



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

Samantha McCarroll Pilot Farm description Fintona, Co. Tyrone - 2022

N. Ireland

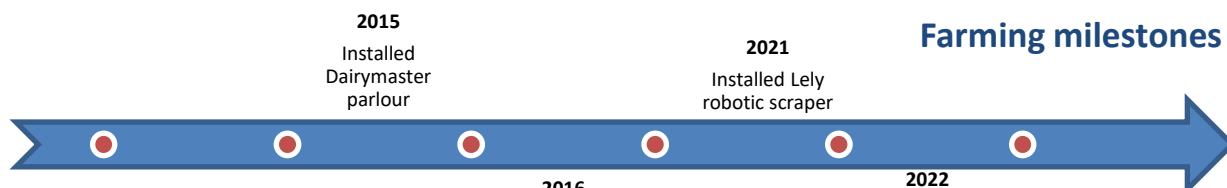


Innovations

Socio-economic
Resilience/
Environment



Farming milestones



The herd

- 137 Livestock Units (LU)
- 95 dairy cows
Breed: Jersey x Friesian and Irish Holstein Friesian
- 20 dairy heifers
- 28 dairy calves
- Calving period : Block Calving – Spring calving over 10 weeks
- Age at first calving : 24 months

Agricultural Area

- **66 ha Farm**
- 19ha rented
- All permanent grassland
- Stocking rate: 2.08LU/ha forage area
- Extended grazing system – cows grazing by day from mid February weather permitting
- 12 hour strip grazing during summer

Workforces

- Farmer (Full time)
- Farming Partnership with Husband
- Casual labour – relief milkers
- **Aims: Make best use of time**

Areas of interest

- Forage quality
- Grassland management – milk from forage
- Sustainability

Main buildings and Equipment

- Low emission slurry spreading – dribble bar, done by contractor
- Dairymaster 10 point swingover, plate cooler, variable rate milk pump
- Lely Robotic scraper
- Cut and weigh equipment for measuring grass, used with Agrinet to optimally utilise grass
- 110 full size cubicles

Production / Technical results

- Yield – 5460 litres
- Feed – 0.699T
- Milk from forage: 3907 litres
- 4.65% butterfat, 3.71% protein
- Milk solids – 456.46kg
- Milk sold to Glanbia Milk
- Cost of production - £0.317/litre (including family labour and finance)
- Net Profit - £394/cow
- Sexed semen used for 3 weeks, beef bull after



Strengths

- Maximising grassland utilisation through extended grazing
- Excellent cow fertility
- Excellent milk from forage and milk solids



Weaknesses

- High rainfall area and farm is considered wet
- Lower cow yield compared to other systems



Opportunities

- Net Zero Farming – already ahead of most farms
- Grow more grass – increased soil fertility



Threats

- Increasing Feed and Fertiliser costs

Farmer’s strategy for a “resilient” system

Maximising use of grass through extended grazing and strip grazing herd. Excellent herd fertility with good quality cows, use of sexed semen in first 3 weeks of breeding to breed replacements, with other cows put to the bull to breed beef calves for sale.

Aspirations / Needs for the future

Increase grass production through improved soil fertility and similar amount of chemical nitrogen, increasing milk production – components and litres. Strategising meal use through increasing feeding during peak milk production.

Improvement project - objectives

- Reduce work load



ECONOMY & LABOUR

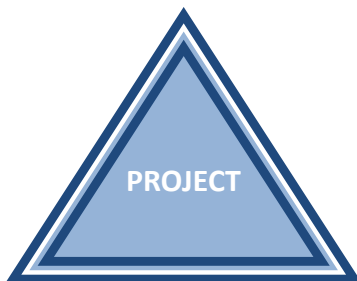
- Optimize dairy gross margin
- Keep a good global profitability for a knowledge transfer centre

- Keep concentrate/cow similar

- Save water consumption



RESOURCE Efficiency



- Keep a good mineral balance
- Improve forage self-sufficiency

ENVIRONMENT ANIMAL Wellbeing



Partners



“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.



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/>