

# BETTERfarm Beef Programme

BUSINESS, ENVIRONMENT, TECHNOLOGY through TRAINING EXTENSION RESEARCH

## LEARNING LESSONS

The farms that are finishing cattle in the BETTER Farm programme had the highest average gross margin and output levels per hectare in 2013



**KIERAN MAILEY**  
LIVESTOCK SPECIALIST  
kmailey@farmersjournal.ie

How many suckler herd owners produce store cattle, or finish cattle because it is what they like doing? How many suckler herd owners are spring calving because it reduces the labour required compared to an autumn calving herd? How many suckler herd owners are producing beef in a system because they are restricted in land type and housing space?

These are just a few questions that need to be asked when reviewing a farm business. Suckler beef production is currently under pressure with the squeeze on market prices, specification of cattle and attractive margins on offer through current milk price.

But not every farm can switch to dairying. Those producers committed to suckler production have to get a system in place that generates maximum output and profit (gross margin) per hectare of land. Land is the biggest and most limiting resource on any farm, not

the cattle.

Farming the land to its potential will do more for the gross margin than the market price when selling cattle. This includes carrying the optimum stocking rate so that the number of cattle grazing matches grass growth and that the live-weight produced is enough to cover all costs of production. Basing performance on a per hectare basis allows the farm to be compared on a system basis.

Suckler to weanling is a low output system, so to generate enough output, more cow units are required to make the system profitable. For some farms, selling stores might be a better option rather than finishing cattle and vice versa. Gross margin per hectare should be used as one of the primary factors when deciding what system is most profitable for the farm.

### System

The BETTER farms have all completed their profit monitors for 2013 and have gone through the report to highlight which areas of their business need to be addressed in terms of poor performance or high costs. The average gross margin for the BETTER farms dropped from €669/ha to €550/ha. While some farms were seriously affected by the fodder crisis in 2013, they should recover in 2014.

For instance, farms that had to hold cattle due to poor performance and price in 2013 will have these extra sales in 2014. Likewise, farms that purchased extra forage and concentrates in 2013 will hopefully not have these additional expenses to account for in 2014 and can operate as normal in terms of variable costs and inputs.

Targets for suckler livestock systems and land type should be set annually as part of a business plan. Table 1 outlines the stocking rate and output produced for each system in terms of kilograms of liveweight produced per hectare and Livestock Unit.

### Suckler to weanling

In 2013, there were 11 farms in the BETTER Farm programme that were suckler to weanling producers, with an average farm size of 38.6ha. Farm system is based on the main enterprise type through which the majority of cattle are marketed. Hence some farms may sell weanlings and store cattle, but will be grouped based on which is the largest of the two enterprise type.

Table 2 outlines the physical performance for the 11 farms last year. The farms are predominantly based along the western side of the country and land type is a major challenge on 50% of the farms. Some of the farms had cattle housed from late



Bull beef production had the highest gross margin in 2013 on the BETTER Farms with an average GM/ha of €726/ha compared to steer beef at €615/ha.

August 2012 to late May 2013 and variable costs increased as a result. Gross margin averaged €433/ha for the farms compared with €578 in 2012.

The drop in gross margin highlights how vulnerable these systems are to increases in variable costs and lower cattle performance from grass. As these cattle are targeted for sale at a similar time period every year, if cattle are lighter, if there is lower demand in the live trade or there's a glut of cattle coming onto the market, then gross margin will suffer.

### Analysis

At a stocking rate of 2.09 LU/ha, the farms are heavily stocked at present and had exactly the same stocking rate in 2012. Variable costs increased from €805/ha in 2012 to €1,023/ha, which is a rise of 27%. The fodder crisis last year is the main factor leading to the increase in variable costs and has seriously undermined the profit in 2013 on some farms.

Tom Halpin had the highest GM/ha of the weanling systems, due to controlling variable costs in 2013. The

farm is a spring and summer-calving enterprise, so cows can be wintered relatively cheaply compared with some of the other autumn/winter-calving herds, where concentrates had to be fed to cows as well as weanlings.

Richard Jennings had the highest output of the weanling producers, but as he calves from November to early February, his system incurred additional meal feeding of €175/ha in spring 2013 to both the cow and calf. The extra meal feeding was required to keep cows milking and, more importantly, to get them back in calf. Reseeding and fertilizer costs also increased by €100/ha.

As his calving pattern is even tighter this winter, the additional expense was justified as he should be able to maintain and improve on calf weights when selling this autumn. Provided there are no unforeseen expenses this year, gross margin should recover in 2014.

James Strain's variable costs increased from €940/ha in 2013 to €1,566. Bought-in feed and concentrates accounted for €213/ha of this increase. A change in fertilizer policy and reseeded accounts for the remainder of the variable cost increase, but soil fertility is a long-term investment in the farm that will be realised through improved grassland performance in the years to come. The farm is actually

performing very well in terms of liveweight gain and physical output. An output of 744kg of liveweight per hectare and €1,698/ha of gross output is excellent for a weanling system. Controlling variable costs while maintaining or improving output will place the farm in a very strong position in the years to come.

### Suckler to store

There are six farms who are predominantly suckler to store producers. The four farms have an average farm size of 54ha.

Gross margin per hectare averaged €490/ha and was similar to the suckler to weanling systems in terms of output. As highlighted in table 3, stocking rate has a clear influence on these farms in terms of output and gross margin.

The average stocking rate for the six farms is 2.00LU/ha, with three farms stocked at a very low level. Increasing cow numbers is part of the three-year plan on these holdings as it is clearly inhibiting gross margin.

### Analysis

Willie Treacy has been involved with the programme since the start of phase one and his gradual building of stock numbers, improved soil fertility and grassland management has left his farm business in a stronger position to cope with the

**Table 1: Physical Targets for suckler systems**

	Stocking rate (LU/ha)	Kg liveweight/LU	Kg liveweight/ha	Output/ha	Variable Costs/ha	GM/ha
Suckler to weanling	1.8-2.4	300-360	650-750	1,400-1,600	500-700	800-900
Store to beef trading	2.0-2.5	350-400	800-1,000	1,800-2,000	600-800	1,200-1,400
Suckler to beef	2.0-2.5	400-450	1,000-1,100	2,000-2,200	1,000-1,200	1,000-1,200

**A TEAGASC/IRISH FARMERS JOURNAL INITIATIVE**



til 2015, they will be reflected in an inventory change in the next profit monitor.

For Michael Smith's farm, output and stocking rate are very low and seriously eroding any prospect of profit. The farm did experience a disease issue in the autumn calving herd in December 2012, which affected mortality levels. The farm needs to increase output to at least 800kg of liveweight per hectare and €1,800 of gross output to have any prospect of reaching the target gross margin per hectare.

**Suckler to beef**

There are 15 farms in the programme operating a birth to beef suckler system. They had an average farm size of 59.8ha and were stocked at 2.09LU/ha, similar to the suckler to weaning systems. Of the 15 farms, six were finishing males as steers and the remaining nine farms finished males as bulls. Patrick Grennan, Donal Scully and Ger Dineen finished bulls under 16 months of age, while the remaining farms finished bulls at 17 to 18 months of age.

On the finishing farms, gross margin per hectare averaged €682/ha in 2013 compared with €592/ha. Variable costs totalled €970 and considering there are higher volumes of meal being fed during the finishing period, it is a relatively good level of performance. When compared with the other systems, the variable costs on the finishing farms are excellent. Variable costs increased from €883/ha in 2012.

The farms producing bulls had an average gross margin of €726/ha, variable costs of €1,083/ha and a gross output of €1,810/ha. The steer systems had a gross margin of €615/ha, variable costs of €800/ha and gross output of €1,414/ha.

**Analysis**

Patrick Grennan finishes bulls under 16 months and had the highest GM/ha of the programme farms. He also has one of the lowest variable costs in the programme at €755/ha. There is a common argument against producing bulls under 16 months in that they require too much meal to finish the animals and getting carcasses into sufficient liveweight to cover costs is difficult. This is true in many cases.

There is no doubt it is a highly specialised system, but Patrick Grennan's farm is an excellent example of what is achievable when breeding, grassland management and herd health are managed to their full potential.

The farm has the natural advantage of being located on dry land, but this created problems with drought for most of 2013's grazing season. Grassland production is excellent on farm.

Grass silage is 78 DMD and being fed to young bulls to reduce concentrate demand. Bulls are fed approximately 1.5 tonnes of concentrates throughout their lifetime on farm. The farm is spring calving and bulls are finished in May.

Last year's cattle were killed at the peak beef prices and availed of payment on the grid which further rewarded U grade animals. Without access to such high quality grass and silage, the economics of the system would be less viable.

For example, Ger Dineen operates a similar system and can achieve daily liveweight gains close to 2kg/day during the finishing phase. But due to silage quality ranging from 66DMD to 70DMD, the silage cannot be used to substitute concentrates to the same degree. Therefore in Ger's system, there is a greater reliance on concentrates to finish cattle despite the high level of management.

**Take-home message**

The economic figures provided by the profit monitor highlight the importance of higher output in suckler beef systems. For suckler herds to be sustainable, they have to be able to generate an output per hectare in the region of

€1,800 to €2,000. The target for the farms is to keep variable costs below 50% of gross output and ideally at 40% of this value.

Only three farms had a gross margin of €1,000/ha and higher. All three were producing bulls and therefore capable of producing enough liveweight to cover the production costs. The farms on better ground and finishing cattle had higher GM/ha compared to those farms producing weanlings and on more difficult land.

\* Gross margins per hectare do not include fixed costs. Typical fixed costs on suckler farms range from €400/ha to €600/ha and have to be deducted after gross margin is calculated.

increased variable costs in 2013. His stocking rate is more than 1.3 LU/ha higher than the average of the three loweststocked farms.

His farm is producing 919kg liveweight per hectare of land, and even though variable costs increased from €736/ha to €1,064/ha over the past year, GM/ha has only been reduced by €71/ha. The increase in variable cost is solely down to purchased feed last spring.

Both David Walsh and Patrick Drohan are in the early stages of herd expansion. They have additional cows calving into their herds this spring which will increase their stocking rate in 2014 and the number of cattle produced. Although these cattle will not be ready for sale un-

**Table 2: Suckler to weaning**

	Stocking rate (LU/ha)	Output (kg LWT/ha)	Gross output (€/ha)	Variable costs (€/ha)	2013 gross margin/ha	2012 gross margin/ha	% change
Joe Murray	2.27	377	1,628	1,387	241	567	-57
Richard Jennings	2.47	873	2,038	1,417	621	1,069	-42
Sean Coughlan	2.06	715	1,553	1,008	545	814	-33
Tom Halpin	2.09	662	1,488	721	767	637	+20
Niall Patterson	1.82	467	1,200	1,080	120	287	-58
Charlie Crawford	1.77	524	1,325	651	674	503	+34
James Strain	2.42	744	1,698	1,566	132	471	-72
Martin Lenehan	2.18	685	1,189	1,019	170	565	-70
Chris McCarthy	2.20	628	1,394	984	410	721	-43
Billy Gilmore	1.69	581	1,240	544	696	948	-27
Micheal Dillane	1.97	606	1,265	875	390	-100	+490
Average	2.09	624	1,456	1,023	433	589	

**Table 3: Suckler to store**

	Stocking rate (LU/ha)	Output (kg LWT/ha)	Gross output (€/ha)	Variable costs (€/ha)	2013 gross margin/ha	2012 gross margin/ha	% change
David Walsh	1.60	562	1,068	757	311	536	-42
William Treacy	2.95	919	2,058	1,064	995	1,066	-7
Patrick Drohan	1.71	454	964	715	249	351	-29
Michael Smith	1.64	390	915	744	171	551	-69
Sheplands Farm	1.99	626	1,493	1,058	436	591	-26
Tomas Murphy	2.10	735	1,536	758	778	913	-15
Average	1.98	581	1,251	820	432	668	

**Table 4: Suckler to beef**

		Stocking rate (LU/ha)	Output (kg LWT/ha)	Gross output (€/ha)	Variable costs (€/ha)	2013 gross margin/ha	2012 gross margin/ha	% change
Frank Beirne	Bull beef	2.05	781	1,654	1,393	261	510	-49
Adrian Kelly	Bull beef	1.76	653	1,364	859	504	485	+4
Gerard Dineen	Bull beef	2.22	874	1,748	1,193	555	567	-2
Patrick O Reilly	Bull beef	2.31	673	1,583	853	729	1,212	-40
Donie Ahern	Bull beef	2.23	966	2,044	1,124	920	725	+27
Donal Scully	Bull beef	2.73	1,005	2,465	1,465	1,000	534	+87
Cathal Crean	Bull beef	1.90	486	1,622	572	1,050	1,145	-8
Dan Fingleton	Bull beef	2.27	455	1,820	1,537	283	512	-45
Patrick Grennan	Bull beef	2.19	783	1,989	755	1,234	1,467	-16
<b>Bull beef average</b>		<b>2.18</b>	<b>742</b>	<b>1,810</b>	<b>1,083</b>	<b>726</b>	<b>795</b>	
David Mitchell	Steers	1.95	502	1,218	1,054	164	395	-58
Richard Willaimson	Steers	1.87	633	1,239	646	594	678	-12
Mark Maxwell	Steers	1.68	510	1,138	476	662	630	+5
Trevor Minion	Steers	2.00	714	1,552	878	674	631	+7
James Madigan	Steers	2.05	600	1,399	680	720	711	+1
James Kenneally	Steers	2.35	794	1,940	1,066	875	746	+17
<b>Steer average</b>		<b>1.98</b>	<b>626</b>	<b>1,414</b>	<b>800</b>	<b>615</b>	<b>632</b>	
<b>Overall average</b>		<b>2.09</b>	<b>695</b>	<b>1,652</b>	<b>970</b>	<b>682</b>	<b>730</b>	

**Table 5: Store to beef**

	Stocking rate (LU/ha)	Output (kg LWT/ha)	Gross output (€/ha)	Variable costs (€/ha)	2013 gross margin/ha	2012 gross margin/ha	% change
Sean Power	2.36	702	1,768	1,014	754	707	+6
Billy Glasheen	2.15	696	2,034	1,327	707	602	+17

**TERMS EXPLAINED**

⇒ Gross margin - this is calculated by deducting the variable costs from the gross output. It does not include fixed costs (ie machinery running costs, labour, building depreciation, land charges and bank loans). It allows for a fair comparison of farm to farm and system to system as fixed costs are excluded.

⇒ Gross output - the difference in the value of stock on farm at the start of the year and end of the year, plus all cattle sales during the 12-month period and presented as a monetary value.

⇒ Output - the amount of liveweight produced per hectare of land.

⇒ Variable costs - the production costs that are commonly incurred across all farms. They include all grassland costs (fertilizer, grass seed, lime), contractor costs, concentrate costs and veterinary costs.