

Teagasc

e-Profit Monitor Analysis Drystock Farms 2007



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Contents	Pg
.....	
Drystock Farms 2007	2
.....	
Beef & Cattle Farms	3
Comparison of 2003 to 2007	
Comparison of 2006 to 2007	
Suckling Farms 2007	
.....	
Non-Breeding Farms 2007	15
.....	
Comparing Cattle and Sheep Farms	21
.....	
Sheep Farms	23
Comparison of 2005 to 2007 (Mid-Season Flocks)	
Comparison of 2006 to 2007 (Mid-Season Flocks)	
Lowland Sheep 2007 (Mid-Season Flocks)	
Hill Sheep 2007	
.....	
Appendices	38
.....	
Acknowledgements	40

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TEAGASC SPECIALIST SERVICE

Drystock Farms 2007

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 adapt to the challenges ahead that we all now face.

This year's booklet summarises the results from 237 cattle farms across the country and 106 lowland sheep farms plus 12 hill sheep farms. This represents almost a 30% increase in farmers completing profit monitors compared with the previous year.

Within the grouping 189 were categorised as suckling farms and 48 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).



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 efficiency at which the enterprise is operating as well as showing your 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 and REPS payments.

Beef & Cattle Farms

Comparison of 2003 to 2007 (Beef Farms)

Table 1 below shows the performance of 42 beef farms, both suckler and non-breeding over the 5 year period 2003 to 2007. This period is of interest because it encompasses the performance in the two years preceding

Table 1: Comparison of costs and income on the same beef farms over four years

Profit Monitors Matched Sample (42 Farms)					
	2003	2004	2005	2006	2007
Physical					
Stocking Rate LU/ha	1.78	1.80	1.87	1.80	1.78
Liveweight Produced kg/ha	647	642	572	601	598
Financial €/ha					
Output Value	809	871	865	935	939
Variable Costs	491	484	482	521	519
Gross Margin Excl. Premia	318	386	383	413	420
Fixed Costs	461	422	415	403	412
Profit Excl. Premia	-143	-35	-31	10	8
Total Premia*	743	751	640	641	651
Premia Retained	81%	95%	95%	102%	101%

(* Includes Single Farm Payment, REPS & CAS)

decoupling and the three years after decoupling.

In terms of physical criteria, it is evident over the period that there is little change in stocking rate, having peaked in 2005 at 1.87 LU/ha before it settled back to 1.78 LU/ha again in 2007. It only serves to prove the point that most drystock farms are not intensively stocked and therefore the majority will comply within the 170kg Organic N limit under the Nitrates Directive. The small variation in the stocking rate is also reflected in the fact that there is very little change over the period in the actual kilograms of liveweight produced per hectare. However it is disappointing to note that beef output per hectare is 7% lower in 2007 compared with 2003 while spending on purchased concentrates was the same in nominal terms for the two years.

Although we see very little change in the physical performance, encouragingly the financial value of the output per hectare has increased from €809 in 2003 to €939 in 2007. This represents an increase of 16% over the five years. This

e-Profit MONITOR ANALYSIS DRYSTOCK 2007

increase in the value of output on the 42 farms was achieved while variable costs increased by 6% in nominal terms over the same period. As is shown the variable costs rose from €491/ha in 2003 to €519/ha in 2007.

The improved efficiency on these farms is highlighted by the increase in gross margin per hectare. The gross margin improved by €102/ha or 32% over the period. In 2007 the average gross margin achieved on these farms was running at €420/ha. Fixed costs declined by almost 11% on these farms between 2003 and 2007. This may just reflect the stage of development on these farms or be a result of trying to control the actual spending on fixed costs.

With an increase in output value, stagnant variable costs and a decline in fixed costs overall profitability has improved over the period. We have witnessed these farms progress from a situation where production was leaving a loss before premia of €143/ha in 2003 to a situation in 2007 where production just covers all costs. Consequently premia retained as profit has risen from 81% in 2003 to 101% in 2007. The challenge in the years ahead will be to further improve the production aspect of the business so that it can add significant profit to the existing premia.

Figure 1 below illustrates the improvement achieved in gross margin per hectare on the farms over the five years.

FIGURE 1

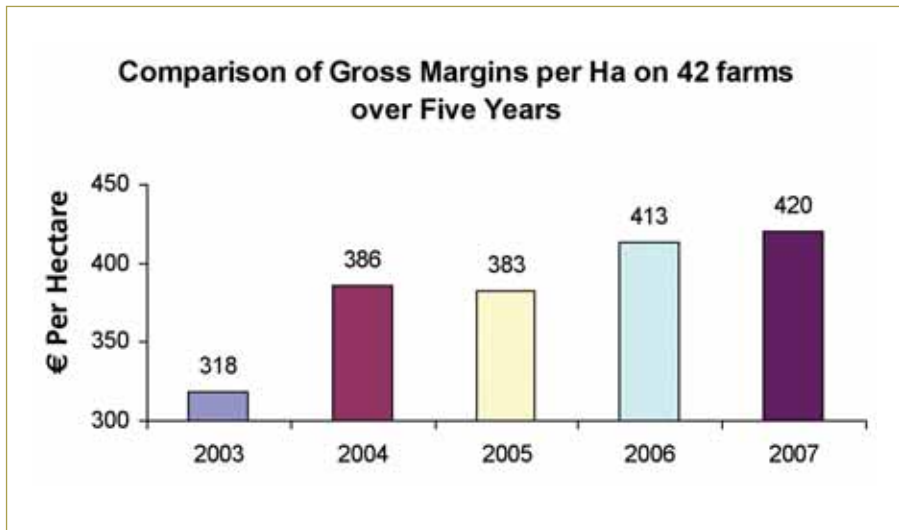
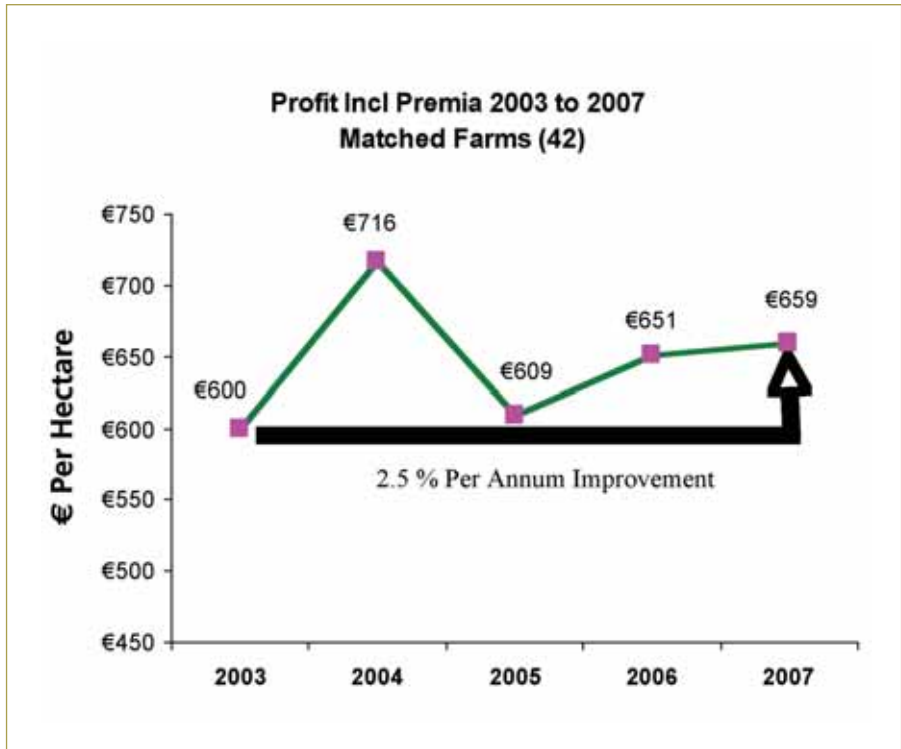


Figure 2 below plots the change in profitability where premia has been included on the farms over the four years. The increase from €600/ha in 2003 to €659/ha in 2007 represents a profit improvement of 2.5% per annum and was achieved despite the fact that premia receipts per hectare decreased by €92 over the period. The reduction in premia is equivalent to 12% of premia receipts or almost 4% per annum of farm income.

FIGURE 2



Comparison of 2006 v 2007 (Beef Farms)

Table 2 below highlights the performance of 105 farms from both the suckling and non-breeding sectors in 2006 and 2007. This period represents the post decoupling era which was forecast as a period where major change would occur due to the abolition of coupled direct payments. The table below, however, does not highlight any major changes in physical or financial performance.

Stocking rate decreased by 2% and the kilograms of beef liveweight per hectare produced increased by 1% indicating a modest increase in individual animal performance. The value of the output per hectare remained the same as the previous year. Variable costs increased by 2% which combined with a static output value resulted in a decrease in gross margin of 2% which is equivalent to €10 per hectare.

Fixed costs increased €5/ha in 2007 which is equivalent to a 1% increase. The profit figure is €14 per hectare lower for 2007 and total premia retained as profit fell from 95% in 2006 to 93% in 2007. While the changes in all the major financial indicators are small it is a concern they are all in the wrong direction. It appears that increased meal and energy costs have had little impact on 2007 costs but will be a significant negative on 2008 figures.

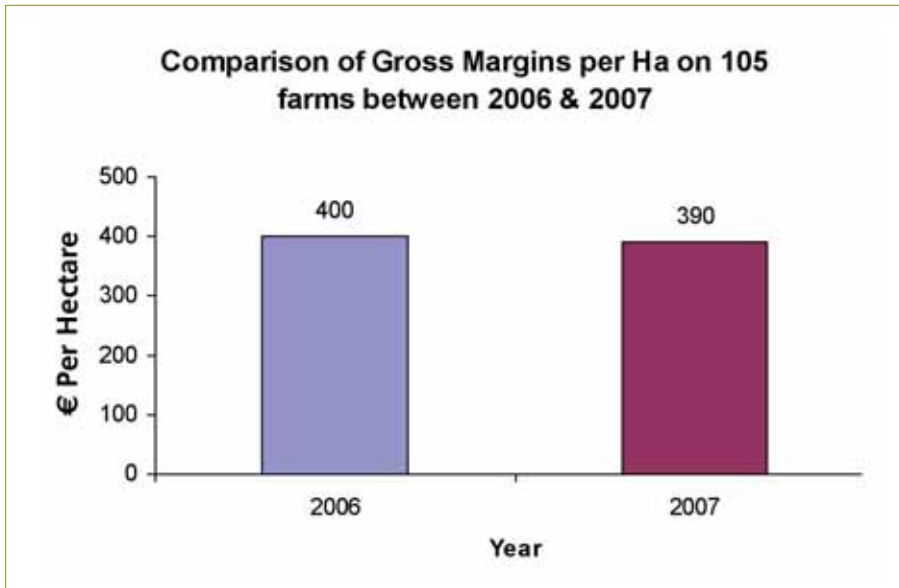
Table 2: Comparison of costs and income on the same farms in two years

Profit Monitors Matched Sample (92 Farms)			
	2006	2007	Change
Physical			
Stocking Rate LU/ha	1.78	1.75	=
Liveweight Produced kg/ha	557	561	=
Financial €/ha			
Output Value	884	885	=
Variable Costs	484	495	*
Gross Margin Excl. Premia	400	390	*
Fixed Costs	429	434	=
Profit Excl. Premia	- 29	- 43	*
Total Premia	631	641	*
Premia Retained	95%	93%	*

(=Same; * Small difference; ** Moderate difference; *** Large difference)

Figure 3 below graphs the change that has occurred over the two years in gross margin per hectare on the 105 farms. The small decline is attributable to the increase experienced in variable costs between 2006 and 2007.

FIGURE 3



Suckling Farms 2007

Table 3 below shows the performance of 189 suckling farms in 2007. These farms include 94 farms where the suckler progeny are sold as weanlings or stores and the remaining 95 farms bring all their suckler progeny to beef. Farms are ranked by gross margin excluding premia into Top 1/3, Average and Bottom 1/3. The difference between the Top and Bottom 1/3 is also shown.

Table 3: Suckling farms 2007 – per hectare analysis

Profit Monitor (189 Farms)				
	Top 1/3	Average	Bottom 1/3	Top v Bottom
Physical				
Farm Size ha	53	53	51	+2
Stocking Rate LU/ha	2.03	1.75	1.53	+0.5
Liveweight Produced kg/LU	361	314	267	+94
Liveweight Produced kg/ha	733	550	408	+325
Financial €/ha				
Gross Output Value	1205	882	614	+591
Variable Costs	581	515	503	+78
Gross Margin	624	368	111	+513
Fixed Costs	527	465	434	+93
Net Profit excl. Premia	97	-98	-323	+420
Total Premia*	675	622	582	+93
Premia Retained	114%	84%	45%	

(* Includes Single Farm Payment, REPS & CAS)

It is important to bear in mind that all of these farms would be classed as good farms nationally but it is alarming to see the variation between the Top and Bottom 1/3 even within this group resulting in a gross margin difference of €513 per hectare and profit difference of €420 per hectare.

Much of what is highlighted in the table is similar to what we have recorded in previous years within the suckling sector. The main points are listed below:

- Farm size is similar for all groups – in previous years the top 1/3 of suckling farms tended to be larger.
- With a stocking rate of 2.03 LU/ha the Top1/3 farms are carrying 0.5 LU/ha more stock than those in the Bottom 1/3 – a staggering 33% extra stock on the same area.
- Despite the higher stocking rate on the top farms, they are also producing 35% more beef liveweight per livestock unit which is due to better animal performance on foot of better feeding and management.
- With a higher stocking rate it is not surprising then that the Top farms are able to produce more kilograms of liveweight on a per hectare basis. The top third of farms produced 80% more beef liveweight on a per hectare basis than those in the lower grouping and this is the secret of their success.
- More kilograms produced equates to a higher output value for the Top farms where they achieved €1205/ha compared to €614/ha on the Bottom 1/3, a staggering difference of €591/ha. Achieving high output per hectare is the first essential requirement on the road to achieving a good profit level.
- The efficiency of these Top farms is borne out by the fact that although they have a 96% higher output value per hectare they only spent €78/ha extra on variable costs compared to those in the Bottom group – a modest 15% extra variable costs for an extra €591 output value.
- Gross Margin which indicates technical efficiency demonstrates the gulf that exists within the group. At €624/ha the Top group are €513/ha ahead of the Bottom 1/3 and €256/ha ahead of the Average for the group.
- Fixed costs are significant within all groups at €434 per hectare for the bottom third and €93 higher for the top third and underlines the need to achieve a good output level. Fixed costs account for 73% of output on bottom third but only 44% of output on top third. The target should be approximately 35%.
- It is only the Top 1/3 that generate a sufficient gross margin to cover fixed costs. Both the Average and Bottom 1/3 had to subsidise their production by taking €98 and €323/ha respectively out of their premia payments in 2007.
- It was only the Top 1/3 that generated a profit (€97/ha) from their stock that could be added to their premia receipts.

It is certainly possible that the average for the group could be improved so that production becomes profitable in its own right. Of more concern is that the Bottom 1/3 only retained 45% of their premia as profit in 2007. Some hard decisions must to be taken by this group if they hope to turn their fortunes around in the future. Increasing individual animal performance is the first step followed by some increase in stocking rate.

Figure 4 below illustrates quite clearly the difference that exists between the farms first in terms of the output per hectare that they generated and second in terms of how efficiently that output was generated. Looking at the level of variable costs across the three groups, relative to their output value, they account for 48%, 58% and 85% of output for the Top, Average and Bottom groups, respectively. This shows the wide disparity that exists in efficiency.

Looking at gross margin, if production costs are to be covered it is important that both the Bottom 1/3 and Average groups generate a gross margin of at least €434/ha to leave themselves in a breakeven situation.

FIGURE 4

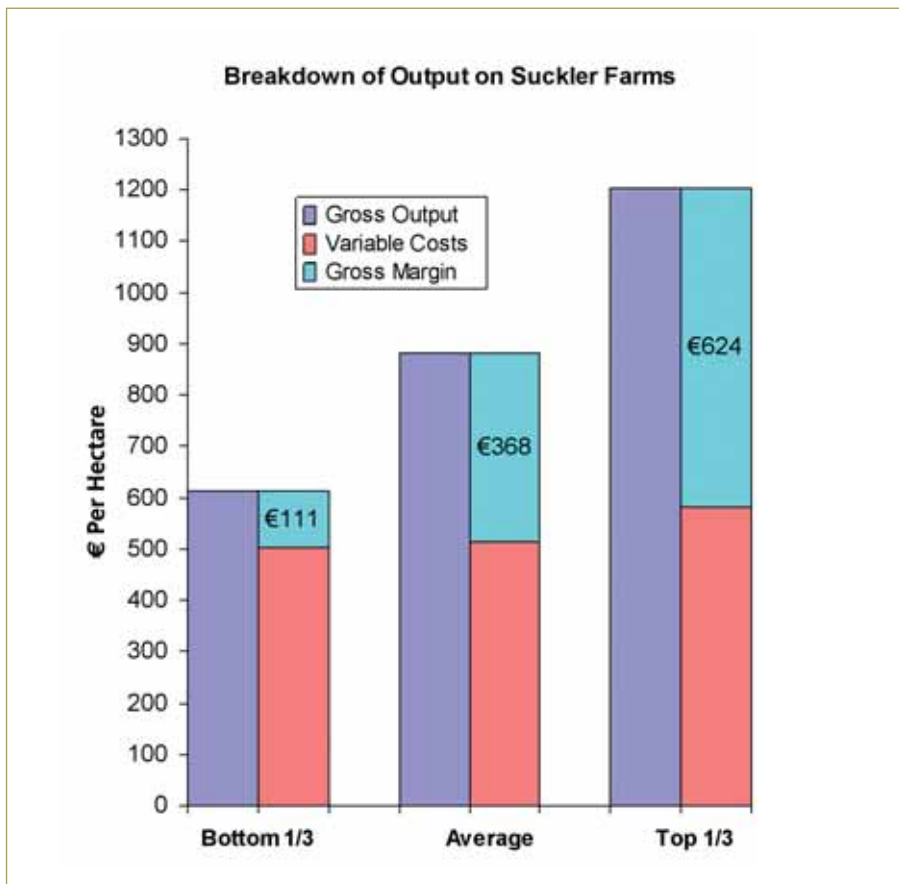
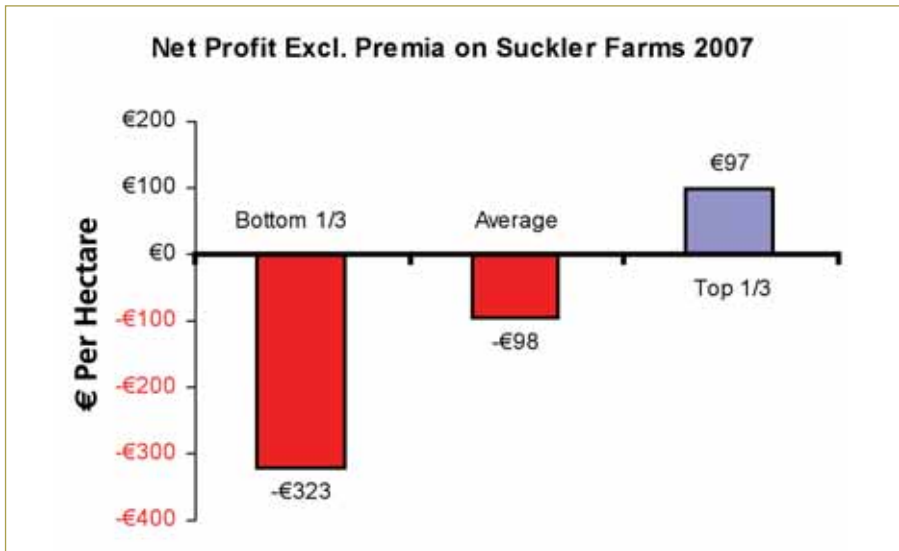


Figure 5 illustrates the difference between the Top 1/3, the Average and the Bottom 1/3 in terms of the profit per hectare generated excluding premia. It is only the Top 1/3 that generate a profit from their farming activity. The other two groups have to dip into their premia to the tune of €323 and €98/ha in order to cover production costs.

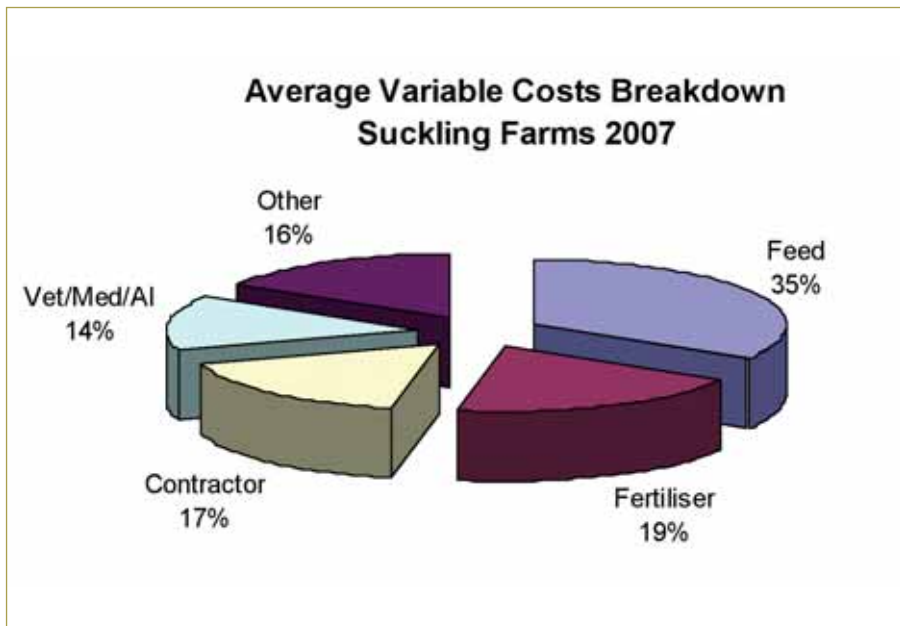
FIGURE 5



Breakdown of Costs – Suckling Farms

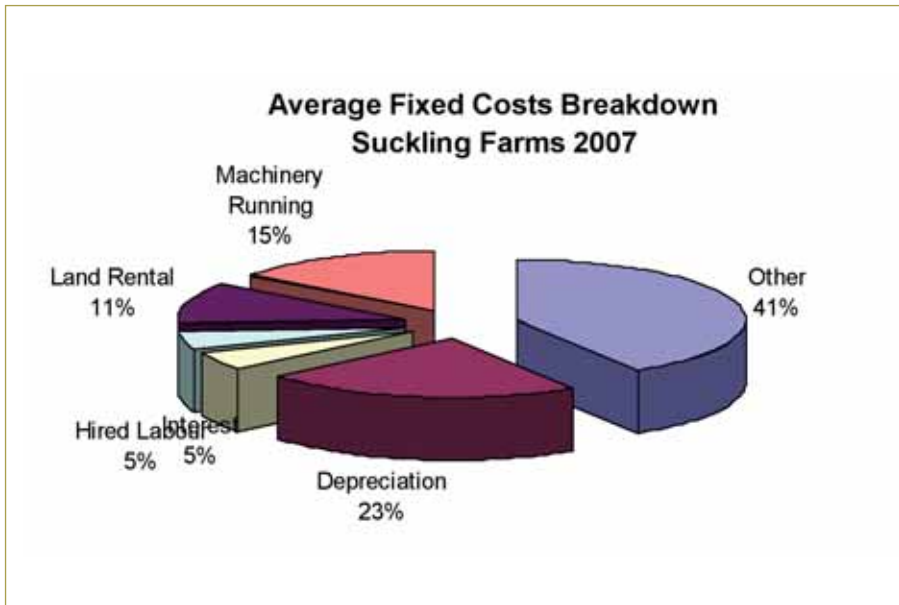
Both pie charts in Figures 6 and 7 demonstrate the major costs in both the variable and fixed cost sectors on the Average suckler farms in 2007. The three major components of variable costs are feed, fertiliser and contractor which account for almost three-quarters of all variable costs.

FIGURE 6



On the fixed costs side other, depreciation, machinery running and land rental account for exactly 90% of the total fixed costs. Included in the 'other' category are items such as machinery leasing, repairs and maintenance, miscellaneous, professional fees, car, ESB, Phone, insurance and sundry.

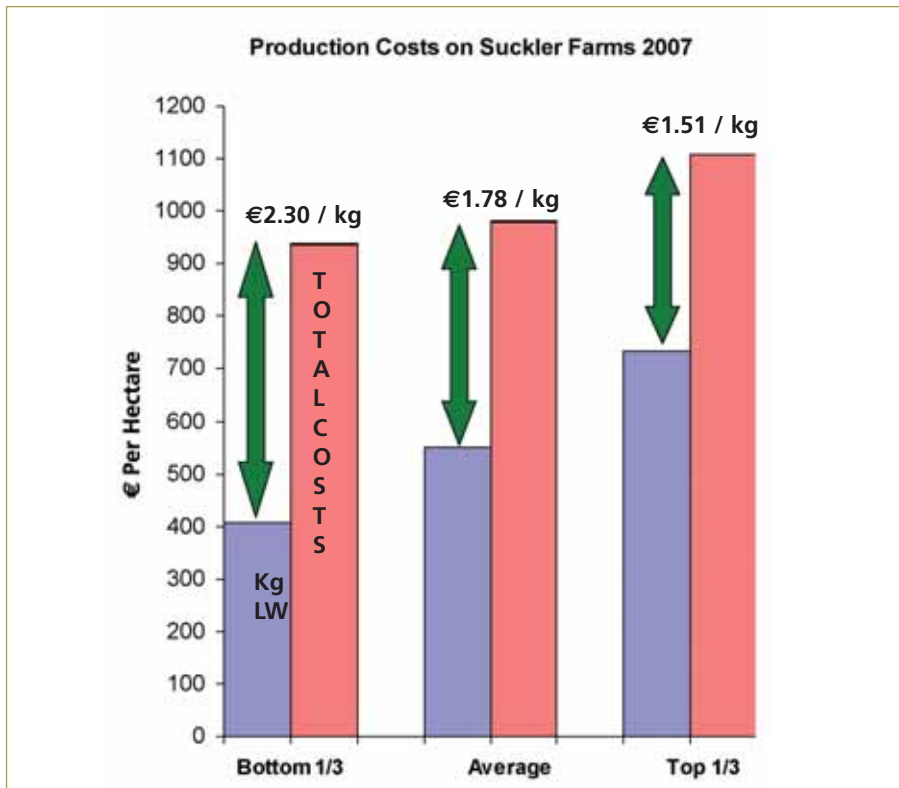
FIGURE 7



Costs per kg Liveweight on Suckling Farms

Figure 8 below demonstrates extremely well that even though the total costs per hectare on the Top farms is slightly higher at €1,108 compared to €980 and €937 on the Average and Bottom 1/3 of farms, respectively, the Top farms because they produce substantially more kilograms of liveweight per hectare are able to dilute their costs. It costs them €1.51 to produce a kilogram of liveweight compared to €2.30/kg on the Bottom farms. The Top farms produce 325 kg more liveweight per hectare compared to the farms in the Bottom 1/3. This is the equivalent of the Top farms producing an extra 325 kg weanling for every hectare they farm compared to those in the Bottom 1/3. That amounts to an extra 40 weanlings of beef output on a 100 acre farm for a farm in the top third compared to the bottom third!

FIGURE 8



Non-Breeding Farms 2007

Table 4 below looks at the performance of 48 non breeding farms in 2007. These farms would have purchased weanlings or stores and either brought them on to forward store stage or brought the animals through to finish. The group is again ranked according to their gross margin excluding premia into Top third, Average and Bottom third.

Table 4: Non-breeding farms 2007 – per hectare analysis

Profit Monitor (48 Farms)				
	Top 1/3	Average	Bottom 1/3	Top v Bottom
Physical				
Farm Size ha	64	59	58	+12
Stocking Rate LU/ha	1.79	1.53	1.42	+0.37
Liveweight Produced kg/LU	460	331	231	+229
Liveweight Produced kg/ha	824	506	328	+496
Financial €/ha				
Gross Output Value	1353	806	465	+888
Variable Costs	628	481	460	+168
Gross Margin	725	326	5	+720
Fixed Costs	526	388	307	+219
Net Profit excl. Premia	199	-62	-302	+501
Total Premia*	789	680	728	+61
Premia Retained	125%	91%	59%	

(* Includes Single Farm Payment, REPS & CAS)

Many of the trends that existed between the Top and Bottom 1/3 in the suckler group are again evident in the non-breeding group.

The main points from the table are:

- The Top 1/3 of farms are 10% larger compared with bottom third - 64 ha compared with 58 ha.
- Although not as heavily stocked as their suckling equivalents the Top group are carrying an extra 0.37 LU/ha compared those in the Bottom 1/3.
- Although carrying 26% more stock on the same area the top farms are producing 99% more beef per livestock unit than the bottom third which is a function of better animal performance on foot of better feeding and management.
- The 26% higher stocking rate combined with better animal performance results in the top third producing over 2.5 times as much beef per hectare.
- At €1,353/ha the Top group are producing €888 more in terms of output value per hectare compared to a lowly €465/ha in the Bottom 1/3
- The extra €168/ha spent on variable costs within the Top farms can be more than justified on the basis that they are getting the return in terms of extra output. It is hard to justify the Bottom group spending €460/ha on variable costs when they are only generating €465/ha in output value. Significant inefficiencies exist with this group in terms of variable cost spending, on farm animal performance and/or buying and selling of stock.
- The difference in efficiencies between the farms is clearly illustrated in the difference in gross margin of €725/ha on the Top farms versus €5/ha on the Bottom 1/3 of farms.
- Fixed costs on the Top farms are €219/ha higher than those on the Bottom 1/3 of farms but with such a high gross margin they can carry such a level of costs and still generate a profit excluding premia of €199/ha. With relatively modest levels of fixed costs of €307/ha the gross margin of the Bottom 1/3 is so low that in 2007 they were eating into their premia to the tune of €302 for every hectare farmed. This resulted in them only retaining 59% of their premia.
- The Average of all the non-breeding farms did not hold onto all their premia in 2007 as their farming activity consumed €62 per hectare of their premia receipts.

As was the case for the Bottom tier in the suckling system, the Bottom 1/3 of the non-breeding group need to examine their farming activity closely. Their low level of output coupled with proportionally higher variable costs leaves them very vulnerable in the future.

Figure 9 below clearly shows the difference in output level between the Top, Average and Bottom 1/3 of farms. Approximately 46% of the output value on the Top 1/3 of farms went on variable costs, compared with 60% and 99% on the Average and Bottom 1/3 of farms, respectively. Therefore, the Bottom 1/3 of farms only had 1% (€5/ha) of their output value available to cover fixed costs. Contrast this to the Top group who had 54% (€725/ha) of their output value available to meet fixed costs.

FIGURE 9

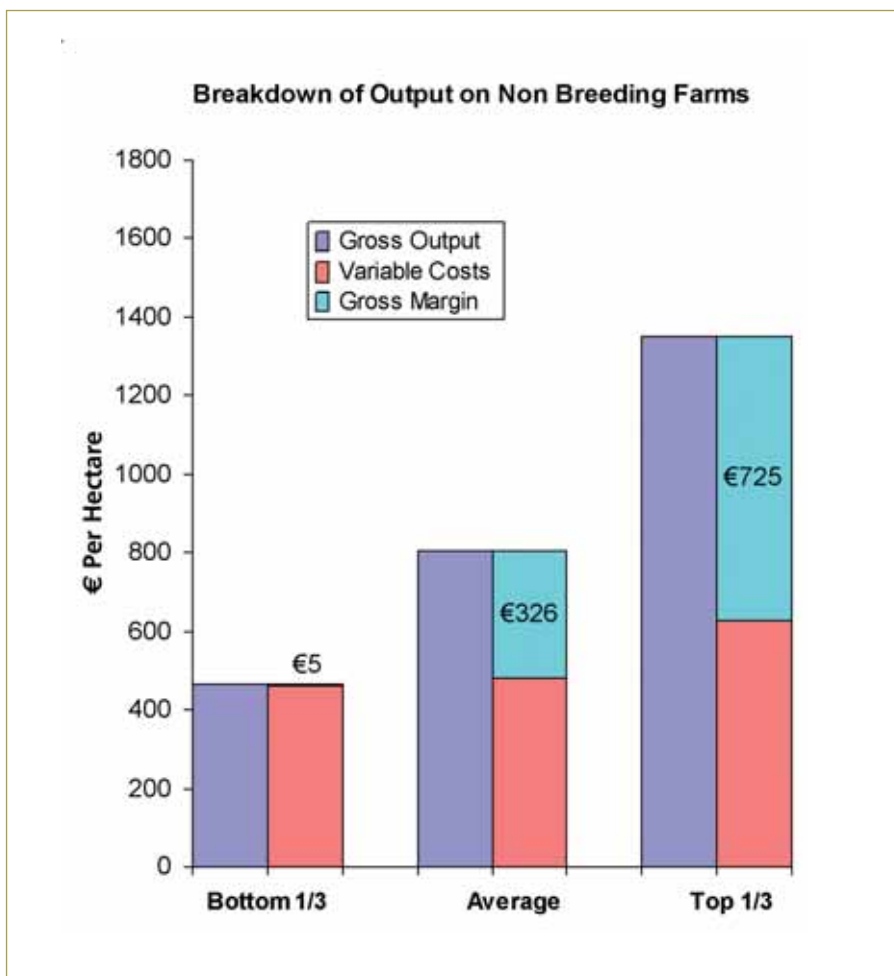
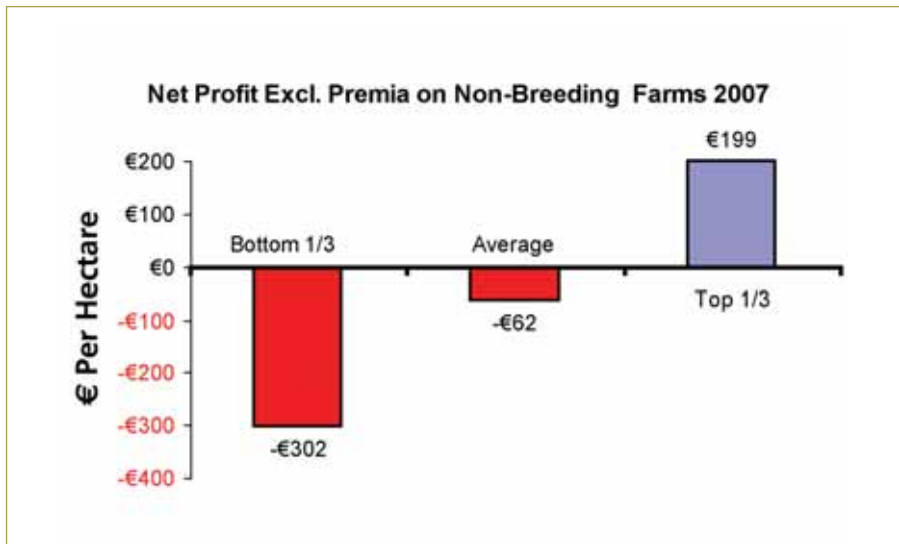


Figure 10 below shows that the Bottom 1/3 of non-breeding farms had a deficit of €302/ha just to meet production costs which would have to be taken out of their premia. The average group had a deficit of €62/ha to deduct from premia receipts. In contrast, the Top 1/3 of farms generated a profit of €199/ha from their farming activity that could be added to their premia.

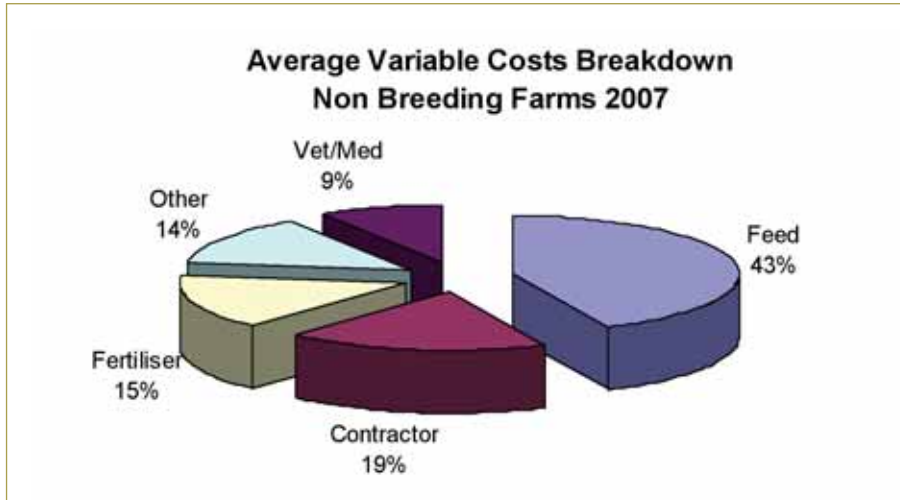
FIGURE 10



Breakdown of Costs – Non-Breeding Farms

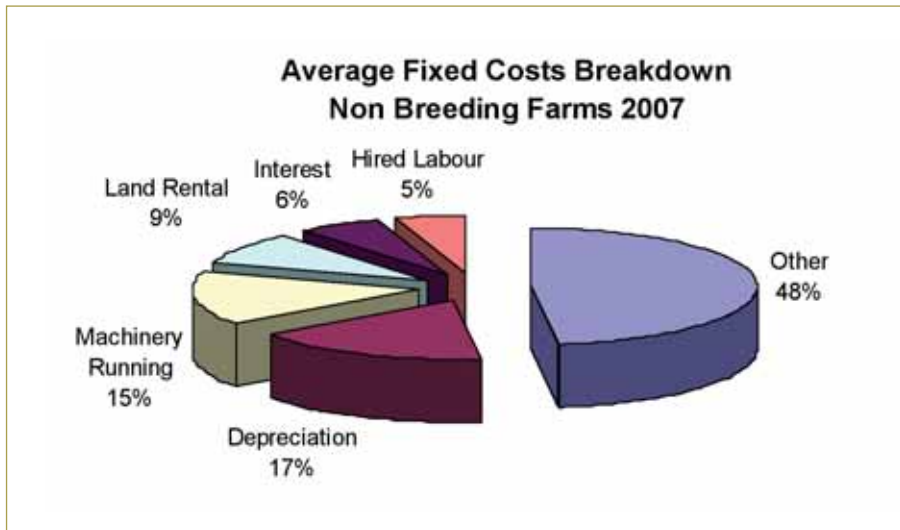
Figures 11 and 12 illustrate the breakdown of the variable and fixed costs across the non-breeding farms. Feed, fertiliser and contractor are the three main costs accounting for 77% of overall variable costs. Not surprisingly given the level of finishing that takes place on these farms feed costs are running at 43% of total variable costs.

FIGURE 11



On the fixed costs side, other, machinery running and depreciation make up 80% of fixed costs. Land rental at 9% is only a slightly lower proportion of fixed costs compared to the 11% that appears for land rental in the suckler system.

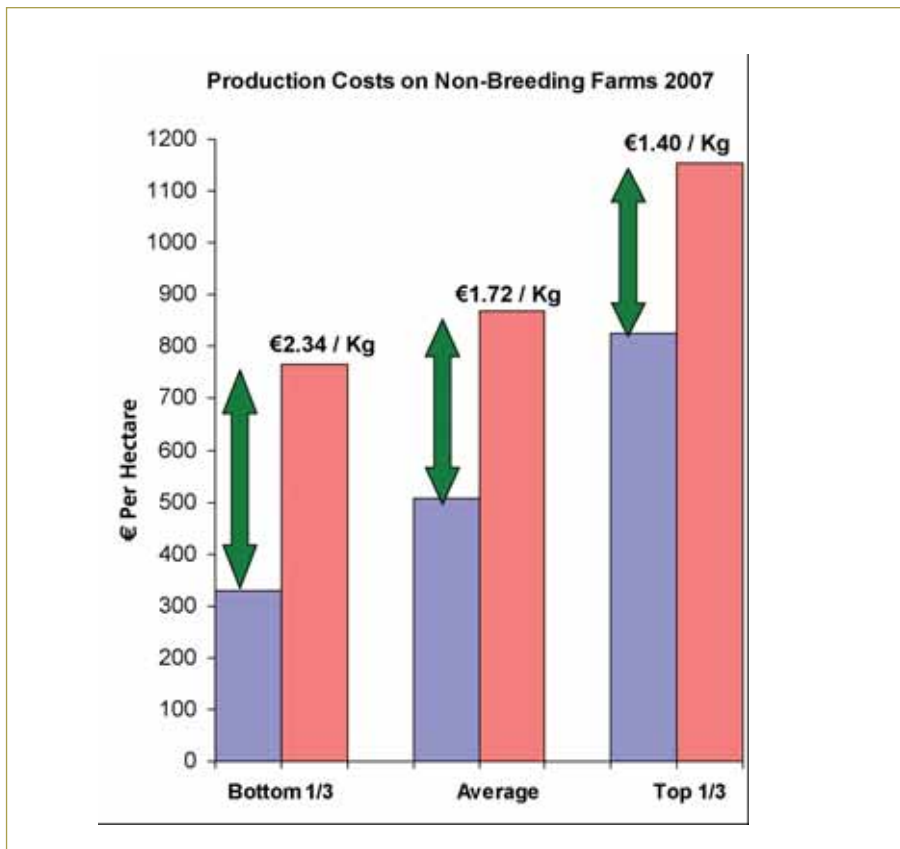
FIGURE 12



Costs per kg Liveweight on Non-Breeding Farms

Figure 13 below illustrates that even though the Top farms have higher costs on a per hectare basis at €1,154 compared to €767 on the Bottom 1/3 of farms, the fact that the Top farms are producing 824 kg of liveweight per hectare as opposed to 328 kg on the Bottom 1/3 means that the Top farms are producing a kilogram of liveweight for €1.40 while the same kilogram costs €2.34 on the Bottom 1/3 and €1.72 on the Average of all of the non-breeding farms. Therefore, as was the case with the suckling farms higher costs can be carried provided enough output is generated to dilute these costs. The cost per kg of beef produced has increased by 9 to 14% compared to 2006 data.

FIGURE 13



Comparing Cattle and Sheep Farms 2007

Table 5: Per hectare analysis – cattle and sheep systems

Profit Monitor 2007				
	Suckling-to-Beef	Suckling-to-Weanling/Store	Cattle Non-Breeding Purchased weanlings or stores-to-beef	Sheep Mainly mid-Season
Physical	95 Farms	94 Farms	48 Farms	106 Farms
Farm Size ha	75	65	59	30
Stocking Rate LU/ha	1.86	1.65	1.53	1.83
Liveweight Produced kg/ha	607	480	506	453
Lambs Reared per Ewe to Ram				1.45
Financial €/ha				
Gross Output Value	967	778	806	797
Variable Costs	569	447	481	398
Gross Margin	398	331	326	399
Fixed Costs	486	440	388	393
Net Profit excl. Premia	-88	-109	-62	6

Table 5 above gives a breakdown of the physical and financial performance of the various cattle systems when compared with sheep farms completing a profit monitor in 2007. Cattle systems appear as three categories, suckler systems where the progeny are sold as weanlings or stores, suckler herds where the progeny are brought to beef and farms where the predominant system is based on the purchase of weanlings or stores for further feeding (non-breeding systems).

The main points from table 5 are as follows:

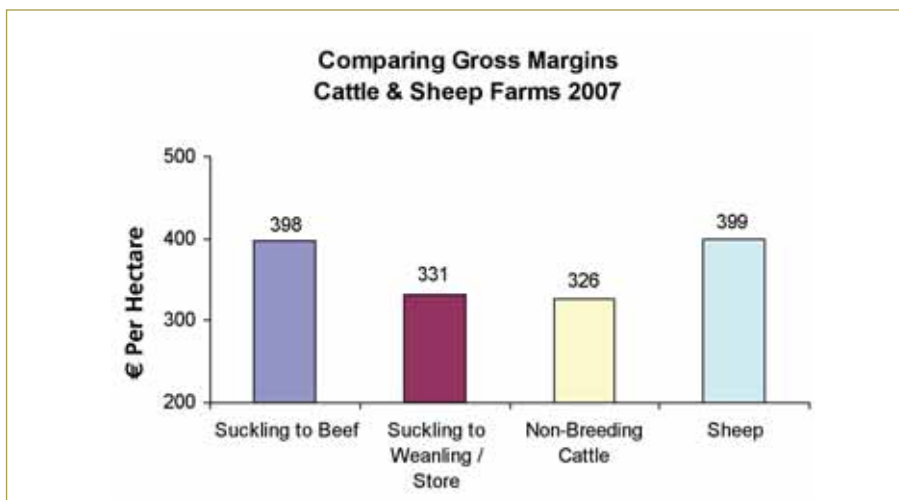
- Suckler-to-beef farms have larger areas devoted to the cattle enterprise, with 75 ha when compared to the other cattle systems. Sheep farms have the smallest area devoted to the sheep enterprise at an average of 30 ha.
- Stocking rate is similar for suckling to beef farms and sheep farms at approximately 1.85 ha per livestock unit. Stocking rate is 11% lower on suckling to weanling farms and 17% lower on non-breeding farms.
- Liveweight produced per hectare was best for suckling to beef systems but liveweight produced per livestock unit was marginally better for non-breeding systems. Beef liveweight production was disappointing for non-breeding systems as this system should have a significant advantage over breeding systems as it does not have to carry the suckler cow or breeding ewe.

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- Sheep farms averaged 1.45 lambs reared per ewe put to the ram
- Output value was similar for sheep, suckler to weanling and non-breeding systems which was almost 20% less than suckling to beef systems.
- Sheep farms had lower variable costs than any of the other systems examined at €398/ha which reflects their lower winter feed costs. Suckler to beef farms had the highest variable costs per hectare but with all cattle systems variable costs consumed almost 59% of output compared to 50% of output for sheep farms.
- In terms of gross margin, suckling to beef and sheep were similar at approximately €400 per hectare with suckling to weanling and non-breeding 16% lower.
- Fixed costs are highest for suckling to beef systems at €486 per hectare, with suckling to weanling 9% lower and non-breeding and sheep almost 20% lower. Fixed costs as a percentage of output are highest on suckler to weanling systems at 57% and run around 50% for other systems. Efficient farms should target fixed costs not accounting for anymore than 35% of output value.
- Sheep is the only system achieving a positive margin before premia and this margin is very modest at €6 per hectare. Non-breeding systems consume €62 of premia receipts and the suckling systems consume almost €100 of premia receipts per hectare.

Figure 14 below illustrates the variation that occurred in gross margin per hectare across the various livestock systems in 2007.

FIGURE 14



Sheep Farms

Comparison of 2005 to 2007 (SHEEP FARMS)

Comparison of sheep farms over the last three years 2005, 2006 and 2007 (mainly mid season lowland flocks)

The information from a matched sample of 30 mainly mid season lowland flocks is contained in table 6 below. The data shows that over the three year period lambs reared per ewe joined to ram has increased from 1.36 to 1.49. In addition, average lamb price also increased from €71.24 per head to €75.62 per head over the period. These figures combined resulted in an increase in Gross Output from €632 per hectare to €713 per hectare an increase of 13% over the three years.

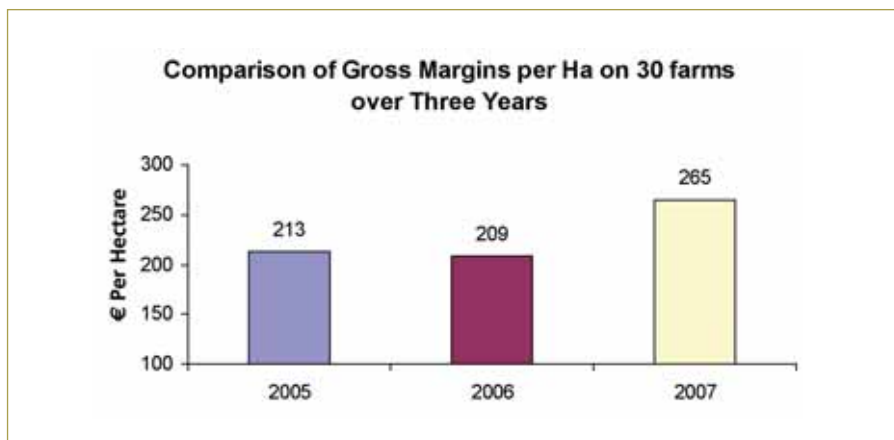
Variable costs per hectare have also increased over the three year period from €419 to €448 per hectare, although these costs were actually highest in 2006 at €469 per hectare. Gross margin increased from €213 per hectare in 2005 to €265 per hectare in 2007, an increase of 24% but this increase was not converted to net margin due to a rise in fixed costs from €338 per hectare in 2005 to €381 per hectare in 2007. Overall net margin has improved from its lowest point in 2006 (-€144/ha) to its current level of -€116 per hectare. In effect, this means that for the last three years the 30 farms in this matched sample have been subsidising their production with direct payments. This has happened despite significant increases in output in terms of lamb price and litter size.

Table 6 : Comparison of costs and income on the same sheep farms for three years

Profit Monitors Matched sample 2005, 2006 & 2007 (30 farms)			
	2005	2006	2007
Physical data			
Stocking rate LU/Ha	1.88	1.9	1.88
Ewes to Ram	288	288	287
Lambs reared per ewe joined to ram	1.36	1.35	1.49
Financial (€)			
Average lamb price	71.24	74.86	75.62
Gross Output per ha	632	678	713
Variable Cost per ha	419	469	448
Gross Margin per ha	213	209	265
Fixed Costs per ha	338	353	381
Net Margin per ha	-125	-144	-116

Figure 15 shows change in gross margin per hectare on matched sample of sheep farms from 2005 to 2007.

FIGURE 15



Comparison of 2006 to 2007 (SHEEP FARMS)

Comparison of sheep farms matched samples for 2006 and 2007 (mainly mid season lowland flocks)

Information relating to 57 flocks (matched samples) for 2006 and 2007 are contained in table 7 below. The farms contained in this analysis are predominantly mid season lowland enterprises. In terms of output the data shows that stocking rate (+7%), lambs reared per ewe to ram (+9%) and average lamb price (+4%) have all increased. These are the main drivers of output with the result that Gross Output has increased by €107 per hectare (€624 v €731) or 17%.

On the 57 flocks ewe numbers have declined slightly (2%) but interestingly the number of ewe lambs retained as replacements in 2007 has declined by 17% which may be an indication that these flocks are scaling down production to some extent.

Variable costs rose by €30 per hectare or 7% from 2006 to 2007 and the main costs responsible for this are given in table 7 below. Gross Margin has increased by €78 per hectare or 34% and this is a reflection of the increase in output minus the smaller increases in variable costs. Fixed costs on these farms

rose by €40 per hectare or 13% and this had the effect of reducing the advantage of the increased gross margin by half at the net margin stage. A more detailed analysis of these costs is contained in table 8.

Net margin increased by €38 per hectare or 55% to - €31per hectare from - €61 per hectare in 2006. Again despite the increase in output from the higher stocking rate, litter size and lamb price rise, about two thirds of the increase was neutralised by increases in both variable and fixed costs. This has resulted in the need for direct payments to subsidise production on these farms.

Table 7: Comparison of costs and income on same sheep farms over two years

Profit Monitors				
Matched sample for 2006 & 2007 (57 farms) – mid season lowland flocks				
	2006	2007	Difference	Change %
Physical data				
Stocking rate LU/Ha	1.85	1.98	+0.13	+ 7%
Ewes to Ram	306	301	-5	- 2%
Lambs reared per ewe joined to ram	1.31	1.43	+0.11	+ 9%
Ewe lambs retained	63	52	-11	- 17%
Financial (€)				
Average lamb price	72.77	75.38	+ 2.61	+ 4%
Gross Output per ha	624	731	+ 107	+ 17%
Variable Costs per ha	390	420	+ 30	+ 7%
Gross Margin per ha	234	311	+ 78	+ 34%
Fixed Costs per ha	302	342	+ 40	+ 13%
Net Margin per ha	- 69	- 31	+ 38	+ 55



Figure 16 shows the change in gross margin per hectare on a matched sample of 57 sheep farms from 2006 to 2007.

Table 8 below demonstrates price changes in some of the major input costs on sheep farms over the last two years. Virtually all of the main variable costs have increased with the exception of contractor charges which are down 12%. It is difficult to say why this is the case. It maybe due to an increase in the number of farms that are using extended grazing principles to reduce their winter feed requirement. Concentrate feed, fertiliser, veterinary and straw costs have continued to rise sharply.

FIGURE 16

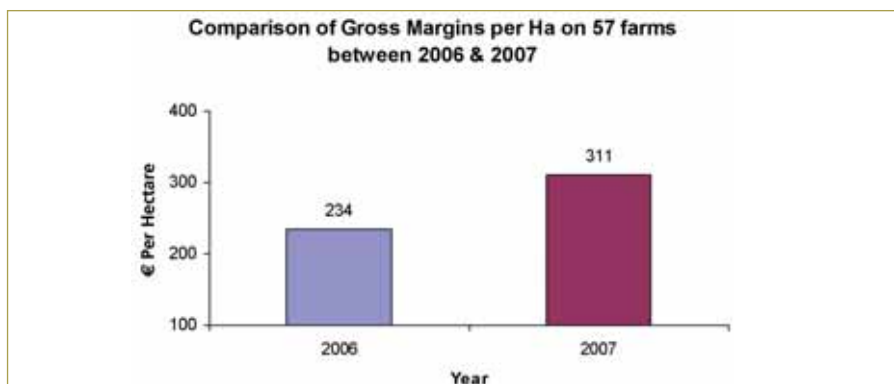


Table 8: Changes in Variable Costs between 2006 and 2007

Increases in major variable costs per ha between 2006 and 2007 on mid season lowland sheep farms (57 farms)			
Variable Costs € / ha	2006	2007	Change %
Concentrates	118	139	+18%
Fertiliser	65	69	+7%
Veterinary	67	76	+12%
Contractor	77	68	-12%
Straw	13	18	+32%
Total Variable Costs	390	420	+7%

Table 9 below examines how fixed costs have changed from 2006 to 2007. Similar to the variable costs, fixed costs have also risen significantly from 2006 to 2007. The exception is repairs and maintenance which have declined somewhat. When comparing the total fixed costs we can see that they increased by €40 per hectare or 13% on the previous year.

Table 9: Changes in Fixed Costs between 2006 and 2007

Increases in major fixed cost per ha between 2006 and 2007 on mid season lowland sheep farms (n=57 farms)			
Fixed Costs € / ha	2006	2007	Change %
Hired Labour	40	51	+27%
O/D, Loan Interest & Bank Charges	16	23	+43%
Car / ESB / Phone	30	38	+26%
Depreciation	46	52	+13%
Repairs & Maintenance	30	27	-11%
Professional Fees	15	19	+25%
Land Lease	44	50	+14%
Total Fixed Costs	302	342	+13%



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Lowland Sheep farms 2007 – Mid Season Production

The analysis for the 2007 profit monitor for sheep is based on the returns of 106 sheep farms that are primarily involved in mid- season lamb production. Table 10 below shows farms ranked on the basis of Gross Margin per hectare, excluding premia and segregates farms into the Top 1/3, Average and Bottom 1/3.

Table 10: Sheep per Hectare Analysis (106 farms)

	Top 1/3	Average	Bottom 1/3
Physical Performance			
Flock Size	213	237	219
Stocking Rate(LU/Ha)	2.0	1.83	1.67
Ewes/Ha	9.82	8.0	6.22
Lambs Reared per Ewe to Ram	1.59	1.45	1.32
Lambs Sold per Ha	15.6	11.6	8.2
Financial Performance €/Ha			
Gross Output	1149	797	495
Variable Costs	432	398	355
Gross Margin	717	399	140
Fixed Costs	526	393	306
Nett Profit excl Premia	191	6	-166
Nett Profit include all Premia*	813	543	302
% Premia* Retained	131%	101%	64%
Average Lamb Price	€79.91	€75.26	€70.91

(* Includes Single Farm Payment, REPS & CAS)

The average flock size for the top and bottom third is practically the same. However, due to the lower stocking rate the bottom third requires an extra 12.3 hectares to keep a flock of 219 ewes compared to the top third.

The average Gross Margin was €399 per hectare. This is 15% higher than 2006 (€399 vs. €360). The Gross Margin per hectare for the top 1/3 at €717 is €42 higher than 2006. The gap between the top third and bottom third is greater in 2007 compared to 2006 i.e. €577 per hectare in 07 vs. €538 in 06. The Gross Margin per hectare for the top third in 2007 is more than five times greater than that of the bottom third.

The main contributing factors influencing the difference in gross margin per hectare are:

1. Lambs reared per ewe to the ram – 1.59 for the top third vs. 1.32 for the bottom third.
2. Higher stocking rate 9.82 ewes vs. 6.22 ewes per hectare.
3. Lambs weaned per hectare 15.6 vs. 8.2
4. Higher lamb price €79.91 vs. €70.91.

Figure 17 shows lambs weaned per hectare for bottom 1/3, average and top 1/3 for the 106 farms with sheep profit monitors for 2007.

FIGURE 17

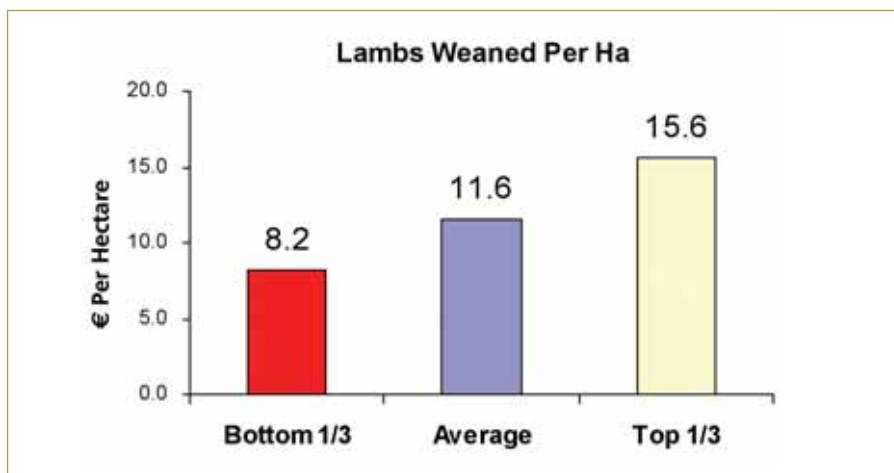
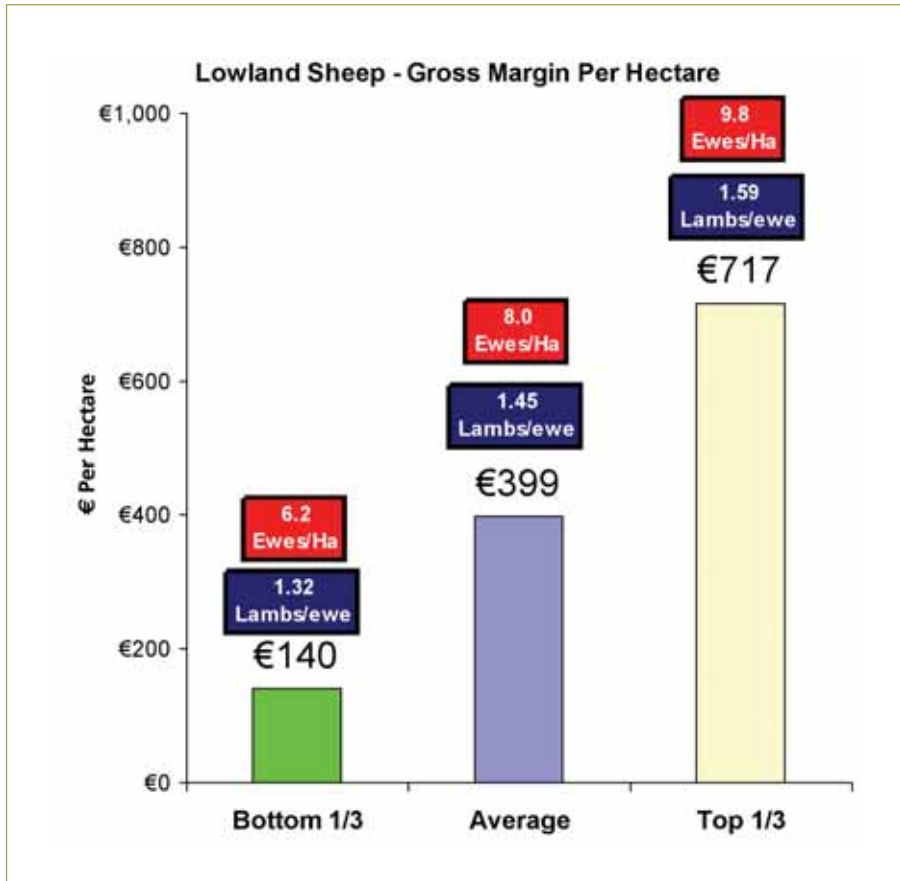


Figure 18 shows the variation in gross margin across the three groups and the principal factors that influence gross margin for sheep farmers.

FIGURE 18



On average sheep farmers in 2007 retained all their premia. However the bottom third only retained 64% of all premia and had a net profit excluding premia of - €166 per hectare. The top third had a net profit excluding premia of €191 per hectare. This results in a difference of €357 in the net profit per hectare between the top third and bottom third and amounts to over €10,700 for the average area devoted to sheep for farms keeping a profit monitor.

Ewe to Ram performance 2007

Table 11 below shows the output, costs and margins on a per ewe basis. The results are placed in 3 categories top1/3, average and bottom 1/3, ranked on the basis of gross margin per hectare.

Table 11: Per Ewe to the ram analysis 2007 (106 farms)

	Top 1/3	Average	Bottom1/3
Physical			
No of lambs / ewe to ram	1.59	1.45	1.32
Financial € / ewe			
Gross Output	117	99	79
Variable Costs	44	50	56
Gross Margin	73	50	23
Fixed Costs	54	49	50
Net Profit excl Premia	19	1	-27
Net Profit incl Premia	34	17	-11
Average Lamb Price	€79.91	€75.26	€70.91

There is a difference in output of €38 between the top and bottom third. This results from a higher number of lambs sold per ewe to the ram (0.27 lambs /ewe) which increased output by €22/ewe and a higher lamb price of €9 (€14.50 per ewe).

The top 1/3 have the lowest variable costs per ewe. At €44/ewe this is €5.63 lower than the average and €12 per ewe lower than the bottom third.

The top third is achieving a gross margin per ewe of €73 compared to just under €50 for the average and €23 for the bottom third.

In the average flock of 230 ewes the top third are achieving an extra gross margin of €5,290 over the average and €11,500 over the bottom third.

The top 1/3 has the highest fixed costs per ewe at €54 with the average and bottom third on similar fixed costs of approx. €50 per ewe.

This results in a net profit excluding premia of €19 per ewe for the top 1/3, 45 cents per ewe for the average and - €27 per ewe for the bottom third.

Based on these figures sheep farmers in the top third with the average ewe flock of 230 are achieving an extra profit of €4,267 compared to the average and €10,580 more than farmers in the bottom third.

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It is alarming that sheep farmers in the bottom third are losing €11 per ewe even when all farm subsidies are included. Sheep farming in this situation is not sustainable and unless this situation can be changed quickly the viability of the sheep enterprise on these farms must be questioned.

Figures 19 and 20 shows the gross margin breakdown and profit figures per ewe for 106 sheep farms for 2007 in diagram format.

FIGURE 19

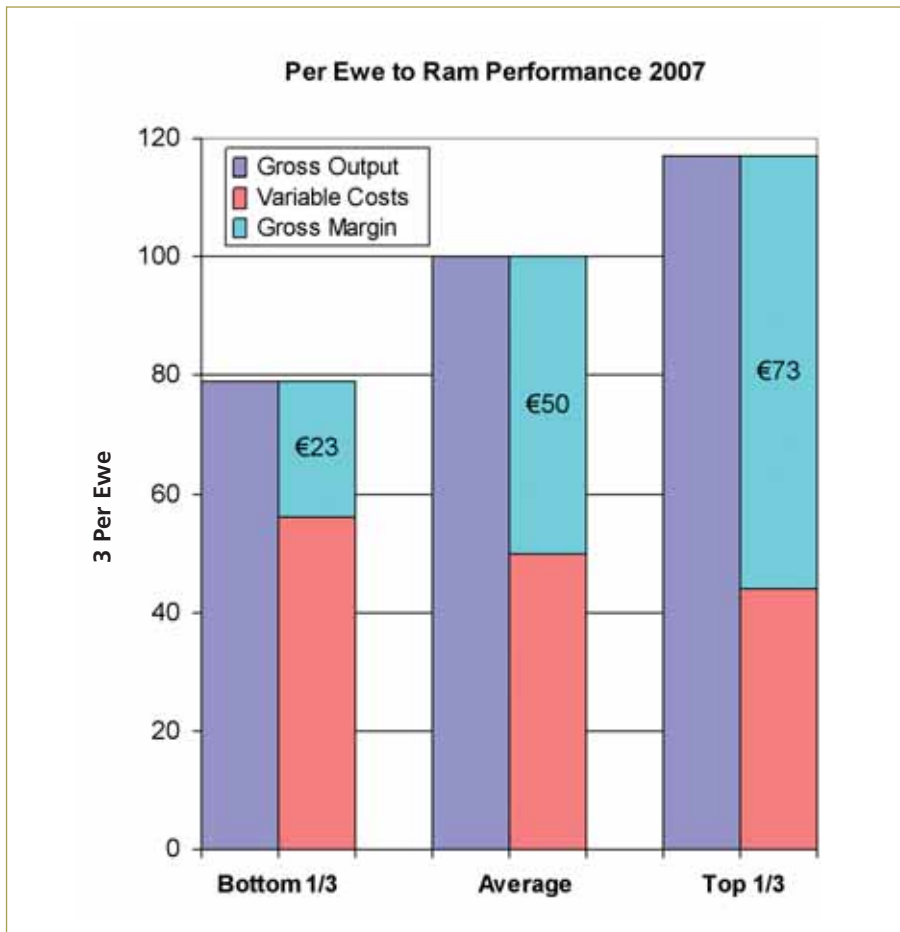
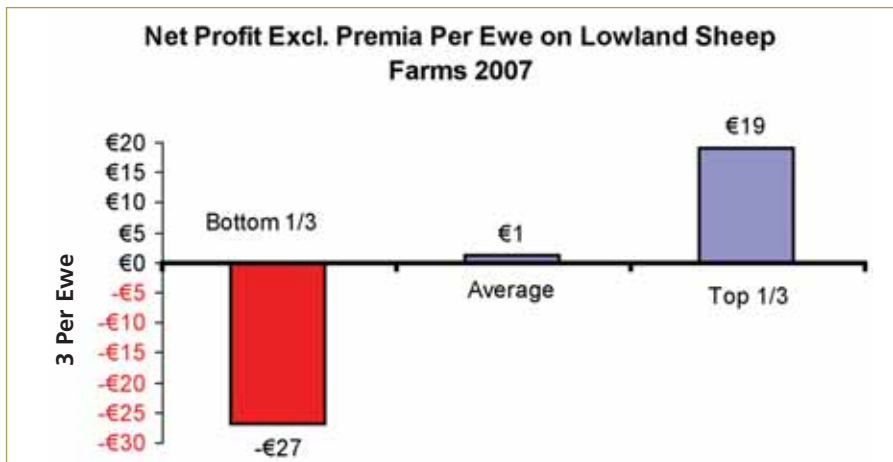


FIGURE 20



Costs per Ewe

A breakdown of the major variable and fixed costs on a per ewe basis are given in Table12.

Table 12: Major costs per ewe to ram analysis 2007(106 farms)

	Top 1/3	Average	Bottom1/3
Total Variable Costs (€/ewe) (of which)	44	50	56
Purchased Feed	15	15.73	15
Fertilizer	8.5	9.60	10.5
Veterinary	8.9	8.90	9.5
Contractor	6	8.60	13
Other	5.6	6.60	8
Total Fixed Costs (€/ewe) (of which)	54	49	50
Machinery Running	8	6.4	5
Labour	5.5	6	11
Land Lease	4	5	5
Depreciation Buildings	6	4	3
Depreciation Machinery	6	5	4
Repairs & Maintenance	5	4.5	4.5

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Purchased feed is the largest single variable cost on sheep farms.

On a per lamb basis purchased feed is costing €9.40 per lamb on the top 1/3, €10.80 on the average and €11.40 per lamb on the bottom 1/3 of sheep farms.

Farms in the bottom 1/3 are spending substantially more on a per ewe basis on fertilizer, veterinary and contractor charges. Fertilizer, veterinary and contractor charges are costing €9.60 per ewe more on the bottom 1/3 farms compared to farms in the top 1/3. Even though these three variable costs are higher on the bottom 1/3, these farms are producing 0.27 lambs per ewe less and selling 7.5 lambs per hectare less than the top 1/3.

Machinery running, labour and land lease charges are the three major fixed costs on the average and bottom 1/3 of farms. These three fixed costs combined represent 32% of total fixed costs on the top 1/3, 35% on the average and 42% on the bottom 1/3 of sheep farms.

Labour costs at €11 per ewe on the bottom 1/3 are double that of the top 1/3.

The total annual cost of maintaining a ewe is €98 in the top third, €99 for the average and €106 for the bottom third.

Figures 21 and 22 show the breakdown of variable and fixed costs in diagrammatic format.

FIGURE 21

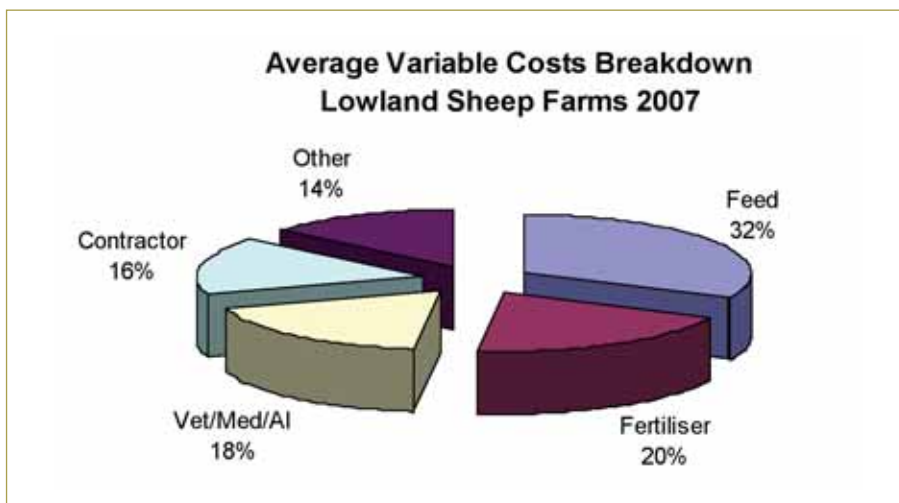
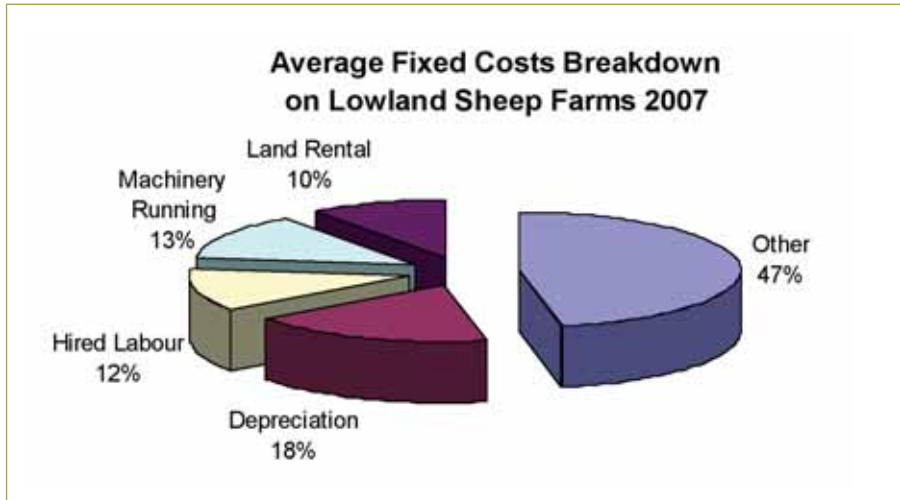


FIGURE 22



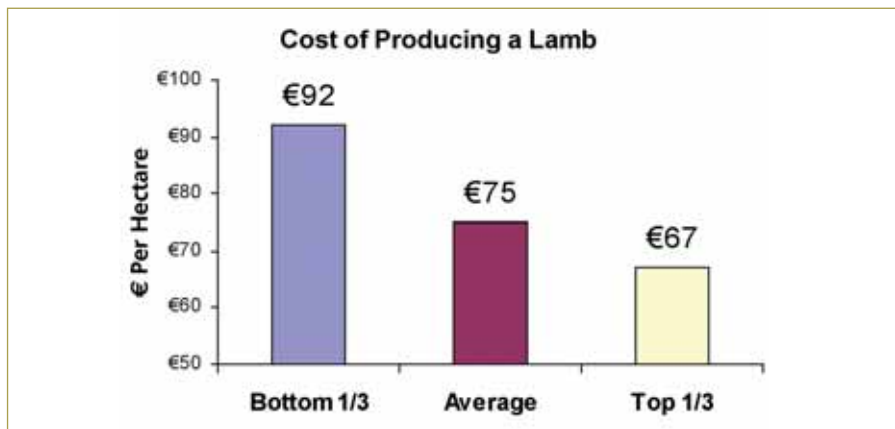
Cost of producing a lamb in 2007 – Lowland Mid Season

Based on the above variable and fixed costs and the number of lambs reared per ewe to the ram, the average cost of producing a lamb in 2007 was €68 excluding replacement and ram costs. Comparable costs for the top third was €61 and for the bottom third was €81. Estimated replacement and ram costs per lamb amounted €11, €7 and €6 for the bottom, average and top thirds respectively.

Consequently the total production and replacement costs per lamb amounted to €92 per head for the bottom third, €75 on average and €67 for the top third of sheep farms with profit monitors. The difference between the top and bottom thirds represents a staggering €25 per lamb and is the prize to be gained by getting performance on your farm to match the top third of sheep producers. Figure 23 shows the cost of producing a lamb for the top, bottom and average for all farms.

It is difficult to estimate replacement costs accurately from the data available as flock size was reducing in all three categories in 2007 and consequently replacement costs stated above may be underestimated by €2 to €4 per lamb.

FIGURE 23



Performance of Hill Sheep Flocks 2007

Details of the hill sheep analysis for 2007 are listed in the Table 13 below. There were 0.98 lambs reared per ewe joined to the ram. The price achieved per lamb is relatively high at €67. This indicates that many of the flocks in question are predominantly finishing their lambs to factory weights and not selling store lambs as is more common on hill farms. It is important to remember that the analysis consists of information collected from only twelve farms.





**Table 13: Hill sheep per ewe to ram analysis 2007
(12 farms with Profit Monitor)**

Physical	
Average Flock Size	402
Lambs Reared per Ewe Joined to Ram	0.98
Average Lamb Price (€/head)	67
Financial	
	€/ewe
Output	49
Feed	16
Fertilizer and Lime	5
Vet	6
Contractor	2
Other	3
Total Variable Costs	32
Gross Margin	17
Total Fixed Costs	17
Net Profit Excl Premia	0

Similar to the lowland flocks, purchased feed is the single largest variable cost on hill sheep farms. Due to the relatively high cost of concentrate feeds this is an area that needs to be looked at going forward.

In terms of output, despite having a relatively strong average lamb price, output per ewe is a relatively low at €49. This is partly due to the relatively high replacement rate (26%) and the relatively poor salvage value of draft/cull hill ewes.

Average fixed costs for the twelve hill sheep farms is €17 per ewe leaving a zero net margin.

Appendices

Appendix Table 1: Major Costs on Suckling Farms 2007 (189 Farms)				
		Top 1/3	Average	Bottom 1/3
Total Variable Costs				
	€/ha	581	515	503
	€/kg liveweight	0.79	0.94	1.23
Of which:				
Feed	€/ha	227	175	161
	€/kg liveweight	0.31	0.32	0.40
Fertiliser	€/ha	108	99	95
	€/kg liveweight	0.15	0.18	0.23
Contractor	€/ha	75	90	113
	€/kg liveweight	0.10	0.16	0.28
Vet/Meds/Al	€/ha	77	70	64
	€/kg liveweight	0.11	0.13	0.16
Total Fixed Cost				
	€/ha	527	465	434
	€/kg liveweight	0.72	0.85	1.06
Of which:				
Land Rental	€/ha	66	49	42
	€/kg liveweight	0.09	0.09	0.10
Machinery Running	€/ha	83	71	64
	€/kg liveweight	0.11	0.13	0.16
Hired Labour	€/ha	29	27	33
	€/kg liveweight	0.04	0.05	0.08
Depreciation	€/ha	122	105	86
	€/kg liveweight	0.17	0.19	0.21
Interest	€/ha	32	22	17
	€/kg liveweight	0.04	0.04	0.04



Appendix Table 2: Major Costs on Non Breeding Farms 2006 (37 Farms)				
		Top 1/3	Average	Bottom 1/3
Total Variable Costs				
	€/ha	628	481	460
	€/kg liveweight	0.76	0.95	1.40
Of which:				
Feed	€/ha	349	208	160
	€/kg liveweight	0.42	0.41	0.49
Fertiliser	€/ha	73	73	78
	€/kg liveweight	0.09	0.14	0.24
Contractor	€/ha	90	92	101
	€/kg liveweight	0.11	0.18	0.31
Vet/Meds/Al	€/ha	47	39	33
	€/kg liveweight	0.06	0.08	0.10
Total Fixed Cost				
	€/ha	526	388	307
	€/kg liveweight	0.64	0.77	0.94
Of which:				
Land Rental	€/ha	44	36	40
	€/kg liveweight	0.05	0.07	0.12
Machinery Running	€/ha	86	58	42
	€/kg liveweight	0.10	0.11	0.13
Hired Labour	€/ha	48	18	7
	€/kg liveweight	0.06	0.04	0.02
Depreciation	€/ha	85	66	39
	€/kg liveweight	0.10	0.13	0.12
Interest	€/ha	28	25	28
	€/kg liveweight	0.03	0.05	0.09

Acknowledgements

Teagasc sincerely thanks all those involved in the collection and inputting of all the data used in compiling this report on the Drystock Profit Monitor farms for 2007.

A special word of thanks to all the drystock farmers for their help and co-operation in making available both the financial and physical information needed. Thanks also to the advisors and technicians who collected much of the data and to Kevin Connolly, Financial Management Specialist, for his overall co-ordination of the ePM system and to the Drystock Specialist Team.

Having completed three full years of the new decoupled system it is now more than obvious that any increase in profit in the future will have to be derived from our farming activity. Our focus must firmly be on improving efficiency through the implementation of improved technology and improving the value of our output. In order to control our costs we need to know what they are.

The Teagasc eProfit Monitor is an invaluable tool. Initially in benchmarking the current situation and then in highlighting the areas for improvement in the future.

For those interested in improving farm profit you need to start with a Profit Monitor.

