StocktakeReport

Formerly Business Pointers

2013

This document involves costings for English cattle and sheep enterprises in the year ending 31 March 2013

Stocktake.

Glossary of abbreviations

DA – Disadvantaged Area

DLWG – Daily Liveweight Gain

DM – Dry Matter

Dwt – Deadweight

Kg – Kilogrammes

LFA – Less Favoured Area

FW – Fresh Weight

LU – Livestock Unit

Lwt – Liveweight

SDA – Severely Disadvantaged Area

Stocktake.

Contents

Key to profitability is in your costs

Welcome to the first edition of Stocktake – or the 11th edition of EBLEX's Business Pointers.

Over the past 10 years, Business Pointers has firmly established itself as the invaluable reference document for beef and sheep meat producers in England to compare their farming enterprise costs with others in the sector. The aim is to highlight areas of the business that are performing well and those where there is scope to improve net margins.

This year marks a change for the report following the establishment, by EBLEX, of the in-house benchmarking project, Stocktake. This system collected on-farm data from a range of farms and enterprises with production years ending in the period of April 2012 to March 2013. It means we can now include a wider range of data, especially relating to physical factors, allowing producers to better gauge their performance against these benchmark enterprises.

The Stocktake report presentation of this information for the different beef and sheep enterprises follows a similar format to the successful Business Pointers, so should remain easy to follow, but with additional commentary to give it more context.

What we have seen over the last two years is that some things, notably the weather and some input costs, remain out of our control. We can, though, influence most other factors which have a bearing on the bottom line, including physical performance and variable costs. Ensuring that we are performing at optimal levels in these areas should ensure that businesses are best placed to cope with other areas of volatility.

Results for the average performing enterprises continue to be mixed. All cattle and sheep enterprises have returned improved net margins compared to previous years and top third net margins are positive, except in the case of lowland suckler herds.

Analysis of enterprise costs continues to show that a key driver is fixed costs and that top third producers in all beef and sheep enterprises spend significantly less on fixed costs than average performing enterprises. This continues to be a key focus area for producers seeking to improve their net margins.

It is important to point out that this report includes the full economic margins for beef and sheep farm enterprises only. In the whole-farm picture, there are a number of other income streams that help make farms viable when beef and sheep enterprise margins may not be showing strong returns, including Single Farm Payments, Environmental Stewardship Payments, diversification and other farm income.

We hope you find this Stocktake report useful. We would welcome your feedback via www.eblex.org.uk where you can also access a range of free information to help improve efficiency in areas identified as having room for improvement.

John Cross
EBLEX Chairman

Suckler cow enterprises kept on land defined as non-LFA by Defra. The grass areas can range from short and long-term leys to permanent pasture and the output from the suckler herd is a calf at weaning.

Lowland Suckler Herds

- Both average and top third herds recorded negative margins
- There is a net margin difference of £178 between the average and top third
- Higher gross output accounts for 36% of the difference, due to higher calf value
- Top third had lower barren cow percentages, lower replacement costs and heifers calving for the first time at a younger age
- Lower fixed costs accounted for nearly 60% of the difference between top and average performers
- Main contributors to lower fixed costs were lower rental, contractor and paid labour costs
- Calving performance was likely compromised by poor weather and potentially increased disease prevalence

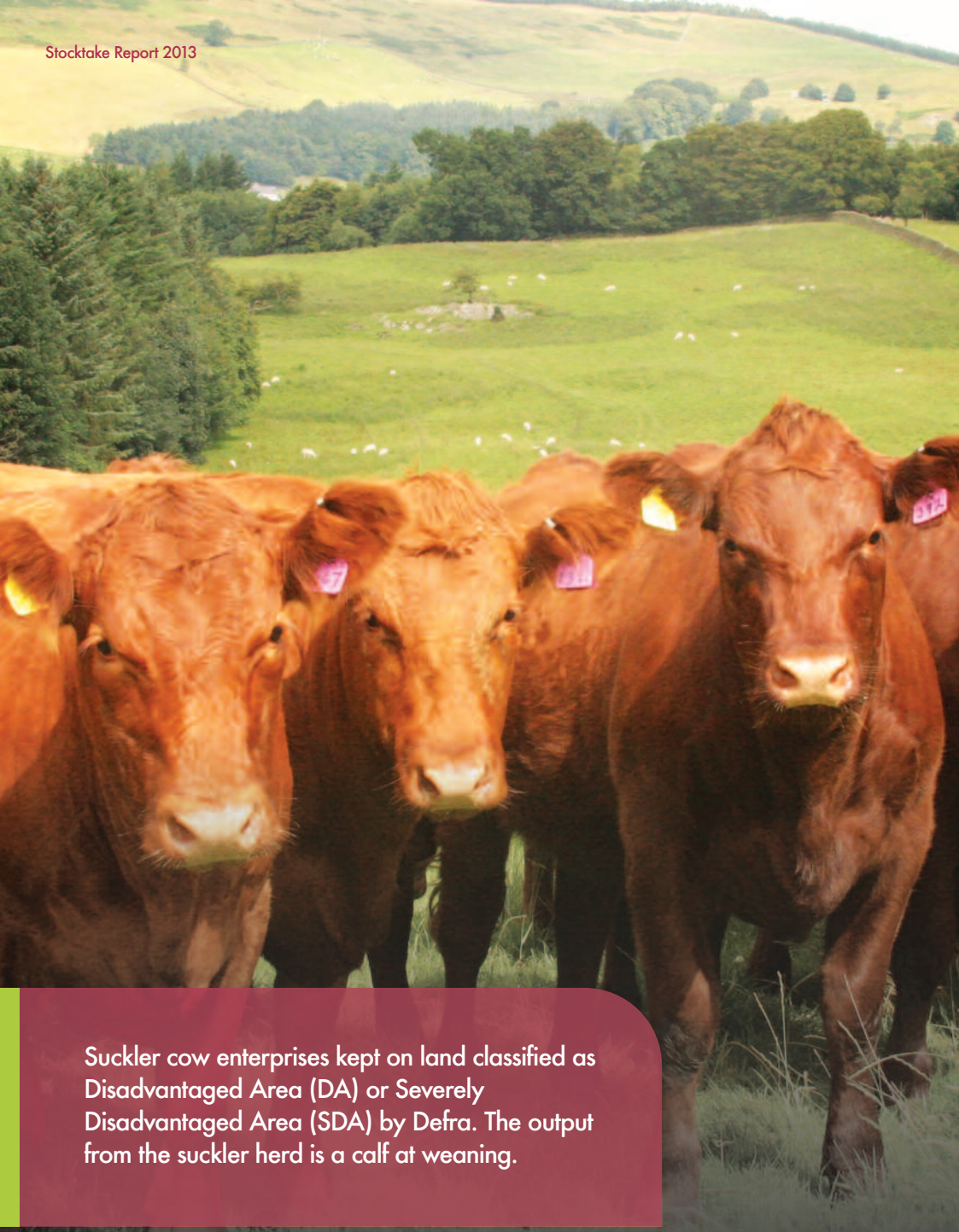
Financial performance (£ per cow to bull)

	Average	Top Third
Number of herds in sample	39	13
Average herd size (cows to bull)	101	113
Calf output	508.39	554.78
Other	9.62	6.79
Gross Output	**518.02**	**561.57**
Replacement costs (incl. incoming calves)	31.31	10.29
Output less replacement costs	**486.71**	**551.28**
Variable Costs		
Purchased feed including minerals	28.79	53.67
Home-grown feed	15.15	17.62
Purchased forage	55.73	48.74
Home-grown forage variable costs	41.48	27.76
Total feed and forage	***141.15***	***147.78***
Vet and medicine	32.80	24.74
Bedding	40.91	36.57
Other livestock expenses	20.16	19.62
Total variable costs	**235.02**	**228.71**
Gross Margin	**251.69**	**322.57**
Fixed Costs		
Labour – paid	67.91	45.23
Labour – unpaid	76.16	74.32
Machinery repairs and spares	23.31	24.00
Contracting	33.45	12.87
Fuel	28.77	20.04
Electricity	2.07	1.71
Property maintenance and water	24.48	13.85
Depreciation	55.11	43.31
Land rent (imputed and actual)	126.41	94.87
Imputed finance costs	32.57	33.21
Overheads	18.18	17.47
Total fixed costs	**488.41**	**380.86**
Net Margin (including imputed costs)	**-236.72**	**-58.29**

An explanation of how the data is compiled can be found on page 50.

Physical performance

	Average	Top Third
Average number of cows/heifers to bull	101	113
Cow to bull ratio	30	30
Age at first calving		
Herds 2 year policy (%)	37	42
Herds 2.5 year policy (%)	47	50
Herds more than 2.5 year policy (%)	16	8
Scanning percentage (%) per cow/heifer to bull	92	94
Calves born alive per 100 cows/heifers to bull	85.7	86.2
Calves born dead per 100 cows/heifers to bull	3.5	3.5
Calves died after birth per 100 cows/heifers to bull	1.7	1.8
Calves weaned per 100 cows/heifers to bull	84	84.3
Empty cows/heifers (%)	7.2	5.7
Cow mortality (%)	1.8	1.6
Herd replacement rate (%)	15.3	14.9
Average age at weaning (days)	229	230
Average weight at weaning (kg per head)	294.6	292.7
Daily liveweight gain to weaning (kg per day)	1.1	1.1
Return per calf (£ per head)	605	657
Calf price (£ per kg lwt)	2.05	2.24
Weaned calves sold at weaning	8	7
Weaned calves retained at weaning	92	93
Total FW cow concentrate use (kg per cow)	409	521
Average concentrate cost (£ per tonne)	157	143
Total FW forage (kg per cow)	4102	2727
Total DM forage (kg per cow)	1667	1390
Creep feed per calf weaned (kg per calf)	20	23
Number of full grazing weeks	29.9	28.7
Stocking rate (LU per ha)	1.41	1.74
Inorganic nitrogen use (kg per ha)	30.6	30.3
Labour use – paid hours per cow	5.7	4.5
Labour use – unpaid hours per cow	7.7	7.5



Suckler cow enterprises kept on land classified as Disadvantaged Area (DA) or Severely Disadvantaged Area (SDA) by Defra. The output from the suckler herd is a calf at weaning.

Less Favoured Area (LFA) Suckler Herds

- Top third herds made a small positive margin of almost £8 per cow put to the bull
- There is a net margin difference of nearly £190 between the average and top third
- Higher output accounts for 11% of the difference, mainly due to more calves born and weaned, and lower replacement costs
- Top third herds have heifers calving for the first time at a younger age
- Lower variable costs accounted for 21% of the difference with lower cow concentrate usage, creep feed usage and bedding costs
- Lower fixed costs accounted for nearly 68% of the difference
- Main contributors to lower fixed costs were lower rental, depreciation and labour (both paid and unpaid) costs

Financial performance (£ per cow to bull)

	Average	Top Third
Number of herds in sample	28	9
Average herd size (cows to bull)	67	91
Calf output	578.42	572.58
Other	1.59	0.00
Gross Output	**580.00**	**572.58**
Replacement costs	67.81	39.73
Output less replacement costs	**512.20**	**532.86**
Variable Costs		
Purchased feed including minerals	51.37	32.30
Home-grown feed	2.14	3.46
Purchased forage	19.32	29.32
Home-grown forage variable costs	54.03	45.44
Total feed and forage	***126.85***	***110.52***
Vet and medicine	35.67	33.97
Bedding	25.50	13.10
Other livestock expenses	21.00	11.14
Total variable costs	**209.02**	**168.74**
Gross Margin	**303.19**	**364.12**
Fixed Costs		
Labour – paid	30.99	25.94
Labour – unpaid	100.21	61.59
Machinery repairs and spares	28.37	16.80
Contracting	19.80	12.94
Fuel	27.33	22.41
Electricity	2.58	1.26
Property maintenance and water	18.88	10.37
Depreciation	95.24	78.27
Land rent (imputed and actual)	107.41	77.70
Imputed finance costs	40.02	37.82
Overheads	14.41	11.42
Total fixed costs	**485.24**	**356.52**
Net Margin (including imputed costs)	**-182.06**	**7.59**

An explanation of how the data is compiled can be found on page 50.

Physical performance

	Average	Top Third
Average number of cows/heifers to bull	67	91
Cow to bull ratio	30	30
Age at first calving		
Herds 2 year policy (%)	36	50
Herds 2.5 year policy (%)	56	50
Herds more than 2.5 year policy (%)	8	0
Scanning percentage (%) per cow/heifer to bull	95.1	94.5
Calves born alive per 100 cows/heifers to bull	90.6	92.5
Calves born dead per 100 cows/heifers to bull	2.5	1.7
Calves died after birth per 100 cows/heifers to bull	2.6	2.2
Calves weaned per 100 cows/heifers to bull	88.1	90.3
Empty cows/heifers (%)	6.6	6
Cow mortality (%)	1.9	0.9
Herd replacement rate (%)	16.1	13.7
Average age at weaning (days)	246	244
Average weight at weaning (kg per head)	286	260
Daily liveweight gain to weaning (kg per day)	1	0.9
Return per calf (£ per head)	649	630
Calf price (£ per kg lwt)	2.27	2.43
Weaned calves sold at weaning (%)	16	10
Weaned calves retained at weaning (%)	84	90
Total FW cow concentrate use (kg per cow)	161	78
Average concentrate cost (£ per tonne)	194	235
Total FW forage (kg per cow)	5212	4830
Total DM forage (kg per cow)	1630	1421
Creep feed per calf weaned (kg per calf)	69	59
Number of full grazing weeks	27.7	30.1
Stocking rate (LU per ha)	0.86	1.44
Inorganic nitrogen use (kg per ha)	30.4	46.2
Labour use – paid hours per cow	3.2	2.6
Labour use – unpaid hours per cow	9.7	5.9

Further analysis of the LFA enterprises into those in Disadvantaged and Severely Disadvantaged Areas (DA/SDA). The land classification is as identified by Defra and an enterprise is allocated to the land classification it grazes and/or uses on the farm.

Disadvantaged Areas/Severely Disadvantaged Areas

- Both DA and SDA recorded negative margins on average
- DA herds achieved a lower negative margin with higher output, lower variable and fixed costs than SDA herds
- Increased output in DA herds was driven by the number of calves born and reared, with lower cow and calf mortality and lower replacement costs than SDA herds
- Lower variable costs in DA herds were due to lower cow concentrate and calf creep usage and lower bedding costs
- Lower fixed costs in DA herds were driven mainly by lower labour hours

Financial performance (£ per cow to bull)

	DA	SDA
Number of herds in sample	6	22
Average herd size (cows to bull)	94	60
Calf output	599.35	569.47
Other	0.00	2.27
Gross Output	**599.35**	**571.74**
Replacement costs	30.76	83.65
Output less replacement costs	**568.59**	**488.09**
Variable Costs		
Purchased feed including minerals	28.18	61.28
Home-grown feed	7.14	0.00
Purchased forage	3.93	25.90
Home-grown forage variable costs	58.36	52.18
Total feed and forage	***97.61***	***139.35***
Vet and medicine	39.18	34.17
Bedding	10.15	32.06
Other livestock expenses	21.00	21.00
Total variable costs	**167.93**	**226.58**
Gross Margin	**400.66**	**261.51**
Fixed Costs		
Labour – paid	21.98	34.85
Labour – unpaid	63.34	115.98
Machinery repairs and spares	15.14	34.04
Contracting	19.40	19.97
Fuel	27.05	27.45
Electricity	2.31	2.69
Property maintenance and water	9.10	23.06
Depreciation	121.37	84.06
Land rent (imputed and actual)	108.01	107.15
Imputed finance costs	42.56	38.93
Overheads	12.40	15.27
Total fixed costs	**442.64**	**503.46**
Net Margin (including imputed costs)	**-41.98**	**-241.95**

An explanation of how the data is compiled can be found on page 50.

Physical performance

	DA	SDA
Average number of cows/heifers to bull	94	60
Cow to bull ratio	30	31
Age at first calving		
Herds 2 year policy (%)	50	32
Herds 2.5 year policy (%)	50	58
Herds more than 2.5 year policy (%)	0	10
Scanning percentage (%) per cow/heifer to bull	95.5	95
Calves born alive per 100 cows/heifers to bull	95.4	88.6
Calves born dead per 100 cows/heifers to bull	0.7	3.3
Calves died after birth per 100 cows/heifers to bull	1.2	3.1
Calves weaned per 100 cows/heifers to bull	94.1	85.4
Empty cows/heifers (%)	3.7	7.8
Cow mortality (%)	1.2	2.2
Herd replacement rate (%)	12.6	17.6
Average age at weaning (days)	259	240
Average weight at weaning (kgs per head)	263	297
Daily liveweight gain to weaning (kg per day)	0.86	1.07
Return per calf (£ per head)	634	655
Calf price (£ per kg lwt)	2.41	2.21
Weaned calves sold at weaning (%)	0	23
Weaned calves retained at weaning (%)	100	77
Total FW cow concentrate use (kg per cow)	65	202
Average concentrate cost (£ per tonne)	216	191
Total FW forage (kg per cow)	4967	5316
Total DM forage (kg per cow)	1465	1701
Creep feed per calf weaned (kg per calf)	45.6	80
Number of full grazing weeks	26.7	28.2
Stocking rate (LU per ha)	1.62	0.72
Inorganic nitrogen use (kg per ha)	66	24
Labour use – paid hours per cow	1.85	3.76
Labour use – unpaid hours per cow	5.81	11.34

The enterprises are a combination of the suckler cow herd and the related beef enterprises on the same farm. The calves may be finished at any age and the suckler herds kept on non-LFA and LFA areas.

Combined Rearer/Finisher Herds

- Compared to the previous year, higher sales prices contributed to better output from the combined rearer/finisher herds
- Higher costs than the previous year, with feed and forage costs nearly £50 higher on a per cow basis
- Producers have tried to control higher feed costs through the lower use of compound feed, with nearly as much purchased by-products used as purchased compound feed
- At 60%, fixed costs make up the greatest proportion of total costs, with labour, depreciation and land being the largest components

Financial performance (£ per cow to bull)

	Average
Number of herds in sample	22
Average herd size (cows to bull)	119
Calf sales	943.74
Other	5.39
Gross Output	**949.13**
Replacement costs	43.18
Output less replacement costs	**905.95**
Variable Costs	
Purchased feed including minerals	133.13
Home-grown feed	80.52
Purchased forage	17.65
Home-grown forage variable costs	71.10
Total feed and forage	***302.40***
Vet and medicine	40.63
Bedding	79.21
Other livestock expenses	43.44
Total variable costs	**465.68**
Gross Margin	**440.27**
Fixed Costs	
Labour – paid	161.28
Labour – unpaid	61.99
Machinery repairs and spares	36.27
Contracting	34.33
Fuel	44.19
Electricity	4.90
Property maintenance and water	47.82
Depreciation	106.10
Land rent (imputed and actual)	153.85
Imputed finance costs	59.96
Overheads	44.08
Total fixed costs	**754.77**
Net Margin (including imputed costs)	**-314.50**

An explanation of how the data is compiled can be found on page 50.

Physical performance

	Average
Cow to bull ratio	27
Age at first calving	
Herds 2 year policy (%)	47
Herds 2.5 year policy (%)	40
Herds more than 2.5 year policy (%)	13
Scanning percentage (%) per cow/heifer to bull	92
Calves born alive per 100 cows/heifers to bull	89
Calves born dead per 100 cows/heifers to bull	2
Calves died after birth per 100 cows/heifers to bull	4
Calves reared per 100 cows/heifers to bull	85
Empty cows/heifers per 100 cows/heifers to bull	8
Cow mortality (%)	2
Herd replacement rate (%)	18
Average age at weaning (days)	251
Average age at disposal (days)	558
Average weight at weaning (kgs/head)	287
Average liveweight at disposal (kgs/head)	565
Daily liveweight gain birth to disposal (kg per day)	0.94
Average carcase weight (kgs)	334
Calf return per head finished (£)	1150
Calf return per head store (£)	868
Liveweight sale price all disposals (£/kg lw)	1.97
Liveweight sale price: finished cattle (£/kg lw)	1.95
Deadweight sale price: finished cattle (£/kg dwt)	3.45
% finished	86
% store	14
Total FW cow concentrate use (kg per cow)	264
Total FW forage (kg per cow)	4331
Total DM forage (kg per cow)	1598
Total FW calf concentrate use (kg per calf)	1289
Total FW forage (kg per calf)	4044
Total DM forage (kg per calf)	1413
Inorganic nitrogen use (kg per ha)	41
Labour use – paid hours per cow	20
Labour use – unpaid hours per cow	11

The focus of these systems is to finish the animals quickly, often with a reliance on cereal and by-product feeds in addition to forage to ensure correct rumen function.

Beef Finishing (up to 16 months)

- Some animals were sold as stores rather than incur further costs to finish
- Higher output prices than previous year but lower net output due to higher purchase price
- Similar total variable costs to previous year, but lower concentrate use
- Lower fixed costs than previous year due to lower labour costs and lower power and machinery costs
- Lower average finish weights than previous year, but at similar average carcase weights

Financial performance (£ per head output)

	Average
Number of enterprises in sample	14
Average head of output	85
Cattle output	1124.77
Other	0.00
Gross Output	**1124.77**
Beef enterprise purchase costs	581.64
Output less purchase costs	**543.13**
Variable Costs	
Purchased feed including minerals	201.70
Home-grown feed	18.02
Purchased forage	2.27
Home-grown forage variable costs	13.48
Total feed and forage	***235.47***
Vet and medicine	14.38
Bedding	39.88
Other livestock expenses	28.12
Total variable costs	**317.84**
Gross Margin	**225.28**
Fixed Costs	
Labour – paid	52.92
Labour – unpaid	11.00
Machinery repairs and spares	9.47
Contracting	3.93
Fuel	13.53
Electricity	1.64
Property maintenance and water	15.59
Depreciation	30.84
Land rent (imputed and actual)	12.32
Imputed finance costs	18.86
Overheads	27.56
Total beef enterprise fixed costs	**197.66**
Net Margin (including imputed costs)	**27.62**

An explanation of how the data is compiled can be found on page 50.

Physical performance

	Average
Mortality (%)	1.5
Average age at start (days)	220
Average age at disposal (days)	447
Feeding period (days)	227
Average liveweight at start (kg)	283
Average liveweight at disposal (kg)	560
Daily liveweight gain (kg per day)	1.22
Average carcase weight (kg)	346
Purchase value per head (£)	573
Return per head finished (£)	1174
Return per head store (£)	793
Purchase price (£ per kg lwt)	2.02
Liveweight sale price all disposals (£ per kg lwt)	2.01
Liveweight sale price: finished cattle (£ per kg lwt)	2.02
Deadweight sale price: finished cattle (£ per kg dwt)	3.39
Finished (%)	87
Store (%)	13
Output heifers (%)	23
Output steers (%)	11
Output bulls (%)	66
Total FW concentrate use (kg per head)	931
Average concentrate cost (£ per tonne)	201
Total FW forage (kg per head)	1799
Total DM forage (kg per head)	574
Number of full grazing weeks	0
Inorganic nitrogen use (kg per ha)	201
Stocking rate (LU per ha)	2.87
Labour use – paid hours per head	52.92
Labour use – unpaid hours per head	11

These systems often include a grass grazing period and/or a reliance on forage as part of the ration. The prime object of the system is to sell animals finished.

Beef Finishing (16 months and over)

- There is a net margin difference of nearly £220 between the average and top third producers
- Lower variable costs accounted for nearly 19% of the difference between average and top third
- Main contributors to lower variable costs were lower feed and forage costs, and bedding costs
- Lower fixed costs accounted for 32% of the difference, mainly due to lower paid labour and rent costs
- Top third producers sold more cattle finished at slightly lower average weights than average
- Key physical indicators for top third producers were lower labour use, higher stocking rates and lower feed usage

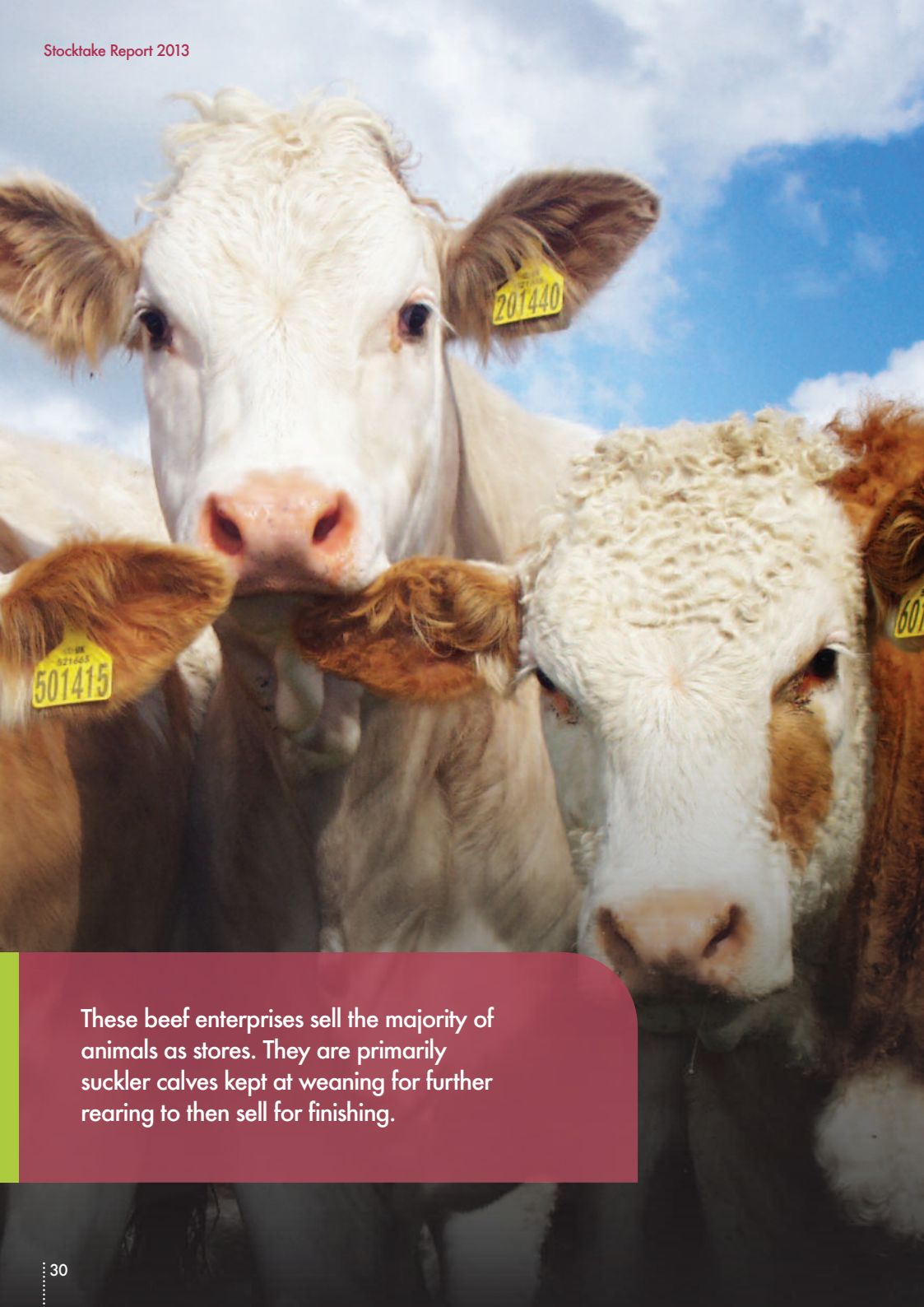
Financial performance (£ per head output)

	Average	Top Third
Number of enterprises in sample	31	10
Average head of output	45	55
Cattle output	1145.40	1134.45
Other	1.42	3.29
Gross Output	**1146.82**	**1137.74**
Beef enterprise purchase costs	630.90	514.83
Output less purchase costs	**515.92**	**622.91**
Variable Costs		
Purchased feed including minerals	73.32	77.08
Home-grown feed	59.39	26.94
Purchased forage	8.04	17.82
Home-grown forage variable costs	28.62	20.69
Total feed and forage	***169.37***	***142.54***
Vet and medicine	13.19	13.77
Bedding	40.41	24.34
Other livestock expenses	33.06	33.80
Total variable costs	**256.02**	**214.45**
Gross Margin	**259.90**	**408.46**
Fixed Costs		
Labour – paid	72.62	41.88
Labour – unpaid	29.79	26.80
Machinery repairs and spares	18.23	14.81
Contracting	9.03	4.78
Fuel	20.30	22.62
Electricity	2.78	2.15
Property maintenance and water	30.98	23.12
Depreciation	58.73	52.97
Land rent (imputed and actual)	43.40	24.89
Imputed finance costs	27.65	29.50
Overheads	35.20	33.92
Total beef enterprise fixed costs	**348.70**	**277.43**
Net Margin (including imputed costs)	**-88.81**	**131.03**

An explanation of how the data is compiled can be found on page 50.

Physical performance

	Average	Top Third
Mortality (%)	0.6	0.9
Average age at start (days)	305	293
Average age at disposal (days)	622	617
Feeding period (days)	317	324
Average liveweight at start (kg)	339	332
Average liveweight at disposal (kg)	589	582
Daily liveweight gain (kg per day)	0.79	0.77
Average carcase weight (kg)	326	320
Purchase value per head (£)	596	510
Return per head finished (£)	1166	1149
Return per head store (£)	945	832
Purchase price (£per kg lwt)	1.80	1.63
Liveweight sale price all disposals (£ per kg lwt)	1.88	1.79
Liveweight sale price: finished cattle (£ per kg lwt)	1.95	1.96
Deadweight sale price: finished cattle (£ per kg dwt)	3.57	3.60
Finished (%)	91	95
Store (%)	9	5
Output heifers (%)	54	57
Output steers (%)	44	43
Output bulls (%)	2	0
Total FW concentrate use (kg per head)	790	672
Average concentrate cost (£ per tonne)	151	125
Total FW forage (kg per head)	3379	2800
Total DM forage (kg per head)	1170	1019
Number of full grazing weeks	15	16
Inorganic nitrogen use (kg per ha)	51	76
Stocking rate (LU per ha)	1.56	2.85
Labour use – paid hours per head	72.62	41.88
Labour use – unpaid hours per head	29.79	26.80



These beef enterprises sell the majority of animals as stores. They are primarily suckler calves kept at weaning for further rearing to then sell for finishing.

Store Rearers

- There is a net margin difference of over £80 between the average and top third producers
- Higher net output accounts for nearly 63% of the difference, driven by higher returns and lower purchase costs
- Lower fixed costs accounted for 36% of the difference between average and top third
- Main contributors to lower fixed costs were lower unpaid labour costs and lower depreciation
- Top third producers had higher stocking rates and higher daily liveweight gains

Financial performance (£ per head output)

	Average	Top Third
Number of enterprises in sample	28	9
Average head of output	63	99
Cattle output	870.19	880.38
Other	0.40	0.00
Gross Output	**870.59**	**880.38**
Beef enterprise purchase costs	532.95	489.31
Output less purchase costs	**337.63**	**391.06**
Variable Costs		
Purchased feed including minerals	72.36	65.26
Home-grown feed	11.03	16.32
Purchased forage	4.52	5.49
Home-grown forage variable costs	9.57	13.69
Total feed and forage	***97.49***	***100.75***
Vet and medicine	10.28	13.52
Bedding	26.23	16.37
Other livestock expenses	30.97	34.98
Total variable costs	**164.97**	**165.63**
Gross Margin	**172.67**	**225.44**
Fixed Costs		
Labour – paid	26.64	37.33
Labour – unpaid	38.87	18.82
Machinery repairs and spares	11.51	8.62
Contracting	6.44	4.40
Fuel	13.58	14.45
Electricity	1.32	1.18
Property maintenance and water	16.68	16.39
Depreciation	39.17	27.73
Land rent (imputed and actual)	18.56	17.54
Imputed finance costs	15.72	15.43
Overheads	30.85	27.66
Total beef enterprise fixed costs	**219.35**	**189.56**
Net Margin (including imputed costs)	**-46.68**	**35.88**

An explanation of how the data is compiled can be found on page 50.

Physical performance

	Average	Top Third
Mortality (%)	0.7	0.7
Average age at start (days)	248	227
Average age at disposal (days)	430	429
Feeding period (days)	183	201
Average liveweight at start (kg)	286	269
Average liveweight at disposal (kg)	442	454
Daily liveweight gain (kg per day)	0.86	0.92
Purchase value per head (£)	529	486
Return per head all disposals (£)	870	880
Purchase price (£ per kg lwt)	1.84	1.80
Liveweight sale price all disposals (£ per kg lwt)	1.97	1.94
Finished (%)	8	15
Store (%)	92	85
Output heifers (%)	50	48
Output steers (%)	49	52
Output bulls (%)	1	0
Total FW concentrate use (kg per head)	916	1035
Average concentrate cost (£ per tonne)	84	70
Total FW forage (kg per head)	1638	1806
Total DM forage (kg per head)	680	705
Number of full grazing weeks	8	9
Inorganic nitrogen use (kg per ha)	37	74
Stocking rate (LU per ha)	1.6	2.4
Labour use – paid hours per head	2.65	3.57
Labour use – unpaid hours per head	3.80	1.77

Sheep flocks kept on land defined as non-LFA. The output from the flock is lambs sold finished, for breeding or as stores. The grass areas can range from short and long-term leys to permanent pasture.

Lowland Breeding Flocks

- Top third producers achieved a £30 per ewe higher net margin than the average
- Higher output accounted for 37% of the net margin difference between average and top third
- Higher output was achieved with more lambs born and reared, fewer empty ewes, higher daily liveweight gain and higher sale weights
- Lamb mortality (after birth) in top third flocks averaged 5.5% of lambs born alive, compared to the overall average of 7.2%
- Top third producers paid more per tonne for ewe concentrate feed, but fed less per head
- Lower fixed costs accounted for 57% of the net margin difference between the average and top third
- After labour, land rent value was the largest contributor to fixed costs – 24% on average and 22% in the case of the top third

Financial performance (£ per ewe to ram)

	Average	Top Third
Number of flocks in sample	56	18
Average flock size (ewes to ram)	586	772
Lamb output	101.85	114.37
Other income	2.75	2.79
Gross Output	**104.60**	**117.70**
Replacement costs	11.36	12.36
Output less replacement costs	**93.19**	**104.69**
Variable Costs		
Purchased feed including minerals	10.17	9.61
Home-grown feed	0.94	1.12
Purchased forage	0.25	0.09
Home-grown forage variable costs	5.70	5.88
Total feed and forage	***17.06***	***16.70***
Vet and medicine	6.96	5.83
Bedding	1.36	1.61
Other livestock expenses	3.93	3.38
Total variable costs	**29.31**	**27.51**
Gross Margin	**63.87**	**77.17**
Fixed Costs		
Labour – paid	14.49	14.19
Labour – unpaid	17.88	10.14
Machinery repairs and spares	3.22	2.25
Contracting	4.96	6.25
Fuel	3.00	2.19
Electricity	0.21	0.15
Property maintenance and water	2.69	2.08
Depreciation	5.86	3.93
Land rent (imputed and actual)	18.56	12.99
Imputed finance costs	1.47	1.12
Overheads	4.18	3.53
Total breeding flock fixed costs	**76.52**	**58.84**
Net Margin (including imputed costs)	**-12.65**	**18.34**

An explanation of how the data is compiled can be found on page 50.

Physical performance

	Average	Top Third
Ewe to ram ratio	42	42
Scanning percentage (%) per ewe to ram	171	186
Lambs born alive per 100 ewes to ram	153	165
Lambs born dead per 100 ewes to ram	6	6
Lambs died in first 48 hours per 100 ewes to ram	5	5
Lambs died after 48 hours per 100 ewes to ram	3	4
Lambs reared per 100 ewes to ram	145	157
Empty ewe (%)	5	4.4
Ewe mortality (%)	4.1	4.1
Flock replacement rate (%)	22.18	19.96
Average liveweight per reared lamb (all lambs) (kg per lamb)	38.17	39.48
Average carcase weight (kg dw per lamb sold finished)	19.57	20.01
Average store weight (kg lw per lamb sold store)	32.09	38.9
Daily liveweight gain to sale (kg per day)	0.26	0.28
Return per lamb sold (store, breeding and finished)	77.26	82.70
Reared lambs sold finished (%)	50.2	55
Reared lambs sold store (%)	4.9	0.9
Reared lambs sold breeding (%)	0.3	0.2
Reared lambs valued at end (%)	44.4	43.6
Total FW ewe concentrate use (kg per ewe)	35	31
Average ewe concentrate cost (£ per tonne)	229	247
Total FW forage (kg per ewe)	317	472
Total DM forage (kg per ewe)	70	70
Creep feed per lamb reared (kg per lamb)	8	8
Number of full grazing weeks	47	46
Stocking rate (LU per ha)	1.04	0.77
Inorganic nitrogen use (kg per ha)	28	36
Labour use – paid hours per ewe	1.4	1.5
Labour use – unpaid hours per ewe	1.9	1.2

Sheep flocks kept on land classified as Disadvantaged Area (DA) or Severely Disadvantaged Area (SDA). The output from the sheep flock is lambs sold finished, for breeding or as stores.

Less Favoured Area (LFA) Breeding Flocks

- Top third producers achieved a £30 per ewe higher net margin than the average
- Higher output accounted for 45% of the net margin difference between average and top third
- Higher output was driven by more lambs reared, lower replacement rate and replacement cost
- Lamb mortality (after birth) in top third flocks averaged 5.9% of lambs born alive, compared to the overall average of 7.2%
- Variable costs were driven by lower feed and forage costs
- Top third producers paid more per tonne for ewe concentrate, but fed less per head
- Lower fixed costs accounted for 40% of the net margin difference between the average and top third
- After labour, land rent value was the largest contributor to fixed costs – 20% on average and 22% in the case of the top third

Financial performance (£ per ewe to ram)

	Average	Top Third
Number of flocks in sample	41	13
Average flock size (ewes to ram)	668	689
Lamb output	97.33	103.63
Other income	2.39	2.61
Gross Output	**99.72**	**106.24**
Replacement costs	16.37	9.36
Output less replacement costs	**83.35**	**96.88**
Variable Costs		
Purchased feed including minerals	11.47	10.67
Home-grown feed	0.13	0.04
Purchased forage	0.91	0.24
Home-grown forage variable costs	7.03	5.27
Total feed and forage	***19.54***	***16.22***
Vet and medicine	6.76	6.13
Bedding	0.79	0.49
Other livestock expenses	2.74	2.70
Total variable costs	**29.83**	**25.54**
Gross Margin	**53.52**	**71.34**
Fixed Costs		
Labour – paid	7.77	8.62
Labour – unpaid	24.56	15.08
Machinery repairs and spares	2.68	2.24
Contracting	2.56	2.96
Fuel	3.51	3.03
Electricity	0.14	0.10
Property maintenance and water	2.40	2.04
Depreciation	7.04	5.64
Land rent (imputed and actual)	13.85	12.82
Imputed finance costs	1.87	1.96
Overheads	2.95	2.90
Total breeding flock fixed costs	**69.33**	**57.38**
Net Margin (including imputed costs)	**-15.81**	**13.96**

An explanation of how the data is compiled can be found on page 50.

Physical performance

	Average	Top Third
Ewe to ram ratio	40.6	41.9
Scanning percentage (%) per ewe to ram	172	166
Lambs born alive per 100 ewes to ram	152	152
Lambs born dead per 100 ewes to ram	3	3
Lambs died in first 48 hours per 100 ewes to ram	5	3
Lambs died after 48 hours per 100 ewes to ram	6	6
Lambs reared per 100 ewes to ram	142	144
Empty ewe (%)	3.5	4.7
Ewe mortality (%)	2.9	2.4
Flock replacement rate (%)	23.65	21.82
Average liveweight per reared lamb (all lambs) (kg per lamb)	37.17	36.65
Average carcase weight (kg dwt per lamb sold finished)	19.28	19.4
Average store weight (kg lwt per lamb sold store)	33.22	33.74
Daily liveweight gain to sale (kg per day)	0.16	0.24
Return per lamb sold (store, breeding and finished)	72.07	79.29
Reared lambs sold finished (%)	31	24
Reared lambs sold store (%)	8	2
Reared lambs sold breeding (%)	7	5
Reared lambs valued at end (%)	54	68
Total FW ewe concentrate use (kg per ewe)	45	34
Average ewe concentrate cost (£ per tonne)	277	295
Total FW forage (kg per ewe)	147	85
Total DM forage (kg per ewe)	51	36
Creep feed per lamb reared (kg per lamb)	5	3
Number of full grazing weeks	49	48
Stocking rate (LU per ha)	1.72	1.09
Inorganic nitrogen use (kg per ha)	16	20
Labour use – paid hours per ewe	1.0	0.8
Labour use – unpaid hours per ewe	2.5	1.6

Further analysis of the LFA enterprises into those in Disadvantaged and Severely Disadvantaged Areas (DA/SDA). The land classification is as identified by Defra and an enterprise is allocated to the land classification it grazes and/or uses on the farm.

Disadvantaged Areas/Severely Disadvantaged Areas

- While both DA and SDA flocks had negative margins on average, ranges within the data show that top producers (on a net margin basis) achieved positive margins
- Not all SDA flocks scanned and those that did were predominantly flocks with higher lambing percentages
- DA flocks had higher output and lower replacement costs than SDA flocks, although SDA flocks had a lower replacement rate
- DA flocks averaged 3.8% deaths of lambs born alive, compared to 7.3% in SDA flocks
- DA flocks had lower feed and forage costs, mainly due to lower purchased feed
- After labour, land rent value was the largest contributor to fixed costs – 23% for DA flocks and 19.4% for SDA flocks

Financial performance (£ per ewe to ram)

	DA Average	SDA Average
Number of flocks in sample	8	33
Average flock size (ewes to ram)	491	710
Lamb output	98.38	97.16
Other income	3.05	2.28
Gross Output	**101.43**	**99.43**
Replacement costs	11.42	17.20
Output less replacement costs	**90.00**	**82.23**
Variable Costs		
Purchased feed including minerals	6.96	12.23
Home-grown feed	0.91	0.00
Purchased forage	0.04	1.06
Home-grown forage variable costs	7.17	7.01
Total feed and forage	***15.08***	***20.30***
Vet and medicine	5.82	6.91
Bedding	0.50	0.83
Other livestock expenses	3.04	2.69
Total variable costs	**24.44**	**30.73**
Gross Margin	**65.56**	**51.50**
Fixed Costs		
Labour – paid	4.35	8.34
Labour – unpaid	28.75	23.86
Machinery repairs and spares	1.36	2.90
Contracting	2.95	2.49
Fuel	3.41	3.53
Electricity	0.21	0.13
Property maintenance and water	2.19	2.43
Depreciation	7.53	6.96
Land rent (imputed and actual)	16.54	13.40
Imputed finance costs	1.13	2.00
Overheads	3.39	2.88
Total breeding flock fixed costs	**71.79**	**68.92**
Net Margin (including imputed costs)	**-6.23**	**-17.42**

An explanation of how the data is compiled can be found on page 50.

Physical performance

	DA Average	SDA Average
Average number ewes to ram	34	30
Scanning percentage (%)	168	172
Lambs born alive per 100 ewes	159	151
Lambs born dead per 100 ewes*	3	1
Lambs died after birth per 100 ewes	6	11
Lambs reared per 100 ewes	153	141
Empty ewes (%)	3.2	3.5
Ewe mortality (%)	2.9	2.9
Replacement rate (%)	25	23
Reared sold finished (%)	32	30
Reared sold store (%)	0	10
Reared sold breeding (%)	0	9
Reared lambs valued at end (%)	67	51
Return per lamb sold (store, breeding and finished)	75.48	71.66
Average carcase weight (kg dwt per lamb sold finished)	19.7	19.2
Average store weight (kg lwt per lamb sold store)	NA	33.21

*types of management system result in challenges recording lambs born dead

Store lambs that have been retained and/or purchased for further rearing to finish. Lambs may be grazed on grass or forage crops, at home or away-grazed.

Store Lamb Finishing

- Top third producers achieved positive net margins
- Increased output through higher daily liveweight gain, higher finish weights and higher price per kg
- Lower feed and forage costs incurred by top third producers
- Higher concentrate cost per tonne but lower concentrate feed use per head
- Lower fixed costs accounted for over 50% of net margin difference between average and top producers

Financial performance (£ per head output)

	Average	Top Third
Number of enterprises in sample	49	16
Average head of output	527	696
Lamb output	78.27	82.48
Other	0.00	0.00
Gross Output	**78.27**	**82.48**
Store lamb purchase costs	56.99	58.25
Output less purchase costs	**21.28**	**24.22**
Variable Costs		
Purchased feed including minerals	3.32	2.24
Home-grown feed	0.55	0.79
Purchased forage	0.04	0.00
Home-grown forage variable costs	1.31	0.96
Total feed and forage	***5.22***	***3.99***
Vet and medicine	0.65	0.60
Bedding	0.35	0.39
Other livestock expenses	3.72	3.18
Total variable costs	**9.93**	**8.15**
Gross Margin	**11.35**	**16.07**
Fixed Costs		
Labour – paid	1.97	0.46
Labour – unpaid	4.44	3.12
Machinery repairs and spares	0.53	0.27
Contracting	0.66	0.39
Fuel	0.87	0.62
Electricity	0.07	0.06
Property maintenance and water	1.43	1.42
Depreciation	1.59	1.46
Land rent (imputed and actual)	2.29	1.95
Imputed finance costs	0.71	0.70
Overheads	3.10	2.11
Total store lamb fixed costs	**17.68**	**12.56**
Net Margin (including imputed costs)	**-6.33**	**3.51**

An explanation of how the data is compiled can be found on page 50.

Physical performance

	Average	Top Third
Mortality (%)	1.5	1.3
Feeding period (days)	81	76
Average liveweight at start (kg)	32.79	32.17
Average liveweight at disposal (kg)	41.11	42.06
Daily liveweight gain (kg per day)	0.11	0.14
Average carcase weight (kgs)	18.31	18.56
Purchase value per lamb (£)	56.16	57.51
Return per lamb (£)	78.27	82.48
Liveweight price all disposals (£ per kg lwt)	1.90	1.96
Return per kg deadweight: finished lambs (£ per kg dwt)	4.02	4.19
Total FW concentrate use (kg per lamb)	18	14
Average concentrate cost (£ per tonne)	213	216
Inorganic nitrogen use (kg per ha)	24	20
Labour use – paid hours per lamb	0.69	0.23
Labour use – unpaid hours per lamb	1.83	1.39

How the Stocktake data is compiled

All the data relates to enterprises with production cycles ending during the year to 31 March 2013. The averages shown are weighted averages. These are produced by totalling all of the costs across the enterprise and dividing by the total number of sheep or cattle.

What the Stocktake figures mean:

AVERAGE HERD/FLOCK SIZE

This is the average number of females put to the bull/ram for this production year. In the case of beef and store enterprises, this is the output number.

GROSS MARGIN

Equates to the value of output (including transfers to other farm enterprises and on-farm consumption) minus the variable costs (which includes purchase or replacement costs).

NET MARGIN

Equates to the value of output minus both the variable and fixed costs (including the value of family labour, imputed rental cost of owner occupied land and imputed interest on working capital) and represents the net return to the enterprise.

Results have been ranked into top third on the basis of net margin per head of output in the case of beef and store lamb enterprises, and on the basis of per ewe or cow put to the ram or bull in the case of breeding enterprises.

FIXED COSTS are defined as follows:

Labour costs

Regular full-time/part-time wages and casual wages for paid labour. The value of unpaid family labour is shown separately. Unpaid family labour is the value of family labour that is not paid directly from farm accounts.

In addition to an hourly rate, employer's liability insurance and Employer National Insurance contributions are included.

Power and machinery repairs

Machinery repairs, spares and insurance.

Contractor charges

Contract labour and machinery hire for forage harvesting, hedge-cutting, slurry carting, sheep shearing, etc.

Overheads

Farm insurance, office costs (including fees for professional services) and miscellaneous sundries.

Property maintenance and water

Water, farm building maintenance (excluding farmhouse) and property repairs.

Depreciation

Machinery and fixtures depreciation, including enterprise-specific equipment and forage machinery.

Land rent (imputed and actual)

Actual rent for rented land. A rental value for owner-occupied land is imputed. The rental used is based on local land rental values.

Imputed finance costs

Interest on working capital was calculated for costs incurred during the production cycle of the beef or sheep enterprise.

PHYSICAL PERFORMANCE

Lambing/calving/rearing/ mortality rates

The number of animals born/reared/died per breeding animal put to the ram/bull.

Daily liveweight gain

Calculated by taking the difference between the starting and finishing weights of the animals and dividing by the number of days in the enterprise.

Stocking rates

The calculation is based on the number of livestock units per forage hectare used by the enterprise, including forage hectares required to produce the forage fed to the enterprise (eg, silage).

Concentrate price per tonne

The concentrate price per tonne is based on the price paid for the fresh weight of product.

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