



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



Resilience4Dairy: Sharing knowledge to improve sustainability and resilience of the dairy sector



LYON 30/8/2023



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R4D Resilience 4 Dairy

1st January 2021 – 31st December 2023



What do we call resilience of agricultural systems?

Dardonville et al., 2020

Environmental,
economic, social
sustainability

Resilience
(session)

Many concepts and
publications on
agricultural systems

Lack of operability

Few
multiperformance
approaches

Maintain
performances over
time

Develop a pragmatic method for dairy sector



EU projects on resilience



- Focusing on **farmers** practical issues affecting future sustainability of dairying
- Involving farmers in the definition of resilience



Resource Efficiency



Animal Care



Socio-Economics



Biodiversity



The EIP R&R Focus Group

What is resilience?

EIP Focusgroup - 2016-2018



7 R&R enhancing factors

1. A genetically R&R dairy cow
2. Farm management strategies
3. Precision livestock farming
4. Sustainable dairy cow milk production systems
5. Indicators of robust and resilient dairy production systems
6. Skills for future robust and resilient dairy farming – curriculum for farmers and advisers
7. Societal challenges



- A sustainable robust and resilient dairy production system **can recover from, or adapt to, changes** in environmental, social or economic conditions
- 3 levels: cow, farm, dairy sector



General objectives of R4D Thematic Network

Resilience

Robustness

Sustainability

3 expertise areas (3 Knowledge Areas KA) =

Economic and social resilience

Technical efficiency

Environment, welfare and society



freepik



Resilience 4 for Dairy



The consortium





Objectives R4D

- Develop and strengthen an **EU Thematic Network** with dairy farmers and relevant stakeholders focusing on resilient dairy farms
- Capture farmers **needs on the main challenges** to improve resilience
- Collect, **assess**, test, exchange and publish **solutions** to improve the resilience of dairy farmers, farms and sector

Structure of the project

In each country, a national steering committee named **National Dairy Akis (NDA)**

With a facilitator named **Farm Facilitator (FF)**

Express the needs
Implement tests and demos
Organise exchanges
(country and project levels)

Farm Facilitator: 1 key contact person per country

Manages the national/regional network and actors
Main contact with other EU "Farm Facilitators" and "Knowledge Facilitators"



The Knowledge Areas in R4D

- 3 expertise areas: Knowledge Areas (KA)
- 3 groups of KA experts: the assessors of solutions:

13 KA 1

10 KA 2

11 KA 3



**Economic and
social resilience**



**Technical
efficiency**



**Environment,
welfare and society**



George Ramsbottom – Teagasc



Anne-Laure Dutertre – Idele



Levente Czeglédi – Unideb

Isabelle Vuylsteke – INAGRO



Marija Klopčič – UL



Margit Bak Jensen- AU

R4D steps

1- Creating National Dairy Akis / Pilot farm networks

2a-Collecting farmers needs

2b-Collecting NDA solutions

3-Matching needs and solutions: Creating national workplans

4-Selecting most promising solutions (experts)

Ranking= NDA/farmers

5-Assessing / testing / adapting solutions

6-Delivering **Ready-to-use Best Practices**
(leaflets, webinars, videos, social networks)

Meetings

Implementing farmers EU workshops and cross visits



R4D Best Practice: Young stock weight measurement
(13.06.2023 | 1:08:00)

Dirk and Griet Vandecasteele keep 110 dairy cows. They have a very efficient young stock management. In order to control the growth of the heifers they measure their weight on a regular basis. This allows them to reach the first calving age at 24 months. Subtitles EN

[WATCH THE VIDEO](#)

200 solutions



100 Best Practices



R4D steps

EAAP Presentations

1- Creating National Dairy Akis / Pilot farm networks

s44

V. Brocard et al

2a-Collecting farmers needs

Needs from Hungarian dairy sector

2b-Collecting NDA solutions

s71

S. Sofiantini and A. Menghi

L. Czegledi et al

3-Matching needs and solutions: Creating national workplans

s71

K. Kuoppala et al.

4-Selecting most promising solutions (experts)

Ranking= NDA/farmers

s71

A Kuipers et al.

5-Assessing / testing / adapting solutions

6-Delivering **Ready-to-use Best Practices**

Resilience & farm economics

s44

E. Koloszycz et al

Financial resilience

s71

G. Ramsbottom et al

Resilience & Labour

s44

S. Debevere et al.

Resilience and Social issues:

 Cow calf contact

 Low cost pasture based system

s71

HW Neave et al.

R. Loges et al

Resilience and food security in Wallonia

Resilience: farmers' point of view

s44

E. Castellan et al

Strategies and cases in Slovenia

poster

M. Klopčič et al

Innovative solutions from NL

s71

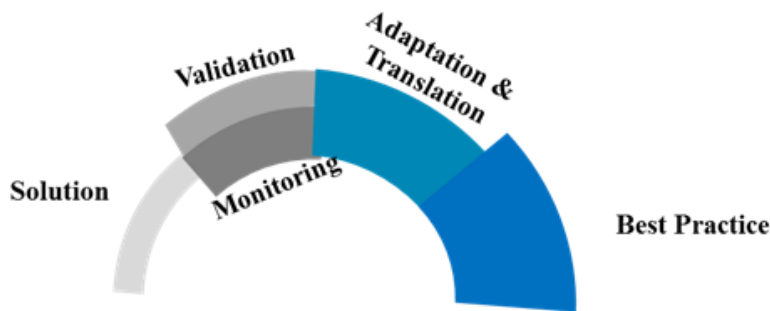
P. Galama et al

Reducing GHG through innovative technologies

CC

A.Svitojus et al

Dissemination of Best Practices



GAEC Trouencon Farm description FR
 16.01.2023 | Flyer
 GAEC Le Trouencon is using a cross breeding system with pasture.

[SHOW THE FLYER](#)



Lameness in dairy cows at pasture - An important challenge for Irish Dairy farmers
 14.11.2022 | Webinar
 Minimising the incidence of lameness in dairy cows was identified by farmers participating in the Resilience for Dairy project as an important contributor to the resilience of their dairy enterprise. During the webinar the principal types of lameness and solutions in grazing dairy cows are discussed.

[WATCH THE WEBINAR](#)

Topic	Topic	Colostrum management: give your calves sufficient colostrum from good quality to become productive cows
Technical efficiency	Economic Resilience	
<p>Background Calves are born without antibodies in their blood and are totally dependent on antibodies in the colostrum they drink after birth. A good colostrum management is extremely important to rear healthy calves, but also productive cows. However, colostrum management is not optimal at many farms, which has of course a financial impact.</p>		
<p>What is a good colostrum management?</p>		
Dry period	<ul style="list-style-type: none"> Enough dry matter intake (target value (TV): 12 kg DM/day) Enough crude protein (TV: 13-14% CP in far-off, 14-15% in close-up) Enough vitamins and minerals (Selenium: 23.5 mg/day; vitamin E: 1000 - 1200 units extra in dry period...) Enough access to (clean) water (intake: min. 40 L/day) 	<p>Which equipment do you need?</p> <p>Temperature independent</p> <p>Temperature dependent</p> <p>Digital refractometer</p> <p>Colostrum balls</p> <p>Analog refractometer</p> <p>Densimeter</p>
Colostrum quality	<ul style="list-style-type: none"> Milk the cow directly after given birth for a good colostrum quality Check the colostrum quality (>20 brix or >55 IgG/L) 	<p>Be careful, especially on these points:</p> <ul style="list-style-type: none"> Colostrum balls and the densimeter are temperature dependent! Do not leave colostrum at room temperature
Colostrum intake	<ul style="list-style-type: none"> Give the calf within 6 hours min. 220g IgG (4L colostrum of good quality). However, strive for 300g IgG within 8h! 	<p>Specific advice:</p> <ul style="list-style-type: none"> Use a drencher probe if the calf doesn't drink enough A colostrum check can be performed to check your colostrum management (contact your vet) Use following words: <ul style="list-style-type: none"> Quick Fresh Much Often
Storage	<ul style="list-style-type: none"> Store colostrum IMMEDIATELY and HYGENIC In the fridge (max. 2 days) In the freezer (max. 3 years) Defrost slowly as bain marie or in the fridge. Never heat above 60°C! 	<p>Assessment of method</p> <p>Economic resilience</p> <p>Technical efficiency</p> <p>Reduction of animal suffering</p> <p>Other societal perception</p> <p>Animal welfare and health</p>
<p>Positive features: A good colostrum management leads to less morbidity and mortality, but also to an early first calving age, more productive cows and hence a more resilient farm.</p>		
<p>Quote of farmer: "Good colostrum management leads to healthy and productive cows"</p>		
<p>More info:</p>		
<p>This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 101000770.</p>		



Automatic Feed Pusher
 24.11.2022 | Video
 Automatic Feed Pusher help to reduce workload and increase feed intake of dairy cows. This innovative technology is applied on the R4D Pilotfarm Soc. Agr. Cervi Ciboldi in Italy.

[WATCH THE VIDEO](#)



Our social networks



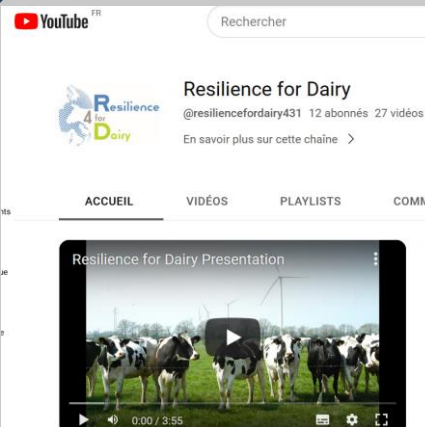
Resilience4Dairy



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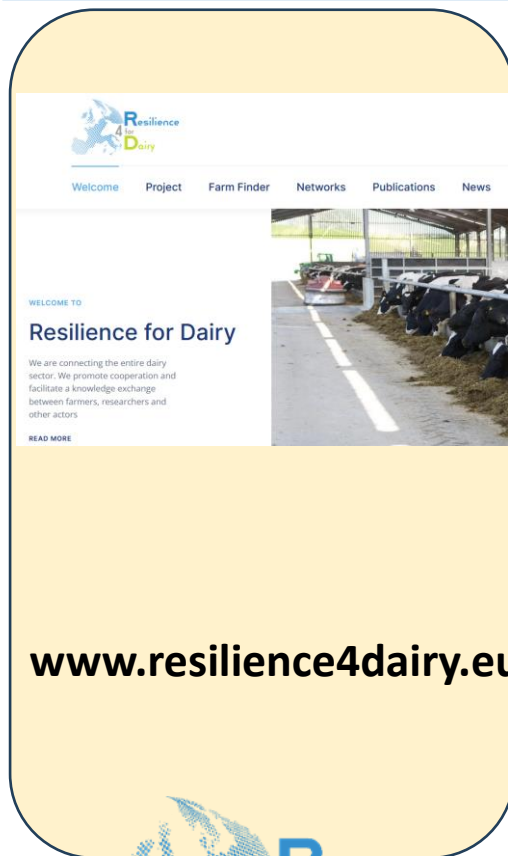
Our Youtube Channel



<https://www.youtube.com/@resiliencefordairy431/featured>

Already 27 videos available

Our website



www.resilience4dairy.eu



For a more resilient European dairy sector!





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Resilience
4 for
Dairy

Thank you for your attention

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