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COST OF REARING A RAM

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I. SUMMARY

- Six Meatlinc ram breeders took part in the survey. The Meatlinc breeders are members
 of the Meatlinc sheep company who follow the same selection procedures to ensure that
 the breed progresses. The Meatlinc is used as a terminal sire with the objective of having
 easy care characteristics.
- The costs of producing a pedigree ram were calculated using the standard Business Pointer methodology. Additional costs resulting from the pedigree status were identified separately, where possible.
- The total costs of rearing a Meatlinc breeding ram are £ 354.35. This was calculated by
 identifying the average cost of rearing all lambs in the pedigree flock to the end of
 October, and then adding the costs of rearing the ram from this date to the point of
 sale.
- The average cost of rearing a lamb in the Meatlinc pedigree flocks is £165.42. The Standard Business Pointer methodology assesses costs per ewe (rather than per lamb), but converting the 2009-10 lowland ewe costs shows a comparable cost of £72.50 per lamb reared (this is inclusive of lambs sold fat as well as those on the farm at the end of October). The costs for the rearing of the Meatlinc pedigree lambs are more than double for variable costs, paid fixed costs and non-cash costs. There are several reasons for these higher costs but the most important is likely to be economies of scale (the pedigree Meatlinc flocks averaged 168 ewes compared to 370 ewes in the lowland flocks). Other reasons identified are that the Meatlinc flocks have much higher replacement costs, feed and forage costs, and labour costs. These costs are likely to be higher because the farmers are rearing progeny with a higher potential value and as such are prepared to spend more on them to realise this.
- The additional costs of rearing the rams from November to the point of sale were calculated at £188.93 including the additional costs resulting from the pedigree status.
 There are no comparable figures available to assess this cost.
- The additional costs resulting from the pedigree status were calculated at £127.33. The
 major costs block is Society and Sales Commissions with 33% of all additional costs. This
 is followed by reproductive technologies (11%) and additional paperwork (9%).



2. INTRODUCTION AND METHODOLOGY

EBLEX are trying to develop a system for pedigree sheep breeders to cost their enterprises.

As a pilot study the Meatlinc breed and their producers were identified. Promar carried out the data collection and based the collection methods and templates on the collection of enterprise margins for Business Pointers. However, the financial data is expressed in per lamb figures rather than per ewe figures in the Business Pointers.

The objective of the project was to assess the costs of rearing a pedigree ram; therefore, the methodology was designed to achieve this. As a consequence supplementary data such as growth rates was not collected.



3. COST OF REARING A RAM

3.1 Technical Performance

The sample consists of six farms measuring the costs of rearing rams from one crop of lambs; the farms involved ranged considerably in size and in systems used, not least because of varying geographical and farm systems considerations. Therefore, it is difficult to produce genuinely comparable figures. With this caveat the key technical performance indicators on a comparable basis to EBLEX Business Pointers data are as in Table I below. As the focus of the project was to establish the costs of rearing a ram, a limit number of technical performance figures were assessed.

Table I: Technical performance measures (per ewe weighted across the six Meatlinc breeders)

	Average performance (per ewe)
Lambs born alive per 100 ewes	160
Lambs died per 100 ewes (estimated)	10
Lambs reared per 100 ewes	150
% of lambs sold prior fat	55%
% of lambs sold or retained as breeding ewes	23%
% of lambs sold or retained as breeding rams	22%

3.2 Overall Costs of Rearing a Ram

The cost of rearing the ram has been calculated in two parts. Firstly the average costs of rearing all lambs in the pedigree flock to the end of October have been identified (these have been spread across all of the lambs reared). In a second step the average costs for rearing the rams sold and used for breeding have been identified from November to the point of sale/use for breeding. Adding these costs provides the total costs of rearing a breeding ram to the point of sale/use.

The average cost of rearing all lambs in the pedigree flock to the end of October is £165.42 per lamb. The average cost of rearing a ram from November to the point of sale/use for breeding is £188.93. This figure includes the specific costs of £127.33. It has to be noted that these specific costs are not necessarily incurred at this stage but are specific to the ram rearing and are therefore shown at this stage.



Table 2: Cost of Rearing a Ram (average of 6 Meatlinc breeders)

A description of the overhead allocation is provided in Appendix 2

	Average costs of rearing all lambs in Meatlinc flock to the end of Oct	Average costs of rearing Meatlinc rams from Nov to point of sale/use	Total Costs of rearing Meatlinc Ram
Replacements	£20.79		£20.79
Feed and Forage Costs	£25.17	£9.61	£34.78
Bedding Costs	£0.44	£0.00	£0.44
Vet and Medicine	£5.89	£0.75	£6.64
Other Costs	£6.87	See specific costs	£6.87
Total Variable	£59.16	£10.36	£69.52
Labour costs	£22.49	£8.40	£30.89
Power and machinery	£9.40	£3.71	£13.11
Contract charges	£4.23	£1.86	£6.09
Administration	£5.94	£2.33	£8.27
Property charges	£8.47	£4.07	£12.54
Land resource costs	£2.63	£0.98	£3.61
Machinery and fixtures	£5.79	£2.51	£8.30
Total Fixed Costs	£58.95	£23.86	£82.81
Specific Costs identified resulting from Pedigree Status		£127.33	£127.33
Unpaid Labour	£29.85	£20.88	£50.73
Rental Value	£10.33	£3.33	£13.66
Notional Interest	£7.13	£3.17	£10.3
Total non Cash Costs	£47.31	£27.38	£74.69
Total Cash and Non Cash Costs	£165.42	£188.93	£354.35

3.3 Additional Costs identified resulting from Pedigree Status

The additional costs resulting from the pedigree status have been separately identified as far as possible on the six farms that were visited. Table 3 shows the items and their percentage contribution to the overall additional costs. The major costs block is Society and sales commissions with 33% of all additional costs. This is followed by reproductive technologies (11%) and additional paperwork (9%).



Table 3: Distribution of Additional Costs resulting from Pedigree Status

Item	%
Society sale commissions	32.8%
Reproductive technologies	10.6%
Additional paperwork- pedigree certificates, and lamb registrations, MV forms	8.6%
Ag show membership and show fees	6.7%
Additional advertising	6.3%
EBVs	5.4%
Additional feed	4.7%
Fuel- extra costs to shows etc	4.3%
Improved ID	4.0%
Importing or exporting sheep genetics- sheep, semen, embryos	3.5%
Extra labour for shows	3.1%
Club subs	2.6%
Insurance	2.4%
Flock visits or trips	2.3%
MV Accreditation	1.5%
Scrapie genotyping	1.3%



4. COMPARISON TO THE AVERAGE LOWLAND PRODUCTION COSTS

Table 4 shows the costs of producing a pedigree lamb to the end of October for the EBLEX Business Pointers compared to those of the costed Meatlinc Producers. The costs of the Meatlinc producers are significantly higher than those of the EBLEX average. Although this may in part be due to some costs relating to rearing and selling pedigree costs (for instance replacement costs), there will be some element of farmers not being able to make use of the full economies of scale due to the lower flock size.

Table 4: Comparison of costs of producing a lamb to the end of October between EBLEX Business Pointers Average and 6 costed Meatlinc Producers

	Bodisuoo Borros	EBLEX Business Pointer Average (Lowland)
Average No of ewes	Pedigree Rams	(Lowiand)
Replacements	£20.79	£5.56
Feed and Forage Costs	£25.17	£10.46
Bedding Costs	£0.44	£0.52
Vet and Medicine	£5.89	£3.92
Other Costs	£6.87	£2.75
Total Variable	£59.16	£23.21
Labour costs	£22.49	£5.84
Power and machinery	£9.40	£5.96
Contract charges	£4.23	£3.32
Administration	£5.94	£2.94
Property charges	£8.47	£3.41
Land resource costs	£2.63	£3.45
Machinery and fixtures	£5.79	£3.76
Total Fixed Costs	£58.95	£28.67
Unpaid Labour	£29.85	£12.16
Rental Value	£10.33	£3.35
Notional Interest	£7.13	£5.12
Total non Cash Costs	£47.31	£20.63
Total Cash and Non Cash Costs	£165.42	£72.52

It is worth noting that non-pedigree beef and sheep farms have for many years had access to industry benchmarking data (plus associated press coverage, farmer meetings etc). Therefore, they have an opportunity to identify areas of strengths and weakness which they have been able to address on their own business. The pedigree breeders will not have been able to utilise this information to the same extent; indeed as this project has shown, it is very complex trying to establish what constitutes the pedigree business in the first place.



5. KEY POINTS AND RECOMMENDATIONS

In summary, the costs of rearing a Meatlinc ram amounted to £354.35 per ram reared of which £127.33 was identified as being a specific cost resulting from the pedigree status. The principle specific costs were found to be society sale commissions, the cost of reproductive technologies and the costs associated with additional paperwork.

Because there is no record of similar work having been carried out in the past, it is not possible to benchmark the cost that has been established against any comparable measure. However, such a figure would provide pedigree breeders with a target sale price for their rams to assess whether or not it is a profitable enterprise.

While splitting out the specific costs resulting from the pedigree status is extremely difficult, having an awareness of the many additional cost headings will be useful for pedigree breeders when trying to increase the profitability of the enterprise, and when deciding on a suitable pricing policy for their rams.

Applicability to Other Breeds

This project appears to have been one of the first ever to try to establish the cost of rearing a ram in any country using "real" farms and "real" data.

The Meatlinc rearers provided a useful "trial" group because they work in a closely coordinated way. However, despite this their farm situations varied tremendously. They were also located in a massive geographic range as per the map below- this was a major contributory factor to the relatively high cost of collecting the data (relative to "normal" EBLEX data). This is something to bear in mind for the future i.e. if a pedigree breed with multiple farmers is seeking to sell rams nationally they may (as per the Meatlinc breeders) be deliberately geographically spread to enable them to sell "locally".





ANALYSIS OF FIXED COSTS SURVEY

This particular project was also an opportunity to look at the feasibility of such a project across other breeds. Some of the lessons learnt from this particular project mean that improvements could be made with regards to the data items collected. In particular, the project focussed specifically on the costs of rearing a pedigree ram and the methodology was designed as such- we believe that the methodology employed was both simple and sound but clearly there is no "correct" method. If trying to do the same for other breeds it is suggested that a "blueprint methodology" is agreed. Some of the key "debatable" issues to consider are:

- Should the performance of the lambs sold out of the pedigree flocks other than for ram sales be included, in particular pedigree ewe lambs?
- How should rams lambs reared through as ram replacements (i.e. not sold) be dealt with?
- The methodology used meant that the specific costs of being pedigree were isolated independently of the other costs as far as was possible. This proved very difficult even for this group and in reality, if the exercise was repeated, would probably only be worth using as a prompt sheet.

In summary, carrying out the same project would be easier in light of the experienced gained with the Meatlinc flocks, but it is important to note that sample sizes will inevitably be relatively small. This means that between breed figures may not be meaningful. In addition, as is always the case with EBLEX data, the collection of robust data is dependent on the full cooperation of the farmers concerned. Because no charge is levied from the farmers this inevitably means that the work involved must be done in a time frame that avoids significant inconvenience for the farmer, both prior to and during any visit. This is particularly the case with farmers being visited for the first time as is likely to be the case if this project is repeated in future with other breeds.

In light of this, it might be better to focus initially on some simple survey work of pedigree breeders to find out how they currently assess the profitability of this part of their business. Our experience would suggest that very few of them do any significant financial analysis of the pedigree business and hence are reliant on their overall farm financial performance when making business decisions.



APPENDIX I: QUESTIONNAIRE FOR PEDIGREE SPECIFIC COSTS

Included Elsewhere	Additional costs	Cost Item
Yes/No		
		Additional feed
		Bedding specific for pedigree status
		Genetic improvement- AI,ET
		Importing or exporting sheep genetics- sheep, semen, embryos
		Scrapie genotyping
		MV Accreditation
		EBVs
		Additional paperwork- pedigree certificates, and lamb registrations, MV forms
		Notification of birth
		Club subs
		Ag show membership and show fees
		Extra labour for shows
		Flock visits or trips
		Additional advertising
		Improved ID
		Insurance
		Fuel- extra costs to shows etc
		Society sale commissions
		Housing costs if only for pedigree
		Genetic improvement- AI,ET
		Importing or exporting sheep genetics- sheep, semen, embryos
		Other- NAME



APPENDIX 2: FIXED COST ALLOCATION

These have been allocated as per standard EBLEX Business Pointers methodology.

There may well be more than one enterprise type on the farm in which case the fixed costs have been apportioned with reference to the number of animals (in livestock unit equivalents) present in the enterprise on a monthly basis.

The averages shown are weighted averages produced by weighting individual enterprise information by the number of relevant sheep/cattle present in the enterprise.

The farms covered include a mixture of tenanted and owner occupied and also cover a combination of farms hiring labour and those just making use of family labour. The value of family labour, the imputed rental value of owner occupied land and interest on working capital have all been included as non-cash costs to give a truer picture of the actual financial performance of English farming enterprises.

FIXED COSTS are defined as follows:

Labour costs

Regular wages and casual wages. (The cost of unpaid family labour is listed under non-cash costs).

Power and machinery

Machinery repairs, fuel, electricity, tax and insurance.

Contractor charges

Contract labour/hire for forage harvesting, hedge-cutting, slurry carting, sheep shearing etc. (These were previously included in 'labour' and 'power and machinery' costs).

Administration

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

Property charges

Water, council tax and farm and property repairs.

Land resource costs

Rent and rented land. (The imputed rental cost for land on owner occupied farms is listed under non-cash costs).

Machinery and fixtures

Machinery depreciation, fixtures depreciation, machinery and equipment leasing.



NON-CASH COSTS are defined as follows:

Unpaid family labour

Value of family labour that is not paid directly from farm accounts. This has been estimated for 2008/09 as £12.34 per hour. In addition to the hourly rate, employer's liability insurance and National Insurance are also included.

Rental value of owner occupied land

Rental equivalent of owner occupied land based on local land rental values.

Interest on working capital

Interest at 5% applied to all costs incurred during the production cycle of the beef or sheep enterprise.

