## **Teagasc National Farm Survey 2023**

# **Cereals Enterprise Factsheet**



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### Irish Cereal Enterprise 2023 Average Performance



Irish Cereal Production
2.02 mil. tonnes (down 21%)





**Irish Cereal Area** 269,400 ha (down 6%)





Irish Barley Area 186,300 ha (down 2%)





Irish Wheat Area 55,800 ha (down 17%)





Spring Barley price
average €217per tonne (down 33%)



Winter Wheat price average €224 per tonne (down 32%)



Spring Barley Yield per ha
average 5.9 tonnes (down 18%)





Winter Wheat Yield per ha average 9.4 tonnes (down 4%)





Total Production Cost per ha Spring Barley average €1708 (down 17%)





Total Production Cost per ha Winter Wheat average €2,353 (down 1%)





**Net Margin for Spring Barley** average -€215 per ha (down €688)



Net Margin for Winter Wheat average €60per ha (down €1082)





**Target Yield for Spring Barley** 7.2 tonnes per hectare

achieved on 15% of farm



**Target Yields for Winter Wheat** 10.3 tonnes per hectare achieved on 22% of farms



Net Margin Target Spring Barley €150 per hectare achieved on 21% of farms



Net Margin Target Winter Wheat €450 per hectare achieved on 30% of farms

Source: Teagasc National Farm Survey and Central Statistics Office



#### **Background**

The 2023 National Farm Survey (NFS) recorded data on represents around 85,000 farms in Ireland. The financial results for these farms are available in the National Farm Survey 2023 report which is available at <a href="https://www.teagasc.ie/publications">www.teagasc.ie/publications</a>. This publication summarises the results for the major cereal enterprises (winter wheat and spring barley) on farms within the survey. In terms of representation for the following analysis, there were 86 farms with a spring barley enterprise in the survey in 2023, representing approximately 113,995 hectares. All farms with a cereal enterprise were included in this analysis, in previous years certain size restrictions were applied to this analysis, but due to sample size issues it was decided to not apply size restrictions to the analysis for 2023 results (and comparison figures for 2022).

#### 1. Analysis of Financial Performance

In general, the yields per hectare achieved in 2023, compared to 2022 were lower. Cereal yields based on the NFS enterprise results across all farms, for spring barley, were down significantly, by 18%, while winter wheat yields decreased by 4%. In addition to the decrease in yields recorded for the afore mentioned crops in the data, cereal prices were much also significantly lower in 2023 compared to 2022, with the price received at farm gate down over 30% for spring barley and winter wheat. The combined effect of the aforementioned factors resulted in a large decrease in gross output for spring barley and winter wheat, of 41% and 31% respectively, in 2023 compared to 2022.

Direct costs fell throughout the year, but timing of purchase continued to have an impact on the change in total direct costs on a year to year basis, with direct costs decreasing by 8% for spring barley but there was a further 9% increase in winter wheat direct costs in 2023. Allocated fixed costs decreased for both crops. Some of the decrease in the fixed costs allocated to the cereal crops is associated with the method in which fixed costs are allocated across enterprises. This allocation across each enterprise is based on the proportion of gross output. Given the change in output value, direct and fixed costs, the net margin on spring barley farms in 2023 was -€215 per hectare, down from €463 per hectare in 2022. The net margin for the winter wheat in 2023 was €60 per hectare, down from €1142 per hectare in 2022 (excluding decoupled payments).



Table 1: Average gross and net margin € per hectare: Spring Barley and Winter Wheat 2022/2023¹

	2022 Spring barley	2023 Spring barley	2023 to 2022 % change	2022 Winter wheat	2023 Winter wheat	2023 to 2022 % change
Yield per hectare	7	6	-18%	9.9	9.4	-4%
Price per tonne	324	217	-33%	330	224	-32%
Gross Output/hectare	2534	1494	-41%	3511	2413	-31%
Fert., Seed, Crop Prot.	844	785	-7%	1074	1159	8%
Machinery Hire	271	260	-4%	195	220	13%
Other direct costs	34	15	-58%	13	18	36%
<b>Total Direct Costs</b>	1150	1060	-8%	1285	1400	9%
Gross Margin	1384	434	-69%	2226	1013	-55%
Fixed Costs	921	649	-30%	1085	953	-12%
Total Costs	2070	1708	-17%	2370	2353	-1%
Net Margin	463	-215	-146%	1142	60	-95%

Source: Teagasc National Farm Survey 2023

Table 2 presents average gross and net margins per tonne of crop produced for 2022 and 2023. Total costs per tonne decreased for both spring barley and winter wheat in 2023, while price per tonne of cereals decreased substantially. The decrease in costs, coupled with the more significant decrease in price of cereals per tonne led to a decrease in the net margin per tonne for both spring barley and winter wheat.

Table 2: Average gross and net margin € per tonne of Spring Barley and Winter Wheat 2022/2023

	2022	2023	2023 to 2022	2022	2023	2023 to 2022
	Spring barley	Spring barley	% change	Winter wheat	Winter wheat	% change
Cereal price per tonne	324	217	-33%	330	224	-32%
Total Gross Output	359	260	-28%	365	255	-30%
Fert., seed, Crop Prot.	121	137	13%	112	125	11%
Machinery Hire	40	44	9%	24	24	1%
Other direct costs	5	3	-50%	1	2	22%
<b>Total Direct Costs</b>	167	184	10%	138	151	10%
Gross Margin	192	76	-60%	227	103	-54%
Allocated Fixed Costs	132	113	-14%	108	88	-18%
Total Costs	299	297	-1%	246	240	-3%
Net Margin	60	-37	-161%	119	15	-87%

Source: Teagasc National Farm Survey 2023



<sup>&</sup>lt;sup>1</sup> The estimates value of straw is based on market value prices minus variables costs of production.

#### 2. Variation in Financial Performance

The data in Tables 1 and 2 presents the average performance across farms and the tonnage of spring barley and winter wheat nationally. The wide variation in financial performance that occurs between different cereal producers throughout the country is not apparent. However, Table 3 shows the average costs of production and margin for farms and splits the sample into top and bottom performing spring barley farms on the basis of net margin per hectare.

Table 3: Variation in output and margin 2023: top and bottom performing Spring barley farms

	Тор	Bottom	% Difference between Top and Bottom
Average crop area (hectares)	24	12	96%
Yield (tonnes per hectare)	6.1	5.7	8%
Price per tonne	229	205	12%
Gross output (€ per hectare)	1622	1368	19%
Fert., seed, spray (€ per hectare)	690	878	-21%
Machinery hire (€ per hectare)	169	349	-51%
Gross Margin (€ per hectare)	751	123	511%
Fixed Costs (€ per hectare)	610	687	-11%
Total Costs (€ per hectare)	1481	1932	-23%
Net Margin (€ per hectare)	142	-564	-125%

Source: Teagasc National Farm Survey 2023

Total costs of production per hectare in the top performing spring barley group was 23% lower than the bottom performing spring barley producers. Gross output per hectare for the top half of spring barley farms was 19% higher than the bottom half. Overall, this results in a €706 per hectare difference in net margin per hectare between the bottom and top performing spring barley farms.

Table 4 shows the distribution of net margin per hectare on spring barley and winter wheat farms in 2023. In 2023, 65% of spring barley farms and 28% winter wheat farms (represented by the sample) produced a negative net margin, i.e., made a loss when allocated overhead costs were deducted from gross margins. At the opposite end of the distribution, 2% of spring barley farms and 12% of winter wheat farms earned a net margin of €750 or more in 2023.

Table 4: Distribution of net margin € per hectare: 2022 and 2023

Net Margin €/hectare	Spring	barley	Winter	wheat
	2022	2023	2022	2023
<0	20	65	0	28
0 to 250	17	26	5	31
250-500	9	6	8	15
500-750	24	1	12	14
>750	30	2	74	12

Source: Teagasc National Farm Survey 2023



#### 3. Variation in Technical Performance

Table 5 presents average technical performance from 2021 to 2023 for a range of indicators. Technical performance decreased in many of the measures examined in 2023 relative to 2022. However, it is important to remember that these partial productivity indictors do not take cereal price and straw receipts into account. In addition, various Teagasc strategy documents have outlined a number of farm performance indicators for tillage crops for the year 2027. Table 6 shows the percentage of farms that achieved a selection of these targets in 2021, 2022 and 2023.

**Table 5: Technical Performance Indicators Tillage Farms 2021-2023** 

	2021	2022	2023
Spring barley land productivity (yield/hectare)	7.2	7.2	5.9
Winter wheat land productivity (yield/hectare)	10.4	9.9	9.4
Winter wheat Crop protection (€ per tonne crop)	27	32	38
Land Rent (€ /hectare spec. tillage farms)	529	547	626
Machinery hire (€/hectare UAA spec. tillage farms)	142	189	191

Source: Teagasc National Farm Survey 2023

Table 6: Percentage of farms achieving selected Teagasc Tillage 2027 Roadmap Targets

Teagasc Roadmap Targets for 2027	2021	2022	2023
Spring Barley yield ≥7.2t/hectare	59	54	15
Winter Wheat yield≥10.3/hectare	66	43	22
Winter Barley yield ≥10.0/hectare	29	24	15
Spring Barley yield ≥7.4 t/hectare (target for top 50%)	57	52	13
Winter Wheat yield ≥10.6t/ha (10%)	17	14	15
Winter Barley yield ≥10.2/hectare	24	13	16
Spring Barley Gross Margin ≥€650 per hectare	84	87	33
Winter Wheat Gross Margin ≥€1200 per hectare	80	97	35
Winter Barley Gross Margin ≥€1000 per hectare	78	94	28
Spring Barley Net Margin ≥€150 per hectare	73	71	21
Winter Wheat Net Margin ≥€450 per hectare	76	92	30
Winter Barley Net Margin ≥€375 per hectare	73	78	18

Source: Teagasc National Farm Survey 2022

For further information on this publication or other Teagasc National Farm Survey Publications please contact NFS@teagasc.ie

