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EDINBURGH AND EAST OF SCOTLAND COLLEGE OF AGRICULTURE.

(Economics Department)

REPORT ON
the Financial Results of
Ten East of Scotland Smallholdings
for 1933-34.

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1. INTRODUCTORY.

In connection with the advisory work of the College, the accounts of ten smallholdings have been completed for the year 1933-1934: this represents a decrease of three on the preceding year and there have been some changes in the composition of the group. Although the holdings are widely scattered geographically, and work under very diverse conditions of soil, climate, and situation relative to markets, they may now be conveniently classified into one group instead of two as in previous years, since, with but one exception, they are specialising on dairying and poultrykeeping on small mixed holdings with an eye to securing quick returns, poultry in most cases being by far the most important subsidiary enterprise to the dairy.

The average size of the ten holdings is 44 acres, and some idea of the nature and scale of their business may be obtained from a study of the Table on page 7, on which is set out the average trading account per holding for the year under review; it will be seen that the net profit per holding works out at £102.

The high range in the monetary value of the production and in the costs on these smallholdings is characteristic of this type of enterprise, and indicates an increase when compared with the group figures obtained in the year 1932-33 for all the thirteen holdings dealt with in that year, which comprised seven dairy and six mixed holdings.

A summary is appended of the average costs and output per acre and per cent. on the ten holdings for the year 1933-34, the following terms being used therein:-

Output i.e. Production: the sales e.g. of cattle, or sheep etc. less purchases, after giving effect to any difference between opening and closing valuations.

Power includes repairs, threshing, fuel, tractor expenses, and depreciation of horses and of implements.

General Expenses include livestock expenses, crop expenses, rates, building repairs, carriage, car expenses, insurance and sundries less miscellaneous receipts.

Labour includes cash wages (or board in lieu) paid to members of the smallholder's family at rates locally current, but excludes the labour of himself and his wife.

2. OUTPUT AND COSTS OF PRODUCTION IN 1933-34.1. OUTPUT (=Production).a) Livestock Products.

Cattle
 Sheep & Wool
 Pigs
 Eggs & Poultry
 Dairy Produce
 Sundry Stock

Total Livestock

b) Crop Products.

Wheat
 Barley
 Oats
 Potatoes
 Hay & Straw
 Other Crops

Total Crops

a + b = TOTAL OUTPUT

2. COSTS OF PRODUCTION.

Purchased Foods
 Seeds
 Manures
 Power
 General Expenses
 Labour
 Rent

TOTAL COSTS

3. NET PROFIT

| 10 Holdings. | |
|--------------|-----------|
| Per Acre | Per Cent. |
| £ s. d. | % |
| -.14.11 | 7 |
| -. 7. 9 | 3 |
| -. 3. 6 | 1 |
| 1.17. 2 | 16 |
| 5.12. 8 | 50 |
| -. 1. 4 | 1 |
| £8.17. 4 | 78 |
| -. 6. - | 3 |
| -. 8. - | 3 |
| -.12. 7 | 6 |
| -.17. 7 | 8 |
| -. 3. 5 | 1 |
| -. 3. 5 | 1 |
| £2.11. - | 22 |
| £11. 8. 4 | 100% |
| 2.10. - | 28 |
| -. 6.10 | 4 |
| -.13. - | 7 |
| 1. -. 6 | 11 |
| -.16.10 | 9 |
| 2. 3.11 | 24 |
| 1.11. 1 | 17 |
| £9. 2. 2 | 100% |
| £2. 6. 2 | - |

From/

From the above table it will be seen that just half of the total output from these holdings is in the form of dairy produce, and, if the output of poultry products is added to this, the two together account for two-thirds of the total produce sold off. There are, however, within the group wide variations, the output of dairy produce for instance, ranging between extremes of £2. 1. 8 per acre on one holding and £13. 17. 8 an acre on another; that of poultry products ranges between 15/8 an acre and £4. 1. 8; and the total output of all classes of produce ranges between £9. 11. 1 and £17. 17. 5 an acre.

It will be seen also that to secure this high output of livestock products, the home-grown crops and the grazing are of necessity supplemented by a heavy outlay on purchased feeding stuffs which are the biggest single item of costs - £2. 10. - an acre, equal to 28% of the total. Surprisingly enough, for these small family farms, this is closely followed by the cost of labour, which, when the labour of the smallholder's own sons and daughters is included, amounts to £2. 3. 11 an acre - almost exactly one-quarter of total costs. Rent, averaging 31/- an acre, is the next item in importance, the remainder of the costs being spread over power, general expenses, seeds and manures, in approximately equal proportions. Total costs, like total output, shew wide variations.

3. CROPS, STOCK AND LABOUR EMPLOYED.

a) Crops. The cropping on the ten holdings was as follows:-

| <u>Crop</u> | <u>Hay</u> | <u>Pasture</u> | <u>Wheat</u> | <u>Barley</u> | <u>Oats</u> | <u>Potatoes</u> | <u>Roots</u> | <u>Other Crops</u> | <u>TOTAL</u> |
|------------------------|------------------|----------------|------------------|-----------------|-------------------|-----------------|------------------|------------------------|-------------------|
| Total Acreage | 51 $\frac{1}{4}$ | 141 | 20 $\frac{1}{2}$ | 13 | 138 $\frac{3}{4}$ | 30 | 41 $\frac{1}{2}$ | 5 $\frac{3}{4}$ | 441 $\frac{3}{4}$ |
| Acreage per Holding | 5 | 14 | 2 | 1 $\frac{1}{2}$ | 14 | 3 | 4 | $\frac{1}{2}$ | 44 |
| Per Cent. of Total | 12 | 32 | 5 | 3 | 31 | 7 | 9 | 1 | 100 |

The importance of grazing and fodder requirements on these dairy smallholdings is brought out by the above figures, a total of 44% of the land being under grass. The major portion of the arable land is taken up by the oat crop which occupies practically one-third of the total area and over half the acreage of arable crops. It is interesting to note that the area under wheat shews an increase over the preceding year when wheat was grown on 1% and 3% of the land occupied by dairy and mixed holdings respectively. The acreage under potatoes has shewn a slight decline, 7% of the total area in 1933-34/

1933-34 comparing with 7% on dairy holdings and 11% on mixed holdings in 1932-33. Yields of sales crops, with the exception of barley, were not so heavy in 1933 as in 1932, wheat yielding 21 cwts., oats 22 cwts., barley 28 cwts. and potatoes 8 tons per acre. The proportions of the crops sold off the holdings were as follows:- wheat 63%, oats 35%, barley 100% and potatoes 63%; even so, the acreage of oats sold off is greater than the total acreage of all other crops sold off, which emphasises the important part played by this crop in the economy of the smallholding.

b) Stock. Each holding carries a pair of horses; whilst the number of cows in milk averages 9 per holding, the actual numbers on the holdings ranging from 3 to 12. On an average 10 other cattle are carried by each holding, mainly heifers and heifer calves intended for future herd replacement, or for sale as store cattle. The type of dairy stock is usually either Shorthorn or a Shorthorn cross, though one holder has a herd of 1000-gallon Ayrshires, all officially recorded. Some cattle are sold off all the holdings, most of them being cast cows, or heifers and calves surplus to the requirements for herd replacement, and, in fact, only three of the holdings sold any fat cattle as distinct from the above classes, thus indicating that it is not the usual practice on these holdings to incur the additional expense, risk and time involved in fattening cattle. Small flocks of Blackface breeding ewes are kept on three of the holdings and fat lambs are sold off. On four of the holdings store lambs are bought to be sold off as fat hogs, but sheep cannot be regarded as of general importance as the output from sheep only takes up 3% of the total output. It is noticeable that pigs are of even less general importance than sheep, and account for only 1% of the total output. Flocks of poultry of varying size are kept on all the holdings and this important branch of the smallholder's activities contributes more to the total output than do cattle, sheep and pigs together.

The high level of costs incurred on these holdings, which in most cases, is accompanied by a lack of working capital, renders the securing of a regular cash income of paramount importance; this is achieved by concentration on milk and egg production as distinct from say the fattening of cattle, or too-great reliance on crops; and it is noticeable that the relationship between the total capital invested in the ten holdings (£5162) and the total turnover for the year (£6444) indicates that the capital is quickly turned over - on an average once in ten months.

c) Labour. On an average the ten holdings employ just over one other person besides the smallholder and his wife; all told twelve persons (6 men, 5 women and 1 boy) being regularly employed. Of these twelve persons, six of them were members of the holders'/'

holders' own family. The distribution of the permanent staff varies considerably, three holdings employing no regular labour at all, one employing one person, four employing two persons and one, an intensive dairy holding with a retail round, employing three persons. All the holdings employ some casual labour. The total labour bill (including allowances for board) amounts to £966, or an average of £96.10. - per holding, a slight increase over the previous year as is shewn by the records of eight holdings for which the two-year comparison is available.

Cost of Labour on 8 Smallholdings 1932-33 and 1933-34.

| Year. | Total Labour Bill per holding | Regular Workers' Wages | | | Casual Labour |
|---------|----------------------------------|------------------------|--------|-------|------------------|
| | | Family | Others | Total | |
| 1932-33 | £71 = 100% | 39% | 37% | 76% | 24% |
| 1933-34 | £79 = 100% | 41% | 44% | 85% | 15% |

It will be noticed that the total labour bill per holding has increased by £8 per annum, equal to 11%, the increased wages of the regular workers being more than sufficient to negative the slight fall in the casual labour bill. The importance of family labour, which accounts for at least 40% of the paid labour, is greatly intensified if the labour of the smallholder and his wife is included: indeed, bearing in mind that none of the family labour would be restricted to customary hours, it may be said that at least three-quarters of the day-to-day manual work on these smallholdings is performed by the holder and his family.

4. CAPITAL INVESTED.

The tenant's capital invested at the beginning of the accounting year, exclusive of growing crops, works out at £516 per holding, and is distributed as shewn below:-

Average/

Average Capital Invested in 10 Holdings 1933-34.

| | <u>Per Holding.</u> | | <u>Per Acre.</u> | | <u>Per Cent.</u> |
|-------------------|---------------------|----------|------------------|--------------|------------------|
| | <u>No.</u> | <u>£</u> | <u>£</u> | <u>s. d.</u> | <u>%</u> |
| <u>Livestock.</u> | | | | | |
| Horses | 2 | 30 | -.13. | 6 | 6 |
| Dairy Cows | 9 | 142 | 3. 4. | 3 | 28 |
| Other Cattle | 10 | 82 | 1.17. | 6 | 16 |
| Sheep | | 12 | -. 5. | 8 | 2 |
| Pigs | | 4 | -. 1. | 9 | 1 |
| Poultry | | 40 | -.17. | 11 | 7 |
| <hr/> | | | | | |
| Total Livestock | | 310 | 7. -. 7 | | 60 |
| Produce | | 20 | -. 9. | - | 4 |
| Implements | | 186 | 4. 4. | 3 | 36 |
| <hr/> | | | | | |
| TOTAL | | £516 | £11.13. | 10 | 100% |
| <hr/> | | | | | |

The distribution of capital again emphasises the importance of livestock in the economy of the smallholding. When it is remembered that "other cattle" mainly constitute a reserve from which the dairy herd is replaced, it may be estimated that approximately two-fifths of the capital is absorbed by dairy stock - actual or potential. This is approximately equal to the capital in implements (including horses), the remaining fifth of the capital being mainly invested in poultry, with sheep and pigs almost negligible. The fact that two-fifths of the capital is taken up by implements focuses attention on a very important aspect of the smallholding, namely, the relatively large proportion of the holder's capital which is sunk in "dead" capital, as distinct from the more immediately productive classes of capital, a fact which constitutes a serious handicap to many smallholders. The total amount of capital invested in each holding varies considerably from £6.10. - per acre to £22 per acre, while the amount invested in livestock varies from £4.10. - to £11 per acre.

Dr. AVERAGE FARM TRADING ACCOUNT OF 10 EAST OF SCOTLAND SMALLHOLDINGS IN 1933-34. Cr.

Average Size of each Holding 44 acres.

| | Per Holding No. | £ | | Per Holding No. | £ |
|--|-----------------------|--------|--|-----------------------|--------|
| To Valuation at 28th May 1933 (incl. Growing Crops) | | 548 | By Valuation at 28th May 1934 (incl. Growing Crops) | | 537 |
| To <u>Livestock Purchases.</u> | | | By <u>Livestock Sales.</u> | | |
| Horses | 1 | 6 | Horses | 1 | 3 |
| Dairy Cows | 2 | 35 | Dairy Cows, cast or fat | 2 | 26 |
| Other Cattle | 1 | 13 | Other Cattle | 9 | 74 |
| Sheep, mainly store | 18 | 17 | Sheep, fat or store | 24 | 36 |
| Pigs | 2 | 2 | Pigs | 3 | 8 |
| Poultry & Eggs | | 3 | Poultry | | 6 |
| Milk | | 61 | Eggs | | 66 |
| To Implements etc. bought | | 21 | Milk | | 327 |
| " Feeding Stuffs | | 105 | Other Livestock Produce | | 3 |
| " Seeds | | 14 | By <u>Crops Sold.</u> | | |
| " Manures | | 28 | Wheat | | 7 |
| " Labour (incl. Board & Allowances) | | 97 | " Quota | | 6 |
| " Rent (incl. Grazing taken) | | 69 | Barley | | 16 |
| " Repairs, Small Tools etc. | | 25 | Oats | | 29 |
| " General Expenses | | 35 | Potatoes | | 37 |
| " Milk Levy (6 months) | | 30 | Small Fruit | | 4 |
| " Net Profit for the year | | 102 | Other Crops | | 5 |
| | | £ 1211 | By Produce Consumed | | 18 |
| | | | " Miscellaneous Receipts | | 3 |
| | | | | | £ 1211 |

5. COMMENTS ON THE FINANCIAL RESULTS.

A comparison of the eight holdings for which records are available for the two years shews that, although the output of livestock products has increased, there has been a corresponding increase in costs, especially of feeding stuffs, so that the average net profit has fallen slightly - from £97 to £93 per holding.

Milk prices have continued on the downgrade for these smallholders, most of whom dispose of their milk wholesale, and after deducting the levy paid or payable to the Scottish Milk Marketing Board (which had been in operation for exactly one-half of the year under review) the average net price realised during the year was 10.1d. per gallon, a drop of approximately 1d. per gallon.

Egg prices have fallen by fully 1d. a dozen, although this has been more than offset by an increase in production. Cattle prices also have fallen, although the holdings where sheep are carried have shared in the welcome appreciation of sheep prices, their selling prices of home-bred lambs having improved by 10/- per head, whilst those which buy store lambs have averaged a useful gross profit of 10/- per head, although one individual made as much as 28/3.

The price of oats fell from 5/9 per cwt. to 5/5 per cwt., which no doubt accounted for the fall in the quantity sold off - a bigger proportion being consumed on the farm. Wheat also declined in price from 5/10 to 5/2 per cwt., although potato prices shewed an improvement of 8/6 a ton, rising from 38/4 per ton to 46/10.

6. INTERPRETATION OF THE FINANCIAL RESULTS.

Not one of the ten holdings made an actual loss on the year's working, although the profits ranged between £8 and £177; five realised a profit of less than £100 - certainly not a very large sum to meet their personal and household expenditure for the year.

The profit earned may be regarded from another angle i.e. as the surplus which it would leave over and above the sum required to cover 4% interest on the tenant's capital invested in live and dead stock, together with a weekly wage of 35/- in return for his manual work: this is regarded as the minimum remuneration, and it is not suggested either that it is adequate for the interminable and arduous hours of toil which a smallholder (and his wife) usually put in on their holding, or that an efficient man would be content with such a low wage in any other sphere.

Average/

Average Management Reward to Smallholdings.

| | 1932-33 13 Holdings | 1933-34 10 Holdings |
|---------------------------------------|------------------------|------------------------|
| Average Net Profit per Holding | *£98 | *£102 |
| Deduct a) 4% Interest on capital | 20 | 21 |
| b) Wage for manual work (35/- a week) | 91 | 91 |
| Balance = Reward for Management | —£13 | —£10 |
| | Deficiency | Deficiency |

*Excluding growing crops from the valuations.

Thus in neither of the two years did the "net profit" shewn by the groups as a whole cover even the very minimum charge which could be put upon the use of the holder's own capital and labour. Moreover, measured by this standard, only five of the holdings shewed a real surplus, and the highest management reward shewn on any holding was less than £60, i.e. very little more than £1 a week, although last year three holdings shewed a surplus of double that amount.

Those holdings suffered worst which are almost exclusively identified with milk production, which hitherto, notwithstanding the risks and responsibilities incidental thereto, had appeared a reasonably safe venture. On three such holdings for which the records are continuous, the net profit per holding (without charging interest on capital or remuneration for the smallholder and his wife) has been as follows:-

| | | | |
|-----------------|-----------------|-----------------|-----------------|
| <u>1930-31.</u> | <u>1931-32.</u> | <u>1932-33.</u> | <u>1933-34.</u> |
| £164.10. 6 | £126. 6. 1 | £92. 3. 6 | £57. 1. 2 |

The decline from 1932-33 must be almost entirely attributed to a smaller NET price per gallon of milk owing to the levy and haulage deductions payable to the Scottish Milk Marketing Board, although, paradoxically enough, the consumer is still paying the same retail price for his milk.

It is noticeable that whereas the small level-producers situated east and south-east of Edinburgh complain bitterly of the heavy burden which they are bearing, as a result of the Board's present/

present policy, those situated to the west of Edinburgh have for the most part not been so badly affected, owing to the fact that the Board gives them a steadier market than they have previously enjoyed. Whilst it does not follow that had there never been a milk marketing scheme in this area, milk prices would always have remained unchanged from those ruling in 1932-33, this drastic diminution in their incomes has descended upon them with such calamitous suddenness that they feel that their livelihood is jeopardised, and willy-nilly, some of them are being compelled completely to re-organise their holdings. It is clear that, as a class, these smallholders are having a hard struggle.

December, 1934.