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Milk  
Cost of  
Production  
(Cooper)

WITHDRAWN

UNIVERSITY OF MANCHESTER

AGRICULTURAL ECONOMICS

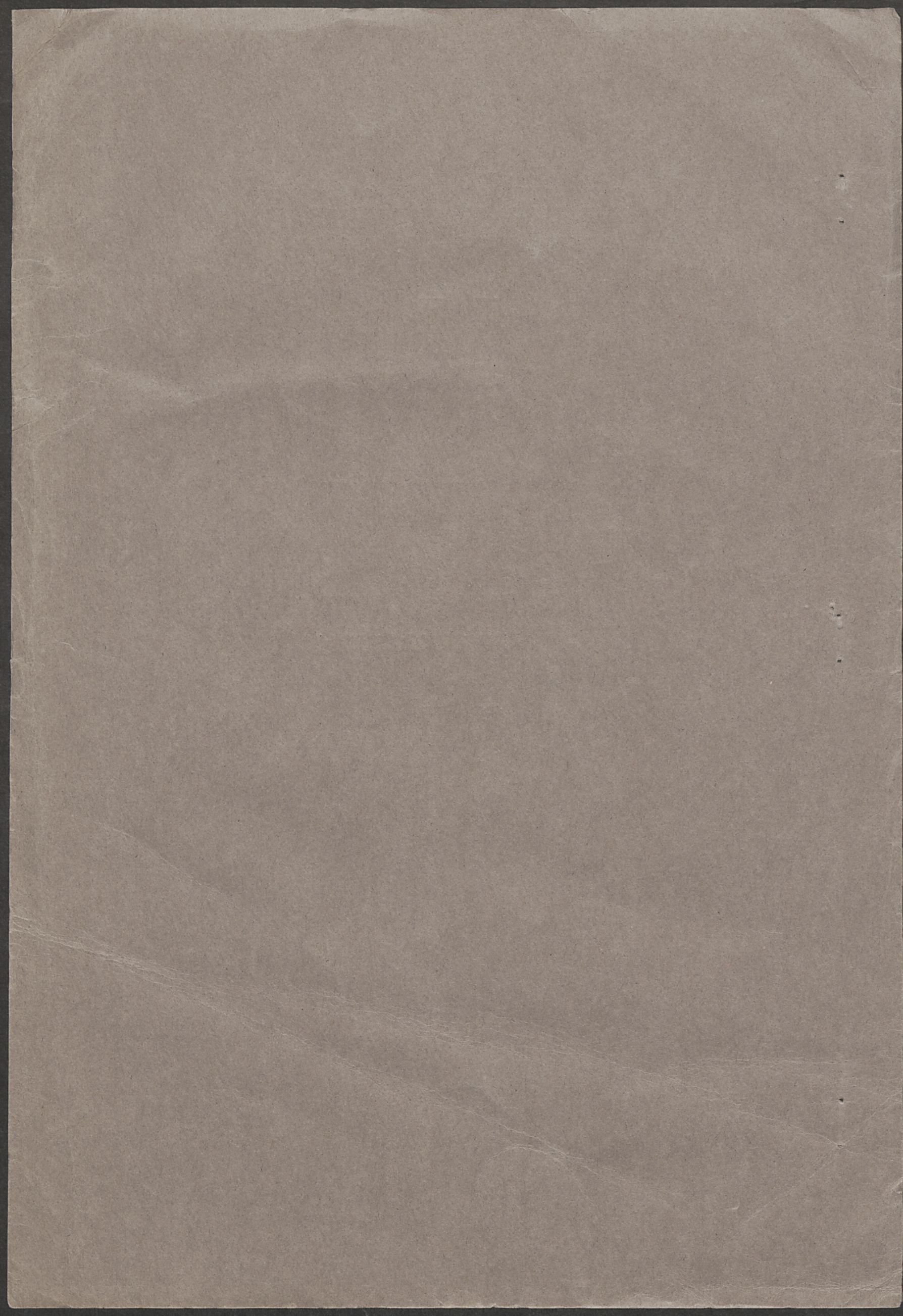


Report No. 3

MANAGEMENT FOR  
MILK PRODUCTION









MANAGEMENT FOR MILK PRODUCTION.

Cost of Feeding - Summer 1934.

A larger group of Lancashire and Cheshire farmers are setting themselves with more or less purpose and success to reduce the cost of producing milk by reducing the cost of feeding. A larger number are keeping records to ascertain the progress which they make. For reasons which have been set forth in previous reports the task they have undertaken is the improved cultivation of their pastures and meadows so that they may get more grass and hay of better quality. The following Table shows the results achieved by twenty farmers who have kept records. The number of cows was 652, and their milk yield for 22 weeks was 208,302 gallons.

Table I.

Cost of Starch Equivalent Consumed per Cow.

Farm No.	S.E. obtained from feed other than grass.		Cost		Cost per lb. S.E. pence.	S.E. obtained from grass.		Cost		Cost per lb. S.E. pence.
	lb.	£.	s.	d.		lb.	£.	s.	d.	
	1.		2.		3.	4.		5.		6.
2.	654	3	1	9	1.13	1055	2	11	10	.59
3.	389	1	11	8	.98	1309	2	9	1	.27
4.	762	3	12	4	1.14	1037	2	7	7	.54
5.	923	3	14	10	.97	800	2	11	4	.77
6.	533	2	9	-	1.10	1031	2	15	8	.65
7.	889	4	2	3	1.11	655	3	10	5	1.29
8.	619	2	18	2	1.13	925	2	2	8	.55
9.	850	3	-	8	.86	1148	3	18	6	.82
10.	898	4	9	4	1.19	1145	4	14	1	.98
12.	1079	4	13	3	1.04	827	2	3	3	.63
13.	1084	5	-	2	1.11	714	2	10	11	.86
14.	591	2	17	10	1.17	1183	3	4	9	.66
15.	559	2	3	5	.93	1321	3	-	5	.55
17.	885	3	16	8	1.04	1061	3	13	3	.83
20.	939	4	3	6	1.07	725	2	7	6	.79
22.	999	4	-	1	.96	710	3	-	9	1.03
26.	626	2	10	7	.97	1345	3	6	10	.60
28.	1582	6	19	4	1.06	202	2	10	2	2.98
29.	1401	6	17	1	1.17	979	1	12	3	.39
41.	289	1	2	2	.92	1617	3	1	4	.45
	Average				1.05	Average				.81
	Excluding No. 28.				1.05	Excluding No. 28.				.69

Six new farms are included in this list and two have dropped out since last year. On most of them improvement had been going on for a few years. Column 1. shows the feeding value obtained from purchased cake and meal, and Column 4. the feeding value obtained from grass, from May 1st., to September 30th., 1934.

This Table shows variations in the costs of both classes of food, but it only shows imperfectly the causes of the variations. These causes are found chiefly in differences in management. The figures for one of the new farms, No. 28, illustrate a too common practice and experience. Many farmers feed concentrated cakes and meals too heavily both in summer and winter. They do this for various reasons, but these reasons are nearly always ill-considered. They waste money to an extent which surprises them when it is brought to their notice. They try to force a high yield of milk from their cows when it cannot be done. If the cost of this misapplied cake is debited to maintenance or milk, a proportionate amount of the feeding value of grass cannot be credited with what it produces, or is capable of producing. On Farm 28. the cost of purchased feed per gallon in summer is 7% more than its cost in winter, and the more balanced use of concentrates in winter gives the hay two and a half times the value of the grass measured by their starch equivalents. From observation the meadows were not superior to the pastures, and the feeding value of the grass in comparison with that on other farms was much higher than the figure in Column 4. suggests.

There is a large amount of information in the records, but in order to concentrate attention on the chief point of the investigation it is not presented in detail in this general report. Individual farmers will be informed on any point about which they wish to know more. The following

three Tables of averages, imperfect from a statistical point of view, are given because they represent the general experience of the farmers. When a departure was made from the old standard of cultivation it was comparatively easy to get a striking result in the early stage of improvement. A reduction in the cost of grass of 30% was achieved by the group of farmers between 1932 and 1933, but an increase of 3% took place between 1933 and 1934. In the second stage of improvement on which farmers have entered progress cannot be so rapid. Here it depends on the systematic pressure brought to bear on problems by intelligent, courageous, and sustained enterprise.

Table II.

	Average Cost of S.E. from Cake & Meal per lb. pence.	Average Cost of S.E. from grass per lb. pence.
1932.	1.10	.96
1933.	1.04	.67
1934.	1.05	.69

Table III.

	Average area grazed per cow or equivalent. acres.	Cost per Gallon of:-			Average Yield. gallons.
		Grazing. pence	Purchased Food. pence.	Total. pence.	
Summer 1932.	1.84	2.85	3.30	6.15	285
Summer 1933.	1.534	2.34	2.40	4.74	316
Summer 1934.	1.503	2.23	2.80	5.03	319

Table IV.

	Cost of Fertilisers. s. d.	Output of S.E. lb.
1932.	6 - 6	569
1933.	7 - 0	881
1934.	6 - 7	736

Averages alone are given in these three Tables. It must not be assumed that they explain a clear cut situation.

The situation is not clear. For example, the average expenditure on fertilisers per acre, and the average amount of food obtained, are given in the last Table, and it looks as if there might be an exclusive connection of cause and effect between them. There is no ground for assuming this. As these experiments are carried out, as cultivation takes place or is omitted, as grazing is skilfully or unskilfully managed, as the weather is favourable or unfavourable for operations, results are affected. But in spite of these modifying influences, such Tables must become increasingly useful as members of the group attain steadiness and system in the development of their experiment. On the twenty farms in 1934 expenditure on fertilisers varied from 8d. to 16/5d. per acre on different farms; on one it fell from 5/1d. per acre in 1933 to 10d. in 1934; on others it has never reached an effective level in nine years, and has been unsteady at too low a level. But the growing steadiness of the majority in effective expenditure together with the wider change in practice which accompanies it will increasingly dominate and determine the average results.

The capacity to make the necessary adjustments in order to use better crops of grass and hay must grow. To observers familiar with active systems of farming elsewhere it seems easy to make full use of early and full crops, but not so easy to practitioners inside a system where growth started late, went on slowly, and stopped early. Men who have never sold hay find it difficult to change good superfluous hay into welcome money.

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