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FINANCIAL RESULTS OF DAIRY FARMING IN THE BLACKMORE VALE 1931/32.

By

Edgar Thomas, G.B. Bisset, and C. Pringle.

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I. THE SAMPLE.

The 20 farms whose financial accounts for the year ended Lady Day 1932 are here summarised are typical representatives of the dairy holdings of the Blackmore Vale district of north Dorset. They may be described as grassland dairy farms depending in the main on the sale of milk, but with poultry and pigs as more or less important sidelines. This type of farming characterises a larger dairying district covering the north of Dorset and extending into Somerset and Wiltshire. This district forms the west country milk-shed which plays an important role in the farming of the west of England, and exercises a considerable pull on the London milk market.

II. USE OF LAND, LABOUR, AND CAPITAL.

The total acreage of the 20 farms was 2069, giving an average of approximately 103 acres per farm. The largest farm was 189 acres and the smallest was 23 acres, 9 farms were under and 11 were over 100 acres in size. The land was utilised as follows :-

Permanent Grass	(a) Not cut for hay	1063 acres	1896 acres or 91.6%
	(b) Cut for hay	833 acres	
Arable Land	(a) Cereals	99 acres	173 acres or 8.4%
	(b) Green crops	39 acres	
	(c) Seeds hay	35 acres	

These figures emphasise the predominance of grassland. The bulk of the arable land was confined to four farms. In all cases the arable crops were made to dovetail into the main enterprise, both in their demands on the labour force, and as a source of home-grown food and litter for the dairy herd.

All 20 farms were in the main dependent on family labour, although only 5 farms carried on with family labour alone. Of the other 15 farms, 7 employed one, 6 employed two, and 2 employed three regular hired men per farm. In addition most of the farms employed some casual labour for the hay harvest, but the total quantity thus employed was of little importance.

The total capital invested in the 20 farms was £20603, which is equivalent to an average investment of £1030 per farm, or £9. 19. 2d per acre. The highest investment per acre was £13. 7. 11d, and the lowest was £6. 18. 2d. The capital investment was distributed as follows :

	Average per Farm.	Per Acre.	Per Cent.
Dairy Herd	£623	£6. 0. 5	60.5%
Other Live Stock	£120	£1. 3. 3	11.6%
Equipment	£189	£1. 16. 6	18.3%
Stores	£ 98	£0. 19. 0	9.6%
Total Investment	£1030	£9. 19. 2	100.0%

III. EXPENSES AND RECEIPTS.

The total expenditure (including estimated wages of family labour) on the 20 farms was £16,760, which is equivalent to an average expenditure of £838 per farm or £8. 2. 0 per acre. The highest expenditure per acre was £11. 14. 0 and the lowest was £4. 8. 10. The following figures, giving the distribution of the expenditure, show that the three important items were labour, rent, and feeding stuffs.

	Average per farm	Per Acre	Per Cent
Family labour	£150	£1. 9. 0	17.9%
Hired labour	£120	£1. 3. 1	14.3%
Rent	£197	£1.18. 1	23.5%
Feeding stuffs	£163	£1.11. 7	19.5%
Dairy live-stock	£ 76	£0.14. 8	9.1%
Other live-stock	£ 39	£0. 7. 8	4.7%
Other expenses	£ 93	£0.17.11	11.0%
Total Expenses	£838	£8. 2. 0	100.0%

The total receipts on the 20 farms was £15,533, which is equivalent to an average of £777 per farm or £7. 10. 2 per acre. The highest receipts were £11. 13. 7 per acre and the lowest were £4. 9. 10 per acre. Over 57% of all receipts was from the sale of milk and milk products. The distribution of the receipts was as follows :

	Average per farm	Per Acre.	Per Cent.
Milk and cheese	£444	£4. 5. 9	57.1%
Cows, yearlings and bulls	£ 51	£0. 9.11	6.6%
Calves	£ 78	£0.15. 0	10.0%
Pigs	£ 85	£0.16. 6	11.0%
Poultry	£ 69	£0.13. 3	8.9%
Other receipts	£ 50	£0. 9. 9	6.4%
Total receipts	£777	£7.10. 2	100.0%

IV. PROFITS AND LOSSES.

Three farms only showed profits (i.e. a surplus of receipts and closing valuations over payments and opening valuations) and seventeen farms showed losses. For all 20 farms there was a total loss of £1743, which is equivalent to an average loss of £87 per farm or 16/11 per acre. This figure represents the net result after all expenses other than interest on capital and remuneration of management had been met. In addition, the farmers had the use of the farmhouse free of rent, and had also been credited with wages for all manual work performed by them and their families. (All farm produce consumed in the farm house was considered as a farm receipt).

Leaving out the charge for family labour the result may be expressed in the form of "family income", when 15 farms showed a surplus income and 5 only showed a minus income. For all 20 farms the total family income was £1260, which is equivalent to an average income of £63 per family.

The distribution of the "farm incomes" and "family incomes" was as follows :

	No. of farm incomes		No. of family incomes	
Profit of over £200	1	3	2	15
" " from £101 to £200	0		5	
" " under £100	2		8	
Loss of under £100	10	17	2	5
" " from £101 to £200	2		3	
" " over £200	5		0	

V. COSTS AND RETURNS OF MILK PRODUCTION.

The total number of cows on the 20 farms during the year was 467, seven herds had over 25 cows and thirteen herds had 25 cows or under.

The total milk output was 260,160 gallons, which is equivalent to an output of 557 gallons per cow. The highest average output per herd was 808 gallons per cow, and the lowest was 365 gallons per cow; 5 herds had outputs of under 500 gallons per cow, 12 herds had outputs of between 500 and 600 gallons, and 3 herds had outputs of over 600 gallons per cow. The maximum production occurred in May, June and July, 63.5% of the total production was in the spring and summer months, and 36.5% in the autumn and winter months. The milk was utilised as follows :

Sold wholesale	89.6 %
Sold retail	0.8 %
Used in farmhouse	1.0 %
Made into cheese	1.7 %
Fed to livestock	6.9 %
	100.0 %

The costs of producing and marketing and the returns obtained from 242,271 gallons of saleable milk (i.e total output less that fed to livestock on the farm) were as follows :

	Total	Per Cow	Per Gallon
Costs of production	£10213	£21. 17. 1	10.12d
Costs of marketing	£ 404	£ 0. 17. 4	0.40d
Total Costs	£10617	£22.14. 5	10.52d
Gross Returns	£ 8874	£18.19. 10	8.79d
Loss	£ 1743	£ 3.14. 7	1.73d

For the purpose of calculating the cost of milk production the farms have been regarded as milk-producing units, all general farm costs (including labour) being charged to milk production and a reduction made equivalent to the surplus on the non-dairying enterprises. It follows from the method of computation that the net returns from dairying shown above are identical with the net returns from the general farming as shown on page 2.

There were considerable variations from farm to farm in the costs per cow, in the costs per gallon, and in the returns per gallon. Thus, on a per cow basis 9 farms had costs above the average, and 11 costs below the average, and on a per gallon basis 10 farms had costs above and 10 below the average. Again, the prices obtained for liquid milk at the farm (which decided almost entirely the returns per gallon) ranged from 6½d to 1/1 for winter milk, and from 5½d to 10d for summer milk.

VI. SOME FACTORS OF SUCCESS.

In Table I the average results on the 20 farms are compared with the results on the 3 farms on which profits were made, and in Table II the comparison is carried further in terms of the costs and returns of milk production. The object of this comparison is to show, so far as these 20 farms are concerned, what were some of the more important factors accounting for the comparatively better results obtained on three of them during the year under review. Each farmer can compare the position on his own farm with the average of the 20 farms and with the average of the 3 farms which made profits.

As compared with the group average the three profitable farms show the following characteristics :

(1) Higher proportion of arable land.
(2) Smaller expenditure but higher receipts per acre
(3) Much higher gross output[x] per farm, per £100 capital (i.e capital turnover), per £100 labour cost, and per £100 rental.
(4) Smaller percentage of total receipts derived from milk and from pigs, but a higher percentage from poultry.
(5) Much lower costs of milk production both per cow and per gallon, this in turn reflecting
  (a) much higher milk yield per cow
  (b) lower net dairy overheads, due mostly to the influence of poultry in reducing the general farm overheads
  (c) less dependence on purchased feeding stuffs
  (d) greater surplus on herd maintenance, due partly to a greater reliance on home-bred stock and partly to a better turnover on calves.

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x Gross Output = (Total Receipts - Purchases of Live-stock) plus or minus (increase or decrease in total valuation during the year).

TABLE I.

	Average 20 farms	Average 3 farms making profits	Your farm
Size of farm	103 acres	113 acres	
Rent per acre	£1. 18. 1	£1. 13. 3	
% arable land	8.4%	14.4%	
Expenses per acre	£8. 2. 0	£6. 10. 10	
Receipts per acre	£7. 10. 2	£7. 17. 0	
Decrease in valuation per acre	£0. 5. 1	£0. 6. 9	
Profit per acre	-£0. 16. 11	£0. 19. 5	
Gross output per farm	£635	£763	
" " per £100 capital	£ 62	£ 79	
" " " £100 labour cost	£236	£288	
" " " £100 rental	£323	£406	
Composition of receipts :-			
Milk and milk products	57.1%	53.5%	
Dairy live-stock	16.6%	17.5%	
Poultry	8.9%	14.4%	
Pigs	11.0%	6.2%	
Other receipts	6.4%	8.4%	
Size of dairy herd	23-24 cows	21-22 cows	
Milk yield per cow	557 gallons	662 gallons	
% milk produced in winter	36.3%	37.5%	
% cows home reared(replacements)	50%	62%	
Milk yield per £1 spent on foods	172 gals.	246 gals.	
Average price received per gal.	8.39d	8.27d	
Head of poultry per farm	113	206	
Poultry receipts per acre	£0. 13. 3	£1. 2. 6.	
Pig receipts per acre	£0. 16. 6	£0. 9. 9	

TABLE II. COSTS and RETURNS of MILK PRODUCTION.

	PER COW			PER GALLON		
	All farms	3 Profit farms	Your farm	All farms	3 Profit farms	Your farm
	£ s d	£ s d	£ s d	d	d	d
Rent	8. 8. 9	8. 14. 11		3.91	3.43	
Labour	11. 7. 11	11. 18. 9		5.27	4.68	
Other farm overheads	3. 5. 3	3. 1. 6		1.51	1.20	
Total farm overheads	23. 1. 11	23. 15. 2		10.69	9.31	
Less surplus on other enterprises x	2. 17. 2	8. 0. 11		1.32	3.15	
Net dairy overheads	20. 4. 9	15. 14. 3		9.37	6.16	
Bought foods for dairy stock	3. 4. 9	2. 13. 9		1.50	1.05	
Miscellaneous dairy expenses	0. 2. 2	0. 0. 7		0.05	0.01	
Less surplus on herd maintenance *	23. 11. 8	18. 8. 7		10.92	7.22	
	1. 14. 7	2. 8. 6		0.80	0.95	
Total costs of production	21. 17. 1	16. 0. 1		10.12	6.27	
Add marketing costs	0. 17. 4	1. 0. 0		0.40	0.39	
Gross Costs	22. 14. 5	17. 0. 1		10.52	6.66	
Gross Returns	18. 19. 10	22. 2. 1		8.79	8.66	
Profit		5. 2. 0			2.00	
Loss	3. 14. 7			1.73		

x Surplus on other enterprises = (Receipts + closing valuations) minus (opening valuations + direct expenses, i.e. all expenses other than rent, labour and other farm overheads).

* Surplus on herd maintenance = (Closing values of dairy stock + sales of cows, yearlings, bulls and calves) minus (opening values of dairy stock + purchases of cows, heifers, bulls and calves).