



Fam. Simon ČRETNIK **Pilot Farm Description** Pernovo 12, 3310 Žalec



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

Innovations

Socio-economic Resilience / **Environment / Animal welfare**









Farming milestones

2016

Taking over family farm from parents 2022

High increase in milk yield

2012

Stop using of plough for soil preparation

2021

New Free-Walk barn for dairy cows



The herd

72 Livestock Units (LU)

55 dairy cows

Breeds: Holstein & Brown

21 dairy heifers

Calving period: all year round

Age at first calving: 26 months

Agricultural Area

40 ha AA

- 20 ha Perm. Grassland
- 6 ha Wheat
- 12 ha Maize silage
- 2 ha Temp. Grassland
- 5 ha Forest

Workforces

- 2 labour units (Full Time Equivalent)
- 27 dairy cows & 313 885 kg /FTE
- Aims: Save time, be efficient,
- Aware of animal and environmental friendly housing system for dairy cows

Areas of interest

- Feed management
- Genetics
- High production
- Sensors for early detection of changes

Main buildings and equipment

- FreeWalk barn without cubicles with permeable floor for dairy cows
- **Fullwood Milking Robot**
- 1 Feed Automat for concentrate
- Individual boxes for young calves
 - Collective boxes for calves and heifers

Production / Technical results



- 627 770 kg of milk produced (98 % sold via cooperative)
- 3.90 % fat & 3.48 % protein content
- Stocking rate: 2.1 LU / ha forage area
 - 11 694 kg of milk /cow /year & 18 464 kg /ha forage area
- 1800 kg concentrate/cow/year
- Replacement rate: 22 %
- Breeding criteria
- High-production



Strengths

- Family 2 generations
- High productive cows
- Healthy cows
- High animal wellbeing
- Farmer and consumer friendly housing system
- Low emission system



Weaknesses

- A lot of rented land
- Price for buying land is high
- Small parcels average less than 1 ha



Opportunities

 Improvement in breeding, production and forage quality



Threats

- Climate changes (drought, storms ...)
- Political situation
- Environment impact negative opinion of society, restrictions on farming

Strategy of the farmers to be resilient

Healthy high production cows with low ${\rm CO_2}$ footprint per litre of milk. Using sensors for early detection of diseases. Best welfare possible to achieve max. production with optimal health

Area of interest / Aspirations / Needs for the future

Improving grassland management. Possibility of using alternative medicine for cows because of early detection of changes.

Good balance between work and free time.

Reduce work load



· Private time and family

· Reduce concentrate for cow



RESSOURCE Efficiency



Improve longevity of cows

ENVIRONMENT ANIMAL Wellbeing



Partner



"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/