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Arable Monitor Farm (Angus)

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Report on Meeting held 15th January 2009

**Business Analysis and
Machinery Replacement decisions**

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TOP TIPS FROM MEETING

There is a systematic way to look at machinery replacement decisions. Use a Partial Budget to structure up the numbers and aid your thinking. It will give you a simple financial comparison, but you then need to add the wider considerations which are difficult to quantify, such as timeliness, to finalise your decision.

INTRODUCTION

The meeting took place at the Carmyllie Hall 9.30–1.00pm and was supported by 35 members present. The programme was as follows:

Programme;

1. Update from Hugh
2. Combine replacement decision
3. Market Update
4. Whole farm review
5. Collaborative supply chains support
6. Lunch
7. Practical demonstration – new potato grading line

2. Combine Replacement Options (Peter Cook)

2.1 What is the issue?

- Current combine is old (worth £26,000 trade-in and is in its 15th season) for acreage it now covers
- Only 14 foot cut
- Expanded area in 2004, but didn't increase combine capacity
- Need contract help. Own combine does roughly 550 acres, contractor does 150 acres)
- Option of replacing with second hand NH CX880 (double the capacity), price £104,000
- Alternatively go for an even bigger and newer option, JD combine for £180,000.

2.2 What are the Options?

- Do nothing
- Buy the bigger second hand combine
- Buy the even bigger new combine
- Share with a neighbour
- Contract combine the whole lot
- Lease or hire for harvest only

2.3 How do we do the comparison of options?

First decide what we are comparing the options against; the "Do Nothing" Status Quo option. Its cost can be estimated as follows.

	£ per annum
1. Capital Cost of keeping this combine	
(a) Depreciation (if we assume 9 or 10 year life left in the machine, currently valued at £26,000 trade-in, possibly £30,000 if sold private, after which it will be worth nothing)	3,000
(b) Interest on capital tied up in the combine £26,000 @ 6%	1,560
	4,560
2. Running Costs	
Repairs/ maintenance (based on records)	4,150
Insurance	520
Fuel	2,200
	6,870
Total annual cost of existing combine	11,430
Contract cost 150 acres @ £32/acre	4,800
Total cost to harvest 700 acres	£16,230
Cost per acre	£23

This excludes labour.

The above gives us a baseline and some cost details to use in the appraisal of alternative options.

Option 1. Buy the bigger second hand NH combine and don't use any contract.

Will this be more profitable?

GAINS	£	LOSSES	£
Extra Revenue		Revenue Foregone	
1. Capacity to do some contract?	?		
2. Better average quality	?		
Costs Saved		Extra Costs	
1. Total running cost of old combine and contractor 700 acres @ £23/acre	16,100	1. Capital cost of new combine	
		<u>Depreciation</u> £104,000 - £26,000 = £78,000 Estimate 8 years on farm, so annual depreciation is £78,000/8	9,750
		<u>Interest (on half the capital as assume it is gradually paid back)</u> Average investment £78,000/2 @ 6%	2,340
2. Less drier fuel, as combine more in best weather	?	2. Running costs of new combine. Repairs/ maintenance Fuel (12litre/ac @ 45p on	5,500 3,780

		700ac) Insurance	1,500
		3. Need to invest in bigger trailer capacity	?
Total Gains	£16,100	Total Losses	£22,870

Net reduction in annual profit from purchase of the new combine is **£6,770 (almost £10 per acre)**

Other Considerations;

Pluses

- Life of combine underestimated?
- Much less risk of a costly breakdown (none in the warranty period)
- Driver tied up for less time – one group estimated this was worth £4/acre?
- Grain losses reduced?
- Less fuel used for drying?
- Better grain quality?
- Technology capability updated e.g. GPS yield mapping, etc
- Capacity to do contract work in some seasons?
- Loss is only £2.20 per acre = worth it for benefits listed above

Minuses

- Ability to finance this capital cost?
- Relationship with current contractor gives flexibility
- Still ties up a worker – could use a contractor and free up labour

Option 2. Contract all combining

Will this be more profitable?

GAINS	£	LOSSES	£
Extra Revenue		Revenue Foregone	
Costs Saved		Extra Costs	
Costs of existing system 700 acres @ £23/ acre	16,100	Contractor 700 acres @ £35/acre	24,500
Labour saving 18 days @ 8 hours/day @ £15/hour	2,160		
Total Gains	18,260	Total Losses	24,500

Net reduction in annual profit is around £6,240

Other considerations;

Pluses

- Can budget ahead on exact cost. Much more uncertainty if have own machine e.g. potential breakdown cost
- Brings in bigger, better machine than existing own machine
- Value of labour saving may be underestimated, as it might allow other valuable work to be done faster e.g. establishing rape

Minuses

- Timeliness? Need to wait? But on this acreage you are more likely to get priority service??
- Lack of control over own time and quality?

Option 3. Buy bigger new JD combine and do some contract

GAINS	£	LOSSES	£
Extra Revenue		Revenue Foregone	
1. Contract work 300 acres @ £35/ acre	10,500		
2. Better average quality	?		
Costs Saved		Extra Costs	
1. Total running cost of old combine and contractor 700 acres @ £23/acre	16,100	1. Capital cost of new combine <u>Depreciation</u> £180,000 - £26,000 = £154,000 Estimate 12 years on farm, so annual depreciation is £154,000/12	12,830
		<u>Interest (on half the capital as assume it is gradually paid back)</u> Average investment £154,000/2 @ 6%	4,620
2. Less drier fuel, as combine more in best weather	?	2. Running costs of new combine. Repairs/ maintenance Fuel (12litre/ac @ 45p on 700ac, fuel supplied on contract) Insurance	4,000 3,780 1,500
		3. Need to invest in bigger trailer capacity	?
		4. Extra labour if do contract work	?
Total Gains	26,600	Total Losses	26,730

This option gives a break-even result – no change in profits.

Other considerations;

Pluses

- Capacity to cope with a bad harvest year
- All the benefits of speed – drier crop as get more in the best weather, better quality, get next crop in faster, ties labour up for less time
- All the benefits of a new machine in terms of technology – GPS, etc
- Warranty
- Tax benefits of new purchase?
- Scope to do contract work

Minuses

- Financing the capital cost. Better uses of the capital?
- Doing contract work needs management time, and could require a lot of extra labour time if lots of small jobs and geographically widespread
- Contract is competitive – will the rates used above be secured?
- Do you want to be involved in contract or just in best management of your own business?

3. Crop Market Update (Charlie Birnie)

Charlie Birnie, Commercial Director, Grainco Scotland, provided the Group with a verbal market overview.

Key points:

- Prices have improved largely due to the weakening of sterling £, making UK gain more competitive
- Market for wheat has firmed, although still weak demand
- The global recession reducing consumption of all commodities and impacting on prices
- Been some fund money activity in France
- Estimated hedge funds lost \$480bn in 2008 in the grain markets – this will affect their future involvement
- Unlikely intervention will come into play this season now
- still a lot of grain on farm to sell.
- Advice would be for those with grain to sell, take opportunity at first rally and sell some
- All consumers are rolling grain forward – taking later delivery – not using the quantities they anticipated
- Today's market prices are being set by the new crop autumn prices
- OSR prices follow the crude oil price, which have dropped from highs of last year. Biofuel is the main use of OSR oil.
- The area of winter OSR down by 15-20% in the UK.
- The price differential between wheat – barley is currently £18/t, however harvest prices predict this to fall to £11/t.
- Would pay to carry over any unsold grain till autumn, however, there are risks in terms of quality.
- Malting barley contracts are still not out – the delay is caused by the Distillers. Contracts are expected to be in region £130 -£140/t

- There is a concern over the large area of English malting barley which would over hang the Scottish malting barley market.
- Some old crop winter barley also sold for next year – so will reduce new crop requirements
- The global recession is impacting on distillers and the demand for whisky

Table 1 Cereal Prices

	Current Ex-farm	Nov 2009
Wheat	£110	£125
Malting barley	£	£145*
Feed barley	£92	£114
OSR	£331	£248

Source: Charlie Birnie Jan 09

Key: * = low N 1.55% - Harvest Movement

4 Review Whole Farm Business (Jim Booth)

We had a quick look at the whole business at the start of the project but now, in the 2nd year of the project the Group, are better placed to review the business. We now have a good understanding of the farm, land capability, the buildings, machinery, enterprise mix, the rotation, the system, yields, crop performance, approach to marketing, etc.

Key questions to consider

Should James and Hugh think about changing the shape of the business?

Change the enterprise mix?

Would they change the marketing policy?

Where are the areas for improvement?

Is there spare capacity for any diversification?

Is there scope for growth?

After reviewing the latest financial accounts for the business, the group considered strengths, weaknesses and options.

Strengths

- Land quality/ soil – easily worked, flexibility
- Owned land = security
- Scales and yet compact
- High output
- Marketing success, especially 2007 crops
- Willing to stand back and consider strategy
- Ambition and willing to take risks
- Good average profits over time
- Good return on tenants capital (19% averaged over years analysed)
- Not subsidy reliant
- Labour cost is within targets
- Shown ability to service debt
- Technically good, variable costs under control/ getting good return
- Excellent facilities; weighbridge and big stores (9,000t)

- Staff – number and quality
- Youth!
- Well tooled up = capacity

Weaknesses

- Fixed charges (total of tattie rents and interest). Not horrendous, but a big burden to be covered before can make profit.
- Highly geared = need output and margin
- Volatility of output value and profit between years
- Power costs a bit above target levels
- Recent cost increases e.g. taken on extra man (though saved some ring labour)
- Potato sales tied mainly to one outlet
- Rape yields been disappointing
- Reliance on tatties
- Youth good, but need more experience

Strategy/ Focus/ Options

- Good business, so basically need only to fine tune
- Look for a bit of diversification (given dominance of one main crop), which fits with the farming operations
- Look at property options (on farm – the Newton site, off farm look to investment?)
- Tatties scale okay, but rotation a problem
- Build the grain storage business
- Review potato seed versus ware balance; more seed contracts and less volatility?
- Review management demand between cereals and tatties – free some time by pool or sub-contract marketing of grain?
- Approaching a crossroads on the grain side? Face combine and drill decisions. Should Hugh look at cooperating with someone on the grain side so can get benefits of real scale, and concentrate more management effort on the tatties?

5 Collaborative Supply Chain Project

Rona Sutherland, Supply Chain Development Manager with SAOS, briefly described a major three-year project SAOS are leading with support from the Scottish Government and the European Union.

The project aims to :

- raise awareness of the benefits of collaboration across the whole supply chain and create a change in behaviour in the sector
- help develop trust and openness in supply chains
- help deliver long-term, fair and sustainable business success for all involved
- help develop a set of principles which characterise a well organised and successful supply chain and which will be communicated across the sector
- create a self-help resource through the open exchange of information and knowledge

What do we mean by collaboration?

We mean working in partnership. Businesses must be competitive, but there are always situations where co-operating with others makes more business sense. The critical element is working with other partners in the supply chain for mutual benefit.

The main benefits of Collaborative Supply Chains include:

- are more market focused
- respond more quickly to market changes and opportunities
- communicate better and share information openly, leading to better business planning
- are more efficient
- are more likely to be competitive and more successful in the long term
- are more likely to develop joint products
- are open to shared problem solving, shared investment, and shared business risk
- having better access to new markets

SAOS are looking to help anyone in the supply chain, although the project will target mainly farmers, other primary producers, co-operatives and processors. Other major stakeholders include distributors, wholesalers, foodservice operators, retailers, public procurement organisations, the government, levy bodies and trade organisations.

What will businesses gain from the project?

Businesses can access advice, knowledge, expertise, information and self-help tools. Some will have the opportunity to take part in supply chain development projects. Anyone who becomes involved will find ways to make their business more efficient and more profitable. SAOS and its partners will deliver the project in a practical and responsive manner and offer expertise and useful resources.

If anyone is interested in finding out more about the project please contact Rona Sutherland on Tel 01360 850763 or alternatively Jim Booth on 01651 843607

Date of next meeting

The next meeting will take place on Tuesday 24th February and will focus on making the most from redundant farm buildings and cottages. Although the residential and commercial property market is struggling at present nevertheless this may be a good time to think about developing surplus property. James and Hugh are looking to develop the steading at the Newton of Carmyllie so we will look at the options and implications there.

6 Practical demonstration of new potato grading line

After lunch, those members interested stayed on to look at the new potato grading line which was recently installed at Backboath.