TEAGASC National Farm Survey Results 2011

Cereals Enterprise

The 2011 National Farm Survey (NFS) recorded data on 1,050 farms. The full financial results for these farms are available in the National Farm Survey 2011 report, (www.teagasc.ie/publications). This publication summarises the results for the major cereal enterprises (Winter wheat and Spring barley) on these farms. In terms of representation, there were 156 farms with a Spring barley enterprise in the survey in 2011, representing approx. 144,000 hectares. Farms with less than 10 hectares of Winter wheat or Spring barley are excluded from the following analysis.

Table 1: Average gross and net margin per hectare: Main cereal crops

	2010 Spring Barley	2011 Spring Barley	Percentage Change (Spring Barley) '10 to '11	2010 Winter wheat	2011 Winter wheat	Percentage Change (Winter wheat) '10 to '11
Yield tonnes per ha.	6.4	6.8	7%	8.8	9.7	10%
Cereal price per tonne	163	169	4%	174	178	3%
Total Gross Output (incl straw)	**1128**	**1220**	**8%**	**1708**	**1837**	**8%**
Fertiliser, seed, crop protection	391	466	18%	572	652	14%
Other direct costs	142	142	-	129	121	-6%
Total Direct Costs	533	608	14%	702	773	10%
Gross Margin	**596**	**612**	**3%**	**1007**	**1063**	**4%**
Total Fixed Costs	446	497	11%	574	675	18%
Total Costs	979	1105	13%	1275	1449	14%
Net Margin	**149**	**115**	**-23%**	**433**	**388**	**-10%**

1. Analysis of Financial Performance

2011 was a good year in terms of increases in output value. Cereal prices and yield per hectare increased for the two main cereal crops, spring barley and winter wheat, resulting in a 8% increase in gross output per hectare (Table 1). However, direct costs and fixed costs also increased by 13% and 14% for S. barley and W. wheat respectively. While gross margin did increase by 3 to 4%, net margin declined. Net margin per hectare in 2011 was €115 and €388 for S. barley and W. wheat respectively. Table 2 presents average margins per tonne of crop produced for 2010 and 2011. The results show that while output value per tonne increased in 2011, this was not sufficient to offset the increase in costs per tonne produced. The average net margin in 2011 for S. barley and W. wheat was €17 and €40 per tonne respectively.

Table 2: Average gross and net margin Euro per tonne of S. Barley and W. Wheat

	2010 Spring Barley	*2011 Spring Barley*	*Change (Spring Barley) '10 to '11*	*2010 Winter Wheat*	*2011 Winter Wheat*	*Change (Winter Wheat) '10 to '11*
	€	*€*	*%*	*€*	*€*	*%*
Cereal price per tonne	163	169	4%	174	178	3%
Total Gross Output (incl. straw)	**177**	**178**	**1%**	**193**	**190**	**-2%**
Fertiliser, seed, crop protection	61	68	11%	65	67	4%
Other direct costs	22	21	-7%	15	13	-14%
Total Direct Costs	84	89	6%	79	80	1%
Gross Margin	**94**	**89**	**-4%**	**114**	**110**	**-4%**
Total Fixed Costs	70	73	4%	65	70	7%
Total Costs	154	162	5%	144	150	4%
Net Margin	**23**	**17**	**-28%**	**49**	**40**	**-18%**

2. Variation in Financial Performance

The data in Tables 1 and 2 presents the average across all hectares and tonnes of S. barley and W. wheat in the country. 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 classified on the basis of gross margin per hectare per farm and splits the sample into third groupings (top, middle and bottom). Total costs of production per hectare are not largely different between the three groupings. However large differences in gross output per hectare exist between the groupings. Gross output per hectare for the top one third of S. barley and W. wheat farms is 60% and 50% higher respectively than the bottom one third of farms. This results in a €457 and €688 per hectare difference in net margin per hectare between the bottom one third and top one third of S. barley and W. wheat farms.

Table 3: Variation in output and margin: top, middle and bottom one third of cereal farms

	Spring Barley			**Winter Wheat**		
	Bottom	Middle	Top	Bottom	Middle	Top
Yield (tonnes per ha)	5.4	7	7.6	8.33	9.81	10.94
Price per tonne	158	166	175	167	177	181
Gross output (€/hectare)	**894**	**1207**	**1428**	**1407**	**1787**	**2090**
Fert., seed, spray (€/hectare)	469	476	453	626	632	611
Other direct costs (€/hectare)	202	209	76	245	140	68
Gross Margin (€/hectare)	**223**	**522**	**899**	**536**	**1016**	1411
Total Fixed Costs (€/hectare)	393	425	612	640	685	827
Total Costs (€/hectare)	1064	1110	1141	1510	1456	1506
Net Margin (€/hectare)	**-170**	**97**	**287**	**-104**	**331**	**584**

Table 4 shows the distribution of net margin per hectare on S. barley and W. wheat farms in 2010 and 2011. In 2010 37% of S. barley farms and 21% of W. wheat farms earned a negative net margin, i.e. made a loss when all overhead costs were considered. This proportion increased slightly in 2011 to 45% and 26% for the two crops respectively. At the opposite end of the distribution only 3% of W. wheat farms earned a net margin of €1,000 or more in 2010, with a slight decrease to 2% in 2011.

Table 4: Distribution of net margin € per hectare: 2010 and 2011

Net Margin €/hectare	Spring Barley		Winter Wheat	
	% of farms			
	2010	2011	2010	2011
<0	37	45	21	26
0 to 250	32	24	7	20
250-500	22	25	41	23
500-750	7	4	22	23
750-1000	2	2	6	7
>€1,000	-	-	3	2

3. Variation in Technical Performance

Table 5 presents average technical performance across all hectares in 2010 and 2011 along a number of indicators. Technical performance improves along all measures examined in 2011.

Table 5: Technical Performance Indicators

	Average 2010	*Average 2011*	*Percentage Change*
S. barley land productivity (yield per hectare)	6.4	6.8	+6%
W. wheat land productivity (yield per hectare)	8.8	9.7	+10%
Labour productivity (W. wheat yield per labour unit)	774	787	+2%
Crop protection usage (Cost per tonne of W. wheat crop)	28	25	-11%

The Teagasc Road Map for tillage crops has set performance indicators for farms for 2018. Table 6 shows the percentage of farms that achieved a selection of these targets in 2011.

Table 6: Percentage of farms achieving selected Teagasc tillage road map targets

	Percentage 2011
Barley yield >=7.3 t/ha	43%
Wheat yield >= 9.5 t/ha	54%
Barley yield > =7.8 t/ha (target for top 10% of producers)	29%
Wheat yield >= 10 t/ha (target for top 10% of producers)	44%
Wheat costs <=€1,100 per ha	5%
Barely costs < =€950 per ha	20%
Wheat costs <= €1050 per ha (target for top 10% of producers)	5%
Barley costs <= €900 per ha (target for top 10% of producers)	12%