# Working towards a Profitable Future in Drystock

A Profit Monitor – the first step

Featuring
Teagasc e-Profit Monitor Analysis

**Drystock Farms 2010** 



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AUTHORS
TEAGASC SPECIALIST SERVICE

## **Drystock Farms 2010**

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

As an advisory service if we are to give good advice and help you make sound decisions as to what direction your business should take in the future then we need to establish how the farm is currently performing.

Having a completed eProfit Monitor will allow us to examine key indicators such as Farm Output, Variable and Fixed costs and your current Gross Margin per hectare (excluding all premia payments). Having this information will leave you in the best position to adapt to the challenges ahead.

This year's booklet summarises the results from 365 cattle farms across the country and 91 lowland sheep farms plus 11 hill sheep farms.

Within the grouping, 304 were categorised as suckling farms and 61 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 91 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 a case study 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  $\pounds 1,000$  gross margin per hectare at the end of the three year programme – that is 160% improvement over 3 years.

Bernard Smyth, Programme Manager Drystock

# **Profit Monitor Highlights**

#### **Suckling Systems 2010**

- 304 Suckling farms completed a profit monitor for 2010.Below is a summary of variation in performance between 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 decreased by approximately €100 per hectare in 2010 compared with 2009
- The top 10 % of farms (the best 30 farms) achieved a gross margin per hectare €828 more than the bottom 10% (the worst 30 farms) – this represents an advantage of €33,000 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 over 40% more stock on the same area and have a REPS friendly stocking rate of 2.17 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 382 kg/LU compared with 224 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 almost 2.5 times as much beef liveweight per hectare. The extra beef liveweight produced on the top farms is the equivalent of an extra 65 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 10% 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 almost 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 10% higher value
- > Variable Costs would expect variable costs to match output level
  - Per livestock unit 25% higher on bottom farms with 40% of difference due to higher spending on contractor costs. Meal costs per livestock unit are 24% higher on top farms
  - Per hectare only 13% higher on top farms although stocking rate is 42% higher
  - Per kg beef liveweight €0.83 per kg on top farms compared with €1.78 per kg on bottom farms. Higher physical output on top farms is diluting costs per kg beef produced
  - As % of output value Variable costs are consuming 113% of output value on bottom farms resulting in a negative gross margin. Variable costs consume 48% of output value on the top farms. The target should be 35% for grass based systems but higher levels are acceptable on more intensive high input high output systems
- ➤ Gross Margin per hectare the top 10% achieved a very good gross margin per hectare of €758 while the bottom 10% returned a negative gross margin of €70. The difference of €828 per hectare shows the potential that exists for many farmers at suckling to significantly increase margins



# Sheep Systems 2010

91 Sheep farms completed a profit monitor for 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 gross margin between the top and bottom farmers completing profit monitor increased by €41 per hectare in 2010 compared with 2009
- The top 10 % of farms (the best 9 farms) achieved a gross margin per hectare €1012 more than the bottom 10% (the worst 9 farms) – this represents an advantage of over €40,000 on a 100 acre farm for the top 10%
- Why do best sheep farms have an advantage of over €1,000 per hectare?
  - Stocking Rate the top 10% of farms are carrying almost twice as many ewes on the same land area as the bottom 10% but still have a REPS friendly stocking rate of 1.95 livestock units per hectare
  - Sheep as a percentage of the overall livestock units in the top 10% of farms sheep account for 35% of the livestock units compared to the bottom third where sheep account for 71% of the livestock units
  - ➤ Lambs reared per ewe the bottom 10% of farms with a profit monitor achieved only 1.0 lambs per ewe, the average 1.40 and top 10% achieved 1.62 lambs reared per ewe. Despite carrying more ewes per hectare, the top farms also reared over 60% more lambs per ewe
  - ➤ Lambs produced per hectare The combination of higher stocking rate and better weaning rate resulted in an output of almost three times 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 380 lambs, each 40kg, on a 100 acre farm!
  - Output value per kg lamb liveweight the output value of each kg of lamb liveweight shows relatively small variation compared with other variables between top & bottom farms
  - 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 6.5 times the output value per hectare of the bottom 10%. This extra output value of almost €1,200 per hectare results mainly from higher physical lamb output
  - Variable Costs would expect variable costs to match output level
    - Per ewe 15% higher on bottom farms with 70% of difference due to higher concentrate costs
    - $\bullet$  Per hectare 50% higher on top farms but producing 280% more lambs per hectare

- Per lamb produced approximately €32 per lamb on top farms compared with €60 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 150% of output value on bottom farms resulting in a negative gross margin. Variable costs only consume 35% 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 €905, while the bottom 10% returned a negative gross margin of €107. The difference of €1012 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 dependent 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 ensure the 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, for example 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 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 3
- Identify key areas for improvement
- Specify required actions needed in each area prioritised
- See template attached for a simple 3 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:	Adviser:
Date:	

#### Farm Plan Summary

Measure	Current 2011	Target 2014
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):		
misn, 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)		

Key Areas	Target/Actions Needed
Financial Performance: (Variable & 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.)	
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.)	

Key Areas	Target/Actions Needed
Other Issues:	
Notes:	

# Increasing Your Profits from Beef Farming

There are huge differences from one farm to the next 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 are looked at. 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 consistently coming through. On average, the farms that are 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 and 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 that 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. Don't 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 6 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 minimize 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 maximize 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 & 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 maximize the payback. Do not waste money on dosing
  when it is not necessary for example a turnout dose for cattle free of parasites
  is money wasted

#### (iii) Stocking Rate

Where production per cow and performance per head are high, maximizing 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 utilization of grass thereby increasing stock carrying capacity and consequently beef output per hectare
- Cattle housing availability
- Labour availability

#### **Controlling Production Costs**

In general, the more beef a farms 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 minimize 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 your level of production. The target is that they 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  $\ensuremath{\in} 300$  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  $\ensuremath{\in} 600$  or less on the farm producing 800 kg per hectare.

#### Your Own Farms 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 your farm is producing for every LU you are farming. 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

Your variable costs of production should match your 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 your 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 that 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 & 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 predecoupling 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 maximizing 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 third of farms have an output level per hectare two and a half times that of the bottom third. 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 6 week period prior to the commencement of mating
  - Adequate feeding in the vital 6 weeks pre-lambing to ensure that ewes are at body condition score of 3 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 6 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 €1000 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 that you can manage the sheep flock - the sheep 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 2010 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 2010 figures show an advantage of €27 per lamb in lower total costs, to the top third compared with the bottom third. 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 the production costs are diluted. A farm selling 8 lambs per hectare has very high variable costs per hectare at €350 compared to a farm with variable costs of €600 per hectare but 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 is that they should match your level of production. The target is that variable cost spending should be close to €30 per lamb produced. A farm therefore producing 8 lambs per hectare should be aiming 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 Farms 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 8 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 2010 profit monitor data. The top third are spending  $\[ \in \]$ 12 less per ewe, of which meal accounts for  $\[ \in \]$ 2 and contractor  $\[ \in \]$ 5, despite producing an extra 7 lambs per hectare. The target for spending on total variable cost per lamb should be  $\[ \in \]$ 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. 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 principal 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 are able to 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, the target drafting
pattern 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 and all lambs sold by the end of October

If creep meal feeding is required to achieve the drafting pattern outlined above, introducing meals from June 1st 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 35%). 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 third of farms with low lamb output (7.4 lambs per hectare) and fixed costs of  $\leqslant$ 334 per hectare are still ending up with the highest level of fixed cost of  $\leqslant$ 45 per lamb. The target for fixed cost should be  $\leqslant$ 35 per lamb or less – this is only achievable with a high lamb output per hectare.



# Case Study

The main purpose in 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 implementing the necessary changes will 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 study demonstrates what can be achieved in terms of profit improvement by putting what is learned into practice.

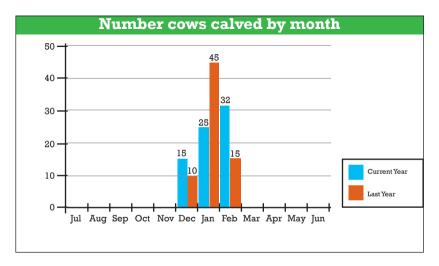
#### Case Study - Suckling to Beef

Margaret and Dermot Lehane are farming in Dromcummer near Kanturk in Co. Cork. Their 53 ha farm is made up of a home farm of 35 hectares and two pieces of land not far from it. 47 hectares is in grass in 2011 with almost 6 hectares in maize. They also have a 240 sow integrated pig unit on the farm. Dermot spends the majority of his time on the pig unit and Margaret for the most part runs the 70 cow spring calving suckler herd. All of the heifers bred on the farm are either finished under 18 months of age or kept as replacements. The bull calves are all finished at 16 months. Their Teagasc adviser is James Fleming and Margaret is also a member of the Kanturk Beef Discussion Group which James facilitates.



#### **Breeding**

Margaret has been keeping her own replacements for a long number of years. During that time she has either had her own Limousin stock bull or used Limousin AI on the majority of the cows. Due to this breeding policy the herd is now close to being a purebred non-registered commercial Limousin herd. In 2011 she kept 20 replacement Limousin heifers. These were all inseminated to the Limousin AI bull FL22. The policy on the farm is to calve in the months December, January and February. Cows that do not go back in calf to fit this tight window are automatically culled. The graph below shows her last two years calving pattern.



The average calving interval for the herd for the last year (July 2010 to June 2011) was 364 days. The previous year it was very similar at 366 days. This is compared to the current national average of 407 days. Over half of the cows in the Lehane herd calved less than 365 days after their previous calf.

The average number of calves per cow for the herd is 0.95. Again this is considerably better than the national average at only 0.79 calves per cow. Calf mortality on the farm is low at 4.2% at 28 days of age.

#### **Bull & Heifer Beef**

The objective on the farm is to grow both the bulls and finishing heifers as much as possible on inexpensive grass and then to finish them quickly during the more costly indoor feeding period. No finishing progeny go back to grass for a second year. The early spring calving pattern matches this plan well. By having a tight calving pattern the calves are all quite strong when they go to grass. They have a long grazing season during which the herd is rotationally grazed around a large number of paddocks. The only other group of stock grazing on the farm are the replacement heifers. By keeping the groups of stock to a minimum it has allowed Margaret to have a high ratio of paddocks per group grazing.

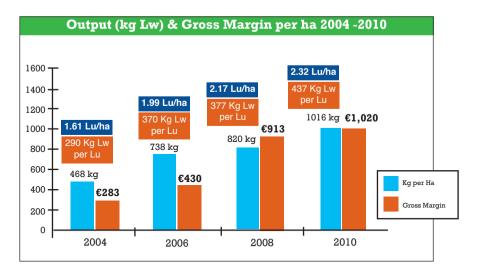
When the calves are housed they are started on a diet of grass silage, maize silage and concentrates. The amount of meals fed are increased throughout the finishing period, starting at 3-4 kg and rising to 8-9 kg by slaughter. In 2010, 31 bulls and 20 heifers were finished. The average age of the bulls at slaughter was 15.8 months and they had a carcass weight of 401 kg. Their average grade was U+3-. They ranged in age from 14 to 17 months. The average age at slaughter of the heifers was 16.7 months with a carcass weight of 314 kg and an average grade of U-3=.

#### **Profit Monitor**

Margaret has been completing a profit monitor for the farm for over ten years. Each year when she gets the analysis back a small number of areas in need of improvement are identified and worked on for the coming year. By taking this approach a clearer picture of where she wanted to take the farm emerged. The direction of the farm over the last six years has been to increase output per ha substantially though increasing stocking rate and also producing extra liveweight per livestock unit farmed. The combination of these two approachs led to a very significant increase in the farms output.

The graph below shows her progress from 2004 to 2010. Six years ago the stocking rate was at a typical 1.61 LU/ha and the output per LU was 290 kg of liveweight. Both of these figures have increased every year since. This has led to the farm going from producing 468 kg of liveweight per ha in 2004 to over 1,000 kg in 2010. While the variable costs also increased significantly they were more than compensated for by the extra liveweight for sale off the farm each year. Hence, the gross margin per ha rose from €283 to €1,020 per ha in that period.

Fixed costs on the farm are low. Most of the buildings while in excellent condition are now fully depreciated. There is very little machinery needed for the suckler herd and there is no land rental. Hired labour is kept to a minimum. In 2010 the fixed costs were just below €300 per ha leaving a net margin per ha (not including premia) of over €700 per ha.



The increase in stocking was brought about by dropping rented ground, putting some grass into tillage and moving from selling weanlings to finishing them. Such a high a stocking rate can only be maintained because of the rotational grazing system in place on the farm which is kept very straight forward with only two grazing groups. Regular reseeding also plays a role on the Lehane farm. This means that a large proportion of the grazing area has relatively new swards that are highly productive. Margaret has also recognised that controlling the quality of this grass by not grazing high swards is one of the keys to her achieving excellent daily gains in the weanlings while they are still at grass. Paddocks with heavy covers are not grazed but are taken out as round bales if the rest of the farm has enough grass.

The high amount of liveweight produced per LU on the farm is a combination of the very good fertility performance figures, the tight calving pattern and the early finishing at a high carcass weight in both the bulls and heifers. Margaret believes by calving all of the cows together and by only having one group grazing, the routine management of the suckler herd is kept as simple and as focused as possible. By doing this the target of keeping the output of beef per ha and hence gross margin per ha high will continue to be the number one priority for the farm.

### Profit Focus Farms 2010 to 2015

Business and Technology Drystock advisers were asked in 2011 to select a group of farmer clients that have a strong interest in increasing profitability and applying recommended technologies that will boost farm output and/or reduce unit costs of production. The aim is to have a larger group of farmers across the country that are focused on improving the profitability of their cattle and sheep enterprise by following a clearly defined plan for their farms that incorporates applying the most relevant technologies aimed at improving output, minimising production costs and maximising profitability from production.

#### The essential components will include:

- Clients of advisers that are striving to improve the profitability of their drystock enterprise through working with their B & T adviser
- Adviser and farmer client agreeing and preparing a three year plan that sets out targets to be achieved aimed at improving profitability
  - 2010 profit monitor will set the base line and determine reasonable and achievable targets for each farm.
  - · Plan should be agreed between farmer and adviser
  - · Specialist support will be provided where requested
  - Use simple farm plan template developed and used in BETTER Beef Programme – outlined earlier in this booklet
  - Main focus should be on increasing output stocking rate, simplifying system, grassland plan, minimising cow wintering costs, finishing / selling strategy, breeding efficiency and animal performance, etc
  - Active participation in discussion group and membership of ICBF HerdPlus are essential

- · Targets should be specified for:
- · Stocking rate
- Beef output kg beef liveweight per hectare
- Output value per ha
- Gross margin per hectare
- Profit per hectare
- Davs at grass (turnout dates & housing dates)
- Breeding efficiency
  - o Calves per cow per year
  - o % cows calved in 12 week period
  - o % of heifers calving at 24 / 26 months
- Clients nominated by each adviser and amalgamated into a national target group with base line set using 2010 profit monitor returns
- > Targets set for each participating farmer and progress reported annually in published Teagasc Drystock Profit Monitor Analysis
- > Initially approximately 100 farmers have agreed to participate and their base line performance figures are summarised below. Additional farmers will be added to this group provided they are prepared to follow the recommended procedures and their goal is increased profitability.
- Performance for the initial group of participating farms indicate they are very much at the national average for farms that complete a Teagasc Drystock Profit Monitor this places them at or near the top 25% of cattle farms in the country compared with National Farm Survey returns. Nevertheless, they have huge scope for increased profitability and the target over the next five years will be to increase gross margin to over €1,000 per hectare with up to 70% of the increased gross margin retained as profit

# Teagasc Profit Focus Farms 2010 to 2015

2010 Performance	Cattle Farms	Sheep Farms
Physical	79 Farms	17 Farms
Farm Size ha	59	68
Stocking Rate LU/ha	1.70	1.77
Ewes/ha		7.59
Liveweight produced kg/ha	542	494
Lambs reared per ewe to ram		1.46
Financial €/ha		
Gross Output Value	944	960
Variable Costs	621	505
Gross Margin	322	455
Fixed Costs	490	466
Net Profit excl. Premia *	-168	-10
Total Premia *	624	562
Total Premia Retained %	73%	98%
Single Farm Payment	457	419
Single Farm Payment Retained %	97%	132%

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



# eProfit Monitor Analysis 2010 – Cattle Farms

### Comparison - 2006 to 2010 (Cattle Farms)

Table 1 below shows the performance of 43 cattle farms, both suckler and non-breeding over the 5 year period 2006 to 2010.

**Table 1:** Comparison of costs and income on the same 43 beef farms over five years

Physical	2006	2007	2008	2009	2010
Stocking Rate LU/ha Liveweight Produced kg/ha Liveweight Produced kg/LU	1.82 584 321	1.81 599 331	1.86 577 310	1.90 632 333	1.83 609 333
Financial €/ha					
Output Value Variable Costs Gross Margin Excl. Premia Fixed Costs Profit Excl. Premia Total Premia*	910 499 411 438 -27 623	959 519 440 443 -4 641	1058 557 502 470 32 664	983 579 411 466 -55 669	1028 582 446 454 -8 652
Premia Retained	96%	99%	105%	92%	99%

<sup>(\*</sup> Includes Single Farm Payment, REPS ,CAS & Suckler Welfare premium)

In terms of physical criteria there is little change in stocking rate with a peak in 2009 at 1.90 LU/ha. The small variation in the stocking rate is also reflected in the fact that there is a small 4% 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 21% in nominal terms over the same period. Beef output per livestock unit increased by 4%.



Although we see very little change in the physical performance, encouragingly the financial value of the output per hectare has increased from €910 in 2006 to €1028 in 2010. This represents an increase of 13% over the four years and is a result of improved quality and increased prices. This increase in the value of output on the 43 farms was achieved alongside a variable costs increase of 17% in nominal terms over the same period. As is shown the variable costs rose from €499/ha in 2006 to €582/ha in 2010.

The gross margin improved by €35/ha or 9% over the period. In 2010 the average gross margin achieved on these farms was running at €446/ha. Fixed costs per hectare in nominal terms increased by 4%.

With the increase in output value and variable costs, combined with the static fixed costs, overall profitability has improved marginally over the period. The 43 farms have improved profitability by just €19 per hectare over the 4 year period. Premia retained as profit has risen from 96% in 2006 to 99% in 2010. 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 1

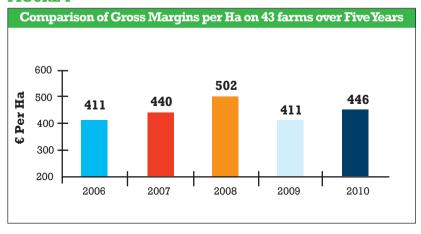
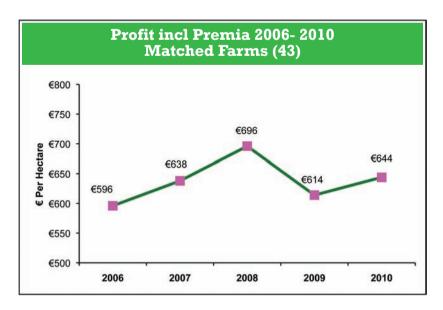


Figure 2 plots the change in profitability where premia has been included on the farms over the five years. The increase from €596/ha in 2006 to €644/ha in 2010 represents a profit improvement of 2% per annum over the period. Profit peaked in 2008 but was hit with reduced cattle prices in 2009 and has partially recovered in 2010.

#### FIGURE 2





# Comparison – 2009 v 2010 (Cattle Farms)

Table 2 below highlights the performance of the same 248 farms from both the suckling and non-breeding sectors in 2009 and 2010. Stocking rate is down 3% in 2010 but beef liveweight per livestock unit increased by 2% resulting in similar beef liveweight per hectare in 2010.

The value of the output increased by  $\leqslant$ 44 per hectare in 2010, a 5% lift. Variable costs increased by 3% resulting in a gross margin increase of  $\leqslant$ 26 per hectare or 8%.

Table 2.	Comparison o	f coets and income	on the same farms in two	Maare
Table 4.	COHDINATISON O	I COSIS AHO HICOHIE (	on the same rains in two	vears

Profit Monitors – Cattle Farms Matched Sample (248 Farms)				
	2009	2010	% Change	
Physical Stocking Rate LU/ha	1.75	1.71	-3%	
Liveweight Produced kg/ha	1.10	1.11	-070	
kg/LU	553	551	No change	
	316	322	+ 2%	
Financial €/ha				
Output Value	885	929	+ 5%	
Variable Costs	555	573	+ 3%	
Gross Margin Excl. Premia	330	356	+ 8%	
Fixed Costs	496	472	- 5%	
Profit Excl. Premia	-166	- 116		
Total Premia	650	635	- 2%	
Premia Retained	75%	82%		

Fixed costs decreased by €24 per hectare in 2010, which is equivalent to a 5% decrease. The bottom line figure before premia is €50 per hectare better for 2010 compared with 2009.

**Table 3** shows the detailed changes in variable costs between 2009 and 2010. There is an increase in most elements making up variable costs resulting in an overall increase of 3% in 2010 over 2009.

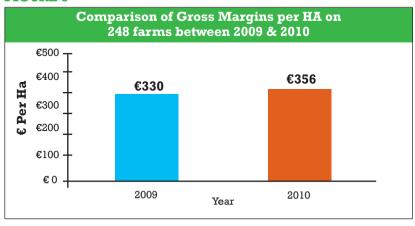
Table 3: Changes in Variable Costs between 2009 and 2010 – Cattle Farms Matched Sample (248 Farms)						
Matched sample 248 farms						
Variable Costs € / ha	2009	2010	Change %			
Concentrates	176	183	+ 4%			
Fertiliser	120	123	+ 3%			
Veterinary 69 72 + 5%						
Contractor 97 103 + 6%						
Other Variable Costs	93	92	No change			
Total Variable Costs	555	573	+ 3%			

**Table 4** examines how fixed costs have changed from 2009 to 2010. Overall spending on fixed costs decreased by 5% despite an 8% increases in machinery running costs.

Table 4: Changes in Fixed Costs between 2009 and 2010 – Cattle Farms				
Matched sample 248 farms				
Fixed Costs € / ha Hired Labour O/D, Loan Interest & Bank Charges Machinery Running Costs Car / ESB / Phone Depreciation Repairs & Maintenance Insurance Land Lease Other Fixed Costs Total Fixed Costs	2009 44 30 69 52 108 49 32 47 65 496	2010 40 25 75 50 99 46 32 46 59 472	Change -11% -17% +8% -4% -8% -5% No change -1% -9% -5%	

**Figure 3** below graphs the change that has occurred over the two years in gross margin per hectare on the 248 farms. Gross margin increased by €26 per hectare or 8%.

#### FIGURE 3





# Suckling Farms 2010

Table 5 below shows the performance of 304 suckling farms in 2010. These farms include 172 farms where the suckler progeny are sold as weanlings or stores and the remaining 132 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.

Table 5: Suckling farms 2010 – per hectare analysis Profit Monitor (304 Farms)

	Top 1/3	Average	Bottom 1/3	Top v Bottom
Physical				
Farm Size ha Stocking Rate LU/ha Liveweight Produced kg/LU Liveweight Produced kg/ha	68 1.98 342 677	57 1.70 306 521	48 1.48 232 343	+20 +0.50 +110 +334
Financial €/ha				
Gross Output Value Variable Costs Gross Margin Fixed Costs Net Profit excl. Premia Total Premia * Total Premia Retained * Single Farm Payment Single Farm Payment Retained	1212 616 596 513 83 662 113% 497 150%	905 562 344 472 -128 623 79% 455 109%	580 515 65 455 -390 629 38% 444 54%	+632 +101 +531 +58 +473 +33 +53

<sup>(\*</sup> Includes Single Farm Payment, REPS, CAS & Suckler Welfare premium)

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  $\mathfrak{C}531$  per hectare and profit difference of  $\mathfrak{C}473$  per hectare.

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 third they are farming 20 ha (42%) more than the bottom third
- With a stocking rate of 1.98 LU/ha, the Top 1/3 farms are carrying 0.5 LU/ha more stock than those in the Bottom 1/3 a staggering 34% extra stock on the same area
- Despite the higher stocking rate on the top farms, they are also producing 47% more beef liveweight per livestock unit which is due to better animal performance on foot of better feeding and management
- With a higher stocking rate it is not surprising then that the Top farms are able to produce more kilograms of liveweight on a per hectare basis. The top third of farms produce almost twice as much beef liveweight on a per hectare basis than those in the lower grouping and this is the secret of their success
- More kilograms produced equates to a higher output value for the Top farms where they achieved €1212/ha compared to €580/ha on the Bottom 1/3, a staggering difference of €632/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 €632 higher output value per hectare they only spent €101/ha extra on variable costs compared to those in the Bottom group a modest 20% extra variable costs for an extra 109% output value
- > Gross margin, which indicates technical efficiency, demonstrates the gulf that exists within the group. At €596/ha the Top group are €531/ha ahead of the Bottom 1/3 and €252/ha ahead of the Average for the group
- ➤ Fixed costs are significant within all groups at €455 per hectare for the bottom third and €58 higher for the top third and underlines the need to achieve a good output level. Fixed costs account for 78% of output on bottom third but only 42% of output on top third. 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 €129 and €390/ha, respectively out of their premia payments in 2010.
- ➤ It was only the Top 1/3 that generated a profit (€82/ha) from their stock that could be added to their premia receipts
- > The bottom third had to use almost 60% 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 41% of total premia as profit in 2010. 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 for the bottom third is only 68% that achieved by the top third 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 51%, 62% and 89% 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 €450 to €470/ha to leave themselves in a breakeven situation.



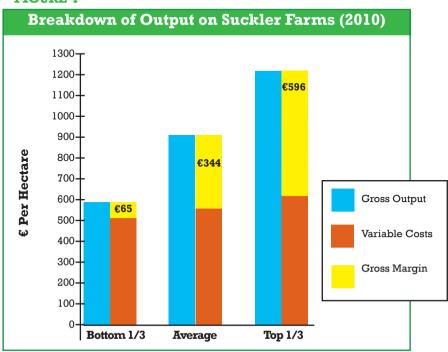


Figure 5 identifies the key variables that influence gross output and consequently gross margin per hectare on the suckling farms. Stocking rate is 34% higher on the top third of farms compared with the bottom third. In addition to the higher stocking rate the beef output per livestock unit is 47% higher on the top third, with both combining to produce a gross margin almost 10 times higher on the top third of farms.

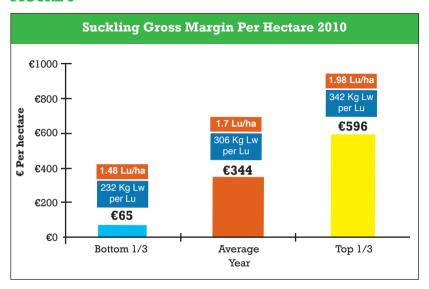
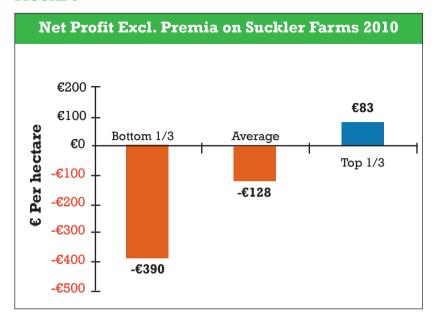


Figure 6 illustrates the difference between the Top 1/3, the Average and the Bottom 1/3 in terms of the profit per hectare generated excluding premia. It is only the Top 1/3 that generates a profit from their farming activity. The other two groups have to dip into their premia to the tune of €390 and €129/ha in order to cover production costs.

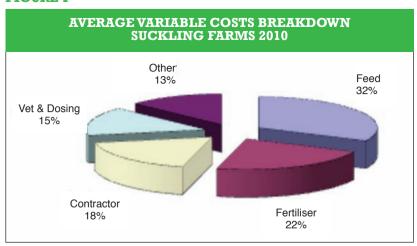


# Breakdown of Costs - Suckling Farms

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 2010.

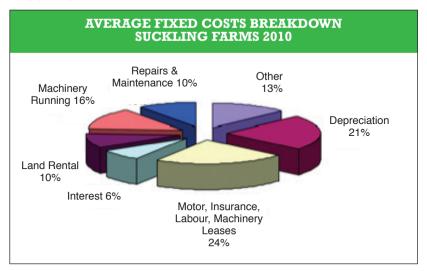
The four major components of variable costs are feed, fertiliser, contractor and veterinary, which account for 87% of all variable costs.

#### FIGURE 7



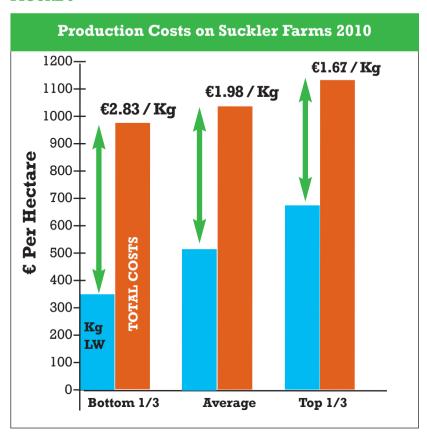
On the fixed costs side, depreciation, machinery running, repairs & maintenance, land rental, and interest account for almost two thirds of the total fixed costs. Motor costs, insurance, hired labour and machinery leases account for an additional 24% of fixed costs.

#### 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 €1,129 compared to €1034 and €970 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 €1.67 to produce a kilogram of liveweight compared to €2.83/kg on the Bottom farms. The Top farms produce 334 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 334 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 third compared to the bottom third



# Non-Breeding Cattle Farms 2010

**Table 6** below looks at the performance of 61 non breeding cattle farms in 2010. These farms would have purchased weanlings or stores and either brought them on to forward store stage or brought the animals through to finish. The group is again ranked according to their gross margin excluding premia into Top third, Average and Bottom third.

Table 6: Non-breeding farms 2010 – per hectare analysis Profit Monitor (61 Farms)

	Top 1/3	Average	Bottom 1/3	Top v Bottom
Physical				
Farm Size ha Stocking Rate LU/ha Liveweight produced kg/LU Liveweight produced kg/ha	52 1.72 503 856	54 1.50 399 599	49 1.34 284 381	+3 +0.38 +219 +475
Financial €/ha				
Gross Output Value Variable Costs Gross Margin Fixed Costs Net Profit excl. Premia Total Premia* Total Premia Retained Single Farm Payment Single Farm Payment Retained	1389 798 591 598 -7 673 99% 509 131%	906 614 291 485 -194 636 70% 492 90%	506 474 31 463 -432 548 21% 420 28%	+884 +323 +560 +135 +425 +125 +89

<sup>(\*</sup> 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:

- There is little difference in size between Top 1/3 of farms, the Average and the Bottom 1/3 of farms – this is different to other years as the top third are usually much larger
- > Stocking rate on the non breeding farms is significantly lower than the corresponding groups of suckler farms. The stocking rate is also lower than non-breeding farms in previous years. The Top group of non-breeding farms are carrying an extra 0.38 LU/ha compared with those in the Bottom 1/3 this represents almost 28% more stock on a similar land area but is not as large a difference as previous years. Stocking rate on the top third shows the largest decrease for all groups compared with previous years
- The top farms are producing almost twice as much beef per livestock unit as the bottom third which is a function of better animal performance on foot of better feeding and management

- The 28% higher stocking rate combined with better animal performance results in the top third producing two and a quarter times as much beef per hectare as the bottom third
- > At €1,389/ha the Top group are producing €884 more in terms of output value per hectare compared with a poor €506/ha in the Bottom 1/3
- The extra €324/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 43% of output value to cover fixed costs and profit. It is hard to justify the Bottom group spending €474/ha on variable costs when they are only generating €505/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 very poor gross margin for the bottom third
- > The difference in efficiencies between the farms is clearly illustrated in the difference in gross margin of €592/ha on the Top farms versus €31/ha on the Bottom 1/3 of farms an advantage to the top farms of over €560 per hectare.
- Fixed costs on the Top farms are €134/ha higher than those on the Bottom 1/3 of farms. At €598 per hectare fixed costs are consuming 43% of output value and results in the top third returning a negative profit before premia of €7 per hectare. Although fixed costs were much lower with the bottom third their very low gross margins resulted in losses of €432 per hectare. This resulted in the bottom third only retaining 21% of total premia receipts
- ➤ The Average of all the non-breeding farms did not hold onto all their premia in 2010 as their farming activity consumed €194 per hectare of their premia receipts
- Single farm payment per hectare was highest on the top farms with an extra €88/ha on the top third compared with bottom third. Only the top third of nonbreeding farms retained all single farm payment in 2010 and the bottom third retained only 28%

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 virtually no 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 clearly shows the difference in output level between the Top, Average and Bottom 1/3 of farms. Approximately 57% of the output value on the Top 1/3 of farms went on variable costs, compared with 68% and 94% on the Average and Bottom 1/3 of farms, respectively. Therefore, the Bottom 1/3 of farms had virtually none of their output value available to cover fixed costs. Contrast this to the Top group who had 43% (€591/ha) of their output value available to meet fixed costs.

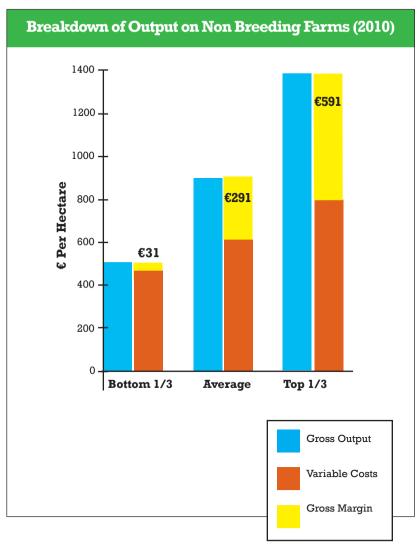
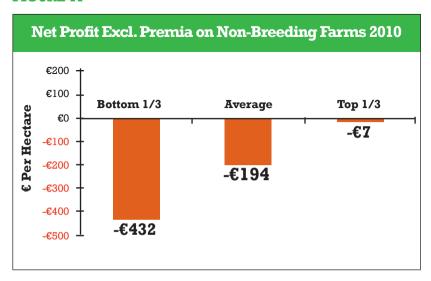


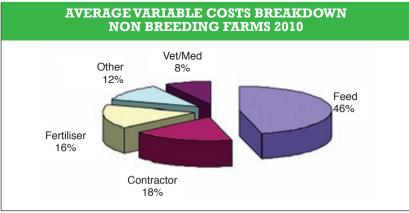
Figure 11 shows that the Bottom 1/3 of non-breeding farms had a deficit of €432/ha after meeting production costs which would have to be taken out of their premia. The average group had a deficit of €194/ha to deduct from premia receipts. The Top 1/3 of farms also had a deficit of €7/ha from their farming activity that had to be covered by premia receipts.



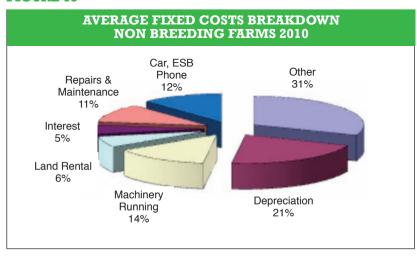
# Breakdown of Costs – Non-Breeding Farms

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 80% 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

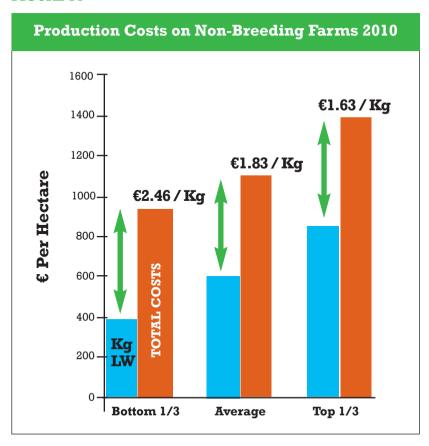


On the fixed costs side, depreciation, machinery running costs, land rental costs, repairs and maintenance and interest make up 58% of fixed costs. Farm share of car, ESB and phone costs account for 12% of total fixed costs.



## 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 €1,396 compared to €938 on the Bottom 1/3 of farms, the fact that the Top farms are producing 856 kg of beef liveweight per hectare as opposed to 381 kg on the Bottom 1/3 means that the Top farms are producing a kilogram of liveweight for €1.63 while the same kilogram costs €2.46 on the Bottom 1/3 and €1.83 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.



# Comparing Cattle and Sheep Systems 2010

Table 7: Per hectare analysis – cattle and sheep systems
Profit Monitor 2010

	Suckling- to-Beef	Suckling-to- Weanling/ Store	Cattle Non-Breeding Purchased weanlings or stores-to-beef	Sheep Mainly mid-Season
Physical	132 Farms	172 Farms	61 Farms	91 Farms
Farm Size ha 71 Stocking Rate LU/ha Ewes/ha	46 1.83	54 1.61	67 1.50	1.83 7.59
Liveweight Produced kg/ha Lambs Reared per Ewe to Ram	582	448	598	434 1.40
Financial €/ha				
Gross Output Value Variable Costs Gross Margin Fixed Costs Net Profit excl. Premia * Total Premia * Total Premia Retained % Single Farm Payment Single Farm Payment Retained %	1007 616 391 497 -106 629 83% 488	786 498 288 444 -156 616 75% 460	905 614 291 485 -194 636 70% 492	859 476 382 416 -33 501 93% 372

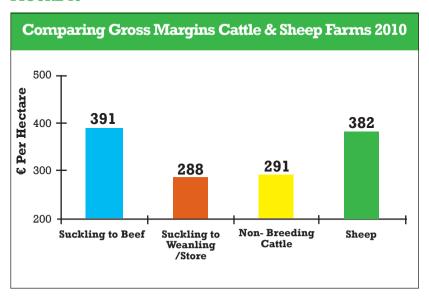
<sup>(\*</sup> Includes Single Farm Payment, AWRBS, REPS & CAS)

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 2010. 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 1.83 livestock units per hectare. Stocking rate is approximately 12 & 18% lower respectively 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 3% lower.
- Sheep farms averaged 1.4 lambs reared per ewe put to the ram at a stocking rate of 7.59 ewes per hectare
- Output value per hectare was highest for suckler to beef systems. Nonbreeding systems, suckling to weanling and mid-season lamb were 10%, 22% and 15% lower, respectively
- Sheep farms had lower variable costs than any of the other systems examined
  at €476/ha which reflects their lower winter feed costs. Non-breeding cattle
  farms and suckler to beef had the highest variable costs per hectare. Variable
  costs consumed 68% of output value on non-breeding systems. This is a very
  high figure and leaves it difficult to achieve a profit unless output value is
  exceptionally high
- In terms of gross margin per hectare, suckling to beef cattle systems were best at €391 per hectare. Sheep systems were 2% lower and non breeding systems 25% lower. Gross margin levels for suckling to weanling with profit monitors were disappointingly low in 2010 at €288 per hectare
- Fixed costs are highest for suckling to beef systems at €497 per hectare. Sheep
  fixed costs were approximately 16% lower. Fixed costs as a percentage of
  output are highest on suckler to weanling systems at 56% and run around 48 to
  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 93%.
- Single farm payment per hectare was 24% lower on sheep systems than suckling to beef 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 2010.





## SHEEP FARMS

### **Comparison - 2008 to 2010**

Comparison of sheep farms over the last three years 2008, 2009 and 2010 (mainly mid season lowland flocks)

The information from a matched sample of 29 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 changed very little. Average lamb price increased by almost 21% over the three years with all of the price increase in 2010. Lambs reared per hectare decreased by almost 10% due to a reduction in stocking rate. Output value by year 3 increased by over 10% on foot of increased lamb selling prices.

Variable costs per hectare showed little change over the period. Increased spending on concentrate costs was offset by reduced spending on fertiliser and contractor costs.

The increase in output value over the three years resulted in a 25% increase in gross margin per hectare in 2010 compared with 2008. Fixed costs peaked in 2009 but 2010 costs were just 4% above 2008 levels.

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.

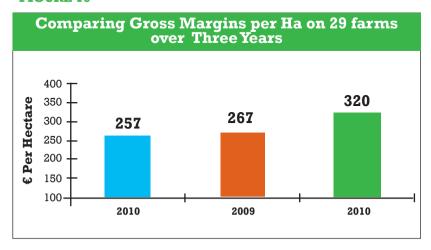
Table 8: Comparison of costs and income on the same sheep farms over three years

Profit Monitors Matched sample 2008, 2009 & 2010 (29 farms)

Physical data	2008	2009	2010
Stocking rate LU/ha Ewes to ram Lambs reared per ewe joined to ram Ewes per hectare Lambs reared per ha	1.90	1.95	1.88
	245	235	226
	1.46	1.47	1.45
	7.94	7.68	7.22
	11.6	11.3	10.5
Financial (€)			
Average lamb price € / head  Gross Output per ha Variable Cost per ha Gross Margin per ha Fixed Costs per ha Net Margin per ha  € / ha  / ha  / ha  / ha	78.26	78.83	94.43
	716	736	785
	459	469	464
	257	267	320
	338	392	351
	-81	-126	-31

Figure 16 shows the change in gross margin per hectare on matched sample of sheep farms from 2008 to 2010.

FIGURE 16



# Comparison - 2009 v 2010

# Comparison of matched sample of sheep farms for 2009 and 2010 (mainly mid season lowland flocks)

Information relating to a matched sample of 50 flocks for 2009 and 2010 are contained in table 9 below. The farms contained in this analysis are predominantly mid season lowland enterprises. In terms of output, there is a decrease in lambs reared per ewe to ram (-4%), no change in stocking rate and a 16% increase in average lamb price. Consequently, gross output increased by 8% or  $\epsilon$ 01 per hectare.

On the 50 flocks, ewe numbers have declined by 2% from 218 to 215 while ewe lambs retained as replacements have increased by 17% indicating confidence in future potential for sheep.

Variable costs changed little over the two years. The output increase combined with stable variable costs resulted in a gross margin improvement of €65 per hectare (19%). Overall fixed costs decreased by 9% in 2010 with the main savings on hired labour and repairs and maintenance. A detailed analysis of these costs is contained in table 11.

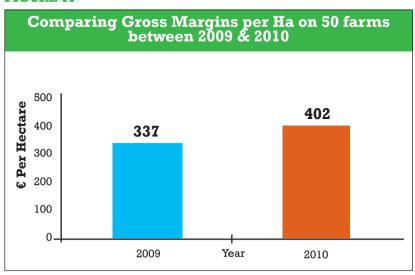
Net profit improved significantly in 2010 by €106 per hectare on foot improved gross margin and fixed costs savings. In 2010 a small profit was achieved from production.

**Table 9:** Comparison of costs and income on same sheep farms over two years Profit Monitors
Matched sample for 2009 & 2010 (50 farms) – mid season lowland flocks

	2009	2010	Difference	Change %
Physical data				
Stocking rate LU/ha Ewes to ram Lambs reared per ewe joined to ram Lambs reared per hectare Ewe lambs retained  Financial €/ha	1.91	1.90	0	0
	218	215	-3	- 2%
	1.47	1.41	-0.06	- 4%
	11.9	10.9	-1.0	- 8%
	42	50	+8	+ 17%
Average lamb price Gross Output per ha Variable Costs per ha Gross Margin per ha Fixed Costs per ha Net Margin per ha	79.61	92.72	+ 13.12	+ 16%
	806	867	+ 61	+ 8%
	469	465	- 4	- 1%
	337	402	+ 65	+ 19%
	432	391	- 41	- 9%
	- 95	+ 11	+ 106	+ 112%

Figure 17 shows the change in gross margin per hectare on a matched sample of 50 sheep farms from 2009 to 2010.

FIGURE 17



**Table 10 and 11** demonstrates price changes in some of the major input costs on sheep farms over the last two years. In table 10 there is little change in any of the variable cost items over the two years.

Table 10: Changes in Variable Costs between 2009 and 2010				
Matched sample 50 farms				
Variable Costs € / ha	2009	2010	Change %	
Concentrates	167	164	- 2%	
Fertiliser	91	91	No change	
Veterinary	79	76	- 4%	
Contractor	71	73	+ 3%	
Straw	20	20	No change	
Total Variable Costs	469	465	- 1%	

**Table 11** examines how fixed costs have changed from 2009 to 2010. Overall spending on fixed costs is down 9% with the largest saving on hired labour costs.

Table 11: Changes in Fixed Costs between 2009 and 2010				
Matched sample 50 farms				
Fixed Costs € / ha	2009	2010	Change %	
Hired Labour O/D, Loan Interest & Bank Charges Car / ESB / Phone Depreciation Repairs & Maintenance Insurance Land Lease Total Fixed Costs	75 18 46 76 42 23 42 432	51 19 38 70 36 26 46 391	-38% +5% -17% -8% -14% +13% +10% -9%	



## Lowland Sheep farms 2010

The analysis for the 2010 eProfit Monitor for sheep is based on the returns of 91 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.

Trable 19.	Sheep per Hectare Analysis 2009 (91 farms)
Table 14:	Sneed der Hectare Analysis 2009 (91 farms)

	Top 1/3	Average	Bottom 1/3
Physical Performance			
Flock size Stocking rate(LU/ha) Ewes/ha Lambs reared per ewe to ram Lambs reared per hectare	210 2.03 9.24 1.54 14.2	192 1.83 7.59 1.40 10.6	202 1.57 5.99 1.23 7.4
Financial Performance €/ha			
Gross output Variable costs Gross margin Fixed costs Nett profit excl premia Nett profit include all premia* % Premia* retained Average lamb price € / head	1269 520 749 511 238 802 142% 93.42	859 476 382 416 -33 468 93% 92.47	486 405 80 334 -243 194 44% 87.89

(\* Includes Single Farm Payment, Reps & CAS)

Flock size is similar for top and bottom thirds but the difference in stocking rate means the bottom third require over 50% more land than the top third to keep the same number of ewes. The combination of the higher weaning % (0.31 lambs extra per ewe) and the better stocking rate on the top third results in an extra 6.8 lambs reared per hectare over the bottom third. This is what contributes to a higher output figure worth an extra £783 per hectare and is the foundation for the higher gross margin and higher profit.

The average gross margin was  $\le 382$  per hectare. The gross margin per hectare for the top third at  $\le 749$  is  $\le 669$  higher than the bottom third. The gross margin per hectare for the top third in 2010 is more than nine times greater than that of the bottom third. There is less difference in lamb price per head between top & bottom farms than other years.

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

- Lambs reared per ewe to the ram 1.54 for the top third compared with 1.23 for the bottom third
- 2. Higher stocking rate, 9.24 ewes compared with 5.99 ewes per hectare
- 3. Lambs weaned per hectare, 14.2 compared with 7.4
- 4. Higher lamb price, €93.42 compared with €87.89

**Figure 18** shows lambs weaned per hectare for bottom 1/3, average and top 1/3 for the 91 farms with sheep profit monitors for 2010.

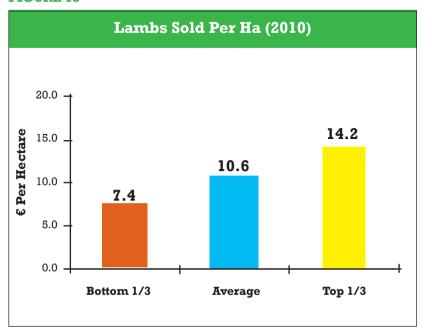
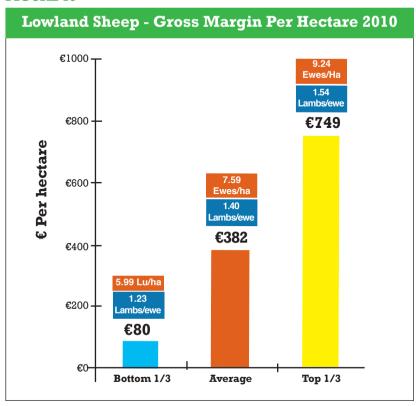


Figure 19 shows the variation in gross margin across the three groups and the principal factors that influence gross margin for sheep farmers.

FIGURE 19



On average, sheep farmers with profit monitors in 2010 failed to retain all their premia. On average, they retained 93% of premia with the bottom third only retaining 44% of all premia and had a net profit excluding premia of -£243 per hectare. The top third had a net profit excluding premia of £238 per hectare. This results in a difference of £481 in the net profit per hectare between the top third and bottom third and amounts to over £12,000 for the average area devoted to sheep for farms keeping a profit monitor.

### Ewe to ram performance 2010

**Table 13** shows the output, costs and margins on a per ewe basis. The results are placed in 3 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 2010 (91 farms)				
	Top 1/3	Average	Bottom 1/3	
Physical Performance Lambs reared per ewe to ram Financial Performance € / Ewe	1.54	1.40	1.23	
Gross Output Variable Costs Gross Margin Fixed Costs Nett Profit excl Premia Average Lamb Price € / head	137 56 81 55 26 93.42	113 63 50 55 -4 92.47	81 68 13 54 -41 87.89	

There is a difference in output per ewe of  $\$ 56 between the top and bottom third. This results from a higher number of lambs weaned per ewe to the ram (0.31 lambs /ewe) which increased output by  $\$ 28/ewe and a higher lamb price of  $\$ 5.50 per head ( $\$ 8.50per ewe).

Variable costs per ewe are highest for the bottom third at €68 and when combined with the lower weaning % for the bottom group results in higher variable costs per lamb of over €19.

The top third is achieving a gross margin per ewe of &81 compared with &50 for the average and just &13 for the bottom third.

In the average flock of 192 ewes, the top third are achieving an extra gross margin of 60,000 over the average and 13,000 over the bottom third.

Fixed costs per ewe were similar for top and bottom farms. Fixed costs per lamb was €8 lower on top third compare with bottom third.

This results in a net profit excluding premia of  $\pounds 26$  per ewe for the top 1/3, a loss of  $\pounds 4$  per ewe for the average and a loss of  $\pounds 4$  per ewe for the bottom third.

Based on these figures sheep farmers in the top third with the average ewe flock of 192 are achieving an extra profit of €4,000 compared to the average and over €12.500 more than farmers in the bottom third.

It is alarming, despite a substantial increase in market prices, that sheep farmers in the bottom third are loosing €41 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.

Figures 20 and 21 shows the gross margin breakdown and profit figures per ewe for 91 sheep farms with profit monitors for 2010 in diagram format.

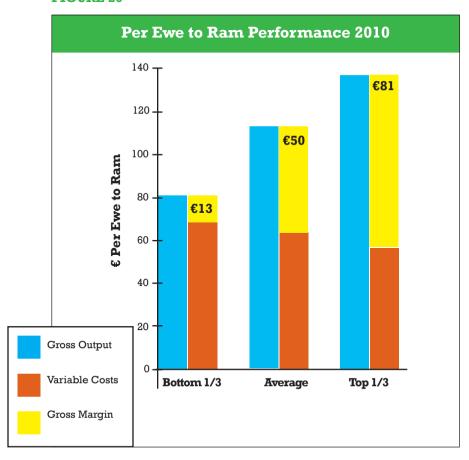
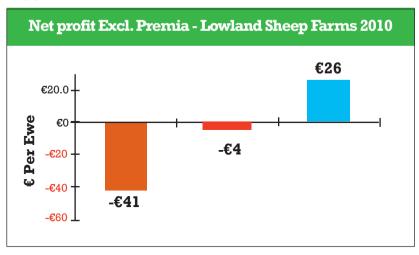


FIGURE 21



### **Costs per Ewe**

A breakdown of the major variable and fixed costs on a per ewe basis are given in **Table 14**.

	Top 1/3	Average	Bottom 1/3
Total Variable Costs (€/ewe) (of which)	56	63	68
Purchased Feed Fertiliser Veterinary Contractor Other	19 11 10 8 8	22 12 10 10 9	21 12 10 13 12
Total Fixed Costs (€/ewe) (of which)	55	55	54
Machinery Running Labour Land Lease Depreciation Buildings Depreciation Machinery Repairs & Maintenance Car, ESB & Phone – farm share Interest Other	9 5 9 4 6 5 5 3	9 5 6 4 6 6 6 4 9	7 8 4 5 5 5 5 6 9

Purchased feed is the largest single variable cost on sheep farms. On a per lamb basis, purchased feed is costing  $\[ \in \] 12.34$  per lamb on the top  $1/3, \[ \in \] 15.71$  on the average and  $\[ \in \] 17.00$  per lamb on the bottom $\[ \in \] 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 €8 per ewe are €3 higher for the bottom third.

The total annual cost of maintaining a ewe is €111 in the top third, €118 for the average and €122 for the bottom third.

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

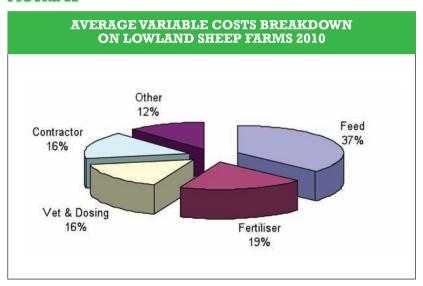
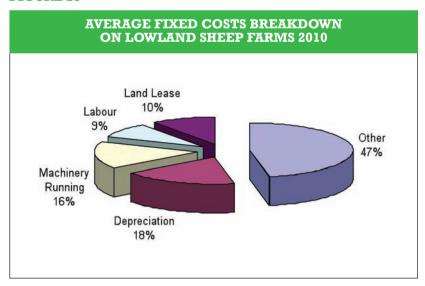


FIGURE 23



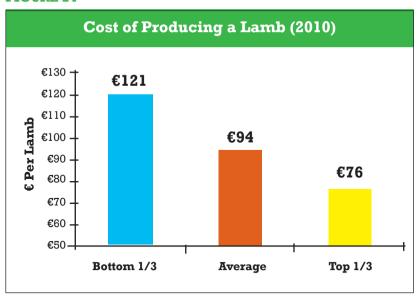


# Cost of producing a lamb in 2010 – Lowland Mid Season

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 2010 was €82 excluding replacement and ram costs. Comparable costs for the top third were €72 and for the bottom third were €99. Estimated replacement and ram costs per lamb amounted €22. €12 and €4 for the bottom, average and top thirds respectively.

Consequently the total production and replacement costs per lamb amounted to €121 per head for the bottom third, €94 on average and €76 for the top third of sheep farms with profit monitors. The difference between the top and bottom thirds represents a staggering €45 per lamb and is the prize to be gained by getting performance on your farm to match the top third 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 is not constant. Consequently replacement costs stated above may be underestimated by &2 to &4 per lamb



# Performance of Hill Sheep Flocks 2010 –

Details of the hill sheep analysis for 2010 are listed in the **Table 15**. Average performance was 1.07 lambs reared per ewe joined to the ram with the range from 0.77 to 1.43. Average lamb price was €65.42 with the range from €40 to €92. 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 €37 per ewe with a range from €3 to €103 per ewe. It is important to remember that the analysis consists of information collected from only eleven farms.

Table 15: Hill sheep per ewe to ram analysis 2010(11 farms with Profit Monitor)			
Physical	224		
Average Flock Size	264		
Lambs reared per ewe joined to ram	1.07		
Average Lamb Price (€/head)	65.42		
Financial	€/ewe		
Output	65		
Feed	10		
Fertilizer and Lime	6		
Vet	7		
Contractor	3		
Other	2		
Total Variable Costs	28		
Gross Margin	37		
Total Fixed Costs	24		
Net Profit Excl Premia	13		

Similar to the lowland flocks, purchased feed is the single largest variable cost on hill sheep farms and accounts for approximately 36% of total variable costs. The top third with a weaning rate of 1.07 lambs per ewe incurred spending of almost  $\[mathebox{\in} 10\]$  per lamb on concentrates and achieved an average selling price of  $\[mathebox{\in} 79\]$  per lamb. The bottom third with a weaning rate of 1.03 lambs per ewe incurred spending on concentrates of  $\[mathebox{\in} 80\]$  per lamb and achieved an average selling price of  $\[mathebox{\in} 51\]$  per lamb. Ewe mortality appears a problem on the bottom farms in 2010, as output value per ewe was  $\[mathebox{\in} 29\]$  lower than average on foot of extra replacements retained and extra purchases.

Output per ewe, with this group of 11 hill sheep farms, is approximately 58% the output level achieved on the 91 lowland flocks in 2010. Variable costs per ewe were 55% lower with hill ewes and spending on meal, contractor, fertiliser, and contractor accounted for 90% of the difference. Despite the lower variable costs, the hill ewes on average achieved only 73% of the gross margin per ewe of the lowland ewes.

Average fixed costs for the eleven hill sheep farms was &24 per ewe, leaving a net profit excluding premia of &13 per ewe.

# **Appendices**

# Appendix 1

Table 1: Major Costs on Suckling Farms 2010 (304 Farms)

Table 1. Major Costs on			
	Top 1/3	Average	Bottom 1/3
Total Variable Costs			
€/ha	616	562	515
€/kg liveweight	0.91	1.08	1.50
Of which: Feed €/ha €/kg liveweight	200 0.32	168 0.35	127 0.41
Fertiliser & Lime €/ha	140	122	107
€/kg liveweight	0.21	0.23	0.31
Contractor €/ha	90	103	121
€/kg liveweight	0.13	0.20	0.35
Vet/Meds/AI €/ha	95	83	73
€/kg liveweight	0.14	0.16	0.21
Total Fixed Cost €/ha €/kg liveweight	513 0.76	472 0.91	455 1.33
Of which: Land Rental €/ha €/kg liveweight	63 0.09	49 0.09	26 0.08
Machinery Running €/ha	82	74	72
€/kg liveweight	0.12	0.14	0.21
Hired Labour €/ha	29	33	46
€/kg liveweight	0.04	0.06	0.13
Depreciation €/ha €/kg liveweight	116	100	85
	0.17	0.19	0.25
Interest €/ha	30	29	28
€/kg liveweight	0.04	0.06	0.08

# **Appendices**

# Appendix 1

Table 2: Major Costs on Non Breeding Farms 2010 (61 Farms)

Table 2. Major Costs on Non Dieeumg Tarms 2010 (of Tarms)			
	<b>Top 1/3</b>	Average	Bottom 1/3
Total Variable Costs			
€/ha	798	614	474
€/kg liveweight	0.92	1.03	1.25
Of which: Feed €/ha €/kg liveweight	439 0.51	280 0.47	190 0.50
Fertiliser & Lime €/ha	121	101	80
€/kg liveweight	0.14	0.17	0.21
Contractor €/ha	99	111	110
€/kg liveweight	0.12	0.19	0.29
Vet/Meds/AI €/ha	56	47	41
€/kg liveweight	0.07	0.08	0.11
Total Fixed Cost €/ha €/kg liveweight	598 0.69	485 0.81	464 1.22
Of which: Land Rental €/ha €/kg liveweight	25 0.03	29 0.05	37 0.10
Machinery Running €/ha	84	67	58
<mark>€/kg liveweight</mark>	0.10	0.11	0.15
Hired Labour €/ha	125	54	23
€/kg liveweight	0.15	0.09	0.06
Depreciation €/ha	104	105	108
€/kg liveweight	0.12	0.18	0.28
Interest €/ha	25	22	24
€/kg liveweight	0.03	0.04	0.06

# Appendix 2 – Teagasc/Farmers Journal BETTER Farm Beef Programme

The Teagasc/Farmers Journal BETTER Farm Beef Programme was launched in September 2008. The word BETTER is an acronym for Business, Environment and Technology through Training, Extension and Research. The programme is sponsored by The Farmers Journal, Dawn Meats, Kepak, AIBP and FBD Trust.

The aim of the programme is to develop a roadmap for profitable beef production through focussing on improving technical efficiency at farm level. In order to increase profitability the programme has focused on:

- · Increasing farm output
- Controlling production costs

#### The Farm Plan

A farm plan was agreed for each farm. The first page of the farm plan summarises the starting position of each farm in terms of key physical and financial indicators. It also sets out the targets to be achieved by the end of the 2011.

The subsequent pages of the plan identifies a number of keys areas to be targeted such as:

- · Financial performance
- Physical performance
- Grassland management
- Breeding performance
- · Winter feeding
- Animal health

The plans are reviewed annually, and, if necessary, amendments made to reflect changes in the market or if it was found that something was not working.

### **Increasing Output**

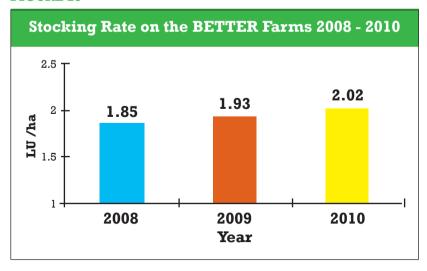
The programme has targeted an increase in output on the farms both in terms of kilograms of liveweight produced and increased output value. This increase in output has been targeted through:

- Increasing stocking rate
- · Improving breeding performance
- Improving individual animal performance
- More astute marketing

## **Stocking Rate**

At the start of the programme the average stocking rate on the BETTER farms was  $1.85 \, \text{LU}$  / ha. The target was a stocking rate of  $2.0 \, \text{to} \, 2.2 \, \text{LU/ha}$  by 2011. The stocking rate has increased to  $1.93 \, \text{and} \, 2.02 \, \text{LU}$  / ha in  $2009 \, \text{and} \, 2010$ , respectively. A number of the farms have brought about this increase in stocking rate by increasing stock/cow numbers. In other instances rented land has been dropped and stock numbers maintained.

#### FIGURE 25



#### **Breeding Performance**

The progress made as a result of the focus on breeding performance is quite evident. Calves per cow per year has increased from 0.87 in 2007/08 to 0.90 in 2009/10. Females not calved in the herd is down by 2%. Mortality at birth has dropped from 4.5% at the start of the programme to 2.8% last year. Mortality at 28 days is down only marginally to 5.1%, despite better hygiene and management around calving.

#### **Animal Performance**

With improved breeding, more calves on the ground and potentially better quality calves can be expected. To capitalise on this, the programme has targeted achieving good weight for age in stock as a means of having more kilograms of liveweight to sell off the farms each year. This gain has to be achieved efficiently and costs controlled.

#### Grassland

Grassland management on the farms is a key focus area of the programme. A lot of time and effort was put into grassland management in the first year of the programme to show the benefits of what could be achieved from grass and to give the farmers the skills and confidence to become competent grassland managers.

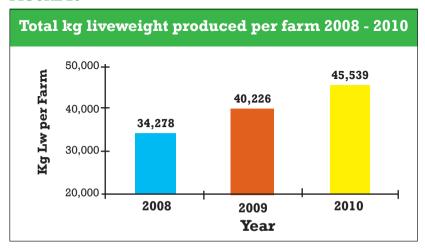
All these improvements, reseeding, setting up paddocks, addressing low phosphate and potassium problems on farms have come as an immediate cost. However, over the medium to longer term, the farms will be better placed to exploit the potential of grazed grass.

The measures already mentioned have clearly had an impact on the output on the farms. The kilograms of liveweight per hectare have increased by 155 kg from 536 kg/ha to 691

kg/ha, an increase of 29% since 2008. Likewise output per livestock unit is also up by 49kg / LU over the same period from 292kg/LU to 341kg/LU.

The magnitude of this increase is best illustrated in **Figure 26** below which shows that on average the total kilograms of liveweight produced per farm has increased by 11.261kg since 2008. This is an increase of 33%.

#### FIGURE 26



#### **Gross Output Value Improves**

Increasing stocking rate, improved animal performance and improved management have all contributed to delivering more kilograms of liveweight on the farms. Combine this with more targeted selling and higher gross output values on the farms is evident.

Figure 27 below shows how gross output on the farms has increased from epsilon 1,016 / ha in 2008 to epsilon 1,276 / ha in 2010. This is an increase of 26% in gross output value.

#### Variable Costs

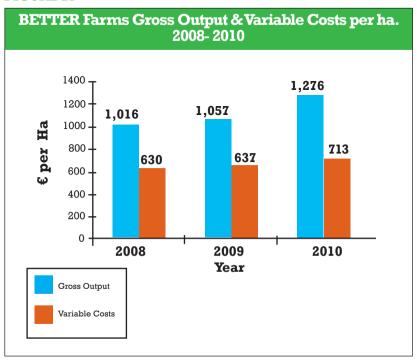
The graph also plots the movement in variable costs associated with achieving this extra output from 2008 to 2010. Variable costs have increased by 13% from 2008 to 2010. As a proportion of gross output, variable costs in 2008 accounted for 62% of output. This dropped to 61% and 56% of output for 2009 and 2010, respectively.

While the trend towards lower variable costs as a % of output is positive, variable costs are still high. The target is variable costs at 45% of gross output.

The farms have incurred higher variable costs than would be the norm on foot of increased reseeding costs. Fertiliser costs have increased due to extra P and K being applied to address soil imbalances. These costs will have lead to better cost savings in the future as the farms make better use of grass.

With increased fuel (contractor), feed and fertiliser costs in 2011, it will be difficult to make any substantial reduction in variable costs.

#### FIGURE 27

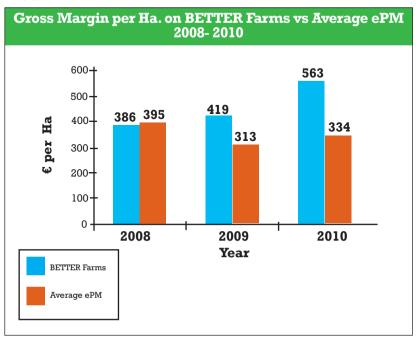


#### **Gross Margin**

Although the target of a gross margin of €1,000 / ha has not been achieved, the farms on the programme have made steady progress when compared with the average suckler farm completing the profit monitor.

In 2008 the BETTER farms had a gross margin of  $\leqslant$ 386 / ha compared to  $\leqslant$ 395 / ha for average farm in the profit monitor. In 2009 the BETTER farms increased gross margin to  $\leqslant$ 419 / ha while the other group fell to  $\leqslant$ 313 / ha. In 2010 the BETTER Farms showed a further increase to  $\leqslant$ 563/ha and the Profit Monitor group moved to  $\leqslant$ 344/ha. Over the 3 years, an improvement of 46% in gross margin has been achieved, while the average suckler farm in the profit monitor has seen gross margin decrease by 13%.

FIGURE 28



It is hoped that the average gross margin on the BETTER farms will be €700-800 / ha in 2011. Most of this will come from further improvements in output both in terms of kilograms produced and improved store and beef price. However, with fertiliser costs up more than €100 per ton, increased fuel costs and high concentrate prices, it is unlikely that substantial savings can be made on the cost side. The extra output however should dilute overall costs as a percentage of gross output.

## Conclusion

Where drystock farmers have to farm 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 approximately €270 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 best means of safeguarding future profitability levels.

The 2010 Profit Monitor results clearly demonstrates that there is huge potential for increased profitability for both cattle and sheep even on our best managed farms nationally.

If you want to safeguard your future in drystock farming and focus on improving profitability you need to start by preparing a Profit Monitor.



## Acknowledgements

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