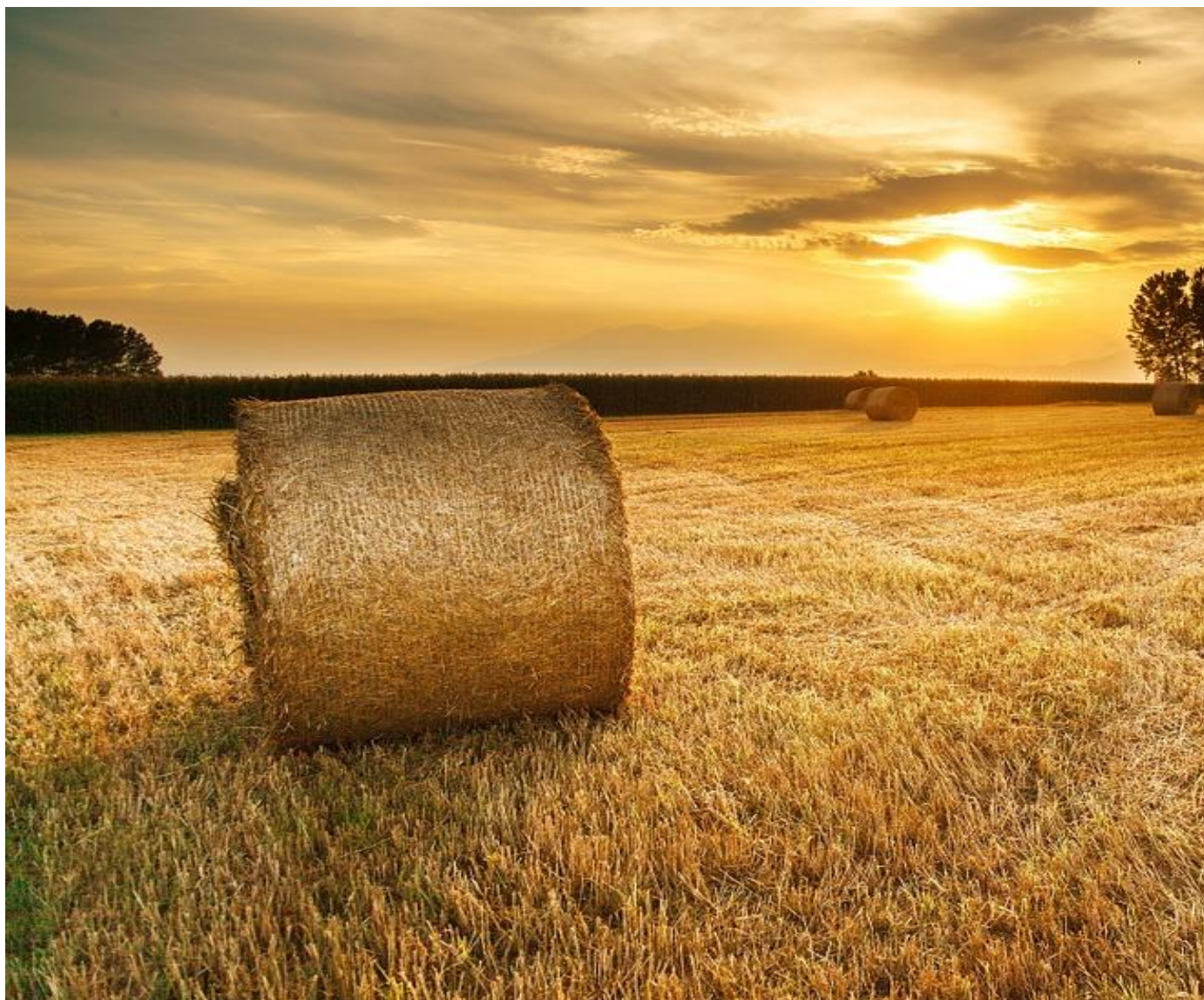


Teagasc National Farm Survey 2022

Cereals

Enterprise Factsheet



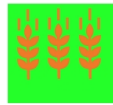
Agricultural Economics and Farm Surveys Department,
Teagasc
Athenry
Co Galway
H65 R718
Ireland

Irish Cereal Enterprise 2022

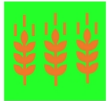
Average Performance



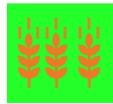
Irish Cereal Production
2.55 million tonnes (up 4%)



Irish Cereal Area
285,700 ha (up 4%)



Irish Barley Area
190,300 ha (up 3%)



Irish Wheat Area
67,200 ha (up 8%)



Spring Barley price
average €325 per tonne (up 40%)



Winter Wheat price
average €333 per tonne (up 43%)



Spring Barley Yield per ha
average 7.1 tonnes (down 1%)



Winter Wheat Yield per ha
average 9.8 tonnes (down 6%)



Total Production Cost per ha
Spring Barley
average €2,025 (up 44%)



Total Production Cost per ha
Winter Wheat
average €2,331 (up 22%)



Net Margin for Spring Barley
average €459 per ha (up 3%)



Net Margin for Winter Wheat
average €1193 per ha (up 61%)



Target Yield for Spring Barley
7.2 tonnes per hectare
achieved on 53% of farm



Target Yields for Winter Wheat
10.3 tonnes per hectare
achieved on 43% of farms



Net Margin Target Spring Barley
€150 per hectare
achieved on 68% of farms



Net Margin Target Winter Wheat
€450 per hectare
achieved on 90% of farms

Source: Teagasc National Farm Survey and Central Statistics Office

Background

The 2022 National Farm Survey (NFS) recorded data on 795 farms. The financial results (provisional) for these farms are available in the National Farm Survey 2022 report which is available at www.teagasc.ie/publications. 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 87 farms with a spring barley enterprise in the survey in 2022, representing approximately 99,554 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 2022 results (and comparison figures for 2021).

1. Analysis of Financial Performance

In general, the yields per hectare achieved in 2022, compared to 2021 were mixed, with some yields higher and some yields lower than 2021. Cereal yields based on the NFS enterprise results across all farms, for spring barley, were down slightly, by 1%, while winter wheat yields decreased by 6%. Whilst there was a slight decrease in yields recorded for the afore mentioned crops in the data, cereal prices were much higher in 2022 compared to 2021, with the price received at farm gate 40% higher for spring barley and 43% higher for winter wheat. The combined effect of the aforementioned factors resulted in a large increase in gross output for spring barley and winter wheat, of 34% and 33% respectively, in 2022 compared to 2021.

Direct costs increased significantly for spring barley and winter wheat in 2022, with allocated fixed costs also increasing for both crops. Some of the increase 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. In addition, the population of farmers growing spring barley in particular tend to be a heterogeneous group of farmers, involved in a variety of enterprises, which tend to experience volatility in fixed costs from one year to the next. Given the change in output value, direct and fixed costs, the net margin on spring barley farms in 2022 was €459 per hectare, up from €447 per hectare in 2021. The net margin for the winter wheat in 2022 was €1193 per hectare, up from €740 per hectare in 2021 (excluding Basic Payment).

Table 1: Average gross and net margin € per hectare: Spring Barley and Winter Wheat 2021/2022¹

	2021 Spring barley	2022 Spring barley	2022 to 2021 % change	2021 Winter wheat	2022 Winter wheat	2022 to 2021 % change
Yield per hectare	7.2	7.1	-1%	10.4	9.8	-6%
Price per tonne	232	325	40%	233	333	43%
Gross Output/hectare	1875	2514	34%	2645	3524	33%
Fert., Seed, Crop Prot.	512	842	64%	719	1042	45%
Machinery Hire	220	269	22%	236	188	-20%
Other direct costs	18	35	94%	14	16	18%
Total Direct Costs	755	1146	52%	971	1248	29%
Gross Margin	1120	1368	22%	1674	2276	36%
Fixed Costs	673	909	35%	934	1083	16%
Total Costs	1428	2055	44%	1905	2331	22%
Net Margin	447	459	3%	740	1193	61%

Source: Teagasc National Farm Survey 2022

Table 2 presents average gross and net margins per tonne of crop produced for 2021 and 2022. Total costs per tonne increased for both spring barley and winter wheat in 2022, while price per tonne of cereals increased substantially. The increase in costs and price of cereals per tonne led to an increase in the net margin per tonne for both spring barley.

Table 2: Average gross and net margin € per tonne of Spring Barley and Winter Wheat 2021/2022

	2021 Spring barley	2022 Spring barley	2022 to 2021 % change	2021 Winter wheat	2022 Winter wheat	2022 to 2021 % change
Cereal price per tonne	232	325	40%	233	333	43%
Total Gross Output	265	359	36%	266	371	40%
Fert., seed, Crop Prot.	74	122	65%	71	111	56%
Machinery Hire	33	40	23%	25	25	~
Other direct costs	3	5	97%	3	2	-40%
Total Direct Costs	109	167	53%	99	137	39%
Gross Margin	155	191	23%	167	196	18%
Allocated Fixed Costs	101	132	30%	86	109	27%
Total Costs	210	299	42%	185	246	33%
Net Margin	54	60	10%	81	124	55%

Source: Teagasc National Farm Survey 2022

¹ 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 2022: top and bottom performing Spring barley farms

	Top	Bottom	% Difference between Top and Bottom
Average crop area (hectares)	19	10	89%
Yield (tonnes per hectare)	8	7	16%
Price per tonne	334	317	6%
Gross output (€ per hectare)	2774	2264	22%
Fert., seed, spray (€ per hectare)	776	906	-14%
Machinery hire (€ per hectare)	208	327	-36%
Gross Margin (€ per hectare)	1782	971	84%
Fixed Costs (€ per hectare)	830	985	-16%
Total Costs (€ per hectare)	1822	2278	-20%
Net Margin (€ per hectare)	951	-14	-6937%

Source: Teagasc National Farm Survey 2022

Total costs of production per hectare in the top performing spring barley group was 20% lower than the bottom performing spring barley producers. Gross output per hectare for the top half of spring barley farms was 22% higher than the bottom half. Overall, this results in a €965 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 2022. In 2022, 21% of spring barley farms and no 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, 29% of spring barley farms and 75% of winter wheat farms earned a net margin of €750 or more in 2022.

Table 4: Distribution of net margin € per hectare: 2021 and 2022

Net Margin €/hectare	Spring barley		Winter wheat	
	2021	2022	2021	2022
<0	15	21	5	0
0 to 250	21	16	6	7
250-500	20	8	21	7
500-750	22	25	15	11
>750	23	29	53	75

Source: Teagasc National Farm Survey 2022

3. Variation in Technical Performance

Table 5 presents average technical performance from 2020 to 2022 for a range of indicators. Technical performance decreased in many of the measures examined in 2022 relative to 2021. However, it is important to remember that these partial productivity indicators 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 2020, 2021 and 2022.

Table 5: Technical Performance Indicators Tillage Farms 2020-2022

	2020	2021	2022
Spring barley land productivity (yield/hectare)	6.8	7.2	7.1
Winter wheat land productivity (yield/hectare)	8.9	10.4	9.8
Winter wheat Crop protection (€ per tonne crop)	30	27	31
Land Rent (€ /hectare spec. tillage farms)	457	529	538
Machinery hire (€/hectare UAA spec. tillage farms)	123	142	189

Source: Teagasc National Farm Survey 2022

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

Teagasc Roadmap Targets for 2027	2020	2021	2022
Spring Barley yield ≥ 7.2t/hectare	42	59	53
Winter Wheat yield ≥ 10.3/hectare	40	66	43
Winter Barley yield ≥ 10.0/hectare	6	6	6
Spring Barley yield ≥ 7.4 t/hectare (target for top 50%)	35	57	50
Winter Wheat yield ≥ 10.6t/ha (10%)	30	60	33
Winter Barley yield ≥ 10.2/hectare	6	6	6
Spring Barley Gross Margin $\geq \text{€}650$ per hectare	45	84	86
Winter Wheat Gross Margin $\geq \text{€}1200$ per hectare	46	80	97
Winter Barley Gross Margin $\geq \text{€}1000$ per hectare	27	27	27
Spring Barley Net Margin $\geq \text{€}150$ per hectare	38	73	68
Winter Wheat Net Margin $\geq \text{€}450$ per hectare	58	76	90
Winter Barley Net Margin $\geq \text{€}375$ per hectare	26	26	26

Source: Teagasc National Farm Survey 2022

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