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Teagasc
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Increasing Your Profit From Drystock Farming

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Featuring

Teagasc e-Profit Monitor Analysis Drystock Farms 2009

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DRYSTOCK FARMS 2009

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 we need to establish how your farm is currently performing.

Having a completed eProfit Monitor allows 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 you are best positioned to adapt to the challenges ahead that we all now face.

This year's booklet summarises the results from 314 cattle farms across the country and 98 lowland sheep farms plus 16 hill sheep farms. Completed numbers at early April 2010 are similar to numbers at the same stage last year.

Within the grouping 258 were categorised as suckling farms and 56 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 98 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 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, REPS payments and AWRBS payments on suckler cows.

An introductory section to the booklet this year highlights the factors that contribute to achieving a high gross margin and subsequently a high profit for both cattle and sheep enterprises. It also includes three case studies showing what improvements are possible when there is a clear focus on taking messages from the profit monitor results and acting on making changes to increase profitability.

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 compared with 2008. This programme has the clear aim of increasing profitability on the participating farms (and influencing other farms) and has set an ambitious target of €1,000 gross margin per hectare at the end of the three year programme – that is 160% improvement over thre years.

PROFIT MONITOR HIGHLIGHTS

Suckling Systems 2009

- 258 suckling farms completed a profit monitor for 2009 by early April 2010. Below is a summary of variation in performance between the top 10% and bottom 10% when ranked on gross margin per hectare.

- The differences in margin between the top and bottom farmers completing profit monitor has increased in 2009

- The top 10 % of farms (the best 26 farms) achieved a gross margin per hectare €922 more than the bottom 10% (the worst 26 farms) – this represents an advantage of €37,000 on a 100 acre farm for the top 10%.

Why do best suckler farms have an advantage of almost €1,000 per hectare?

- **Stocking rate** – the top farms are carrying almost 30% more stock on the same area and have a REPS friendly stocking rate of 2.07 livestock units per hectare

- **Beef produced per livestock unit** – despite the higher stocking rate the top farms are producing almost twice as much beef liveweight per livestock unit at 367 kg/LU compared with 188 kg/LU on the bottom 10%. The reasons for the better performance per LU are two-fold – higher breeding efficiency (calving interval, calving spread & less empty cows) and better performance per animal

- **Beef produced per hectare** – resulting from the higher stocking rate and better performance per LU the top 10% of farms are producing 2.5 times as much beef liveweight per hectare. The extra beef liveweight produced on the top farms is the equivalent of an extra 60 weanlings, each 300kg, on a 100 acre farm!

- **Output value per kg beef liveweight** – the output value of each kg of beef liveweight is over 30% higher on the top farms due

to better quality stock, lower replacement costs and better marketing.

- **Output value per hectare** – it is the output value that must carry all costs, so high output value per hectare is the first essential requirement needed to generate worthwhile margins. The top 10% are achieving over 3 times higher output value per hectare compared with the bottom 10%. This extra output value of over €900 per hectare results from higher physical beef output combined with the 30% higher value.

- **Variable costs** – would expect variable costs to match output level

  - Per livestock unit – 25% higher on bottom farms with over 80% of difference due to higher contractor costs and higher purchased forage

  - Per hectare – only 2% higher on top farms although stocking rate is 30% higher

  - Per kg beef liveweight - €0.78 per kg on top farms compared with €1.89 per kg on bottom farms. Higher physical output on top farms is diluting costs per kg beef produced; and,

  - As % of output value – variable costs are consuming 139% of output value on bottom farms resulting in a negative gross margin. Variable costs only consume 44% of output value on the top farms. The target should be 35%.

- Gross margin per hectare – despite reduced cattle prices in 2009 (down approximately 10% on 2008 level) the top 10% achieved a very good gross margin per hectare of €759 while the bottom 10% returned a negative gross margin of €163. The difference of €922 per hectare shows the potential that exists for many farmers at suckling to significantly increase margins.

Sheep Systems 2009

- Ninety-eight sheep farms completed a profit monitor for 2009, by early April 2010. Below is a summary of variation in performance between the top 10% and the bottom 10% when ranked on gross margin per hectare.

- The differences in margin between the top and bottom farmers completing profit monitor has increased in 2009

- The top 10% of farms (the best 10 farms) achieved a gross margin per hectare €971 more than the bottom 10% (the worst 10 farms) – this represents an advantage of almost €39,000 on a 100 acre farm for the top 10%.

Why do best sheep farms have an advantage of almost €1,000 per hectare?

- **Stocking rate** – the top 10% of farms are carrying over twice as many ewes on the same land area as the bottom 10% but still have a REPS friendly stocking rate of 2.08 livestock units per hectare

- **Lambs reared per ewe** – the bottom 5% of farms with a profit monitor achieved 1.4 lambs per ewe, the average 1.47 and top 5% achieved 1.73 lambs reared per ewe. Despite carrying more ewes per hectare, the top farms also reared almost 25% more lambs per ewe.

- **Lambs produced per hectare** – the combination of higher stocking rate and better weaning rate resulted in an output of over twice as many lambs per hectare on the top 10% of farms compared with the bottom 10%. The extra lamb output produced on the top farms is the equivalent of an extra 364 lambs, each 40kg, on a 100 acre farm.

- **Output value per kg lamb liveweight** – the output value of each kg of lamb liveweight is similar for 85% of the sheep farms. The

bottom 15% of producers had a somewhat higher price per kg, probably reflecting the sale of a higher percentage of light store lambs.

- **Output value per hectare** – it is the output value that must carry all costs, so high output value per hectare is the first essential requirement needed to generate worthwhile margins. The top 10% are achieving over five times higher output value per hectare compared with the bottom 10%. This extra output value of almost €1,100 per hectare results from higher physical lamb output.

- **Variable Costs** – would expect variable costs to match output level

  - **Per Ewe** – 60% higher on bottom farms with over 50% of difference due to higher concentrate costs.

  - **Per hectare** – 33% higher on top farms but producing 225% more lambs per hectare.

  - **Per lamb produced** - approximately €25 per lamb on top farms compared with €43 per lamb on bottom farms. Higher physical output on top farms is diluting costs per lamb produced.

  - **As % of output value** – variable costs are consuming 124% of output value on bottom farms resulting in a negative gross margin. Variable costs only consume 31% of output value on the top farms. The target should be 30% or less.

- **Gross Margin per hectare** – The top 10% achieved an excellent gross margin per hectare of €910, while the bottom 10% returned a negative gross margin of €60. The difference of €971 per hectare shows the potential that exists for many sheep farmers to significantly increase margins.

WHY KEEP A PROFIT MONITOR?

- To establish current levels of performance, both physical and financial.
- To benchmark own performance against others with similar systems.
- To monitor progress on own farm over time.
- To identify areas of weakness that need improvement.
- To use as a guide in setting realistic targets aimed at improving future profitability.
- In summary, the profit monitor will help farmers with the key business questions that will determine the future success of their farm enterprise:
    - Where are you – financially?
    - Where do you want to be?
    - How will you get there?
- Maximising the benefit from keeping a profit monitor is dependant on using the information about the farm business.
- Farmers with a profit monitor for their own farm need to engage with their adviser, discuss the results and identify and agree targets for future improvements. Setting clear and simple targets is essential to ensuring your business is going in the right direction

PROFIT MONITOR FOLLOW-UP

- Overall assessment of current performance and identification of potential improvements.
- Closer examination of other factors identified as contributing to below par performance e.g., stocking rate, poor weight for age, calving interval, calving spread, barren cows, lambs reared per ewe, grassland management, winter feed quality, health issues, etc.
- Prioritise areas for attention and improvement.
- Setting clear targets in a simple 3-year plan aimed at improving financial margins.

3-YEAR FARM PLAN

- Essential for farmers to buy into the idea of setting targets and agreeing a simple plan aimed at improving farm income – this is a major step in using your information to your future benefit.
- Should set out current position and targets for year three.
- Identify key areas for improvement.
- Specify required actions needed in each area prioritised.
- See the template attached for a simple three-year farm plan. This template was piloted on the Better Beef Farms and has proved popular and acceptable with participating farmers.

TEAGASC 3-YEAR – FARM PLAN TEMPLATE

Name:	**Date:**
Adviser:	

FARM PLAN SUMMARY

Measure	Current 2009	Target 2011
PHYSICAL SYSTEM		
Stocking rate - (LU/ha)		
- Ewes per hectare		
Land base (adj. ha)		
Cows calving		
Calving spread - Spring		
- Autumn		
Purchases		
Trading system (weanling, store, finish, etc):		
Male progeny - Spring-born		
- Autumn-born		
Female progeny - Spring-born		
- Autumn-born		
Liveweight output (kg / ha)		
FINANCIAL SYSTEM		
Cattle		
- Output value (€/ha)		
- Variable costs (% of output)		
- Gross margin (€/ha)		
Sheep		
- Output value (€/ha)		
- Variable costs (% of output)		
- Gross margin (€/ha)		

FARM PLAN DETAIL	
Key Areas	**Target/ Actions Needed**
Financial Performance: (variable and fixed costs, cashflow)	
Physical Performance: (stocking rate, kg lw/ha, ewes /ha, weaning rate etc.)	
Grassland Management: (turnout dates, housing dates, number of grazing divisions, silage conserved, etc.)	

FARM PLAN DETAIL

Key Areas	Target/ Actions Needed
Breeding Performance: (stock quality, replacement strategy, calving spread, etc.)	
Winter Feeding: (use of alternative forages, winter grazing brassicas, etc.)	
Health Issues: (need for health plan, screening etc.)	

NOTES

FARM PLAN DETAIL

Key Areas	Target/ Actions Needed
Other Issues:	

NOTES

INCREASING YOUR PROFITS FROM BEEF FARMING

There are huge differences between farms in the level of profits made from beef farming. This can be seen throughout this booklet when comparing the Top 1/3 of beef farms to the average and even greater still when the Bottom 1/3.

Whether it is suckler farms selling weanlings, suckler farms finishing their progeny, or non-suckling beef farms buying weanlings/stores for finishing, the same message is consistent. ***On average, the farms producing the highest amount of beef per hectare are making the highest profits per hectare.*** Combined with this, a control on the costs that are associated with producing this output is also very important. Variable costs represent approximately 50% of total costs and include feed, fertiliser, veterinary and contractor charges.

Increasing beef output per hectare

On suckler farms there are three areas that affect the level of beef liveweight produced per ha. These are:-

- Production per suckler cow.
- Performance per head.
- Stocking rate per ha.

Obviously on non-suckling farms production per cow does not play a part and performance per head and stocking rate are the two variables involved.

(i) Production per cow

The more live weanlings produced every 365 days per 100 cows put to the bull the higher the average production per cow. This is affected by:

- **Cow fertility:** The sooner a suckler cow goes back in calf and produces her next calf the more productive she is. A high empty rate and long average calving interval are both signs of poor fertility. Participation in ICBF Herdplus for beef will provide

detailed information on calving interval for your herd, show how you compare with the national average, and identify cows with breeding problems.

- **Bull fertility:** It has been estimated that 25% of all stock bulls are sub-fertile and 4% are infertile in any one year. Low fertility in a bull running with a suckler herd can dramatically reduce the productivity of the herd, in the current and subsequent years if it is not discovered soon enough. Having the bull prepared well in advance of the breeding season is vital and close observation during the breeding period is essential to ensure the bull is functioning properly.

- **Calving pattern:** The more spread out the calving pattern is the lower the average production per cow. Do not leave the bull running with the cows all year. Herds with a compact calving pattern confine the breeding period to no more than 70 days and remove the bull at this stage. The option with cows not in-calf at this stage is to cull or some can be let slip six months to calve at the start of an autumn herd if they must be kept in the herd. Cows that are consistently poor breeders should be culled.

- **Mortality:** Calf deaths at or shortly after calving can be high on some farms. Pay attention to expected calving difficulty of the bull at purchase to minimise calving problems, monitor cow condition and nutrition from drying off to reduce the risk with the cow. The mortality rate from then until weaning also needs to be kept to a minimum.

(ii) Performance per head

The more liveweight put on each growing animal the higher the overall output per hectare. This is affected by:

- Liveweight gain at grass: The standard of grassland management on the farm will have an enormous influence on this. Where cattle are grazing a plentiful supply of high quality leafy grass

performance will be at the maximum. Where cattle are grazing poor quality swards, due to either low levels of ryegrass or poor management, liveweight gain per day will be very poor. A long grazing season is essential to maximise performance at grass and early turnout in spring is achieved by planned closing/resting of fields from the previous autumn. Performance in the second half of the grazing season from July is an area where grass quality and weight gain are often poor due to poor grazing management in the early part of the year. Pastures must be grazed tightly up to June to ensure the basis for leafy grass later in the year.

- Liveweight gain indoors: The feeding value of the forage fed over the winter will have the biggest affect here. Grass silage of low dry matter digestibility (DMD) or poorly preserved forages will lead to little or no animal gain for close to half the year. On growing cattle the higher the level of gain required in the indoor period the higher the costs and it may not be economical to attempt to finish animals indoors unless they are at or above their target weight for age – this is especially true for steers or heifers. Cattle going back to grass should achieve the shortest possible indoor period.

- Level of meal feeding: The more concentrates or alternative energy sources fed (e.g., beet) the higher the level of output per head. Where there is a return for feeding this extra feed source it makes sense to do it. Where there is not it needs to be questioned. The duration of the feeding period has a huge impact on the economics of finishing, as feed efficiency reduces over time. This is particularly important for steers and heifers, less critical for young bulls.

- Animal health: Healthy cattle that are free of parasites, respiratory diseases etc. put on more beef liveweight per day. Timely use of the correct dosing products is essential to maximise the payback. Do not waste money on dosing when it is not necessary – e.g., a turnout dose for cattle free of parasites is money wasted.

(iii) Stocking rate
Where production per cow and performance per head are high, maximising the number of animals farmed per hectare should be the next priority. Every farm has a limit on the amount of cattle it can accommodate. This depends on:

- **Land type:** Free draining fertile soils can carry more stock per hectare than wet farms with poor soil fertility;
- **Grassland management system:** Rotational grazing gives greater control over managing grass quality and supply and results in higher utilisation of grass thereby increasing stock carrying capacity and consequently beef output per hectare;
- Cattle housing availability; and,
- Labour availability.

Controlling production costs

In general, the more beef a farm produces, the higher the costs per hectare to produce that beef. Farms with a high beef output per hectare can afford to have higher variable costs per hectare, whereas, farms that have a very low production of beef per hectare find it difficult to justify even their very low costs of production.

The more beef produced per hectare the more the production costs are diluted. A farm with 400 kg of beef liveweight produced per hectare has very high variable costs per hectare at €400 compared with a farm with variable costs of €600 per hectare but an output of 800 kg of beef liveweight per hectare. Systems with low beef output per hectare must obtain most of their production from grazed grass and must minimise the input of purchased concentrates. High output systems can afford larger concentrate inputs provided the overall cost per kilogram of beef produced is economical.

The aim with variable costs is that they should match the level of production; the target should be close to 75 cents per kg of beef produced. A farm therefore producing 400 kg of beef per hectare should be aiming for no more than €300 per hectare on feed, fertiliser, vet and contractor charges (this will be extremely difficult to achieve and this type of farm needs to increase its output per hectare to dilute its costs of production). The variable cost limit is €600 or less on the farm producing 800 kg per hectare.

Your own farm's figures

When looking at your own eProfit Monitor results what are the key areas that you should focus on to 'benchmark' yourself against other farms and targets?

(i) Output of beef liveweight per livestock unit (LU)
This is a measure of the amount of beef liveweight that a farm is producing for every LU being farmed. It takes into account both cow productivity and performance per head. On suckler farms it should be at least 300 kg whereas on non-breeding farms it should be over 400 kg. The higher it is, the higher your output of beef liveweight per hectare will be.

(ii) Stocking rate
This is measured in LU per hectare. A stocking rate of less than 1.5 LU per hectare is quite low. The aim should be that it is as high as your farm will allow taking into account land quality, REPS and Nitrates Directive limits. The majority of commercial beef farms, looking to maximise their profits from beef production, should be aiming for a figure of at least 2.0 LU per hectare.

(iii) Output of beef liveweight per hectare.
This is a combination of (i) and (ii). If either is low it will be difficult to achieve a high output per hectare. On suckling farms selling weanlings you should aim for this to be over 700 kg per hectare. Where the progeny are brought through to beef it should be over 800 kg and where all the cattle are bought (no suckler cows) it should be over 900 kg per ha.

(iv) Variable costs per Kg
Variable costs of production should match the level of output of beef produced. Farms with low levels of production should have very low variable costs whereas farms with a high output of beef per hectare can carry significantly higher variable costs per hectare and still have a higher margin per hectare than the low output farms. Look at the costs to produce 1 kg of beef liveweight. The target is 75 cents or less for variable costs.

Fixed costs

The main items in fixed costs include depreciation, machinery running costs, repairs & maintenance, land rental and interest. Motor costs, insurance, hired labour and machinery leases are also included. Generally, any item that can not be directly linked to an enterprise and which varies little with changes in scale of enterprise is termed a fixed cost. Fixed costs represent approximately 50% of total costs on cattle farms and can have a huge impact on overall profitability level. The stage of development on a particular farm can influence the level of fixed costs – farms with good facilities and adequate machinery in place may have low depreciation and interest costs where the investments were made some years earlier. Farms with very recent substantial investments will have much higher current costs for depreciation and interest where the new investment was funded with borrowing.

A very significant influence on fixed cost level on cattle and sheep farms is the level of single farm payment. Before decoupling cattle premia (suckler cow premium, special beef premium, slaughter premium and extensification premium) were included as part of output from the cattle enterprise and generally fixed costs consumed approx 30 – 35% of output value – that is farms with a high output level per hectare had much higher fixed costs per hectare than farms with a low output value per hectare. Since decoupling the old cattle premia are no longer counted as part of the cattle output value and the fixed cost structure inherited from pre-decoupling results in the fixed costs consuming a much higher percentage of the lower cattle output value.

The same principles about reducing variable costs per kg beef output also apply to fixed costs. Achieving the highest physical output of beef produced per hectare is the means of diluting fixed costs per kg of beef. It is essential for farms with low beef output per hectare to have very tight control on both variable and fixed costs. The absolute level of fixed costs may be more difficult to control but high fixed cost farms can only reduce the cost per kg beef produced by increasing output of beef produced per hectare and/or reducing fixed cost spending level.

Profitability from the cattle enterprise will ultimately be determined by the difference between the cost of producing a kg of beef and the market price of the beef. Efficient farms with a high output of beef per hectare have diluted total costs per kg beef produced and are maximising profitability. At farm level there is little influence on selling price other than improving quality and/or targeting niche markets and/or contract prices. The target production costs for very efficient operators are approximately €1.50 per kg liveweight with this equally split between variable costs and fixed costs.

INCREASING YOUR PROFITS FROM SHEEP FARMING

There are also huge differences from one farm to the next in the level of profits made from sheep farming. Similar to cattle systems, the big profit driver with sheep systems is also the level of output; the higher the output per hectare, the higher will be the gross margin and the higher will be the profit.

The Top 1/3 of farms have an output level per hectare two-and-a-half times that of the Bottom 1/3. Over 90% of the extra output is retained as extra gross margin and over 70% of the extra output is retained as extra profit. The principal factor contributing to output on sheep farms is the number of lambs weaned per hectare and this depends on the combination of stocking rate (ewes per hectare) and weaning rate (lambs per ewe).

Increasing lambs weaned per hectare

The major factors that determine lambs weaned per hectare are lambs weaned per ewe (lambing rate per ewe to the ram & lamb mortality) and stocking rate in ewes per hectare.

Lambs weaned per ewe

Lambs weaned per ewe will be influenced by management factors and the breed of the ewe, as different breeds and crosses have a range of potential litter sizes.

- **Management factors:** Mature ewes of the predominant breeds in the Irish ewe flock all have the potential, under good management, to scan up to 1.8 lambs per ewe and wean up to 1.5/1.6 lambs per ewe. The key management factors that determine lamb output per ewe are:

    - Ewe condition at mating – ewes need to be in good condition at mating to ensure a good lamb crop. The target ewe body condition at mating is 3.5.

    - Mating management and health programme with special emphasis on prevention of lameness – ewe and ram health

must be optimal during the mating season and this requires planning in the six- week period prior to the commencement of mating.

- Adequate feeding in the vital six weeks pre-lambing to ensure that ewes are at body condition score of three or better at lambing and have a sufficient supply of colostrum after lambing.

- Attentive management and care post-lambing to minimise mortality from birth to weaning which should be less than 10%.

- Barren ewes should not exceed 3% of the flock and annual overall ewe mortality should be less than 4%.

- **Breed factors:** If the target weaning rate is over 1.5 lambs per ewe it is necessary to focus on a long-term breeding policy that will produce more prolific ewes with a litter size up to 2.0 lambs per ewe. Alternatively, prolific replacement ewes can be sourced from a reputable breeder specialising in producing replacements; this may involve more health risks but it simplifies the system, particularly in small and medium sized flocks. Proper management of the more prolific ewes is essential to ensure they can realise their potential.

Stocking rate

This is a key factor in terms of maximising lamb output per hectare. The first priority should be to increase the lamb output per ewe to a satisfactory level, before pushing up stocking rate. Increasing from six ewes per hectare at 1.35 lambs per ewe, to 12 ewes per hectare at 1.5 lambs per ewe, more than doubles lamb output per hectare. Based on farm returns on sheep farms with an eProfit Monitor, this will increase output value by approximately €1,000 per hectare – gross margin will increase by €900 per hectare and profit by up to €700 per hectare.

Increasing stocking rate can be achieved by confining existing ewe numbers to a smaller area, and releasing surplus land for another enterprise, or reducing expensive conacre. Alternatively, the ewe flock can be increased and kept on the existing area devoted to sheep but at the higher stocking rate. The critical factor when increasing stocking rate is to do it in a planned way – do a grass management and winter feed plan in advance and provide for the financial implications of making the change. Sheep proof fencing is essential to ensure management of the sheep flock; the flock should not be the decision makers on where they should graze. A small investment in upgrading handling facilities could be a vital investment on many sheep farms where facilities are less than adequate. An efficient sheep handling unit makes it much easier to undertake any essential tasks in a timely manner.

The target stocking rate on lowland farms should be 12 ewes per hectare and weaning over 18 lambs per hectare. This should yield a gross margin in excess of €1,000 per hectare based on 2009 profit monitor returns.

Controlling production costs

In general, the higher the lamb sales per hectare, the higher the total costs per hectare. Data from the eProfit Monitor results consistently shows that the top farms with the highest output, while incurring the highest production costs per hectare, have the lowest cost of producing a lamb. The 2009 figures show an advantage of €22 per lamb in lower total costs, to the Top 1/3 compared with the Bottom 1/3. Farms that have a very low output of lambs sold per hectare must be vigilant at controlling spending on both variable and fixed costs or profit potential is destroyed. It is the difference between the cost of producing a lamb and the lamb selling price that determines the profit level of the sheep flock. Controlling the cost of producing a lamb is where farmers have most control.

The greater the number of lambs sold per hectare the more production costs are diluted. A farm selling eight lambs per hectare has very high

variable costs per hectare at €350 compared to a farm with variable costs of €600 per hectare selling 19 lambs per hectare. Systems with low lamb sales per hectare must obtain most of their production from grazed grass and must minimize the input of purchased concentrates. High output systems can afford larger concentrate inputs provided the overall cost per lamb produced is economical.

The aim with spending on variable costs per hectare should be they match the level of production. The target is that variable cost spending should be close to €30 per lamb produced. A farm therefore producing eight lambs per hectare should aim for no more than €250 per hectare on feed, fertiliser, vet and contractor charges (this will be extremely difficult, if not impossible, to achieve and this type of farm needs to increase its output per hectare to dilute its costs of production). A farm selling 19 lambs per hectare can afford to spend €600 per hectare on variable costs.

Your own farm's figures

What are the key areas in your own eProfit Monitor results that you should focus on to 'benchmark' yourself against other farms and targets?

1) Stocking rate – ewes per hectare

The target stocking rate on lowland farms should be 12 ewes per hectare for a high output system. At eight ewes per hectare or less too few lambs are produced to carry total costs and leave any potential for profit at current lamb prices.

2) Lambs weaned per ewe to the ram

A reasonable lamb output per ewe is required to cover the costs of keeping the ewe and leave some profit potential. There are only small differences in the cost of keeping the ewe between the top and bottom sheep farmers, so the main avenue to reducing cost per lamb is achieving a higher weaning rate. The minimum target should be to wean 1.5 lambs per ewe to the ram – more prolific flocks should be aiming to wean 1.7 lambs per ewe.

3) Lambs weaned per hectare
Achieving a high output of lambs weaned per hectare is the key to increasing profit potential. The target should be 18 to 20 lambs per hectare. Low output producers need to set realistic targets over a two to three year period based on modest increases in stocking rate and weaning rate.

4) Variable costs per lamb produced
The most efficient farms have lower variable costs per ewe in 2009 profit monitor data. The Top 1/3 are spending €16 less per ewe, of which meal accounts for €9 and contractor €4, despite producing almost an extra six lambs per hectare. The target for spending on total variable cost per lamb should be €30 or less for the most efficient producers.

- Meal feeding accounts for over 30% of total variable costs and is often identified as an area of overspending on many sheep farms. However, many sheep producers feel meal feeding to lambs is essential to achieve a satisfactory sales pattern and to avoid being left with too many store lambs. The 2009 profit monitor results show the most efficient high margin farmers with meal accounting for 25% of variable costs and the least efficient with up to 40% of their variable cost spending on meal. Spending on meal feeding on most sheep farms needs to be closely examined and a plan put in place that will reduce dependence on meals and also ensure that the most economical response is obtained from meals fed.

    - Meal feeding to the ewe pre-lambing should not exceed 30 kg and should not cost more than €6 to €7 per ewe. For mid-season flocks lambing in mid-March no meals should be fed to ewes after lambing. Early closing of fields in October combined with spring nitrogen application, are the basics of the grassland management plan to provide adequate grass for ewes after lambing. Insufficient grass after lambing is the most common problem on sheep farms in spring, the principle reason is that pastures were not closed up in time the previous autumn.

- Creep feeding to lambs: Excellent grassland managers and some farms with low stocking rates can finish the majority of their lambs without creep feeding. However where target drafting dates are not being achieved it may be necessary to feed meals to compensate for poor performance. The target must be to control and minimise the meal input to a maximum of 25 kg per lamb. Lamb health and grass quality are key to reducing the need for creep feeding. Generally, lamb performance is adequate up to the end of May on most farms and poor thrive is more of an issue from early June as grass quality deteriorates and ewe milk supply dries up. The best response to creep meals is obtained at low feeding levels. Enhance the response to creep meals by using them to encourage lambs to creep graze ahead of the ewes. Limit creep meals to a maximum of 300 to 400 grams per lamb per day.

- Target drafting pattern, when lambing in mid-March, for a moderate to good performer should be 20% sold by weaning at the end of June, 55% sold by the end of July, 75% sold by the end of August, 90% sold by the end of September with all lambs sold by the end of October.

- If creep meal feeding is required to achieve the drafting pattern outlined above, introducing meals from 1 June at 300 grams per lamb per day will result in total consumption of less than 25 kg per lamb in the flock. In the present economic climate and at current lamb prices the medium term target for sheep producers must be to concentrate their efforts on improving grass quality and incorporating clover to minimise dependence on meal feeding. Strategic use of concentrates may be necessary to finish tail enders but spending on concentrates should be reduced to 20% of total variable costs (from the current 36%). Achieving this target is worth up to €100 per hectare.

5) Fixed costs per lamb produced

Fixed costs represent approximately 50% of total costs and consequently have a large impact on profitability. It is essential to have a high output of lambs per hectare to spread fixed costs per lamb. The Bottom 1/3 of farms with low lamb output (8.9 lambs per hectare) and fixed costs of €375 per hectare are still ending up with the highest level of fixed cost of €42 per lamb. The target for fixed cost should be €35 per lamb or less – this is only achievable with a high lamb output per hectare.

Courtesy of Bord Bia

CASE STUDIES

The main purpose of completing a profit monitor is to help identify the strengths and weaknesses of the farm business and to provide assistance in drawing up a plan to improve profitability. It is essential to act on what is learned from the profit monitor and to implement the necessary changes to accelerate profit improvement. Participation in an active discussion group where all members complete a profit monitor and openly discuss the results gives a greater understanding of how the business works and allows members see how other farmers in their locality at similar systems are performing. The following case studies demonstrate what can be achieved in terms of profit improvement by putting what is learned into practice.

Case Study: Suckling-to-Beef

Sean Roberts is farming in Ballinaboola near New Ross in County Wexford with 70 ha of owned land and a further 27 ha leased. He has a spring-calving herd with all of the progeny brought through to beef. In 2009, he calved down 120 suckler cows. He also buys in cattle for finishing on the farm. Up until early 2009, all of the males were finished out of the shed as steers at 24 months of age. In 2009, he switched to finishing bulls at 20 months of age and has continued with this finishing system in 2010. He also buys in a small number of bull weanlings in the autumn to finish with his own as bulls. His Teagasc adviser is Michael Fitzgerald and he is a member of the local Model County Suckler Discussion Group.

High Output System

Sean's aim is to maximise his output and hence his profit per ha. The key figures from his 2009 eProfit Monitor are outlined in the table below.

Sean Roberts

PHYSICAL PERFORMANCE	2009
Stocking Rate	2.51 Lu / ha
Output per LU (kg)	324 kg / Lu
Output per ha (kg)	815 kg / Lu
Financial Performance per ha	
Gross Output	€1,545
Variable Costs	€719
Gross Margin (excl. premia)	**€826**
Fixed Costs	€720
Net Profit (excl. premia)	**€106**

His variable costs make up 47% of his gross output and are at 88 cent per kg of beef liveweight produced. His fixed costs are also at 88 cent per kg. At a gross margin of over €800 per ha, he is in the Top 5% of profit monitors for 2009.

In 2009, all of the remaining steers on the farm were finished out of the shed in early January. Their average carcass weight was 403 kg with 37% of them grading R+ or better. Almost half of these were home-bred and these had an average carcase weight at 23 months of 409 kg and an average grade of U=3=. Most of his heifers slaughtered in 2009 were home-bred with a slaughter weight of 306 kg at 21 months of age.

In 2009, he grazed his yearling bulls from the end of March to the middle of June. Grass was allocated to them in one day blocks with no more than 25 bulls per group. In wet weather they were moved twice per day. During this period they gained 1.45 kg LW per day. They were then housed *on ad-lib* meal for 80 to 100 days during which time they gained 1.9 kg LW per day. At slaughter they had an average carcass weight of 417 kg when they were on average 19 months of age. He is continuing with this system in 2010.

Bulls at Grass Spring 2010 on the Roberts' Farm

Key areas of performance

This farm is achieving a gross margin in excess of €800 per ha because of its performance in a number of key areas.

- **High output (kg) per livestock unit** – 324 kg of beef liveweight is produced for every LU farmed. This is because of a high output per suckler cow and per finishing animal.

  A high output per cow starts with good fertility. The herd fertility figures on the Roberts farm are excellent with a short average calving interval and a very tight, controlled calving pattern. The breeding season starts on the 1 May and ends on the 20 July each year. Any cow scanned not in calf is culled. In the 2009 calving season, 55% calved in the first month, 88% had calved within two months and all of the cows were calved within three months.

A high sale weight per cow is also crucial in achieving a high output. On this farm the carcass weight for age is high due to:

- The high beef genetic merit of both the cows and bulls;
- Excellent grassland management. Sean has been using grass budgeting techniques for a number of years and this is giving him high daily gains at grass while at the same time keeping his finishing costs low;
- High meal feeding levels when cattle are close to finish; and,
- A well defined annual herd health plan.

- **Good stocking rate** – A high output of beef per LU is magnified by also having a high stocking rate. At 2.51 LU/ha the total beef output per hectare on this farm is pushed to over 800 kg.

- **Low costs** – Both the variable and fixed costs are kept in proportion to the output generated. By grazing the bulls for three months as yearlings he is maximising the amount of grass in their lifetime diet. The finishing periods for all cattle are kept short and a significant proportion of the cereals fed are home-grown. Contractor costs are kept low by working with other family members at busy times of the year e.g., silage cutting.

Tight Grazing on the Roberts Farm May, 2009

Case Study: Suckling-to-Weanling

Thomas Halpin, Meath with Ned Heffernan, Teagasc, Grange

Thomas Halpin is farming 94.7 hectares near Carlanstown in County Meath, of which just over 64 hectares are owned. He operates a suckler to weanling/store system. The 70 suckler cow herd is predominantly made up of Charolais x Limousin or Charolais x Simmental type cows. For the last few years a Simmental bull has been running with the milkier cows to breed replacements. A Charolais bull is used on the remainder of the herd. This year, heifers were finished out of the shed at 12-13 months and killed out at 270 kg carcase weight. Spring born bulls are generally sold in the autumn as weanlings, at 380-400 kg. Summer born bulls will sold at 11-12 mths at 460-480 kg. In the last year bull calves have been sold at €1.90 - €2.00 per kg liveweight, so the quality of stock is very good.

Calving is split between spring (February to April) and summer (July to August). Overall, breeding performance is excellent with a calving interval of 359 days and mortality running at 1.4% at birth. Calves per cow per year are running at 0.95 which is well above the national average of 0.80. This year the replacement heifers were all AI bred to a selection of easy calving Limousin sires.

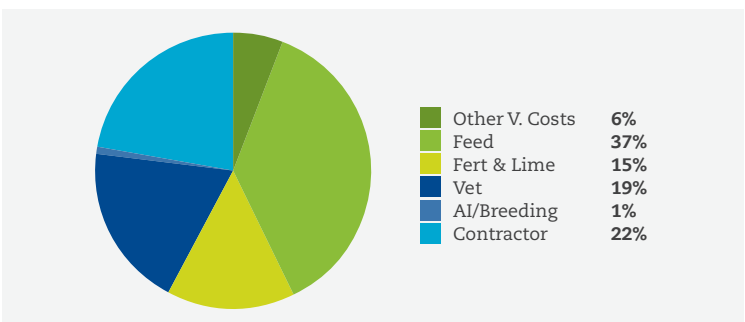
Tom is actively involved in the Positive Farmers' Suckler Discussion Group facilitated by Ned Heffernan, Teagasc, Grange. The group meets on members' farms, with the main focus on improving profitability.

Finanacial performance

The overall stocking rate on the farm is relatively low at 1.41 LU/ha. The low stocking rate is reflected in the liveweight produced on the farm at 387kg/ha or 275kg/LU.

The resulting gross output from the farm is €1094/ha which is good given the low stocking rate. Variable costs are well below average on the farm at €347/ha or 32% of gross output. The breakdown of variable costs shows that feed, veterinary and contractor accounts for 77% of the total.

With such good control on costs and a good level of output being achieved on the farm, the gross margin on the farm is an excellent €747.



Variable Cost Breakdown 2009

Target for the future

If we put the performance of the farm in context several things become obvious. First, Tom is achieving very good overall breeding performance in the herd which he will need to maintain. His calving pattern is tight and the calving interval is excellent. In terms of

output, the calf quality is good and he is achieving very good weight for age which again he will have to maintain.

Stocking rate is however low for what is very good land and is all in one block. He could look at increasing cow numbers to increase stocking rate but he is quite limited by available buildings to house stock over the winter. The other option would be for him to consider dropping the rented ground which would push his stocking rate to over 2 LU/ha which is very achievable.

If the stocking rate increases it will put pressure on variable costs to rise which is fine provided he remains technically efficient and we see a corresponding lift in output.

The feed and contractor costs should be maintained even if stocking rate increases.

Fertiliser costs will increase but they are currently only €51 per hectare. There are certainly huge gains to be made on the farm from improved grassland management. Tom is beginning to divide up fields more and the extra paddocks will allow him to make much better use of grass in the future. The young summer born bulls would benefit from earlier turnout after their first winter where they could gain a lot of weight cheaply at grass before sale.

Join a Beef Discussion Group and Increase YOUR Knowledge

Case Study: Mid-Season Lamb Production

Richard Hogg farms a mixed cattle and sheep farm in Stoneyford, County Kilkenny. Extending to 61 hectares of owned land Richard runs 30 suckler cows taking all the progeny to beef and 315 ewes (including ewe lambs) are mated annually. Richard's sheep flock is also one of the participants in Sheep Ireland MALP (Maternal Lamb Producer) Programme.

Richard is an active member of the Teagasc Kilkenny Sheep Discussion Group and with the assistance of his adviser Terry Carroll he completes a profit monitor annually to help him make appropriate business decisions.

Output

Output per hectare is the single biggest factor affecting profitability. On sheep farms the components that influence this are stocking rate (ewes per hectare), lamb output (lambs reared per ewe to the ram) and lamb price.

Richard Hogg

OUTPUT ON HOGG FARM IN 2009	
Stocking Rate (ewes per ha)	9.61
Lambs weaned per ewe to ram	1.66
Lamb price € per head	71
Gross Output € per ewe	103.92
Gross Output € per ha	998
Gross Margin (excl. premia)	**€826**
Fixed Costs	€720

Stocking rate has been held constant at close to 10 ewes per hectare in recent years to facilitate outwintering and outdoor lambing. Lambs reared per ewe to ram and lamb price are key areas in which further improvements are being sought.

The breeding policy on this farm has for the past few years involved using prolific maternal breeds (Lleyn and Belclare) to produce flock replacements. As the ewe lambs are also mated, the current litter size is quiet acceptable.

Variable costs

Costs on the Hogg farm have always been low. Concentrate feed and costs associated with wintering sheep (contractor/hay/straw etc.) are very low. The main reason for this is that ewes are outwintered and block grazed. Most of the ewes on the farm are never housed thereby significantly reducing concentrate and wintering costs. In addition the majority of the lamb crop never get any concentrate feed. Lambs are fed an all grass diet and finished on tyfon which is sown annually as part of the farms reseeding policy.

The table overleaf outlines variable and fixed costs on the Hogg farm.

COSTS ON HOGG FARM IN 2009	
Variable Costs	
€ per ewe	24.17
€ per hectare	232
Fixed Costs	
€ per ewe	39.93
€ per hectare	384

Margins

Richard views his farm as a business and maximising profitability is his primary goal. As the overall cost structure on the farm is relatively low increased profits will have to come from keeping costs at their current low level while at the same time trying to increase the value of the output. The table below outlines both the gross and net margins achieved on the Hogg farm before direct payments (REPS, Single Farm Payment, Disadvantaged Area payments).

MARGINS ON HOGG FARM 2009	
Gross Margin	
€ per ewe	79.76
€ per hectare	766
Net Margin	
€ per ewe	39.82
€ per hectare	383

Future plans

- Maintain costs at low level.
- Increase lambs reared to 1.7 or better.
- Focus on improved animal performance from grass.

CATTLE FARMS - E PROFIT MONITOR ANALYSIS 2009

Comparison - 2004 to 2009

Table 1 below shows the performance of 26 cattle farms, both suckler and non-breeding over the 6 year period 2004 to 2009.

TABLE 1: COMPARISON OF COSTS AND INCOME ON THE SAME 26 BEEF FARMS OVER SIX YEARS

	2004	2005	2006	2007	2008	2009
Physical						
Stocking Rate LU/ha	1.82	1.89	1.84	1.84	1.86	1.87
Liveweight Produced kg/ha	646	619	628	632	609	675
Liveweight Produced kg/LU	355	328	341	343	327	361
Financial €/ha						
Output Value	927	924	989	1027	1135	1080
Variable Costs	494	525	545	561	608	628
Gross Margin Excl. Premia	433	399	444	466	527	452
Fixed Costs	446	466	429	428	446	446
Profit Excl. Premia	-13	-67	15	38	81	6
Total Premia*	698	655	656	683	714	701
Premia Retained	98%	90%	102%	106%	111%	101%

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

In terms of physical criteria, it is evident over the period that there is just a modest 3% increase in stocking rate with a peak in 2005 at 1.89 LU/ha. The small variation in the stocking rate is also reflected in the fact that there is a small 5% increase over the period in the actual kilograms of liveweight produced per hectare. While movement in physical beef output was low over the period there was an increase in spending on concentrates of 16% in nominal terms over the same period. Beef output per livestock unit decreased in the early years but recovered in 2009 to finish 2% above 2004 level.

Although we see very little change in the physical performance, encouragingly the financial value of the output per hectare has increased from €927 in 2004 to €1080 in 2009. This represents an increase of 17% over the five years and is a result of improved quality and increased prices. This increase in the value of output on the 26 farms was achieved alongside a variable costs increase of 27% in nominal terms over the same period. As is shown the variable costs rose from €494/ha in 2004 to €628/ha in 2009.

The gross margin improved by only €19/ha or 4% over the period. In 2009 the average gross margin achieved on these farms was running at €452/ha. Fixed costs per hectare in nominal terms remained fairly static over the period which indicates cost savings to offset annual inflation of costs.

With the increase in output value and variable costs, combined with the static fixed costs, overall profitability has improved marginally over the period. The 26 farms have improved profitability by just €23 per hectare over the five-year period. Premia retained as profit has risen from 98% in 2004 to 101% in 2009. The challenge in the years ahead will be to further improve the production aspect of the business so that it can add more significant profit to the existing premia.

Figure 1 illustrates the change in gross margin per hectare on the farms over the five years.

Figure 2 plots the change in profitability where premia has been included on the farms over the four years. The increase from €685/ha in 2004 to €708/ha in 2009 represents a profit improvement of less than 1% per annum over the period. After an initial reduction in profit in 2005 profit increased steadily over the three years up to 2008 when it peaked at €795 per hectare. Reduced cattle prices in 2009 have seriously hit gross margin and profit levels by approximately €120 per hectare. Better efficiency has offset the impact of reduced cattle prices so actual profit fall is confined to €87 per hectare.

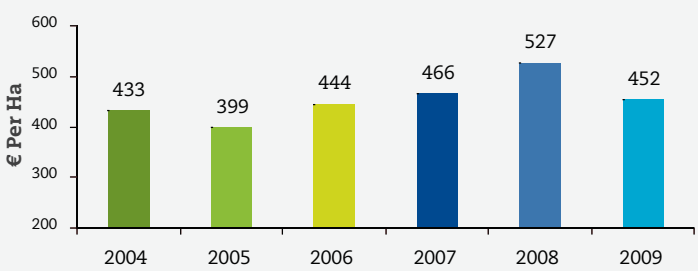


Figure 1

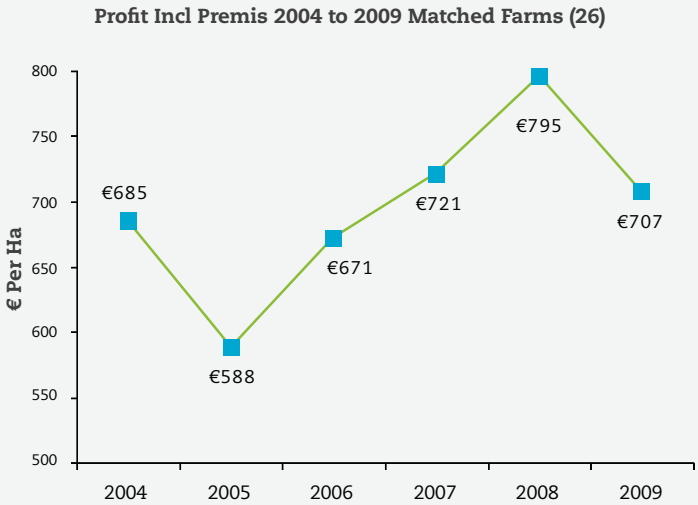


Figure 2

Comparison 2008 v 2009 (Cattle Farms)

Table 2 below highlights the performance of the same 171 farms from both the suckling and non-breeding sectors in 2008 and 2009. Stocking rate is up 4% in 2009 and beef liveweight output per hectare is 6% higher in 2009.

Despite the increase in physical beef output, the value of the output decreased by €56 per hectare in 2009, a 6% decline. Variable costs showed no change resulting in a gross margin decline of €59 per hectare or 15%.

TABLE 2: COMPARISON OF COSTS AND INCOME ON THE SAME FARMS IN TWO YEARS

Profit Monitors –Cattle Farms Matched Sample (171 Farms)			
	2008	2009	% Change
Physical			
Stocking Rate LU/ha	1.74	1.81	+4%
Liveweight Produced kg/ha	539	569	+6%
Financial €/ha			
Output Value	955	899	- 6%
Variable Costs	553	556	No change
Gross Margin Excl. Premia	402	343	- 15%
Fixed Costs	489	474	- 3%
Profit Excl. Premia	- 87	- 131	-
Total Premia	655	639	- 2%
Premia Retained	87%	80%	-

Fixed costs decreased by €14 per hectare in 2009, which is equivalent to a 3% decrease. The profit figure is €44 per hectare lower for 2009 despite the reduction in fixed costs. Reduced cattle prices in 2009 are responsible for the gross margin reduction of 15% - the fall in cattle prices cut a potential €100 per hectare off gross margin and profit. The poor market returns for 2009 are further compounded by a decline in premia receipts in 2009 of €16 per hectare or 2%.

Preliminary figures from the National Farm Survey (NFS) for 2009 indicate a much greater fall in gross margin of almost 43% from 2008 to 2009 for a random sample of 320 suckler farmers. Average gross margin fell from €194 per hectare in 2008 to €111 per hectare in 2009. Premia receipts also fell by 2% with NFS sample. Reduced spending on fixed costs was much more significant in NFS sample at 19% compared to just a 3% reduction with the profit monitor sample.

Table 3 shows the detailed changes in variable costs between 2008 and 2009. There is little change in the principal elements of variable costs from 2008 to 2009 with the exception of fertilisers that are down 6% in 2009. Spending on "other variable costs" increased by 19% in 2009 or €16 per hectare in total. This extra spending was made up from straw costs €7, purchased forage €3, seeds and sprays €3, and levies and transport €3.

TABLE 3: CHANGES IN VARIABLE COSTS BETWEEN 2008 AND 2009 – CATTLE FARMS			
Matched sample 171 farms			
Variable Costs € / ha	**2008**	**2009**	**Change %**
Concentrates	181	175	- 3%
Fertiliser	121	114	- 6%
Veterinary	68	68	No change
Contractor	98	98	No change
Other Variable Costs	85	101	+ 19%
Total Variable Costs	553	556	No change
Profit Excl. Premia	- 87	- 131	-
Total Premia	655	639	- 2%
Premia Retained	87%	80%	-

Table 4 examines how fixed costs have changed from 2008 to 2009. Overall spending on fixed costs decreased by 3% despite increases on hired labour (+ 14%), repairs and maintenance (+ 7%) and insurance (+ 3%). Surprisingly overdraft and loan interest plus bank charges showed a decrease of 25% in 2009 equivalent to €11 per hectare. Overall, depreciation showed only a marginal 1% increase in 2009 as a result of a 7% reduction in machinery depreciation combined with a 12% increase in building depreciation.

Figure 3 below graphs the change that has occurred over the two years in gross margin per hectare on the 171 farms. The 15% decline in gross margin occurs despite increased physical beef output of 6% and is the result of reduced cattle & beef prices as variable costs remained stable.

TABLE 4: CHANGES IN FIXED COSTS BETWEEN 2008 AND 2009 – CATTLE FARMS			
Matched sample 171 farms			
Fixed Costs € / ha	**2008**	**2009**	**Change %**
Hired Labour	24	28	+14%
O/D, Loan Interest & Bank Charges	44	33	- 25%
Machinery Running Costs	74	66	- 11%
Car / ESB / Phone	53	52	- 2%
Depreciation	110	112	+ 1%
Repairs & Maintenance	42	45	+ 7%
Insurance	29	30	+ 3%
Land Lease	45	45	No change
Other Fixed Costs	68	64	- 6%
Total Fixed Costs	489	474	- 3%

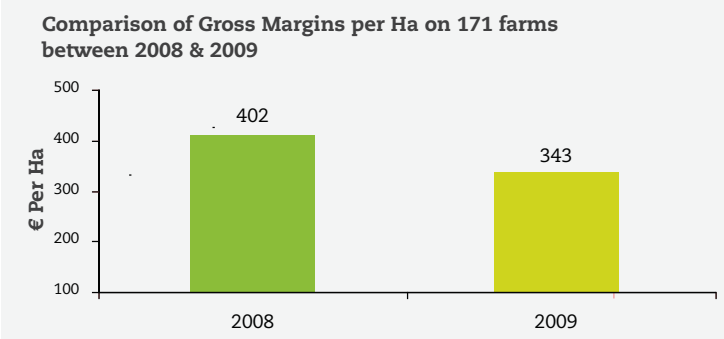


FIGURE 3

Suckling farms 2009

Table 5 below shows the performance of 258 suckling farms in 2009. These farms include 136 farms where the suckler progeny are sold as weanlings or stores and the remaining 122 farms bring all their suckler progeny to beef. Farms are ranked by gross margin per hectare excluding premia into Top 1/3, Average and Bottom 1/3. The difference between the Top and Bottom 1/3 is also shown.

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 €547 per hectare and profit difference of €466 per hectare – the advantage to the top farms has increased in 2009 compared with 2008 with most of the improvement on the Top farms coming from greater cost efficiencies.

Much of what is highlighted in Table 5 is similar to what we have recorded in previous years within the suckling sector. The main points are listed below:

- Farm size is larger for the Top 1/3 – they are farming 15 ha more (29%) than the Bottom 1/3.
- With a stocking rate of 1.95 LU/ha, the Top 1/3 farms are carrying 0.43 LU/ha more stock than those in the Bottom 1/3 – a staggering 28% extra stock on the same area.
- Despite the higher stocking rate on the top farms, they are also producing 53% 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 1/3 of farms produce almost twice as much beef liveweight on a per hectare basis than those in the lower

TABLE 5: SUCKLING FARMS 2009 – PER HECTARE ANALYSIS PROFIT MONITOR (258 FARMS)				
Profit Monitors –Cattle Farms Matched Sample (171 Farms)				
	Top 1/3	**Average**	**Bottom 1/3**	**Top v Bottom**
Physical				
Farm Size ha	66	57	51	+15
Stocking Rate LU/ha	1.95	1.73	1.52	+0.43
Liveweight Produced kg/LU	340	301	222	+118
Liveweight Produced kg/ha	663	521	338	+325
Financial €/ha				
Gross Output Value	1126	849	514	+612
Variable Costs	555	536	490	+64
Gross Margin	571	313	24	+547
Fixed Costs	514	485	433	+81
Net Profit excl. Premia	57	-172	-409	+466
Total Premia *	666	643	597	+69
Total Premia Retained *	109%	73%	31%	
Single Farm Payment	499	455	390	+ 109
Single Farm Payment Retained	145%	104%	48%	

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

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 €1,126/ha compared to €514/ha on the Bottom 1/3, a staggering difference of €612/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 €612 higher output value per hectare they only spent €64/ha extra on variable costs compared to those in the Bottom group – a modest 13% extra variable costs for an extra 119% output value.

- Gross Margin which indicates technical efficiency demonstrates the gulf that exists within the group. At €571/ha the Top group are €547/ha ahead of the Bottom 1/3 and €258/ha ahead of the Average for the group.

- Fixed costs are significant within all groups at €433 per hectare for the Bottom 1/3 and €81 higher for the Top 1/3 and underlines the need to achieve a good output level. Fixed costs account for 84% of output on Bottom 1/3 but only 46% of output on Top 1/3. The target should be approximately 35%. Prior to decoupling premia receipts were included as part of farm output and both variable and fixed costs each accounted for 30 to 35% of the higher output figure. Excluding premia receipts from farm output post decoupling results in fixed costs accounting for a much higher percentage of the lower output figure.

- It is only the Top 1/3 that generates a sufficient gross margin to cover fixed costs. Both the Average and Bottom 1/3 had to subsidise their production by taking €172 and €409/ha respectively out of their premia payments in 2009.

- It was only the Top 1/3 that generated a profit (€57/ha) from their stock that could be added to their premia receipts.

- Single farm payment accounts for 75% of premia receipts on Top 1/3, 71% on average and just 65% of premia receipts for the Bottom 1/3. The Bottom 1/3 had to use almost 70% of their premia receipts to subsidise production.

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 31% of total premia and 48% of single farm payment as profit in 2009. 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. Beef output per livestock unit is 35% lower compared with the Top 1/3 and provides huge scope for improvement.

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 49%, 63% and 95% 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 €430 to €480/ha to leave themselves in a breakeven situation.

While depressed prices were responsible for taking over €100 per hectare off the gross margin and profit of the Top 1/3, the negative price impact on the Bottom 1/3 was much less at approximately €50 per hectare. This clearly indicates the absolute need for increased output and efficiency with the Bottom 1/3 of producers keeping a profit monitor, as their margins will continue to be totally inadequate even with substantial price improvements.

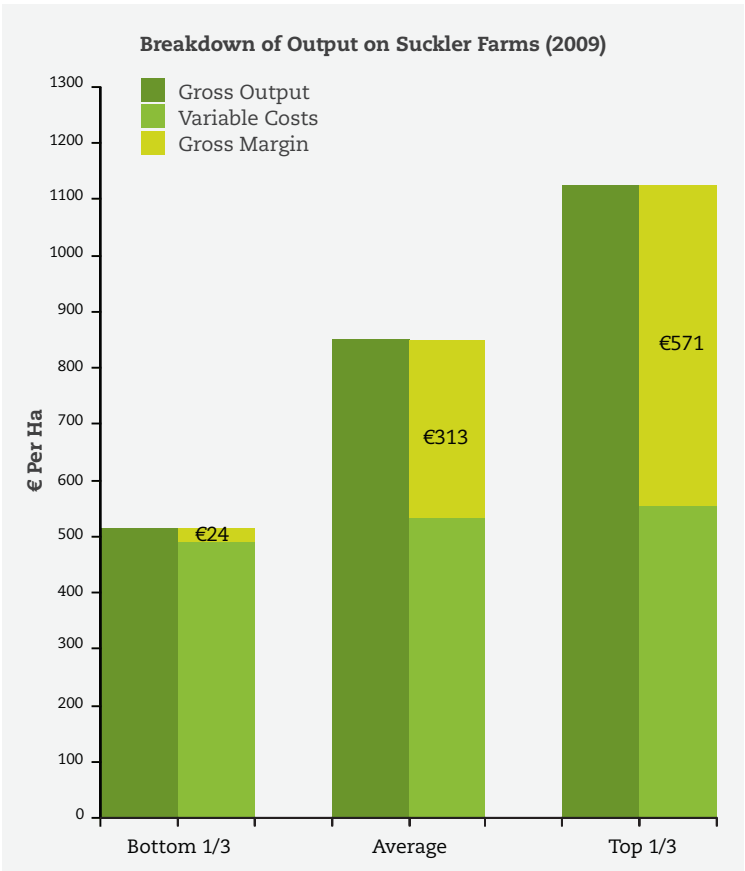

Breakdown of Output on Suckler Farms (2009)
Gross Output
Variable Costs
Gross Margin
€ Per Ha
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
€24
€313
€571
Bottom 1/3
Average
Top 1/3

FIGURE 4

Figure 5 identifies the key variables that influence gross output and consequently gross margin per hectare on the suckling farms. Stocking rate is 28% 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 is 53% higher on the Top 1/3, with both combining to produce a gross margin over 20 times higher on the Top 1/3 of farms.

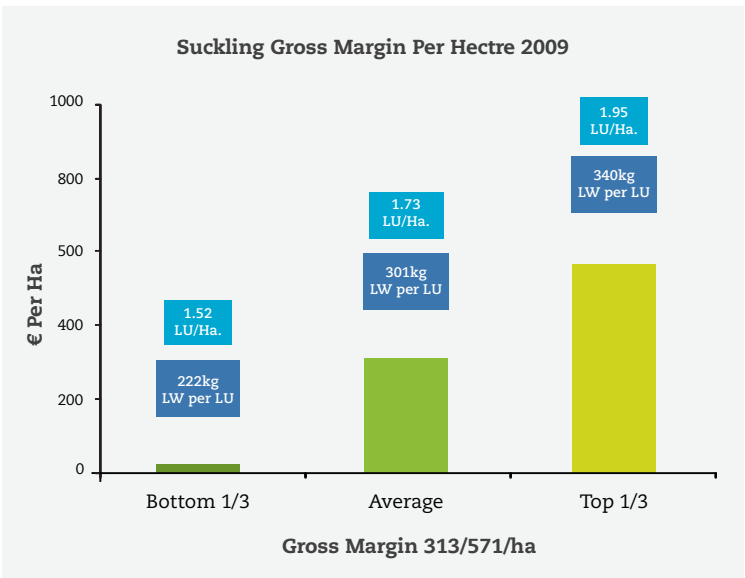


FIGURE 5

Figure 6 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 generates a profit from their farming activity. The other two groups have to dip into their premia to the tune of €409 and €172/ha in order to cover production costs.

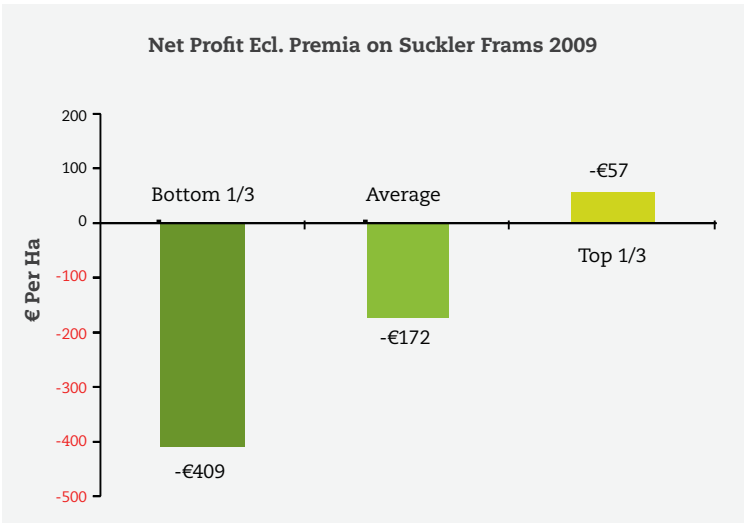

Net Profit Ecl. Premia on Suckler Frams 2009
€ Per Ha
200
100
0
-100
-200
-300
-400
-500
Bottom 1/3
Average
-€57
Top 1/3
-€172
-€409

FIGURE 6

Breakdown of costs – suckling farms

Both pie charts in Figures 7 and 8 demonstrate the major costs in both the variable and fixed cost sectors on the Average suckler farms in 2009.

The four major components of variable costs are feed, fertiliser, contractor and veterinary, which account for 86% of all variable costs.

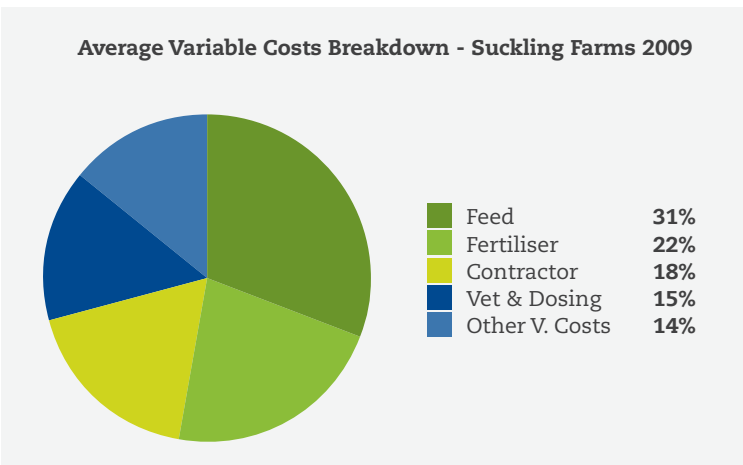


FIGURE 7

On the fixed costs side, depreciation, machinery running, repairs and maintenance, land rental, and interest account for almost two-thirds of the total fixed costs. Motor costs, insurance, hired labour and machinery leases account for an additional 23% of fixed costs.

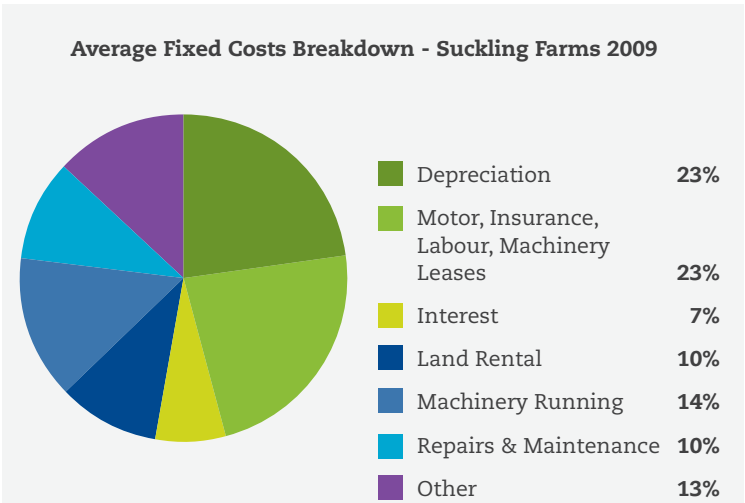


FIGURE 8

Costs per kg liveweight on suckling farms

Figure 9 below demonstrates extremely well that even though the total costs per hectare on the Top farms is slightly higher at €1,069 compared to €1021 and €923 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 the top farms €1.61 to produce a kilogram of liveweight compared to €2.73/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 beef output on a 100 acre farm for a farm in the Top 1/3 compared to the Bottom 1/3.

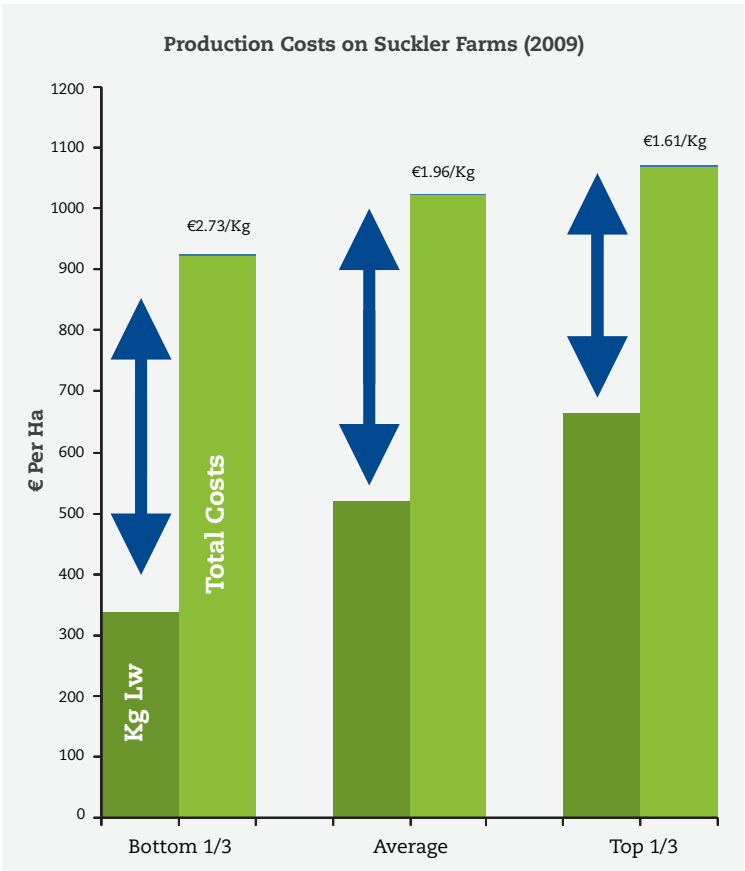

Production Costs on Suckler Farms (2009)
€ Per Ha
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
€2.73/Kg
€1.96/Kg
€1.61/Kg
Total Costs
Kg Lw
Bottom 1/3
Average
Top 1/3

FIGURE 9

Non-Breeding Cattle Farms 2009

Table 6 below looks at the performance of 56 non-breeding cattle farms in 2009. 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 1/3, Average and Bottom 1/3 .

TABLE 6: NON-BREEDING FARMS 2009 – PER HECTARE ANALYSIS				
Profit Monitor (56 Farms)				
	Top 1/3	**Average**	**Bottom 1/3**	**Top v Bottom**
Physical				
Farm Size ha	54	45	34	+20
Stocking Rate LU/ha	2.00	1.68	1.44	+0.56
Liveweight Produced kg/LU	506	386	243	+187
Liveweight Produced kg/ha	1,011	648	350	+661
Financial €/ha				
Gross Output Value	1,504	939	451	+1,053
Variable Costs	895	633	476	+419
Gross Margin	609	306	-25	+634
Fixed Costs	623	495	384	+239
Net Profit excl. Premia	- 14	-189	-409	+395
Total Premia*	708	687	708	0
Total Premia Retained	98%	72%	42%	
Single Farm Payment	591	526	479	+ 112
Single Farm Payment Retained	117%	95%	62%	

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

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 Table 6 are:

- The Top 1/3 of farms are almost 60% larger compared with Bottom 1/3 - 54 ha compared with 34 ha. This size differential has increased with the 2009 farms over the previous year but the same farms are not in both years.

- Stocking rate on the Top 1/3 is marginally higher than the corresponding group of suckler farms – this differs from what pertained in previous years. The Top group of non-breeding farms are carrying an extra 0.56 LU/ha compared with those in the Bottom 1/3 – this represents almost 40% more stock on a similar land area.

- The top farms are producing twice as much beef per livestock unit as the Bottom 1/3 which is a function of better animal performance on foot of better feeding and management.

- The 39% higher stocking rate combined with better animal performance results in the Top 1/3 producing almost three times as much beef per hectare as the Bottom 1/3.

- At €1,504/ha the Top group are producing €1,053 more in terms of output value per hectare compared with a poor €451/ha in the Bottom 1/3

- The extra €419/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. However, variable costs are consuming almost 60% of output on the top farms just leaving 40% of output value to cover fixed costs and profit. It is hard to justify the Bottom group spending €476/ha on variable costs when they are only generating €451/ha in output value.

Significant inefficiencies exist with this group in terms of variable cost spending, poor stocking rate, poor on farm animal performance and/or poor buying and selling of stock. The poor output level combined with the high variable cost level results in a negative gross margin for the Bottom 1/3.

- The difference in efficiencies between the farms is clearly illustrated in the difference in gross margin of €609/ha on the Top farms versus a negative €25/ha on the Bottom 1/3 of farms – an advantage to the Top farms of over €634 per hectare.

- Fixed costs on the Top farms are €239/ha higher than those on the Bottom 1/3 of farms. At €623 per hectare fixed costs are consuming 41% of output value and results in the Top 1/3 returning a negative profit before premia of €14 per hectare. Although fixed costs were much lower with the Bottom 1/3 their non-existent gross margins resulted in losses of €409 per hectare. This resulted in the Bottom 1/3 only retaining 42% of total premia receipts.

- The Average of all the non-breeding farms did not hold onto all their premia in 2009 as their farming activity consumed €189 per hectare of their premia receipts.

- Single farm payment per hectare was highest on the Top farms with an extra €112/ha on the Top 1/3 compared with Bottom 1/3. Only the Top 1/3 of non-breeding farms retained all single farm payment in 2009 and the Bottom 1/3 retained 62%.

- While stocking rates are only marginally different on the non breeding farms compared with the group of suckling farms in Table 1, single farm payment per hectare is 15 to 22% higher on the non-breeding farms.

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 extremely low level of output coupled with proportionally higher variable costs leaves them very vulnerable in the future. It is not viable to continue with an enterprise that generates a negative gross margin as the enterprise is making no contribution to farm fixed or overhead costs. Low output systems must operate on the basis of very low inputs and must achieve good levels of animal performance. Low stocking rate may hit output levels but can be offset somewhat by achieving high levels of animal performance and cutting spending on variable and fixed costs.

Figure 10 overleaf clearly shows the difference in output level between the Top, Average and Bottom 1/3 of farms. Approximately 60% of the output value on the Top 1/3 of farms went on variable costs, compared with 67% and 106% on the Average and Bottom 1/3 of farms, respectively. Therefore, the Bottom 1/3 of farms had no part of their output value available to cover fixed costs. Contrast this to the Top group who had 40% (€609/ha) of their output value available to meet fixed costs.

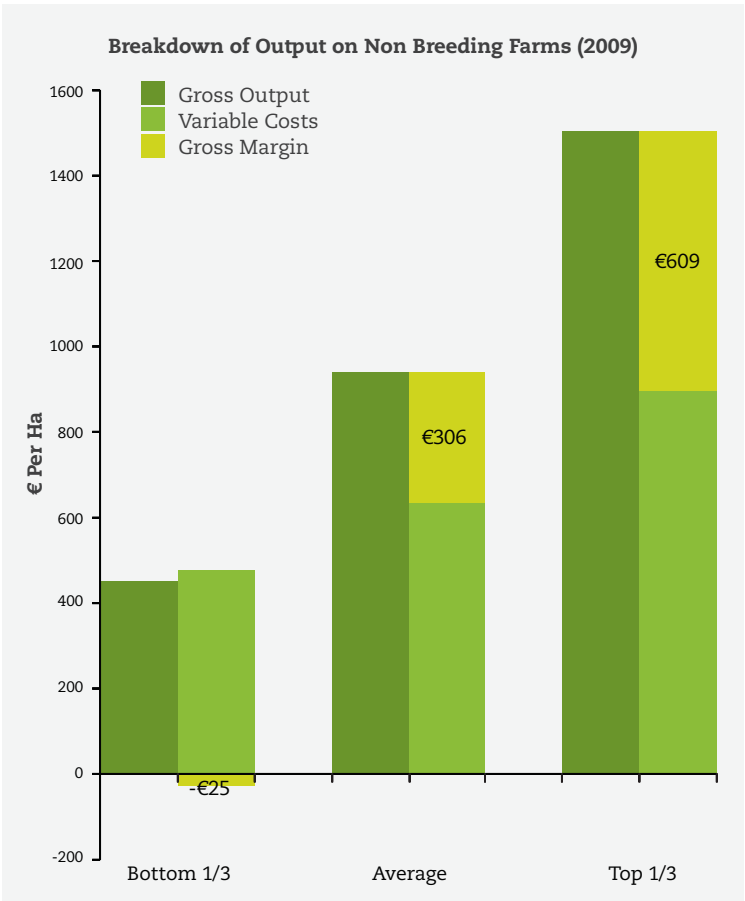

Breakdown of Output on Non Breeding Farms (2009)
Gross Output
Variable Costs
Gross Margin
€ Per Ha
1600
1400
1200
1000
800
600
400
200
0
-200
€609
€306
-€25
Bottom 1/3
Average
Top 1/3

FIGURE 10

Figure 11 shows that the Bottom 1/3 of non-breeding farms had a deficit of €409/ha just to meet production costs which would have to be taken out of their premia. The Average group had a deficit of €189/ha to deduct from premia receipts. The Top 1/3 of farms also had a deficit of €14/ha from their farming activity that had to be covered by premia receipts.

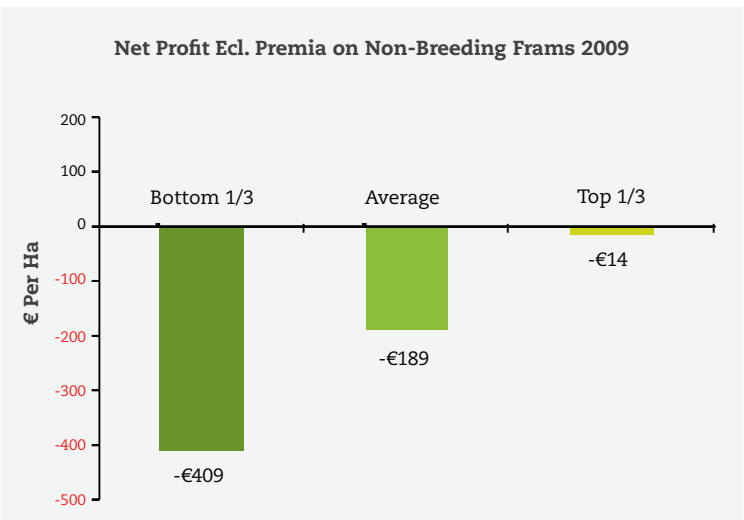


FIGURE 11

Breakdown of costs – non-breeding farms

Figures 12 and 13 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 82% of overall variable costs. Not surprisingly given the level of finishing that takes place on these farms, feed costs account for almost half of total variable costs.

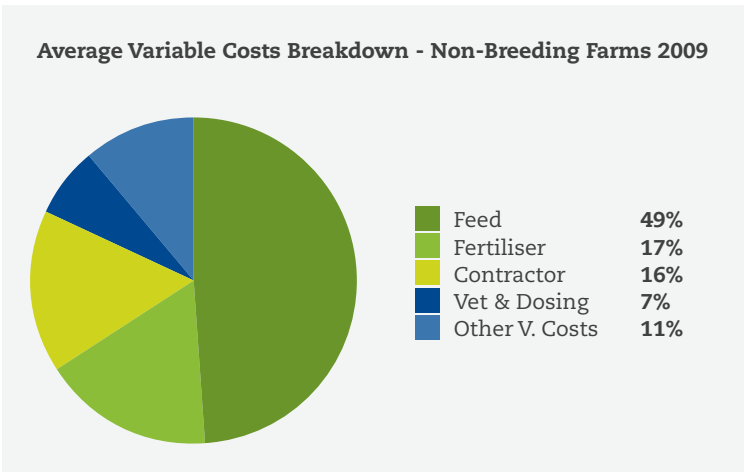


FIGURE 12

On the fixed costs side, depreciation, machinery running costs, land rental costs, repairs and maintenance and interest make up 60% of fixed costs. Farm share of car, ESB and phone costs account for 12% of total fixed costs.

Average Fixed Costs Breakdown - Non-Breeding Farms 2009

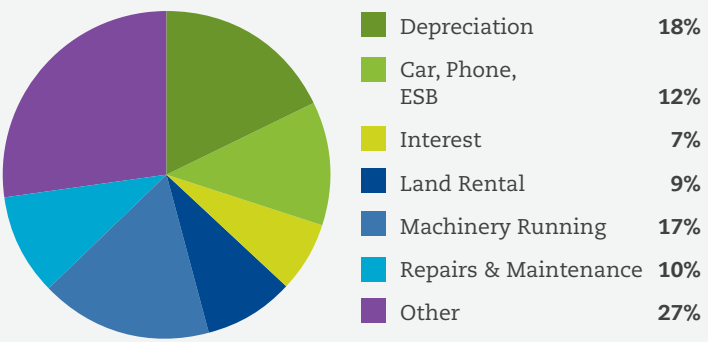


FIGURE 13

Costs per kg liveweight on Non-Breeding Farms

Figure 14 illustrates that even though the Top farms have higher costs on a per hectare basis at €1,518 compared to €860 on the Bottom 1/3 of farms, the fact that the Top farms are producing 1011 kg of beef liveweight per hectare as opposed to 350 kg on the Bottom 1/3 means that the Top farms are producing a kilogram of liveweight for €1.50 while the same kilogram costs €2.46 on the Bottom 1/3 and €1.74 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 advantage to the Top farms has increased substantially compared with 2008. The Bottom 1/3 of farms in 2009 have higher costs (13%) than the Bottom 1/3 of farms in 2008. However, the cost of producing a kilogramme beef liveweight is 4% lower on Average and 14% lower for the Top 1/3 in 2009. This implies that the Bottom group in 2009 were less efficient than the Bottom group in 2008 and the Top group in 2009 were more efficient than the Top group in 2008.

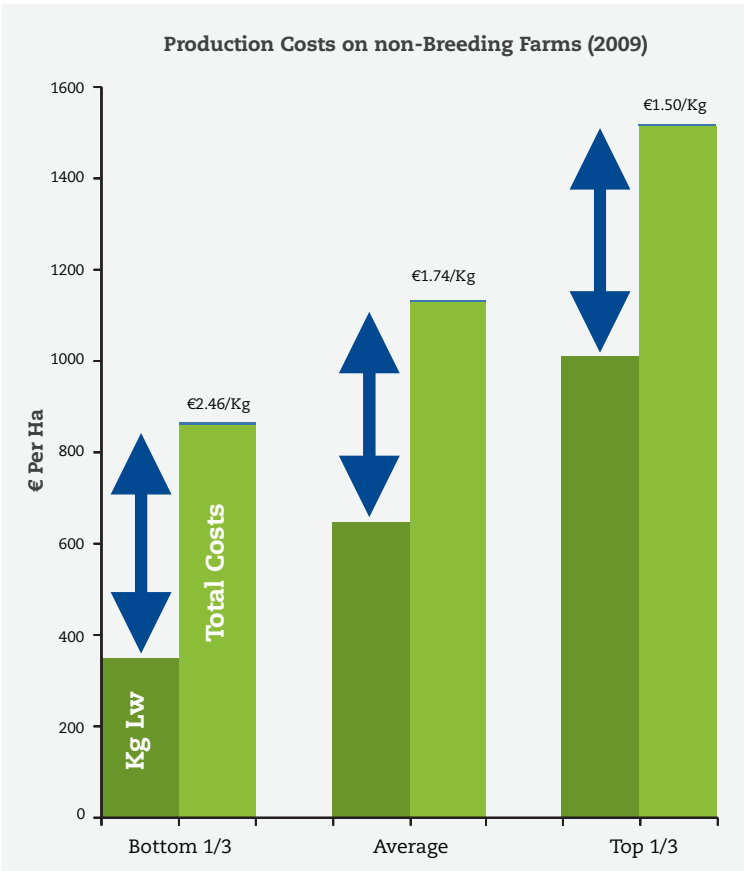

Production Costs on non-Breeding Farms (2009)
€ Per Ha
1600
1400
1200
1000
800
600
400
200
0
€2.46/Kg
€1.74/Kg
€1.50/Kg
Total Costs
Kg Lw
Bottom 1/3
Average
Top 1/3

FIGURE 14

COMPARING CATTLE AND SHEEP SYSTEMS 2009

TABLE 7: PER HECTARE ANALYSIS – CATTLE AND SHEEP SYSTEMS				
	Suckling to Beef	Suckling to Weanling / Store	Cattle Non-Breeding Purchased weanlings or stores-to-beef	Sheep mainly mid-Season
Physical	**122 Farms**	**136 Farms**	**56 Farms**	**98 Farms**
Farm Size ha	56	49	45	60
Stocking Rate LU/ha	1.81	1.65	1.68	1.79
Ewes/ha				7.9
Liveweight Produced kg/ha	573	456	628	465
Lambs Reared per Ewe to Ram				1.47
Financial €/ha				
Gross Output Value	930	750	939	797
Variable Costs	562	504	633	462
Gross Margin	368	246	306	335
Fixed Costs	508	458	495	421
Net Profit excl. Premia*	-140	-212	-189	-86
Total Premia*	649	635	687	537
Total Premia Retained %	78%	67%	72%	84%
Single Farm Payment	491	410	526	404
Single Farm Payment Retained %	104%	103%	95%	112%

(* Includes Single Farm Payment, AWRBS, REPS & CAS)

Table 7 shows a breakdown of the physical and financial performance of the various cattle systems when compared with sheep farms completing a profit monitor in 2009.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). Sheep systems are mainly mid-season lamb production.

The main points from Table 7 are:

- Overall farm size is larger for farms with suckling to beef and sheep systems.
- Stocking rate is similar for suckling to beef farms and sheep farms at approximately 1.8 livestock units per hectare. Stocking rate is approximately 7% lower on suckling to weanling farms and non-breeding farms.
- Liveweight produced per hectare was highest for non-breeding cattle systems with suckling to beef systems 12% lower.
- Sheep farms averaged 1.47 lambs reared per ewe put to the ram at a stocking rate of 7.9 ewes per hectare
- Output value per hectare was similar for suckler to beef and non-breeding systems. Suckling to weanling and mid-season lamb were 20% and 15% lower, respectively.
- Sheep farms had lower variable costs than any of the other systems examined at €462/ha which reflects their lower winter feed costs. Non-breeding cattle farms had the highest variable costs per hectare. Variable costs consumed 67% of output value on suckling to weanling and non-breeding systems. This is a very high figure and leaves it difficult to achieve a profit unless output value is exceptionally high – reduced cattle prices in 2009

reduced potential output values on cattle systems.

- In terms of gross margin per hectare, suckling to beef cattle systems were best at €368 per hectare. Sheep systems were 9% lower and non breeding systems 17% lower. Gross margin levels for suckling to weanling with profit monitors were disappointingly low in 2009 at €246 per hectare.

- Fixed costs are highest for suckling to beef systems at €508 per hectare. Sheep fixed costs were approximately 17% lower. Fixed costs as a percentage of output are highest on suckler to weanling systems at 61% and run around 54% for other systems. Efficient farms should target fixed costs not accounting for anymore than 35% of output value.

- No system generated a positive margin before premia – retention of premia as profit was best with sheep systems at approximately 84%.

- Single farm payment per hectare was 20% lower on suckling to weanling and sheep systems than other cattle systems. Non-breeding cattle farms did not retain all single farm payment as profit. Some of REPS payments and CAS were used to subsidise production with all farm groups.

Figure 15 illustrates the variation that occurred in gross margin per hectare across the various livestock systems in 2009.

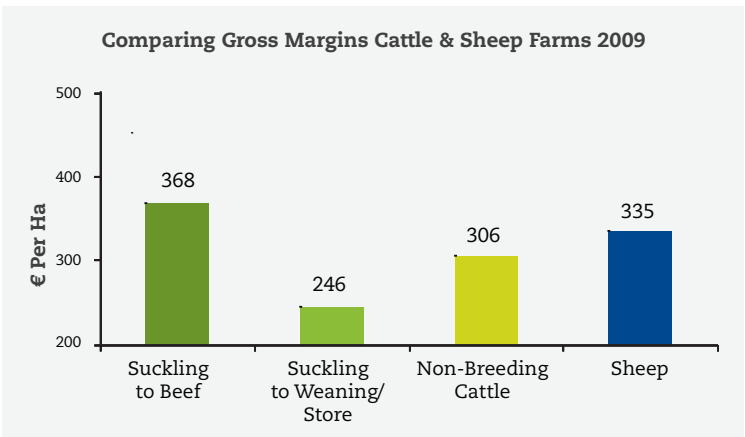

Comparing Gross Margins Cattle & Sheep Farms 2009
€ Per Ha
500
400
300
200
368
246
306
335
Suckling to Beef
Suckling to Weaning/ Store
Non-Breeding Cattle
Sheep

Figure 15

SHEEP FARMS - E PROFIT MONITOR ANALYSIS 2009

Comparison - 2007 to 2009

Comparison of sheep farms over the last three years 2007, 2008 and 2009 (mainly mid season lowland flocks). The information from a matched sample of 30 mainly mid-season lowland flocks is contained in Table 8 below. The data shows that over the three year period, lambs reared per ewe joined to ram has increased by 2% from 1.45 in year one to 1.48 in year three. Average lamb price increased by almost 5% over the three years. Lambs reared per hectare was similar in year three to year one, so 7% increase in output value in year three resulted mainly from improved lamb price.

Variable costs per hectare increased substantially in 2008 and 2009 above 2007 level. An extra €64 per hectare in total variable costs amounted to an increase of 18% in 2009 over 2007 level.

Concentrate costs accounts for over 70% of the increased variable costs with increased fertiliser costs accounting a further 20% of the increase. Spending on contractor costs is down 17% or €15 per hectare in 2009 compared with 2007.

The modest increase in output value over the three years is more than offset by the substantial increase in variable costs resulting in a gross margin decline of 6% or almost €18 per hectare. Fixed costs increased by 10% over the period (€36 per hectare) which further contributed to an increased negative net profit figure.

Average lamb output of around 11 lambs per hectare each year is modest resulting in a poor level of output value to offset variable and fixed costs.

TABLE 8: COMPARISON OF COSTS AND INCOME ON THE SAME SHEEP FARMS OVER THREE YEARS			
Profit Monitors Matched sample 2007, 2008 & 2009 (30 farms)			
	2007	**2008**	**2009**
Physical data			
Stocking Rate LU/ha	1.81	1.87	1.88
Ewes to Ram	247	221	204
Lambs Reared per Ewe Joined to Ram	1.45	1.43	1.48
Ewes per Hectare	7.38	7.81	7.38
Lambs Reared per Hectare	10.7	11.2	10.9
Financial (€)			
Average Lamb Price €/head	74.24	76.98	77.61
Gross Output per ha €/ha	653	673	699
Variable Cost per ha €/ha	361	433	425
Gross Margin per ha €/ha	292	240	274
Fixed Costs per ha €/ha	358	357	394
Net Margin per ha €/ha	-66	-117	-120

Figure 16 shows the change in gross margin per hectare on matched sample of sheep farms from 2007 to 2009.

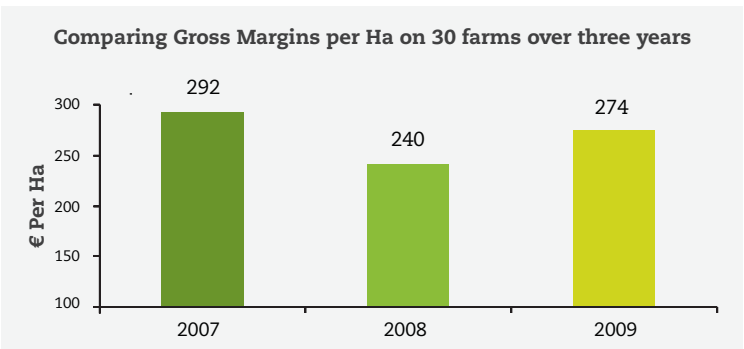


Figure 16

Comparison 2008 v 2009
Comparison of matched sample of sheep farms for 2008 and 2009 (mainly mid-season lowland flocks)

Information relating to 53 flocks (matched sample) for 2008 and 2009 are contained in Table 9 below. The farms contained in this analysis are predominantly mid-season lowland enterprises. In terms of output, there is just a small positive change in lambs reared per ewe to ram (+2%) and average lamb price (+2%) which is partially offset by a 4% decrease in stocking rate. Consequently, gross output shows a marginal increase of €23 per hectare (+3%).

On the 53 flocks, ewe numbers have declined by 6% from 204 to 192 while ewe lambs retained as replacements decreased by 10%.

Variable costs decreased marginally by €3 per hectare or 1% from 2008 to 2009 and the main changes are shown in table 10 below. Feed costs increased by 9% but this was offset by decreases in fertiliser, contractor and veterinary costs. The output increase combined with the variable cost saving resulted in a gross margin improvement of €26 per hectare (9%). Overall, fixed costs increased by 6% in 2009 but this hides significant changes between some items in the two years. A more detailed analysis of these costs is contained in Table 11.

Net profit worsened marginally in 2009 by €3 per hectare or 1%. There is still a need for direct payments to continue to subsidise production on these farms.

TABLE 9: COMPARISON OF COSTS AND INCOME ON SAME SHEEP FARMS OVER TWO YEARS				
Profit Monitors Matched sample for 2008 & 2009 (53 farms) – mid-season lowland flocks				
	2008	**2009**	**Difference**	**Change %**
Physical data				
Stocking Rate LU/ha	1.83	1.87	+.05	+ 3%
Ewes to Ram	204	192	-11	- 6%
Lambs Rared per Ewe Joined to Ram	1.47	1.49	+.02	+ 2%
Lambs Rared per Hectare	11.6	11.3	-0.3	- 2%
Ewe Lambs Retained	45	40	-5	- 11%
Financial (€)				
Average Lmb price	77.67	79.00	+ 1.33	+ 2%
Gross Output per ha	743	766	+ 23	+ 3%
Variable Costs per ha	463	460	- 3	- 1%
Gross Margin per ha	280	306	+ 26	+ 9%
Fixed Costs per ha	371	394	+ 23	+ 6%
Net Margin per ha	- 91	- 88	- 3	- 1%

Figure 17 shows the change in gross margin per hectare on a matched sample of 53 sheep farms from 2008 to 2009.

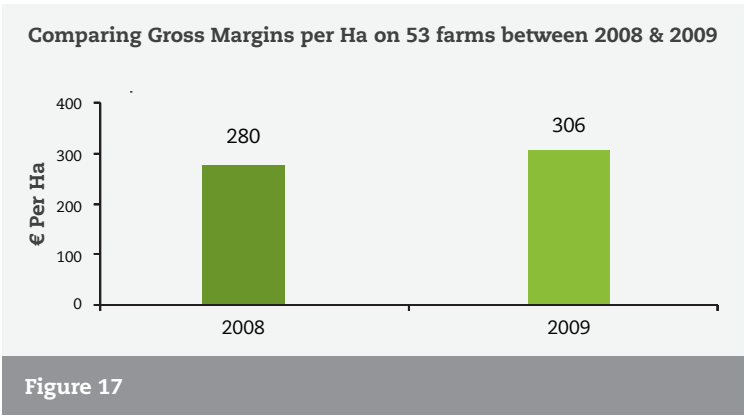


Figure 17

Tables 10 and 11 demonstrate price changes in some of the major input costs on sheep farms over the last two years. In Table 10 the reduction in spending on fertiliser reflects reduced fertiliser prices while increased spending on concentrates reflects difficult weather and poor grazing conditions.

TABLE 10: CHANGES IN VARIABLE COSTS BETWEEN 2008 AND 2009

Matched sample 53 farms

Variable Costs € / ha	2008	2009	Change %
Concentrates	154	168	+ 9%
Fertiliser	96	83	- 11%
Veterinary	79	77	- 2%
Contractor	75	72	- 4%
Straw	14	17	+ 21%
Total Variable Costs	463	460	- 1%

Table 11 examines how fixed costs have changed from 2008 to 2009. Overall spending on fixed costs is up 6% despite a reduction in interest costs. Hired labour shows a significant increase in 2009 of €43 per hectare, a 56%increase on the 2008 level.

TABLE 11: CHANGES IN FIXED COSTS BETWEEN 2008 AND 2009			
Matched sample 53 farms			
Fixed Costs € / ha	**2008**	**2009**	**Change %**
Hired Labour	41	64	+ 56%
O/D, Loan Interest & Bank Charges	24	15	- 38%
Car / ESB / Phone	49	44	- 10%
Depreciation	78	78	No change
Repairs & Maintenance	40	41	+ 2%
Insurance	22	24	+ 9%
Land Lease	26	24	- 8%
Total Fixed Costs	371	394	+ 6%

Lowland Sheep Farms 2009

The analysis for the 2009 eProfit Monitor for sheep is based on the returns of 98 sheep farms that are primarily involved in mid-season lamb production. Table 12 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 12: SHEEP PER HECTARE ANALYSIS 2009 (98 FARMS)			
	Top 1/3	**Average**	**Bottom 1/3**
Physical Performance			
Flock Size	182	180	175
Stocking Rate(LU/ha)	1.99	179	1.59
Ewes/Ha	9.56	7.9	6.35
Lambs Reared per Ewe to Ram	1.53	1.47	1.40
Lambs Reared per Hectare	14.6	11.6	8.9
Financial Performance €/ha			
Gross Output	1155	797	467
Variable Costs	476	462	421
Gross Margin	679	335	46
Fixed Costs	514	421	375
Nett Profit excl Premia	165	-86	-329
Nett Profit include all Premia*	771	451	149
% Premia* Retained	127%	84%	31%
Average Lamb Price € / head	82.59	79.18	72.86

(* Includes Single Farm Payment, Reps & CAS)

Flock size is similar for the Top and Bottom 1/3 s but the difference in stocking rate means the Bottom 1/3 require 50% more land than the Top 1/3 to keep the same number of ewes. Combined with the higher weaning % on the Top 1/3 (0.13 lambs extra per ewe) the better stocking rate on the Top 1/3 results in an extra 5.7 lambs reared per hectare. This is what contributes to a higher output figure worth an extra €688 per hectare and is the foundation for the higher gross margin and higher profit.

The average gross margin was €335 per hectare. The gross margin per hectare for the Top 1/3 at €679 is €633 higher than the Bottom 1/3 which retains over 90% of the extra output value achieved by the Top 1/3. The gross margin per hectare for the Top 1/3 in 2009 is more than fourteen times greater than that of the Bottom 1/3.

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

1. Lambs reared per ewe to the ram – 1.53 for the Top 1/3 vs. 1.4 for the Bottom 1/3.

2. Higher stocking rate, 9.56 ewes vs. 6.35 ewes per hectare.

3. Lambs weaned per hectare, 14.6 vs. 8.9.

4. Higher lamb price, €82.59 vs. €72.86.

Figure 18 shows lambs weaned per hectare for Bottom 1/3, average and Top 1/3 for the 98 farms with sheep profit monitors for 2009.

Figure 19 overleaf shows the variation in gross margin across the three groups and the principal factors that influence gross margin for sheep farmers.

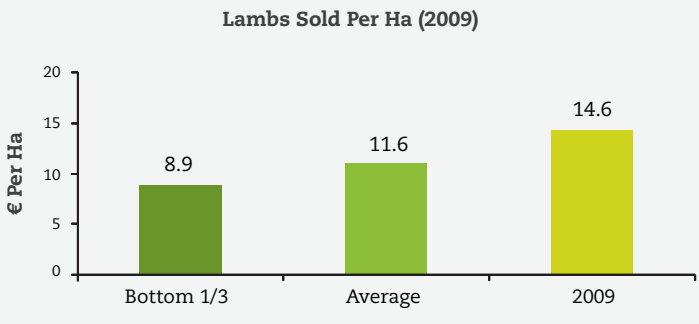


Figure 18

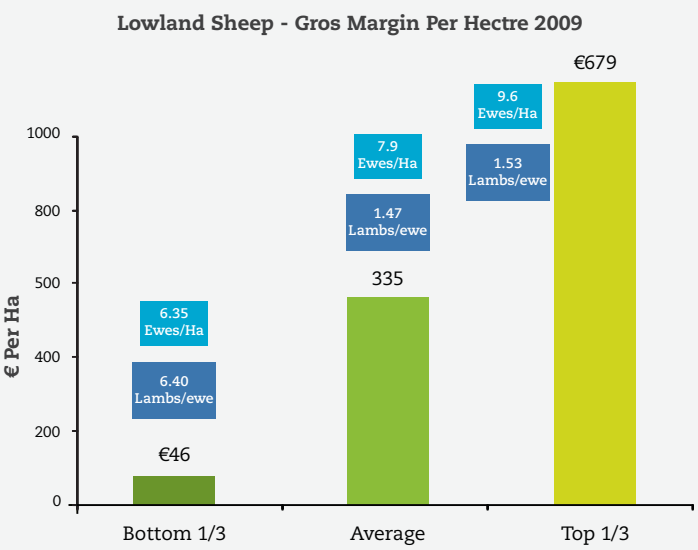


Figure 19

On average, sheep farmers with profit monitors in 2009 failed to retain all their premia. On average, they retained 84% of premia with the Bottom 1/3 only retaining 31% of all premia and had a net profit excluding premia of -€329 per hectare. The Top 1/3 had a net profit excluding premia of €165 per hectare. This results in a difference of €494 in the net profit per hectare between the Top 1/3 and Bottom 1/3 and amounts to over €11,000 for the average area devoted to sheep for farms keeping a profit monitor.

Ewe-to-Ram performance 2009

Table 13 shows the output, costs and margins on a per ewe basis. The results are placed in three categories 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 2009 (98 FARMS)

	Top 1/3	Average	Bottom 1/3
Physical Performance			
Lambs Reared per Ewe to Ram	1.53	1.47	1.40
Financial Performance €/Ewe			
Gross Output	121	101	74
Variable Costs	50	59	66
Gross Margin	71	42	8
Fixed Costs	54	53	59
Nett Profit excl Premia	17	-11	-51
Average Lamb Price €/head	82.59	79.18	72.86

There is a difference in output per ewe of €47 between the Top and Bottom 1/3. This results from a higher number of lambs weaned per ewe to the ram (0.13 lambs /ewe) which increased output by €11/ewe and a higher lamb price of €9 (€14 per ewe).

Variable costs per ewe are highest for the Bottom 1/3 at €66 and when combined with the lower weaning % for the bottom group results in higher variable costs per lamb of over €14. The Top 1/3 is achieving a gross margin per ewe of €71 compared to €42 for the average and just €8 for the Bottom 1/3.

In the average flock of 180 ewes, the Top 1/3 are achieving an extra gross margin of €5.220 over the average and €11,340 over the Bottom 1/3.

Fixed costs per ewe were approximately €5 higher for the Bottom 1/3 over Average and Top 1/3s. Fixed costs per lamb was €7.50 lower on Top 1/3 compare with Bottom 1/3. This results in a net profit excluding premia of €17 per ewe for the Top 1/3, a loss of €11 per ewe for the average and a loss of €51 per ewe for the Bottom 1/3.

Based on these figures sheep farmers in the Top 1/3 with the average ewe flock of 180 are achieving an extra profit of €5,040 compared to the average and €12,240 more than farmers in the Bottom 1/3.

It is alarming that sheep farmers in the Bottom 1/3 are losing €51 per ewe before taking premia into account. 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. The Top farms are somewhat better off per ewe compared to the previous year while the Bottom farms are worse off.

Figures 20 and 21 overleaf show the gross margin breakdown and profit figures per ewe for 98 sheep farms with profit monitors for 2009 in diagrammatic format.

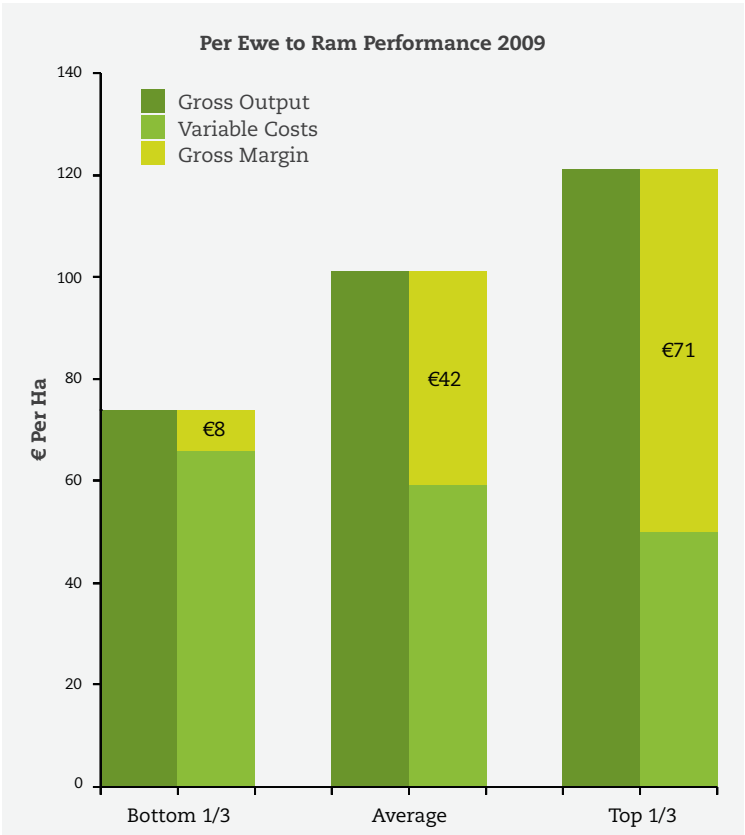

Per Ewe to Ram Performance 2009
Gross Output
Variable Costs
Gross Margin
€ Per Ha
140
120
100
80
60
40
20
0
€8
€42
€71
Bottom 1/3
Average
Top 1/3

FIGURE 20

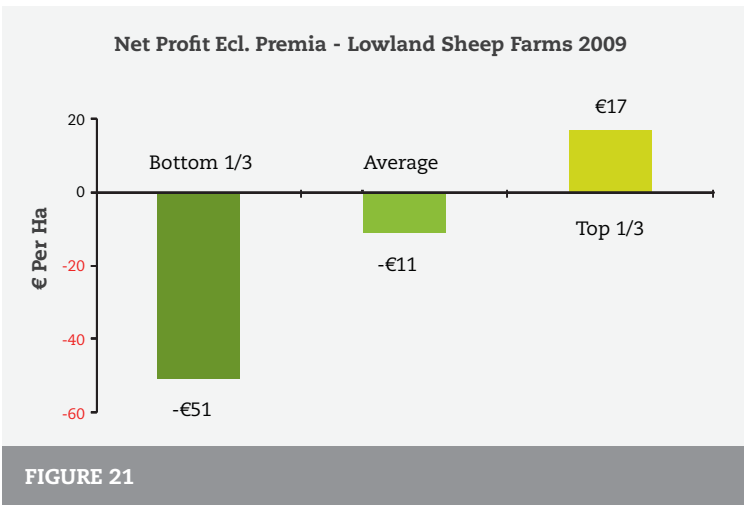

Net Profit Ecl. Premia - Lowland Sheep Farms 2009
€ Per Ha
20
0
-20
-40
-60
Bottom 1/3
Average
Top 1/3
-€51
-€11
€17

FIGURE 21

Costs per Ewe

A breakdown of the major variable and fixed costs on a per ewe basis are given in Table14.

TABLE 14: MAJOR COSTS PER EWE TO RAM ANALYSIS 2009 (98 FARMS)			
	Top 1/3	Average	Bottom 1/3
Total Variable Costs (€/ewe) (of which)	**50**	**59**	**66**
Purchased Feed	16	21	26
Fertiliser	10	11	11
Veterinary	9	10	10
Contractor	7	9	12
Other	8	8	16
Total Fixed Costs (€/ewe) (of which)	**54**	**53**	**59**
Machinery Running	7	7	6
Labour	4	7	14
Land Lease	8	5	3
Depreciation Buildings	5	4	4
Depreciation Machinery	7	6	4
Repairs & Maintenance	4	6	4
Car, ESB & Phone – farm share	7	7	8
Interest	2	2	3
Other	10	9	13

Purchased feed is the largest single variable cost on sheep farms. On a per lamb basis, purchased feed is costing €10.46 per lamb on the Top 1/3, €14.30 on the Aerage and €18.57 per lamb on the Bottom 1/3 of sheep farms.

Contractor charges are costing €5 per ewe more on the Bottom 1/3 farms compared to farms in the Top 1/3, while fertiliser and veterinary costs are similar on a per ewe basis across all three groups.

Depreciation, machinery running, labour and land lease charges are the three major fixed costs. These four fixed costs combined represent over 50% of total fixed costs. Labour costs at €14 per ewe are significantly higher for the Bottom 1/3.

The total annual cost of maintaining a ewe is €104 in the Top 1/3, €112 for the Average and €125 for the Bottom 1/3.

Figures 22 and 23 show the breakdown of variable and fixed costs in diagrammatic format.

Average Variable Costs Breakdown - Lowland Sheep Farms 2009

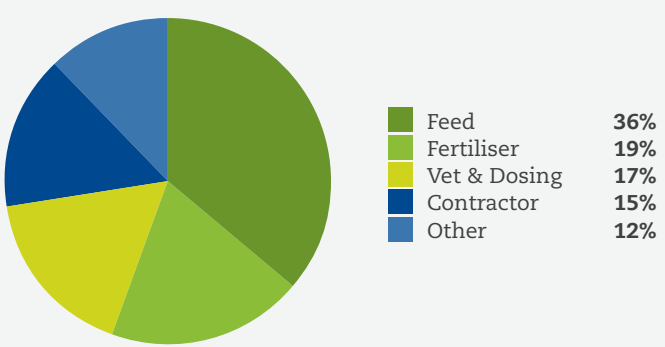


FIGURE 22

Average Fixed Costs Breakdown on Lowland Sheep Farms 2009

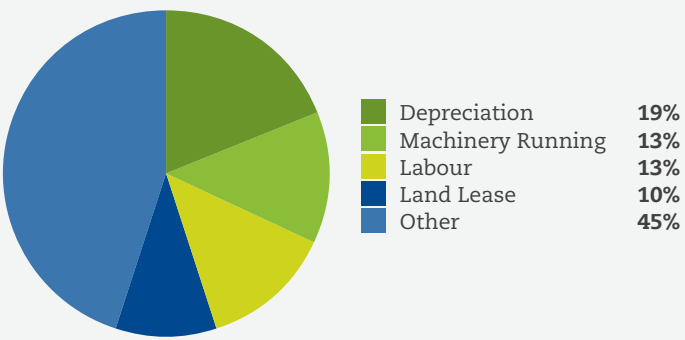


FIGURE 23

Cost of producing a lamb in 2009 – 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 2009 was €76 excluding replacement and ram costs. Comparable costs for the Top 1/3 were €68 and for the Bottom 1/3 were almost €90. Estimated replacement and ram costs per lamb amounted €21, €11 and €4 for the Bottom, Average and Top 1/3s, respectively.

Consequently, the total production and replacement costs per lamb amounted to €111 per head for the Bottom 1/3, €87 on Average and €72 for the Top 1/3 of sheep farms with profit monitors. The difference between the Top and Bottom 1/3s represents a staggering €39 per lamb and is the prize to be gained by getting performance on your farm to match the Top 1/3 of sheep producers. Figure 24 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 with average and Bottom 1/3s and was almost maintained in Top 1/3. Accordingly, replacement costs stated above may be underestimated by €2 to €4 per lamb.

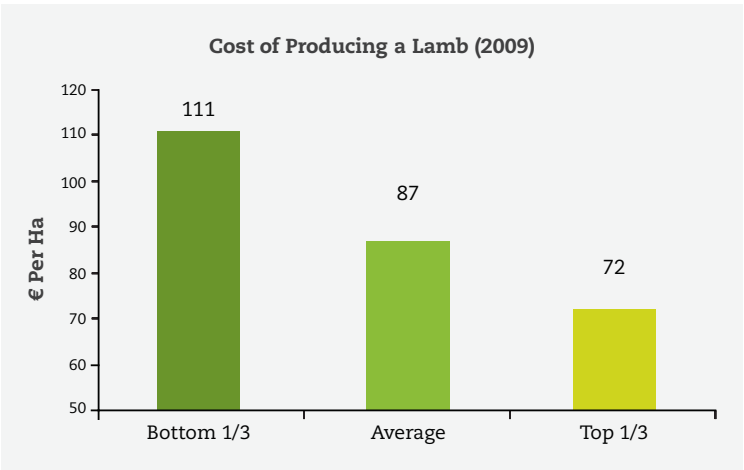


FIGURE 24

Performance of hill sheep flocks 2009

Details of the hill sheep analysis for 2009 are listed in Table 15. Average performance was 1.13 lambs reared per ewe joined to the ram with the range from 0.73 to 1.56. Average lamb price was €58.64 with the range from €41 to €72. 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. Average gross margin was €24 per ewe with a range from €4 to €55 per ewe. It is important to remember that the analysis consists of information collected from only sixteen farms.

TABLE 15: HILL SHEEP PER EWE TO RAM ANALYSIS 2009(16 FARMS WITH PROFIT MONITOR)	
Physical	
Average Flock Size	274
Lambs Reared per Ewe Joined to Ram	1.13
Average Lamb Price (€/head)	58.64
Financial	**€/ewe**
Output	51
Feed	11
Fertiliser and Lime	5
Vet	6
Contractor	2
Other	3
Total Variable Costs	27
Gross Margin	24
Total Fixed Costs	21
Net Profit Excl Premia	2

Similar to the lowland flocks, purchased feed is the single largest variable cost on hill sheep farms and accounts for approximately 40% of total variable costs. The Top 1/3 with a weaning rate of 1.17 lambs per ewe incurred spending of almost €12 per lamb on concentrates and achieved an average selling price of €62 per lamb. The Bottom 1/3 with a weaning rate of 1.13 lambs per ewe incurred spending on concentrates of €9 per lamb and achieved an average selling price of €60 per lamb. Ewe mortality appears a problem on the bottom farms in 2009, as output value per ewe was €30 lower on foot of extra replacements retained and extra purchases.

Output per ewe, with this group of 16 hill sheep farms, is approximately 50% the output level achieved on the 98 lowland flocks in 2009. Variable costs per ewe were 50% lower with hill ewes and spending on meal, fertiliser, and contractor accounted for 90% of the difference. Despite the lower variable costs, the hill ewes on average achieved only 55% of the gross margin per ewe of the lowland ewes.

Average fixed costs for the sixteen hill sheep farms was €21 per ewe, leaving a net profit excluding premia of €2 per ewe.

APPENDIX 1

TABLE 1: MAJOR COSTS ON SUCKLING FARMS 2009 (258 FARMS)			
	Top 1/3	Average	Bottom1/3
Total Variable Costs			
€/ha	555	536	490
€/kg liveweight	0.84	1.03	1.45
Of which:			
Feed €/ha	181	168	133
€/kg liveweight	0.27	0.32	0.39
Fertiliser & Lime €/ha	128	118	105
€/kg liveweight	0.19	0.23	0.31
Contractor €/ha	86	96	107
€/kg liveweight	0.18	0.13	0.32
Vet/Meds/AI €/ha	81	79	79
€/kg liveweight	0.12	0.15	0.15
Total Fixed Cost			
€/ha	514	485	433
€/kg liveweight	0.78	0.93	1.28
Of which:			
Land Rental €/ha	69	49	31
€/kg liveweight	0.10	0.09	0.09
Machinery Running €/ha	70	68	62
€/kg liveweight	0.11	0.13	0.18
Hired Labour €/ha	29	28	31
€/kg liveweight	0.04	0.05	0.09
Depreciation €/ha	124	111	92
€/kg liveweight	0.19	0.21	0.27
Interest €/ha	34	34	34
€/kg liveweight	0.05	0.07	0.10

TABLE 2: MAJOR COSTS ON NON-BREEDING FARMS 2009 (56 FARMS)			
	Top 1/3	Average	Bottom1/3
Total Variable Costs			
€/ha	895	633	476
€/kg liveweight	0.89	0.98	1.36
Of which:			
Feed €/ha	552	311	179
€/kg liveweight	0.55	0.48	0.51
Fertiliser & Lime €/ha	117	108	103
€/kg liveweight	0.12	0.17	0.29
Contractor €/ha	82	102	107
€/kg liveweight	0.08	0.16	0.31
Vet/Meds/AI €/ha	58	45	32
€/kg liveweight	0.06	0.07	0.09
Total Fixed Cost			
€/ha	623	495	384
€/kg liveweight	0.62	0.76	1.10
Of which:			
Land Rental €/ha	50	46	56
€/kg liveweight	0.05	0.07	0.16
Machinery Running €/ha	99	82	66
€/kg liveweight	0.10	0.13	0.19
Hired Labour €/ha	83	37	7
€/kg liveweight	0.08	0.06	0.02
Depreciation €/ha	108	86	76
€/kg liveweight	0.11	0.13	0.22
Interest €/ha	65	34	22
€/kg liveweight	0.05	0.06	0.06

APPENDIX 2

Teagasc/Farmers' Journal BETTER Beef Programme

Teagasc/Farmers Journal BETTER Farms Profit Monitor Results - 2009
Two thousand and nine will be a year that most cattle farmers will want to forget. Poor weather coupled with falling beef prices have seriously impacted on the financial performance on many farms.

Output
In order to achieve the target gross margin of €1,000/ha output on the farms has to increase. In 2008, the average stocking rate was 1.91LU/ha this increased to 2.04LU/ha in 2009.

The kilograms of liveweight produced per hectare increased in 2009 on the farms by 18.5% to 653kg/ha. Despite this impressive gain in physical output, gross output rose by only 8.2%. In other words, although liveweight gain increased by 102 kg/ha, gross output value only increased by €84/ha due to falling market prices.

There is certainly scope for the majority of the farms to improve on the amount of liveweight produced per hectare considering the range in output from 516 kg to 840 kg/ha. Improving the quality of the animals, removing poor quality cows, tightening up calving interval, increasing the number of calves per cow per year and maximising the weight for age in stock are all central in driving up physical output.

Variable Costs
Variable costs within the group stood at €669/ha in 2009 an increase of 4.9% or €31/ha on the previous year.

For many of the farms with heavier soils 2009 proved an extremely difficult year as stock had to be rehoused and extra feed purchased. Also extra cattle were fed to finish on farms as a way of streamlining their operation as they implemented the three-year farm plan. These factors are clearly reflected when you look through the individual components that make up variable costs in Figure 2.

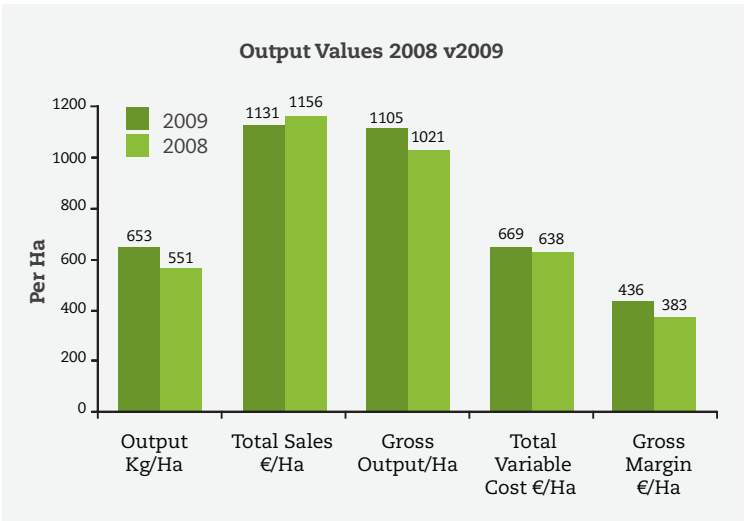


Figure 1

The main reason for the increase in variable costs was the 11.9% (€24/ha) increase in feed costs. Fertilizer and lime costs actually decreased by 6.2% (€10/ha). Regular grassland measurements and more targeted application meant that less fertiliser was spread on a number of the farms.

Veterinary costs remained almost static at €103/ha but with improved health planning and a more proactive approach it is hoped that this figure can be reduced over the next few years. AI costs increased from €10 to €14/ha reflecting more AI usage across the herds as we target better quality stock for export, finishing or as replacements. Contactor costs decreased by €2/ha reflecting slightly lower contracting charges in 2009 compared with 2009.

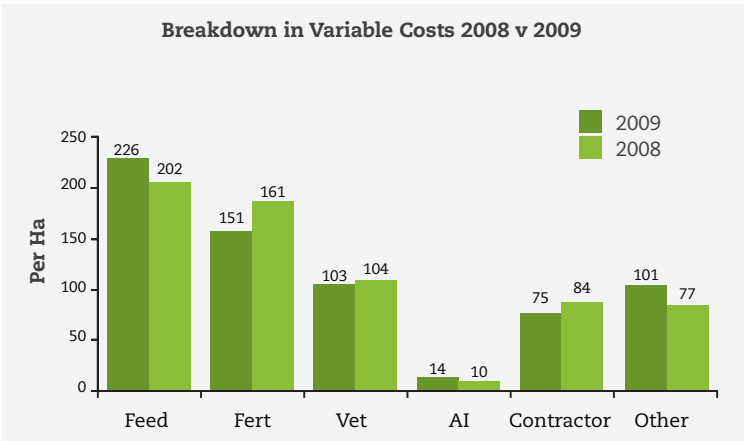


Figure 2

Gross Margin

With a gross output of €1,105/ha and total variable costs of €669/ha the average gross margin across all the farms is €436/ha. This represents an increase of 13.5% on the previous year. The range in gross margin across the farms is from €106 to 699/ha. The €436/ha is still a long way off the overall target of €1,000/ha. The difficult weather conditions and falling market prices impacted on our ability to reduce costs and eroded any gains that were made in terms of output in 2009.

Farms also incurred additional costs in terms of reseeding and sourcing replacement stock which will have a negative impact on gross margin in the short term but are necessary over the longer term.

The main emphasis will be to continue to drive output, through producing more kilograms of liveweight per hectare and with better breeding improving the value of each kilogram sold. This extra output will have to be achieved on foot of improved efficiency and controlling of variable costs.

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 2009.

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 and Research colleagues.

Operating with a fully decoupled premia system, it is essential to look to efficiency improvements and product price increases for extra profit in future. Future reform of the CAP is likely to put increased downward pressure on premia receipts. In particular individuals with high levels of Single Farm Payment per hectare (compared with national average of ~ €300 per hectare) may be most at risk. There is a more urgent need than ever for drystock farmers to focus on improving efficiency through the implementation of improved technology and improving the value of output with better quality. 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. Having a simple plan with clear targets to aim for will ensure that you will be in the best possible position to face future challenges. Putting the plan into action is the means of safeguarding profitability levels.

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