

# Teagasc National Farm Survey 2018

## Cereals Enterprise Factsheet

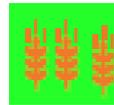


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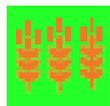
## Irish Cereal Enterprise 2018 Average Performance



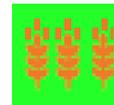
**Irish Cereal Production**  
1.85 million tonnes (down 23%)



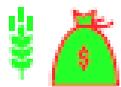
**Irish Cereal Area**  
261,000 ha (down 4%)



**Irish Barley Area**  
185,200 ha (up 3%)



**Irish Wheat Area**  
58,000 ha (down 13%)



**Spring Barley price**  
average €209 per tonne (up 38%)



**Winter Wheat price**  
average €210 per tonne (up 32%)



**Spring Barley Yield per ha**  
average 5.8 tonnes (down 19%)   
Source: Teagasc, NFS



**Winter Wheat Yield per ha**  
average 8.8 tonnes (down 20%)   
Source: Teagasc, NFS



**Total Production Cost per ha  
Spring Barley**  
average €1,237 (up 8%)



**Total Production Cost per ha  
Winter Wheat**  
average €1,586 (up 10%)



**Net Margin for Spring Barley**  
average €216 per hectare



**Net Margin for Winter Wheat**  
average €627 per hectare



**Target Yield for Spring Barley**  
7.4 tonnes per hectare  
achieved on 6% of farms



**Target Yields for Winter Wheat**  
10.2 tonnes per hectare  
achieved on 13% of farms



**Gross Margin Target Spring Barley**  
€540 per hectare  
achieved on 73% of farms



**Gross Margin Target Winter Wheat**  
€860 per hectare  
achieved on 88% of farms

Source: Teagasc National Farm Survey and Central Statistics Office

## Background

The 2018 National Farm Survey (NFS) recorded data on 898 farms. The full financial results for these farms are available in the National Farm Survey 2018 report which is available at [www.teagasc.ie/publications](http://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 58 farms with a spring barley enterprise in the survey in 2018, representing approximately 88,000 hectares. Farms with less than 10 hectares of winter wheat or spring barley are excluded from the following analysis.

### 1. Analysis of Financial Performance

Cereal yields in 2018 were lower than in 2017 for all the major cereal crops. Cereal yields for spring barley, decreased by 19%, whilst winter wheat yields decreased by 19%. However, in addition to decreases in yields, cereal prices were significantly higher in 2018 compared to 2017, with price received at farm gate 38% higher for spring barley and 32% higher for winter wheat. Straw receipts also increased significantly in 2018 compared to 2017. This resulted in an increase in output value for both spring barley and winter wheat by 16 and 17 % respectively. Direct costs increased slightly for spring barley and winter wheat, with allocated fixed cost also increasing for both crops. Some of the increase in the fixed costs allocated to the spring barley and winter wheat crops is associated with the method in which fixed costs are allocated across enterprises, with allocation based on a proportion of gross output across all enterprises. Given that output values associated with these cereal enterprises increased in 2018 relative to 2017, the allocation of whole farm fixed costs also increased for the aforementioned crops. Given the change in output value and direct and fixed costs, the net margin on spring barley farms in 2018 was €216 per hectare, and the net margin for the winter wheat crop increased by €178 per hectare, to €627 per hectare, in 2018 relative to 2017 (excluding Basic Payment figures).

**Table 1: Average gross and net margin € per hectare: Spring Barley and Winter Wheat 2017/2018<sup>1</sup>**

	2017 Spring barley	2018 Spring barley	% Change (Spring barley)	2017 Winter wheat	2018 Winter wheat	% Change (Winter wheat)
Yield per hectare	7.1	5.8	-19%	10.9	8.8	-20%
Price per tonne	151	209	38%	159	210	32%
<b>Gross Output/hectare</b>	1252	1453	16%	1895	2213	17%
Fert., Seed, Crop Prot.	493	499	1%	638	674	6%
Machinery Hire	124	151	22%	108	133	23%
Other direct costs	15	17	11%	4	7	67%
<b>Total Direct Costs</b>	635	667	5%	751	814	8%
<b>Gross Margin</b>	617	786	27%	1145	1399	22%
Fixed Costs	511	570	12%	696	772	11%
<b>Total Costs</b>	1146	1237	8%	1446	1586	10%
<b>Net Margin</b>	106	216	103%	449	627	40%

<sup>1</sup> The estimates value of straw is based on market value prices minus variables costs of production. This is a divergence from previous years when straw was assigned an opportunity cost rather than a market value. Note: 2017 figures are re-estimated based on the new methodology.

Table 2 presents average gross and net margins per tonne of crop produced for 2017 and 2018. Total costs per tonne increased for spring barley and for winter wheat, whilst price per tonne also increased. The change in costs and prices per tonne translated into a positive story in terms of net margin per tonne. In 2018 net margin per tonne for spring barley was €37 and for winter wheat was €72 per tonne.

**Table 2: Average gross and net margin € per tonne of Spring Barley and Winter Wheat 2017/2018**

	2017 Spring barley	2018 Spring barley	2018 to 2017 change	to % 2017 Winter wheat	2018 Winter wheat	2018 to 2017 change	to %
Cereal price per tonne	151	209	38%	159	210	32%	
<b>Total Gross Output (incl. straw)</b>	176	252	43%	174	253	45%	
Fertiliser, seed, crop protection	70	86	24%	59	77	31%	
Machinery Hire	17	26	50%	10	15	53%	
Other direct costs	2	3	36%	0	1	108%	
Total Direct Costs	89	116	29%	69	93	35%	
<b>Gross Margin</b>	87	136	56%	105	160	52%	
Allocated Fixed Costs	72	99	37%	64	88	38%	
Total Costs	162	214	33%	133	181	36%	
<b>Net Margin</b>	15	37	150%	41	72	74%	

## 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 that occurs throughout the country in financial performance between different cereal producers is not apparent. 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 2018: top and bottom performing Spring barley farms**

	Bottom	Top	% Difference between Top and Bottom
Average crop area (hectares)	21	19	-14%
Yield (tonnes per hectare)	5.1	6.4	21%
Price per tonne	207	211	2%
<b>Gross output (€ per hectare)</b>	1223	1677	27%
Fert., seed, spray (€ per hectare)	555	445	-25%
Machinery hire (€ per hectare)	218	87	-150%
<b>Gross Margin (€ per hectare)</b>	426	1135	62%
Fixed Costs (€ per hectare)	567	573	1%
Total Costs (€ per hectare)	1175	1015	-16%
<b>Net Margin (€ per hectare)</b>	-141	562	125%

Total costs of production per hectare are more variable in the spring barley sample than the winter wheat sample, with a 16 per cent cost differential on spring barley farms (per hectare). Gross output per hectare for the top half of spring barley farms was 27% higher than the bottom half. Overall, this results in a €703 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 2018. In 2018, 26% of spring barley farms and 2% of winter wheat farms 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, 10% of spring barley farms and 29% of winter wheat farms earned a net margin of €750 or more in 2018.

**Table 4: Distribution of net margin € per hectare: 2017 and 2018**

Net Margin €/hectare	Spring Barley		Winter Wheat	
	2017	2018	2017	2018
<0	38	26	10	2
0 to 250	34	24	5	16
250-500	22	25	15	10
500-750	6	15	45	43
>750	~	10	25	29

### 3. Variation in Technical Performance

Table 5 presents average technical performance from 2014 to 2018 for a range of indicators. Technical performance decreased in many of the measures examined in 2018 relative to 2017, due to the reduction in yields year-on-year. In addition, various Teagasc strategy documents have outlined a number of performance indicators for tillage crops for farms for the year 2025. Table 6 shows the percentage of farms that achieved a selection of these targets in 2016, 2017 and 2018.

**Table 5: Technical Performance Indicators Tillage Farms 2013-2017**

	2014	2015	2016	2017	2018
Spring barley land productivity (yield/hectare)	7.0	7.4	6.8	7.1	5.8
Winter wheat land productivity (yield/hectare)	10.0	10.8	9.3	10.9	8.8
Winter wheat Crop protection (€ per tonne crop)	26	26	29	27	33
Land Rent (€/hectare spec. tillage farms)	NA	NA	282	307	348
Machinery hire (€/hectare UAA spec. tillage farms)	94	107	93	113	126

**Table 6: Percentage of farms achieving selected Teagasc Tillage 2025 Roadmap Targets**

Teagasc Roadmap Targets for 2025	2016	2017	2018
	<b>% of farms</b>		
Spring Barley yield $\geq 7.4$ t/hectare	25	40	6
Wheat yield $\geq 10.2$ /hectare	37	75	13
Spring Barley yield $\geq 7.7$ t/hectare (target for 10%)	21	30	2
Wheat yield $\geq 10.5$ t/ha (10%)	33	55	10
Winter Wheat Gross Margin $\geq \text{€}860$ per hectare	40	70	88
Spring Barley Gross Margin $\geq \text{€}540$ per hectare	38	60	73

#### Methodological Note: Updated 2017 population weights

Note that the data reported for 2017 in this factsheet supersede that reported in the NFS Cereals 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)