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## Dairy Enterprise Factsheet



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## Irish Dairy Farming Factsheet 2023 Average Performance

	<b>Milk Sales per ha</b> 11,177 litres (down 6%)			<b>Days at Grass</b> 226 days (down 5 days)	
	<b>Milk Production per cow</b> 5,474 litres (down 5%)			<b>Stocking Rate</b> 2.12 lu/ha (down 1%)	
	<b>Milk price actual fat/protein</b> 42.79 cent per litre (down 31%)			<b>Dairy Enterprise* area</b> 44.3 ha (down 2%)	
	<b>Average Dairy Herd Size</b> 95 dairy cows (down 2%)			<b>Milk Fat Content</b> average 4.29% (up 0.01 point)	
	<b>Concentrates Fed/Dairy Cow</b> average 1,216 kg (down 1%)			<b>Milk Protein Content</b> average 3.54% (down 0.02 points)	
	<b>Concentrates fed/litre of milk</b> average 0.22 kg (up 4%)			<b>Milk Solids per Cow</b> average 423 kg (down 5%)	
	<b>Nitrogen per ha of grassland</b> 147 kg (down 8%)			<b>Pillar I Payment</b> per farm € 17,989	
	<b>Total Production Costs</b> 36.71 cent per litre (unchanged) €4,213 per hectare (down 5%)	 		<b>Somatic Cell Count</b> 179,000 cells/ml (up 6%)	
	<b>Gross Margin Dairy Enterprise</b> 22.60 cent per litre (down 45%) €2,674 per hectare (down 47%)	 		<b>Net Margin Dairy Enterprise</b> 7.24 cent per litre (down 71%) €922 per hectare (down 70%)	 

Source: Teagasc National Farm Survey 2023. Please note that percentage changes are relative to 2022.

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

## Background

The 2023 Teagasc National Farm Survey (NFS) recorded data on 793 farms representative of almost 85,000 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 254 surveyed dairy farms, representative of 15,319 dairy farms nationally.

### 1. Analysis of Financial Performance

Data from the Teagasc NFS indicate that there was a sharp decline in the average milk price (down 31% to 43 cpl) in 2023, resulting in a 28% decline in gross output per litre. The elevated input costs experienced in 2022 showed little sign of respite in 2023, with total costs remaining stable for the average dairy enterprise. Details across cost categories are contained in Table 1. In terms of direct costs, on a cent per litre basis, concentrate feed costs increased by 4%, as did pasture and forage costs. There was a 13% increase in other direct costs, with average direct costs up 6% in total as a result. On the other hand, there were some cost savings in fixed costs, which declined by 6% on average compared to 2022. There was a substantial reduction in building depreciation costs, at 26%, however this was negated by a comparable increase in other fixed costs. Depreciation costs for machinery were up slightly compared to 2022, at 3%. On average, costs relating to energy and labour were down 4% year-on-year. On average, total production costs remained relatively unchanged at 36.7 cent per litre of milk in 2023. Margin figures-reported include hired labour costs, but the methodology does not treat farm family labour as a cost, since this labour is rewarded by the farm's profit. This is detailed in the explanatory box on the next page. Decoupled payments are also excluded in this enterprise analysis.

**Table 1: Average gross margin and average net margin 2022 and 2023**

	2022	2023	2023/2022
	cent/litre		% change
Milk Price	60.06	42.79	-29
<b>Total Gross Output</b>	<b>61.34</b>	<b>43.96</b>	<b>-28</b>
Concentrate Costs	8.83	9.18	+4
Pasture and Forage Costs	6.68	6.95	+4
Other Direct Costs	4.62	5.24	+13
Total Direct Costs	20.13	21.36	+6
<b>Gross Margin</b>	<b>41.21</b>	<b>22.60</b>	<b>-45</b>
Electricity and Fuel	3.17	3.03	-4
Hired Labour	1.02	0.98	-4
Rent/Leasing of Land	1.30	1.29	-1
Machinery Depreciation	3.14	3.23	+3
Buildings Depreciation	2.76	2.05	-26
Remaining Fixed Costs	5.02	4.77	-6
Total Fixed Costs	16.41	15.35	-6
Total Costs	36.54	36.71	-
<b>Net Margin</b>	<b>24.80</b>	<b>7.24</b>	<b>-71</b>

Source: Teagasc National Farm Survey 2023

### The cost of on-farm family labour

Net margin represents the returns to family labour, farm 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 this labour equivalent to 15 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 family labour costs per litre that are lower than the average.

Challenging grass conditions resulting in the earlier housing and drying off of animals, coupled with a sharp decrease in the average milk price resulted in a 4% decline in national milk production in 2023. This is reflected in the NFS data which indicates a 5% reduction in milk produced per hectare compared to 2022. Total costs declined by 5% on a per hectare basis. Overall, this resulted in a steep reduction in the average dairy enterprise net margin from the very high level reported in 2022. On a per hectare basis, average net margin declined by 70% to €922.

**Table 2: Average net margin 2022 and 2023: Dairy Farms**

		2022	2023	2023/2022 % change
Milk Produced*	litres/hectare	12,234	11,617	-5
Total Costs	€/hectare	4,424	4,213	-5
Net Margin	€/hectare	3,078	922	-70

Source: Teagasc National Farm Survey 2023

\*Milk Produced includes milk fed to calves as well as milk delivered to dairies

## 2. Variation in Financial Performance

Moving beyond the average level of farm performance, it is useful to also explore the performance of the better performing and less well performing farm cohorts in the dairy farm population. Splitting the population into three groups on the basis of gross margin per hectare, Table 3 shows dairy enterprise results for the best performing one-third (Top), the middle third (Middle) and bottom third (Bottom).

A wide variation across some cost components continues to be observed, with input expenditure typically higher for the bottom cohort, which is the main reason for the lower net margin in this bottom group.

**Table 3: Output, costs and net margin Top, Middle and Bottom thirds 2023: Dairy Farms**

	Top	Middle	Bottom	Average
	cent/litre			
Gross Output	45.77	43.82	42.30	43.96
Concentrate Feeds	8.34	8.59	10.59	9.18
Pasture & Forage	6.45	6.89	7.49	6.95
Other Direct Costs	5.10	4.92	5.69	5.24
Energy & Fuel	2.48	3.06	3.55	3.03
Hired Labour	1.68	0.59	0.68	0.98
Other Fixed Costs	10.56	11.08	12.36	11.34
Total Costs	34.62	35.14	40.37	36.71
<b>Net Margin</b>	<b>11.14</b>	<b>8.68</b>	<b>1.94</b>	<b>7.24</b>

Source: Teagasc National Farm Survey 2023

Concentrate feed expenditure was relatively unchanged for the top and middle cohorts in 2023, compared to 2022 but increased for the bottom cohort (going from 9.2 to 10.6). Some of this group may have been more adversely impacted by the poor weather and subsequent need to house animals earlier. Pasture and forage costs remained relatively stable for the bottom group in 2023, but increased slightly for the others. Costs relating to hired labour remained highest for the top group, which are generally higher output farms. A wide variation in net margin (which was much reduced on 2022) is reported across the three groups, varying from an average of 11.14 cent per litre on the top performing farms to 8.68 on average for the middle group, and just 1.94 cent per litre for the bottom group.

Table 4 presents the variation in output and gross margin per hectare for the Top, Middle and Bottom groups in 2023. The degree to which gross margin declined across the groups varied, the reduction largest for the top performing cohort (down €2,956 per hectare compared to 2022). The corresponding figures for the middle and bottom groups were €2,402 and €1,770 respectively. In terms of milk produced per hectare, the drop was largest for the middle cohort, down 8% versus 4% across the other two groups. In 2023 the gap between the top and bottom groups in terms of gross margin was almost €2,241 per hectare, a significant increase on the previous year.

**Table 4: Output and profit for Top, Middle and Bottom one-thirds 2023: Dairy Farms**

		Top	Middle	Bottom	Average
Stocking Rate	cows per hectare	2.48	2.13	1.74	2.12
Milk Production*	litres per hectare	14,874	11,515	8,496	11,617
Concentrates fed	kg per cow	1,253	1,161	1,236	1,216
Concentrates fed	kg per litre milk produced	0.20	0.21	0.25	0.22
Gross Output	€ per hectare	6,804	5,030	3,591	5,136
Direct Costs	€ per hectare	2,994	2,374	2,022	2,461
Gross Margin	€ per hectare	3,810	2,656	1,569	2,674

Source: Teagasc National Farm Survey 2023 \*includes milk fed to calves

### 3. Variation in Technical Performance

Table 5 presents a selection of technical performance indicators for dairy farms in 2023. A year-on-year decline in technical performance is evident across most categories. Milk production per cow and per hectare decreased by 5% relative to 2022. A decline in milk solids per cow of the same magnitude is also evident. In addition, there was deterioration in the average herd level somatic cell count (up 6%) compared to 2022. Concentrate feed use remained relatively stable on average in 2023, with a 5 day reduction in grazing days evident.

**Table 5: Technical Performance Indicators 2022 and 2023: Dairy Farms**

		Average 2022	Average 2023	% change
Milk production per cow	litres	5,740	5,474	-5
Milk production per hectare	litres	12,234	11,617	-5
Milk solids	kg per cow	446	423	-5
Somatic Cell Count	'000 cells/ml	169	179	+6
Concentrate feed usage	kg per cow	1,232	1,216	-1
Grazing Season	days	238	226	-5

Source: Teagasc National Farm Survey 2023



Table 6 shows Teagasc Dairying Road Map Targets for 2027 and the percentage of dairy farms achieving each of these performance indicators in 2023. These technical figures generally reflect a deterioration in milk production and quality in 2023 compared to 2022, with a lower proportion of producers meeting targets with regard to milk solids, protein and SCC. Conversely, there was a year-on-year increase in those meeting particular environmental targets with regard to nutrient use. In 2023, over two-thirds of dairy farms utilised less than 170kg of nitrogen per hectare, a larger share of farms than in 2022. In 2023, there was also an increase evident in the proportion of dairy farms using protected urea (58%), and the share of dairy farms applying more than 50% of their nitrogen as protected urea (28%). Similarly, on dairy farms there was an increase in the share of slurry applied using low emissions spreading techniques in 2023, compared to the previous year, at over 80%.

**Table 6: Percentage of farms reaching selected Teagasc 2027 Dairying Road Map Targets in 2023**

		2027 Target	% Farms Achieving Target in 2023
Milk delivered per cow	litres per cow	≥ 5,750	47
Milk solids per cow	kg per cow	≥ 465	31
Somatic cell count	cells / ml	≤ 150	43
Dairy stocking rate	livestock units	2.2	42
Concentrates per cow	Kgs	≤ 750	11
Nitrogen fertiliser use	kg per ha	<170kg	67
N applied at protected urea	% of farms	50%	28
% of farms using protected urea	% of farms	n.a.	58
Slurry applied using LESS	% of slurry	80%	81

Source: Teagasc National Farm Survey 2023

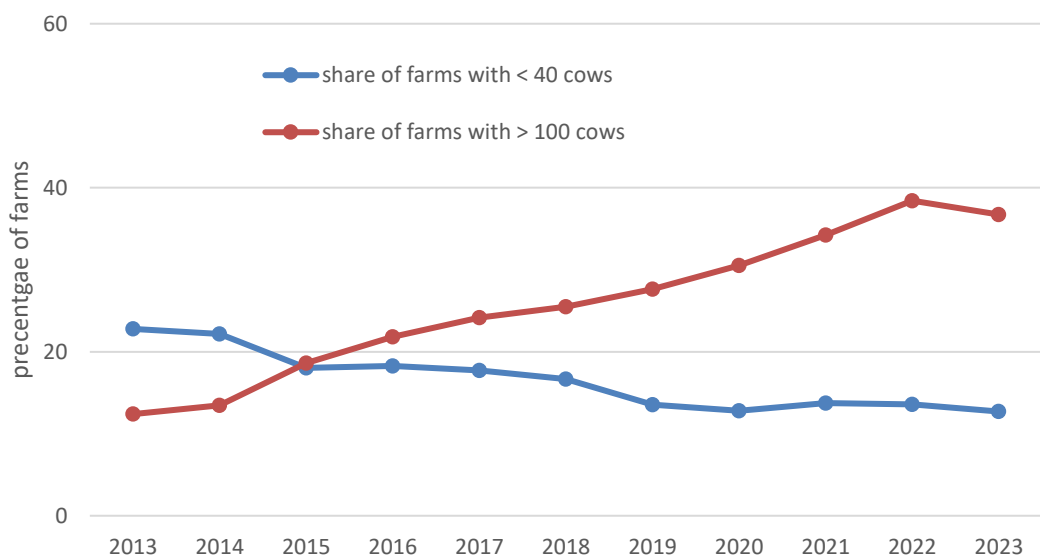
In 2023, the average herd size was 95 cows. In 2023, smaller herds, with less than 40 cows, accounted for 13% of all dairy herds and 3% of the total milk pool. On the other hand, 37% of herds comprised at least 100 cows, and accounted for 63% of total milk production in 2023. The increase over the last decade, in dairy farm scale, represented by farms with at least 100 cows, is reflected in Figure 1. The data indicates that this cohort has increased from 12% in 2013 to 37% in 2023. That said, a slight decline in the share of farms in this category is evident in 2023 after more than a decade of year-on-year growth.

**Table 7: Herd Size distribution 2023**

Herd Size	% of Farms	% of Milk production
<40	13	3
40-60	19	9
60-100	31	25
>100	37	63

Source: Teagasc National Farm Survey 2023

Figure 1: Structural change in Irish Dairy Farm Size 2013-2023



Source: Teagasc National Farm Survey 2023

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