

# National Farm Survey 2012 Preliminary Estimates



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Rural Economy & Development Programme

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# Teagasc

# **National Farm Survey**

# **2012 Estimates**

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2012 at a glance The main developments

#### Weather Effects

The inclement weather was the big news story of 2012. A very wet summer followed by the early onset of winter negatively affected crop yields and feed usage. The situation was worst in the south and south east with summer rainfall up significantly. Production costs increased by 9% while feed costs increased most significantly. **Expenditure on concentrate feed** was up 30% and bulky feed up 28% on average.

#### **Output Prices**

Prices for agricultural outputs remained relatively favourable in 2012. Cattle prices were strong, with the **average finished cattle price increasing 15%** in 2012. **Milk prices declined by 9%** but from high levels in 2011 and production was also down slightly in 2012. Lamb prices decreased by 7%. Although prices for grain products increased significantly yields were seriously compromised and **the value of the winter wheat harvest was down 19%**.





#### **Family Farm Income**

Family farm income **fell by 15% in 2012** to  $\in 25,483$  on average but was still almost 10% ahead of the 2010 figure. The income decrease was entirely driven by input expenditure as gross output declined by less than 1% on average, while total production costs increased by almost 9%. The average direct payment per farm was  $\in 20,534$  in 2012, a 2% reduction on the 2011 figure. Direct payments comprised 81% of income on average.



#### **Dairy Farms**

On Dairy farms average family **farm income decreased by 24%** in 2012, representing a return to the 2010 level. Dairy farms were particularly adversely impacted by the weather and direct costs of production were up 21%. The impact of the declining milk price was offset by strong cattle prices and overall farm gross output was more or less unchanged in 2012

## **Cattle Other Farms**

Average family **farm income decreased by 8%** on the Cattle Other system farms in 2012. Although farm gross output increased on cattle farms, production costs rose faster, up 6% in total in 2012. The average direct payment on cattle farms in 2012 was €20,793, down 3% on the previous year. Direct Payments comprised 118% of total farm income on Cattle Other farms in 2012.

#### **Sheep Farms**

**Income on Sheep farms declined by 11%** on average in 2012. The value of gross output of the sheep enterprise declined by 6% due to falling lamb prices, while total production costs increased by 8%. Direct payments per farm averaged at €19,961 in 2012, comprising 118% of farm income.



On average **income on specialist Tillage farms declined by 4%** in 2012. It was a poor year for crop production with the gross output of cereals down 19%. However strong cattle prices and a considerable reliance on direct payments meant that overall farm gross output was down just 6%. Expenditure on conacre rental was down substantially (40%) in 2012.



# Family Farm Income € / farm 19,183 17,621 11,997 2010 2011 2012





# What is Family Farm Income?

Family Farm Income per Farm (FFI) is the principal measure of income used in the NFS. It is calculated by deducting all farm costs (direct and overhead) from the value of farm gross output. Factors of production owned by the farmer, such as labour and land, are not included as costs.

FFI therefore represents the financial reward to all members of the family, who work on the farm, for their labour, management and investment. It does not include income from non-farming sources and thus may not be equated to household income.



The average family farm income across all 79,103 farms was **€25,483** in 2012, representing a 15% decline on 2011, albeit average incomes in 2011 reached unprecedented highs.

Components of Family Farm Income		
	2012	change 2011
	€	%
Gross output	81,971	-0.3
(of which direct payments)	20,534	-2
Production costs	56,488	+8
(of which direct costs)	30,898	+14
(of which overhead costs)	25590	+3
Family Farm Income	25,483	-15

The value of gross output remained more or less unchanged, just down 0.3%. The value of subsidies declined slightly due to a reduction in REPS payments and modulation on the Single Farm Payment. The income decrease was mostly driven by increased input expenditure. Total production costs on the average farm were up 8%. Direct costs increased more significantly almost entirely due to increased feed usage as expenditure on fertiliser was only up 2%.



Costs as a proportion of output increased from 65% in 2011 to 70% in 2012 constituting a loss in efficiency.



Although income decreased by 15% in 2012, income was still comparatively high relative to the previous seven years. Incomes in 2012 are the second highest on record since 2005.



# Distribution of Farm Income

There is a wide variation in farm incomes. In 2012 approximately 19%, or 15,029 farms, produced a family farm income of less than  $\in$ 5,000 compared to 13 percent of farms in 2011.

At the opposite end of the spectrum, 16% of farms produced a farm income of over €50,000 compared to 19% the previous year. Almost 3% or 2,373 farms, produced an income of over €100,000



Family farm income does not include a cost for family labour. On average there is **1.1 family labour units** employed on each farm.

Almost 14% of farms are operated with less than three-quarters of a labour unit, while 47% of farms have more than one unpaid family labour unit.

The average unpaid labour supplied was highest on Dairy farms at 1.6 labour units and lowest on Cattle Rearing farms at 1 labour unit.

The average income per labour unit was €20,888 in 2012.



The income per labour unit exceeded €50,000 on 12% of farms in 2012. While at the opposite end of the spectrum income per labour unit was less than €10,000 on 35% of farms.



The number of farms where either the farm holder or the spouse had off-farm employment peaked in 2006 at 59% and has been in decline since.

The number of farmers employed off farm decreased from 30% in 2011 to 27% in 2012, while the number of households where either the farmer or spouse were employed off farm, declined from 51.3% in 2011 to 49.4% in 2012.





The average farm size across all systems of farming in 2012 was 47 hectares and the average income was €542 per hectare.

On average Tillage farms are the largest at 64 hectares of utilised agricultural area. However, dairy farms are the most profitable producing an income per hectare of  $\notin$ 939 in 2012.

The dry-stock sector, cattle and sheep farms, is characterised by low profitability and small holdings. The average income per hectare was €326 on Cattle Rearing farms in 2012, the lowest of all systems. This system also has the smallest average size.

Average Fa	arm Size &	Income pe	r Hectare
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	Size	Income
	ha	€/ha
Dairy	55	939
Cattle Rearing	36	326
Cattle Finishing	42	419
Sheep	50	337
Tillage	64	556
Mixed Livestock	63	763
All Farms	47	542



Average family farm income varies considerably by farm system and is considerably higher than average on Dairy and Mixed Livestock farms. The average dairy farm income in 2012 was more than double the sector average.

Income decreased across all farm systems between 2011 and 2012. Proportionately, the largest income reduction was on Dairy farms down 24% from 2011 to 2012.

Income on the two cattle systems was down 8% from 2011 to 2012 and the Cattle Rearing system recorded the lowest farm income at just  $\in$ 11,743 in 2012.

Income on Sheep farms declined by 11% in 2012 from  $\leq$ 19,050 to  $\leq$ 16,898. Income on Tillage farms declined by just 4% from 2011 to 2012, while income on Mixed Livestock farms was down 12.5%.

Farm system classifications are defined in the appendix

## **Reliance on Direct Payments**

On average, total direct payments per farm were  $\in$ 20,534 in 2012. This comprises the Single Farm Payment (SFP), the Disadvantaged Area Scheme (DAS), the Rural Environmental Protection Scheme (REPS) and other subsidies including the newer Agri-Environmental scheme (AEOS).

Tillage farms have the highest Single Farm Payment on average, at €23,575, and it comprises 66% of income on Tillage farms.

Cattle Other farms are the most reliant on the Single Farm Payment as it comprises 86% of income.

When the value of all direct payments to farmers are considered, DAS, REPS and Other payments in addition to the SFP, Mixed Livestock farms are the biggest recipients with a total direct payments sum of  $\in$ 27,882. Tillage farms also have significant payments at an average of  $\notin$ 26,484 per farm.

Single	Share
Payment to Farm Income	
Contribution of the Single Far	m

	Single Farm	Share of
	Payment	Income
	€	%
Dairy	17,204	33
Cattle Rearing	9,388	80
Cattle Other	15,074	86
Sheep	12,104	72
Tillage	23,575	66
Mixed	21,602	45
All Farms	14,675	58

Across all farm systems the Single Farm Payment is the most important direct payment. The Disadvantaged Area Scheme is of more importance to the dry-stock farms than Tillage or Dairy Farms.



Direct payments comprise on average 81% of total farm income across all farms and reliance is highest on Cattle Rearing farms, comprising over 100% of income. On average across all farms, **market income was €4,949**, that is income before the receipt of direct payments.

The two cattle and sheep systems failed to earn a positive market income in 2012. In other words, the costs of production exceeded the price received for the products in the market place. Without direct payments these farms would be operating at a loss.



Viability of Farming

An economically viable farm is one that has the capacity to (a) pay family labour at the average agricultural wage, and (b) provide a 5 per cent return on non-land assets.

A sustainable farm is not economically viable but it is sustainable due to the presence of off-farm income. While a vulnerable farm is one that is not economically viable and does not have income from off-farm employment.



Viability of Farms by System			
	Viable	Sustain	Vulner-
		-able	able
	%	%	%
Dairy	71	18	11
Cattle Rearing	16	45	39
Cattle Other	27	29	43
Sheep	20	35	45
Tillage	74	9	17
Mixed	59	22	18
All Farms	37	30	33

The proportion of economically viable farms decreased to 37% in 2012 from 41% in 2011. Approximately 30% of farms are economically sustainable.

Almost 33% of farms, or approximately 26,000 farms, are classified as economically vulnerable because the farm is not economically viable and neither the farmer nor spouse has off-farm income.

Tillage and Dairy farms are the most viable. The proportion of economically viable drystock farms remains low at about 16% for Cattle Rearing farms.



The average borrowings per farm in 2012 was €23,979 a 1% increase from the previous year.

The large majority of farms have no farm business related debt, although this varies considerably across farm systems. The average borrowings on Dairy farms was €70,937 compared to just €6,158 on Sheep farms.

Gross new investment in farming totalled  $\in 657$  million in 2012 an increase of almost 2% on the 2011 level. The average gross new investment per farm was  $\in 8,306$  in 2012. The average gross new investment per Dairy farm was  $\in 20,466$  in 2012.



The average income per farm varies considerably by region. The Border region has the lowest average farm income at just over  $\in$ 14,000 per farm and the lowest income per hectare. The Border is also the most reliant on direct payments, contributing 122% of farm income. The average Single Farm Payment per hectare in the Border region is  $\in$ 294.

The West region has the smallest farms on average and the lowest Single Farm Payments per hectare at  $\notin$ 251.

	Indicat		
	Farm	Single	Farm
	Size	Farm	Income
		Payment	
	ha	€/ha	€/ha
Border	40	294	363
East	59	331	557
Midlands	49	365	539
Southwest	48	300	567
Southeast	55	369	680
South	48	278	607
West	39	251	382

# On average total direct payments comprise 107% of family farm income in the West.

The Southeast has the most profitable farms with an average farm income of just over  $\in$  37,000 and income per hectare of  $\in$  680, almost twice the income per hectare of the Border region.

The Southeast has the highest Single Farm payment per hectare at  $\in$  369, but is the least reliant on direct payments as they contribute just 68% of farm income.



# **Overview of the Dairy System**

There were approximately 15,584 specialist dairy farms with an **average FFI of €51,648** in 2012, a **24% decrease on 2011**. Incomes were still ahead of the 2010 level by almost 2%.

The income decrease was mostly driven by increased expenditure with direct costs up 21% and overhead costs up 8%. Overall farm gross output was more or less unchanged on the average dairy farm. While the value of the dairy enterprise declined, strong cattle prices in addition to relatively stable direct payment receipts were sufficient to offset much of the decline.

# Components of Family Farm Income Dairy Farms

	2012	change
	2012	2011
	€	%
Gross output	172,103	-0.3
(of which direct payments)	22,596	-2
Production costs	120,455	15
(of which direct costs)	71,686	21
(of which overhead costs)	48,769	8
Family Farm Income	51,648	-24

Milk production per hectare decreased slightly in 2012, down 3%. Milk price also declined, by 9%, to an annual average milk price of 32 cent per litre. This resulted in an overall reduction in the gross output per hectare for the dairy enterprise of 12% in 2012.

Looking specifically at the dairy enterprise, direct and overhead costs per hectare increased significantly. Expenditure on concentrate feed increased by a third with feed usage increasing from 865kg per cow in 2011 to 1,017kg per cow in 2012 on average. The combined impact of the lower milk price and output per hectare was a 22% reduction in the gross margin per hectare for the dairy enterprise.

Dairy Enterprise Performance Indicators		
	2012	change
	2012	2011
<u>,</u>		%
Production (litres / ha)	9,632	-3
Milk Price (€ / litre)	0.32	-9
Gross Output (€/ha)	3,082	-12
Direct Costs (€/litre)	0.15	+20
Gross Margin (€ / litre)	0.18	-22

About 30% of dairy farms produced a farm income of  $\in$  30,000 or less in 2012, while 9% earned  $\notin$  100,000 or more.

On a per labour unit basis about 35% of all dairy farms produced an income per labour unit of less than  $\in$  30,000, while almost 30% produced an income per labour unit of over  $\in$  50,000.



## **Overview of the Cattle Rearing System**

There were approximately 17,877 Cattle Rearing farms with an **average FFI of €11,743** in 2012, a **8% reduction on 2011**. Suckler cow production is the dominant enterprise on these farms, with approximately one third of farms each selling the progeny as weanlings, store animals or finished.

<b>Components of Family Farm Income</b>
Cattle Rearing Farms

	2012	change
		2011
	€	%
Gross output	38,560	4
(of which direct payments)	15,458	-4
Production costs	26,816	10
(of which direct costs)	12,912	16
(of which overhead costs)	13,904	5
Family Farm Income	11,743	-8

The income decrease was entirely driven by higher costs as total farm gross output increased by 4%. Some of the gain in cattle gross output was eroded by declining direct payments. The value of the Single Farm Payment on Cattle Rearing farms decreased by 2.6%, while the value of the Rural Environmental Protection Scheme payments declined by 18%. Some of the reduction in REPS payments was offset by the AEOS scheme, but not entirely.

Direct costs increased substantially mostly due to increased feed expenditure; concentrate feed costs are up 34% and bulky feed costs are up 36%.

The average Cattle Rearing farmer operates a 35.5 hectare holding with 25 suckler cows at a stocking rate of 1.06 livestock units per hectare. The average Single Farm Payment is  $\in$ 264 per hectare compared to a national average of  $\notin$ 312 per hectare across all farm systems and sizes.

#### **Cattle Rearing Farms**

Average for farms	2012
Farm Size	35.5
Number of Cows	25
Livestock Units per hectare	1.06
Single Farm Payment (€/ha)	264
Family Labour Units supplied	0.98
Age of Farmer	56
Farmer employed off farm (%)	37

The average Cattle Rearing farm is operated with less than one unpaid family labour unit, 0.98 and the average age of the farmer is 56 compared to a national average of 57. About 37% of Cattle Rearing farms have off-farm employment.

Just over one-third of Cattle Rearing farms produced a family farm income of  $\notin$ 5,000 or less in 2012, with a further 28% earning between  $\notin$ 5,000 and  $\notin$ 10,000. Only 17% of Cattle Rearing farms produced a farm income of  $\notin$ 20,000 or greater.

On a per labour unit supplied, i.e. unpaid labour, 29% of farms produced an income per labour unit of  $\notin$ 5,000 or less, while just 17% of farms achieved an income per labour unit of  $\notin$ 20,000 or more.



### **Overview of the Cattle Other System**

There were approximately 23,414 Cattle Other farms with an **average FFI of €17,621** in 2012, a **8% decrease on 2011**. Cattle fattening is the dominant farm enterprise on these farms.

# Components of Family Farm Income Cattle Other Farms

(	)11
20   € %   Gross output 55,671 +   (of which direct payments) 20,793 -3	
Gross output 55,671 + (of which direct payments) 20,793 -:	6
(of which direct payments) 20,793 -	0
	1
Production costs 38,050 +	3
	6
(of which direct costs) 19,435 +1	10
of which overhead costs) 18,615 +	-2
Family Farm Income 17,621 -	

The income decrease on Cattle Other farms in 2012 was also due to increased input expenditure as gross output remained more or less unchanged. Similar to the Cattle Rearing farms, the value of direct payments declined by 3%, eroding some of the gains in gross output due to rising cattle prices.

As with the Cattle Rearing farms, the increase in direct costs was due to increased expenditure on feed items. Total production costs increased by 6% from 2011 to 2012 on Cattle Other farms.

The average Cattle Other farmer operates a 42 hectare holding with approximately 53 livestock units. The average Single Farm Payment is  $\in$  356 per hectare slightly higher than the national average at  $\in$  312 per hectare.

## **Cattle Other Farms**

Farm Size Livestock Units Livestock Units per hectare	42 53
	53
Livesteck Units per hestere	
Liveslock Units per nectare	1.25
Single Farm Payment (€/ha)	356
Family Labour Units supplied	1.1
Age of Farmer	60
Farmer employed off farm (%)	32

The average Cattle Other farm is operated with slightly more than one labour unit, 1.1 and the average age of the farmer is 60 compared to a national average of 57. About 32% of Cattle Other farms have off-farm employment.

Just about a quarter of Cattle Other farms produced a family farm income of  $\notin$ 5,000 or less in 2012, with a further 16% earning between  $\notin$ 5,000 and  $\notin$ 10,000. Over one-third of Cattle Other farms produced a farm income of  $\notin$ 20,000 or greater.

On a per labour unit supplied, i.e. unpaid labour, 25% of farms produced an income per labour unit of  $\in$ 5,000 or less, while 35% of farms achieved an income per labour unit of  $\notin$ 20,000 or more.



## **Overview of the Sheep System**

There were approximately 12,577 Sheep farms with an **average FFI of €16,898** in 2012, a **11% decrease on 2011**. Although these farms may operate a number of farm enterprises, sheep production is the predominant system on these farms.

		change
	2012	2011
	€	%
Gross output	47,938	0.3
(of which direct payments)	19,961	1.5
Production costs	31,040	8
(of which direct costs)	15,251	13
(of which overhead costs)	15,789	4
Family Farm Income	16,898	-11

The income decrease on Sheep farms in 2012 was also due to both declining output and increased costs. Average lamb prices declined by 7% in 2012 from an average of  $\in 102$  in 2011 to  $\in 95$  in 2012.

Input expenditure increase, with direct costs up 13%. As with the other livestock systems this was almost entirely due to feed costs. Concentrate feed expenditure increased by over 20%.

The average Sheep farmer operates a 50 hectare holding with approximately 142 ewes. The average stocking rate is 1.08 livestock units per hectare.

The average Single Farm Payment per hectare is  $\notin$ 244 for sheep farms, the lowest of all farm systems and considerably lower than the national average of  $\notin$ 312 per hectare.

#### Sheep Farms

Average for farms	2012
Farm Size	50
Ewes	142
Livestock Units per hectare	1.08
Single Farm Payment (€/ha)	244
Family Labour Units supplied	1.1
Age of Farmer	59
Farmer employed off farm (%)	28

The average Sheep farm is operated with slightly more than one unpaid family labour unit, 1.1 and the average age of the farmer is 59 compared to a national average of 57. On about 28% of Sheep farms the farmer has off-farm employment.

Just about 17% of Sheep farms produced a family farm income of  $\in$ 5,000 or less in 2012, with a further 22% earning between  $\in$ 5,000 and  $\in$ 10,000. About 12% of sheep farms produced a farm income of  $\in$ 30,000 or greater.

On a per labour unit supplied, i.e. unpaid labour, 19% of farms produced an income per labour unit of  $\in$ 5,000 or less, while 25% of farms achieved an income per labour unit of  $\notin$ 20,000 or more.



### **Overview of the Tillage System**

There were approximately 6,566 Tillage farms with an **average FFI of €35,593** in 2012, a **4% decrease on 2011**. Although these farms may operate a number of farm enterprises, crop production is the predominant system on these farms.

**Components of Family Farm Income** 

	2012	change
	2012	2011
	€	%
Gross output	114,531	-6
(of which direct payments)	26,484	-4
Production costs	78,938	-7
(of which direct costs)	40,392	-4
(of which overhead costs)	38,546	-10
Family Farm Income	35,593	-4

The income story on tillage farms differs somewhat from the livestock systems. Input costs did not increase as significantly, as expenditure on livestock feeding stuffs is a less important input on Tillage farms. However, gross output values declined at a greater pace on Tillage farms than in the livestock sector.

Although cereal prices were quite favourable in 2012, the weather adversely affected yields and the overall gross output value of crops on tillage farms was down 19% from 2011 to 2012. Relatively strong cattle prices offset some of this decline, and the overall reduction in farm gross output was 6%.

The average Tillage farmer operates a 64 hectare holding and slightly over half of the farm is in crop production. The average gross output per hectare of crops in 2012 was  $\in$ 1,753. This compares to an average gross output of over  $\in$ 3,000 on a dairy enterprise in the same year.

The average Single Farm Payment per hectare is  $\in$  370 for Tillage farms considerably higher than the national average of  $\in$  312 per hectare.

Tillage Farms	
Average for farms	2012
Farm Size	64
Hectares of Cereals	36
Cereal Output (€/ha)	1,735
Single Farm Payment (€/ha)	370
Family Labour Uniits supplied	0.95
Age of Farmer	56
Farmer employed off farm (%)	30

The average Tillage farm is operated with slightly less than one unpaid family labour unit, 0.95 and the average age of the farmer is 56 compared to a national average of 57.

About 11% of Tillage farms produced a family farm income of  $\in$ 70,000 or more, while almost 40% of farms produced a family farm income of  $\in$ 20,000 or less.

The lower labour input supply on Tillage farms means that income is higher when measured on a per labour unit basis. About 22% of Tillage farms produced an income per labour unit of  $\notin$ 70,000 or more.



Appendix

# **Background Notes**

The National Farm Survey (NFS) has been conducted by Teagasc on an annual basis since 1972. The survey is operated as part of the Farm Accountancy Data Network of the EU and fulfils Ireland's statutory obligation to provide data on farm output, costs and income to the European Commission. A random, nationally representative sample is selected annually in conjunction with the Central Statistics Office (CSO). Each farm is assigned a weighting factor so that the results of the survey are representative of the national population of farms.

In 2012 approximately 1,000 farms participated in the NFS. These preliminary estimates of farm income for 2012 are based on a sample of 760 farms. The final results, based on the full sample of 1,000 farms, will be published in June 2013. While the income figures may change somewhat between the preliminary and final results, the representative basis of the sample and the weighting methodology ensures that any changes are unlikely to be significant.

Farms are assigned to six farm systems on the basis of farm gross output, as calculated on a standard output basis. Standard output measures are applied to each animal and crop output on the farm and only farms with a standard output of €8,000 or more, the equivalent of 6 dairy cows, 6 hectares of wheat or 14 suckler cows, are included in the sample. Farms are then classified as one of the six farm systems on the basis of the main outputs of the farm. Farms falling into the Pigs and Poultry System are not included in the survey, due to the inability to obtain a representative sample of these systems.

# **Methodological Note: Sample Changes**

For the 2012 Teagasc National Farm Survey, farms below €8,000 of Standard Output (SO) were no longer included in the sample. Up to this the threshold for inclusion of farms in the survey field had been €4,000 SO. The excluded farms represent 18% of the total farm population but they contribute only about 5% of the sector's gross output. As a result a straightforward comparison between the 2012 results and those of preceding years could easily lead to an incorrect interpretation of intervening changes. Accordingly the results presented in this publication included revised figures for previous years which will facilitate a direct comparison between 2012 and previous years. Nevertheless it must be borne in mind that the population of farms represented in the 2012 NFS sample is smaller than previous years and the survey now represents 79,103 farm holdings which represent 93% of the sectors output.

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