer possible)

Research Gaps

- Socioeconomic approach how to transform to sustainable farming systems

Suggestions to Adapt

- Switch to small ruminants
- Breeding of crops that are adapted to the system, e.g. tolerant to drought and flooding
- Education and awareness of young farmers

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COST-BENEFIT ANALYSIS

INVESTMENT COSTS

Total initial investment costs at start up:	mid
• Initial authorisation costs (e.g. sanitary, veterinary, etc.)	low
• Initial advisory costs	high
• Initial buildings and machineries	low
• Initial certification costs	low
• Initial working capital (personal qualification, marketing and promotion, etc.)	high

ON-GOING COSTS

On-going advisory costs	mid
On-going certification costs	low
On-going buildings and machinery costs	low
On-going working capital	mid

BENEFITS RELATIVE TO ORIGINAL SYSTEM

- **Economic**

Reduction in energy consumption (electricity; fuel consumption)	high
Reduction in input use (fertilizers; pesticides; feed) etc.	high
Payback period	high
Product value added	none or low
Additional farm income through agroecological/agri-environmental payment schemes	not applicable/not known

- **Environmental**

Animal feed self-sufficiency increase	high
Biodiversity increase	high
Improved nitrogen cycling	high
Soil regeneration	high
Animal health and welfare improvement	high

- **Social**

Workload reduction	not applicable/not known
Engagement of young generation	none or low

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Literature

English

- https://onlinelibrary.wiley.com/doi/full/10.1111/gfs.12639
- https://www.sciencedirect.com/science/article/pii/S2772283X22007701
- https://www.sciencedirect.com/science/article/abs/pii/S1871141323001191
- https://www.sciencedirect.com/science/article/pii/S0022030221009486
- https://www.sciencedirect.com/science/article/pii/S0022030206724729

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