

CONTEXT PROFILE

 THE NETHERLANDS



FARMER

Auke Spijkerman



INNOVATION

Optimising seasonal calving for sustainable grazing



[Video](#)



MAIN DOMAIN OF THE INNOVATION

Animal management



AGROCLIMATIC AREA

Atlantic central



CLIMATE

Moderate rainfall



SOIL TYPE

Sand



MANAGEMENT

Pasture dairy



TECHNICAL

Easy



FINANCE/INVESTMENT

Low



MARKET

Global



SOCIAL

Full-time farmer

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Case Study: NL_10	Agroclimatic Zone								
Item (Key Innovation Elements)	Alpine	Atlantic Central	Atlantic North	Atlantic South	Boreal	Continental North	Continental South	Mediterranean North	Mediterranean South
Strategic alignment of calving and pasture use	+++	+++	+++	+++	+++	+++	+++	+++	+++
Use of seasonal calving to optimize forage utilization	+++	+++	+++	+++	+++	+++	+++	+++	+++
Crossbreeding for improved resilience and grazing efficiency	+++	+++	+++	+++	+++	+++	+++	+++	+++
Intensive grazing with frequent field use	++	+++	+++	+++	++	++	+	+	+

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

Implementation Gaps

- Achieving and maintaining excellent cow fertility

Research Gaps

- Applicability of the system in regions with lower rainfall or more variable climates
- Long-term impacts of seasonal calving on animal health and productivity
- Resilience of the system under drought conditions
- Potential need for grassland renovation in the long term

Suggestions to Adapt

- Consider allowing strategic transfer of some cows from spring to autumn calving by extending lactation periods
- Less intensive grazing in regions with less rainfall and grass growth

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

ON-GOING COSTS

On-going advisory costs	low
On-going certification costs	mid
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)	high
Reduction in input use (fertilizers; pesticides; feed) etc.	high
Payback period	high
Product value added	high
Additional farm income through agroecological/agri-environmental payment schemes	high

◦ Environmental

Animal feed self-sufficiency increase	high
Biodiversity increase	high
Improved nitrogen cycling	not applicable/not known
Soil regeneration	not applicable/not known
Animal health and welfare improvement	high

◦ Social

Workload reduction	high
Engagement of young generation	high

Literature

English

- [https://www.journalofdairyscience.org/article/S0022-0302\(10\)00095-0/pdf](https://www.journalofdairyscience.org/article/S0022-0302(10)00095-0/pdf)