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

Jack Johnston
Pilot Farm description
Ahoghill, Co. Antrim - 2022

N. Ireland

Innovations

Socio-economic Resilience / Environment

Farming milestones

2005
New dairy unit built

2007
Cow numbers increased from 120 to 200

2017
Mark and Jack came home to farm

2017
Joined Grasscheck

2021
26ha purchased

2022
Parlour extension for extra 4 units

The herd

- 417 Livestock Units (LU)
- 275 dairy cows
  Breed: Holstein-Friesian
- 100 dairy heifers
- 100 calves
- 55 beef cattle
- Calving period : Block Calving – autumn, calving over 6 months
- Age at first calving : 24-25 months

Agricultural Area

198 ha Farm

- 68ha rented
- Mainly permanent grassland, 16ha used for growing barley, 7ha used for growing wholecrop rye
- Stocking rate: 2.4LU/ha forage area
- Rotational grazing system
- Autumn calving cows kept in from September, turned out in March

Workforces

- Farmer (Full time), Father and Brother
- 3 relief milkers
- **Aims: Using technology to reduce labour**

Areas of interest

- Forage quality
- Grassland management
- Sustainability

Main buildings and Equipment

- Wind turbine and solar panels
- Low emission slurry spreading – dribble bar
- GPS fertiliser application
- 24 point Dairymaster swingover parlour
- 20 cubic metre Trioliet diet feeder
- 2x Volac automatic calf feeders
- Delaval robotic scrapers

Production / Technical results

- Yield – 8433 litres
- Feed – 2.91T
- Milk from forage: 3050 litres
- 4.06% butterfat, 3.36% protein
- Milk solids – 626kg
- Milk sold to Dale Farm Cooperative
- Rotational grazing system
- Cost of production - £0.31
- Net profit - £887 per cow
- Dairymaster Moomonitor heat detection system

Strengths

- Good grazing platform – able to get cows out early to grass
- Innovative – willing to try new technology and take part in projects

Weaknesses

- Lacking cubicle space for herd expansion
- More part time labour required

Opportunities

- Net Zero Farming – already ahead of most farms
- Improving cow fertility
- Renewables – solar panels and wind turbine on farm

Threats

- Increasing Feed and Fertiliser costs
- Large amount of land on short term lease

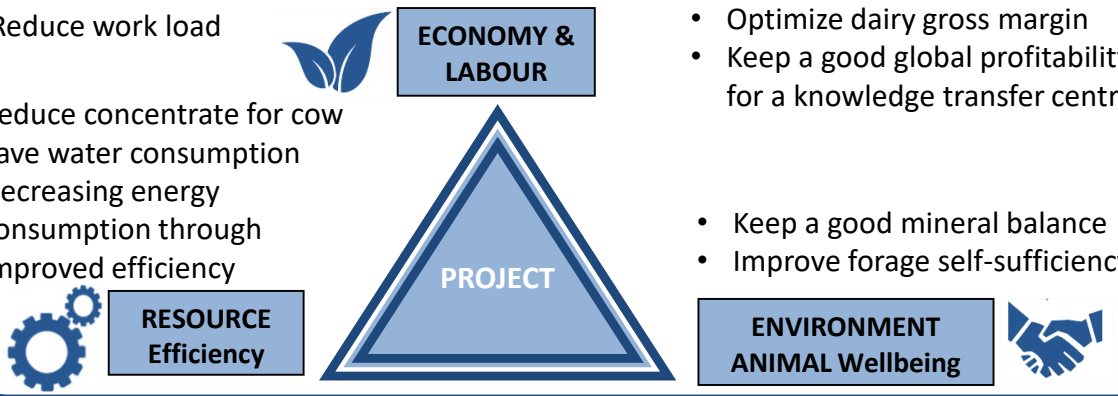
Farmer's strategy for a "resilient" system

Using more home grown feed, including grassland, wholecrop and cereals to reduce bought in concentrate usage. Focussing on longevity of cows through improving fertility and milk solids. Looking to introduce more clover into the grassland swards. Regular reseeding of grassland to maintain grass quality.

Aspirations / Needs for the future

Wanting to increase herd size, however infrastructure and staffing will need to be updated and increased. Wanting to introduce more clover into the grassland swards, however this will require a change in management style to make clover incorporation effective.

Improvement project - objectives



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/