CONTEXT PROFILE





FARMER Annabelle Gérard & Christian Friebe



INNOVATION Holistic management



MAIN DOMAIN OF THE INNOVATION Improvement of grassland management



AGROCLIMATIC AREA Atlantic central



CLIMATE Little rainfall



SOIL TYPE Sand

I man	
hes-	

MANAGEMENT Pasture dairy



TECHNICAL Easy











FINANCE/INVESTMENT Low

MARKET Local-rural

SOCIAL Full-time farmer



CONTEXT PROFILE GERMANY

Case Study: DE_10	Agroclimatic Zone								
Item (Key Innovation Elements)	Alpine	Atlantic Central	Atlantic North	Atlantic South	Boreal	Continental North	Continental South	Mediterranean North	Mediterranean South
System approach on field and farm scale	X	X	X	X	Х	Х	Х	X	X
Complex farm situation. Dairy is a part of a full range of farming activities including laying hens (egg), vegetables, flowers, forest, agri-tourism, pigs.	Х	Х	Х	Х	Х	Х	Х	Х	Х
Combining low milk production on a sandy soil (reduced water availability) with adapted grazing management (early use, short grazing time on each paddock, greater grass waste)	Х	Х	X	Х	Х	Х	Х	X	Х
Labour intensive	X	X	X	X	Х	Х	Х	X	X
Direct selling of products to consumers	+++	+++	+++	+++	+++	+++	+++	+++	+++



+++ Strong transferability ++ Slightly limited transferability ++ Very limited transferability

Generic information/not relevant



Funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Commission . Neither the European Union nor the European Commission can be held responsible for them.

Implementation Gaps

- System approach: relies on resources (labour, finances) outside dairy
- Fits for small herds
- Labour intensive

Research Gaps

- Effect of single aspects at the management scale are known, but the effect at system level is largely unknown.
- Effect of grass residues (organic material) on soil fertility and water retention capacity not well researched.



Funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Commission . Neither the European Union nor the European Commission can be held responsible for them.

Suggestions to Adapt

• Very specific situation that involves the setup of the whole farm and relies on a number and interrelated of set prerequisites. Transferability is therefore limited, parts could be adopted.

COST-BENEFIT ANALYSIS

INVESTMENT COSTS

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

On-going advisory costs

On-going certification costs

On-going buildings and machinery costs

On-going working capital

BENEFITS RELATIVE TO ORIGINAL SYSTEM

• Economic

Reduction in energy consumption (electricity; fuel consumption)

Reduction in input use (fertilizers; pesticides; feed) etc.

Payback period

Product value added

Additional farm income through agroecological/agri-environmental payment schemes

Added value through solidarity farming (workload for marketing and processing included!)

Financial circular economy with local markets

• Environmental

Animal feed self-sufficiency increase

Biodiversity increase

Improved nitrogen cycling

Soil regeneration

Animal health and welfare improvement

• Social

Workload reduction

Engagement of young generation

Social ties with local customers, transparency of farming and production model to consumers

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Commission . Neither the European Union nor the European Commission can be held responsible for them.



Funded by the European Union

not applicable/not known
not applicable/not known
not applicable/not known
not applicable/not known

mid
mid
high

mid
mid
high
high
none or low

high
high

Literature

English

Organic farming system:

• <u>https://you-will-grow.net/</u>

Organic matter and grassland:

- <u>https://www.sciencedirect.com/science/article/pii/S0929139320306302</u>
- <u>https://www.sciencedirect.com/science/article/pii/S001670612100536X</u>



Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Commission . Neither the European Union nor the European Commission can be held responsible for them.