Teagasc
e-Profit Monitor Analysis

Drystock Farms 2012

Agriculture and Food Development Authority

CONTENTS

AUTHORS
TEAGASC SPECIALIST SERVICE

DRYSTOCK FARMS 2012

The Teagasc e-Profit Monitor is an internet based system which allows drystock farmers and their advisers to enter physical and financial data on their farm enterprises online. It is available through the Teagasc client site on www.client.teagasc.ie.

As an advisory service if we are to give good advice and help you make sound decisions as to what direction your business should take in the future then we need to establish how the farm is currently performing. Having a completed eProfit Monitor will allow us to examine key indicators such as Farm Output, Variable and Fixed costs and your current Gross Margin per hectare (excluding all premia payments). Having this information will leave you in the best position to plan for the future and adapt the current farming system to the challenges ahead.

This year's booklet summarises the results from 1,062 cattle farms across the country and 227 lowland sheep farms plus 40 hill sheep farms.

Within the cattle grouping, 847 were categorised as suckling farms and 215 as non-breeding farms. These farms are considered to be among the Top 25% of cattle farms in the country when compared with those that are randomly selected for the Teagasc National Farm Survey (NFS). The 227 lowland sheep farms are returning a similar gross margin to the average for sheep farms in the NFS and it is a consistent feature that the sheep farms with profit monitors are no better than the NFS average.

Where data is presented in the form of Top or Bottom 1/3s, the farms are ranked on the basis of gross margin excluding premia per hectare. Gross margin excluding premia per hectare is an important indicator because it highlights the current level of technical efficiency at which the enterprise is operating as well as showing the potential for improvement. There is a high correlation between this figure and net profit per hectare.

When we refer to premia throughout the analysis, it refers to the Single Farm Payment and, where applicable, the Compensatory Allowance Scheme payment, REPS payments, AWRBS payments on suckler cows, BTAP payments and the Sheep Grassland Scheme.

Appendix 2 features the profit monitor results for the farms participating in the Teagasc/Irish Farmers Journal BETTER beef programme and shows the progress achieved. This programme has the clear aim of increasing profitability on the participating farms (and influencing other farms) and has a target of €1,000 gross margin per hectare at the end of the three year period.

Appendix 3 features the financial performance of the sheep enterprise on farms participating in Teagasc BETTER Sheep programme.

Pearse Kelly, Head of Drystock Knowledge Transfer

Cattle Farms
eProfit Monitor Analysis 2012

Comparison – 2011 v 2012 (Cattle Farms)

TABLE 1 below represents 306 beef farms (both suckler and non-breeding beef farms) that completed a Teagasc eProfit Monitor for both 2011 and 2012. It allows us to compare the physical and financial performance from a matched sample of farms across the two years.

Table 1: Comparison of costs and income on the same farms in two years

Profit Monitors –Cattle Farms	Matched Sample (306 Farms)		
	2011	**2012**	**% Change**
Physical			
Stocking Rate LU/ha	1.67	1.77	+6%
Liveweight Produced kg/ha	590 kg	619 kg	+5%
kg/LU	353 kg	350 kg	-1%
Financial €/ha			
Output Value	€1,157	€1,340	+16%
Variable Costs	€630	€716	+14%
Gross Margin Excl. Premia	**€527**	**€624**	**+18%**
Fixed Costs	€489	€514	+5%
Profit Excl. Premia	€38	€110	+190%
Total Premia*	€617	€627	+2%
Premia Retained*	106%	118%	+12%

(* Includes Single Farm Payment, REPS, CAS, Suckler Welfare premium & BTAP payment)

The main points from TABLE 1 are:

- Stocking rate increased from 1.67 LU/ha. to 1.77 LU/ha., a 6% increase.
- The increase in stocking rate meant there was a 5% increase in the amount of beef liveweight produced per hectare across the 306 farms.
- Gross output value per hectare increased by 16% from 2011 to 2012 rising by €183 per hectare.
- Variable costs per hectare also rose by 14% representing an €86 per hectare increase. As a % of gross output variable costs remained above 50%.

- Due to the gross output per hectare rising by more than the increase per hectare in variable costs, the gross margin per hectare rose by 18% in the two years or €97 per hectare.
- Fixed costs per hectare rose by 5% or €25 per hectare.
- There was a 190% increase in profit excluding premia per hectare between 2011 and 2012 on average across the 306 farms rising from €38 to €110 per hectare.
- Total premia retained per hectare rose by 11% due to the increase in profit per hectare.

TABLE 2 shows the breakdown of variable costs per hectare in 2012 compared to 2011 on the 306 farms that completed a Teagasc eProfit Monitor for both years.

Table 2: Changes in Variable Costs between 2011 and 2012 – Cattle Farms

Matched sample 306 farms

Variable Costs € / ha	2011	2012	Change %
Concentrates	215	282	+ 31%
Fertiliser	135	143	+ 6%
Veterinary	76	81	+ 7%
Contractor	111	107	- 4%
Other Variable Costs	93	103	+ 11%
Total Variable Costs	630	716	+ 14%

- The 14% rise in variable costs per hectare from 2011 to 2012 was mostly due to a 31% rise in the amount spent per hectare on concentrates.
- The very poor weather conditions in 2012 would have caused most of the rise in concentrate costs per hectare on beef farms.
- Fertiliser and veterinary costs per hectare also rose by 6% and 7%, respectively.
- Contractor costs per hectare dropped by 4% between 2011 and 2012.

TABLE 3 shows the breakdown of fixed costs per hectare in 2012 compared to 2011 on the 306 farms that completed a Teagasc eProfit Monitor for both years.

Table 3: Changes in Fixed Costs between 2011 and 2012 – Cattle Farms

Matched sample 306 farms

Fixed Costs € / ha	2011	2012	Change %
Hired Labour	34	36	+ 6%
O/D, Loan Interest & Bank Charges	30	28	- 7%
Machinery Running Costs	87	94	+ 8%
Car / ESB / Phone	59	61	+ 3%
Depreciation	96	98	+2%
Repairs & Maintenance	51	58	+ 14%
Insurance	35	35	-
Land Lease	47	47	-
Other Fixed Costs	50	57	+ 14%
Total Fixed Costs	489	514	+ 5%

- The 5% rise in fixed costs per hectare was due to a number of different fixed costs rising.
- Repairs and maintenance costs per hectare rose by the highest amount with a 14% increase.
- Machinery running costs per hectare rose by 8%. Some of this would have been due rises in fuel costs.
- Interest per hectare dropped between 2011 and 2012 by 7%.

Suckling Farms 2012

TABLE 4 shows the analysis per hectare on 847 beef farms that completed a Teagasc eProfit Monitor for 2012 where a suckler herd was their main beef enterprise. It shows the Average along with the Top and Bottom 1/3 of farms (based on gross margin excluding premia per hectare).

Table 4: All Suckling Farms 2012 – per hectare analysis Profit Monitor (847 Farms)

	Top 1/3	Average	Bottom 1/3	Top v Bottom
Physical				
Farm Size ha	45	39	32	+13
Stocking Rate LU/ha	1.95	1.58	1.26	+0.69
Liveweight Produced kg/LU	341 kg	307 kg	233 kg	+108
Liveweight Produced kg/ha	664 kg	485 kg	294 kg	+370
Financial €/ha				
Gross Output Value	**€1,503**	**€1,054**	**€569**	+€934
Variable Costs	€693	€585	€488	+€205
Gross Margin	**€809**	**€469**	**€81**	+€728
Fixed Costs	€554	€495	€427	+€127
Net Profit excl. Premia	**€255**	**-€26**	**-€346**	+€601
Total Premia *	€618	€566	€508	+€110
Total Premia Retained *	141%	95%	32%	
Single Farm Payment	€466	€394	€321	+€145
Single Farm Payment Retained	187%	137%	51%	

(* Includes Single Farm Payment, REPS, CAS, Suckler Welfare premium & BTAP payment)

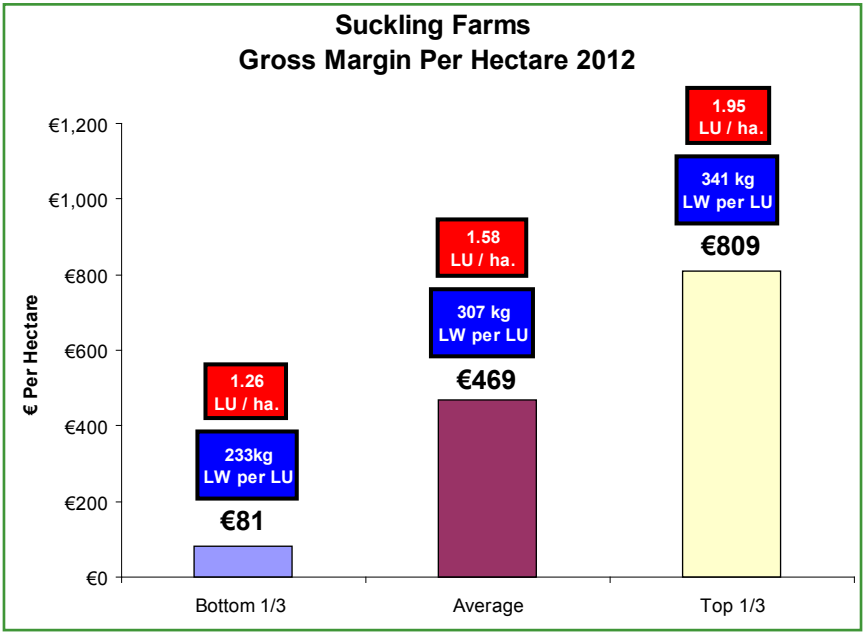
The main points from TABLE 4 are:

- The average stocking rate across the 847 suckling farms was 1.58 LU per hectare. The Top 1/3 farms carried an extra 0.69 LU per hectare compared to the Bottom 1/3 farms (1.95 vs. 1.26 LU per hectare).
- 307 kg of beef liveweight per livestock unit was produced on average. The Top 1/3 farms produced an extra 108 kg of liveweight for every livestock unit on the farm compared to the Bottom 1/3 of farms.
- When the higher stocking rate on the Top 1/3 of farms is combined with the higher beef output per livestock unit on the same farms the output of liveweight per hectare from the Top 1/3 of farms was more than double the beef produced per hectare on the Bottom 1/3 of farms.

- The significantly higher kg of beef liveweight per hectare on the Top 1/3 of farms follows through to a higher gross output on these farms compared to the Bottom 1/3 of farms. At a gross output per hectare of €1,503 they were almost €1,000 higher per hectare compared to the Bottom 1/3 at €569 per hectare. On a 40 hectare farm that would be almost €40,000 extra of a gross output from the farm per year.
- While the Top 1/3 of farms had a significantly higher gross output per hectare compared to the Bottom 1/3 of farms their variable costs per hectare were only an extra €205 per hectare (€693 vs.€488 per hectare). This represents a much more efficient use of variable costs on the Top 1/3 of farms. For every €1 spent on their variable costs they achieved €2.17 of a gross output compared to the Bottom 1/3 of farms who only achieved a gross output of € 1.17 for every €1 they spent on variable costs.
- While the Top 1/3 of farms were operating at variable costs that were 46% of their farms gross output the equivalent figure on the Bottom 1/3 was a massive 86%.
- A breakdown of the variable costs is given in Appendix 1.
- The average gross margin per hectare from the 847 suckler farms was €469. The Top 1/3 farms had an extra €728 per hectare of a gross margin compared to the Bottom 1/3 due to the higher gross output combined with a modest increase in variable costs.
- Due to the higher output the Top 1/3 of farms carried more fixed costs per hectare compared to the Bottom 1/3 of farms (an extra €126 per hectare). With more stock there will be more housing and machinery costs. This can be seen in the breakdown of the fixed costs in Appendix 1.
- Net profit excluding premia was on average a loss of €26 per hectare for the 847 farms. The Bottom 1/3 of farms operated at a loss of €346 per hectare compared to the Top 1/3 of farms at a profit of €255 per hectare, a €601 per hectare difference.
- The Bottom 1/3 of suckling farms only held onto 32% of the total premia that came into their farms with the rest being used to cover farm running costs. The Top 1/3 held onto all of their premia and had their net profit per hectare to go with it.

Figure 1 Identifies the key variables that influenced gross output and consequently gross margin per hectare on the suckling farms. Stocking rate was 55% higher on the Top 1/3 of farms compared with the Bottom 1/3. In addition to the higher stocking rate the beef output per livestock unit was 46% higher on the Top 1/3 with both combining to produce a gross margin 10 times higher on the Top 1/3 of farms.

FIGURE 1



Suckling to Beef Farms 2012

TABLE 5 shows the analysis per hectare for 2012 on the 223 suckler farms where the progeny were brought through and finished as beef. It shows the Average along with the Top and Bottom 1/3 of farms (based on gross margin excluding premia per hectare).

Table 5: Suckling to Beef Farms 2012 – per hectare analysis Profit Monitor (223 Farms)

	Top 1/3	Average	Bottom 1/3	Top v Bottom
Physical				
Farm Size ha	54	49	41	+13
Stocking Rate LU/ha	2.14	1.74	1.42	+0.72
Liveweight Produced kg/LU	364 kg	335 kg	276 kg	+88
Liveweight Produced kg/ha	778 kg	583 kg	392 kg	+386
Financial €/ha				
Gross Output Value	**€1,786**	**€1,273**	**€772**	+€1,014
Variable Costs	€814	€671	€573	+€241
Gross Margin	**€972**	**€602**	**€199**	+€773
Fixed Costs	€615	€541	€489	+€126
Net Profit excl. Premia	**€357**	**€61**	**-€290**	+€647
Total Premia *	€637	€580	€535	+€102
Total Premia Retained *	156%	110%	46%	
Single Farm Payment	€496	€430	€370	+€126
Single Farm Payment Retained	200%	149%	66%	

(* Includes Single Farm Payment, REPS, CAS, Suckler Welfare premium & BTAP payment)

The main points from TABLE 5 are:

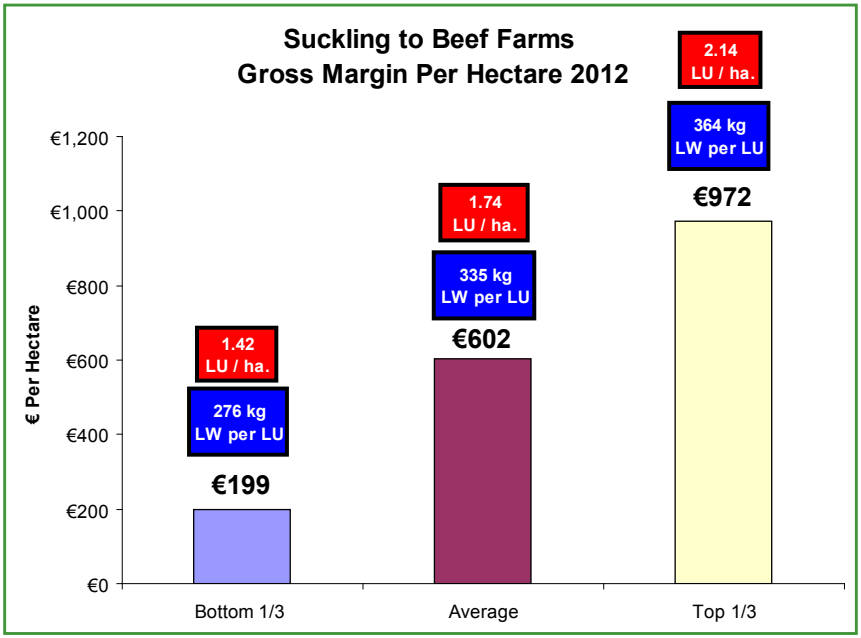
- Compared to all suckling farms with a Teagasc eProfit Monitor for 2012 the differences between the Top 1/3 and Bottom 1/3 of farms were even greater when the farms that were bringing the progeny through to beef were looked at as a separate group.
- Comparing the Top 1/3 to the Bottom 1/3 per hectare of suckling to beef farms:-
  - Liveweight produced was 386 kg higher
  - Gross Output was €1,014 higher
  - Variable costs were €241 higher
  - Variable costs as a % of gross output were 46% compared to 74%

- Gross margin was €773 higher
- Fixed costs were €126 higher
- Net profit excluding premia was €647 higher

- The Bottom 1/3 of suckling to beef farms only held onto 46% of the premia that came into their farms whereas the Top 1/3 of suckling to beef farms held onto all of their premia to add to their net profit of €357 per hectare.

Figure 2 Identifies the key variables that influenced gross output and consequently gross margin per hectare on the suckling to beef farms. Stocking rate was 51% higher on the Top 1/3 of farms compared with the Bottom 1/3. In addition to the higher stocking rate the beef output per livestock unit was 32% higher on the Top 1/3 with both combining to produce a gross margin almost 5 times higher on the Top 1/3 of suckling to beef farms.

FIGURE 2



Suckling to Weanling/Store Farms 2012

TABLE 6 shows the analysis per hectare for 2012 on the 624 suckler farms where the progeny were sold as either weanlings or stores. It shows the Average along with the Top and Bottom 1/3 of farms (based on gross margin excluding premia per hectare).

Table 6: Suckling to Store/Weanling Farms 2012 – per hectare analysis Profit Monitor (624 Farms)

	Top 1/3	Average	Bottom 1/3	Top v Bottom
Physical				
Farm Size ha	39	35	32	+7.8
Stocking Rate LU/ha	1.86	1.52	1.25	+0.61
Liveweight Produced kg/LU	319 kg	287 kg	226 kg	+93
Liveweight Produced kg/ha	594 kg	436 kg	283 kg	+310
Financial€/ha				
Gross Output Value	**€1,343**	**€945**	**€548**	+€794
Variable Costs	€614	€542	€490	+€124
Gross Margin	**€728**	**€404**	**€58**	+€670
Fixed Costs	€520	€471	€436	+€84
Net Profit excl. Premia	**€208**	**-€68**	**-€378**	+€586
Total Premia *	€620	€560	€509	+€111
Total Premia Retained *	134%	88%	26%	
Single Farm Payment	€450	€377	€318	+€132
Single Farm Payment Retained	184%	131%	41%	

(* Includes Single Farm Payment, REPS, CAS, Suckler Welfare premium & BTAP payment)

The main points from TABLE 6 are:

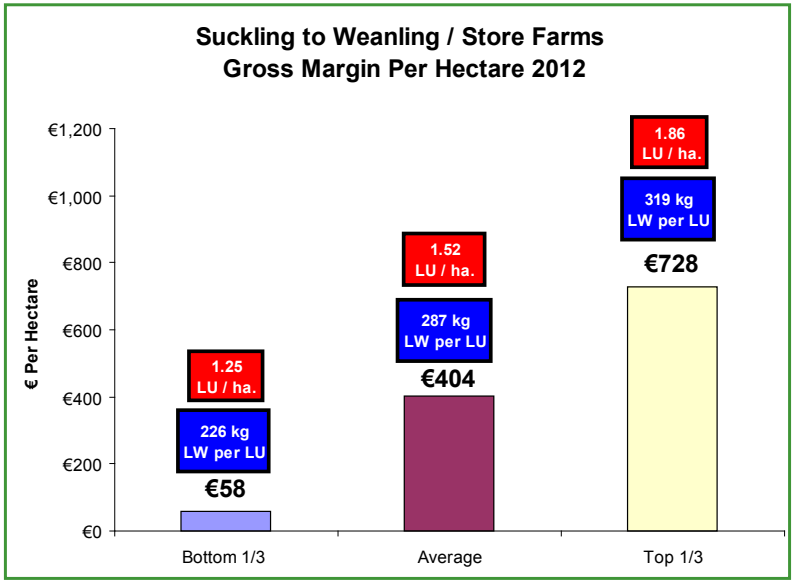
- Again there were significant differences in the financial performance per hectare comparing the Top 1/3 with the Bottom 1/3 of suckler farms that sold weanlings or stores due to a much higher output of beef produced per hectare (an extra 310 kg of liveweight).
- The higher output of liveweight per hectare was due to the higher stocking rate (an extra 0.61 livestock units per hectare) and the extra liveweight produced per livestock unit (an extra 93 kg).
- Gross margin per hectare was €670 higher on the Top 1/3 of farms compared to the Bottom 1/3 and they earned an extra €586 per hectare profit excluding premia.
- The suckler farms selling weanlings or stores had a lower gross margin

and net margin per hectare excluding premia compared to the suckling to beef farms (TABLE 5).

- Output of beef liveweight per hectare was 147 kg lower on the suckling to weanling / store farms compared to the suckling to beef farms due to a lower average stocking rate (1.52 vs. 1.74 LU per hectare) and a lower amount of beef produced per livestock unit (287 vs. 335 kg).
- Gross output on the suckling to weanling / store farms was €328 per hectare lower than the suckling to beef farms due almost entirely to the lower amount of beef liveweight produced per hectare.
- Variable costs on the suckling to weanling / store farms were €129 per hectare lower than those on the suckling to beef farms due for the most part to a lower reliance on concentrates. However, as a % of gross output they were higher (57% vs. 53%) on the suckling to weanling / store farms.
- The suckling to beef farms had a 49% higher gross margin per hectare compared to the suckling to weanling / store farms (€602 vs. €404 per hectare) due to their higher output per hectare.
- Even the though the average fixed costs per hectare on the suckling to weanling / store farms were lower, their net profit excluding premia was still negative at -€68 compared to the €61 per hectare profit on the suckling to beef farms.
- The suckling to weanling / store farms held onto 88% of the all the premia that came into their farm in 2012 with the remaining 12% going towards farm running costs.

Figure 3 Identifies the key variables that influenced gross output and consequently gross margin per hectare on the suckling to weanling / store farms. Stocking rate was 49% higher on the Top 1/3 of farms compared with the Bottom 1/3. In addition to the higher stocking rate the beef output per livestock unit was 41% higher on the Top 1/3 with both combining to produce a gross margin over 12 times higher on the Top 1/3 of suckling to weanling / store farms.

FIGURE 3



Non-Breeding Farms 2012

TABLE 7 shows the analysis per hectare for 2012 on the 215 beef farms that either did not have suckler cows or where there were some cows they made up a very small proportion of the beef herd on the farm. It shows the Average along with the Top and Bottom 1/3 of farms (based on gross margin excluding premia per hectare).

Table 7: Non Breeding Farms 2012 – per hectare analysis Profit Monitor (215 Farms)

	Top 1/3	Average	Bottom 1/3	Top v Bottom
Physical				
Farm Size ha	38	37	33	+5
Stocking Rate LU/ha	1.77	1.50	1.36	+0.41
Liveweight Produced kg/LU	499 kg	397 kg	268 kg	+231
Liveweight Produced kg/ha	883 kg	595 kg	364 kg	+519
Financial €/ha				
Gross Output Value	**€2,122**	**€1,325**	**€713**	+€1,410
Variable Costs	€1,084	€794	€629	+€455
Gross Margin	**€1,039**	**€531**	**€84**	+€955
Fixed Costs	€633	€528	€508	+€125
Net Profit excl. Premia	**€405**	**€3**	**-€424**	+€830
Total Premia *	€731	€635	€554	+€177
Total Premia Retained *	155%	100%	23%	
Single Farm Payment	€636	€506	€425	+€212
Single Farm Payment Retained	179%	126%	30%	

(* Includes Single Farm Payment, REPS, CAS, Suckler Welfare premium & BTAP payment)

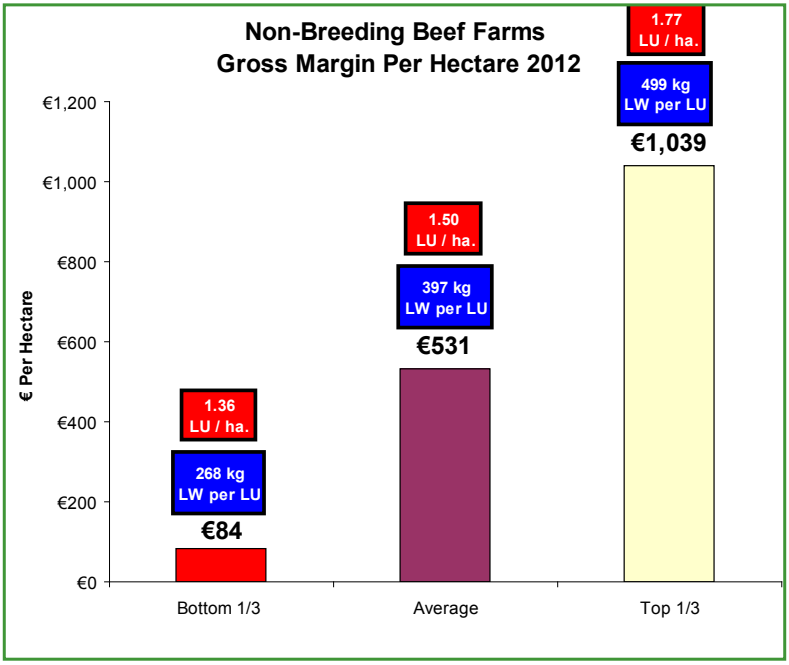
The main points from TABLE 7 are:

- The average stocking rate was 1.50 livestock units per hectare with the Top 1/3 of farms at 1.77 livestock units per hectare compared to the Bottom 1/3 at 1.36 livestock units per hectare.
- Similar to the suckler farms the Top 1/3 produced a significantly higher output of beef liveweight per hectare compared to the Bottom 1/3 due to producing almost double the amount per livestock unit along with having a higher stocking rate. The Top 1/3 of non-breeding beef farms produced over half a ton extra beef liveweight per hectare compared to the Bottom 1/3 of non-breeding beef farms.

- The Top 1/3 of non-breeding beef farms had almost three times the gross output per hectare compared to the Bottom 1/3 of non-breeding beef farms a €2,122 vs. €713). The extra beef produced per hectare was one of the reasons for this but differences in prices paid per kg for bought in stock (calves / weanlings / stores) and the selling prices achieved per kg (live or dead) when they are sold also heavily influence this figure.
- Even though the variable costs per hectare were much higher on the Top 1/3 of non-breeding farms compared to the Bottom 1/3 of non-breeding farms (€1,084 vs.€629) the extra €1,409 per hectare gross output more than compensated for these extra costs to leave a gross margin per hectare of €1,039 on the Top 1/3 of farms compared to just €84 per hectare on the Bottom 1/3 of farms.
- The variable costs as a % of gross output on the Top 1/3 of farms was 51% whereas it was 88% on the Bottom 1/3 of farms.
- A breakdown of the variable costs is given in Appendix 1.
- Fixed costs per hectare were only modestly higher (an extra €125) on the Top 1/3 of non-breeding beef farms compared to the Bottom 1/3 of farms resulting in an €830 per hectare difference in the net margin excluding premia when comparing the Top 1/3 with the Bottom 1/3 of non-breeding beef farms.
- A breakdown of the fixed costs is given in Appendix 1.
- The Bottom 1/3 of non-breeding beef farms had a lower premia level per hectare compared to the Top 1/3 of non-breeding beef farms and only held onto 23% of it. The Top 1/3 held onto all of their premia payments to add to their €405 per hectare net profit.

Figure 4 Identifies the key variables that influenced gross output and consequently gross margin per hectare on the non-breeding beef farms. Stocking rate was 30% higher on the Top 1/3 of farms compared with the Bottom 1/3. In addition to the higher stocking rate the beef output per livestock unit was 86% higher on the Top 1/3 with both combining to produce a gross margin over 12 times higher on the Top 1/3 of non-breeding beef farms.

FIGURE 4



Beef Profit Focus Farms 2010 - 2015

TABLE 8 shows the analysis per hectare from 2010 to 2012 on 53 Beef Profit Focus Farms. These farms were selected in 2011 by their Teagasc advisers as farmers that have a strong interest in increasing their profitability per hectare through applying recommended technologies that that will boost farm output per hectare. They are all implementing farm plans that were drawn up between them and their adviser, with 2012 being the second year in their five year plan.

Table 8: Cattle Profit Focus Farms 2010 to 2012 – per hectare analysis Profit Monitor (53 Farms)

	2010	2011	2012	% Change 2010 - 2012
Physical				
Farm Size ha	59	59	57	-3%
Cattle ha.	52	52	49	-6%
Stocking Rate LU/ha	1.72	1.77	1.84	+7%
Liveweight Produced kg/LU	315	311	325	+3%
Liveweight Produced kg/ha	541	550	598	+11%
Financial €/ha				
Gross Output Value	**€892**	**€1135**	**€1330**	+49%
Variable Costs	€566	€604	€702	+24%
Gross Margin	**€327**	**€532**	**€627**	+92%
Fixed Costs	€480	€479	€498	+4
Net Profit excl. Premia	**-€153**	**€53**	**€129**	
Total Premia *	€615	€579	€590	-4%
Total Premia Retained *	75%	109%	122%	
Single Farm Payment	€466	€445	€462	-1%
Single Farm Payment Retained	99%	142%	156%	

(* Includes Single Farm Payment, REPS, CAS, Suckler Welfare premium & BTAP payment)

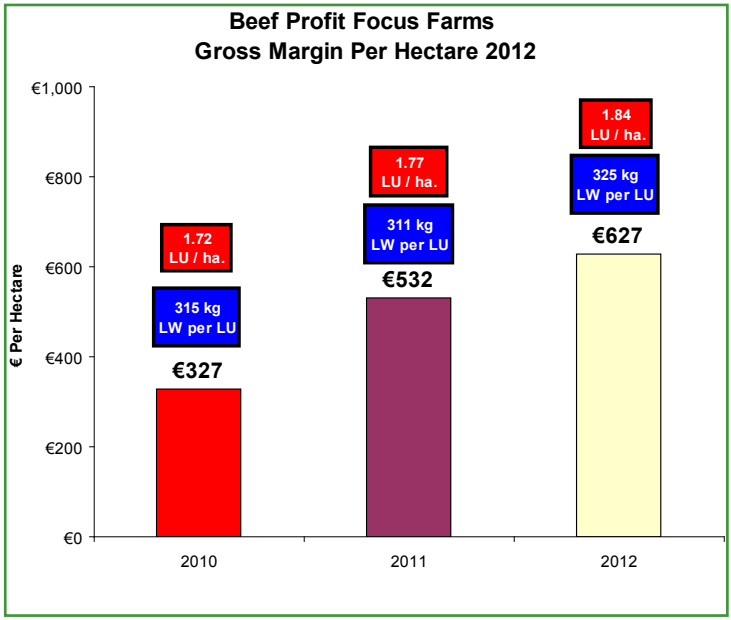
The main points from TABLE 8 when comparing 2012 to 2010 are:

- Stocking rate has increased by 7% rising from 1.72 to 1.84 livestock units per hectare.
- An extra 11% of beef liveweight has been produced per hectare due to an increase in the amount produced per livestock unit (+3%) and the extra stock carried per hectare (+7%)
- Gross output per hectare has gone from €892 to €1,330 per hectare, a 49% increase. This is due to the extra beef liveweight produced per hectare and also a rise in the price of beef over that period.

- Variable costs have also risen from €566 to €702 per hectare. However, with a €438 rise in gross output per hectare the extra €136 in variable costs is more than covered giving an increase in gross margin per hectare of €300. This represents a 92% increase in gross margin per hectare in a two year period.
- The variable costs as a % of gross output fell from 63% in 2010 to 53% in 2012.
- There was a very small (+ 4%) increase in fixed costs which meant that most of the extra gross margin was retained as extra profit per hectare.
- Net profit per hectare excluding premia rose by €282 per hectare. Across the average farm size of 57 hectares this comes to an increase of over €16,000 in net profit.
- Premia retained on the farm rose from 75% in 2010 to retaining all of it in 2012 along with a net profit per hectare of €129.

Figure 5 Identifies the key variables that influenced gross output and consequently gross margin per hectare on the Beef Profit Focus Farms. From 2010 to 2012 stocking rate increased by 7% and beef output per livestock unit increased by 3%. Gross margin per hectare increased by 92%.

FIGURE 5



Sheep Farms – e Profit Monitor Analysis 2012

Comparison of 2011 to 2012 (Mid-Season Flocks)

TABLE 9 below provides a comparison of 49 sheep farms that completed a profit monitor for both 2011 and 2012 (mainly mid season lowland flocks). It allows us to compare the physical and financial performance from a matched sample of farms across two years.

Table 9: Comparison of costs and income on same sheep farms over two years

Profit Monitors **Matched sample for 2011 & 2012 (49 farms) – mid season lowland flocks**				
	2011	**2012**	Difference	Change %
Physical data				
Stocking rate LU/ha	1.96	2.02	+0.06	+3%
Ewes to ram	196	216	+20	+10%
Lambs reared per ewe joined to ram	1.45	1.40	-0.05	-3%
Lambs reared per hectare	12.5	12.6	+0.1	-
Ewe lambs retained	49.1	43.6	-5.6	-11%
Financial (€)				
Average lamb price	€105	€98	-€7	-7%
Gross Output per ha	€1227	€1152	-€75	-6%
Variable Costs per ha	€546	€588	+€42	+8%
Gross Margin per ha	€681	€563	-€118	-17%
Fixed Costs per ha	€490	€462	-€28	-6%
Net Margin per ha	€190	€101	€89	-47%

- The farms contained in this analysis have predominantly mid season lowland enterprises.
- In terms of output, there was a decrease in lambs reared per ewe to ram (-3%). However, stocking rate increased (+3%). The combination of these factors led to a small increase in the number of lambs reared per hectare from 12.5 to 12.6.
- There was a 7% decline in average lamb price. Consequently gross output decreased by 6% or €75 per hectare.
- In the 49 flocks, ewe numbers increased by 10% from 196 to 216 which is in line with an overall increase in sheep numbers throughout the

country in recent years and indicates an increased confidence in sheep farming over that period. However, the number of ewe lambs retained as replacements decreased by 11% indicating concerns farmers may have once again over the future potential for sheep. This may also have arisen due to scarce grass supplies in late summer and autumn 2012.

- Variable costs increased by 8% over the year (see Table 10). While most individual costs had modest increases, the greatest monetary increase was in the cost of concentrates which increased by 21% from €178 to €215 per hectare.
- The decrease in output combined with the increase in variable costs resulted in a decline in gross margin by €118 per hectare (17%).
- A detailed analysis of the fixed costs is presented in Table 11. Overall fixed costs decreased by 6% in 2012. The main savings arose in depreciation with small reductions in most other areas. However, much of the savings were cancelled out by an increase of 13% on hired labour.
- The combined effect of the factors outlined above resulted in the net profit declining in 2012 by €89 per hectare. This represented a 47% decline from €190 to €101 per hectare, leaving a small profit being achieved from production.

TABLE 10 demonstrates price changes in some of the major input costs on sheep farms that completed a profit monitor in both 2011 and 2012.

Table 10: Changes in Variable Costs between 2011 and 2012

Matched sample 49 farms

Variable Costs € / ha	**2011**	**2012**	**Change %**
Concentrates	€178	€215	+21%
Fertiliser & Lime	€119	€123	+3%
Veterinary	€94	€98	+4%
Contractor	€76	€71	-7%
Straw	€17	€22	+29%
Total Variable Costs	€546	€588	+8%

- All of the main variable cost items increased except for contractor charges which were down by 7%.
- The greatest percentage increase arose in the cost of straw. This is likely to reflect the difficulty caused by very wet weather throughout 2012, leading to a scarcity of quality straw and a scarcity of winter feed.
- Concentrate cost also rose significantly by 21%. This is likely to be due to an increase in the price of concentrates plus additional quantities used. Extra concentrates were required due to grass scarcity and poor grazing conditions particularly in the autumn of 2012 as well as poor quality and scarce supplies of winter feed.

TABLE 11 examines how fixed costs have changed from 2011 to 2012. Overall spending on fixed costs for this group of farms has decreased by 6%.

Table 11: Changes in Fixed Costs between 2011 and 2012

Matched sample 49 farms

Fixed Costs € / ha	**2011**	**2012**	**Change %**
Hired Labour	€48	€54	+13%
O/D, Loan Interest & Bank Charges	€19	€17	-11%
Car / ESB / Phone	€60	€57	-5%
Depreciation	€84	€60	-29%
Repairs & Maintenance	€59	€56	-5%
Insurance	€31	€32	+3%
Land Lease	€53	€51	-4%
Total Fixed Costs	€490	€462	-6%

Lowland Sheep 2012 (Mid-Season Flocks)

TABLE 12 shows the analysis for the 2012 eProfit Monitor for sheep and is based on the returns of 227 sheep farms that were primarily involved in mid- season lamb production. Farms are ranked on the basis of gross margin per hectare, excluding premia and divided into the Top 1/3, Average and Bottom 1/3.

Table 12: Sheep per Hectare Analysis 2012 (227 farms)

	Top 1/3	Average	Bottom 1/3
Physical Performance			
Flock size	188	151	103
Stocking rate(LU/ha)	2.11	1.76	1.44
Ewes/ha	10.0	7.7	6.0
Lambs reared per ewe to ram	1.43	1.30	1.11
Lambs reared per hectare	14.3	10.0	6.7
Financial Performance €/ha			
Gross output	€1394	€957	€529
Variable costs	€573	€486	€415
Gross margin	€820	€471	€114
Fixed costs	€600	€450	€291
Net profit excl premia	€220	€21	-€176
Net profit include all premia*	€635	€430	€276
% Premia* retained	209%	105%	61%
Average lamb price € / head	€98	€95	€86

(* Includes Single Farm Payment, REPS, CAS, Sheep Grassland Scheme)

- Average flock size for the Top 1/3 was over 87% (85 ewes) greater than flock size for the Bottom 1/3.
- The Top 1/3 also had a significantly higher stocking rate at 10 ewes per hectare compared to 6 ewes per hectare for the Bottom 1/3. Furthermore, there was an extra 0.33 lambs reared per ewe put to the ram for the Top 1/3.
- The combined effect of the higher stocking rate and higher weaning rate resulted in 7.6 extra lambs reared per hectare. This was largely what led to the higher output figure of an extra €865 per hectare and is the foundation for the higher gross margin and higher profit achieved.
- The average gross margin was €471 per hectare. However, the gross margin per hectare for the Top 1/3 at €820 was €706 higher than that of the Bottom 1/3. The gross margin per hectare for the Top 1/3 in 2012 was more than seven times greater than that of the Bottom 1/3.
- While all farmers operated in the same market, farmers in the Top 1/3 were paid €12 per lamb more than farmers in the Bottom 1/3.

Figure 6 shows the variation in gross margin across the three groups. It identifies the key variables that influenced gross output and consequently margin per hectare on the 227 sheep farms. The main contributing factors influencing the difference in gross margin per hectare were:

1. **Lambs reared per ewe to the ram – 1.43 for the Top 1/3 compared with 1.11 for the Bottom 1/3.**
2. **Higher stocking rate, 10 ewes compared with 6 ewes per hectare.**
3. **Lambs weaned per hectare, 14.3 compared with 6.7**
4. **Higher lamb price, €98 compared with €86**

FIGURE 6

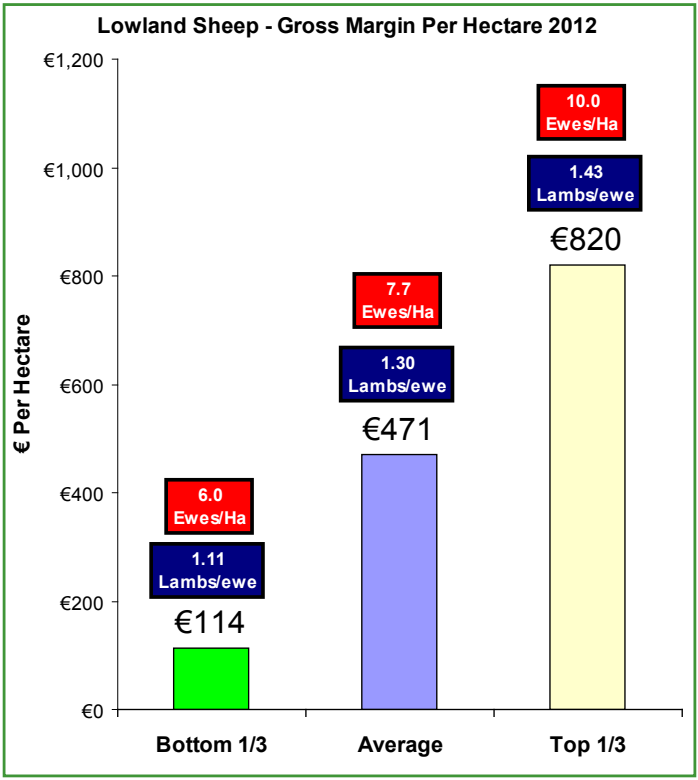


TABLE 13 shows the output, costs and margins on a per ewe basis for lowland sheep farms that completed a profit monitor for 2012. Farms are categorised as Top 1/3, Average and Bottom 1/3, ranked on the basis of gross margin per hectare.

Table 13: Per ewe to the ram analysis 2012 (227 farms)

	Top 1/3	Average	Bottom 1/3
Physical Performance			
Lambs reared per ewe to ram	1.43	1.30	1.11
Financial Performance € /Ewe			
Gross Output	€139	€124	€88
Variable Costs	€57	€63	€69
Gross Margin	€82	€61	€19
Fixed Costs	€60	€58	€48
Nett Profit excl Premia	€22	€3	-€29
Average Lamb Price € / head	€98	€95	€86

- Output per ewe for the Top 1/3 was €51 higher than for the Bottom 1/3.
- An extra 0.32 lambs weaned per ewe to the ram increased output by €31/ewe.
- There was a further increase due to an extra €12 per lamb worth €13 per ewe.
- The four main variable costs including purchased feed, fertilizer and lime, veterinary costs and contractor costs accounted for over 87% of total variable costs.
- Variable costs per ewe were highest for the Bottom 1/3 at €69. When combined with the lower weaning % for the Bottom group it resulted in variable costs per lamb being over €22 greater than the variable cost per lamb for the Top 1/3.
- The average gross margin per ewe was €61. There was a large variation with the Top 1/3 achieving a gross margin per ewe of €83 with just €19 achieved for the Bottom 1/3.
- In the average flock of 151 ewes, a farm in the Top 1/3 was achieving an extra gross margin of €9,362 over a flock of the same size in the Bottom 1/3.
- Fixed costs per ewe were €12 higher for farms in the Top 1/3 compared with those in the Bottom 1/3. However, when examined on a per lamb basis, the fixed costs per lamb were actually marginally lower for the Top 1/3, with €42, €45 and €43 per lamb for the Top, Average and Bottom 1/3, respectively.

- The net profit excluding premia was €22 per ewe for the Top 1/3, €3 per ewe for the Average and a loss of €29 per ewe for the Bottom 1/3. This represented a difference of €51 between the Top and Bottom 1/3 farms.
- Based on these figures sheep farmers in the Top 1/3 with the average ewe flock of 151 were achieving an extra profit of €2,869 compared to the Average and over €7,700 more than farmers in the Bottom 1/3.

Costs per Ewe

TABLE 14 shows the breakdown of the major variable and fixed costs on a per ewe basis for the lowland flocks with a profit monitor for 2012.

Table 14: Major costs per ewe to ram analysis 2012 (227 farms)

	Top 1/3	Average	Bottom 1/3
Total Variable Costs (€/ewe) (of which)	**57**	**63**	**69**
Purchased Feed	21	24	28
Fertiliser	13	13	14
Veterinary	9	9	9
Contractor	7	9	12
Other	7	8	6
Total Fixed Costs (€/ewe) (of which)	**60**	**58**	**48**
Machinery Running	10	10	9
Labour	4	4	3
Land Lease	7	6	4
Depreciation Buildings	6	5	3
Depreciation Machinery	7	5	4
Repairs & Maintenance	8	7	5
Car, ESB & Phone – farm share	6	7	8
Interest	3	3	3
Other	9	11	9

- Purchased feed was the largest single variable cost on sheep farms in 2012. The average cost per ewe was €24. This equates with over €18 per lamb weaned. Farms in the Top 1/3 spent approximately €4 less and those in the Bottom 1/3 spent approximately €7 more per lamb weaned compared with the average farms. The high level of expenditure on purchased feed is of particular concern given the ability of Irish farms to grow grass, which is a much cheaper feed.

- Contractor costs were €5 per ewe more on the Bottom 1/3 farms compared to farms in the Top 1/3, while fertiliser and veterinary costs were similar on a per ewe basis across all three groups.
- Machinery running costs were the single biggest fixed cost on sheep farms in 2012. Combined with machinery depreciation, they accounted for almost 26% of total fixed costs.
- Other significant fixed costs included building depreciation, repairs & maintenance, land lease and car, electricity & phone with the latter being higher on the Bottom 1/3 of farms than either the Average or the Top 1/3.
- The total annual cost of maintaining a ewe was €117 in both the Top and Bottom 1/3 of farms and €121 for the Average farms. When these are examined on a per lamb basis, the cost of producing a lamb was €82, €93 and €105 for the Top, Average and Bottom groups, respectively.

Hill Sheep 2012

TABLE 15 details the hill sheep analysis from profit monitors for 2012.

Table 15: Hill sheep per ewe to ram analysis 2012 (40 farms with Profit Monitor)

Physical	
Average Flock Size	178
Lambs reared per ewe joined to ram	0.98
Average Lamb Price (€/head)	67
Financial	**€/ewe**
Output	58
Purchased feed	13
Fertilizer and Lime	8
Vet	6
Contractor	3
Other	5
Total Variable Costs	35
Gross Margin	**23**
Total Fixed Costs	25
Net Profit Excl Premia	-2

- Average performance was 0.98 lambs reared per ewe joined to the ram.
- Average lamb price was €67. Average gross margin was €23 per ewe.
- As with the lowland flocks, the four main variable costs of purchased feed, fertilizer and lime, veterinary costs and contractor costs accounted for over 87% of total variable costs.
- Similar to the lowland flocks, purchased feed was the single largest variable cost on hill sheep farms and accounted for over 37% of total variable costs.
- Output per ewe, for this group of hill sheep farms, was approximately 47% of the output level achieved on the 227 lowland sheep flocks in 2012. However, variable costs per ewe were over 55% of the variable costs on average of the lowland flocks.
- Correspondingly, the gross margin of €23 per ewe on the hill sheep flocks was less than 38% of the gross margin per ewe of the lowland ewes.
- The average total fixed costs for the hill sheep farms, was €25 per ewe, leaving a net loss excluding premia of €2 per ewe.

Appendices

Appendix 1

Table 1: Major Costs on Suckling Farms 2012 (847 Farms)

	Top 1/3	Average	Bottom 1/3
Total Variable Costs €/ha	693	585	488
€/kg liveweight	€1.05	€1.21	€1.66
Of which:			
Feed €/ha	275	208	149
€/kg liveweight	€0.41	€0.43	€0.51
Fertiliser & Lime €/ha	146	120	97
€/kg liveweight	€0.22	€0.25	€0.33
Contractor €/ha	92	101	108
€/kg liveweight	€0.14	€0.21	€0.37
Vet/Meds/AI €/ha	99	85	68
€/kg liveweight	€0.15	€0.18	€0.23
Total Fixed Costs €/ha	554	495	427
€/kg liveweight	€0.83	€1.02	€1.45
Of which:			
Land Rental €/ha	62	47	29
€/kg liveweight	€0.09	€0.10	€0.10
Machinery Running €/ha	102	86	65
€/kg liveweight	€0.15	€0.18	€0.22
Hired Labour €/ha	36	27	20
€/kg liveweight	€0.05	€0.06	€0.07
Depreciation €/ha	116	98	78
€/kg liveweight	€0.17	€0.20	€0.27
Interest €/ha	32	34	33
€/kg liveweight	€0.05	€0.07	€0.11

Table 2: Major Costs on Non Breeding Farms 2012 (215 Farms)

	Top 1/3	Average	Bottom 1/3
Total Variable Costs €/ha	1084	794	629
€/kg liveweight	€1.23	€1.33	€1.73
Of which:			
Feed €/ha	680	434	278
€/kg liveweight	€0.77	€0.73	€0.76
Fertiliser & Lime €/ha	136	119	113
€/kg liveweight	€0.15	€0.20	€0.31
Contractor €/ha	103	104	111
€/kg liveweight	€0.12	€0.17	€0.30
Vet/Meds/AI €/ha	65	54	50
€/kg liveweight	€0.07	€0.09	€0.14
Total Fixed Costs €/ha	633	528	508
€/kg liveweight	€0.72	€0.89	€1.40
Of which:			
Land Rental €/ha	61	45	33
€/kg liveweight	€0.07	€0.08	€0.09
Machinery Running €/ha	117	89	85
€/kg liveweight	€0.13	€0.15	€0.23
Hired Labour €/ha	48	31	19
€/kg liveweight	€0.05	€0.05	€0.05
Depreciation €/ha	132	105	110
€/kg liveweight	€0.15	€0.18	€0.30
Interest €/ha	22	33	46
€/kg liveweight	€0.02	€0.06	€0.13

Appendix 2

Teagasc / Farmers Journal BETTER Beef Farms - Profit Monitor 2011 & 2012

	2011			2012		
	Existing 8 Farms	27New Farms	**Overall Analysis (n=35)**	Existing 8 Farms	27 New Farms	**Overall Analysis (n=35)**
Farm Size Ha	60.3	50.2	**52.1**	60.4	48.8	**51.4**
Stocking Rate LU/Ha	2.1	1.76	**1.84**	2.2	1.86	**1.94**
Output KgLw/Ha	671	579	**599**	754	650	**673**
Output Kg/LU	319	329	**325**	342	349	**347**
Gross Output €/Ha	1545	1127	**1223**	1673	1388	**1453**
Variable Costs €/Ha	678	652	**664**	778	824	**813**
Gross Margin €/Ha	867	475	**559**	895	564	**640**

Main Points

- Stocking rate across all the farms increased by 0.1 livestock units per hectare or 5.4%. The existing eight farms from Phase 1 were stocked considerably higher at 2.2 livestock units per hectare compared to the new farms in the programme.
- In a difficult year kilograms of beef liveweight produced per hectare increased by 74 kg or 12% across all the farms.
- Overall beef liveweight produced per livestock unit also increased by 7% from 325 kg to 347 kg.
- Gross output per hectare has increased from €1223 to €1453 per hectare, an increase of 16%. The new farms showed a more significant increase of 23% going from €1127 to €1388 per hectare. The existing 8 farms were starting off from higher output and higher stocking rate per hectare.

- In the overall programme variable costs increased from €664 to €813 per hectare, an increase of 22%. Variable costs per hectare were high on the new farms as they accounted for 59% of gross output. The existing farms showed a much better level of cost control as variable costs only accounted for 47% of gross output.
- The increase in variable costs reflected the increases in the cost and usage of concentrates in 2012. Earlier housing of stock and higher supplementation levels saw feed costs rise from €195 per hectare in 2011 to €308 per hectare in 2012.
- Gross margin has improved across all the farms from €559 in 2011 to €640 per hectare in 2012. This represents an increase of 14%. The major improvements came from the new farms with an increase of 19% in gross margin where it increased from €475 to €564 per hectare.

Appendix 3

Teagasc BETTER Farm Sheep Programme

The main objective of the Teagasc BETTER Farm Sheep programme is to provide focal points to facilitate the improvement of technology adoption at farm level. The programme began with the recruitment of 3 hill flocks in the autumn of 2008 with lowland flocks recruited thereafter. In the past 2 seasons the programme has expanded with the addition of 7 lowland flocks. In total for the 2013- 2014 season there are 10 lowland flocks' and 3 hills flocks involved in the programme.

Context

The flocks involved in the programme are located throughout Ireland and vary considerably in size, land type and indeed scope for improvement. The geographic spread and constraints of each farming system are reflective of the challenges faced by sheep producers nationally. However despite this, the focus on each of the farms was the same: highlight how productivity, efficiency and ultimately profitability could be improved though adopting technology.

Plan to improve

A 3 to 5 year plan was developed to increase productivity and efficiency on each of these farms with the help of the farmer, local adviser, sheep specialist and research staff. The plan identified key areas where improvements could be made and highlighted how the use of certain technologies could facilitate this. The areas addressed are equally applicable to any commercial farm. Many of these technologies and messages relate to: flock size and stocking rate, breeding policy, breeding management, ewe management, grassland management, lamb performance, parasitic gastro-enteritis (PGE) control.

To quantify the progress made on the farms a comprehensive account of animal and financial performance on each farm was maintained.

Results

The results from the original flocks 4 lowland and 3 hill flocks that have been in the programme for 4 years show how simple changes to each farming system can influence productivity and ultimately the profitability of the sheep enterprise.

To date, relative to the first year of the project (the 2008/09 season) the number of lambs weaned per ewe joined in the lowland flocks has increased by 0.27, due to an increased litter size (+0.22) and increasing the percentage of ewes lambed (+4.4%).

Similarly, for the hill flocks, the number of lambs weaned/ewe joined has increased by 0.14, due to a combination of increased litter size (+0.17) and a substantial improvement in percentage of ewes that lambed (+5.3%).

A summary of the impact of these changes on the flock's financial margin is presented in Table 1 for Lowland flocks and in Table 2 for the Hill flocks

Table 1. Financial performance of the Lowland BETTER Farm Flocks € per hectare)

	2009 (Year 1)	2012 (Year 4)	Change (%)
Gross output	857	1314	+53
Variable costs	567	644	+13
Gross margin	290	670	+131

Table 2. Financial performance of the Hill BETTER Farm Flocks (€ per ewe)

	2009 (Year 1)	2012 (Year 4)	Change (%)
Gross output	42.7	53.4	+25
Variable costs	22.9	19.7	-14
Gross margin	19.8	33.7	+70

Despite a difficult season in 2012 the financial gain relative to the first year of the programme is substantial and highlights the benefits of adopting a 3 to 5 year plan for a sheep enterprise. For both the lowland and hill systems productivity on either a per ewe or per hectare basis is the key driver of profitability.

Accessibility

The programme has expanded considerably for the 2014 season. For interested groups there is an opportunity to see early lamb, mid-season and hill flocks in various stages of transition in the programme. In addition there are a number of integrated sheep and beef systems that will highlight the options that exist for drystock producers. These farms are available for visiting groups during the season. To arrange a visit to these farms please contact your local advisor.

Further details of the programme, the farms involved and regular updates are available on the Sheep BETTER Farm Webpage **http://www.teagasc.ie/advisory/better_farms/sheep/**
Ciaran Lynch.

Conclusions

This booklet summarises the eProfit Monitor results from over 1,000 cattle and 200 sheep farmers for 2012. It is very clear across all the beef and sheep enterprises examined that increased profitability in the drystock sector has to come from increasing the kilograms of beef and lamb produced per hectare while at the same time controlling the costs that go towards delivering this output. The differences in output from the 2012 eProfit Monitor results between the Top and Bottom 1/3 of farmers were huge:-

- **Suckling Farms (847)**

  Double the liveweight produced per hectare resulting in 10 times the gross margin per hectare

- **Non-Breeding Beef Farms (215)**

  Over half a ton extra liveweight produced per hectare resulting in over 12 times the gross margin per hectare

- **Lowland Sheep Farms (227)**

  Over double the number of lambs produced per hectare resulting in over 7 times the gross margin per hectare

High output of beef and lamb liveweight per hectare comes from a combination of good cow and ewe fertility, low mortality, high liveweight gain both at grass and indoors and by maximising the stocking rate that your farm can handle. Drystock farmers who adopt the different technologies that improve each of these components see for themselves the increased output that their farms are capable of and the positive affect this has on their bottom line.

The Teagasc / Farmers Journal BETTER Beef and the Teagasc BETTER Sheep Programmes were established to demonstrate that where technologies to increase farm output were put in place on beef and sheep farms the reward would be seen in the financial performance of these farms. The results to date from both these very successful programmes clearly show that where output is increased margins will also increase.

Completing a Teagasc eProfit Monitor and comparing their results to the figures in this booklet is the first step that drystock farmers need to take if they are serious about increasing their profitability into the future.

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