

# Using Figures to Make Money

**SRDP FARM ADVISORY SERVICE**



# Welcome

**New Entrants to Farming Programme (Morayshire & North East)**  
 Castle Hotel, Huntly      Wednesday 7<sup>th</sup> February 2018

 The European Agricultural Fund  
 for Rural Development  
 Europe Investing in Rural Areas

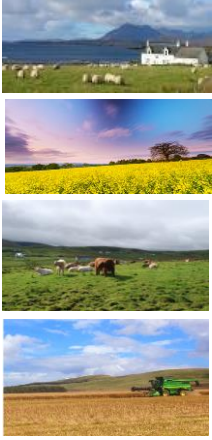
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## Overview


- Setting the scene
- Understand financial aspects of a business
- Techniques to analyse performance
- Tools to assist in making business decisions
- Benchmarking against others

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# What figures do you use and why?


## Physical Figures?

- Crop
  - Yield grain/straw, quality, market
- Grass
  - Yield, stocking density, DM, quality
- Beef
  - DLWG, weaning %, cow vs. calf weight
- Sheep
  - DLWG, condition score, scanning/lambing %



<div><div>Kg of calf weaned per kg cow – average per cow</div><div><div>SRDP</div><div>FARM ADVISORY SERVICE</div></div></div>		
	Farm A	Farm B
Cow weight (kg)	667	595
Calf 200 day wt (kg)	291	336
Efficiency (% of cow kg)	43.6	56.5
<div>What if Farm A’s calves reared was 85% compared to B’s 95%?</div>		
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### Kg of calf weaned per kg cow – herd basis



	Farm A	Farm B
Cow weight (kg)	667 x 100 = <b>66,700</b>	595 x 100 = <b>59,500</b>
Calf 200 day wt (kg)	291 x 85 = <b>24,735</b>	336 x 95 = <b>31,920</b>
Efficiency (% of cow kg)	37.1	53.7

< 39% = low  
40-44% = Moderate  
45-49% = Good  
>50% = Exceptional

So avoid big cows with low calving %'s delivering poor growth rates!

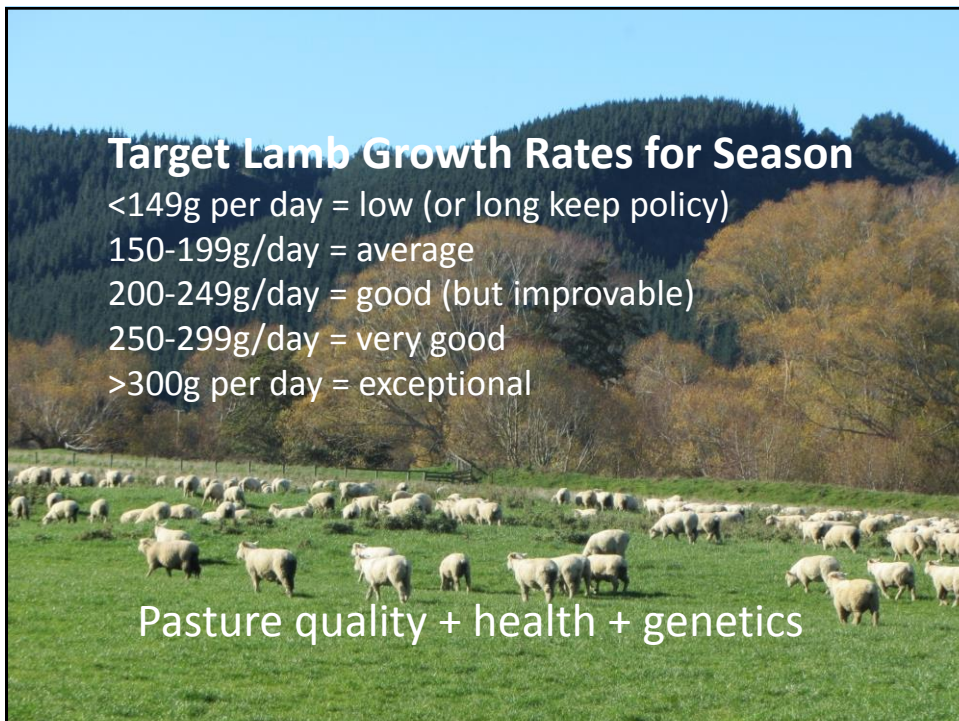
## Ewe Efficiency Birth to Weaning

Weaning target (at 90 days)  
Total lamb lwt as % ewe weight

55-59% = Good  
60-69% = Very good  
> 70% = Excellent









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# Weigh Scales

A key piece of equipment on livestock farms

Remember to calibrate!!!!



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## Recording & Technology



- Collection and logging data only useful if used
  - Otherwise it is pointless!!
- Technology can help speed up the data collection process
  - (e.g. EID tags & reader on weigh crate)
- Begin by collecting simple data and build on it



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## Increase Weight Reared per Farm

Sell more lambs/calves

Healthy lambs/calves growing well

Fewer assisted births

Reduce costs of maintaining barren ewes/cows

Cost of maintaining large ewes/cows

Opportunity to increase stocking density to achieve more output

Big win





Pride

Sanity!

Hidden win

Frustrating?





Opportunity



## Physical + £'s (costs & returns)

# = Economic Efficiency

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## Business Accounts



- Capture in figures your performance
- Three key elements:
  - Cash
  - Profit
  - Capital
- Only the latter two normally shown in accounts



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## Tax Accounts



- A set of accounts prepared at the end of each financial year
  - Used for tax and management purposes
- Tax accounts must contain the following:
  - Profit & Loss Account
  - Balance Sheet
  - Capital Account



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## Profit & Loss Account



- Measure of success over a given period, usually 1 year.
- Main headings you will see:
  - Gross Output
  - Variable Costs
  - Gross Margin
  - Fixed Costs
  - Gross Profit
  - Rent & Finance
  - Net Profit (Loss)



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## Balance Sheet



- Estimation of your business worth at a particular point in time – usually the year end.
- Main headings you will see:
  - Assets – fixed and current
  - Liabilities – Long term and current
  - Net worth – Assets minus liabilities



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## Capital Account



- Often shown on the same page as the balance sheet
- Squares the P&L account with the Balance Sheet
- Balance brought forward (opening balance) + profit – drawings = Net Worth



## Be Aware!!!!



- Accounts only provide a “snapshot” of a business
  - Look for trends (i.e. view over a few years)
  - Look for seasonal fluctuations (e.g. overdraft)
- Tax (not management) accounts
  - Costs aggregated
  - Adjustments made for debtors, creditors, prepayments and accruals
  - Valuations (livestock, land etc.)
- Historical



## Financial Evaluation Techniques



- Profit and Loss Analysis
- Balance Sheet Analysis
- Cash Needs
- Benchmarking Tools
  - Gross Output Analysis
  - Comparative Analysis
  - Enterprise & Technical Performance Analysis



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## Budgeting



- Prediction of what will happen to the business when you implement your business plan.
- Things to think about:
  - How much income & costs are you expecting
  - What your expected profits and losses will be
  - How much external funding you may need (if any)
  - What you can offer against security against loans (if required)



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## Partial Budgets



- Used for a quick analysis to assess viability of a business change or investment.
- Work through example....



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## Worked Example



The weather forecast is not looking very good for the months ahead.

I am wondering whether to sell my lambs as store this week, or finish them and sell them fat.

**What do you think?**

Use a partial budget to help you to decide.




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## The Power of Partial Budgeting







- To

**Additional Revenue**  
+  
**Costs Saved**



**Revenue Forgone**  
+  
**Additional Costs**



## Partial Budgets - Big Decisions



- Change enterprise mix on-farm
- Put up a new building
- Buy the farm next door







## Guiding Principles



- Two big economic tests
  - Worthwhileness (profitability)
  - Feasibility (capital needs, cash flow)
- But also consider:
  - Riskiness
  - Practicality (e.g. skills)
  - Personal preferences



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## Guiding Principles



- With-without approach
- Use realistic assumptions
  - Physical performance
  - Prices, costs, timescales
  - Sources of information
- Always do some “what-if” to test risk
  - Worst case scenario
  - Critical success factors



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## Note!



For big decisions that typically involve help from the bank, a formal business plan is usually required.



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## Benchmarking



- Compare figures to similar farm businesses
- Starting point = whole farm
- Then drill down into individual enterprises
- Learn from neighbours & improve performance
- Use numbers as a decision making tool



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## FarmBench



- AHDB's new farm benchmarking tool
  - Whole farm analysis
  - Individual enterprises
- Remember: Rubbish in = Rubbish out!!!!
- Useful to discuss figures in a group setting to put the figures into context



<https://farmbench.ahdb.org.uk/>



- FREE & available to all farmers in the UK

The screenshot shows the FarmBench website homepage. At the top left is the FarmBench logo. To the right is a navigation bar with links: Home, FAQs, Contact, Case Studies, and User Guides. Below these links is a Helpdesk contact: farmbench.support@ahdb.org.uk | 024 7647 8599. On the far right of the navigation bar are links for Register and Log in. The main body of the page features a large, scenic photograph of rolling green hills under a blue sky with scattered clouds. Overlaid on the top left of this image is the text "Unearth your strengths" in a bold, dark font. At the bottom of the page, a white box contains the text: "Farmbench helps you to understand and compare your full costs of production at both enterprise and whole-farm level."

## Carbon Audit



- Farms with a low carbon footprint are usually the most efficient (& profitable)
- A carbon audit will:
  - establish your carbon footprint
  - identify the sources of emissions on your farm
  - show you how your performance compares with others
  - highlight areas where you can improve your farm's operational efficiency.



## Carbon Audit



- Repeat annually to monitor performance and identify the impact of the changes you make
- Funding available, up to £500, from FAS to carry out carbon audit
  - Can apply once per year
- <https://www.fas.scot/carbon-audits/>



# Useful Information



- <https://www.gov.uk/guidance/farm-business-and-financial-planning>
- <http://www.qmscotland.co.uk/cattle-and-sheep-enterprise-profitability-scotland-2017-edition>
- [www.fas.scot](http://www.fas.scot)



# Thank You



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