Resilience for Dairy (R4D) has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 101000770

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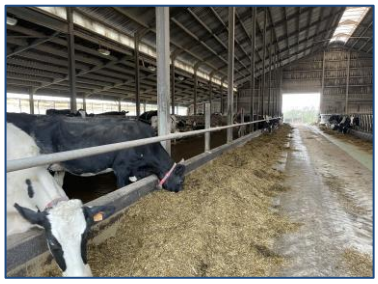
Pilot Farm description
Hautbellain - 2021

Luxembourg

Innovations



Farming milestones

2009: Construction of the dairy cow

2011: Commissioning of 1st milking robot and reconstruction of young cattle barn

2014: Expansion of the cow barn and commissioning of the 2nd milking robot

2017: Farm takeover from his parents

2019: Construction of a new calf barn

The herd

- 176 Livestock Units (LU)
- 119 dairy cows
  Breeds : Holstein Friesian
- 93 dairy heifers
- Calving period : all year
- Age at first calving : 25 months

Agricultural Area

181 ha AA

- 28 ha perm. grassland
- 24 ha temp. grassland
- 24 ha Maize silage
- 40 ha barley/ 25 ha wheat
- 40 ha rapeseed and potatoes
- 76 ha main fodder area
- 68 % of grassland / forage area

Workforces

- 2 labour units (Full Time Equivalent)
- 60 dairy cows/FTE & 550.000 l /FTE
- **Aims** : - increase efficiency
  - Work facilitation

Areas of interest

- Digitalisation
- Data synchronization
- Staff management

Main buildings and Equipment

- Cubicle walk-in barn with 2 milking robots
- Cubicle walk-in barn for young cattle
- Straw barn for calves with single and group boxes

Production / Technical results

- 1.100.000 liters of milk produced (99 % sold)
- 4,1 % fat & 3,42 % protein content
- Stocking rate: 2,3 LU / ha forage area
- 9.250 l of milk /cow /year & 14.470 l/ha forage area

Strengths

- Organisation (standard operating procedures)
- many different pillars of income
- many workforces, a lot of family members involved

Weaknesses

- administrative expenses (land in 2 countries)
- diversification (interest not 100 % focused)

Opportunities

- good location (soil, precipitation)
- located near border, available land abroad
- interest in digitalization

Threats

- potato cultivation could disappear
- father retires soon

Farmer's strategy for a "resilient" system

- Diversification (several pillars)
- Cost Savings
- Increase efficiency
- Long crop rotation

Aspirations / Needs for the future

- Drive digitalisation forward
- Increase automation

Improvement project - objectives

- Reduce workload
- Hire workers

ECONOMY & LABOUR

- Increase efficiency
- Save concentrates
- Reduce Energy

RESSOURCE Efficiency

PROJECT

- Increase animal welfare
- Reduce environmental impacts

ENVIRONMENT ANIMAL Wellbeing

Project

"Resilience 4 Dairy" is a European project involving 15 European countries and 18 partners. R4D is a thematic network on innovations and aims to support EU dairy farming in these regions where dairy farming is a main economic activity.

Lycée Technique Agricole

R4D pilot farmers are involved in a National Dairy Akis group where needs, solutions and knowledge are exchanged with other farmers, advisors and scientists on their way to build a resilient system. More information https://resilience4dairy.eu/