

CONTEXT PROFILE

 GERMANY



FARMER

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INNOVATION

Water infrastructure for grazing



[Video](#)



MAIN DOMAIN OF THE INNOVATION

Animal management



SOIL TYPE

Gley



FINANCE/INVESTMENT

Low



AGROCLIMATIC AREA

Atlantic central



MANAGEMENT

Pasture dairy



MARKET

Global



CLIMATE

Moderate rainfall



TECHNICAL

Difficult



SOCIAL

Full-time farmer

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Case Study: DE_05	Agroclimatic Zone								
Item (Key Innovation Elements)	Alpine	Atlantic Central	Atlantic North	Atlantic South	Boreal	Continental North	Continental South	Mediterranean North	Mediterranean South
Clean municipal (public) water available close to the farm	+	+	+	+	+	+	+	+	+
Simple to make water troughs	+++	+++	+++	+++	+++	+++	+++	+++	+++
Pipelines to all fields	++	++	++	++	++	++	++	++	++

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

Implementation Gaps

- Clean municipal water
- Knowledge on maintenance of the system
- Sufficient finances

Research Gaps

- None

Suggestions to Adapt

- More robust water infrastructure requiring less maintenance

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	low
• Initial buildings and machineries	mid
• Initial certification costs	low
• Initial working capital (personal qualification, marketing and promotion, etc.)	low

ON-GOING COSTS

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

BENEFITS RELATIVE TO ORIGINAL SYSTEM

◦ Economic

Reduction in energy consumption (electricity; fuel consumption)	none or low
Reduction in input use (fertilizers; pesticides; feed) etc.	none or low
Payback period	high
Product value added	high
Additional farm income through agroecological/agri-environmental payment schemes	none or low

◦ Environmental

Animal feed self-sufficiency increase	none or low
Biodiversity increase	none or low
Improved nitrogen cycling	none or low
Soil regeneration	none or low
Animal health and welfare improvement	high

◦ Social

Workload reduction	none or low
Engagement of young generation	none or low

Literature

English

- https://www.teagasc.ie/media/website/rural-economy/farm-management/water_article.pdf
- <https://www.ncbi.nlm.nih.gov/books/NBK600589/>