

Striving for sustainable future

A group of 10 dairy farmers from Northern Ireland are taking part in an EU supported Dairy4Future project. The initiative has been established to help milk producers in five regions along Europe's Atlantic seaboard to learn from each other with the aim of making their businesses more sustainable. Richard Halleron reports.

Dairy farming is a major economic activity in the EU's Atlantic area. The region accounts for approximately 20% of milk production in Europe-28. The area is also home to 80,000 dairy farms, 100,000 dairy farmers and employees plus the 70,000 workers employed in the region's milk processing sector.

The Dairy4Future project was launched in 2018 and will continue through to 2022. The four-year, £3.8m project has received 75% funding support from the EU (see Brexit footnote).

Economic, environmental and social sustainability of dairy farming are being addressed by the project. A consortium of 11 partners from eight countries including Northern Ireland, Scotland, England, Wales, Ireland, plus France, Spain and Portugal are involved.

The active participation of the producer group from Northern Ireland is being coordinated by Martin Mulholland, senior dairy technology at the College of Agriculture, Food and Rural Enterprise (CAFRE). He operates from the college's Greenmount campus in Co Antrim.

Aims of the project

From Scotland to the Azores, the Dairy4Future project aims to increase the competitiveness, sustainability and resilience of dairy farms through the development of innovative and efficient dairy systems and increased cooperation between research and development stakeholder groups.

At the heart of the project are a group of 100 pilot farmers and 10 experimental farms drawn from all the regions involved. Detailed data on economic, environment and social sustainability aspects of dairy farming have been collected and are currently being analysed.

The analysis will assess how the differing management practices across the diverse systems of dairy farming in the Atlantic area

Performance of host Brittany dairy farms compared to results from top 10% CAFRE benchmarked dairy farms in Northern Ireland

Farm	Earl de Boureau	GAEC RBX Holstein	Earl Glehelle	Derval research	CAFRE Top 10%
Herd size	57	85	100	86	190
Grassland proportion of area (%)	25	31	35	53	n/a
Maize proportion of forage area (%)	62	32	25	39	n/a
Forage area stocking rate (LU/ha)	1.9	1.6	1.7	1.3	2.6
Mineral fertiliser N use (kg/ha)	70	80	61	32	n/a
Milk yield (litres)	9,277	8,470	8,111	8,540	8,538
Fat (g/kg)	40.8	41.4	44.5	42.0	41.0
Protein (g/kg)	33.9	34.4	34.5	34.0	33.2
Concentrates fed (kg)	2,006	1,144	1,289	1,224	2,696
Concentrates fed (kg/kg FCM)	0.21	0.13	0.16	0.14	0.31
Milk from forage (kg/cow)*	4,819	5,928	5,247	5,820	2,548
Milk price (€/1,000 litres)	341	350	360	n/a	n/a
Gross margin (£/litre @1.10 €/£)	0.23	0.25	0.23	n/a	0.18
Milk production per labour unit (litres)	480,818	237,667	208,750	n/a	905,908

*Milk yield less concentrate @ 0.45kg/litre; n/a figure not available

can contribute to increasing milk price resilience, reducing ammonia and greenhouse gas emissions and encouraging generational renewal on dairy farms.

"The 10 farmer participants from Northern Ireland were selected following the completion of a CAFRE-coordinated application process," explains Martin Mulholland. "Priorities for the group of farmers in question include the identification of ways to improve the sustainability of milk production.

"Specifically, this will include aspects of environmental sustainability, including the management of greenhouse gases and ammonia emissions. We will also be looking at the role of soil phosphate balances and the associated impact on water quality.

"Another priority for the project is to identify ways in which antibiotic usage levels within the dairy sector can be reduced through the use of benchmarking techniques."

But Martin is also keen to stress the role of the project in helping to improve the social

infrastructure of dairy farming in Northern Ireland.

"Succession planning is a key issue in this context," he says. "All of the farms involved are family-run businesses. Succession is as relevant to milk producers in Brittany or Spain as it is to farmers here in Northern Ireland."

Farm exchange visits

Visiting their farming colleagues in the other regions involved in Dairy4Future will be a key driver for the participating group from Northern Ireland. And this process is already underway. June of this year saw the 10 farmers undertake a two-day exchange visit to Brittany.

"The trip included visits to Brittany dairy farms, dinner with local farmers and advisers and a visit to the Derval Experimental farm north of Nantes.

"Some of the management practices that particularly impressed the farmers on the exchange visit were the low concentrate use per cow and per litre relative to milk yields. The farm-

ers in question are able to produce up to 8,500 litres of milk from 1.56 tonnes of concentrates.

"Grassland management standards on the farms visited was also extremely high, as was the commitment to produce high quality conserved forage quality. The low nitrogen fertiliser use on the Brittany farms is also worthy of comment as was the family centred life focus of the farmers themselves."

Benchmarking figures

Figures produced by CAFRE, comparing the relative performance of dairy farms in Brittany that hosted the visiting group with the current benchmarking performance levels achieved on the top 10% of recorded farms in Northern Ireland are worthy of note (see table).

For example, herd size in Brittany ranges from 57 to 100 cows, whereas the Northern Ireland benchmarked figure is 190 head. Average milk yields in Brittany range from 8,470 to 9,227 litres. The equivalent figure for top performing herds Northern Ireland is

8,538 litres.

One of the most significant differences in the production practices followed in the two regions is the relatively high emphasis of forage maize in Brittany.

Mr Mulholland comments: "The farmers from Northern Ireland participating in the exchange visit were surprised by the low land prices in Brittany. These range between €5,000 and €10,000 per hectare."

Labour unit productivity

"The extent of mixed dairying and cereal cropping on the dairy farms we visited was also significant, as was the relatively low milk output productivity per labour unit on the Brittany dairy farms.

"This works out at 309,078 litres per labour unit, compared with 905,908 litres on the top 10% of farms in Northern Ireland. The lack of drive by Brittany farmers to expand their business was also evident.

"However, there was a strong recognition on the farms we visited



Martin Mullholland.

of the potential for watercourse pollution from dirty water run-off from farmyards."

Other points gleaned included the French recognition of the need to put in place sustainable succession plans, the French dairy industry's commitment to reducing antibiotic residue levels in milk and the varying producer price structures put in place by milk processors in Brittany.

The CAFRE representative believes that the Dairy4Future pro-

gramme can deliver real benefits for milk producers in Northern Ireland.

"There will be a series of publications produced throughout the lifetime of the project, as well as a concluding report," he says.

"All of this work will constitute a resource which practising farmers and students can learn from."

Part of the work undertaken by the co-ordinating teams in the five regions will be that of assessing conserved forage quality across the 100 pilot farms. Mr Mulholland has been selected as the person responsible for overseeing this particular aspect of the project.

"Forage samples will be taken on all the respective farms over the coming months," he explains.

Programme benefits

Martin Mulholland concludes: "The Dairy4Future programme can help to increase the competitiveness, sustainability and resilience of dairy farms in North-

ern Ireland. It will allow those involved to analyse the strengths and weaknesses of the dairy sectors in the five participating regions.

"In turn, this will encourage those involved to assess how they can improve efficiency, using the resources available to them on their own farms. In so doing, they will be acting as role models for other dairy farmers seeking to secure a viable future for themselves and their families."

Brexit footnote

A degree of confusion surrounds the future funding availability associated with all the farm development programmes that are coordinated by the EU, but which receive support from the UK.

The current general rule of thumb is as follows: If a Brexit deal is arrived at, then the status quo will be retained. If there is no Brexit deal, the UK will immediately stop funding these projects. An exception to this rule is the UK government's continuing support for dairy export programmes.

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