



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

Hugh Harbison Pilot Farm description Aghadowey - 2022

N. Ireland

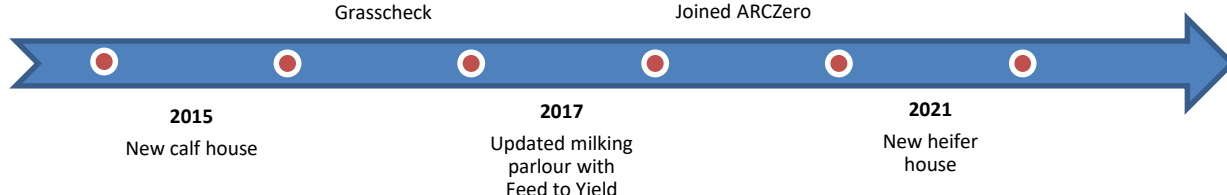


Innovations

Socio-economic
Resilience /
Environment



Farming milestones



The herd

- 240 Livestock Units (LU)
- 180 dairy cows
- Breed: Holstein-Cross
- 50 dairy heifers
- 50 calves
- Calving period : Block Calving - autumn
- Age at first calving : 24 months

Agricultural Area

- **108 ha Farm**
- 80 ha owned
- 28 ha rented
- Stocking rate: 2.85LU/ha forage area
- Permanent grassland
- Multi Species Swards – 7ha
- Rotational/strip grazing system
- Grazing 4.5 CE/ha

Workforce

- Farmer (Full time)
- Family help – e.g. Father
- 1 man full time labour
- 1 man part time labour

Areas of interest

- Sustainability
- Conservation
- Forage quality
- Milk quality

Main buildings and Equipment

- Low emissions slurry spreading equipment – trailing shoe
- 20 point swingover – automatic drafting
- 220 full size cubicles
- AG Duo sawdust bedder
- Platemeter
- 28 teat batch calf feeder
- Automatic scrapers

Production / Technical results

- Yield – 8626 litres
- 4.40% butterfat and 3.54% protein
- Feed – 2.51T
- Milk from forage – 3216kg
- Milk solids – 685kg
- Milk sold to Dale Farm Cooperative
- Cost of production – £0.321/litre (incl family Labour)
- Rotational/strip grazing system



Strengths

- Innovative - willing to try new things and take part in R&D.



Weaknesses

- Heavy land – very high clay content, black peat type soils
- High rainfall – over 1000mm annual rainfall



Opportunities

- Net Zero Farming – already ahead of most farms
- Renewables



Threats

- Increasing Feed and Fertiliser costs
- Energy costs
- Decreased milk payments from pre price rise milk contract

Farmer's strategy for a "resilient" system

- Making use of good quality grazed and conserved forage
- Reducing artificial fertiliser usage through the use of clover and multi-species swards
- Operates a compact autumn block calving system, with a 88% in calf rate

Aspirations / Needs for the future

- Continue to reduce fertiliser usage through more use of clover and multi species swards
- Aiming to reach Net Zero carbon emissions on farm through reducing cow size, reduced fertiliser usage, and continuing to maximise technical efficiency

Improvement project - objectives

- Reduce work load
- Reduce concentrate for cow
- Save water consumption
- Reduce cow size
- Reducing artificial fertiliser use
- Optimize dairy gross margin
- Keep a good global profitability for a knowledge transfer centre
- Keep a good mineral balance
- Improve forage self-sufficiency



ECONOMY & LABOUR

PROJECT



RESOURCE Efficiency

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/>