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EXPENDITURE, INCOME AND RETURN ON A SMALL GROUP OF DAIRY FARMS

1943-44 to 1947-48

FOREWORD.

As a result of the financial accounting investigation into the economics of farming in South-West Scotland, accurate financial records of certain farms are now available over a number of years. A selection of such records for the five year period ended 1947-48 provides an interesting, though not wholly representative, indication of the trends in expenditure, income, and return on a small group of dairy farms.

This present report is based on a sample of farm financial accounts chosen as giving records for the same farms over five statistical years. From a larger number of records a selection was made of farms which, after close scrutiny, provided a wholly identical sample for each of five years. Any farm which, in any of the five years, showed other than a minor divergence in acreage, or rental value, or in major farming policy, was rejected for the purposes of this statement.

In all, a total of 63 farms finally proved to be suitable for the period comparison, and these can be accepted as giving a picture of the changing accounting position year by year.

While all farms included are commercial dairy farms and in no way represent a special selection of above average cases, from some aspects the results presented require qualification. On standards of average size, land quality, and possibly dairy stock quality, the sample dealt with does not contain a sufficiency of the smaller dairy farms, of farms lying on poorer quality land, or of farms with below average milk yields, to be truly indicative of average financial returns in this area. It is probable, therefore, that a considerably larger sample would show a rather lower rate of return.

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THE FARMS AND FARM ACCOUNTS.

Both for particular farms and for the average farm, the use of the term "low-arable dairying" is justified. In the closing year of this review the acreage under hay and grass made up two-thirds of the average farm acreage, while few farms would show any marked variation from this.

Milk production is easily the most important farm enterprise; milk sales alone, in 1947-48, accounting for 61% of total income, or, if the sales of dairy stock are added to milk sales, receipts from the dairy brought in 80% of total income. Between individual farms there is some variation in the relative importance of milk and of dairy stock sales, but generally, the farms reported on had, in the sale of calving heifers and young cows, an additional source of income. They tend, therefore, to represent the combined returns from milk production and some good quality stock sales, rather than milk production where the stock sales are largely low-priced cast and fat cows.

With an average size of 185 acres, and a cow stock of 45 cows, the average represents a dairy farm unit rather too large to be typical of this area. Partly to overcome this, the total of 63 farms was sub-grouped into a group of farms of over 125 acres, which includes 46 farms, and a group of farms of under 125 acres, totalling 17 farms.

The annual accounting results are given according to statistical years, for example, 1947-48 includes farms where the closing date of the financial year lay between November, 1947, and May, 1948. In each year the majority of farms closed their financial year about March; coinciding largely with the milk-pricing year. Thus 1947-48 refers to the crop of 1947 and largely, but not wholly, to milk prices obtaining between April, 1947, and March, 1948. Similarly, the 1946-47 year relates to the crop year 1946 and to 1946-47 milk prices; the earlier years of 1945-46, 1944-45 and 1943-44 dealing with comparable periods.

Definitions of profit and explanations of accounting method are given in a later section, but for a proper understanding of the figures presented, two points require mention. The minor one is that the annual sum payable as wages or salary against work done by the farmer's wife tended slightly to increase over the period, but the final effect on the profit averages is negligible. A major point is that the later years show rising expenditure of a capital nature—on new farm equipment, on replacement motor-cars, and on that class of capital improvement which qualifies for the annual one-tenth allowance. This trend is especially marked in the group of 46 farms over 125 acres in size. On this account, and also because of the correspondingly important 20% "initial" allowance on new equipment purchased, the charge against farm income for "depreciation and allowances" has increased, meaning a considerably greater charge against returns than in the earlier years.

SUMMARY.

1.—Over the combined group of 63 farms, and also for the two separate size groups, the average annual accounting profits over a five year period were :—

	All Farms.	Farms Over 125 Acres.	Farms Under 125 Acres.
Number of Farm Accounts ...	63	46	17
Average Size in Acres ...	185	222	84
Average Cow Herd ...	43-45	50-52	25-27
Average Profit per Farm ...	£1,065	£1,230	£620

2.—The annual variations in profit from the five year average were comparatively small :—

VARIATION OF ANNUAL PROFIT FROM FIVE YEAR AVERAGE.

	PLUS—Indicates Above.	MINUS—Indicates Below.	
	All 63 Farms.	Farms Over 125 Acres.	Farms Under 125 Acres.
1947-48 ...	—£40	—£31	—£70
1946-47 ...	+£69	+£75	+£55
1945-46 ...	—£38	—£54	+£7
1944-45 ...	—£58	—£57	—£63
1943-44 ...	+£69	+£67	+£71

Over the combined groups, the sum of £127 per farm represents the difference between the highest and lowest average profit for any year of the five years under review.

3.—A calculation of profit per acre gives a five year average of £5 11/-.

4.—A calculation of farm profit expressed per cow carried, gives a five year average of £24 per cow.

5.—The group of larger farms left an average surplus of £57 per farm after making charges for farmers' manual work, for interest on approximate tenancy capital at 2½%, and for managerial work at 10% on approximate tenancy capital; with the sum of these three charges totalling £1,173.

6.—The group of smaller farms showed an average deficit of £220 per farm after making charges for farmers' manual work, for interest on approximate tenancy capital at 2½%, and for managerial work at 10% on approximate tenancy capital; with the sum of these three charges totalling £840.

7.—Statistical tables are given in an Appendix, as follows :—

TABLE 1.—Average Crop Acreages of 63 Dairy Farms.

TABLE 2.—Average Stocking of 63 Dairy Farms.

TABLE 3.—Expenditure, Income and Return for 63 Dairy Farms.

TABLE 4.—Expenditure, Income and Return for 46 Dairy Farms Over 125 Acres.

TABLE 5.—Expenditure, Income and Return for 17 Dairy Farms Under 125 Acres.

TABLE 6.—Trend of Profits per Farm, per Acre and per Cow.

TABLE 7.—Some Comparative per Cow Figures for 63 Dairy Farms.

SOME TRENDS AND COMPARISONS.

Cropping.—With changes in farm size negligible, the cropping programme gives a reliable indication of changing conditions. Wheat—seldom important as a cash crop on these farms—fell away after 1944-45, as to some extent did the relatively unimportant mashlum and bean crops. The average acreages of oats were very comparable throughout, but there is a suggestion of a decline in the area cropped for turnips and swedes, and a slightly reduced potato acreage among the smaller farms. In both size groups, the hay and grazing acreages rose, giving, over all farms, about 8 acres more of these two classifications in 1947-48 than in 1943-44. For the latest year, 66% of the average farm was hayed or grazed.

Table 1 in the Appendix contains a detailed statement.

Stocking.—The averages available on "work horses" show a steady decline, indicating increasing use of the tractor. In the group of farms of over 125 acres, the reduction is almost equivalent to 1 horse less per farm over a 5 year period. By 1947-48, these farms, averaging about 222 adjusted acres, were carrying only 1 work horse for each 75 acres of farm size.

For the dairy herd, the group of 46 larger farms suggests a slightly increased stock-carry, both in cows and in dairy followers, but the group of smaller farms would appear to have carried 1 or 2 cows less in 1947-48 than in 1943-44. Also, while in the smaller farm group, sheep were unimportant, the group of larger sized farms suggests some reduction in the ewe-flocks carried, this tendency partly explaining some of the slightly heavier stocking with dairy cattle which this group shows.

While the poultry flocks on the larger farms remained almost unchanged, the figures for the smaller farms for the two closing years indicate increasing attention to poultry.

Details of the stock carried each year are shown in Table 2 in the Appendix.

Expenditure.—The five year period saw continually increasing trading expenditure, most markedly in the payments to, or charges for, paid and unpaid labour. In 1947-48 the labour charge, excluding the value of manual or managerial work by the farmer himself, had risen to make up 30% of total outgoings. In the group of larger farms the actual percentage was 31%, and for the smaller farms—those on which farmers' manual work is most important—the percentage was 26%. Every other classification of expenditure, except stock purchases and the "rent, rates and insurance" heading, shows increased outgoings. The decreasing dependence on horses for power is reflected in the falling annual replacement costs.

Appendix Tables 3, 4 and 5 give details of, and changes in, farm expenditure.

Income.—The total receipts from milk sales indicate a steady upward trend, the average annual "milk-cheque" per farm being £900 more in 1947-48 than in 1943-44. In contrast the income from crop sales declined. Receipts from the sale of calving heifers and cows in early lactations showed, as is to be expected, some annual fluctuations, but in both size groups the 1947-48 and 1946-47 figures were above 1943-44. The group of smaller farms points to a minor, but evident, increase in the annual value of poultry produce sold.

Tables 3, 4 and 5 in the Appendix provide detailed information.

Balance Between Income and Expenditure.—By the method of accounting used, equipment on hand at the opening date is part of the opening valuation, and this, plus any new equipment or improvement expenditure, appears in the closing valuation after charging depreciation and allowances. Thus, capital expenditure as part of outgoings is partly offset by the depreciated value at which it is included in the closing valuation. Considering only gross expenditure as against receipts, gives :—

ALL 63 FARMS.

Year.	Total Income.	Trading Expenditure.	Balance (1).	Deduct Capital Expenditure.	Balance (2).
1947-48	£5,360	£4,105	£1,255	£278	£977
1946-47	£5,009	£3,647	£1,362	£193	£1,169
1945-46	£4,695	£3,468	£1,227	£147	£1,080
1944-45	£4,550	£3,472	£1,078	£187	£891
1943-44	£4,483	£3,192	£1,291	£152	£1,139

The figures shown as Balance (1) are those before charging any purchase of new equipment or of depreciation on existing equipment. The column, headed Balance (2), represents the position after new equipment had been purchased, but before allowing depreciation on such additions, or on existing equipment.

The size of the average farm to which these balances relate was 185 acres.

Similar figures for the two size-groups are :—

46 FARMS OVER 125 ACRES.

Year.	Total Income.	Trading Expenditure.	Balance (1).	Deduct Capital Expenditure.	Balance (2).
1947-48	£6,212	£4,751	£1,461	£310	£1,151
1946-47	£5,788	£4,179	£1,609	£228	£1,381
1945-46	£5,432	£3,997	£1,435	£180	£1,255
1944-45	£5,239	£4,040	£1,199	£232	£967
1943-44	£5,202	£3,704	£1,498	£169	£1,329

17 FARMS UNDER 125 ACRES.

1947-48	£3,054	£2,359	£695	£191	£504
1946-47	£2,903	£2,205	£698	£99	£599
1945-46	£2,701	£2,037	£664	£56	£608
1944-45	£2,683	£1,934	£749	£65	£684
1943-44	£2,536	£1,806	£730	£104	£626

The average size over the 46 farms was 222 acres and over the 17 farms it was 85 acres.

For the group of larger farms, for the four year period, 1943-44 to 1946-47, the average balance, before meeting capital expenditure, was £1,435, and the same balance for 1947-48, at £1,461, was very close to this average. The same comparison for the smaller farms gives £710 as the four year's average, which is £15 above the 1947-48 balance of £695.

Considering the balance between income and expenditure after meeting capital expenditure, the 1947-48 figure for the larger farm group, at £1,151, was below the £1,233 which represents the average for the previous four years. Similarly, with the smaller farms, the 1947-48 balance was £504; considerably below the £629 which is the average of the preceding four years.

Equipment Valuations, Depreciation and Allowances.—While depreciation and allowances are not shown as a separate item in the appendix tables, the appropriate charges have been made by writing down annually the opening valuation of equipment, and also any new equipment purchased. The charges made against profits under this heading have increased, partly because of increasing capital expenditure, and partly on account of the introduction of the 20% "initial" allowance. In the standard form of accounting used, sales of equipment are credited to the Farm Account at value realised, but on the average these are not of sufficient importance to introduce any large element of "capital" profit into the accounting, nor to reduce considerably the net charge for depreciation and allowances.

ANNUAL CHARGES FOR DEPRECIATION AND ALLOWANCES.

	46 Farms Over 125 Acres.	17 Farms Under 125 Acres.
1947-48 ...	£365	£133
1946-47 ...	£195	£99
1945-46 ...	£168	£85
1944-45 ...	£142	£78
1943-44 ...	£119	£157

The trends in the two groups show a difference. For the group of larger farms the increase is continuous, and is very marked in 1947-48, while for the smaller farms, both the opening and closing years are high—in this case indicating some recent mechanisation for field or byre about the early 1940's, and some tractor, car or machinery purchases or replacements in 1947-48. The larger farms would, however, be more fully mechanised in field and byre by the late 1930's and, on older equipment, the sums written off in the early 1940's would be smaller. By 1947-48 tractor and car replacements and some capital improvement expenditure account for the marked increase.

Stock and Crop Valuations.—In general, the methods of valuation used annually are conservative. The effect of increases or decreases on the structure of profits is shown in the following section. For certain years, owing to minor adjustments and improvements in valuation methods, the closing valuation of one year may not wholly agree with the opening valuation of the succeeding year, and in this connection slight discrepancies of this nature are present in Tables 3, 4 and 5. The differences are, however, small, and the effect on comparative annual figures is negligible.

Profit.—In summary form, the accounting profits may be presented as :—

- (i) The balance between Trading Receipts and Trading Expenses (*i.e.* omitting sales or purchases of capital equipment).
- (ii) Less the charges for depreciation and allowances.
- (iii) Plus or minus the annual increase or decrease in the stock and crop valuations.

The yearly averages for the two size-groups are :—

	1947-48.	1946-47.	1945-46.	1944-45.	1943-44.
	£	£	£	£	£
46 FARMS OVER 125 ACRES :—					
Trading Receipts exceeded Trading Expenses by	1437	1552	1384	1144	1461
Deduct Depreciation and Allowances	365	195	168	142	119
	<u>1072</u>	<u>1357</u>	<u>1216</u>	<u>1002</u>	<u>1342</u>
Stock and Crop Valuation :—					
Add Rise	127	—	—	171	—
Deduct Fall	—	52	40	—	45
	<u>127</u>	<u>52</u>	<u>40</u>	<u>171</u>	<u>45</u>
NET PROFIT	<u>£1199</u>	<u>£1305</u>	<u>£1176</u>	<u>£1173</u>	<u>£1297</u>
17 FARMS UNDER 125 ACRES :—					
Trading Receipts exceeded Trading Expenses by	672	675	661	739	729
Deduct Depreciation and Allowances	133	99	85	78	157
	<u>539</u>	<u>576</u>	<u>576</u>	<u>661</u>	<u>572</u>
Stock and Crop Valuation :—					
Add Rise	11	99	51	—	119
Deduct Fall	—	—	—	104	—
	<u>11</u>	<u>99</u>	<u>51</u>	<u>104</u>	<u>119</u>
NET PROFIT	<u>£550</u>	<u>£675</u>	<u>£627</u>	<u>£557</u>	<u>£691</u>

Among the larger farms, in only two years did the stock and crop valuation increase contribute markedly to the accounting profit, namely £127 in 1947-48, and £171 in 1944-45. For the smaller farms, in 1946-47, £99 of the accountancy profit was valuation increase, and in 1943-44, this item accounted for £119 of the profit shown.

Tables 3, 4 and 5 in the Appendix give the annual profit figures.

Profit Standards.—Calculations of "per acre" and "per cow" have been chosen as convenient standards of concise indication of return.

For the general group of 63 farms, profit "per acre" varied between £5 9s. and £6 2s., with the 1947-48 figure of £5 11s. only slightly below the £5 16s. which represents the average of the four preceding years. The rate of profit per acre was higher on the smaller farms—partly because of the importance of farmers' manual work—but the 1947-48 figure was £1 per acre below the average of the past four years. On the larger farms, the 1947-48 average was £5 8s. per acre in comparison with £5 12s. over the earlier four years.

For all 63 farms the total farm profit, expressed per cow, averaged £24 per year over the 5 years.

Detail on these points is given in Appendix Table 6.

A Calculation of Profit Structure.—As in the case of other “one-man” business undertakings, the use of the term “profit” can be introduced at various stages of the calculation of return from farming, and similarly to these cases, the exact assessment of the value of the proprietors’ manual and managerial work is impossible. It is of interest, however, to attempt some refinement of the returns already quoted in this report, even although the various stages of analysis cannot be other than rough and arbitrary. The following are the methods used :—

- (i) For the average farm of up to 125 acres, farmers’ manual work has been valued at £350 per farm and, for the larger group, at £200 per farm. These estimates take into account, for an essentially dairy district, the high rates being paid to skilled byre labour, and the considerable overtime work undertaken by the farmer himself in milk production.
- (ii) Interest on tenancy capital has been charged at 2½%, calculated on the average tenancy valuation for accountancy purposes increased by one-third to correct for various understatements of assets arising from conservative valuations, depreciated equipment and valuation dates which do not coincide with the May or November terms.
- (iii) A sum has been allowed for managerial work on an arbitrary basis of 10% on the average tenancy valuation as already increased by one-third.

The result of these calculations is :—

	46 Farms Over 125 Acres.	17 Farms Under 125 Acres.
Average Profit over 5 Years	£1230	£620
Allow against Farmers’ Manual Work ...	200	350
	<hr/>	<hr/>
Allow Interest at 2½% on Capital	£1030	£270
	195	98
	<hr/>	<hr/>
Allow Managerial Salary at 10% on Capital ...	£835	£172
	778	392
	<hr/>	<hr/>
Surplus	£57	—
Deficit	—	£220
	<hr/>	<hr/>

The group of larger farms, with a roughly estimated capital of around £7,800, left, per farm, a surplus of £57, after charging £200 for farmers’ manual work, £195 for interest on capital, and £778 for managerial salary. The smaller farms failed by £220 per farm to meet a charge of £350 for farmers’ manual work, £98 for interest on capital, and £392 as managerial salary. In this case the estimated capital was around £3,900 per farm at current values. As already stated the 63 farms dealt with are, in all probability, rather above the average which would be shown by a larger sample.

Some Comparative Per Cow Figures.

Milk Sales per Cow.—The value of milk sales per cow carried was £20 higher in 1947-48 than in 1943-44, this figure for both size groups showing a steady annual increase. In 1947-48 the group of larger farms averaged £70 of milk sales per cow as against £76 as the average for the smaller farms.

Purchased Concentrates per Cow.—This figure is to some extent misleading as it indicates not the direct purchased concentrate input for immediate milk production, but the total farm bill for purchased concentrate foods expressed per cow carried. On the whole, however, it will relate almost wholly to dairy concentrates on the larger farms and mainly to dairy concentrates on the smaller farms, although in this case, poultry feeding stuffs purchased will form some part of the total expenditure. The annually rising outlay under this head reflects jointly some rise in purchase prices, the rather larger quantities available in contrast to the mid-war years and the linkage of supplies to milk yields obtained.

Labour Expenditure Expressed per Cow.—The labour figures used are those for the farm as a whole—field labour, byre labour and general farm work—expressed per cow, but excluding the manual work of the farmer himself. On the average, for the larger farms, the total labour bill was £9 per cow greater in 1947-48 than in 1943-44.

DEFINITIONS AND ACCOUNTING METHOD.

Net Profit.—The profits quoted throughout this report are gross, that is, the expenditure does not include the relevant payments of income-tax under Schedules “B” or “D.” Further, except in the section where the structure of profit is calculated, the labour bill does not include any allowance for the manual or managerial duties of the farmer, nor has any charge been made for interest on the tenancy capital. It is essential, therefore, that the components of the profit figures be clearly understood. The figures of profit represent, in fact, the salary earned by a mixed group of working and managerial farmers, before national taxation, all household and personal expenses, interest on tenancy capital, and savings of a personal or business nature, other than depreciation, have been met. Also, as the income side of the farm accounts contains a credit for the value of farm produce used, and a moderate figure representing the rental value of the dwelling-house, these two items are already an essential part of the profit. Depreciation and allowances on equipment, and allowances on structural improvements erected during the two closing years have, however, been charged before arriving at profit. The rate of allowance under these heads is identical with normal taxation practice, and includes the 20% “initial” allowance on new equipment purchased, and the annual one-tenth on “improvement expenditure.” Although these depreciation charges are not separately shown in the summary tables, they are given effect to as the deficit between the Opening Valuation plus Expenditure, and the Sales plus Closing Valuation, of implements, cars and improvement expenditure.

Expenditure.—All normal trading outgoings are included. The item of "Total Labour" excludes any charge for the manual or managerial duties of the farmer, but in the majority of cases it does include some payment as wages or salary to the farmer's wife for farm duties; the average payment under this head being between £75 and £125 per annum. In all other respects the quoted expenditure on labour is complete, and includes a sum against partners' and other unpaid work, usually at slightly above minimum wage rates. All wages paid partly in kind have been allowed for. The expenditure position is invariably that as tenant, with items arising from ownership excluded.

Valuations.—The method used followed normal farm accounting practice, with livestock valuations mainly on a trading basis. Over the period covered, the rising market values for crop were given effect to. In the case of practically every farm, however, the total tenancy valuations of stock, crop and equipment do present an understatement of "ingo" or "waygo" values, partly because of depreciated equipment and partly because of the conservative valuations of livestock and crop.

Income.—Again the position is that as tenant, with receipts arising out of ownership excluded. The term "prime cows" is used to indicate a classification of calving heifers and good quality cows sold, in contrast to the cast and fat cows included with "other cattle." The heading of "Crop Sales and Subsidies" includes only the direct crop subsidies payable on wheat, potatoes and rye; all other subsidy receipts being included with "Miscellaneous Receipts," which heading covers, in addition to sundry small receipts, the credit given for produce used or given as perquisites, and the rental value of the farm dwelling-house.

Adjusted Acreage.—The calculations "per acre" are based on an adjusted acreage with 4 acres of "rough grazing" taken as equivalent to 1 acre of ordinary grazing.

Calculations "Per Cow."—As the farms dealt with are all essentially dairy farms, the "per cow" basis has been used as a convenient standard for making certain comparisons. It has to be stressed, however, that although "profit per cow," "purchased concentrates per cow," and "labour expressed per cow" are almost wholly related to dairying, the presence of certain other minor farm enterprises affect these figures.

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TABLE I.

**AVERAGE CROP ACREAGES OF 63 IDENTICAL DAIRY FARMS
OVER THE FIVE YEAR PERIOD, 1943-44 to 1947-48.**

63 IDENTICAL DAIRY FARMS.
COMBINED GROUP.

46 IDENTICAL DAIRY FARMS.
OVER 125 ACRES.

17 IDENTICAL DAIRY FARMS.
UNDER 125 ACRES.

CROP.	1947-48	1946-47	1945-46	1944-45	1943-44	1947-48	1946-47	1945-46	1944-45	1943-44	1947-48	1946-47	1945-46	1944-45	1943-44
Wheat	2.1	1.8	2.3	5.4	6.1	2.8	2.2	3.1	6.8	7.3	.5	.9	.2	1.7	2.8
Rye	—	—	—	.4	.1	—	—	—	.1	.2	—	—	—	1.1	—
Barley ... ..	.3	.3	.2	.9	.9	.3	.5	.2	1.1	1.1	—	—	—	.2	.5
Oats	33.0	34.9	34.1	33.3	33.2	38.0	41.2	39.6	39.4	39.1	19.4	17.9	19.4	16.8	17.1
Mashlum and Beans	3.1	3.7	4.3	6.3	4.9	3.8	3.9	4.7	7.0	5.2	1.7	3.3	3.3	4.7	3.9
Potatoes	3.6	3.8	3.9	4.0	3.9	4.3	4.6	4.7	4.8	4.5	1.7	1.7	1.7	2.0	2.2
Turnips and Swedes	8.7	9.4	9.4	9.7	10.4	10.5	11.1	11.0	11.6	12.4	4.0	4.7	5.0	4.9	4.8
Kale, etc.	2.8	2.2	2.5	2.6	2.7	3.5	2.5	2.7	3.2	3.4	1.1	1.2	1.7	1.0	1.0
Hay	25.0	23.7	24.8	21.7	22.6	28.3	26.8	28.3	24.5	25.8	16.0	15.4	15.1	14.3	14.2
Grass	99.4	99.0	97.3	94.5	94.0	120.9	120.9	119.4	115.2	114.7	40.0	39.1	37.8	37.5	37.7
Rough Grazing ...	25.1	24.9	24.9	24.9	24.9	34.3	33.7	33.7	33.7	33.7	.5	1.1	1.1	1.1	1.1
Total Acreage ...	203.1	203.7	203.7	203.7	203.7	246.7	247.4	247.4	247.4	247.4	84.9	85.3	85.3	85.3	85.3
ADJUSTED ACREAGE	184.3	185.0	185.0	185.0	185.0	221.0	222.1	222.1	222.1	222.1	84.5	84.5	84.5	84.5	84.5

TABLE 2.

**AVERAGE STOCKING OF 63 IDENTICAL DAIRY FARMS
OVER THE FIVE YEAR PERIOD, 1943-44 to 1947-48.**

63 IDENTICAL DAIRY FARMS.
COMBINED GROUP.

46 IDENTICAL DAIRY FARMS.
OVER 125 ACRES.

17 IDENTICAL DAIRY FARMS.
UNDER 125 ACRES.

STOCKING.	1947-48	1946-47	1945-46	1944-45	1943-44	1947-48	1946-47	1945-46	1944-45	1943-44	1947-48	1946-47	1945-46	1944-45	1943-44
Work Horses ...	2.8	2.9	3.0	3.2	3.4	3.0	3.2	3.3	3.5	3.7	1.9	2.0	2.2	2.4	2.6
Other Horses ...	.8	.8	.9	.8	.7	.9	1.0	1.0	1.0	.8	.4	.4	.4	.4	.4
Cows ...	45	44	43	43	44	52	51	50	50	50	25	25	25	25	27
Bulls ...	2.1	2.1	2.3	2.2	2.1	2.3	2.4	2.4	2.4	2.3	1.6	1.5	2.0	1.4	1.5
Young Stock ...	50	52	51	49	47	57	60	60	57	54	28	30	28	28	28
Stores and Feeders	.8	.8	.6	.5	.7	1.0	1.1	.9	.6	.9	—	.1	—	.1	.2
Sheep— Breeding Ewes	17.8	16.9	17.9	20	21.8	24.3	23.1	24.4	27.5	29.1	.2	.1	.1	1.4	2.1
Sheep—Rams ...	5.9	2.5	.6	.6	.6	8.0	3.5	.8	.8	.8	—	—	—	.1	.1
All Other Sheep ...	18.2	16.5	23.4	20.6	21.4	22.8	20.4	29.6	25.9	26.3	5.4	5.7	6.5	6.4	7.9
Boars ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sows ...	.2	.2	.1	.1	.2	—	—	.1	.1	.1	.6	.5	.4	.2	.2
Suckers ...	.4	.3	.3	.2	.1	—	.3	.3	.2	.1	1.5	.3	.2	.2	—
Other Pigs ...	2.5	2.0	2.7	4.0	4.5	3.0	2.3	3.4	5.2	5.8	1.3	1.0	.8	.5	.9
Poultry ...	93	85	73	71	77	77	75	67	63	77	135	114	88	91	77

TABLE 3.

AVERAGE AND PERCENTAGE EXPENDITURE, INCOME AND RETURN ON 63 IDENTICAL DAIRY FARMS.

EXPENDITURE.	1947-48	1946-47	1945-46	1944-45	1943-44	1947-48	1946-47	1945-46	1944-45	1943-44
	£	£	£	£	£	%	%	%	%	%
Horses	22	34	57	40	73	.5	.9	1.6	1.1	2.2
Cows and Heifers ...	83	107	115	267	153	1.9	2.8	3.2	7.3	4.6
Other Cattle	73	55	63	105	76	1.7	1.4	1.8	2.9	2.3
Sheep, Pigs and Poultry ...	162	133	159	152	184	3.7	3.5	4.4	4.2	5.5
Purchased Concentrates ...	736	642	639	556	518	16.8	16.7	17.7	15.2	15.5
Other Foods, etc. ...	207	178	148	142	107	4.7	4.6	4.1	3.9	3.2
Seeds	179	139	151	155	161	4.1	3.6	4.2	4.2	4.8
Lime, Manures, etc. ...	357	310	290	269	261	8.1	8.1	8.0	7.3	7.8
Total Labour	1328	1202	1040	982	884	30.3	31.3	28.7	26.8	26.4
Implement Repairs ...	209	185	165	149	144	4.8	4.8	4.6	4.1	4.3
Fuel, Light and Power ...	180	154	154	167	153	4.1	4.0	4.2	4.6	4.6
Rent, Rates and Insurance	259	256	254	254	256	5.9	6.7	7.0	6.9	7.7
Other General Expenses	310	252	233	234	222	7.1	6.6	6.4	6.4	6.6
Total Trading Expenses ...	4105	3647	3468	3472	3192	93.7	95.0	95.9	94.9	95.5
Improvement Expenditure	42	26	—	—	—	1.0	.7	—	—	—
New Implements and Car	236	167	147	187	152	5.3	4.3	4.1	5.1	4.5
Total Expenditure	4383	3840	3615	3659	3344	100	100	100	100	100
OPENING VALUATION										
Stock and Crop	3969	4076	4091	3992	3972					
Implements, etc.	1081	1006	1027	1004	1018					
NET PROFIT	1025	1134	1027	1007	1134					
TOTAL	10,458	10,056	9760	9662	9468					

INCOME.	1947-48	1946-47	1945-46	1944-45	1943-44	1947-48	1946-47	1945-46	1944-45	1943-44
	£	£	£	£	£	%	%	%	%	%
Horses	31	40	61	63	82	.6	.8	1.3	1.4	1.8
"Prime" Cows	697	617	547	626	472	13.0	12.3	11.7	13.8	10.5
Other Cattle	271	268	256	287	304	5.1	5.4	5.5	6.3	6.8
Sheep and Pigs	278	303	349	306	386	5.2	6.0	7.4	6.7	8.6
Milk and Dairy Produce ...	3296	3060	2722	2484	2384	61.4	61.1	57.9	54.6	53.2
Eggs, Poultry, etc. ...	73	66	59	57	65	1.4	1.3	1.3	1.3	1.4
Crop Sales and Subsidies	452	409	479	500	591	8.4	8.2	10.2	11	13.2
Miscellaneous Receipts ...	238	199	184	184	172	4.5	4.0	3.9	4	3.9
Total Trading Receipts ...	5336	4962	4657	4507	4456	99.6	99.1	99.2	99.1	99.4
Implements and Car Sold	24	47	38	43	27	.4	.9	.8	.9	.6
Total Income	5360	5009	4695	4550	4483	100	100	100	100	100
CLOSING VALUATION										
Stock and Crop	4065	4065	4076	4089	3973					
Implements, Etc.	1033	982	989	1023	1012					
NET LOSS	—	—	—	—	—					
TOTAL	10,458	10,056	9760	9662	9468					

TABLE 4.

AVERAGE AND PERCENTAGE EXPENDITURE, INCOME AND RETURN ON 46 IDENTICAL DAIRY FARMS OVER 125 ACRES.

EXPENDITURE.	1947-48	1946-47	1945-46	1944-45	1943-44	1947-48	1946-47	1945-46	1944-45	1943-44
	£	£	£	£	£	%	%	%	%	%
Horses	26	37	55	37	51	.5	.8	1.3	.9	1.3
Cows and Heifers ...	106	116	140	331	180	2.1	2.6	3.3	7.7	4.6
Other Cattle	74	63	69	117	83	1.5	1.4	1.7	2.8	2.2
Sheep, Pigs and Poultry	189	148	179	184	216	3.7	3.5	4.3	4.3	5.6
Purchased Concentrates ...	821	718	714	619	585	16.2	16.2	17.1	14.5	15.1
Other Foods, Etc. ...	216	184	158	160	118.	4.3	4.2	3.8	3.7	3.0
Seeds	209	158	177	183	192	4.1	3.6	4.2	4.3	5.0
Lime, Manures, Etc. ...	419	369	345	318	309	8.3	8.4	8.3	7.4	7.9
Total Labour	1574	1421	1233	1169	1072	31.1	32.2	29.5	27.4	27.7
Implement Repairs ...	248	214	189	172	169	4.9	4.9	4.5	4.0	4.4
Fuel, Light and Power ...	207	172	171	193	178	4.1	3.9	4.1	4.5	4.6
Rent, Rates and Insurance	306	301	300	298	301	6.1	6.8	7.2	7.0	7.8
Other General Expenses	356	278	267	259	250	7.0	6.3	6.4	6.1	6.4
Total Trading Expenses ...	4751	4179	3997	4040	3704	93.9	94.8	95.7	94.6	95.6
Improvement Expenditure	52	36	—	—	—	1.0	.8	—	—	—
New Implements and Car	258	192	180	232	169	5.1	4.4	4.3	5.4	4.4
Total Expenditure	5061	4407	4177	4272	3873	100	100	100	100	100
OPENING VALUATION										
Stock and Crop	4557	4739	4780	4606	4639					
Implements, Etc. ...	1256	1145	1168	1129	1133					
NET PROFIT	1199	1305	1176	1173	1297					
TOTAL	12,073	11,596	11,301	11,180	10,942					

INCOME.	1947-48	1946-47	1945-46	1944-45	1943-44	1947-48	1946-47	1945-46	1944-45	1943-44
	£	£	£	£	£	%	%	%	%	%
Horses	34	45	50	60	59	.5	.8	.9	1.1	1.1
"Prime" Cows	850	746	660	744	573	13.7	12.9	12.1	14.2	11.0
Other Cattle	314	301	294	313	350	5.0	5.2	5.5	6.0	6.7
Sheep and Pigs	334	354	425	366	475	5.4	6.1	7.8	7.0	9.2
Milk and Dairy Produce	3796	3514	3112	2839	2737	61.1	60.8	57.4	54.1	52.5
Eggs, Poultry, Etc. ...	51	50	46	48	64	.8	.8	.8	.9	1.3
Crop Sales and Subsidies	529	493	582	606	708	8.5	8.5	10.7	11.6	13.6
Miscellaneous Receipts ...	280	228	212	208	199	4.6	3.9	3.9	4.0	3.9
Total Trading Receipts ...	6188	5731	5381	5184	5165	99.6	99.0	99.1	98.9	99.3
Implements and Car Sold	24	57	51	55	37	.4	1.0	.9	1.1	.7
Total Income	6212	5788	5432	5239	5202	100	100	100	100	100
CLOSING VALUATION										
Stock and Crop	4684	4687	4740	4777	4594					
Implements, Etc. ...	1177	1121	1129	1164	1146					
NET LOSS	—	—	—	—	—					
TOTAL	12,073	11,596	11,301	11,180	10,942					

TABLE 5.

AVERAGE AND PERCENTAGE EXPENDITURE, INCOME AND RETURN ON 17 IDENTICAL DAIRY FARMS UNDER 125 ACRES.

EXPENDITURE.	1947-48	1946-47	1945-46	1944-45	1943-44	1947-48	1946-47	1945-46	1944-45	1943-44
	£	£	£	£	£	%	%	%	%	%
Horses	12	24	62	49	134	.5	1.1	3.0	2.4	7.0
Cows and Heifers ...	22	83	48	94	78	.9	3.6	2.3	4.7	4.1
Other Cattle	70	35	47	73	56	2.7	1.5	2.2	3.6	2.9
Sheep, Pigs and Poultry	85	93	105	66	96	3.3	4.0	5.0	3.4	5.1
Purchased Concentrates ...	505	438	437	385	339	19.8	19.0	20.8	19.2	17.8
Other Foods, Etc. ...	184	160	122	98	77	7.2	6.9	5.9	4.9	4.0
Seeds	97	86	82	78	76	3.8	3.7	3.9	3.9	4.0
Lime, Manures, Etc. ...	188	150	141	137	130	7.4	6.5	6.8	6.9	6.8
Total Labour	662	609	516	472	375	25.9	26.4	24.6	23.6	19.6
Implement Repairs ...	105	108	101	88	77	4.1	4.7	4.8	4.4	4.0
Fuel, Light and Power ...	109	105	107	94	85	4.3	4.6	5.1	4.7	4.5
Rents, Rates and Insurance	132	133	128	132	135	5.2	5.8	6.1	6.6	7.1
Other General Expenses	188	181	141	168	148	7.4	7.9	6.8	8.4	7.7
Total Trading Expenses ...	2359	2205	2037	1934	1806	92.5	95.7	97.3	96.7	94.6
Improvement Expenditure	16	—	—	—	—	.6	—	—	—	—
New Implements and Car	175	99	56	65	104	6.9	4.3	2.7	3.3	5.4
Total Expenditure ...	2550	2304	2093	1999	1910	100	100	100	100	100
OPENING VALUATION										
Stock and Crop	2379	2280	2228	2332	2168					
Implements, Etc. ...	608	631	645	666	709					
NET PROFIT	550	675	627	557	691					
TOTAL	6087	5890	5593	5554	5478					

INCOME.	1947-48	1946-47	1945-46	1944-45	1943-44	1947-48	1946-47	1945-46	1944-45	1943-44
	£	£	£	£	£	%	%	%	%	%
Horses	25	30	90	70	143	.8	1.0	3.3	2.6	5.6
"Prime" Cows	283	266	242	306	197	9.3	9.2	9.0	11.4	7.8
Other Cattle	155	180	156	215	180	5.1	6.2	5.8	8.0	7.1
Sheep and Pigs	124	165	146	145	146	4.1	5.7	5.4	5.4	5.8
Milk and Dairy Produce	1945	1831	1662	1524	1427	63.7	63.1	61.5	56.9	56.3
Eggs, Poultry, Etc. ...	131	109	95	80	67	4.3	3.7	3.5	3.0	2.6
Crop Sales and Subsidies	244	180	202	216	278	8.0	6.2	7.5	8.0	11.0
Miscellaneous Receipts ...	124	119	105	117	97	4.0	4.1	3.9	4.3	3.8
Total Trading Receipts ...	3031	2880	2698	2673	2535	99.3	99.2	99.9	99.6	100
Implements and Car Sold	23	23	3	10	1	.7	.8	.1	.4	—
Total Income	3054	2903	2701	2683	2536	100	100	100	100	100
CLOSING VALUATION										
Stock and Crop	2390	2379	2279	2228	2287					
Implements, Etc. ...	643	608	613	643	655					
NET LOSS	—	—	—	—	—					
TOTAL	6087	5890	5593	5554	5478					

TABLE 6.

FIVE YEAR TREND OF PROFITS ON 63 IDENTICAL DAIRY FARMS.

Year.	Total Identical Sample of 63 Farms.			46 Farms Over 125 Acres.			17 Farms Under 125 Acres.		
	Profit per Farm.	Profit per Adjusted Acre.	Profit per Cow.	Profit per Farm.	Profit per Adjusted Acre.	Profit per Cow.	Profit per Farm.	Profit per Adjusted Acre.	Profit per Cow.
	£	£	£	£	£	£	£	£	£
1947-48	1025	5 11/-	22 18/-	1199	5 8/-	23 4/-	550	6 10/-	21 14/-
1946-47	1134	6 3/-	25 19/-	1305	5 17/-	25 16/-	675	7 19/-	26 11/-
1945-46	1027	5 11/-	23 14/-	1176	5 6/-	23 9/-	627	7 8/-	25 3/-
1944-45	1007	5 9/-	23 7/-	1173	5 9/-	23 13/-	557	6 12/-	21 17/-
1943-44	1134	6 2/-	25 18/-	1297	5 17/-	25 18/-	691	8 4/-	26 2/-

TABLE 7.

SOME COMPARATIVE PER COW FIGURES FOR 63 IDENTICAL DAIRY FARMS.

Year.	Total Identical Sample of 63 Farms.			46 Farms Over 125 Acres.			17 Farms Under 125 Acres.		
	Milk Sales per Cow.	Purchased Concentrates per Cow.	Labour Expressed per Cow.	Milk Sales per Cow.	Purchased Concentrates per Cow.	Labour Expressed per Cow.	Milk Sales per Cow.	Purchased Concentrates per Cow.	Labour Expressed per Cow.
	£	£	£	£	£	£	£	£	£
1947-48	71	16 9/-	29 14/-	70	15 17/-	30 8/-	76 11/-	19 17/-	26 1/-
1946-47	67	14 13/-	27 10/-	67	14 4/-	28 3/-	71 19/-	17 4/-	23 19/-
1945-46	60	14 15/-	24 0/-	58	14 4/-	24 12/-	66 14/-	17 11/-	20 14/-
1944-45	55	12 18/-	22 15/-	54	12 10/-	23 12/-	59 17/-	15 2/-	18 11/-
1943-44	51	11 17/-	20 4/-	51	11 13/-	21 8/-	53 16/-	12 16/-	14 3/-