

# CONTEXT PROFILE

 ROMANIA



## FARMER

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## INNOVATION

Efficient and Eco-friendly model



[Video](#)



## MAIN DOMAIN OF THE INNOVATION

Workload reduction



## AGROCLIMATIC AREA

Continental south



## CLIMATE

Moderate rainfall



## SOIL TYPE

Clay



## MANAGEMENT

Pasture dairy



## TECHNICAL

Easy



## FINANCE/INVESTMENT

Low



## MARKET

Local-rural



## SOCIAL

full-time farmer

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Case Study: RO_03	Agroclimatic Zone								
Item (Key Innovation Elements)	Alpine	Atlantic Central	Atlantic North	Atlantic South	Boreal	Continental North	Continental South	Mediterranean North	Mediterranean South
Modern stable with drainage system	+++	+++	+++	+++	+++	+++	+++	+++	++
Collection and distribution of manure	++	+++	+++	+++	+++	+++	+++	+++	++
Less demand for work with the stable	+++	+++	+++	+++	+++	+++	+++	+++	++

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

## Implementation Gaps

- Some investment needed
- Required water and electricity
- Pit sizing to be calculated in relation with the number of animals
- Availability of labs to carry out manure analysis
- Adpat horse power tractor to the manure quantity

## Research Gaps

- Implications of the manure distribution on soils
- Implications of manure distribution on soil biodiversity (weeds included)

## Suggestions to Adapt

- Further improve the barn (cleaning systems; Feeding systems; integrated management systems)
- Planning the timing of manure spreading in relation with the national rules
- Establish the nutrient value of manure. Calculate the quantity of artificial manure that is replaced

# COST-BENEFIT ANALYSIS

## INVESTMENT COSTS

Total initial investment costs at start up:	mid
• Initial authorisation costs (e.g. sanitary, veterinary, etc.)	mid
• Initial advisory costs	low
• Initial buildings and machineries	high
• Initial certification costs	mid
• 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.	none or low
Payback period	mid
Product value added	mid
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	high
Animal health and welfare improvement	not applicable/not known

### ◦ Social

Workload reduction	mid
Engagement of young generation	mid

# Literature

## English

- Julia Köninger, Emanuele Lugato, Panos Panagos, Mrinalini Kochupillai, Alberto Orgiazzi, Maria J.I. Briones, Manure management and soil biodiversity: Towards more sustainable food systems in the EU, *Agricultural Systems*, Volume 194, 2021, 103251, ISSN 0308-521X, <https://doi.org/10.1016/j.agry.2021.103251>
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