

CONTEXT PROFILE

 ROMANIA



FARMER

Sebastian Vaida



INNOVATION

Rotational management system in mixed dairy and meat farm



[Video](#)



MAIN DOMAIN OF THE INNOVATION

Improvement of grassland management



SOIL TYPE

Loam



FINANCE/INVESTMENT

Mid



AGROCLIMATIC AREA

Continental south



MANAGEMENT

Pasture beef



MARKET

Local-rural



CLIMATE

Moderate rainfall



TECHNICAL

Easy



SOCIAL

full-time farmer

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Case Study: RO_10	Agroclimatic Zone								
Item (Key Innovation Elements)	Alpine	Atlantic Central	Atlantic North	Atlantic South	Boreal	Continental North	Continental South	Mediterranean North	Mediterranean South
Pasture system with combined grazing and mowing	+++	+++	+++	+++	+++	+++	+++	+++	+++
Utilize the pasture crop at the optimal nutritional level	++	+++	+++	+++	+++	+++	+++	+++	+++
Increasing the protein and energy output from the pasture area	+++	+++	+++	+++	+++	+++	+++	+++	+++
Rotational grazing	+++	+++	+++	+++	+++	+++	+++	+++	+++
Distinct pastures for dairy and meat cows	+++	+++	+++	+++	+++	+++	+++	+++	+++

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

Implementation Gaps

- It should be mentioned that the mowed pasture could also be preserved as silage (or haylage) bales and fed during the summer in areas where the haymaking is difficult due to moist weather.
- The combined grazing and mowing for hay production can be used in spring season, but not in autumn (rainy days can disturb haymaking)

Research Gaps

- It is probably clear that the optimal nutritional level is reached in the crop by harvesting it in an early stage of development (Item 2). But if the optimal total output of energy and protein is reached by this system is maybe less investigated (Item 3). However, it is true that the mowing machine takes a higher harvest per ha than grazing animals.
- Best combinations of species to be managed with grazing-mowing cycles;
- Optimal stocking rate;

Suggestions to Adapt

- Difference in seed composition between the pasture for dairy cows (clover) and beef cows (Lucerne);
- Resewing is done on 10 % of the pasture (10-15 ha) or on 30 % of the pasture (every 5:th year).
- The systems seems useful also for sheep farms

COST-BENEFIT ANALYSIS

INVESTMENT COSTS

Total initial investment costs at start up:	low
• Initial authorisation costs (e.g. sanitary, veterinary, etc.)	not applicable/not known
• Initial advisory costs	low
• Initial buildings and machineries	not applicable/not known
• Initial certification costs	not applicable/not known
• Initial working capital (personal qualification, marketing and promotion, etc.)	mid

ON-GOING COSTS

On-going advisory costs	low
On-going certification costs	not applicable/not known
On-going buildings and machinery costs	low
On-going working capital	low

BENEFITS RELATIVE TO ORIGINAL SYSTEM

◦ Economic

Reduction in energy consumption (electricity; fuel consumption)	none or low
Reduction in input use (fertilizers; pesticides; feed) etc.	mid
Payback period	mid
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	mid
Biodiversity increase	mid
Improved nitrogen cycling	none or low
Soil regeneration	mid
Animal health and welfare improvement	none or low

◦ Social

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

Literature

English

- Surprisingly, long-term investigations (8 to 14 years) show that mowing resulted in higher number of plants indicating good management at mowing compared to grazing. Tälle, M., Fogelfors, H., Westerberg, L. and Milberg, P. 2015. The conservation benefit of mowing vs grazing for management of species-rich grasslands: a multi-site, multi-year field experiment. *Nordic Journal of Botany*, (33), 6, 761 - 768. <http://dx.doi.org/10.1111/njb.00966>