

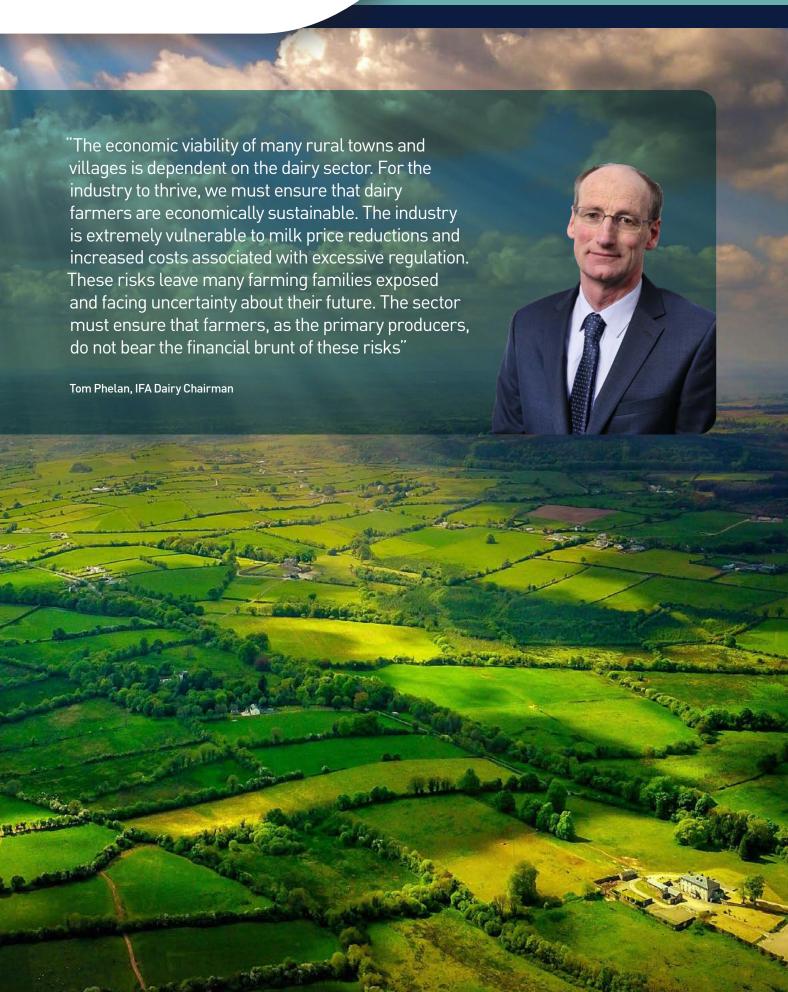


# Vulnerability Assessment of the Irish Dairy Sector

January 2021







#### Introduction

The dairy sector in Ireland is robust, supporting almost 17,000 farm families. In the last five years, the dairy sector has undergone significant expansion. As a direct consequence of this expansion, numerous revenue streams have developed throughout the rural economy. In 2019 alone, dairy farmers invested on average &34,221 in their farms\frac{1}{2}.

#### The purpose of this paper is to:

- Highlight the gains achieved by the sector in the past ten years;
- Demonstrate how profits at the farm level remain modest;
- Outline the vulnerability of farms to factors such as reductions in milk price and costs associated with environmental or other restrictions.

#### **Industry gains**

Food Harvest 2020<sup>2</sup> outlined an ambitious 50% growth in milk production by 2020 for the dairy sector, with associated downstream benefits to the broader economy.

Irish dairy farmers delivered on this target ahead of schedule. In so doing, they contributed real long-term economic benefits to the Irish economy, including an increase in export value of  $\[ \in \]$  2.9bn over the last decade.

Table 1: Summary of achieved targets set out in Food Harvest 2020			
Food Harvest 2020 Goal	Achievement in 2020		
Increase milk production by 50% (2007-2009 average milk production as a baseline)	67% growth in milk production achieved <sup>4</sup>		
Achieve 42% increase in dairy exports	Dairy exports grew by 134% <sup>5</sup>		
Reduce emission per litre of milk reduced	7% reduction in carbon intensity between 2013 and 2019 <sup>6</sup>		
Predicted investment by industry of €400m	See Appendix I		

Source: CSO, Bord Bia, National Farm Survey

#### Impact of the dairy sector on the rural economy

There are 17,000 dairy farmers in Ireland. Associated with the sector are approximately  $40,000^7$  indirect jobs in processing, haulage, sales and services. Crucially, this employment is in areas throughout the country where employment prospects are limited and purchasing power is lower.

In Ireland, those living in rural areas have, on average, half the purchasing power of those in urban areas<sup>8</sup>. Therefore, both at the primary and processor level, investment by the dairy sector has played a vital role in somewhat rebalancing fiscal development in the Irish economy.

Since 2015, over  $\[ \in \]$ 2.2bn was invested by dairy farmers and over  $\[ \in \]$ 1.3bn invested by milk processors (see Appendix I) in the sector. This investment has had knock-on benefits to the broader economy. Crucially, for every  $\[ \in \]$ 1 of dairy product exported, 90c is spent within the Irish economy. In contrast, 10c per euro exported by the multinational sector is reinvested in the Irish economy. In 2020, dairy exports amounted to  $\[ \in \]$ 5.2bn.

Appendix I outlines seven of Ireland's largest milk processors and their contribution to the local economy.

- $1 \qquad \text{Teagasc National Farm Survey 2019: https://www.teagasc.ie/media/website/publications/2020/Teagasc-National-Farm-Survey-2019.pdf}$
- 2 Food Harvest 2020: https://www.gov.ie/en/publication/5a0f2-food-harvest-2020/
- 3 Bord Bia Performance and Prospects Reports: https://www.bordbia.ie/industry/insights/performance-and-prospects/previous-performance-prospects/
- 4 CSO milk statistics: https://www.cso.ie/en/statistics/agriculture/milkstatistics/
- $5 \quad \text{Bord Bia Performance and Prospects Reports: https://www.bordbia.ie/industry/insights/performance-and-prospects/previous-performance-performance-prospects/previous-performance-perfor$
- 6 National Farm Survey 2019 Sustainability Report: https://www.teagasc.ie/media/website/publications/2020/NFS-2019-Sustainability-Report.pdf
- $7 \qquad \text{Teagasc, Dairy in the Irish Economy: https://www.teagasc.ie/media/website/publications/2019/Dairy-in-the-Irish-economy.pdf} \\$
- 8 EU Commission: https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/key\_policies/documents/cap-strategic-plans-c2020-846-swd-ie\_en.pdf
- 9 National Farm Survey: https://www.teagasc.ie/rural-economy/rural-economy/national-farm-survey/national-farm-surv
- 10 Teagasc, Dairy in the Irish Economy: https://www.teagasc.ie/media/website/publications/2019/Dairy-in-the-Irish-economy.pdf

### Dairy farm income comparison

As referenced previously, the 2015-2019 period saw a substantial increase in Irish milk production, with on-farm production increasing by almost 50% and average herd size increasing from 67 cows to 86 cows.

However, during this time, we have not seen a corresponding increase in dairy farm incomes. Based on the National Farm Survey analysis, dairy incomes for 2019 were lower than those in 2014.

Much of this is related to a lower milk price prevailing in 2019. Even accounting for this, farm net margins have not kept pace with expansion.

Table 2: Dairy Family Farm income (FFI) analysis				
	2014	2019	% Change	
Dairy FFI (€)	67,598	65,828	-3%	
Milk production (litres)	308,661	456,354	+48%	
Family Labour input (labour units)	0.36	0.37	+3%	
Dairy income (€) (wage attributed to family labour)	49,704	48,049	-3%	
Average full-time industrial wage (€)	44,829	48,946	+9%	
Dairy Farmer Income/Ave Full-time industrial wage	1.11	0.98	-12%	

Source: Teagasc, National Farm Survey, CSO

On the face of it, even though incomes have not increased in the 2015-2019 period, income levels in dairy farming appear high relative to other agricultural sectors and indeed the wider economy. However, as the National Farm Survey confirms, there is a substantial level of unpaid family labour evident on Irish dairy farms. When this labour input is accounted and an appropriate cost attributed to it, average dairy farm incomes in 2019 were actually lower than the equivalent Irish full-time average industrial wage.

In addition to rewarding a farmer for their labour input, the income derived from farming is also required for much more than that. Firstly, it is what remains to give a farmer an entrepreneurial return for the risk's farmers take in running a self-employed business along with employing very substantial assets on ongoing basis. Secondly, from this income farmers are also required to service capital repayments on bank finance they have in place. As the following table illustrates, many dairy farmers have significant levels of borrowings which require servicing.

Table 3: Percentage of Irish Farms with Borrowings and Average Debt 2019 <sup>11</sup>				
Enterprise	Farms with Borrowings (%)	Average Debt (€)		
Dairy	64%	€117,039		
Cattle Rearing	30%	€26,301		
Cattle Other	34%	€35,072		
Sheep	25%	€27,835		
Tillage	32%	€60,901		
All	37%	€61,237		

Source: National Farm Survey

### Assessment of factors that could impact farm incomes

Dairy Sector Vulnerabilities impact of a drop in milk price or drop on stocking rate on farm income.

Based on the National Farm Survey analysis, the average milk price paid to farmers in 2019 was 34.5 cent/litre. A key feature of dairy farming over the past number of years has been milk price volatility.

At current levels, dairy farmer net margins are susceptible to any significant milk price drop.

For example, a two-cent drop in milk price would reduce the average dairy net margin by approximately  $\[ \]$ 9,300 and reduce the average dairy farmer income (after accounting for family labour input) to c.  $\[ \]$ 41,200.

Furthermore, if implemented, the EU Green Deal proposals will reduce artificial nitrogen usage levels for dairy farmers. A recent analysis by Teagasc<sup>12</sup> has shown that a 20% reduction in inorganic nitrogen usage would reduce dairy farm net margins by c. 10%.

Irish dairy farm net margins are vulnerable to both adverse milk price movements and increased fertiliser restrictions.

#### Return on assets

### Table 4: Return on Asset Rates for Dairy Farms in different EU Member States and the UK.

Selected EU Member States and UK	Return on Asset (%)
Italy	8.9
France	8.8
Belgium	6.9
Germany	5.7
Finland	5.0
Ireland	4.4
United Kingdom	3.6
Denmark	2.9
Sweden	2.2
Netherlands	2.1
EU/UK Average	5.3
Netherlands	2.1

Source: 2018 FADN data

The recent Teagasc/CIT study<sup>13</sup> on Irish dairy farms post-quota outlined that Irish dairy farm businesses have the highest net margins in Europe.

While an important measure, net margin is one of several comparative benchmarks used to assess a business's financial performance. Another widely used method is Return on Asset (ROA) – the percentage return the business owner is getting for the assets they have tied up in their business.

Using 2018 Farm Accountancy Data Network  $^{14}$  (FADN), it is possible to compare Irish dairy farms' performance from an ROA perspective relative to their European counterparts.

As this table shows, ROA achieved on Irish dairy farms in 2018 (4.4%) was lower than the European average (5.3%). So, while Irish dairy farmers appear to be achieving relatively higher margins than their European neighbours, the overall percentage return they are earning on their asset base is still below the European average.

The above ROA calculation does not account for labour input. If we attribute Ireland's average industrial wage for the farmers' labour input, the percentage return on asset reduces to 1.4%, outlining the low return dairy farmers in Ireland (and other EU countries) receive for their business investment.

<sup>12</sup> Teagasc, Review of the Influence of Chemical Nitrogen Application Rate, Soil Type and Agroclimate Location on Grass Production, Feed Budgets, Nitrogen Use Efficiency, Environmental Impact and Farm Profitability: https://www.teagasc.ie/publications/2020/review-of-the-influence-of-chemical-nitrogen-application-rate-soil-type-and-agroclimate-location-on.php

<sup>13</sup> Teagasc, An Analysis of the Irish Dairy Sector Post Quota: Lowest Milk Price but Highest Margin: https://www.teagasc.ie/news--events/news/2020/irish-dairy-sector-.php

<sup>14</sup> FADN: https://ec.europa.eu/info/food-farming-fisheries/farming/facts-and-figures/farms-farming-and-innovation/structures-and-economics/economics/fadn en

#### Conclusion

The expansion in milk production has delivered substantial economic benefits to the broader Irish economy, both in terms of employment and net foreign earnings associated with the processing sector, and the economic activity generated from the onfarm investment.

There is no doubt that dairy expansion has provided many Irish farmers with the opportunity to increase their overall farm profitability. However, it must also be recognised that dairy farm incomes remain modest when compared with the average industrial wage.

Furthermore, dairy farm margins are vulnerable to a downward movement in milk price and increased fertiliser usage restrictions and other costs.

Similarly, in a European context, the actual return dairy farmers receive on the substantial assets tied up in their business is below the EU average.

While Irish dairy farming net margins are more favourable than our EU counterparts, other considerations put these apparent high margins into a more appropriate context.

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#### **Appendix I**

#### **Economic footprint of Irish Dairy Industry**



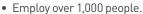
- Employ 300 people in West Cork
- €78m capital investment for Mozarella cheese processing 250 local contractors
- Process 567m litres milk which is exported to 50 countries
- Total revenue €434m



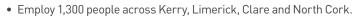
- Employ 275 people in Sligo, Roscommon and Donegal
- Subcontract 19 haulage companies for the collection and supply of dairy goods
- Process 500m litres which is exported to 50 countries
- €37m investment in dairy processing capacity
- 34 retail stores
- Total revenue €446m



- Collects milk from 17 counties
- Process almost three billion litres from 4,800 milk suppliers
- Milk payments surpassed €1bn in 2019
- Invested over €343 million since 2015 in processing facilities
- 52 agri-branches in Ireland
- Export to over 100 countries
- Annual revenue of €1.9 billion



- Process 1.85bn litres of milk from 3,200 suppliers.
- Group Revenues (2019) €1.03bn.
- 8 facilities (Food Ingredients, Foodservice, Consumer, Agribusiness)
- Exporting over 200 dairy products to 80+ markets worldwide.
- €550m in milk payments to dairy farmers (2019) across 16 counties
- €185m invested in milk processing capacity since 2015



- 3000 Milk Suppliers across 6 counties.
- 3 Primary Dairy Manufacturing sites Listowel, Charleville & Newmarket
- 32 Farm & Home Stores and Compound Feed Mill, Farranfore, Co. Kerry
- €200m invested in Dairy sites since 2013.
- Milk payments exceeded €441m in 2019.



- Annual revenue of €270m
- Milk payments of €140m
- 420 direct employees
- €63 million investment in past five years
- Process 1.42 billion litres of milk from 2,700 milk suppliers across Munster
- Milk payments of €490m
- Employ 1,150 in Munster
- €450m investment in milk processing
- Group Revenue (2019) €1.02bn
- Employ 2,400 globally
- 12 production facilities and 9 innovation centres
- Owner of Kerrygold, Ireland's only €1 billion food brand
- 340,000MT of product sold through Ornua's value-added routes to market in 2019
- Group Revenue of €2.4bn















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