

How does your flock perform?

Using performance indicators for increased returns



www.hccmpw.org.uk



Cronfa Amaethyddol Ewrop ar gyfer Datblygu
Gwledig; Ewrop yn Buddsoddi
mewn Ardaloedd Gwledig
The European Agricultural Fund for
Rural Development; Europe Investing in
Rural Areas



Llywodraeth Cymru
Welsh Government

Hybu Cig Cymru / Meat Promotion Wales
Tŷ Rheidol, Parc Merlin,
Aberystwyth, SY23 3FF
Tel: 01970 625050 Fax: 01970 615148
Email: info@hccmpw.org.uk

www.hccmpw.org.uk

November 2011

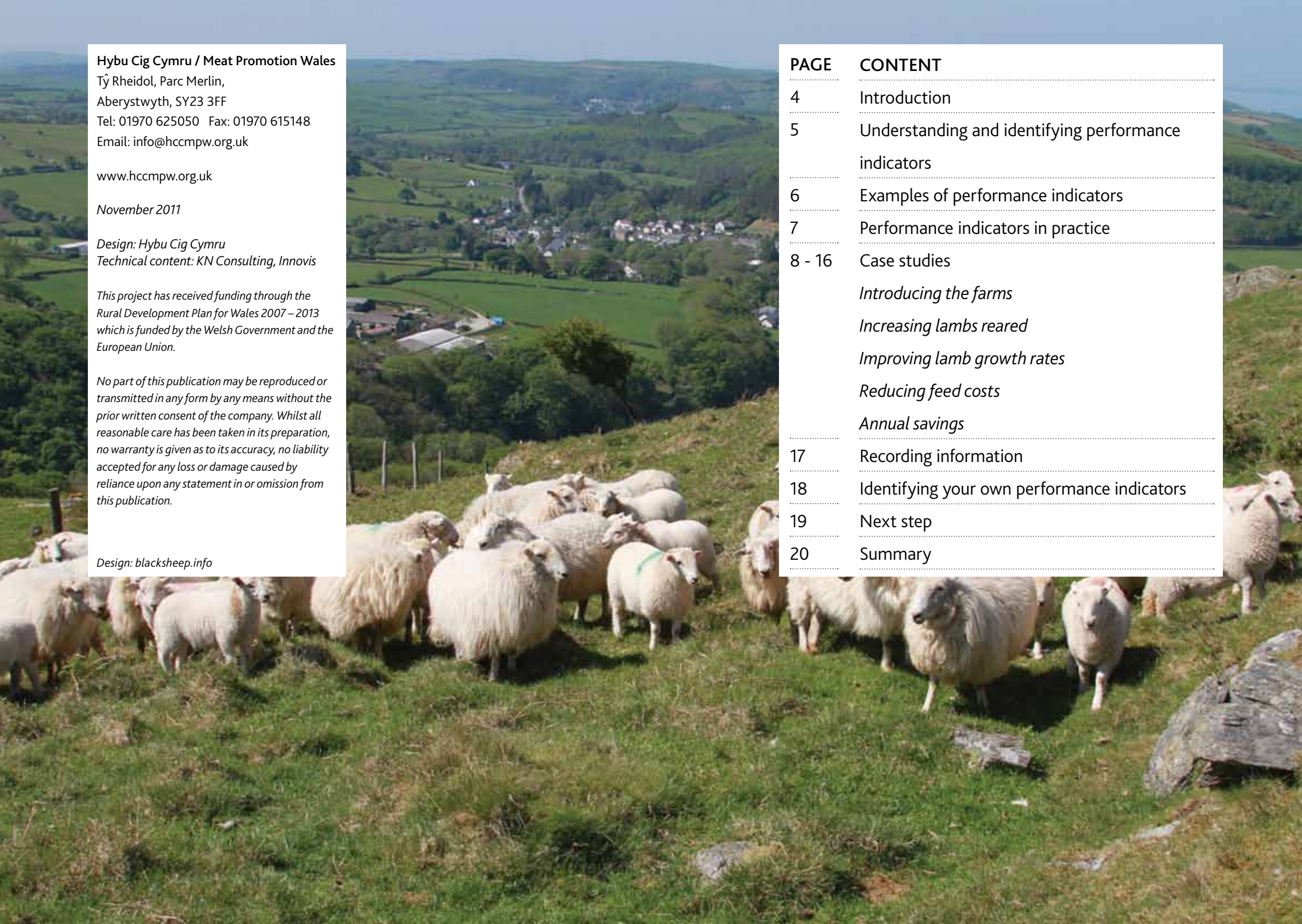
Design: Hybu Cig Cymru
Technical content: KN Consulting, Innovis

This project has received funding through the Rural Development Plan for Wales 2007 – 2013 which is funded by the Welsh Government and the European Union.

No part of this publication may be reproduced or transmitted in any form by any means without the prior written consent of the company. Whilst all reasonable care has been taken in its preparation, no warranty is given as to its accuracy, no liability accepted for any loss or damage caused by reliance upon any statement in or omission from this publication.

Design: blacksheep.info

PAGE	CONTENT
4	Introduction
5	Understanding and identifying performance indicators
6	Examples of performance indicators
7	Performance indicators in practice
8 - 16	Case studies <i>Introducing the farms</i> <i>Increasing lambs reared</i> <i>Improving lamb growth rates</i> <i>Reducing feed costs</i> <i>Annual savings</i>
17	Recording information
18	Identifying your own performance indicators
19	Next step
20	Summary



INTRODUCTION

Improving efficiency of production and the profitability of the farm business is the goal of all sheep producers. Knowing what factors drive profitable production is the foundation of this process.

Performance indicators are one of the most useful tools businesses have available for this purpose. Their use helps to identify problem areas and drive improvements; they can be used to set targets and then monitor performance.

This booklet will demonstrate through practical examples how performance indicators can be used to address three

common issues facing sheep producers;

- * *increasing the number of lambs reared,*
- * *improving lamb growth rates,*
- * *reducing feed costs.*

While this booklet uses three examples there are many different indicators that can be used on the farm and these are explored in greater detail towards the end of this booklet.



UNDERSTANDING AND IDENTIFYING PERFORMANCE INDICATORS

It is widely believed that market prices are one of the biggest factors determining the profitability of lamb production. Market returns can be addressed through time of marketing and meeting buyer specifications. However, it is only by minimising production costs whilst maximising efficiency that long term sustainability can be achieved.

Improving flock profitability starts with considering current performance. The first step is to consider the most recent performance of the business and answer a few questions;

- * *Is the flock making money?*
- * *What are the production costs and how do they compare with other similar businesses?*
- * *Are there any ways that expenditure can be used more efficiently?*
- * *Can the physical performance of the flock be improved to increase returns?*

The flexibility of performance indicators means that there is an endless list of issues which could be considered. In practice the key to making performance indicators work for the business is to identify those which have a direct impact on flock profitability.

Performance indicators should be;

- * Measureable
- * Practical
- * Comparable
- * Important to the business

EXAMPLES OF PERFORMANCE INDICATORS

Performance indicators can consist of financial, physical or health measures

Examples include;

- * Lamb growth rate
- * Concentrate use per ewe
- * Scanning percentage
- * Rearing percentage
- * Number of lambs sold finished off grass
- * Ewe condition score at tugging
- * Incidence of footrot
- * Number of cases of mastitis
- * Percentage of lambs meeting market specification
- * Replacement rates



These examples all demonstrate the range of performance indicators that may be identified for an individual flock. Whilst improving the areas mentioned can lead to reduced costs, improved efficiency or increased income they can also lead to other benefits such as lower labour requirements.

PERFORMANCE INDICATORS IN PRACTICE

Performance indicators should be seen as an aide in the decision making process. Their use can reassure that current management practices offer the best method for profitable lamb production.

Putting performance indicators into practice is a simple five step process.

Step 1: Identifying the issue

- * *Where are improvements needed?*

Step 2: Decide what to measure and how to collect the information

- * *What information is needed and how can this be easily collected?*

Step 3:

Consider the outcome of the measurements

- * *What does the information show? How does this compare with other similar businesses? Are improvements achievable?*

Step 4:

Act on the information collected

- * *Set achievable targets and then implement changes within the business.*

Step 5:

Monitor the results

- * *Are the changes made working? Can further improvements be made?*

To illustrate performance indicators two example flocks have been used which have undergone the process of identifying, monitoring and addressing management changes through monitoring key elements of their flock performance.

INTRODUCING THE LOWLAND FLOCK

- * 120 acre lowland flock
- * 400 crossbred ewes
- * Average ewe weight of 70kg
- * Lambing indoors from mid-February
- * Scanning percentage of 190 – 205%
- * Typically rearing 175%
- * All lambs are creep fed
- * Ewe lamb replacements purchased
- * All ewes mated to terminal sires
- * Lambs are selected for market from early May until the beginning of October



INTRODUCING THE UPLAND FLOCK

- * 400 acre upland/hill flock
- * 950 purebred ewes
- * Average ewe weight of 55kg
- * Lambing outdoors from the beginning of April
- * Scanning percentage of 135 – 150%
- * Typically rearing 125%
- * Lambs pasture reared, late lambs creep fed
- * Ewe lamb replacements retained
- * Ewes mated to pure and terminal sires
- * Most lambs are finished by end of October, remaining lambs sold as stores



INCREASING LAMBS REARED

Reducing disease at lambing

1. Issue

Despite a consistent scanning percentage of 190-205% the number of lambs reared had slowly reduced over the last few years.

2. Measure

During the last lambing season every lamb lost from scanning to weaning was recorded.

3. Outcome

Recording lamb losses showed a total of 168 (or 21%) of lambs failed to survive from scanning to weaning. Of the lambs lost nearly one third was due to watery mouth disease.

4. Action

Discussing ewe management around lambing time with the farm's veterinary surgeon suggested that ewe nutrition could be improved. A change in compound feed led to improved colostrum production. *Improving communication between the members of the family helping at lambing time also meant that a system of ensuring that lambs received sufficient colostrum within two hours of birth was introduced.*

5. Result

Number of cases of watery mouth reduced from 48 to 8 the following year.

Reducing lamb losses increased income by nearly £3,500

INCREASING LAMBS REARED

Improving ram management

1. Issue

The barren rate had increased from the usual 3-4% to over 8% despite there being no change in tupping date or ewe management.

2. Measure

Ewes had been marked according to tupping group and it enabled an inspection of barren ewes to be undertaken.

3. Outcome

Inspection of the groups showed that of the ewes mated to 4 newly purchased rams, 48 (16% barren rate) were empty. Of the remaining 650 ewes there were 26 (4% barren rate) empty ewes.

4. Action

The 4 newly purchased rams were examined and one was found to have abnormally small testicles whilst another had a hard swelling within the scrotum. Of the other 10 flock rams examined a further ram was found to have abnormalities. The 3 rams were culled from the flock. *Following some training by the vet, the farmer carefully examined any ram before purchase and had all rams examined annually 8 weeks pre-tupping.*

5. Result

The number of barren ewes was reduced to less than 3% the following year.

Reducing the barren rate increased income by over £3,000

IMPROVING LAMB GROWTH RATE

Using performance recorded rams

1. Issue

Despite creep feeding the lambs in early spring there were a number of lambs still present on the farm at the beginning of September.

2. Measure

Different coloured raddles were used to note which rams mated with the breeding ewes and a record was kept of each lamb to monitor their growth rate.

3. Outcome

It was clear that lambs from two rams had particularly slow growth rates. Of the 150 lambs left to sell in September over 100 were the progeny of these two rams.

4. Action

When purchasing rams the following season two performance recorded rams were bought that had superior growth rates. These were mated to a group of 180 ewes and their progeny identified at lambing.

5. Result

The lambs from the high index rams showed significantly reduced finishing time with 85% of lambs sold by the fifth of July and the majority of lambs sold by the beginning of September.

Improved lamb growth rate increased profits by over £3,200.

IMPROVING LAMB GROWTH RATE

Introducing new grass varieties

1. Issue

An increased number of lambs were being sold as stores every year rather than as finished lambs.

2. Measure

The farmer kept a record of lambs sold every year and was able to measure if the number of lambs sold finished and as stores had changed over time.

3. Outcome

Records showed that the number of lambs sold as stores had gradually increased from 200 to over 350 in the previous 5 years.

4. Action

Through soil testing a programme of grassland improvement was introduced with the most unproductive fields identified for reseeding. *As part of the reseeding process an emphasis was placed on selecting modern grass varieties for high digestibility values. Maximising clover yields was seen as vital to improving lamb growth rates whilst reducing reliance on nitrogen fertilisers.*

5. Result

Grazing smaller lambs post-weaning on the new reseeds led to improved growth rates and allowed on-farm finishing of an increased numbers of lambs.

Maximising the number of lambs finished on-farm increased flock income by £3,240.

REDUCING FEED COSTS

Lowering concentrate usage

1. Issue

Feed costs, especially ewe concentrates, had increased markedly over the previous three years.

2. Measure

A decision was made to review ewe concentrate fed pre and post-lambing. Records were kept of the amount of feed given to different groups and the length of feeding.

3. Outcome

Feeding normally began 8 weeks pre-lambing for twins and triplets and 6 weeks pre-lambing for singles. Feeding continued until 4-6 weeks post-lambing depending on spring grass.

4. Action

Following discussions with an animal nutritionist it was agreed that the starting point for reducing concentrate costs was to analyse silage quality. *Following the results of silage analysis and the introduction of a strict feeding regime, the following season concentrate use was reduced by 10kg per ewe due to improved silage quality.*

5. Result

Reducing concentrate use lowered feed costs and also had the added benefit of fewer ewes needing assistance at lambing.

Silage analysis and a subsequent reduction in concentrate use led to savings of £900.

REDUCING FEED COSTS

Using a winter forage crop

1. Issue

The cost associated with producing silage had increased considerably. This led to a review of the approach to feeding ewe lambs.

2. Measure

Replacement ewe lambs were traditionally over-wintered on grass and supplemented with concentrates. Silage was introduced from December through to mid-February. A record was kept of the number of silage bales used and the acreage allocated to the ewe lambs.

3. Outcome

Results showed over-wintering the ewe lambs cost over £12 per ewe lamb. This was very high when compared to national figures.

4. Action

A program of reseeded introduced a forage crop to act as a 'break crop' before being re-sown back to a grass ley. *A hybrid rape/kale crop was selected due to its winter hardiness. The crop was utilised from early November through to early February and the area for over-wintering ewe lambs was reduced.*

5. Result

The ewe lambs attained similar growth rates over the winter, gaining 8kg live-weight without the need for silage. An added benefit was that more ground was available for lambing ewes.

The introduction of a forage crop led to savings of £1,080.

From the examples used in the previous pages it can be seen that the following additional income was made through the use of performance indicators

Lowland flock

- * Reducing lamb losses
£3,500
- * Increasing lamb growth rate
£3,200
- * Reducing ewe feed costs
£900

INCREASED INCOME
£7,600

Upland flock

- * Improving ram management
£3,000
- * Improving grassland quality
£3,240
- * Reducing ewe lamb feed costs
£1,080

INCREASED INCOME
£7,320



RECORDING INFORMATION

Making good decisions relies on having the most up-to-date information to hand. Recording this information does not have to be tedious or time consuming:

- * Consider what information is useful – *there is no point keeping detailed records unless they can be of use*
- * Make it as easy as possible to record the information – *carefully filing relevant invoices*

and output records may be appropriate or recording sheets can be created

- * Make it as easy as possible to interpret the records – *whilst information may seem meaningful at the time, 6 months later it is easy to forget what was meant!*

There are many different ways of recording flock performance, all of which have their own advantages and disadvantages.

	ADVANTAGES	DISADVANTAGES
Pen & paper	<ul style="list-style-type: none"> * Cheap * Flexible 	<ul style="list-style-type: none"> * Can be time consuming * Searching for information can be difficult * Analysis needs to be carried out manually
Computer programs	<ul style="list-style-type: none"> * Relatively cheap * Easy to set up simple analysis options 	<ul style="list-style-type: none"> * Requires some technical knowledge of computers
Farm management software	<ul style="list-style-type: none"> * Can be integrated with electronic identification * Often include options for analysis * Can be used to meet legislative recording requirements 	<ul style="list-style-type: none"> * Requires some technical knowledge of computers * Higher cost

Collecting the information is not difficult. Many breeders use a notebook for recording information 'in the field' whilst others are using technology such as hand-held readers or smartphones.

IDENTIFYING YOUR OWN PERFORMANCE INDICATORS

Use this page to identify areas that you could measure within your own sheep enterprise

What area of the farm business could be improved?

1

2

3

What measurements are needed to monitor the physical or financial performance?

1

2

3

What are the targets for improvement?

1

2

3

What changes could be made to meet the targets or from where could the best advice be sought?

1

2

3

THE NEXT STEP

For performance indicators to be really effective it is useful to compare the results with others. *You can compare performance:*

Against targets

Set a target to aim for – how did your results compare? Did you achieve it? If not, are there any other management changes that can be added in next season?

Year on Year

Simply compare performance this season with last season's

performance – is the enterprise going in the right direction? Are any other changes needed?

With other similar businesses

Although national standards are available for comparison, it often helps to discuss results with other similar sheep farming businesses.

Local discussion groups or conversations at the market or in the pub can be really useful to see how neighbours who are farming in a similar terrain, climate and breed mix deal with similar issues.



SUMMARY

- * There are a number of recurring themes which characterise profitable enterprises in any business, these include;
 - *High physical and technical performance*
 - *Control over costs*
 - *Maximum returns from the market place*
- * Evaluating the current business performance is the first step to improving flock profitability
- * Performance indicators are easy ways to set targets and monitor improvements within the flock
- * Accurate information is vital to ensure that the best business decisions are made
- * Increasing flock profitability is the key to a sustainable sheep industry

CONCLUSION

Performance indicators are really easy tools to use as the first stage to evaluate business performance. They can provide significant insight into possible areas of improvements. They can also complement further analysis of the business such as calculating production costs.

Although there are many things within any enterprise that can be measured, **the most valuable ones are those that are key to the success of the business.** *Measuring and acting on these will have the biggest impact.*

Further information on HCC's activities and other relevant publications can be found at www.hccmpw.org.uk