

CONTEXT PROFILE

 ROMANIA



FARMER

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INNOVATION

Dairy farming with automated milking machines



[Video](#)



MAIN DOMAIN OF THE INNOVATION

Workload reduction



AGROCLIMATIC AREA

Continental south



CLIMATE

Moderate rainfall



SOIL TYPE

Clay



MANAGEMENT

Pasture dairy



TECHNICAL

Computer-based



FINANCE/INVESTMENT

High



MARKET

Local-rural



SOCIAL

Part-time farmer

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Case Study: RO_11	Agroclimatic Zone								
Item (Key Innovation Elements)	Alpine	Atlantic Central	Atlantic North	Atlantic South	Boreal	Continental North	Continental South	Mediterranean North	Mediterranean South
New milking parlour with automated washing and improved entry and exit	+++	+++	+++	+++	+++	+++	+++	+++	+++
Increased number of units in milking parlour	+++	+++	+++	+++	+++	+++	+++	+++	+++
Computer literacy	+++	+++	+++	+++	+++	+++	+++	+++	+++
Reduced workload for employees	+++	+++	+++	+++	+++	+++	+++	+++	+++
Less waiting time for cows for milking	+++	+++	+++	+++	+++	+++	+++	+++	+++
Farm co-operative	+++	+++	+++	+++	+++	+++	+++	+++	+++

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

Implementation Gaps

- Increase in milk quality with the automatic washing
- Reduction in milking time
- Potential to increase cow numbers
- Staff training needs

Research Gaps

- Comparison of milk quality

Suggestions to Adapt

- Demonstration
- Training requirements
- Information about milk quality

COST-BENEFIT ANALYSIS

INVESTMENT COSTS

Total initial investment costs at start up:	low
• Initial authorisation costs (e.g. sanitary, veterinary, etc.)	low
• Initial advisory costs	not applicable/not known
• Initial buildings and machineries	not applicable/not known
• Initial certification costs	low
• 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	low
On-going buildings and machinery costs	high
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	mid
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	not applicable/not known
Biodiversity increase	not applicable/not known
Improved nitrogen cycling	not applicable/not known
Soil regeneration	not applicable/not known
Animal health and welfare improvement	mid

◦ Social

Workload reduction	mid
Engagement of young generation	mid

Literature

English

Lots of grey literature around milk quality impacts of washing routines

- <http://www.positiveaction.info/pdfs/articles/dt8.6p13.pdf>
- <https://doi.org/10.3103/S1068367415040199>
- [DOI: 10.5772/intechopen.113084](https://doi.org/10.5772/intechopen.113084)