Farm Efficiency and Rural Aid Schemes













Kara Craig, SAC Consulting Perth

New Entrants, Inverness



Friday 10 March 2017



Agenda

- Record keeping
- Benchmarking
- LUNCH
- Subsidies
- Grants

















Why Keep Records?



- Traceability
- Food safety & animal health



- Flock/herd performance (physical & financial)
- Inspections check keepers comply with ID & traceability law (EU & Scottish)







What records do you keep?











What records do you keep?



- IACS Single Application Form (SAF)
- Nitrate Vulnerable Zone (NVZ) records
- Livestock movement records
- Spray records
- Purchase and disposal of veterinary medicines
- Livestock medicine records (incl. dog)
- Sheep annual inventory
- Agricultural survey and census returns
- HMRC business annual taxation accounts, personal tax returns, VAT returns
- Employment national insurance (NI), pay as you earn (PAYE), pensions
- Insurance personal, employers, public
- Health and safety
- Quality assurance
- Animal health plan
- Nutrient management plan

- Farm waste management plan
- Crop records
- Pest control
- Livestock breeding records
- Calving and lambing records
- Livestock/crop performance records
- Livestock reconciliations
- Livestock feed use records
- Machinery records
- Training records
- Property repairs inventory
- SEPA licences e.g. sheep dipping, waste disposal, water abstraction/irrigation
- Enterprise financial records
- Complaints record
- Biosecurity plan
- Risk assessments
- Emergency contacts







Benchmarking



- How do we assess enterprise performance
- Identify the key performance indicators
- Identify what makes top performing farmers successful
- Identify the most important areas for improvement in your enterprise







How do you benchmark?











Benchmarking information



- Farm Management Handbooks SACC, ABC, John Nix, Farm Office H'book, Organic Farm H'book
- QMS http://www.qmscotland.co.uk/publications
- AHDB http://beefandlamb.ahdb.org.uk/returns/tools/kpi-calculators/
- SG http://www.gov.scot/Topics/Statistics/Browse/Agriculture-
 Fisheries?utm_source=website&utm_medium=navigation&utm_campaign=statistics-topics
- Fertbench http://www.fertbench.com/
- SAHPS https://www.sahps.co.uk/
- BES https://www.ruralpayments.org/publicsite/futures/topics/all-schemes/beef-efficiency-scheme/
- FAS https://www.fas.scot/
- Yourself!
- The competition!







Marginal gains



- Small improvements in a number of areas can add up to a substantially more profitable enterprise – 1% here, 1% there
- Work out where you are now and where you want to be, the gap
- Measure everything you do to:
 - Keep things consistent
 - Reduce risk
 - Pay attention to inputs
- What if marginal gains are not enough?



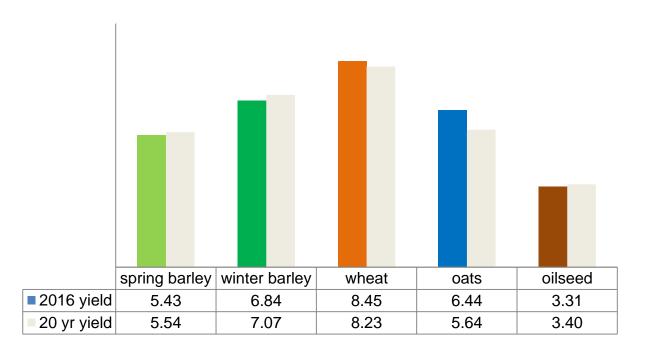




Crop data



- Yield
 - Grain
 - Straw
- Margin
 - Seed
 - Fert
 - Sprays
- Price
- Nitrogen
- Screenings









Cattle benchmark targets



Item	Detail	Measurement
Herd fertility	Calving percentage	% calves reared per 100 cows/heifers in herd
	Compact calving	% cows and heifers calving in first 3 weeks (start of calving defined as 285 days after bulls in)
Minimising calf losses	Calf losses	<3% of calves born alive to weaning
Cow efficiency		Av weight calves weaned per 100kg of cow weight – adjusted to 200 days
Cow/bull replacement	Bulls	Lifetime numbers of calves reared
	Cows	Lifetime number of calves reared
Optimum daily lwt/dwt gain		Average kg/day
Minimising feed costs	Store/finishing	p/kg liveweight gain
Reducing labour costs		Calves reared per labour unit







Targets for herd fertility



Item	Target	Definition
Barren cows	< 5%	
Cows calving	95%	Cows and heifers to bull
Calving in first 3 weeks	65%	Of cows calving (start of calving 285 days from bulls in)
Bulling period	9 weeks	Cows
	6 weeks	Heifers
Calf mortality	< 3%	Of calves born alive
Calves reared	94%	Of cows/heifers to bull
Difficult calvings	< 5%	Requiring assistance, no caesarians







Cow Efficiency



	Farm A	Farm B
Calving %	85	95
Cow weight (kg)	$667 \times 100 = 66,700$	$595 \times 100 = 59,500$
Calf 200 day wt (kg)	$291 \times 85 = 24,735$	$336 \times 95 = 31,920$
Efficiency (% of cow weight)	37.1	53.7

< 39% = low

40-44% = Moderate

45-49% = Good

>50% = Exceptional









Sheep benchmark targets



	Hill	Upland	Lowland
% Scanning	135%	190%	195%
% Ewes barren	5%	2%	2%
% Ewes sold cull	13%	14%	14%
% Ewes & gimmers died	2%	2%	2%
% Lambs born alive	130%	165%	180%
% Lambs marked	123%	155%	170%
% Lambs weaned	121%	152%	167%
% Lamb mortality (birth-marking)	7%	10%	10%
% Lamb mortality (marking-weaning)	2%	3%	3%
% Lamb mortality (birth-weaning)	9%	13%	13%
% Lamb mortality (weaning-sale/tfer)	2%	2%	1%
Total number of lambs sold/retained	120%	150%	165%







Ewe Efficiency



- Calculate the weight of lambs reared (sold and retained)
 - Lambs per ewe
 - Wt of each lamb
- Divide by the ewe weight at mating
- Target is to achieve 1 to 1 ratio or 100%
- Targets to weaning
 - -55-59% = Good
 - 60-69% = Very good
 - > 70% = Excellent







Lamb growth rate targets



<149g per day = low (or long keep policy)

150-199g/day = average

200-249g/day = good (but improvable)

250-299g/day = very good

>300g per day = exceptional







Exercise











LFA upland ewe flocks - financial performance measures

	Bottom Third	Average	Top Third
Number in sample	11	33	11
Flock size	575	525	458
		£ per ewe	
Lamb sales	91.44	101.29	115.76
Wool	3.37	2.90	2.79
Gross Output	94.81	104.19	118.54
Less replacement costs	14.17	13.10	11.24
Net Output	80.63	91.09	107.30
Variable Costs			
Purchased concentrates	11.81	10.75	12.00
Home-grown concentrates	0.30	0.27	0.29
Other feeds	3.84	2.11	1.34
Forage	7.81	8.19	7.89
Total feed and forage	23.76	21.32	21.51
Veterinary	8.72	8.97	8.54
Bedding	0.81	1.02	0.65
Other costs	9.50	8.62	8.68
Total Variable Costs	42.79	39.94	39.38
Gross Margin	37.84	51.16	67.92
Fixed Costs			
Labour	10.79	9.65	8.17
Contractors	3.59	4.69	4.39
Power and machinery	9.83	9.79	10.48
Property maintenance and rent	11.61	10.44	9.97
Depreciation	11.17	9.06	6.71
Finance	2.11	2.16	4.05
Administration	3.33	3.33	3.69
Total Fixed Costs	52.43	49.11	47.46
Net Margin	(-)14.58	2.04	20.46
Flock replacements – Pence per kg lamb	25	22	17
produced	25	22	1/
Variable cost – Pence per kg lamb produced	75	66	60
Fixed cost – Pence per kg lamb produced	92	81	73
Unpaid family labour hours	1hr 20min	1hr 10min	1hr 5min
			•



LFA upland ewe flocks - technical performance

	Bottom Third	Average	Top Third
Ewes per ram	28	32	33
Ewe mortality %	5.2	5.2	4.5
Ewe replacement rate %	24.3	22.9	16.1
Lambs born dead or alive per 100 ewes	160	169	174
Lamb mortality (inc. born dead) %	19	20	15
Lambs reared per 100 ewes	141	149	159
Average weight of lambs – kg	40.56	40.56	40.98
Weight of lamb produced per ewes – kg	57.27	60.44	65.07
Purchased concentrates – kg/ewe	44	47	65
Home-grown concentrates – kg/ewe	2	2	2
Lambs sold finished per 100 ewes	90	106	128
Value per lamb – £/head	67.19	67.59	69.91
Lambs sold/transferred store per 100 ewes	34	21	3
Value per lamb – £/head	51.90	53.93	55.57
Lambs sold/transferred for breeding per 100 ewes	17	22	28
Value per lamb – £/head	79.20	82.58	87.03
CO _{2e} kg/net lwt kg produced	13.7	12.7	11.5

Source: QMS Cattle and Sheep Enterprise Profitability in Scotland 2016 Edition







Benchmarking information



- Farm Management Handbooks SACC, ABC, John Nix, Farm Office H'book, Organic Farm H'book
- QMS http://www.qmscotland.co.uk/publications
- SG http://www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/Publications
- Fertbench http://www.fertbench.com/
- SAHPS https://www.sahps.co.uk/
- BES https://www.ruralpayments.org/publicsite/futures/topics/all-schemes/beef-efficiency-scheme/
- FAS https://www.fas.scot/
- Yourself!
- The competition!







Lunch











Rural Aid Schemes



Pillar I:

- BPS including Greening
- Young Farmer Scheme
- National Reserve
- Voluntary Coupled Support
 - SSBSS
 - SUSSS







Rural Aid Schemes



Pillar II (SRDP):

- Less Favoured Area Support Scheme (LFASS)
- Agri-Environment Climate Scheme (AECS)
- Forestry Grant Scheme (FGS)
- New Entrant Support Schemes
 - Young Farmers Start-up Grant Scheme
 - New Entrant Start-up Grant Scheme
 - New Entrant Capital Grant Scheme
- Beef Efficiency Scheme (BES)
- Crofting Agricultural Grant Scheme (CAGS)







Rural Aid Schemes



Pillar II (cont'd):

- Croft House Grant Scheme
- Small Farms Support Scheme
- Food Processing, Marketing and Co-operation Scheme
- Knowledge Transfer and Innovation Fund (KTIF)
- Environment Co-operation Action Fund
- SRDP Farm Advisory Service (FAS)
- Leader
- Broadband







Young Farmers Start-Up Grant



- A 'bursary' type grant of €70,000 (~£59,000)
- Need to have started (become head of holding) in past
 18 months and be under 41 at point of application
- Need 3 ha minimum and...
 - Standard output of €10,000 €600,000 e.g. at least 9 cows + calves or 100 ewes + 25 followers
- Application form, evidence and business plan required









1. Business History	Score
New business and holding purchased/leased on open market	16
New business and holding created from split of existing holding/business	5
Continued business and existing holding	0

2. Business Composition	Score
Sole trader or all partners/shareholders in business meet Young Farmer criteria	12
All partners/shareholders are new to the farming business but some partners/shareholders do not meet the Young Farmer criteria	8
Some partners/shareholders are not new to the farming business and some partners/shareholders of business do not meet the Young Farmer criteria	4
Some partners/shareholders (including Young Farmer(s)) of business have a continued interest in another agricultural business	0









3. Previous Grant Award	Score
No member of the business has received a Young Farmers establishment	
grant / interest rate relief under the previous programme or already received	0
start up grant under this programme	
One or members of the business has / have received a Young Farmers	
establishment grant / interest rate relief under the previous programme or	-5
already received start up grant under this programme	

4. Priority Sector	Score
Organic Farming	2
Beef Farming	2
Crofters	2

5. Training	Score
Relevant training needs identified in the business plan	1
No relevant training needs identified in the business plan	0









6. Value for money – private investment (PI) in business of other non-public funding by applicant – new business	Score
No private investment	0
PI of 1% - 9% of grant requested	2
PI of 10% - 19% of grant requested	4
PI of 20% - 29% of grant requested	6
PI of 30% - 39% of grant requested	8
PI of 40% - 49% of grant requested	10
PI of 50% - 59% of grant requested	12
PI of 60% - 69% of grant requested	14
PI of 70% - 79% of grant requested	16
PI of 80% - 89% of grant requested	18
PI of 90% - 99% of grant requested	20
PI of > 100% of grant requested	30









7. Value for money – private investment (PI) in business of other non-public funding by applicant – existing business	Score
No private investment	0
PI of 1% - 9% of grant requested	1
PI of 10% - 19% of grant requested	2
PI of 20% - 29% of grant requested	3
PI of 30% - 39% of grant requested	4
PI of 40% - 49% of grant requested	5
PI of 50% - 59% of grant requested	6
PI of 60% - 69% of grant requested	7
PI of 70% - 79% of grant requested	8
PI of 80% - 89% of grant requested	9
PI of 90% - 99% of grant requested	10
PI of > 100% of grant requested	15









8. Effect of Investments on Standard Output (SO) of business	Score
All the proposed investments in the business plan will enhance the SO of the business	4
Some of the proposed investments in the business plan will enhance the SO of the business	2
None of the proposed investments in the business plan will enhance the SO of the business	0







YF Start-Up Grant Summary



- Score of 20 points was needed previously for approval
- Think carefully about other business implications if considering business split or new business (e.g. tax and BPS entitlements)
- Demand is strong for this so scoring requirement unlikely to drop







New Entrant Capital Grant Scheme



- Grant of up to £25,000 for individuals (40-80% grant rate based on age, LFA or NLFA)
- Up to £125,000 for formally constituted groups (up to 90% grant rate)
- Eligible capital expenditure includes buildings, improvement of buildings, handling pens etc
 - must be NEW
 - doesn't include purchase of livestock, purchase of land, regulatory requirements (e.g. planning fees)





New Entrant Capital Grant Scheme































New Entrant Capital Grant Scheme Summary



5 key requirements:

- Need to submit a SAF
- Need agricultural qualification or a testimony (e.g. vet)
- At least 5 years left on a tenancy if tenant
- Have been head of the holding for less than 5 years
- Hold 25% capital share in the business



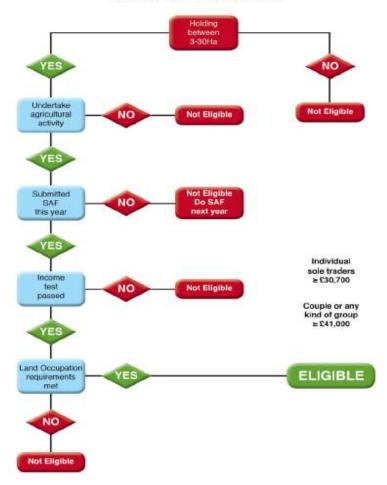




Small Farms Grant Scheme



Small Farms Grant - Are You Eligible?









Agri-Environment Climate Scheme



- Management and capital
 - Arable options
 - Grassland options
 - Upland, peatland, moorland and heath options
 - Wetland and bog options
 - Farmland habitat and feature options
 - Small unit options
 - Control of invasive non-native species options
 - Managing water quality and flood risk options
 - Organic options
 - Public access options
- Opportunity to improve infrastructure and add value to 'poorer' areas of the farm





SRDP Farm Advisory Service



- Part of the Scottish Rural Development Programme (SRDP) which is co-funded by the EU and the Scottish Government
- A £20 million programme providing information and resources aimed at increasing the profitability and sustainability of farms and crofts
- www.fas.scot







How does the Farm Advisory Service help farmers, crofters and small holders?



- Grants (one to one)
 - ILMPs, specialist advice, mentoring for new entrants, carbon audits
- Events and publications (one to many)
 - Workshops, training, conferences, FMH, TNs, newsletters, guidance, reports
- Crofts and small farms
 - subscription service

National Advice Hub
T: 0300 323 0161
E: advice@fas.scot
W: www.fas.scot













FAS Funding



- ILMPs
 - 80% (up to a maximum of £1,200) of the costs
- Two specialist advice plans (per plan)
 - 100% of costs, up to £1,000 (public good)
 - 50% of costs, up to £500 (improved farm efficiency)
- Carbon audits
 - £500 per audit (per year)
- Mentoring new entrants
 - £250/day/mentee (1 mentor = 2 mentees)







FAS New Entrants Support



Under FAS, the Scottish Government have put measures in place to provide advice on:

- how to effectively enter and survive in the industry
- the skills required
- the support measures available







Crofts & Small Farms Advisory Service



- Crofts & Small Farms (<30ha)
- Annual subscription costs £69 + VAT (£82.80) including:
 - 2 hours advice
 - technical notes
 - newsletter
 - meetings/demonstrations
 - Farm Text



https://www.fas.scot/crofters-small-farms/







Scholarships & Bursaries



- Tesco Future Farmer Foundation
- McDonalds Progressive Young Farmer
- Mains of Loriston Charitable Trust
- The Moredun Foundation Scholarship
- Border Union Agricultural Society
- Royal Highland & Agricultural Society of Scotland







Take home messages











Thank You









