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FACUITY OF ECONOMIC AND SOCIAL STUDIES

DEPARTMENT OFAGRICULTURAL ECONOMICS
 AGRICULTURAR ECONOMICS LIBRAMY?
MAY $22196{ }^{2}$

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## Summary

The report contains information on output, costs and income on 17 identical hill farms situated in the Bowland Forest area of north-east Lancashire for four successive years from 1958/59 to 1961/62.

Average net income on milk producing farms was $£ 5.3$ per adjusted acre and on those not producing milk it was $£ 3.6$ per acre. The average size of the former farms was 205 adjusted acres and the latter 239 adjusted acres.

In addition to a detailed analysis of the economy during the four year period, ways and means of increasing profit margins from both the dairy herd and the hill flock are discussed and budgets have been included.

The economic consequences of reclaiming moorland are also touched upon.

## PROFITS AND PERFORMANCE ON

## THE HILL SHEEP FARMS OF NORTH EAST LANCASHIRI

## INTRODUCTION.

The seventeen farms whose performance and character are discussed in this report are all situated in the Bowland Forest area of north-east Lancashire. A straight line drawn between the two most distant farms would measure only 8 miles, but the journey by road would be nearer thirty. All the land occupied lies abore the 500 ft . contour, the highest point reached being 1800 ft . above sea level. The area is subject to 53 inches of rain per year and haymaking is often prolonged and tedious.

Though farms are remote, access is reasonably easy by metalled road right up to the farm gate, but beyond this point approach to the farmstead can sometimes be both lengthy and difficult. Gates interfere with progress here and there but these are being rapidly replaced by iron grids. Thirteen of the seventeen farms are already connected to mains electricity and the remainder could probably be so if landlords were willing to find a proportion of the capital cost of installation. Water supplies are obtained from natural sources and are usually piped into the farmhouses and cowsheds, though occasionally water is still diverted from the open becks and collected in stone troughs in the yards.

The grey stone farmhouses and outbuildings are for the most part sturdily built and are surrounded by walled fields of permenent grass. Elsewhere, sometimes enclosed and sometimes not, are extensive moorland stretches of heather, rushes, coarse grass and occasional bracken, broken up by boulder strewn water-courses which are a striking feature of the area. Generally speaking terrain is steep, often rising sharply from the wooded banks of the larger streams and
then ascending more graduelly in broad exposed sweeps to the ridges. The soil is thin and the millstone grit over which it lies frequently protrudes.

Farms vary greatly in size. It is difficult to assëss effective acreages but an attempt has been made to do this by assuming firstly that rough grazings are used to their full extent, and secondly that the pasture requiremencs of 8 hill sheep is 3 acres per year. Thus, if a farmer's right on a common foll is limited to a stint of 200 sheep, such grazing is deemed to be the equivalent of 75 pasture acres. Using this method and by giving the enclosed pasture land its full acreage value, the average stocking rate on these exposed hill farms over a period of four consecutive years is 2.5 acres per cow equivalent, compared with 2.1 acres on the rearing farms in the kindlier hill country of southwest Shropshire or 2.0 acres on the small Pennine dairy farms of north-east Staffordshire. FARMTNG SYSTHIIS.

The enterprise common to all farms in the report is the hill sheep flock. Generally speaking it is associated with the rearing of beef stores, or occasionally Friesian dairy heifers on farms at the higher levels and with milk production on the lower lying farms. There is, however, no hard and fast rule. The elevation and situation do not alone determine which of the two broad farming types will be adopted and it is of interest to note that between 1958 and 1962, out of the seventeen farms mentioned here, two cattle rearing farms at the higher altitudes turned to milk production, whilst two others abandoned it. In the area, a switch to milk production, al though involvine capital expenditure either on the provision of new buildings or on alterations to the existing ones to bring them up to the standard required under statutory regulations, can be made
economically. The basic material, stone, is readily to hand and the hill farmer with his innate skill can affect the change with farm labour at a very low cost. Availability of labour in fact appears to be a more important reason than the cost of a change in determining the farm system.

Occasiorally, where family labour is available, farm output has been increased by intensive pouitry systems. Few farmers keep pigs. The pattern of cropping on these grassland farms changes little between one year and the next, and the hay crop is telken from the some fields annually.

The following table shows the cropping and stocking calculated "per 100 adjusted acres" on the two types of farm:Cropping per 100 ad.justed acres.

|  | $\begin{gathered} \text { Farms } \\ \text { with milk } \end{gathered}$ | Farms without $\qquad$ |
| :---: | :---: | :---: |
| Hay | 17 | 15 |
| Silage | 3 | - |
| Grazing | 41 | 29 |
| Enclosed Land | 61 | 44 |
| Unenclosed land (equive- |  |  |
| lent pasture acreage) | 39 | 56 |
| Total adjusted acres | 100 | 100 |

Stocking per 100 adjusted acres
Cattle

| Dairy Cows | 9 | - |
| ---: | ---: | ---: |
| Other Cattle | 22 | 18 |
| Total | 31 | 18 |
|  |  |  |

## Sheep

| Rams | 3 | 4 |
| :--- | ---: | ---: |
| Ewes | 106 | 139 |
| Ewe hoggs | 43 | 57 |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## Qutput. Costs and Income.

A. year by year analysis of output, costs and income from 1958/59 to 1961/62 is given Iater in Tables 1 and 2 of the Appendix. Average figures for the fonie vears are sumnarized below.

| Output | Bran Pann | Per Adjusted Acre |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | hatis vion mity | $\begin{gathered} \text { rams without } \\ \text { miljk } \end{gathered}$ | $\begin{gathered} \text { All } \\ \text { farms } \\ \hline \end{gathered}$ | Facms with mitik | Farmis without milk |
|  | £ | む | £ | む | £ |
| Cattle | 1.31 .5 | 887 | 5.7 | 6.2 | 4.4 |
| Milk | 2054 | 59 | 7.7 | 10.4 | 0.2 |
| Pigs $\quad 9$ | 8 | 12 | 0.1 | 0.1 | - |
| Poultry \& ezgs 578 | 692 | 273 | 3.0 | 3.7 | 1.4 |
| Sheep \& Wool 1996 | 1267 | 1442 | 5.9 | 5.8 | 6.1 |
| Miscellaneous | 113 | 95 | 0.6 | 0.5 | 0.5 |
| Total 4713 | 5459 | 2768 | 23.0 | 26.8 | 12.6 |
| Costs |  |  |  |  |  |
| Purchased food 1834 | 2205 | 845 | 9.2 | 11.1 | 4.0 |
| Purchased seed: 2 | 2 | - | - | - | - |
| Fertilisers : 179 | 219 | 75 | 0.8 | 1.0 | 0.3 |
| Rent \& Rates : 199 | 221 | 141 | 0.9 | 1.1 | 0.6 |
| Power Costis : 471 | 540 | 294 | 2.4 | 2.8 | 1.4 |
| Labour 572 | 620 | 478 | 2.5 | 2.7 | 1.9 |
| Miscellaneous 336 | 387 | 199 | 1.6 | 1.8 | 0.9 |
| Total 3593 | 4194 | 2012 | 17.4 | 20.5 | 9.1 |
| Net Farm Income 1120 | 1265 | 756 | 5.6 | 6.3 | 3.5 |
| Farmer's \& wify's 426 | 471 | 341 | 2.6 | 2.8 | 1.8 |
| Investment Incme 694 | 794 | 415 | 3.0 | 3.5 | 1.7 |

The net dairy farm income of $£ 6.3$ per adjusted acres is low when compared with other Pennine dairy farm groups but the spread of the farmer's labour over a larger acreage has produced a higher investment income figure.

Output figures show how dependent the north-east Lancashire farmer is upon cattle and sheep. $86 \%$ of the gross output on milk producing farms is derived
from these two sections of the farm alone, and on the others it is $87 \%$.
Inevitably the main item of cost is purchased feed, accounting for 53\% of the total costs on dairy farms and $42 \%$ on the others. It follows that one of the main factors determining the level of profitability is economy in the use of purchased feed.

## DAIRY HERD.

The dairy cattle in the area are almost entirely of the British Friesian breed. The local farmer specializes in the breeding of quality cows and regards this side of his business with as much importance as he does the production of milk, though the two are inseparable and inter-dependent. A number of farmers are pedigree breeders. The normal practice is to milk the cow through one or sometimes two lactations and then sell her with her calf in the Lancaster auction sales. In recent years there hes been a steady demand by lowland farmers for these hardy deep milking cows off the hills and prices have been good. However, the average price received has fallen from a peak of £97 in 1959/60 to $\ddagger 84$ in 1961/62, and looks like being lower still in 1962/63. Milk yields per cow and value of milk sales per cow have increased consistently. During four consecutive years they were:-

|  | Gallons | $\frac{£}{\ldots}$ |
| :---: | :---: | :---: |
| 1958/59 | 761 | 104 |
| $1959 / 60$ | 806 | 114 |
| $1960 / 61$ | 868 | 115 |
| $1961 / 62$ | 882 | 116 |

The high rate of turnover in milking cows ( $65 \%$ going out each year) produces a large number of followers in relation to cows. The composition of a typical herd in the area is:-

1 buil
17 dairy cows
9 heifers in calf
16 over 1 year
16 below I year
This gives a ratio of 7 followers to 3 cows which is much greater than that usually found in herds maintained primalily to produce milk. Normally the self oontained herd on a milk producing farm is comprised of roughly equal numbers of followers and cows so that a herd of the same size as the hill farm herd, that is one containing 36.5 cow equivalents, would be:-

1 bull
26 dairy cows
6 heifers in calf
8 yearlings
8 calves
It is interesting to compare the net output of these two herds and thus the hill farm system with the normal system. The calculations below have been made at the 1961/62 price levels in the area and on the assumption that the rates of feeding, the yield of milk per cow and land use remain the same with both systems.

## Hil1 Farm Systeil

## Normal System

| Sales | 2 | Sales | £ |
| :---: | :---: | :---: | :---: |
| 14,450 gallons milk |  | 22, 100 gallons milk |  |
| (17 cows @ £l12) | 1904 | (26 cows (6) £ 112 ) |  |
| 11 dairy cows in milk |  | (26 cows (3) 112) | 2912 |
| (1) 184 | 924 | 6 culled cows @ £45 | 270 |
| 4 yearlings @ ¢40 | 160 | 2 yearlings @ £40 | 80 |
| 12 calves @ ¢5 | 60 | 18 calves @ - | 90 |
|  | £ 3048 |  | £3352 |
| Deduct purchased feed: |  | Deduct purchased feed: |  |
| 17 dairy cows @ £60 |  | 26 dairy cows @ £60 |  |
| = £ 1020 |  | = $£ 1560$ |  |
| 42 other cattle |  | 22 other cattle |  |
| \& £6.10.-. 273 | 1293 | @ \&6.10.-. 143 | 1703 |
| Margin | £ 1755 | Margin | \& 1649 |

On this calculation the hill farmer with his present system has a balance of £106 in his favour and is at no apparent disadvantage unless: -
(a) the price of quality cows falls to about $\& 70$, when the margin would fall from \&1755 to \&l600.
(b) he could feed for milk alone more cheaply than he can feed for milk and a saleable young cow. A saving of $\ddagger 4$ per cow on feed (i.s. $\frac{1}{3} \mathrm{lb}$. per gallon), would swing the advantage in favour of the normal system.

In order to produce high yields and obtain a good looking cow for sale, the north east Lancashire farmer has resorted to liberal feeding from the provender bag. Though he is able to get more out of his cow than many lowland dairy farmers, he has had to replace the fodder denied to him by his environment with purchased cake and beet pulp from the corm merchant. In a few cases actual farm purchases of provender have been analysed. One of the more consistently successful farmers feeds $4 / 4 \frac{1}{2}$ lbs. of concentrates for every gallon of milk produced, but the average amount on these farms would appear to be nearer $4 \frac{3}{4}$ or 5 lbs. fed per gallon, in comparison with a figure of 2.7 lbs . per gallon calculated by the "National Investigation into the Economics of Milk Production" for farms in the North West of England.

As there is a real connection between high milk yields and high prices obtained for young cows in milk, the advantage gained by higher milk yields under the one system would in all probability have a compensatory advantage under the other. Individual farmers might find it of help to consider the effect upon the farm profit of a change in the system, by applying their own standards to the type of calculation outlined above. THE HIII THOCK.

Flocks vary greatly in size, numbers being largely determined by the rough grazing available on the fells. In some cases flock size is limited
by the number of ewes allowed under tenancy agreements.
The ewes are mostly of the Dalesbred type. Flocks are self maintained, new blood being introduced through the rams, a half of which are replaced each year. One ram normally serves between 35 and 40 ewes which are brought down into the enclosed land for this purpose. Flock management systems are to a certain extent flexible and the output per ewe in the same year can range from as little as 70 shillings on one farm to 170 shillings on another adjacent.

The traditional practice is to take two lemb crops for ewe replacements and a third crop of half bred lambs for sale, either as stores or fat if possible. The ewe is then drafted off the fells to the lowland farmer, who takes another two or even three lamb crops before slaughter. Occasionally, where conditions and breed permit, as many as five crops of lambs can be taken on the hill, the worn out ewe fetching between twenty and thirty shillings less than it would if sold after weaning its third lamb crop.

Here again, the hill farmer might find it to his advantage to calculate the outcome if a change were made from the usual pattern of flock management by extending the life of the ewe on the hill. Fewer ewe replacements would then be required thus releasing for market more fat and store lambs. If it were possible to get the extra lambs off fat this would certainly prove worthwhile, but in fact over half the lambs still go off as stores, and these generally fetch a lower price than the draft ewe.

The two alternative systems mentioned above are compared in the following budget. It has been assumed that 102 lambs per 100 ewes have been reared under both systems and the ratio between store and fat lambs has been
kept constant. The prices used are those ruling during the four year period under review.
Normal patterm, i.e.
drafting ewe after 3 lamb crops

Sales per 250 ewes: - £
3 rams 30
83 draft ewes @ 80/- 332
86 store lambs @ 75/- 322
67 fat lambs (1) 100/- 335
Wool 288

1307

## Deduct: -

|  | £ |  |
| :---: | :---: | :---: |
| 4 replacement rams | 48 |  |
| Cost wintering 102 |  |  |
| hoggs @ \& 1.5.0. | 127 | 175 |
| Margin |  | $113 ?$ |

Revised pattern, i.e.
drafting eve after 5 lamb crops
Sales per 250 ewes: - $\mathcal{Z}$
3 rams 30
50 draft ewes @ 60/- 150
104 store lambs @ 75/- 388
82 fat lambs @ 100/- 410
Wool 288
1266
Deduct: -
$\begin{array}{lrr}4 \text { replacement rams } & \begin{array}{c}\mathcal{む} \\ \text { Cost wintering } 69 \\ \text { hoggs @ £l.5.0. }\end{array} & \boxed{86} \\ & \underline{134}\end{array}$

On this basis there is little to choose between the two systems. Any advantage which might accrue from the sale of a greater number of lambs is offset by the relatively high prices obtained for the younger draft ewes. If, however, the cost of wintering hoggs away from home was much more than the $25 /$ - per head show, then the 'revised pattern' flock would become the more profitable one and, of course, if more lambs could be sent off the farms fat without competing with the cattle both systems would benefit.

More fat lambs have been sold in recent years. On the seventeen farms covered in the report the percentage fattened has risen through four successive years as follows: -
1958/59
1959/60
$22 \%$
30\%
1960/61
$37 \%$
$\frac{1961 / 62}{44 \%}$

This increase is associated usually with grassland improvement in the form of drainage schemes and the application of fertilizers; particularly slag and lime, and occasionally with the feeding of concentrates. It is of interest to note here some recent work at the Great House Experimental Husbandry Farm in which hill lambs were fattened (a) on grass leys with the addition of concentrates fed once daily in troughs and also (b) indoors with hand feeding. There is a report of this work in the 1962 edition of the Great House Review, where it is claimed that both methods show a substantial profit margin over the then prevailing store lamb price plus the cost of fattening. Hill farmers interested in the possibility of obtaining fat lambs by these methods should be able to obtain the necessary information from their District Officers. IAND RECLAMATION

It has been remarked above that the percentage increase in the numbers of lambs sold fat is due primarily to grassland improvenent, and this of course has been achieved on the enclosed land, but surprisingly, little seems to have been done in the way of reclaiming moorland. Perhaps the fact that much of the moor is common land and also has uses other than farming has a bearing on this. No instance of land reclamation on the 17 farms visited is recorded during the four year period under review, though one farmer had in fact recovered $3 \frac{1}{2}$ acres in a previous year.

It has been ascertained that after receiving drainage and ploughing-up grants, the net cost of reclamation at contract rates works out at approximately £50 an acre including the cost of reseeding, as follows: -
Per Acre ..... £
Cultivations ..... 11
Seed (including rape as cover) ..... 6
Preparing drains (600 yds.) ..... 50
Tiles ..... 30

## Less

Grant - $\frac{1}{2}$ cost drainage ..... 45
Ploughing up Grant ..... 1257
Net Cost per Acre ..... 50

If written off over a period of ten years the annual charge would be $£ 5$ an acre or $£ 6.10 \mathrm{~s} .0 \mathrm{~d}$. if interest were charged at $6 \%$. This extra expenditure would be well covered if, as seems a very reasonable expectation, the reclaimed land were capable of carrying as many sheep as the land already enclosed.

The in-bye land is capable of carrying 3 ewes to the acre producing annually $£ 17 / 10 / 0$ worth of output less, say, $£ 2$ purchased feed, leaving a margin of $£ 15 / 10 / 0$ reducing to $£ 7 / 0 / 0$ when the annual cost of reclamation and fertilizer is deducted. As moorland the comparable figure would have been much below this, possibly less than £2.

Under certain circumstances it might be preferable to treat the cost of reclamation purely as an investment. If for instance, 10 acres of land were reclaimed at a net cost of $£ 500$, it could reasonably be assumed that the freehold value of the farm would be worth $£ 500$ more than previously. The capital cost of the improvement could then be equated to an increase in rental value of

TABIES

The tables that follow cover a four year period and require no further elaboration. The aim has been to establish standards and levels of performance for farm management purposes.

In arriving at farm acreages the following factors have been used: -

$$
\begin{aligned}
I \text { pasture acre } & =4 \text { rough grazing acres. } \\
& =3 \text { stinted sheep. }
\end{aligned}
$$

In converting stock to livestock units (or covequivalents) the main factors used were: -

$$
\begin{aligned}
1 \text { livestock unit } & =1 \text { dairy cow } \\
& =1 \frac{1}{4} \text { beef cows } \\
& =8 \text { hill sheep } \\
& =2 \text { sows with litters to weaning } \\
& =50 \text { laying hens. }
\end{aligned}
$$

TABLE I - Output, costs and income for four successive years calculated on a "per farm" basis


TABIE 2 - Output, Costs and Adjusted Income for four
successive years calculated on a "Per Acre" basis.

| Number of farms | All farms |  |  |  | Farms with milk |  |  |  | Farms without milk |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1958/9 59/60 60/1 :61/2 |  |  |  | 1958/9 159/60 |  | $\frac{12}{12}$ | $\frac{61 / 2}{13}$ | 1958/9 | $\frac{159 / 60}{5}$ | [60/61 | 16./62 |
|  | 17 identical farms |  |  |  | 13 | 12 |  |  | 4 |  |  | 4. |
| Output per |  |  |  | £ | $\approx$ | £ | ๕ | £ | £ | 2 | 2 | £ |
| adjusted acre | ま | \& | £ |  |  |  |  |  |  |  |  |  |
| Cattle | 5.8 | 5.7 | 5.9 | 5.6 | 6.5 | 6.2 | 6.5 | 5.6 | 3.3 | 4.6 | 4.5 | 5.4 |
| Mill | 7.5 | 7.6 | 7.7 | 7.9 | 9.9 | 10.6 | 10.9 | 10.2 | 0.1 | 0.2 | $\cdots$ | 0.6 |
| Pigs | 0.1 | - | 0.1 | 0.1 | - | - | 0.1 | 0.1 | 0.1 | - | - | - |
| Poultry \& Eggs | 2.4 | 2.9 | 3.5 | 3.4 | 2.9 | 3.6 | 4.3 | 3.9 | 0.9 | 1.2 | 1.6 | 1.8 |
| Sheep \& Wool | 6.1 | 5.3 | 6.3 | 6.0 | 6.0 | 5.4 | 6.0 | 6.0 | 6.6 | 5.1 | 6.7 | 6.0 |
| Miscellaneous | 0.6 | 0.6 | 0.5 | 0.6 | 0.7 | 0.7 | 0.6 | 0.7 | 0.5 | 0.4 | 0.4 | 0.6 |
| Total | 22.5 | 22.1 | 24.0 | 23.6 | 26.0 | 26.5 | 28.4 | 26.5 | 11.5 | 11.5 | 13.2 | 14.4 |
| Costs per |  |  |  |  |  |  |  |  |  |  |  |  |
| adjusted acre |  |  |  |  |  |  |  |  |  |  |  |  |
| Purchased food | 8.2 | 9.1 | 9.7 | 10.0 | 9.7 | 11.2 | 12.1 | 11.6 | 3.2 | 4.0 | 3.9 | 4.8 |
| Purchased sued | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Fertilisers | 0.6 | 0.9 | 0.8 | 0.8 | 0.8 | 1.2 | 1.0 | 0.9 | 0.1 | 0.3 | 0.3 | 0.5 |
| Rent \& Rates | 0.8 | 0.9 | 1.0 | 1.0 | 1.0 | 1.1 | 1.1 | 1.1 | 0.5 | 0.6 | 0.7 | 0.7 |
| Power Costs | 2.2 | 2.4 | 2.5 | 2.5 | 2.6 | 2.8 | 2.7 | 2.9 | 1.0 | 1.4 | 1.5 | 1.7 |
| Labour | 2.4 | 2.6 | 2.5 | 2.5 | 2.5 | 2.8 | 2.9 | 2.7 | 2.2 | 2.1 | 1.6 | 1.8 |
| Miscellaneous | 1.6 | 1.6 | 1.5 | 1.7 | 1.8 | 1.8 | 1.9 | 1.9 | 0.7 | 0.9 | 0.9 | 1.0 |
| Total | 15.8 | 17.5 | 18.0 | 18.5 | 18.4 | 20.9 | 21.7 | 21.1 | 7.7 | 9.3 | 8.9 | 10.5 |
| Net Farm Income | 6.7 | 4.6 | 6.0 | 5.1 | 7.6 | 5.6 | 6.7 | 5.4 | 3.8 | 2.2 | 4.3 | 3.9 |
| Farmer's \& wife's labour | 2.5 | 2.5 | 2.6 | 2.7 | 2.9 | 2.8 | 2.8 | 2.8 | 1.4 | 1.7 | 2.0 | 2.2 |
| Investment Income | 4.2 | 2.1 | 3.4 | 2.4 | 4.7 | 2.8 | 3.9 | 2.6 | 2.4 | 0.5 | 2.3 | 1.7 |


| Number of farms | All farms |  |  |  | Fanns with milk |  |  |  | Farms without milk |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1958/9 159/60 160/1 161/2 |  |  |  | $\frac{1958 / 9}{13}$ | $\frac{59 / 60}{12}$ | $\frac{160 / 1}{12}$ | $\frac{13}{13}$ | 1958/9:59/60 |  | $\frac{160 / 1}{5}$ | 161/2 |
|  | 17 identical farms |  |  |  |  |  |  |  | 4 | 5 |  |  |
| $\frac{\text { Livestock units }}{\text { per farm }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dairy Cows | 13 | 13 | 13. | 14 | 17 | 18 | 18 | 17 | - | 1 | - | 3 |
| Other Cattle | 19 | 20 | 23 | 24 | 19 | 21 | 24 | 23 | 20 | 20 | 21 | 26 |
| Shecp | 44 | 44 | 45 | 45 | 36 | 39 | 39 | 44 | 69 | 58 | 60 | 49 |
| Other | 4 | 5 | 5 | 5 | 4 | 5 | 6 | 6 | 3 | 3 | 3 | 3 |
| Total Livestock units | 80 | 82 | 86 | 88 | 76 | 83 | 87 | 90 | 92 | 82 | 84 | 81 |
| Cropping per farm adjusted acres |  |  |  |  |  |  |  |  |  |  |  |  |
| Hay | 32 | 32 | 32 | 35 | 33 | 33 | 33 | 36 | 40 | 38 | 38 | 33 |
| Silage | 5 | 5 | 5 | 4 | 5 | 6 | 6 | 5 | - | - | - | - |
| Grazing | 78 | 78 | 78 | 81 | 85 | 89 | 89 | 80 | 68 | 62 | 62 | 86 |
| Rough grazing and fell stints (equivalent pasture acres) | 92 | 92 | 92 | 94 | 73 | 76 | 76 | 97 | 167 | 139 | 139 | 83 |
| Total Adjusted Acres | 207 | 207 | 207 | 214 | 196 | 204 | 204 | 218 | 275 | 239 | 239 | 202 |

TABIE 4 - Cattle Standards

| Nurnber of farms | All farms |  |  |  | F'arms with milk |  |  |  | Farms without milk |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1958/9 159/60/60/61 161/2 |  |  |  | 1958/9 | 159/60:60/1:61/2 |  |  | 1958/9 /59/60 /60/1:61/62 |  |  |  |
|  | 17 identical farms |  |  |  | 13 | 12 | 12 | 13 | 4 | 5 | 5 | 4 |
| Cattle units as percentage of all livestock uni.ts $\%$ |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| of total valuation \% | 42 | 42 | 42 | 42 | 47 | 45 | 46 | 45 | 24 | 36 | 34 | 35 |
| Cattile and dairy produce output per unit of cattle | 78 | 73 | 67 | 67 | 88 | 86 | 80 | 77 | 47 | 43 | 36 | 38 |
| Milk yield per cow-galls | 761 | 806 | 868 | 882 | 765 | 806 | 868 | 882 | - | - | - | - |
| Milk sales per cow $\quad$ E | 104 | 114 | 115 | 116 | 107 | 114 | 115 | 116 | - | - | - | - |
| Selling prices <br> obtained: - <br>  <br> Cows (fat/store) <br> Other store cattle |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 85 | 93 | 86 | 78 | 88 | 97 | 91 | 84 |  |  |  |  |
|  | 53 | 56 | 48 | 45 | 55 | 53 | 49 | 45 |  | 64 | 57 | 62 |
|  | 40 | 40 | 36 | 40 | - | - | 37 | 40 | 40 | 40 | 33 | 40 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

## TABLE 5 - Sheep Standards


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## y <br> $\because$

