








































# Teagasc National Farm Survey 2018

## Dairy Enterprise Factsheet



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## Irish Dairy Farming Factsheet 2018 Average Performance

 <b>Milk Sales per ha</b> 10,863 litres (up 1%) 	 <b>Days at Grass</b> 229 days (down 5 days) 
 <b>Milk Production per cow</b> 5,438 litres (up 1%) 	 <b>Stocking Rate</b> 2.06 lu/ha 
 <b>Milk price actual fat/protein</b> 35.6 cent per litre (down 4%) 	 <b>Dairy Enterprise* area ha</b> 38.3 ha (up 0.4%) 
 <b>Average Dairy Herd Size</b> 78.6 dairy cows (up 1%) 	 <b>Milk Fat Content</b> average 3.97% (down 2 basis points) 
 <b>Concentrates Fed/Dairy Cow</b> average 1,353 kg (up 31%) 	 <b>Milk Protein Content</b> average 3.35% (down 5 basis points) 
 <b>Concentrates fed/litre of milk</b> average 0.24 kg (up 38%) 	 <b>Milk Solids per Cow</b> average 407 kg (up 2%) 
 <b>Nitrogen per ha of grassland</b> 189.5 kg (up 7%) 	 <b>Basic Payment Scheme</b> per farm € 16,510 
 <b>Total Production Costs</b> 26.8 cent per litre (up 17%)  €2,993 per hectare (up 18%) 	 <b>Somatic Cell Count</b> 176,000 cells/ml (up 7%) 
 <b>Gross Margin Dairy Enterprise</b> 20.6 cent per litre (down 19%)  €2,350 per hectare (down 18%) 	 <b>Net Margin Dairy Enterprise</b> 9.6 cent per litre (down 37%)  €1,133 per hectare (down 35%) 

Source: Teagasc National Farm Survey 2018

Note: Percentage changes are relative to 2017

\*Dairy Enterprise area refers to area for dairy cows only

## Background

The 2018 Teagasc National Farm Survey (NFS) recorded data on 897 farms representative of 92,720 dairy, beef, sheep and tillage farms nationally. This analysis summarises the results of dairy enterprises, excluding farms supplying mostly liquid milk and herds of 10 cows or less. The results below relate to 311 dairy farms, representative of 15,916 dairy farms nationally.

### 1. Analysis of Financial Performance

Following on from an excellent production year in 2017, the average milk price fell by 3.6% in 2018 resulting in a 4.5% reduction in gross output per litre year-on-year. However, the very large increase in concentrate feed expenditure, additional expenditure on forage and increased spending on fertiliser, resulted in a 23% increase in total direct costs on the average dairy enterprise. Total fixed costs increased by 9% overall in 2018. Data from the Teagasc NFS shows that overall production costs increased by 17% in 2018, indicating that the average producer had production costs of approximately 26.8 cent per litre of milk. The margin figures reported here do not include decoupled payments.

**Table 1: Average gross margin and average net margin 2017 and 2018**

	2017	2018	2018/2017
	cent/litre		% change
Milk Price	36.94	35.62	-3.6
<b>Total Gross Output</b>	<b>38.13</b>	<b>36.41</b>	-4.5
Concentrate Costs	4.95	6.98	41.0
Pasture and Forage Costs	4.21	5.15	22.3
Other Direct Costs	3.68	3.72	1.1
Total Direct Costs	12.84	15.85	23.4
<b>Gross Margin</b>	<b>25.29</b>	<b>20.56</b>	<b>-18.7</b>
Energy and Fuel	2.12	2.26	6.6
Hired Labour	0.55	0.63	14.5
Other Fixed Costs	7.40	8.07	9.1
Total Fixed Costs	10.08	10.96	8.7
Total Costs	22.92	26.81	17.0
<b>Net Margin</b>	<b>15.21</b>	<b>9.60</b>	<b>-36.9</b>

Source: Teagasc National Farm Survey 2018

#### The cost of on-farm family labour

Net margin represents the returns to family labour, management, owned land and capital. It is very difficult to segregate the returns to each of these components with an acceptable level of accuracy. Allowing for an approximation of the value of on-farm family labour input, would place a value on own labour input, equivalent to 12 cent per litre. This estimate is based on the self-reported labour input of respondents and an assumed wage of €15 per hour. This figure does not have the accuracy associated with the estimates of costs for other farm inputs. Own labour costs for smaller herds, with low yielding cows, a less desirable farm layout and inferior yard and parlour facilities would be expected to be several cents higher than the average. By contrast the most labour efficient farms would be expected to have substantially lower labour costs.

Despite very difficult production conditions over the first half of 2018, milk production per hectare increased by close to 1% for the year as a whole, due to strong late season production. Notwithstanding the increase in production, net margin, on a per hectare basis, fell by 35% for the average dairy enterprise in 2018, due mainly to substantially higher production costs, primarily associated with increased feed use.

**Table 2: Average net margin 2017 and 2018: Dairy Farms**

		2017	2018	2018/2017 % change
Milk Produced	litres/hectare	11,225	11,293	0.6
Total Costs	€/hectare	2,533	2,993	18.2
Net Margin	€/hectare	1,752	1,133	-35.3

Source: Teagasc National Farm Survey 2018

## 2. Variation in Financial Performance

Table 3 summarises the Teagasc NFS 2018 results for farms classified on the basis of gross margin per hectare; the best performing one-third of farms (Top), the middle one-third (Middle) and the least well performing one-third (Bottom). A wide variation across some cost components is reported. Expenditure on pasture and forage in particular was significantly higher for the bottom cohort, who also had a lower milk price.

**Table 3: Output, costs and net margin Top, Middle and Bottom thirds 2018: Dairy Farm**

	Top	Middle	Bottom	Average
	cent/litre			
Gross Output	37.62	36.26	35.34	36.41
Concentrate Feeds	6.73	6.85	7.36	6.98
Pasture & Forage	4.34	4.91	6.17	5.14
Other Direct Costs	3.42	3.59	4.14	3.72
Energy & Fuel	1.77	2.23	2.78	2.26
Hired Labour	0.85	0.57	0.46	0.63
Other Fixed Costs	7.52	8.20	8.50	8.07
Total Costs	24.63	26.36	29.41	26.81
<b>Net Margin</b>	<b>13.00</b>	<b>9.90</b>	<b>5.93</b>	<b>9.60</b>

Source: Teagasc National Farm Survey 2018

Concentrate expenditure was up in 2018 for all three cohorts, with the largest increase occurring in the bottom group. On the other hand, costs relating to hired labour were substantially lower in the bottom cohort, who typically would have lower output and hence less need for hired labour. A wide variation in net margin is reported across the three groups varying from 13 cent per litre on top performing farms to less than 6 cent per litre at the lower end. Relative to 2017, net margin was down 4.6 cent per litre for the top group, but net margin was down by 5.4 cent per litre for the middle group and almost 6 cent per litre for the bottom group.

Table 4 presents the variation in output and profit per hectare for the Top, Middle and Bottom groups in 2018. Gross margins per hectare were down for all three cohorts, with the largest reduction occurring for the Top cohort. In 2018 the gap between the top and bottom group in terms of gross margin was just over €2,000 per hectare, which was €300 smaller than in 2017.



**Table 4: Output and profit for Top, Middle and Bottom one-thirds 2018: Dairy Farms**

		Top	Middle	Bottom	Average
Stocking Rate	Cows per hectare	2.48	2.04	1.69	2.07
Milk Sold	litres per hectare	14,895	11,146	7,867	11,293
Concentrates fed	kg per cow	1,474	1,364	1,225	1,354
Concentrates fed	kg per litre milk produced	0.24	0.25	0.26	0.25
Gross Output	€ per hectare	5,602	4,026	2,760	4,125
Direct Costs	€ per hectare	2,189	1,737	1,402	1,775
Gross Margin	€ per hectare	3,413	2,288	1,358	2,350

Source: Teagasc National Farm Survey 2018

### 3. Variation in Technical Performance

Table 5 presents a selection of technical performance indicators for dairy farms. Milk production per cow increased marginally in 2018 (+1% on average). An improvement in milk solids (kg per cow) is evident (+2%), but there was also an increase in Somatic Cell Count (+7%). Concentrate feed use increased dramatically. All of these measures of technical performance will have been affected by the difficult weather experienced in 2018 and should not be considered as indicative of a trend. Notably there was only a small reduction in the length of the grazing season, with the late start to the season largely compensated for by a late close.

**Table 5: Technical Performance Indicators 2017 and 2018: Dairy Farms**

		Average 2017	Average 2018	% change
Milk production	litres per cow	5,391	5,438	0.9
Milk sales	litres per hectare	11,225	11,293	0.6
Milk solids	kg per cow	400	408	2.0
Somatic Cell Count	'000 cells/ml	165	176	6.7
Concentrate feed usage	kg per cow	1,030	1,354	31.5
Grazing Season	days	234	229	-2.1

Source: Teagasc National Farm Survey 2018

Table 6 shows Teagasc Dairying Road Map Targets for 2025 and the percentage of dairy farms achieving each of these performance indicators in 2018. While there was continued progress in some areas in 2018, due to the difficult production conditions, fewer farms achieved several of these targets than in 2017.

**Table 6: Percentage of farms reaching Teagasc 2020 & 2025 Dairying Road Map Targets in 2018**

		2025 Target	Farms Achieving Target
			%
Milk yield per cow	litres per cow	≥ 5,573	45.9
Milk solids per cow	kgs per cow	≥ 448	30.9
Protein	%	≥ 3.56	21.0
Fat	%	≥ 4.25	22.3
Somatic Cell Count	cells / ml	≤ 180	60.3
Concentrates per cow	Kgs	≤ 750	10.3

Source: Teagasc National Farm Survey 2018

The average herd size in 2018 was 78.6 cows. This represents a 20% increase since milk quota abolition in 2014 and a 23% increase since 2012.

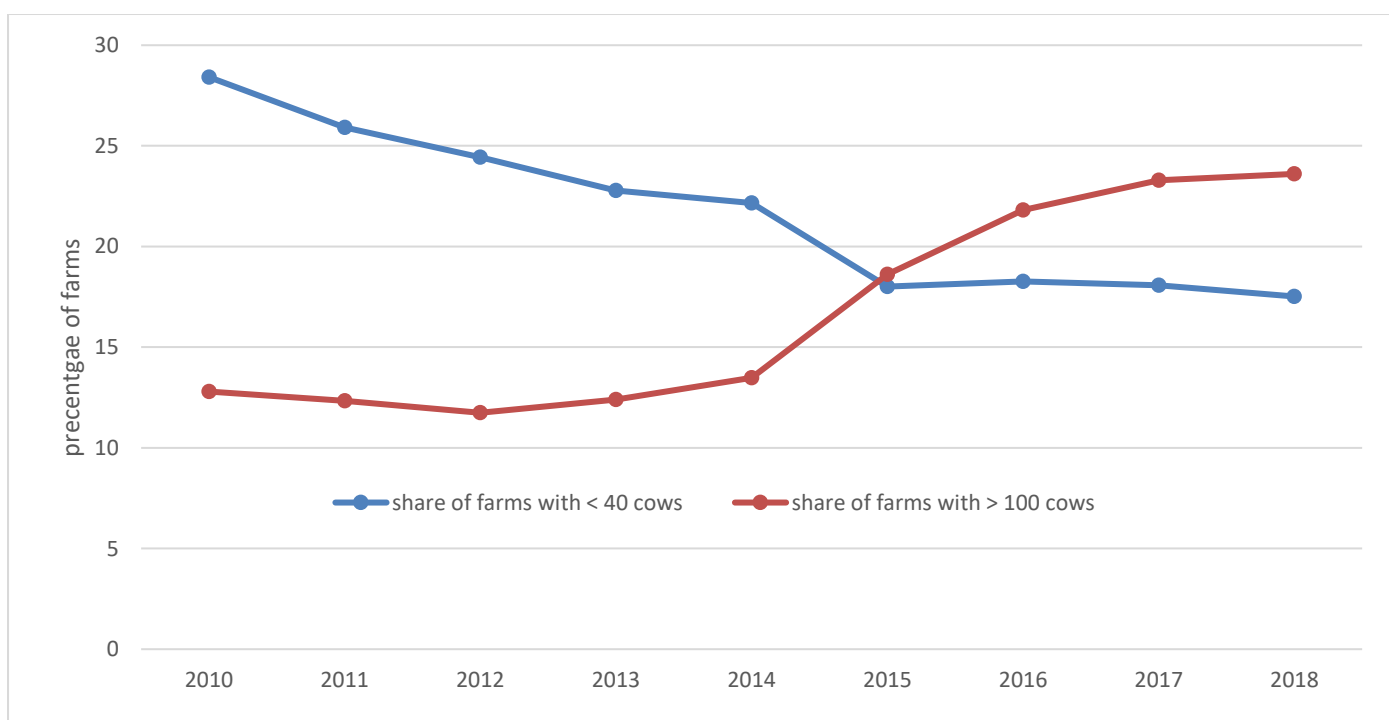
**Table 7: Herd Size distribution 2018**

Herd Size	% of Farms	% of Milk production
<40	17.5	5.3
40-60	21.8	12.7
60-100	37.1	34.7
>100	23.6	47.3
Total	100	100

Source: Teagasc National Farm Survey 2018

Figure 1 illustrates that farm scale has also increased over the period, with almost 24% of farms reporting a herd size of 100 cows or more in 2018 compared to only 13% in 2006. Data from the NFS also indicates that this cohort of farms with 100 cows or more now produce 47% of total milk production, the equivalent figure in 2010 was only 30%.

**Figure 1: Structural change in Irish Dairy Farm Size 2010-2018**



Source: Teagasc National Farm Survey 2018

## Methodological Note: Updated 2017 population weights

Note that the data reported for 2017 in this factsheet supersede that reported in the NFS Dairy Enterprise Factsheet 2017. This is due to the effect of a reweighting procedure applied to the survey data.

The CSO conducts a Census of Agriculture every 10 years to record the population of farms and the structure of farming in Ireland. Farm Structure Surveys (FSS) are conducted, in the intervening periods, to produce estimates of the total farm population. The 2016 FSS estimated the farming population falling within the sampling frame of the Teagasc NFS to be 92,720. As a result of the structural change on farms since the previous FSS (2013), we have reweighted the 2017 Teagasc NFS data to take account of this.

Additionally, output price inflation has also led to an increase in the number of farms represented by the Teagasc NFS, with a larger share of the total farm population meeting the €8,000 standard output threshold for coverage within the survey. This also has an effect on margin and income estimates.

*For further information on this publication or other Teagasc National Farm Survey Publications please contact [NFS@teagasc.ie](mailto:NFS@teagasc.ie)*