



DAIRY 4 FUTURE FINALE CONFERENCE
« TACKLING THE CHALLENGES OF
THE ATLANTIC AREA DAIRY SECTOR »



***Rendered services and dysservices
of dairy farming to the territories.
A bottom-up approach.***

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From the D4F experience with

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Context

- The Dairy-4-Future project focuses on the **improvement of dairy farming's sustainability** in the UK, Ireland, France, Spain and Portugal.

Action “Assessment of rendered services”
in Work Package “Dairy sector analysis”:

- In what extent, can it be achieved by **fostering the services that dairy farming offers to the territories ?**
- **What are these services rendered** by dairy farming ?

Method 1. A balanced approach

- **Different definitions:** (agro)(ecosystem) services
- **Services** = positive impacts of agricultural sector on three dimensions of sustainability (economic, environmental and social).
- But there are **some negative impacts** as well (réf. INRAe,...).
oftently called **Dysservices**, dys- like **DYS-functioning Services**
- **More balanced approach:**
 - **Services to be fostered and recognized**
 - **Dysservices to be adressed and fixed**
(some English native partners prefer **Challenges** ≠ **Disservices**)

➤ Looking for a **dedicated list of + and - impacts for dairy farming**

Method 2. A bottom-up approach to get a qualitative identification with ranking without any quantitative or monetary assessment

- **Interactive workshop with local stakeholders** (farmers, dairy processors, advisors and researchers, GNO, local authorities,...) **in each regional case study of the project.**
- **9 Focus group (April -October 2019) with 14 stakeholders (9-23), within 3,33 farmers + Survey Scotland (150/90)**

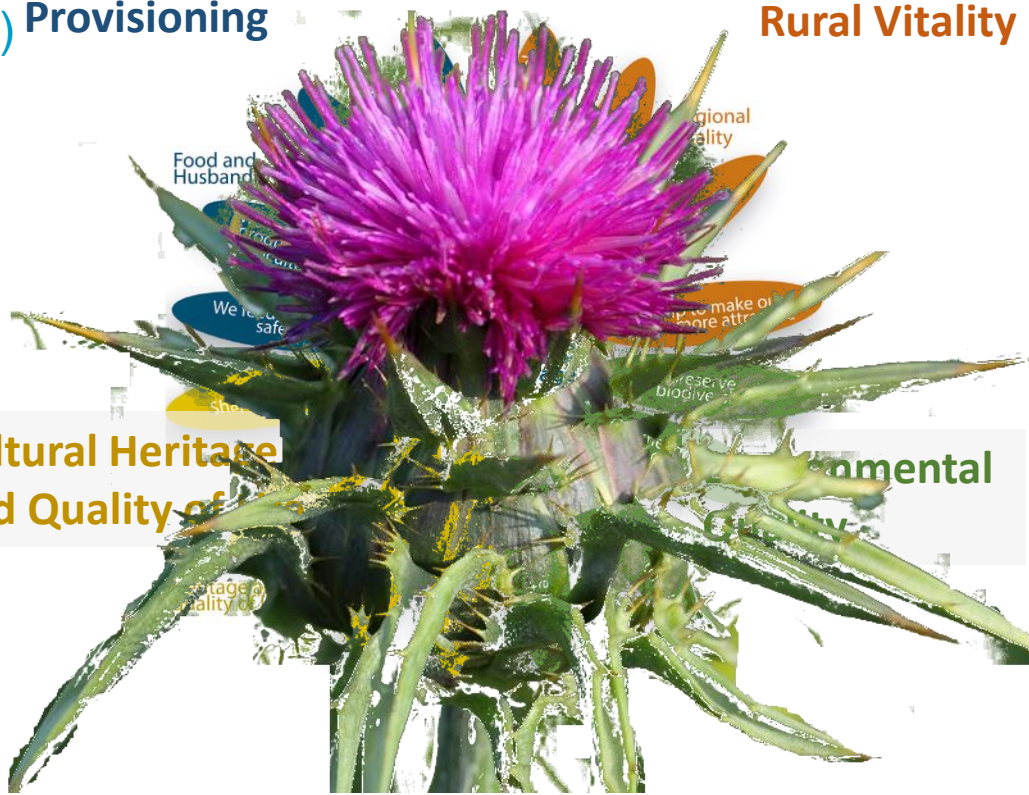
Stakeholders were told to identify positive or negative impacts of local dairy farming on their territories in **four category of functions** :

- **provisioning (food,...),**
- **rural vitality,**
- **environmental quality,**
- **cultural heritage and quality of life.**

+ to identify or imagine actions to develop services and fix dysservices

165 Services +135 Dysservices(Challenges) Provisioning Balanced +/- & functions

	Services	Dysservices	Total
Provisioning	55	33	88
Rural Vitality	41	32	73
Environmental Quality	43	43	86
Cultural Heritage and Quality of Life	26	27	53
Total	165	135	300



Fixing Dysservices and Recognising Services. Examples

Dairy farming/sector: a labour intensive and social inclusive production/industry

« efficiency treadmill », financial problems, feeling of not being valued, social/technical requirements, competition between farmers
-> **Mental Health (issues), Isolation, Burn-Out**

Provide Jobs, Life, Communication, Identity, Skills, Income in remote areas



Farming and managing environmental impacts

Negative impacts of intensification/dairy expansion on **Air/Water pollution,**

Closing nutrients cycles and producing Renewable Energy to get a more circular economy, avoid artificial fertilizer, maintain soil fertility

Rendered services and Dysservices of dairy farming to territories

in

Dossier Technique de l'Elevage special Dairy4Future

Functions	Services (nb items)		Dysservices (nb items)	Dysservices & Challenges	Total (nb items)
Provisioning	55	Strong function of supplying milk and meat With high standards of production Efficiency thanks to technical progress Low(er) impact thanks to circularity/autonomy, Grass/pasture, Manure Differentiated products for domestic (food security, nutrition), biotech and exports	33	Oversupply of milk and manure Economic uncertainty and lack in processing, marketing, competition, organisation in the supply chain (= missing market opportunities) Impacts of the dairy expansion/intensification on Environment and Animal Welfare Technical impasses (antibiotics), lack of Circularity (imported feed), issues with Holstein Male calves	88
Participating to Rural Vitality	41	Provides jobs on farms, supplychain & services, rural territories Generating « landscape economy » with Access to (anthropized) nature Providing activities (Social inclusive, Labour intensive industry), Life, Communication, Identity, Skills, Income in remote areas	32	Attractiveness at stake (profitability, work pressure, paperwork). Both for paid and unpaid labour Labour shortage (paid), Skills requirement (unpaid) Interrogation about Automation effects Traffic of heavy machinery Less cooperation between farmers, competition for land, misunderstanding with public	73
Managing the Environmental Quality	43	Quality and Efficiency of the Resource Management is Favourable to Biodiversity, Carbon footprint, Landscape, Soil Fertility Closing nutrients cycles and producing Renewable Energy Valorisation non_arable, disadvantaged land Fire prevention	43	Negative impacts of Intensification/dairy expansion, on: Water pollution, NH4 and GHG emissions, Loss of biodiversity, Soil management, Antibiotic use and Animal Health/Welfare, Energy or Water use, Plastic waste Misunderstanding/Nuisance for inhabitants (odors, flies, rodents) Delocalized impacts of imported inputs	86
Preserving Cultural Heritage and Quality of Life	26	Cultural/Social Capital maintenance Wellbeing of Vibrant Rural communities, Rural Solidarity, Mental Health The Agriculture Shows provide recreation and communication Traditional Way of Life Territorial identity and image (grassland; dairy products; breed)	27	Negative impacts of Intensification/dairy expansion: « efficiency treadmill », financial problems, feeling of not being valued, Social/technical requirements Competition between farmers ->Mental Health (issues), Isolation, Burn-Out Difficulties with Consumers/Citizen, Disconnect from food origin Nuisance for neighbours Lack of public access to landscape Lack of specific products, unfair marketing, loss of Territorial cultural identity	53
Total	165		135		300

Discussion

- **Qualitative identification** (not quantitative nor monetary assesment) but dependency, redondancy and quite difficult categorization.
- **Positive & negative impacts for the same variable**, sometimes in one region (different farming systems) or different regions
- Requirements to identify perfectly different types of « **Bundles** » of **Services/Dyss** (« Bouquets » in French) and reveal proximities between regions Northern Ireland and Cornwall ; Southern Ireland and Normandy ; Galicia and Brittany
- A confirmation: **dairy production** a ground based production, many **territorial implications**, positive and negative impacts

Main topics for 131 actions to enhance Services and fix Dysservices

- **Labour:** attractiveness, work/family life, skills, mental health/social isolation
- **Feed, Herd management** (antibiotics, calves, welfare)
- **Markets, consumers expectations**
- **Citizen and neighbours**
- **Microeconomics** (profitability, volatility) and investment, to get more resilient dairy farming systems
- **Ressource management** (water, soil, manure), **circular economy, agroecology** and environmental impact.



Thank you for attention

