

CONTEXT PROFILE







INNOVATIONExtending the grazing season length





MAIN DOMAIN OF THE INNOVATION

Improvement of nutrient cycle



AGROCLIMATIC AREA

Atlantic north



CLIMATE

Moderate rainfall



SOIL TYPE

Gley



MANAGEMENT

Pasture dairy



TECHNICAL

Computer-based



FINANCE/INVESTMENT

Low



MARKET

Local-rural



SOCIAL

Full-time farmer





Case Study: IE_13	Agroclimatic Zone								
Item (Key Innovation Elements)	Alpine	Atlantic Central	Atlantic North	Atlantic South	Boreal	Continental North	Continental South	Mediterranean North	Mediterranean South
Long term program to improve soil fertility	+++	+++	+++	+++	+++	+++	+++	++	++
Improve grass production by incorporating white clover for the grazing paddocks and red clover for the silage paddocks	++	+++	+++	+++	+++	+++	+++	++	++
Improve access to the grazing paddocks (cambered roadways; astroturf on high volume areas; multiple access points etc) - positive effects improve cow flow; reduce lameness; increase the number of grazing days	++	+++	+++	++	+++	++	++	++	++













Implementation Gaps

- Establish the cost/benefits of the soil fertility program, grass production improvements and access to grazing paddocks;
- Use other materials to improve the farm roads;

Research Gaps

- Impact on the biodiversity of the farm is not clear;
- Economic/animal welfare benefits;

Suggestions to Adapt

- Adapt the management of the soil fertility program to the farm/soil needs;
- Use other plant species adapted to the local conditions to improve grass production (grazing & silage production);





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	mid
Initial certification costs	not applicable/not known
Initial working capital (personal qualification, marketing and promotion, etc.)	low

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	high
	not applicable/not known

BENEFITS RELATIVE TO ORIGINAL SYSTEM

Economic

Reduction in energy consumption (electricity; fuel consumption)	high
Reduction in input use (fertilizers; pesticides; feed) etc.	high
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	high
Biodiversity increase	high
Improved nitrogen cycling	high
Soil regeneration	high
Animal health and welfare improvement	not applicable/not known

Social

Workload reduction	not applicable/not known
Engagement of young generation	not applicable/not known

Literature

English

- Salomon, E. and Spörndly, E. 2016. Materials to prevent trampling damage on pasture areas subjected to high dairy cow traffic. In: Höglind et al (Eds.) Proceedings of the 26th General Meeting, Trondheim, Norway. 4-8 September, pp 113-115.
- Berry, E., Stoddart, M. och Broughan, J. 2008. Locomotion scoring of cattle using a lameness-speed index on different types of track. Veterinary Record, vol. 163, pp 601-602.