

Setting new targets for a new era in dairying

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My name is Michael Bateman. I am a dairy farmer from Crookstown in Cork and also a council member of the Irish Grassland Association. It is with my IGA hat on that I present this paper. I would like to acknowledge the input of the people listed below who have contributed to this paper.

This is an Irish Grassland Association initiative, borne out of frustration arising from which are the best figures to present at conferences and farm walks. Confusion exists about what figures mean and what is included or not included in the costs of production. For example, is own labour included or excluded; are costs expressed on a per hectare farmed, per hectare used by the dairy cows or per milking platform hectare? With this in mind, we established a working group composed of agri-business and Teagasc personnel and consultants to discuss and establish the appropriate financial measures for the top farmers in an expanding dairy industry.

Goals of the working group

As a result of our discussions, the goals of the working group were:

1. To identify important farm financial KPIs;
2. Propose them as the industry *Gold Standard*;
3. Present them to the wider industry – today's Conference is our first opportunity to do this;
4. To get 'buy in' from;
 - a. Farmers (from all enterprises);
 - b. Teagasc advisory and research personnel;
 - c. Agri-business personnel working for Irish Banks, agri-consultancy and accountancy firms.

Issues

A number of issues were identified by the working group for further consideration:

1. Land as the major limiting factor on dairy farms;
2. What does the €2,500/ha profit presented as the new Moorepark target really mean and how do farmers' own figures compare with it?

¹ With the help of Laurence Shalloo, Teagasc; George Ramsbottom, Teagasc; John Fitzgerald, Bank of Ireland; Tadgh Buckley, AIB; Mike Brady, Brady Group; Laurence Sexton, IGA council member and dairy farmer; Bernard Ging, IGA council member and dairy farmer; Paul Hyland, IGA council member and dairy farmer.

- a. For example included in the per hectare figures are all hectares farmed;
- b. Also included is a charge for all labour worked including that of the farm family in the costs – not just the cost of hired labour;
3. Identifying important financial KPIs. This objective wasn't seen as important at the start of the discussion by the working group. However, when we analysed the KPIs selected for early Profit Monitor 2017 users, it soon became clear how crucial identifying a small number of important KPIs was for farmers to make progress with their farm businesses;
4. The reports need to be relevant not just for discussion group meetings and farm walks but also for meetings with agri-consultants and banks i.e. the reports need to reflect the tax accounts as closely as possible.

Issues identified and discussed

Issue	Decision
Cash flow vs. net profit	Both are needed in the report
Inventory	Remain the same
Depreciation	Need to be consistent (5%/10%)
Labour	All labour needs to be included (both hired and owned)
Contract rearing	Needs a separate category in the input sheet
Land change	Owned land not included as a cost category
Return on asset	Needs to be generated

Main recommendations

1. Whole farm figures. All output and costs across all enterprises are to be included in the summary and more detailed farm reports. We think that overall hectares farmed give the best picture of the business. For example if the total fertiliser bill is €15,000 then this is the figure that is included wherever it was spread on the farm. These figures will be presented on a total farm and per hectare farmed basis.
2. Stop dividing into fixed and variable costs just total the costs. Total costs include an owned labour charge (the farmer's estimate of hours worked on the farm valued at a rate of €15/hour). The point here is that the line between fixed and variable cost has become very blurred with things such as machinery running, contractor costs and contract rearing. It was felt it would be better just to compare total costs.
3. Return on asset (defined in Laurence Shaloo's paper in this proceedings).
4. Moorepark targets need to be clear. The €2,500 figure outlined at last summer's open day needs to be outlined and broken down for each cost so that farmers can compare themselves to best practice. Laurence Shaloo will address this area in the paper that follows.

Short report

The report presented in Table 1 is an example of the short report which we believe is a good overview of the business, and would bring people up to speed very quickly as to how a farm was performing, combine this with Moorepark targets for same and very quickly you would get a clear picture of the financial performance of a farm.

Table 1. Template of the overall farm financial report for use at future IGA events.

	Total	Per hectare farmed	Moorepark targets
Gross output			6,531
Total costs			4,043
Net profit			2,489
Cash flow			2,740
Return on asset (+SFP)			8%

Profit monitor analysis

After we had completed this paper we returned to the Profit Monitor database to see how the early 2017 Profit Monitor reports compared to our draft report and the Moorepark Targets. The preliminary analysis of 60 spring milk producers are presented in Table 2.

Table 2. Net profit/ha for the first 60 spring milk producers by enterprise category for 2017.

Enterprise	Net profit/ha	No. (%) with the enterprise	Av. no. ha
Dairying	€2,599	60 (100%)	74
Replacement heifer	€149	60 (100%)	22
Other enterprise	€155	35 (58%)	4

The early Profit Monitor completers are specialised dairy farmers with a proportionately large replacement heifer enterprise and practically no other animals on the farm. At first glance it appears that they have achieved the Moorepark target of €2,500/ha. However an own labour charge is not included in the net profit figures quoted, the base milk price of 29 c/litre used in the model is lower than the price prevailing in 2017 and not the net profit figure included in Table 2 is for the land engaged in dairying rather than for the overall farm.

Detailed report

The report presented in Table 3 is an example of the more detailed report which we think will present a more detailed report of the performance of the farm business,

while still allowing users to compare themselves to the Moorepark targets and establish a clear picture of the financial performance of a farm.

Table 3. Template of the detailed farm financial report.

	Total	Per hectare farmed	Moorepark targets²
Output			
Milk sales			5,873
Livestock sales			659
Other sales			
Livestock purchases			
Inventory change			
Gross output			6,531
Costs			
Feed (Concentrate)			294
Feed (Fodder & Bedding)			
Fertiliser, Seeds & Sprays			355
Vet, Med & AI			346
Contractors (silage)			150
Contractors (other incl mach hire)			155
Dairy (incl Parlour & Milk Recording)			131
Electricity			45
Car & Phone			169
Insurance			59
Professional fees			
Machinery Operating Costs (incl Oil)			
General Maintenance & Repairs			140
Sundries & other			100
Contract heifer rearing			606
Labour (Employed)			682
*Labour (Owned)			-
Land rent (incl Rates)			-
Loan interest			224
*Depreciation (buildings)			422
*Depreciation (machinery)			162
Total costs			4,043
Net profit			2,489
*Cash surplus			2,740
Return on assets			8%

Using the summary report outlined in Table 1, the figures presented in Table 4 emerge for the same group of dairy farmers.

² A more detailed explanation of the Moorepark targets is presented in Laurence Shalloo's paper in this Conference proceedings.

Table 4. Short report for a group of 60 spring milk producers for 2017 compared to the Moorepark targets.

	Per ha farmed	Moorepark targets
Gross output	4,563	6,531
Total costs	3,126	4,043
Net profit	1,438	2,489
Cash flow (-depreciation)	1,647	2,740
Return on asset (+SFP)	??	8%

The analysis presented in Table 4 shows that on average the spring milk producers in the analysis had a lower gross output but lower production costs. Despite the higher milk price achieved in 2017 than used in the Moorepark targets, the net profit per hectare farmed was approximately €1,050 per hectare lower than the Moorepark target and cash flow was similarly €1,000 lower per hectare than the Moorepark target. We were unable to generate a return on asset because only a small number of the farmers completed the balance sheet. As in most similar analysis there was a large range in the net profit being generated between farms as shown in Figure 1.

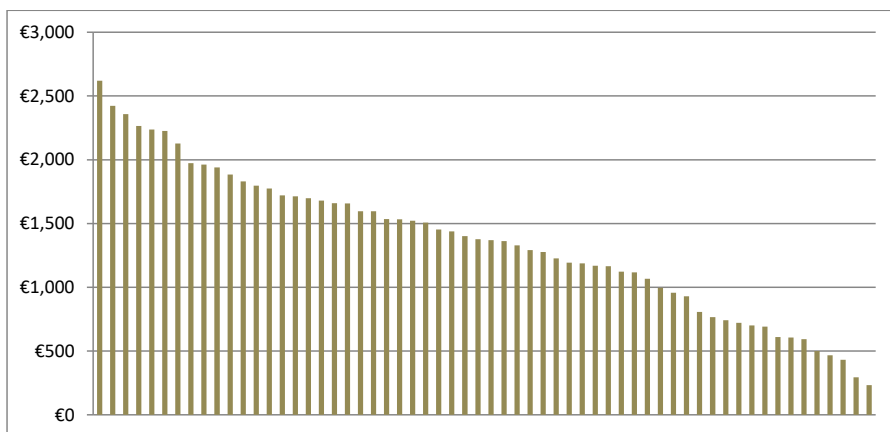


Figure 1. Range in net profit per hectare for 60 specialised spring milk producers in 2017.

Reasons for the net profit shortfall

A number of reasons were identified for the lower level of profitability.

- Approximately 1/3 of the land farmed was rented – all of the land included in the Moorepark model is owned so this would have the effect of lowering the comparable net profit margin.
- In the Moorepark model, all of the land farmed is engaged in milk production – approximately one quarter of the land farmed in our analysis was occupied by

animals other than cows – practically all with replacement heifers. While the overall stocking rate of the group was 2.54 LU/ha, the cow stocking rate on the milking platform was 2.99 cows/ha.

- Costs of production at €3.65/ kg milk solids were €0.70 higher than those in the Moorepark model.
- Grass utilised by the group was 11.3 t DM/ha, while high, was still lower than the Moorepark target of 13.0 t DM/ha.

