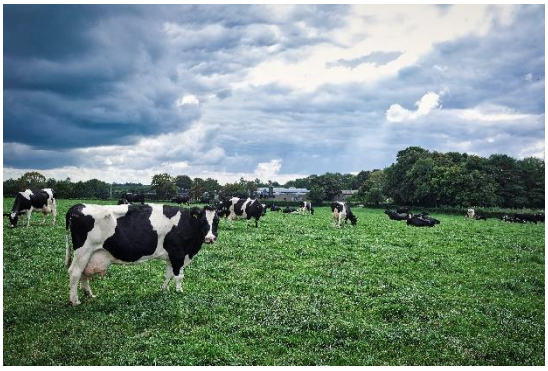
Resilience for Dairy (R4D) has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 101000770

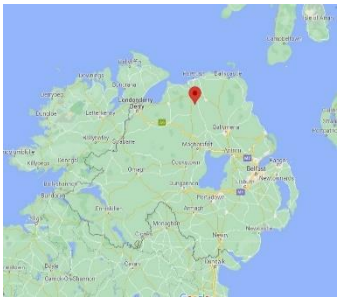
Hugh Harbison
Pilot Farm description
Aghadowey - 2022

N. Ireland

Innovations

Socio-economic Resilience / Environment





Farming milestones

2015
New calf house

2016
Joined Grasscheck

2017
Updated milking parlour with Feed to Yield

2020
Joined ARCZero

2021
New heifer house

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

ECONOMY & LABOUR

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

- Reduce concentrate for cow
- Save water consumption
- Reduce cow size
- Reducing artificial fertiliser use

RESOURCE Efficiency

PROJECT

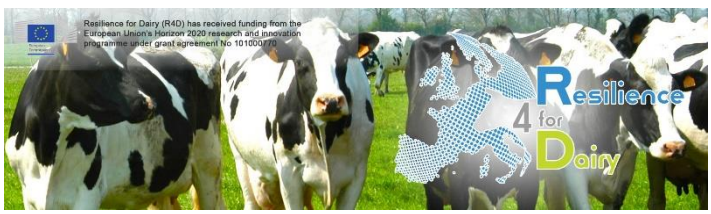
- Keep a good mineral balance
- Improve forage self-sufficiency

ENVIRONMENT ANIMAL Wellbeing

Partners

AgriSearch NI
Driving Excellence & Innovation

"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/