



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

# David Fennelly Pilot Farm description Emo, Co. Laois

Ireland

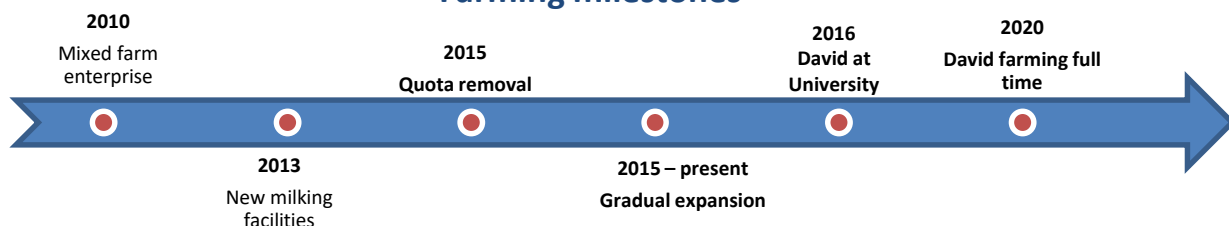


## Innovations

Environment /  
resilience



## Farming milestones



### The herd

- 370 Livestock Units (LU)
- 310 dairy cows  
Breed: Holstein-Friesian
- 80 dairy heifers
- 70 dairy heifer calves
- Compact spring calving system
- Age at first calving : 24 months
- 2 times a day milking

### Agricultural Area

#### 152 ha Farm

- 64 ha rented
- All in permanent grassland
- Stocking rate: 2.5 LU/ha forage area
- Cows graze from February to November
- Calves & heifers graze from Late January to November

### Workforces

- Father & Son Partnership
- 1 full time
- 2 relief milkers for weekend work

### Areas of interest

- Reduction in chemical N
- Optimum stocking rate
- Biodiversity improvement

### Main buildings and Equipment

- Low emission slurry spreading – trailing shoe & dribble bar
- GPS fertilizer application
- Cow monitoring collars
- 20 unit Dairymaster parlour
- Cubicle housing for cows
- Calves winter on mats on slats
- Slatted & concrete slurry stores

### Production / Technical results

- Yield – 6,108 liters
- Feed – 945 kg
- Milk from forage: 4,216 liters
- 4.55% butterfat, 3.70% protein
- Milk solids – 519 kg
- Grass based dairying
- Milk sold to Tirlan
- €0.34 litre cost of production (Incl. all labour)



## Strengths

- Good quality land
- Herd genetic quality
- Innovative –
  - Breeding –compact calving.
  - Pasture – MSS, red/white clover reseeding



## Weaknesses

- Low rainfall area and light land
- High fixed costs



## Opportunities

- Trying to reduce Carbon footprint
- Genetics – more tailored use of sexed and beef semen



## Threats

- Increasing costs
- Public misconception of farming practices
- Environmental legislation

## Farmer's strategy for a "resilient" system

Focussing on breeding a productive, healthy and fertile herd

Reseeding and oversowing with high clover swards.

Making use of multi species swards and to improve drought resilience.

## Aspirations / Needs for the future

Focused on improving soil health and biodiversity on farm.

Breeding strategy change to reduce number of dairy bred calves born and increase the value of the beef cross calves born on the farm.

## Improvement project - objectives

- Maintain a labour efficient work load



**ECONOMY & LABOUR**

- Optimize dairy gross margin

- Maintain a low level of concentrate input per cow while increasing milk yield



**RESOURCE Efficiency**

**PROJECT**

- Reduce fertiliser N use
- Breed healthy productive cows
- Breed quality surplus calves

**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/>