



# AGRICULTURE IN SCOTLAND

The Report of  
the Department of Agriculture for Scotland  
for 1949

*Presented by the Secretary of State for Scotland to Parliament  
by Command of His Majesty*

EDINBURGH  
HIS MAJESTY'S STATIONERY OFFICE: 1950

THREE SHILLINGS NET



# AGRICULTURE IN SCOTLAND

The Report of  
the Department of Agriculture for Scotland  
for 1949

*Presented by the Secretary of State for Scotland to Parliament  
by Command of His Majesty*

EDINBURGH  
HIS MAJESTY'S STATIONERY OFFICE: 1950

THREE SHILLINGS NET

TO THE RIGHT HONOURABLE  
HECTOR McNEIL, P.C., M.P.,  
HIS MAJESTY'S SECRETARY OF STATE FOR SCOTLAND

---

SIR,

I have the honour to present the Report of the Department  
of Agriculture for Scotland for the year 1949.

I am, Sir,

Your obedient Servant,

*Patrick R. Laird*

---

*Secretary.*

Department of Agriculture for Scotland,  
Edinburgh. 29th April, 1950.

# CONTENTS

CHAP.	PAGE
I. SCOTTISH AGRICULTURE IN 1949 :	
General review .. .. .	8
II. THE AGRICULTURAL EXECUTIVE COMMITTEES :	
Development of committees .. .. .	12
Functions :	
Securing efficiency .. .. .	13
Agricultural Holdings Acts .. .. .	14
Food production .. .. .	15
Miscellaneous duties .. .. .	16
Composition of committees .. .. .	16
III. ECONOMIC POLICY, PRICES AND SUBSIDIES :	
Economic policy .. .. .	17
Prices :	
Price reviews .. .. .	17
Acreage payments .. .. .	19
Subsidies :	
Marginal agricultural production .. .. .	19
Grassland ploughing scheme .. .. .	20
Hill sheep subsidy .. .. .	20
Hill cattle subsidy .. .. .	20
Calf rearing subsidy .. .. .	21
Other financial assistance :	
Live stock replacement .. .. .	21
Agricultural resettlement grants .. .. .	22
Agricultural credit .. .. .	22
IV. PRODUCTION AND MARKETING :	
Production :	
Crops .. .. .	22
Live stock and live stock products .. .. .	23
Milk sales records scheme .. .. .	24
Milk recording .. .. .	24
Committee on milk services .. .. .	25
Marketing :	
Agricultural Marketing Act, 1949 .. .. .	25
Marketing schemes .. .. .	25
Wool .. .. .	26
Grading and marking .. .. .	27
Miscellaneous .. .. .	27
V. ESTATE MANAGEMENT AND LAND SETTLEMENT :	
Estate management :	
Properties vested in the Secretary of State .. .. .	28
Forestry Commission land .. .. .	28
Requisitioned properties .. .. .	29
Other properties .. .. .	29
Land Settlement .. .. .	29

CHAP.		PAGE
VI.	LAND UTILISATION :	
	General .. .. .	31
	Housing, industrial and other development .. .. .	32
	Services land requirements .. .. .	32
	Opencast coal mining .. .. .	33
	Afforestation .. .. .	34
	Restoration of ploughed-up grassland .. .. .	34
	Allotments .. .. .	34
VII.	LAND TENURE AND LAND IMPROVEMENT :	
	Land tenure :	
	General .. .. .	35
	Notices to quit .. .. .	35
	Short term tenancies .. .. .	36
	Arbitrations .. .. .	36
	Records of holdings .. .. .	36
	Residual values .. .. .	36
	Land improvement :	
	Land drainage .. .. .	36
	Hill farming improvement schemes .. .. .	37
	Muirburn .. .. .	38
	Bracken eradication .. .. .	38
	Improvement of Land Acts .. .. .	38
	Fertilisers .. .. .	38
	Lime .. .. .	39
	Grassland development .. .. .	39
VIII.	CROP IMPROVEMENT :	
	Seed testing .. .. .	40
	Plant registration .. .. .	40
	Certification schemes .. .. .	42
	Commercial control .. .. .	43
IX.	LIVE STOCK IMPROVEMENT :	
	Horses :	
	Licensing .. .. .	44
	Highland pony improvement scheme .. .. .	45
	Shetland pony improvement scheme .. .. .	45
	Heavy horse breeding scheme .. .. .	45
	Cattle :	
	Bull licensing .. .. .	46
	Cattle breeding schemes .. .. .	46
	Sheep breeding schemes .. .. .	46
	Pigs :	
	Boar licensing .. .. .	47
	Pig breeding scheme .. .. .	47
	Poultry :	
	Accreditation schemes .. .. .	47
	Exhibition stock .. .. .	47
	Highland poultry improvement scheme .. .. .	47
	Fowl pest .. .. .	47
	Goat breeding scheme .. .. .	48
	Miscellaneous :	
	Highlands and Islands veterinary service .. .. .	48
	Stud farms .. .. .	48
	Assistance to agricultural shows .. .. .	48
	Artificial insemination .. .. .	48
	Export and import of live stock .. .. .	48

## CHAP.

X.	RURAL AND HIGHLAND DEVELOPMENT :	PAGE
	Housing .. .. .	49
	Water supplies and electricity .. .. .	49
	Telephones .. .. .	50
	Rural industries .. .. .	50
	Social services .. .. .	51
	Highland development :	
	West Highland survey .. .. .	51
	Public works .. .. .	51
	Crofter housing and building .. .. .	52
	Special live stock improvement schemes .. .. .	53
	Other development .. .. .	53
XI.	RESEARCH, EDUCATION, ADVISORY SERVICES AND PUBLICITY :	
	Research :	
	Finance .. .. .	53
	Hill Farming .. .. .	53
	Marginal land .. .. .	54
	Agricultural engineering .. .. .	54
	Sugar beet .. .. .	54
	Education :	
	Agricultural colleges .. .. .	55
	Veterinary colleges .. .. .	55
	Agricultural scholarships .. .. .	55
	Further education and training scheme .. .. .	56
	Vocational training .. .. .	56
	Advisory services .. .. .	56
	Publicity .. .. .	57
	Conferences, visits, etc. .. .. .	58
XII.	LABOUR :	
	General .. .. .	58
	Wages and conditions .. .. .	59
	Supplementary labour .. .. .	61
	Harvest labour .. .. .	62
	Harvest labour enquiry .. .. .	62
	Women's land Army .. .. .	63
	German ex-prisoners of war .. .. .	63
XIII.	FEEDING-STUFFS :	
	General .. .. .	63
	Dairy cows .. .. .	64
	Calves .. .. .	64
	Calving cows and heifers .. .. .	64
	Pigs and poultry .. .. .	64
	Horses .. .. .	65
	Pedigree ram lambs .. .. .	65
	Hill cattle .. .. .	65
	Sheep dogs .. .. .	65
	Milch goats .. .. .	65
	Molasses .. .. .	65
	Bran .. .. .	65
	Discretionary reserve .. .. .	65
	Other issues .. .. .	65
	Domestic poultry rationing scheme .. .. .	66
	Kitchen waste .. .. .	66

CHAP.		PAGE
XIV.	PEST CONTROL :	
	General .. .. .	66
	Destructive insects and pests .. .. .	66
	Rats and mice .. .. .	68
	Injurious animals and birds .. .. .	68
	Food infestation .. .. .	69
	Injurious weeds .. .. .	69
	Pest control articles .. .. .	69
XV.	MACHINERY, TRANSPORT AND SUPPLY OF MATERIALS :	
	Machinery .. .. .	70
	Tractor service .. .. .	71
	Transport .. .. .	72
	Supply of materials .. .. .	73
XVI.	MISCELLANEOUS ADMINISTRATIVE SERVICES :	
	Organisation .. .. .	74
	Committees of the Department .. .. .	74
	Staffing .. .. .	75
	Finance .. .. .	75
	Farm Economics .. .. .	76
	Statistics .. .. .	78

## LIST OF TABLES

### (a) IN THE TEXT

TABLE		PAGE
1.	Scottish agricultural output .. .. .	8
2.	Acreage under crops, 1939 to 1949 (shown graphically) .. .. .	9
3.	Live stock numbers, 1939 to 1949 (shown graphically) .. .. .	10
4.	Alteration in prices following February, 1949, price reviews .. .. .	18
5.	Hill cattle subsidy scheme—position of claims .. .. .	21
6.	Acreage of crops .. .. .	22
7.	Crop yields .. .. .	23
8.	Live stock numbers .. .. .	23
9.	Average sales of milk per cow .. .. .	24
10.	Producers' prices for wool .. .. .	26
11.	Land approved for housing and industrial development .. .. .	32
12.	Use of agricultural land for Service purposes .. .. .	32
13.	Land requisitioned for open-cast coal mining .. .. .	33
14.	Allotments under cultivation .. .. .	35
15.	Consumption of fertilisers .. .. .	39
16.	Result of potato registration trials .. .. .	41
17.	Seed potato inspection, 1949 .. .. .	42
18.	Soft fruit and shallots certification schemes .. .. .	43
19.	Number of agricultural workers .. .. .	58
20.	Average weekly wage of agricultural workers .. .. .	60
21.	Supplementary labour force (numbers) .. .. .	61
22.	Charges for supplementary labour .. .. .	61
23.	Import of plants .. .. .	67
24.	Production of agricultural machinery in Scotland .. .. .	70
25.	Tractor service—implements and machinery held .. .. .	71
26.	Work done by the tractor service .. .. .	72
27.	Staff employed .. .. .	75

(b) APPENDICES

APPENDIX

	PAGE
1. List of principal Acts and Orders made during 1949 which affected Scottish agriculture .. .. .	79
2. Prices of agricultural produce .. .. .	82
3. Land managed or farmed by the Department .. .. .	83
4. Land improvement schemes :	
Table 1. Grants paid for agricultural drainage .. .. .	83
Table 2. Hill Farming Act, 1946—proposals for improvement schemes analysed by counties .. .. .	84
Table 3. Hill Farming Act, 1946—estimated cost of “live” schemes analysed by nature of work proposed .. .. .	85
Table 4. Scheme for the destruction of bracken .. .. .	86
5. Schemes for the inspection of growing crops :	
Table 1. Seed potatoes .. .. .	87
Table 2. Soft fruit and shallots .. .. .	88
6. Certificates issued for the export of plants, etc., and seed potatoes	89
7. Live stock improvement :	
Table 1. Horse Breeding Acts, 1918 and 1948—licensing of stallions .. .. .	89
Table 2. Improvement of Live Stock (Licensing of Bulls) Act, 1931—bull licensing .. .. .	90
Table 3. Scheme for the improvement of cattle—“supply bulls”	91
Table 4. Scheme for the improvement of cattle—“premium bulls” .. .. .	92
Table 5. Schemes for the improvement of sheep .. .. .	93
Table 6. Boars licensed or rejected .. .. .	94
Table 7. Scheme for the encouragement of pig-breeding—“premium boars.” .. .. .	94
Table 8. Scheme for the encouragement of goat breeding .. .. .	94
Table 9. Scheme for assisting local agricultural shows .. .. .	95
Table 10. Highlands and Islands veterinary service scheme .. .. .	95
8. Export and import of live stock :	
Table 1. Live stock recommended for export or import, 1949 .. .. .	96
Table 2. Export of Scottish live stock, 1946 to 1949 .. .. .	96
9. Agricultural water supplies scheme .. .. .	97
10. Grants offered by the Department in aid of public works in the Congested Districts .. .. .	98
11. Crofter housing and building :	
Table 1. Grants and loans approved for building purposes .. .. .	99
Table 2. Proceeds from the sale of building materials .. .. .	99
12. Agricultural education :	
Table 1. Courses undertaken by students at agricultural colleges during 1948/49 and enrolments for 1949/50 .. .. .	100
Table 2. Students attending additional courses at Aberdeen, Auchincruive and Edinburgh .. .. .	101
Table 3. Agricultural colleges—advisory work .. .. .	101
13. Animal feeding-stuffs rationing scheme—amount of feeding-stuffs issued .. .. .	102
14. Distribution of imported machinery .. .. .	102
15. Organisation of the Department of Agriculture for Scotland :	
Table 1. Headquarters organisation .. .. .	103
Table 2. Regional organisation .. .. .	105
Table 3. Standing committees .. .. .	105



## CHAPTER I—SCOTTISH AGRICULTURE IN 1949

The general public will remember 1949 as a year when they enjoyed a summer of a kind that is rare in these all too often wet, cold and mist-wreathed islands. But what was welcome to the general public was not so entirely satisfactory to the farmers. It is true that the long spells of fine weather ensured record hay crops and an early, easy harvest ; but the shortage of rain meant poor root crops and pastures that were quite burnt up in some parts of the country.

Apart from the weather, 1949 was not a year of unprecedented events in the agricultural world. Rather was it a year of steady development along lines of policy which will enable a stable and prosperous agricultural industry to play its part in the national recovery. The development of this policy was discussed in the report of the Department for the ten years 1939-48,<sup>1</sup> and this report seeks to carry the story on through 1949. It is not its function to tell the story of Scottish agriculture, but in this first chapter it covers some of the main features of the farming year. As a whole, however, it is concerned essentially with the multitude of statutory and other duties carried out by the Department during the year.

The Government's agricultural expansion programme, launched in August, 1947, called for an increase of 20 per cent. in the net output of British agriculture by 1951/52. By 1948/49, Scottish farmers had increased their output over the datum 1946/47 figure by eight per cent. A measure of this achievement is shown in Table I, which compares present indices of farm output with pre-war output and with the peak figures obtained during the war. For purposes of comparison, the output is valued at constant (1945/46) figures.<sup>2</sup>

TABLE I.—SCOTTISH AGRICULTURAL OUTPUT

	Pre-war	1943/44	1946/47	1947/48	1948/49 (provisional)
Gross output ..	100	112	99	102	109
Net output ..	100	144	127	129	137

Details of crop acreages and yields and of livestock numbers in 1949 are given later in the report.<sup>3</sup> Tables 2 and 3 give in graphical form the acreages of the principal farm crops and the numbers of livestock yearly since 1939. As will be seen from these graphs, Scotland's contribution to the expansion programme has been greatest in livestock products. Compared with the overall increase in output of eight per cent. the output of milk has increased by 12 per cent., and of eggs by ~~40~~ per cent., while the rapidly expanding herds and flocks of beef cattle, sheep and pigs suggest that before long these same herds and flocks will be providing a substantially larger proportion of the nation's meat supplies. This increase in the livestock population in a period when it was not possible to import all the feeding-stuffs, particularly protein

<sup>1</sup> Cmd. 7717. H.M.S.O. Price 2/6 net.

<sup>2</sup> An explanation of the calculation of output figures and of the meaning of the terms "gross output" and "net output" is given in the farm economics section of Chapter XVI.

<sup>3</sup> Chapter IV.

TABLE 2—ACREAGE UNDER CROPS, 1939 TO 1949  
(AT 4th JUNE)

THOUSAND  
ACRES.

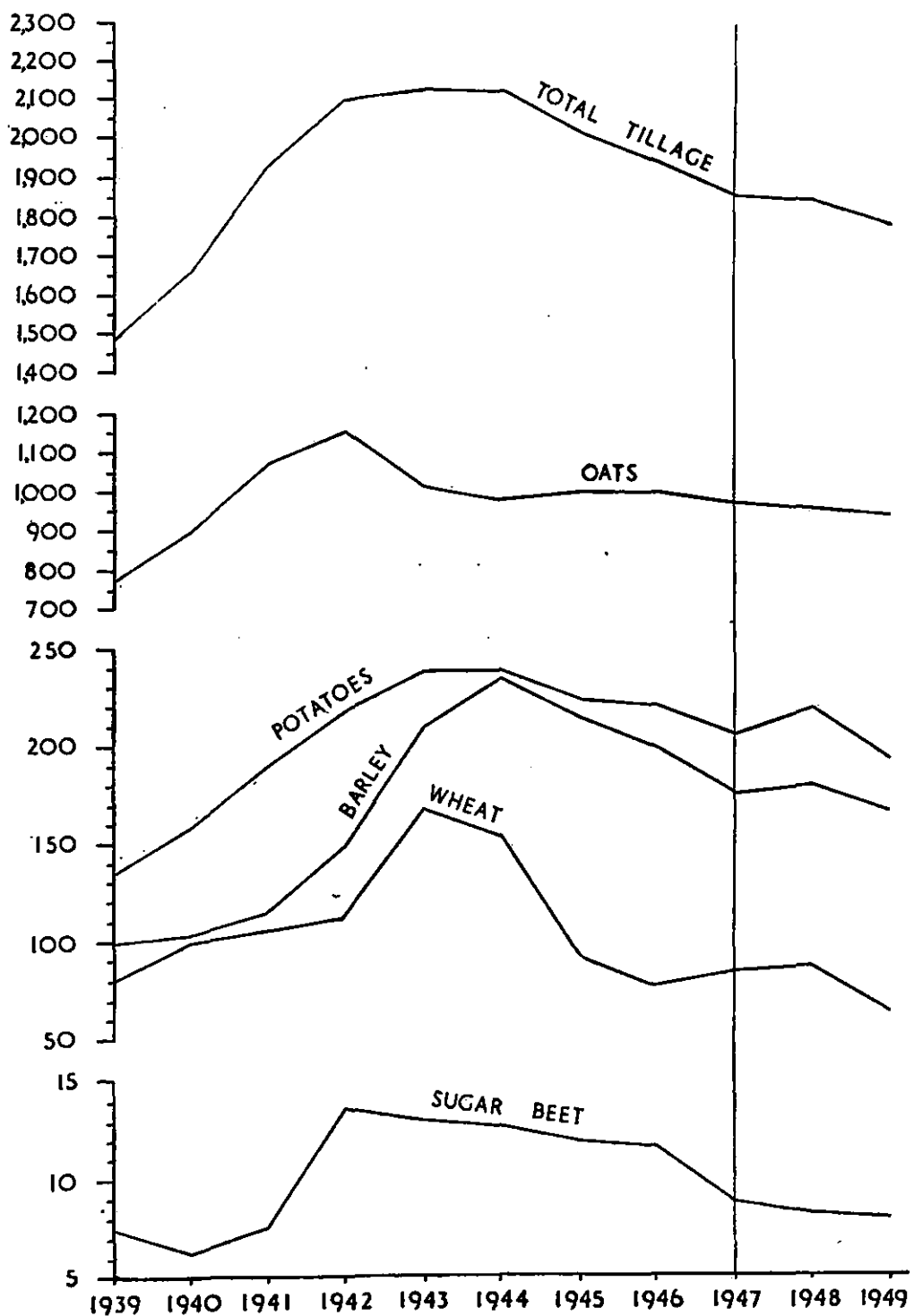
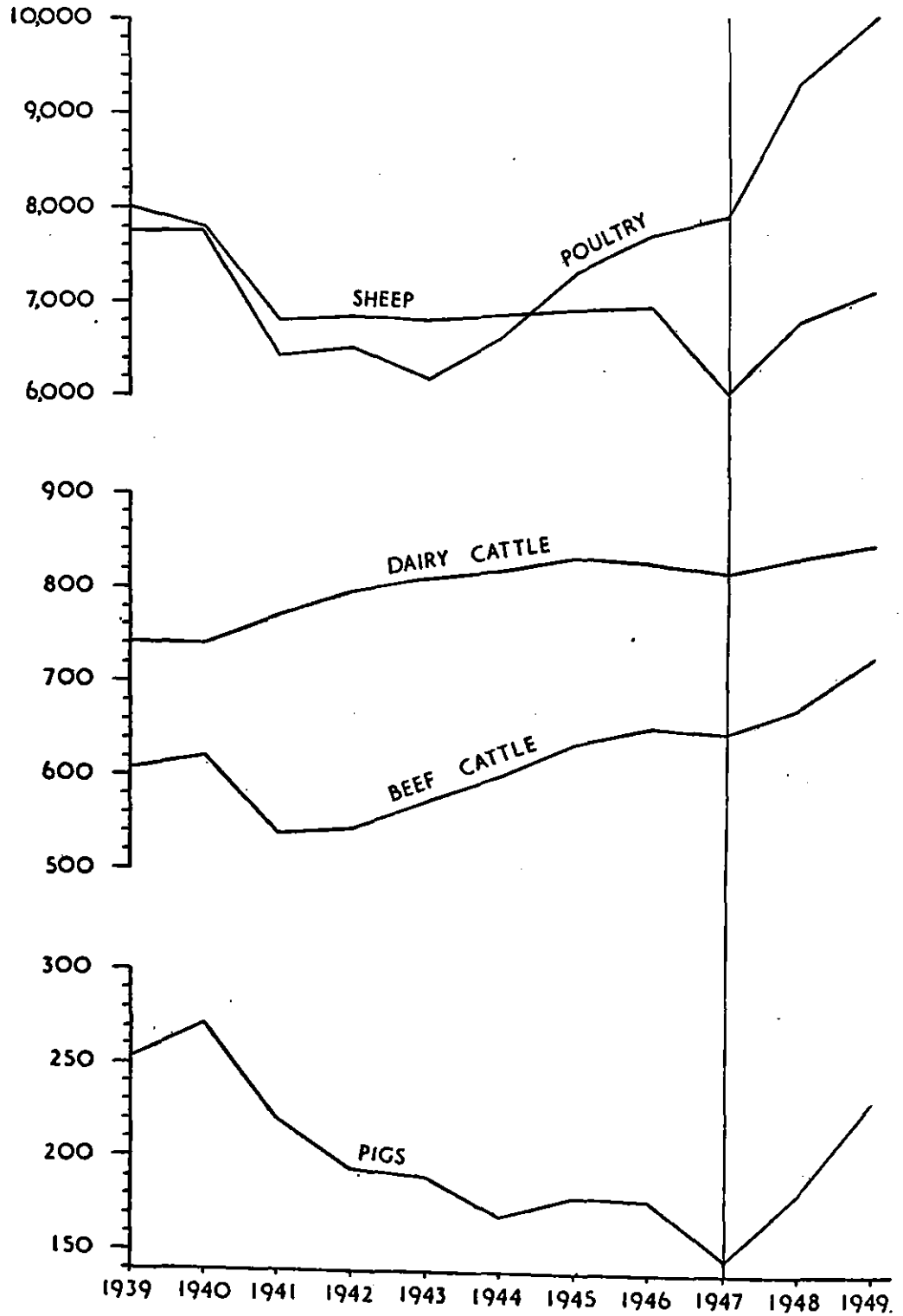


TABLE 3.—LIVE STOCK NUMBERS, 1939 TO 1949  
(AT 4th JUNE)

THOUSANDS



feeding-stuffs, which we require has been achieved largely by a rise in the general standard of self-sufficiency in feeding-stuffs, mainly as a result of improved grassland management and grass conservation.

During 1949, farmers were permitted to retain for stock feeding, in addition to fodder crops, as much as they wished of their oats and barley and 25 per cent. of their wheat. Relatively plentiful supplies of imported cereals were also available and it was possible to increase many cereal ration allowances.<sup>1</sup> Protein supplies were still less than might be desired. A continued expansion of livestock—and, indeed, the maintenance of the present high figures—must depend on the extent to which British farmers can continue to provide animal feeding-stuffs from their own land. In view of this necessity, it is unfortunate that crop acreages have tended to fall. Against this reduction there can, of course, be set to some extent increases in technical efficiency. With the constant help of the advisory services and the support of the new Agricultural Advisory Committees there is every reason to look forward to a steady increase in technical efficiency in the future.<sup>2</sup>

The appointment of Agricultural Advisory Committees will represent the completion of the present phase of agricultural policy in Scotland as framed in the Agriculture (Scotland) Act of 1948 and partly implemented in November of that year with the appointment of the Agricultural Executive Committees. After just over a year's experience of the working of the executive committees, there may be many who would welcome a statement of their place in the scheme of things. The next chapter in this report is devoted to an explanation of their development and composition and of the functions assigned to them.

With the creation of a permanent system of executive committees, the regional organisation of the Department has been extended and strengthened.<sup>3</sup>

The policy of bringing economic stability to the agricultural industry contained in Part I of the Agriculture Act of 1947 was continued during 1949 and annual and special price reviews were held.<sup>4</sup> The prices of "guaranteed" products were increased as a result of these reviews. The demand for young dairy stock continued, if at slightly lower prices on the average, but prices of other store stock were above the 1948 levels. Record prices were obtained both at the annual bull sales in February and at the ram sales in the autumn. The appendices give particulars of exports of livestock from Scotland overseas which are of intense interest and importance.<sup>5</sup> Considerable movement of stock takes place annually within the British Isles and in 1949 43,000 head of cattle and 398,000 sheep went from Scotland to England, Wales and Northern Ireland. To the same destinations went some 50,000 tons of Scottish seed oats and 340,000 tons of Scottish seed potatoes.

The 1949 clip of wool was again requisitioned by the Agricultural Departments pending the preparation of a marketing scheme,<sup>6</sup> and farmers' prices were higher than in 1948. Agricultural producers have shown increasing interest in collective marketing, and proposals for three new marketing schemes were under consideration at the end of the year. It is understood that others are in various stages of preparation prior to their submission to the Ministers.

The various schemes for the improvement of land, crops and livestock<sup>7</sup> were continued during the year and in many cases arrangements were put in hand to raise still further the high standards for which Scottish producers have been famous for many years. Pest control duties were also continued.<sup>8</sup>

In general, Scottish agriculture was not unduly troubled in 1949 by plant pests and diseases, though all the well-known ones were still with us. Certain skin diseases caused an unusual number of blanks in potato crops but blight was less prevalent than usual. Raan was fairly common in turnips and virus yellows was severe in sugar beet in certain areas. Smut occurred widely in

<sup>1</sup> Chapter XIII.

<sup>2</sup> Appendix 8, Tables 1 and 2.

<sup>3</sup> Chapter XI.

<sup>4</sup> Chapter IV.

<sup>5</sup> Chapter XVI.

<sup>6</sup> Chapters VII, VIII, IX and X.

<sup>7</sup> Chapter III.

<sup>8</sup> Chapter XIV.

some of the newer varieties of barley, and halo blight in oats, hitherto largely unknown, was reported in some districts.

The excellent weather conditions under which the harvest was gathered made labour problems less pressing than usual, but it was still necessary to provide additional hands, including school children. Farm workers obtained a further improvement in their conditions of employment during the year.<sup>1</sup> The marked expansion in farm mechanisation during recent years showed no signs of diminishing, and improved supplies of machinery and implements were available.<sup>2</sup>

Agricultural legislation during the year was, in the main, limited to consolidation and amendment of previous statutes. The law governing the relationship between landlords and tenants and that relating to the wages and conditions of farm workers was consolidated in two new Acts.<sup>3</sup> Acts were also put on the Statute Book dealing with agricultural marketing, pests, milk, the slaughter of animals and the docking and nicking of horses.<sup>4</sup> A further Act covered a variety of subjects including calf subsidies, grass drying, artificial insemination and agricultural training.<sup>5</sup> Not confined to agriculture, but nevertheless of interest to farmers, were Acts dealing with housing, water and coast protection.<sup>6</sup> A list of the principal Acts and Orders of 1949 which affected Scottish agriculture is given in Appendix 1.

In retrospect, 1949 is seen as a year of adjustment rather than of innovations. Scottish agriculture was settling down to the heaviest peace-time task it has ever had to face, stimulated and safeguarded by the provisions of the two major Acts passed in 1947 and 1948. There is still much to be done, but there can be no doubt of a steady development in the productivity and efficiency of Scottish farming if the present spirit of helpful co-operation continues to prevail among all concerned.

## CHAPTER II—THE AGRICULTURAL EXECUTIVE COMMITTEES

### DEVELOPMENT OF COMMITTEES

The eleven Agricultural Executive Committees in Scotland were appointed on 1st November, 1948, under the Agriculture (Scotland) Act, 1948.

The achievements of the forty war-time Committees set up in September, 1939, under Defence Regulations suggested that local committees of agricultural experts, familiar with the conditions in their areas and respected and trusted by the farming community, could usefully take a permanent part in guiding and stimulating the industry. It was therefore decided, as part of the Government's long-term policy for agriculture, to retain Agricultural Executive Committees as part of the administrative machinery. The war-time organisation in Scotland required some adaptation, however, to meet post-war needs. Many of the officers of the Committees were business men or members of the staff of an agricultural college whose services could no longer be called upon for committee work. Moreover, some change in the functions of Committees in peace-time was also to be expected. After careful consideration it was decided to group

<sup>1</sup> Chapter XII.

<sup>2</sup> The Agricultural Holdings (Scotland) Act, 1949, and the Agricultural Wages (Scotland) Act, 1949.

<sup>3</sup> Chapter XV.  
<sup>4</sup> The Agricultural Marketing Act, 1949, the Prevention of Damage by Pests Act, 1949, the Milk (Special Designations) Act, 1949, the Slaughter of Animals (Scotland) Act, 1949, and the Docking and Nicking of Horses Act, 1949.

<sup>5</sup> The Agriculture (Miscellaneous Provisions) Act, 1949.

<sup>6</sup> The Housing (Scotland) Act, 1949, the Water (Scotland) Act, 1949, and the Coast Protection Act, 1949.

the counties into eleven new geographical areas, broadly according to types of farming, and to appoint smaller Committees, each consisting of twelve members, to be known as Area Agricultural Executive Committees. This title distinguished them from the war-time Committees which they were to succeed.

The new Committees were set up early in 1947 and gradually took over from the war-time Committees various emergency powers that were still then being exercised—mainly for the purpose of maintaining food production.<sup>1</sup> Their main task, however, at this time was to make preliminary surveys of their areas and draw up their plans for exercising the responsibilities to be delegated to them under the Agriculture (Scotland) Act, 1948. While the new Committees were “running themselves in,” the war-time Committees remained in office until after the harvest of 1947 thus completing eight years of service. They were disbanded in November, 1947, and the eleven new Committees then became known, simply, as Agricultural Executive Committees.

After the Agriculture (Scotland) Act, 1948, was passed, the Committees were formally appointed, without change in membership or area, to be the Agricultural Executive Committees for which the Act provides, and statutory powers were delegated to them.<sup>2</sup> The change over from the old Committees to the new took place smoothly and abrupt changes in administration were largely avoided. Many members of the statutory Agricultural Executive Committees were original members of the Committees set up in 1939, bringing a wealth of experience to the new tasks. Apart from this the Committees had been able from the start to acquire increasing familiarity with those aspects of their work which were to demand the greater part of their time and attention after November, 1948.

## FUNCTIONS

The functions of the eleven Committees, now established under Statute as an essential link between the agricultural community of landowners, farmers and workers, and the State, fall into four broad groups.

*Securing efficiency.*—Post-war legislation reflected the need for a stable and efficient farming industry. Arrangements for giving economic stability to the industry by fixing prices for the main agricultural products and providing assured markets were given legislative effect in the Agriculture Act, 1947. Powers designed to secure greater agricultural efficiency in Scotland were conferred on the Secretary of State by the Agriculture (Scotland) Act, 1948, the majority being subsequently delegated to Committees. They include power to serve a warning notice on the owner or occupier of an agricultural unit who is not maintaining a satisfactory standard of management or husbandry, and thereafter to give directions to secure an improved standard. Such directions may be concerned with cropping, stocking, cultivations, and other farming operations, and with the provision and improvement of fixed equipment in the case of estate management. Where directions are not carried out Committees may undertake the work required and recover the cost from the defaulter. In addition, failure to comply with directions may involve prosecution. Committees are required to review warning notices at intervals of not more than 12 months. They may withdraw notices, if there has been sufficient improvement, or they may continue them in force. Where Committees are satisfied that the required improvement has not been shown, they may recommend to the Secretary of State that the owner or occupier concerned should be dispossessed.

From 1st November, 1948 to 31st December, 1949, Committees served 52 warning notices, of which 40 were in respect of bad husbandry and 12 in respect of bad estate management. No proposals for dispossession were made during this period.

<sup>1</sup> The Cultivation of Lands (Scotland) Orders, 1947.

<sup>2</sup> The Agriculture (Scotland) Regulations, 1948.

The Committees' functions in regard to the control of game and agricultural pests are derived from powers delegated by the Secretary of State under Defence Regulation 63 and from Orders made under Defence Regulation 63A. Under these powers Committees can, by Order, require the destruction of hares, rabbits, or any specified vermin, pest, or bird. So far as deer, hares or rabbits are concerned they can approve their destruction by persons acting under authority from occupiers. Generally speaking compulsory powers have not had to be used as the work has usually been carried out by the persons concerned at the suggestion of Committees. Part III of the Agriculture (Scotland) Act, 1948, dealing with the control of injurious animals, birds and weeds is expected to be brought into force early in 1950. The Secretary of State's powers under the Act, which will be delegated to the Committees, will supersede the powers they have at present under the Defence Regulations.

*Adjudicating on matters arising under the Agricultural Holdings (Scotland) Acts.*—Part I of the Agriculture (Scotland) Act, 1948, made some important amendments in the basic code governing the relationship between landlords and tenants of agricultural holdings in Scotland<sup>1</sup> and added some new provisions designed to facilitate the promotion of efficiency. The principal aim underlying one of the most far-reaching provisions was to ensure that the efficient tenant farmer should have security of tenure. Of the many functions conferred on the Secretary of State by Part I of the Agriculture (Scotland) Act and delegated to Committees<sup>2</sup> one of the most important is that of giving, or withholding, consent to the operation of notices to quit. Between 1st November, 1948 and 31st December, 1949, Committees gave consent in 18 cases and withheld consent in 27. If either the landlord or the tenant is dissatisfied with the Committee's decision, he is entitled to appeal to the Land Court. When the appeal is made the Committee take no further part and the case is argued anew by the parties before the Land Court.

Applications by landlords for certificates that tenants are not farming according to the rules of good husbandry are considered by Committees. After giving the landlord and the tenant an opportunity to make representations, the Committee inform both that they propose to grant, or to refuse, the certificate. Alternatively, if they consider that the tenant is likely to bring his farming up to standard during a probationary period, they may serve a warning notice on him. In the period 1st November, 1948 to 31st December, 1949, Committees proposed to grant certificates of bad husbandry in five cases, and to refuse certificates in eight; they adopted the alternative procedure of serving a warning notice in five cases. The tenant or the landlord, as the case may be, has the right to require that the Committee's proposal to grant or refuse the certificate of bad husbandry be referred to the Land Court. If this happens the Committee refer their proposal to the Land Court, where the case is argued afresh by the parties. The Committee are not called upon to take part. The Committee are bound to act in accordance with the findings of the Land Court. Reference to the Land Court has been required in three cases. In one case the Land Court reversed the Committee's proposal to grant a certificate; in the other two they had not reported by the end of the year.

Where a certificate of bad husbandry has been granted and the landlord gives notice to quit to his tenant, the Committee have power to serve directions on the tenant to prevent further deterioration of the holding. If the tenant does not comply, they can terminate the tenancy, by order, earlier than the term specified in the notice to quit.

The letting of agricultural land for less than an annual tenancy is now restricted by law, in the interests of efficiency, but Committees have power to

<sup>1</sup> Now consolidated in the Agricultural Holdings (Scotland) Act, 1949.  
<sup>2</sup> The Agriculture (Scotland) Regulations, 1948.

approve short term lets. Between 1st November, 1948 and 31st December, 1949, they gave approval in 29 such cases.

By the end of 1949, Committees had not been called on to exercise, to any great extent, their other statutory functions which come into the second group. Mention should, however, be made of their power to vary the terms of a lease where they are satisfied that the tenant should be allowed to plough up permanent pasture to secure the full and efficient farming of the holding. In such cases Committees are further entitled to adjust compensation for pasture at outgo. They can also act on applications by tenants for approval to carry out long term improvements for which notice to the landlord is required by statute. The landlord has the right to object to a proposal by his tenant to carry out such an improvement, but if he objects, the Committee can decide, on application, whether the improvement should be carried out, and upon what terms.

The importance of the duties outlined above has not been underrated by Committee members, who have spared neither time nor effort in their responsible work. The various steps taken before final decisions are reached—the visits of inspection, the hearing and consideration of representations, the careful discussion in Committee—are not reflected in statistics.

*Food production.*—The year 1947, in which the new Committees were first appointed, saw also the launching of the Agricultural Expansion Programme, designed to assist the country in its efforts towards economic recovery. The help of the Committees was enlisted in this campaign, although, unlike their war-time predecessors, they were not authorised to employ powers of direction to secure the additional production sought by the Government. It was expected nevertheless that when the Agriculture (Scotland) Act came into operation the Committees would be able to contribute materially to the drive towards higher production by bringing about increased efficiency both in husbandry and in estate management. The industry was called upon to achieve voluntarily an annual increase in production during the succeeding four years so that by 1951 the level reached would be almost as high as the war-time peak and some 50 per cent. higher than pre-war. In the summer of 1949, however, it became clear that the acreage then under crops was far short of the target set for the year and was, in fact, some 83,000 acres less than in 1947. It was obvious that special efforts would be required if the aims of the Expansion Programme were to be realised. Committees were asked therefore to do everything possible to bring home to the farmers in their areas the urgent need for the highest possible level of crop production, and particularly to obtain adequate supplies of home grown feeding stuffs for the increased livestock population which was expected and which, in fact, showed every sign of being obtained.

The Committees were, at the same time, asked by the Secretary of State to examine, in collaboration with the local leaders of the National Farmers' Union, the technical and practical implications of the crop requirements of the expansion programme. During this examination the Committees came to the conclusion that the drive for greater production was being adversely affected by the example of a small minority of farmers who, by an excessive laying down of land to grass, were failing to make a fair contribution towards the desired crop acreages. As a result, in December, 1949, the Secretary of State obtained the approval of Parliament to an order under the Agriculture (Scotland) Act, 1948, which permitted him to give directions to control the maximum area of pasture land laid down on an agricultural unit. This power, which was delegated to Committees, was intended for use only in special cases where the desired results could be obtained in no other way.

During the year, wherever it was practicable, Committees were again able to arrange for the grazing of golf courses. This was a useful contribution towards meeting the high demand for grazing facilities. The Committees had power under the Defence Regulations to serve directions on Golf Clubs but



the ready response from the Clubs rendered this unnecessary except in two cases.

*Miscellaneous duties.*—Among the Committees' duties which can be broadly described as advisory or consultative, can be included the exercise of the right to grant certificates under the Rent and Mortgage Interest Restrictions Acts. A landlord who wishes to regain vacant possession of a cottage to house one of his farm workers whose employment is necessary for the proper working of the farm may, under these Acts, seek from his Agricultural Executive Committee a certificate which will support his application to the sheriff. Between 1st November, 1948 and 31st December, 1949, Committees granted 89 certificates and refused 20. In the latter cases they were unable to certify that the worker for whom the house was said to be required was, or was to be, employed on work necessary for the proper working of the holding.

Local planning authorities have to consult the Agricultural Executive Committees before preparing development plans.<sup>1</sup> These plans may allocate land for agriculture or other purposes. Further, where a private individual applies to the local planning authority for permission to carry out development for agricultural purposes, the local planning authority has to consult the Agricultural Executive Committee for the area before refusing planning permission or before imposing any conditions on the grant of planning permission. Committees also have an opportunity to advise on the siting of houses for agricultural workers which local authorities are erecting under a special programme. They can also make recommendations to local authorities concerning the selection of tenants for these houses.

Under the Secretary of State, the responsibility for administering the various agricultural subsidy and grant schemes rests with the Department of Agriculture. The Department also operate rationing schemes for scarce supplies, the Agricultural Machinery Service, the Labour Services and the Pest Control Service. The local work is done by officials at the Department's area and local offices. The Committees, however, advise, in the light of their knowledge, on the local administration of many of the schemes, particularly the Animal Feeding Stuffs Rationing Scheme and the Scheme for the Assistance of Marginal Agricultural Production.

Each Agricultural Executive Committee, with additional members, acts also as the Local Committee which the Secretary of State has set up under Section 33 of the Hill Farming Act, 1946.

## COMPOSITION OF COMMITTEES

Each Agricultural Executive Committee consists of not more than twelve members, appointed by the Secretary of State after consultation with the organisations representing Scottish landowners, farmers and farm workers. Members have either direct practical experience of agriculture or other professional qualifications. In the main the membership comprises landlords, factors, owner-occupiers, tenant farmers and farm workers. Committees may, and must if the Secretary of State requires them to do so, appoint sub-committees. These may be purely advisory or, subject to the Secretary of State's approval, the Committees may delegate to them certain of their functions. Committees can also add to their sub-committees persons who are not Committee members. By the end of 1949 the majority of Committees had set up sub-committees to undertake the preliminary examination of cases requiring a decision by the main Committee. In addition to Committee members 191 persons are serving on sub-committees. Most Agricultural Executive Committees have found it necessary to meet at least once a month. Office accommodation is provided at the Department's offices in the various areas and the Secretary of each Committee is an officer of the Department. Technical officers of the Department are stationed in each Committee's area and, in addition to carrying out their

<sup>1</sup> The Town and Country Planning (Scotland) Act, 1947.

Departmental duties, are available to assist the Committee in the technical aspects of their work.

The Committees are now becoming firmly established, but after little more than a year on a statutory footing, it is rather early to make a full assessment either of the work done under their far-reaching powers or of the wide influence which they bring to bear on local agricultural administration. A good start has been made, however, and special tribute must, deservedly, be paid to all those Committee members throughout the country who give their services freely and voluntarily in the interests of Scottish agriculture.

## CHAPTER III—ECONOMIC POLICY, PRICES AND SUBSIDIES

### ECONOMIC POLICY

The system of guaranteed prices and assured markets for the principal farm products and the general economic control now exercised by the State have extended the Department's functions on the economic side.

The increasing emphasis placed upon the development of international trade and, in particular, upon European economic co-operation, has resulted during the year in a marked relaxation of trade restrictions. Open general licences have taken the place of specific import licences for a wide range of commodities. British agriculture, and especially Scottish agriculture, has always been interested in export markets for pedigree live stock but in general overseas trade in agricultural produce is limited to imports. It has been the concern of the Agricultural Departments to see that, as regards such imports, any alteration in procedure was effected with the minimum of disturbance to the maintenance of stable conditions in the home farming industry.

Against this background of increasing freedom in international trade, home policy during the year has been marked by the progressive relaxation or removal of controls, and by the tendency for prices to give greater recognition to quality. Apart from those products covered by the guarantee under Part I of the Agriculture Act of 1947, the only products subject to price control during 1949 were carrots, apples, pears, hay and straw. Of these, carrots, apples and pears were freed from price control during the main home production season, and the Government have announced that carrots will be freed entirely from price control after 30th April, 1950. All controls were removed from straw on 1st March and from hay on 1st June, 1949. The Government have also announced that new potatoes of the 1950 crop will not be subject to control.

### PRICES

The fifth annual review of the general economic conditions and prospects of the agricultural industry was held in February, 1949. Following increases in farm workers' wages awarded by the Agricultural Wages Boards of England and Wales and of Northern Ireland (a similar award was made later by the Scottish Board), a special review was held at the same time. The annual review covered prices for the live stock year beginning 1st April, 1949, and for crops to be harvested in 1950. The special review covered prices for crops harvested in 1949, previously fixed after the annual review in February, 1948.

The alterations in prices agreed at these reviews and subsequently approved by the Government are shown in Table 4.

TABLE 4.—ALTERATIONS IN PRICES FOLLOWING FEBRUARY, 1949, PRICE REVIEWS

(a) Crops :

	Increase	
	1949 Crops <sup>1</sup>	1950 Crops <sup>2</sup>
Wheat .. .. .	3d. per cwt.	5s. 0d. per cwt. Acreage payments to be discontinued.
Barley .. .. .	3d. per cwt.	<i>Malting.</i> A maximum price for malting barley was not fixed : the position to be reviewed early in 1950 and a further announcement made. <i>Feeding.</i> Guaranteed fixed price of 21s. 6d. per cwt.
Oats : maximum price } minimum price }	3d. per cwt.	{ 1s. 0d. per cwt. 9d. per cwt.
Rye .. .. .	3d. per cwt.	The existing fixed price to be a minimum price. Acreage payments to be continued.
Potatoes .. .. .	6s. 9d. per ton.	10s. 0d. per ton. Acreage payment to be £10 per acre on total acreage.
Sugar beet .. .. .	1s. 9d. per ton.	2s. 0d. per ton.

(b) Live stock and live stock products :

	Average overall price increase over 1948/49	Operative date
Fat cattle .. .. .	4s. 6d. per live cwt.	21st March, 1949.
Fat sheep .. .. .	$\frac{1}{2}$ d. per lb.	Do.
Fat pigs .. .. .	6s. 9d. per score dead weight.	4th April, 1949.
Milk .. .. .	2 $\frac{1}{2}$ d. per gallon.	1st April, 1949.
Eggs .. .. .	1d. per dozen.	31st March, 1949.

In 1950 the guaranteed price of barley, fixed at 21s. 6d. per cwt. would relate to all barley, provided that it was of satisfactory quality and in fair merchantable condition. The standard of quality would be agreed with the National Farmers' Unions. A provision was included that the guarantee would apply to barley which could, by expenditure of not more than 2s. per cwt., be made marketable.

The average price increases for potatoes of the 1949 and 1950 crops include and continue the addition of 3s. per ton which was made for the 1948 crop to offset the rise in the cost of seed for that crop.

All the above prices are the average increases over the whole of the quantities sold, irrespective of any grade or seasonal variations. Following normal practice, the detailed application of the price increases was considered in consultation with the National Farmers' Unions. The increases were not uniformly

<sup>1</sup> Over average prices previously announced.

<sup>2</sup> Over 1949 average prices announced in August, 1947.

applied, and for a number of commodities there were variations according to the season and variations in the increases for different grades. In particular, seasonal prices for eggs were re-introduced. These were a price of 3s. 9d. per dozen from 1st April to 21st September, 1949, and from 16th February to 31st March, 1950; 5s. per dozen from 22nd September to 19th October, 1949, and from 19th January to 15th February, 1950; and 5s. 6d. per dozen from 20th October, 1949, to 18th January, 1950. On the basis of the two previous years' deliveries to packing stations, these prices would yield an average of 4s. 1d. per dozen for the year. Notice of the introduction of a seasonal scale was given in March, 1949, and at the same time farmers were advised that, subject to the outcome of the annual review in February, 1950, and to the guaranteed minimum price of 3s. 4d. per dozen, it was expected that the average price of eggs in the year 1950/51 would be reduced below the new figure of 4s. 1d. per dozen.

Details of prices for 1948/49, 1949/50 and 1950/51 are given in Appendix 2.

### Grass Seed Prices

Following consultation with representatives of growers, merchants and users of Scottish perennial and Italian ryegrass and timothy seed the Secretary of State made an Order<sup>1</sup> prescribing fixed prices for such seed in relation to its real value. As the statutory authority for the making of this Order expires in 1950 the Department have informed all parties concerned that the Order will be withdrawn after the 1949 crop has been disposed of.

### Acreage Payments

Acreage payments in respect of potatoes, wheat and rye grown in Scotland for harvesting in 1949 were made at the following rates<sup>2</sup> :—

*Potatoes*: £8 per acre, with an additional payment of £4 per acre on the first ten acres grown by any one person whether on one or more than one holding.

*Wheat*: £3 per acre on the first ten acres grown by any one person whether on one or more than one holding.

*Rye (fully ripened and threshed as grain)*: £3 per acre on the first ten acres grown by any one person whether on one or more than one holding.

The closing date for receipt of applications was 1st October, 1949. Otherwise, the conditions of payment were similar to those in force in previous years.

Some 55,700 forms of application for acreage payments were issued by the Department. By the close of the year 46,481 claims had been certified by the Department's inspectorate after local examination, and of these 39,480, involving a sum of £1,715,743 had been finally approved for payment. Actual payments amounting to £1,420,761 had been made in respect of 31,835 claims.

## SUBSIDIES

### Marginal Agricultural Production

The scheme governing the payment of subsidies for marginal agricultural production was made under the provisions of Section 75 of the Agriculture (Scotland) Act, 1948.<sup>3</sup> Like the non-statutory "Scheme for Assistance of Marginal Agricultural Production" which was in operation from 1943 to 1948

<sup>1</sup> The Grass Seed (Growers' Fixed Prices) (Scotland) Order, 1949.

<sup>2</sup> The Crop Acreage Payment (Scotland) Order, 1949.

<sup>3</sup> The Marginal Agricultural Production (Scotland) Scheme, 1949.

inclusive, it was designed to enable production on inferior land to be maintained and where possible increased. Up to 31st August, 1952, offers of assistance can be made towards the cost of specified goods and services so that farmers of marginal subjects can carry out agricultural operations which they could not otherwise be expected to undertake.

For the 1949 cropping season, grants involving a total sum of about £323,600 were offered in some 14,600 cases and by the end of the year payments amounting to £160,659 had been made in 5,380 of these.

### **Grassland Ploughing Scheme**

Grants in respect of the ploughing up of grassland were made under the Agricultural Development Acts, 1939 to 1946, as amended by the Emergency Laws (Miscellaneous Provisions) Act, 1947.

Under these powers grant was payable only for ploughing carried out by 31st December, 1949. For grassland in its third growing season (or older) ploughed between 21st August, 1947, and 31st December, 1949, inclusive, the rate of grant was £4 per acre and, subject to a minimum acreage of one acre ploughed, payment was made for each complete quarter acre. The land had to be sown to an approved crop or resown to grass with the approval of the Department and in accordance with any standards laid down by them.

Between 1st April, 1949, and 31st December, 1949, payments amounting to £1,112,870 were made in 22,466 cases involving 278,218 acres. In addition payments amounting to £16,723 were made in 379 cases in respect of land ploughed for the harvest of 1948.

### **Hill Sheep Subsidy**

Hill sheep subsidy was paid in 1949 at the rate of 10s. per ewe to the owners (or in exceptional cases to the renters) at 4th December, 1948, of regular breeding ewe stocks of hill sheep maintained on hill land and managed in accordance with the recognised practices of hill sheep farming.<sup>1</sup> Applicants had the option of having the payments calculated either (a) on the numbers of ewes and gimmers in the flock at 4th December, 1948, or (b) on the numbers of ewes and gimmers in the flock at 4th December, 1946, that qualified for subsidy in 1947.

By the end of the year 16,560 applications had been dealt with and of these 16,183 were approved and 377 disallowed; £1,182,911 had actually been paid on 16,128 applications for 2,367,919 sheep including £526 paid in 1948 by way of advances. More than one quarter of the applicants elected to have payment calculated on the number of sheep that qualified for subsidy at 4th December, 1946.

### **Hill Cattle Subsidy**

Payments of subsidy for hill cattle<sup>2</sup> introduced in 1947 under the Hill Farming Act, 1946, were continued in 1949. There were no changes in the conditions of the Scheme which, unless otherwise amended or revoked, will remain in operation until 1951. These conditions, in broad outline, provide for payment of subsidy at the rate of £7 per head for female breeding stock kept on "hill land" for the twelve months between the dates of the relative December Agricultural Returns. The term "hill land" applies both to "hill farming land" proper and to land in upland districts forming units which are not used wholly or substantially for the production for sale of crops, fat stock or milk. Subsidy is payable to the "occupier" at 4th June of the hill land on which the cattle are grazed and maintained.

<sup>1</sup> The Hill Sheep (Scotland) No. 2 Scheme, and the Hill Sheep Subsidy Payment (Scotland) Order, 1949.  
<sup>2</sup> The Hill Cattle (Scotland) Scheme, 1947.

Table 5 shows the position at the end of 1949 of subsidy payments for the years 1947, 1948 and 1949.

TABLE 5.—HILL CATTLE SUBSIDY SCHEME—POSITION OF CLAIMS

	1947	1948	1949 <sup>1</sup>
	Number		
Received .. .. .	12,916	12,694	13,088
Approved and passed for payment	12,259	12,205	10,516
Refused or withdrawn .. .. .	655	473	204
Under consideration .. .. .	2	16	2,368
Paid .. .. .	12,259	12,196	10,312
	£		
Total payments to 31/12/49 ..	641,676	669,905	549,507

Claims amounting to £248, 10s. are outstanding in respect of earlier years. These claims have been approved, but payment has been deferred pending confirmation of the claims of heirs and executors.

### Calf Rearing Subsidy

Section 1 of the Agriculture (Miscellaneous Provisions) Act, 1949, empowered the Agricultural Ministers (a) to make schemes for the payment of subsidy in respect of home-bred steer and heifer calves of approved types born between 21st August, 1947, and 1st October, 1949 inclusive and reared to the age of one year, and (b) to extend this power, with the approval of Parliament, to cover calves born between 2nd October, 1949, and 30th September, 1950, inclusive, and to prescribe rates of payment for such calves.

In exercise of these powers, a scheme was framed which came into operation on 1st September, 1948.<sup>2</sup> The scheme was later modified by an Order<sup>3</sup> providing for the making of schemes for calves born between 2nd October, 1949, and 30th September, 1951, inclusive, and prescribing rates of £5 each for steer and £2 each for heifer calves.

Between 1st September, 1948, and 31st December, 1949, the Department's certifying officers made 74,046 visits to holdings and marked 114,035 steer and 309,464 heifer calves as eligible for subsidy; 9,869 calves were rejected on inspection. A total of 56,160 claims, amounting to £1,309,069, were paid, and 17,886 claims are outstanding.

## OTHER FINANCIAL ASSISTANCE

### Live Stock Replacement

The Secretary of State can give financial assistance to occupiers of agricultural land to replace live stock lost through abnormal weather conditions, or, with the approval of the Treasury, in other special circumstances.<sup>4</sup> Advances made under the Scheme, plus interest at the rate of 2½ per cent. per annum must be repaid within three years from the date of the first purchase of replacements.

Only one application for assistance amounting to £105 was received in 1949. £1,570 was received in repayment, with interest, of advances made. Total advances made from the inception of the Scheme up to 31st December, 1949, were £5,180. Repayments during the same period amounted to £2,301.

<sup>1</sup> Incomplete.

<sup>2</sup> The Calf Rearing Subsidy (Scotland) Scheme, 1949.

<sup>3</sup> The Calf Rearing Subsidy Scheme (Extension and Payment) (Scotland) Order, 1949.

<sup>4</sup> The Agricultural Goods and Services (Scotland) Scheme, 1948.

## Agricultural Resettlement Grants

The scheme for providing resettlement grants was continued during 1949. Its object is to assist (1) persons who were working agricultural or horticultural holdings on their own account for commercial food production before joining H.M. Forces, the Merchant Navy or the Civil Defence Services, and who can show that they need help to restart in a holding on their own account, and (2) in suitable cases, those disabled by war service who desire to set up in a holding for the first time. The maximum grant which may be offered in either case is £150. The Scheme will not apply to men called up under the National Service Acts after 31st December, 1948.

During 1949, 39 applications were received and grants totalling £2,467 were awarded. From the inception of the Scheme a total of 244 grants amounting to £16,382 have been awarded, £9,250 to disabled persons and £7,132 to persons resuming their previous occupation.

Refund of grant, amounting to £285, was requested in four cases during the year where the recipients of the award had broken the conditions of the Scheme by failing to submit vouchers or by disposing of the holding before the expiry of a two-year period without the consent of the Department.

## Agricultural Credit

Under the Agricultural Credits (Scotland) Act, 1929, the Scottish Agricultural Securities Corporation Ltd. can make loans for the purchase of agricultural land. More than £200,000 was advanced by the Corporation during 1949, bringing the total amount advanced since its incorporation in 1933 to over £1½ million.

A grant of £5,365 was paid by the Department to the Corporation for the financial year 1948/49, being the amount due under the provisions of the Agriculture (Miscellaneous Provisions) Act, 1944, in respect of a reduction in interest charges.

# CHAPTER IV—PRODUCTION AND MARKETING

## PRODUCTION

The early onset of bad weather towards the end of 1948 led to a serious reduction in the acreage of winter-sown crops, and although spring sowing made good this deficit to some extent, the final acreages were considerably less than those of 1948. This was particularly disappointing in view of the requirements of the agricultural expansion programme. Total cereal acreages and total tillage fell short of the targets which had been set by 132,000 and 126,000 acres respectively. Table 6 compares the acreages of the main crops and the total area of tillage for 1948 and 1949.

TABLE 6.—ACREAGE OF CROPS  
At 4th June

	1948	1949
Total tillage .. .. .	1,852	1,775
Wheat .. .. .	87	63
Barley .. .. .	180	170
Oats .. .. .	953	932
Potatoes .. .. .	222	192
Sugar beet .. .. .	9	9
Turnips and swedes .. .. .	295	293

Despite the long period of dry weather, crops came through well and the harvest was secured early and in good condition. Yields were high, as shown by Table 7.

TABLE 7.—CROP YIELDS

*Per acre*

	1949	1948	Ten-year average 1939/48
Wheat .. .. . cwts.	23.1	21.5	21.9
Barley .. .. . ”	21.8	20.2	19.6
Oats .. .. . ”	17.1	17.0	16.3
Potatoes .. .. . tons	7.5	7.5	7.2
Sugar beet .. .. . ”	11.1	8.1	7.6
Turnips and swedes .. .. . ”	17.6	16.6	17.1

Pastures provided a high standard of keep throughout most of the season and survived the long dry summer. They were still serviceable in many areas well into the autumn. The area of permanent pasture (1,188,232 acres) was 54,732 acres more than in 1948, and the area of rotation grass (1,452,605 acres) was 21,022 acres more. Stocks of hay and grass silage at 3rd September, 1949, were 702,239 and 98,853 tons respectively, and a significant quantity of dried grass was also made. Stocks of silage other than grass silage amounted to 43,018 tons. The silage figures show that an appreciable response is being made by farmers to the campaign for greater output from our grasslands.

With increasing mechanisation of farming operations, the number of horses continued to decline. Sheep numbers on the other hand showed complete recovery of the losses incurred during the severe winter of 1947. The numbers of both beef and dairy cattle were the highest ever recorded, and poultry numbers exceeded the ten million mark for the first time. The number of pigs, increased by 27 per cent. during the year, was not far short of the pre-war level. Table 8 gives particulars of the expansion in live stock that has been achieved.

TABLE 8.—LIVE STOCK NUMBERS

*At 4th June*

*Thousands*

	1939	1941	1948	1949
Horses .. .. .	142	138	97	87
Cattle :				
Total .. .. .	1,349	1,312	1,499	1,569
Dairy .. .. .	741	776	828	843
Beef .. .. .	608	536	671	726
Sheep .. .. .	8,007	6,759	6,731	7,103
Pigs .. .. .	252	218	184	232*
Poultry .. .. .	7,711	6,417	9,285	10,006

Milk production continued to increase and it was found possible to suspend milk rationing for 15 weeks from 27th March to 9th September, 1949. Sales under the milk marketing schemes in Scotland during the year ended 30th September, 1949, totalled 171,306,000 gallons, an increase of 8½ per cent. over 1948 and of nearly 28 per cent. over 1939. Approximately 85 per cent. of the total sold was for liquid consumption, which represents an increase in consumer demand of nearly 65 per cent. compared with pre-war.



Over 75 per cent. of the milk produced was of Certified or T.T. Grade and came from Attested Herds. The corresponding figure for 1948 was 70 per cent., and for 1939, 20 per cent. Over 70 per cent. of Scottish dairy herds are now attested and licensed to sell "specially designated" milk (*i.e.* "Certified," "Tuberculin Tested" or "Standard" milk).

Government policy aims at the complete eradication of bovine tuberculosis and the details of a long-term scheme to achieve this end were further considered during the year. The intention is to continue giving encouragement to voluntary attestation, but the compulsory removal of cattle which react to the tuberculin test will be progressively applied to areas as they reach a high degree of attestation. It is hoped that it may be possible to bring the scheme into operation during 1950.

Under the Milk (Special Designations) Act of 1949, the Minister of Food has power to specify, from time to time, areas within which only raw milk of Certified or T.T. Grade or pasteurised milk may be sold. The sale of standard milk is permitted up to 30th September, 1954. No such area has yet been specified.

The Department continued to operate the Milk Sales Records Scheme during the year. Under this Scheme, records are kept of sales of milk by each producer registered under a milk marketing scheme so that advisory work can be concentrated on those producers whose average sales per cow are below the average for the area. Sales by producers who are primarily interested in disposing of milk otherwise than by sale, *e.g.* calf feeding, are ignored in striking averages. Figures are not strictly comparable year by year, but Table 9 gives a guide to the trend in Scottish milk production since the scheme was introduced in 1944/45.

TABLE 9.—AVERAGE SALES OF MILK PER COW

	<i>Gallons</i>				
	1944/45	1945/46	1946/47	1947/48	1948/49
Winter (October to March) ..	213	226	232	233	258
Year (October to September)	532	555	556	579	613

The benefits of milk recording as a guide to economic production and good management are being progressively realised and milk records are now regarded as a most important factor in the pedigree records of dairy stock.

During 1949, 2,227 herds were recorded compared with 2,044 in 1948. The Government wish to encourage producers to take advantage of the recording services available, and a grant of £11,400, or 60 per cent. of approved expenditure, whichever is the less, has been approved towards the administrative expenses of the Scottish Milk Records Association for the current financial year. In addition, the milk marketing boards in Scotland, with the concurrence of the Ministry of Food, again made a joint grant to the Association at the rate of 2s. per cow recorded, the grant being designed to reduce the cost of recording falling directly on farmers participating in the scheme.

In co-operation with the British Goat Society, and with the sanction of the Treasury, the Department during the course of the year introduced a scheme of grants in aid of the milk recording of goats in Scotland, which is also carried out by the Scottish Milk Records Association. Under this scheme the Department make an annual grant of £3 per herd provided that the Society make a grant of £2 per herd towards the cost of recording. When, however, cows in the same ownership as the goats are recorded by the Association, the grants and charges are reduced by 50 per cent. So far only three herds are being recorded under the scheme.

The Report of the Committee on Milk Services in Scotland was published in March. At the close of the year the Department was examining, in conjunction with the Department of Health for Scotland, the observations submitted by interested organisations on the recommendations contained in the report.

## MARKETING

It will be remembered that, following consideration of the report of the Agricultural Marketing Committee, the Government announced in May, 1948, that a measure would be introduced to amend the Agricultural Marketing Acts, 1931 to 1933. Accordingly the Agricultural Marketing Act of 1949, which received Royal Assent on 31st May, provides for a closer control of the operations of marketing boards by increasing the number of members of such boards to be appointed by the Minister and by giving him the power to issue directions to boards in the public interest. The Act also abolishes the Market Supply Committee, repeals the provisions of the 1933 Act relating to development schemes, and amends the principal Acts in several other respects, including extending the application of their provisions to Northern Ireland.

Of particular interest to Scotland is the provision enabling certain areas in Scotland, in which milk marketing has so far been regulated by schemes made under Defence Regulations, to be brought, with the consent of the producers concerned, into existing milk marketing schemes under the Marketing Acts. Following discussions with representatives of the milk marketing boards in Scotland and of producers in the "special" areas, agreement has been reached in the case of the Aberdeen and District and the North of Scotland Boards to the terms on which they would be prepared to incorporate permanently into their schemes the counties of Banff (Aberdeen Scheme) and Moray and Orkney (North of Scotland Scheme). At the end of the year arrangements were being made to carry out the statutory procedure to give effect to the agreement.

As a result of the passing of the 1949 Act it became necessary to revise certain of the Regulations made under existing legislation. The Agricultural Marketing (Public Inquiry) Rules, 1949, and the Agricultural Marketing (Committee of Investigation) Regulations, 1949, were therefore made, and amendment of the Agricultural Marketing (Consumers' Committee) Regulations, 1932, is under consideration. The Agricultural Marketing (Facilities Committee) Regulations, 1932, and the Agricultural Marketing (Loans) (Scotland) Regulations, 1932, remain in force as amended by the Amending Regulations of 1933. Amendment of the existing marketing schemes to bring them into accord with the 1949 Act is also under consideration.

### Marketing Schemes

During the year, the Scottish, the Aberdeen and District and the North of Scotland Milk Marketing Boards continued to operate their schemes under the direction of the Ministry of Food. The boards also administered on behalf of that Ministry the special milk marketing schemes, introduced under Defence Regulations and referred to in the previous section, covering Moray, Banff, Orkney, Argyll (mainland) and Argyll (Islands of Coll, Islay and Gigha). The Potato, Pigs and Bacon Marketing Schemes, and the Bacon Development Scheme under the Bacon Industry Act of 1938, remained in suspense. The Milk Products Marketing Scheme, approved in 1939, has not yet been brought into operation.

An Order<sup>1</sup> was made enabling the Potato Marketing Board to appoint a Committee to consider future policy with regard to the Scheme. Similar provision was made in the case of the Pigs and Bacon Schemes during 1944/45.

The report of the Commissioner appointed to hold a public inquiry under

<sup>1</sup> The Potato Marketing Scheme, 1933 (Modification and Suspension) (Amendment) Order, 1949

the Agricultural Marketing Acts into objections to the scheme submitted in 1948 for regulating the marketing of tomatoes and cucumbers grown in Great Britain has been under consideration by the Agricultural Ministers concerned, in consultation with the Board of Trade. They have to determine whether any modification should be made in the scheme as originally submitted.

A scheme under the Agricultural Marketing Acts for the regulation of the marketing of wool produced in the United Kingdom was submitted in October, 1949, to the Minister of Agriculture and Fisheries, the Secretary of State for Scotland, and the Secretary of State for the Home Department (being the Ministers concerned with agriculture in England, Scotland and Northern Ireland respectively). The scheme was submitted by the National Farmers' Unions of England and Wales and of Scotland, and the Ulster Farmers' Union. Statutory notice of the submission of the scheme was published on 28th October, 1949, and the last date for the receipt of objections to and representations about the scheme was 10th December, 1949.

In the course of discussion with the farmers' unions prior to the submission of the scheme, the Agricultural Ministers agreed that in the event of the scheme coming into operation, and subject to the necessary parliamentary approval, an Order would be made under Section 6 of the Agriculture Act, 1947, adding wool to the list of commodities for which prices are guaranteed under the first schedule to that Act.

The statutory notice of the submission to the Secretary of State for Scotland of a scheme under the Agricultural Marketing Acts for the regulation of the marketing of wool produced in Shetland was also published in the *Edinburgh Gazette* on 28th October, 1949. The last date for the receipt of objections to and representations about the scheme was again 10th December, 1949.

## Wool

It was decided to continue to requisition during 1949, by Order under Defence Regulations, the home-grown wool clip (except wool grown in the Orkney Islands, the Shetland Islands, and the Western Isles). As in 1947 and 1948 the Agricultural Departments took responsibility for the collection of the clip and, through English and Scottish committees of wool brokers, arranged for the disposal of the wool by public auction. The prices paid to producers for the more important varieties of Scottish wool of the 1949 clip, such as Cheviot, Blackface and Halfbred, showed an increase over those paid in 1948, as will be seen from Table 10. The prices quoted were the highest prices for wools of the specified types; in the case of intermediate or inferior wools the prices applicable were proportionately lower.

TABLE 10.—PRODUCERS' PRICES FOR WOOL

*Pence per lb.*

	1948		1949	
	Washed	Greasy	Washed	Greasy
Cheviot hogs .. .. .	34½	29½	37½	32½
Cheviot ewes and wethers .. .. .	34½	29½	37½	32½
Half-bred hogs .. .. .	28	25½	30½	26½
Half-bred ewes and wethers .. .. .	28	25½	30	26
Leicester hogs .. .. .	27½	25	29½	26
Leicester ewes and wethers .. .. .	27½	25	25	22
Cross hogs .. .. .	25½	23	25	22
Cross ewes and wethers .. .. .	25½	23	24	21
Blackfaced .. .. .	26½	25½	29	26

During the year, 29 farmers applied to the Scottish Regional Advisory Com-

mittee for a change of wool merchant. The Committee allowed one application and rejected the others. Five farmers appealed to the Department against the rejection of their applications by the Advisory Committee. Three of the appeals were sustained by the Department and the other two dismissed.

The Wool Advisory Committee, set up by the Agricultural Ministers to advise them on the arrangements for the collection and marketing of the home-grown wool clip, held a number of meetings during the year. Among the matters considered by the Committee was the damaging effect upon wool resulting from the use of tar or paint for marking purposes. After making certain preliminary enquiries into the availability of sheep marking fluids which are claimed to have no injurious effects on the wool, the Committee have initiated a scheme in co-operation with the Ministry of Agriculture and Fisheries and the Department to test the effectiveness of a variety of substances which might be used for marking.

A special exhibit of fleeces of various Scottish breeds of sheep, designed to demonstrate to wool growers the correct methods of preparing wool for marketing, was staged by the Department at the Royal Highland and Agricultural Society's Show held at Dundee in June, 1949. The exhibit was subsequently on show at a number of other agricultural shows held at various centres throughout Scotland.

### Grading and Marking

Revival of the pre-war National Mark schemes under the Agricultural Produce (Grading and Marking) Act, 1928, has been considered inappropriate. The National Mark grades were designed to cover the best quality produce (e.g. select dessert plums, prime beef), and it is considered that it would be more useful in present conditions to have grades covering the bulk of marketable produce. The Ministry of Agriculture and Fisheries have therefore set up an Advisory Committee on Standard Grades and Packs representative of all interests concerned and have issued revised grades on a non-statutory basis for voluntary use in England and Wales for a variety of fruits and vegetables. These grades are to be given statutory sanction when experience of their suitability has been gained although their use will continue to be voluntary. The Committee have also considered methods of grade supervision, standards for containers and the possibilities of the system, which has proved so popular in the United States of America and elsewhere, of packing produce at the initial assembly stage in containers of a size and type suited to the day-to-day requirements of domestic consumers. At the close of the year arrangements were being made to consider standards for eggs and for table poultry.

The Department are represented on the Committee but in deference to the views of the Scottish growers' organisations no action has yet been taken to introduce similar grades for use in Scotland.

### Miscellaneous

During the year the Secretary of State made an Order authorising the Elgin Market Green Co. Ltd. to extend their present mart at Elgin for the accommodation and sale of attested stock.<sup>1</sup> Renewals of 22 exemptions from the requirements of the Markets and Fairs (Weighing of Cattle) Acts, 1887 to 1926, were granted for periods up to three years. One exemption was granted for a period of one year.

From 1st August, 1949, in terms of a new Order,<sup>2</sup> the provisions of the Threshing of Grain (Scotland) Order, 1946, now apply only to wheat. The present position is, therefore, that all owners of threshing tackle in Scotland are required to make returns to the Department of all wheat threshed by them.

<sup>1</sup> Livestock Industry Act, 1937—Section 14.

<sup>2</sup> The Threshing of Grain (Amendment) (Scotland) Order, 1949.

# CHAPTER V—ESTATE MANAGEMENT AND LAND SETTLEMENT

## ESTATE MANAGEMENT

The Department are responsible for the management of land settlement and other estates vested in the Secretary of State. In addition they are responsible for land acquired for forestry purposes by the Forestry Commission as long as it remains in agricultural use, for land requisitioned during the war years because of the bad husbandry of the occupiers, and for certain other properties. A table showing the acreages involved is included as Appendix 3.

### Properties vested in the Secretary of State

Management of land settlement estates, particularly where small type holdings are concerned, is governed primarily by the need to encourage the more intensive forms of agricultural production. At the same time every opportunity is taken to develop subsidiary uses for economic purposes or for the provision of employment. Thus a number of areas have been transferred to the Forestry Commission for commercial timber production. The possibility of making further areas available is being examined. Where shelter belts are wanted or trees required for amenity purposes the work is normally undertaken by the Department as a matter of estate improvement.

Attention has also been given to the development of other assets on land settlement properties. Arrangements were made during the year with a private company to develop the diatomite deposits at Loch Cuithir on the Kilmuir Estate in Skye and the right to extract cockle shell on the Eoligarry Estate in Barra was re-let to another company. The possibility of re-opening the mineral workings on Sunart Estate in Argyllshire is being investigated.

The question of the fullest use of sporting rights on land settlement estates has not been overlooked. On the Highland and Island estates, where the major sporting value exists, it has been clear for some time that revenue from private lets has been diminishing. This is partly due to deterioration in the sporting value of the subjects during the war though there is now some evidence of a natural improvement taking place. The Department have let a number of shooting lodges as sporting and tourist hotels, thus providing sporting facilities for more people and providing accommodation for visitors to the area. Up to the present six lodges have been let in this way along with sporting rights. A substantial farmhouse was similarly let and subsequently sold while another lodge has been sold to the Scottish Youth Hostels Association. Only one lodge with sporting rights attached is now let to a private individual.

During the year one additional property was acquired by the Secretary of State under the provisions of Section 9 of the Agriculture (Miscellaneous Provisions) Act, 1941, bringing the total number of subjects so acquired to twelve. Eight farms extending to 5,410 acres are let on lease and the Department continue to work the remaining four farms extending to 2,103 acres.

### Forestry Commission Land

At the beginning of the year the total area managed by the Department on properties acquired for forestry purposes was 192,964 acres representing 220 factored subjects extending to 141,017 acres and 18 subjects extending to 51,947

acres which they themselves were farming. During the year the Department assumed management of an additional 12,189 acres on existing forestry estates and in the same period some 5,231 acres of land on the subjects managed by the Department were placed at the direct disposal of the Commission. The Department also became responsible for the management of 20,909 acres of land acquired during the year for forestry purposes, this area involving factorage of 47 subjects amounting to 11,784 acres and the direct farming of one subject extending to 9,125 acres. Thus the total area of land on forestry estates managed by the Department at 31st December, 1949, was 220,831 acres representing 340 factored subjects extending to 169,456 acres and 16 subjects extending to 51,375 acres which they were farming.

In the course of the year the Department arranged 9 new lets of farms administered by them under the Forestry Act, 1945. Increases in rent totalling £744 were obtained in the process, a reflection of the fact that the Department will be involved in considerable expenditure on repairs and improvements.

In six cases proposals have been made for improvement schemes under the Hill Farming Act, 1946, and in 3 of these cases proposals have been approved in principle by the appropriate Agricultural Executive Committees.

### **Requisitioned Properties**

During the war 114 subjects were requisitioned on the grounds of the bad husbandry of the occupiers or failure on their part to cultivate the land. Most of these properties have now been returned to their owners following the receipt of satisfactory assurances as to their future use. In 1949 five such subjects totalling 4,769 acres were derequisitioned. The number still under requisition at the end of the year was reduced to 16 of which four were deer forest areas (totalling 110,600 acres), four were sheep farms (9,369 acres) and eight were arable subjects (2,018 acres). Seven of these subjects are let to tenants, and the remainder are farmed by the Department.

### **Other Properties**

The Department continued to manage part of Nunnerie Farm which was taken on lease from Lanarkshire Water (Additional Requirements) Joint Committee in order to avoid dispersal of a notable sheep stock. Certain items of equipment were provided during the year and at Martinmas the subject was let on lease as two units to shepherd applicants for small holdings who took over the sheep stock at a valuation made in accordance with the Hill Farming Act, 1946. The Department continued to factor other three tenanted farms and to raise T.T. stock on a farm in Lanarkshire (Woodend), on which considerable peat reclamation work was at one time carried out.

The Department are also responsible for the management of five sheep farms in Roxburghshire, requisitioned by the War Department in 1943 for use as an artillery range, and, in addition, for the management of sheep stock on an area of land in Kirkcudbrightshire, leased in 1942 for stocking with sheep cleared from land in Northumberland which was required for military purposes.

## **LAND SETTLEMENT**

Continued shortage of building labour and materials and restrictions on capital investment have stood in the way of the resumption of land settlement operations and no new schemes were constituted during the year. A start was, however, made in planning two new schemes of settlement, one on Balnagore Farm in Ross-shire and one on Kilfillan Farm on the Dunragit Estate, Wigtownshire. The former extends to 321 acres and the latter to 428 acres. On these two farms it is planned to constitute 12 new holdings mainly of the larger

type for dairying and stock raising. It is hoped to start work on these two new schemes in 1950.

The main interest of the past year has been in the progress made by the tenants already settled by the Department and in the maintenance and development of the estates already held for land settlement purposes.

The year 1949 saw considerable improvements in cultivations and stock on smallholdings and some changes in the character of the management, fostered and assisted by the Department. Quite a number of holdings turned over to dairying and to the breeding of tuberculin-tested stock. In many cases this involved improvements and extensions to farm buildings. During the year the Department undertook to carry out work of this kind in 21 cases. In other cases work of a less extensive character is being carried out by the tenants themselves. Many of the tenants of dairy holdings in the south-west of Scotland are making use of the services of the artificial insemination station at Hoddon Castle, Dumfriesshire. There is also evidence of definite improvement in the position of specialist pig and poultry holders following the introduction of the bonus system for the allocation of animal feeding stuffs. Market garden holdings have been further developed by the extension of the area under glass and by other improvements in methods of production.

The Department have been anxious, as their landlord, that smallholder tenants of hill grazings, whether these were individual subjects or common grazings, should be able to take advantage of the assistance available for comprehensive hill farm improvement schemes under the Hill Farming Act, 1946. In view of the limited financial resources of many of the tenants and the difficulties which arise in the case of common grazings, the Department have offered to meet the whole of the capital cost of approved hill farm schemes on land settlement estates owned by the Secretary of State, subject to revision of rents by the Scottish Land Court when the improvement works have been completed. Thirty-seven individual tenants and 52 common grazings committees have provisionally accepted this offer and investigations and discussions with tenants are proceeding with a view to framing schemes and preparing estimates of cost.

In general, tenants have maintained satisfactorily the equipment on their holdings. However, certain classes of buildings, mainly old structures and semi-permanent buildings provided immediately after the 1914/18 war have now deteriorated to the point at which major works are required. This work involves substantial capital expenditure and progress in carrying it out has been delayed by shortages of staff, labour and materials, and by the difficulty of getting contractors to accept isolated building work in rural areas. Even so it was possible last year to do work under these heads which included completing or putting in hand the improvement of 25 houses and 28 steadings. Approval was also given for work on a further ten houses and 17 steadings, and one new house was completed.

On some estates improvements in water supplies and roads are still necessary. A number of improvement schemes have been carried out and others are planned which can ultimately be brought within the scope of the larger water supply schemes to be provided under the Rural Water Supplies and Sewerage Act of 1944. In the matter of roads the Department endeavour to obtain the agreement of the County Council that any road serving a sufficient number of holdings will be placed on the list of County highways. One particular case of this kind is worth mention. The island of Vatersay, lying to the south of Barra, on which one of the earliest settlements was carried out by the Congested Districts Board, has no road suitable for vehicular traffic. The Department have now agreed with the Inverness-shire County Council to provide county highways to serve the settlements on the island and to improve the ferry access to it. The economic life of the island has recently been greatly improved with

the development of lobster fishing and it is hoped that the provision of adequate transport facilities will bring further advantages to the community.

Since the end of the war there has been a strong demand for the introduction of electricity to smallholding schemes. This has been done in a number of cases on the basis that the Department meet the capital expenditure and rents are adjusted. Outstanding cases will be dealt with as labour and materials become available. In some instances holders have, individually or collectively, made the necessary arrangements direct with the Electricity Boards.

During the year the Department received 708 applications for smallholdings. There were no applications for enlargements of existing holdings. Thirty-eight existing holdings were re-let following vacancies. During the past ten years, the total number of applications received for smallholdings was 6,638 and for enlargements, 16. In the same period 584 applicants have been settled and 16 applicants have been given enlargements.

Of a total sum of £128,307 advanced by the Department in loans to assist smallholders to take over sheep stocks on land settlement schemes £98,566 has been advanced to groups of holders operating as Co-operative Credit Societies registered under the Industrial and Provident Societies Act, £11,593 to groups of holders in clubs not registered as co-operative societies, and £18,148 to individual holders. At the end of the year four societies or clubs and seven individuals had not entirely repaid their loans. The amount outstanding was £5,548.

During the year 76 vacancies of landholders' holdings on private estates were reported to the Department.<sup>1</sup> Of these, 66 have been let to new holders on landholder's tenure and three have been assigned as enlargements to existing holdings or have been the subject of assurances that they will be so let or assigned. One holding was let outwith the provisions of the Small Landholders (Scotland) Acts with the Secretary of State's consent, and one was retained in the proprietor's occupation. The remaining five were under consideration at the end of the year.

Several schemes for the provision of plots have been closed down. At the end of the year there were 563 plots at 35 centres, totalling 319 acres.

## CHAPTER VI—LAND UTILISATION

The continued need for maximum food production makes it imperative that good agricultural land should not be allowed to pass out of agricultural use except where the proposed development will confer a greater good upon the country as a whole, and where unproductive or less productive land cannot reasonably be used for the non-agricultural purpose in question. This is a cardinal feature of Government policy. Accordingly, consideration of any proposals for the acquisition of land for non-agricultural purposes by Government Departments, Local Authorities and public bodies, involves consultation with the Department who are required to proffer advice from the agricultural standpoint. The Department's functions do not extend to the use of land by private individuals, which is subject to the procedure laid down in the Town and Country Planning (Scotland) Acts.

In the exercise of these functions, the Department is in the closest contact with the Department of Health for Scotland (the Department responsible for the central administration of town and country planning and of housing), and during 1949 many of the proposals which came up for consideration were withdrawn or modified to meet agricultural objections.

Gradual progress, limited by pressure of more urgent work, has been made

<sup>1</sup> The Small Landholders (Scotland) Act, 1911—Section 17.



in the preparation of land quality and farming types classification maps. By the end of the year approximately one-fifth of the work on both sets of maps had been completed. About three-quarters of the farm boundaries which are being shown on the farming types maps had also been completed.

The following paragraphs give details of proposals involving the diversion of agricultural land to other uses.

*Housing, industrial and other development.*—The amount of land approved for housing by Local Authorities or by the Scottish Special Housing Association, and for industrial development sponsored by the Board of Trade during 1949 totalled 1,470 acres. This excluded 84 acres already owned by certain authorities. Table 11 shows how the proposals affected different categories of land.

TABLE 11.—LAND APPROVED FOR HOUSING AND INDUSTRIAL DEVELOPMENT

Acres

	Total	Housing	Industry
<b>Agricultural land :</b>			
Total .. .. .	1,231	1,036	195
Dairy farms .. .. .	158	58	100
Arable farms .. .. .	925	881	44
Market gardens .. .. .	10	10	—
Allotments .. .. .	1	—	1
Detached agricultural land (grass parks, etc.) .. .. .	4	—	4
Smallholdings .. .. .	11	11	—
Grazing land .. .. .	122	76	46
<b>Non-agricultural land .. .. .</b>	<b>239</b>	<b>196</b>	<b>43</b>

Numerous proposals involving the use of agricultural land for such purposes as playing-fields, schools, roads, etc., were investigated by the Department and every effort was made to prevent unnecessary loss of land to farming.

*Services land requirements.*—As indicated in the report for 1939-48, agreement had been reached up to the end of 1948 for the use of some 57,000 acres of land, mainly rough grazings, for training and other purposes by the Service Departments. One War Office requirement, extending to 1,227 acres has since been cancelled. During 1949, approval was given to further proposals involving the use of 13,240 acres of land. Table 12 gives details of this area.

TABLE 12.—USE OF AGRICULTURAL LAND FOR SERVICE PURPOSES

	Number of cases	Acreage of land involved
War Office .. .. .	24	7,570
Air Ministry .. .. .	6	400
Admiralty .. .. .	14	1,270
Ministry of Supply .. .. .	1	4,000

In these cases, the Service Departments either acquire the land or obtain the right to train over it. A large proportion of the land consists of rough grazings which, in most cases, will continue to be used for grazing.

The War Department are still carrying out training on agricultural land under rights conferred by Orders made under Defence Regulations. The Department are consulted about the agricultural aspects of the use of land in this way. In 1949, 20 Orders of this kind were in operation involving an area of 32,500 acres, most of which again was rough grazing which at the same time continued to be used for agriculture. Arrangements were made whereby

training was not carried out during important periods of the hill-sheep farmers' year such as the lambing and tupping seasons.

It has been agreed with the Air Ministry and the Admiralty that certain airfields which have been, or will be, acquired by these Departments and are now surplus to long-term flying requirements should be transferred to the ownership of the Secretary of State and used for agricultural purposes. It is expected that 12 airfields owned by the Air Ministry and two owned by the Admiralty will be transferred in this way.<sup>1</sup> Pending completion of these transactions the Department have accepted responsibility for all liabilities, etc., attaching to the ownership of seven of these airfields, and for the agricultural use of two more.

Generally, where the Service Departments retain ownership of airfields for immediate flying use or other purposes they also retain responsibility for seeing that the land is used for food production as far as possible. The Department collaborate with the Air Ministry and the Admiralty for this purpose, and have in this way helped to get agricultural use made of 3,742 acres on 16 Admiralty airfields, and 4,394 acres on 27 Air Ministry airfields. In addition various areas of other land outside airfields, totalling some 2,800 acres, have been made available by these Departments for food production.

Much is being done to restore to farming use areas of land requisitioned during the war for the purpose of erecting defence works (including road blocks), gunsites, barrack huts, wireless stations, airfields, etc. The Department are represented on the Committee which adjudicates on the need to remove such works from privately owned land in Scotland. Where removal is thought to be necessary in the public interest the work is generally undertaken at Government expense, but in certain circumstances financial assistance can be given to owners to help them to carry out the necessary work. During 1949, 94 cases of this kind were referred to the Department, and in 67 cases removal of the defence works was recommended either in whole or in part.

*Opencast coal mining.*—The working of coal by opencast methods, adopted as a war-time expedient, is still carried on because of the urgent need for maximum coal production. Before land is requisitioned for this purpose the Department are consulted about the agricultural considerations involved. Where work proceeds the Department make recommendations about the removal and storage of soil, and, subsequently, they carry out the agricultural operations necessary to bring the land back into effective food production after coal production has ceased.

In 1949 agreement was given to six requisitions, involving 352 acres of which 150 acres were hill grazing, and the remainder arable land. Three areas, where coal production had ceased and totalling 200 acres, were reseeded, but were not regarded as ready for derequisition. One site, which was reseeded before 1949, was derequisitioned. Table 13 gives a summary of the position in Scotland at the end of 1949.

TABLE 13.—LAND REQUISITIONED FOR OPEN-CAST COAL MINING

	Acres
Total requisitioned since 1943 .. .. .	3,866
Under requisition at 31st December, 1949 :	
Total .. .. .	3,387
Re-seeded and in agricultural use .. .. .	446
Coal production finished .. .. .	846
" in progress .. .. .	1,446
" not yet begun .. .. .	649
Derequisitioned .. .. .	479

<sup>1</sup> The Agriculture (Scotland) Act, 1948—Section 59.

*Afforestation.*—During the year the Department examined 70 properties which the Forestry Commission proposed to acquire for forestry purposes. In 66 cases they were able to agree to the proposals subject, in certain cases, to reservations or adjustments affecting the areas to be planted. These properties included either wholly or in part 21 hill sheep farms comprising some 48,000 acres and some 18,000 acres of existing or felled woodland. Purchase was not effected in all cases.

During 1949 the total area actually acquired for afforestation was 35,637 acres. Of this area the Secretary of State directed that 14,728 acres should be placed at the disposal of the Forestry Commission. Management of the remaining 20,909 acres was undertaken by the Department. In addition, some 5,226 acres of land on forestry estates acquired prior to 1949, and so far managed by the Department, were also placed at the disposal of the Commission during the year.

The Department were consulted about ten proposals which involved the inclusion of agricultural land in the Forestry Commission's scheme for dedication and planting of private woodlands, and in eight of these cases agreed that the areas offered should be planted. In the remaining cases the proposals were accepted subject to certain modifications.

### **Restoration of Ploughed-up Grassland**

In 1947 the Department announced that, with a view to settlement by agreement, they would be prepared to entertain claims covering the restoration of golf courses, public parks, playing fields and recreation grounds which had been ploughed up under formal direction or at the request of Agricultural Executive Committees during the war. For the purpose of examining each case on its merits, a small Departmental Committee was set up in January, 1948. Claims in respect of 24 golf courses and one playing field were received during 1949, making, together with previous claims, a total of 70 (58 golf courses and 12 playing fields) up to the end of the year. Settlement was adjusted with the claimants in 32 cases, the awards amounting to some £8,770 as against £34,600 claimed. Up to the end of the year, payment of £15,700 had been made for a total of 56 claims amounting to £49,400. Nine cases were still under negotiation at the end of the year and investigations were in hand in the case of the remaining five claims received.

It was decided in April, 1948, to entertain claims for compensation for permanent pasture, such as policy parks, which had been ploughed up under direction, but, in the interests of good husbandry had been, or were about to be, reseeded to permanent pasture. Five of the 12 claims first submitted were under consideration at the beginning of 1949, and in two of these cases the claimants have failed so far to support their applications or to renew their claims. Two more claims were lodged during 1949 and one of these was subsequently withdrawn. Thus, four claims were considered during the year in all of which cases it was decided that no allowance was payable. The two unsupported claims remained in abeyance.

### **Allotments**

As in previous years the Department collected returns showing the number of allotments under cultivation at 30th April, 1949. The results compared with those for 1948, are summarised in Table 14.

TABLE 14.—ALLOTMENTS UNDER CULTIVATION

At 30th April

Number

	1949	1948
Total .. .. .	44,349	46,591
Provided by :		
Local Authorities .. .. .	19,632	20,834
Private arrangement .. .. .	13,283	13,259
Education Authorities .. .. .	3,549	3,014
Navy .. .. .	1,429	2,751
Army .. .. .	1,200	1,850
Air Force .. .. .	1,520	1,080
Railway Executive .. .. .	3,736	3,803

The decrease of 2,242 in the number of allotments under cultivation is mainly due to (a) land previously used for allotments having been taken over for housing purposes, and (b) the reduction in the number of men and women in the Services.

A grant of £600 was made to the Scottish Allotments and Gardens Society for administrative purposes with an additional grant of £250 to assist the Society in their winter campaign of lectures and film shows.

## CHAPTER VII—LAND TENURE AND LAND IMPROVEMENT

### LAND TENURE

The Agricultural Holdings (Scotland) Act, 1949, came into operation on 24th November, 1949. This was a consolidating measure, reproducing in a clear and logical manner in one statute the existing law dealing with the relationship of landlords and tenants of agricultural holdings in Scotland as contained in the Agricultural Holdings (Scotland) Act, 1923, Part II of the Small Landholders and Agricultural Holdings (Scotland) Act, 1931, Part I of the Agriculture (Scotland) Act, 1948, and certain other enactments. The inclusion of Part I of the 1948 Act does not affect the exercise by Agricultural Executive Committees of functions of the Secretary of State under Part I which had been previously delegated to them.

Most of the functions of the Secretary of State under Parts I<sup>1</sup> and II of the Agriculture (Scotland) Act, 1948 (dealing respectively with the amendment of the code governing the relationship between landlords and tenants of agricultural holdings and with the promotion of efficiency in estate management and husbandry) have been delegated to the Agricultural Executive Committees. The Committees' operations under that Act during 1949 are described in Chapter II of this report. The Department's main duty has been to advise the Committees how to carry out their administrative responsibilities in the light of problems and difficulties which have arisen in particular cases. There are some functions, of course, which remain the direct responsibility of the Secretary of State.

*Notices to quit.*—The function of giving or withholding consent to notices to quit in cases where land is required for agricultural research, education,

<sup>1</sup> Now included in the Agricultural Holdings (Scotland) Act, 1949.

experiment or demonstration has not been delegated to the Agricultural Executive Committees.<sup>1</sup> During the year three applications were received. Consent was given in one case and withheld in another and the remaining application was under consideration at the end of the year.

Defence Regulation 62 (4A) (which required that the consent of the Secretary of State should be obtained to the operation of notices to quit agricultural holdings in cases where the land had been sold subsequent to 3rd September, 1939) was revoked from 1st November, 1948, except for notices given prior to that date. During the year, 18 applications were considered, bringing the total number received during the period the Regulation was effective to 325. Consent was given in 131 of these cases and refused in 151. The remaining 43 applications were withdrawn.

*Short term tenancies.*—The Secretary of State has also remained responsible for applications by Service and other Government Departments for approval to the letting of agricultural land for less than one year.<sup>2</sup> Sixty-six applications involving land at airfields and land required for trunk road improvements, etc., were received during 1949. Approval was given in 55 cases and withheld in six. At the end of the year five applications were outstanding.

*Arbitrations.*—The panel of arbiters, after revision in October, 1948,<sup>3</sup> contained 175 members. Of these, one has since died and one has been appointed to the Scottish Land Court, leaving 173 effective members.

During 1949, arbiters were appointed by the Secretary of State in 36 cases. Revision of rent was in question in 13 of these arbitrations, 22 were concerned with claims and other matters arising out of the tenancy or in connection with the holding, and one was in connection with securing a written lease. The Department issued 13 orders to arbiters extending the time for the issue of their awards. The appointment of the arbiter in one case was revoked, at the arbiter's own request, by both parties and by the Secretary of State.

*Records of holdings.*—The form in which records must be made is specified in new regulations which came into operation on 5th January, 1949.<sup>4</sup> Recorders were nominated by the Secretary of State in 214 cases. The nomination of the recorder was recalled in five cases, three at the recorder's own request and the other two at the request of the parties.

*Residual values of fertilisers and feeding-stuffs.*—During the year a specialist committee was appointed by the Secretary of State to report on methods of calculating the residual values of fertilisers and feeding-stuffs and to fix tables of such values annually. The first report of the committee and tables of values for the current year were published in October, 1949.<sup>5</sup>

## LAND IMPROVEMENT

### Land drainage

Abnormal rainfall in August, 1948, led to extensive flooding in South-east Scotland over an area of some 1,750 square miles, and, although there was no loss of life, widespread damage was done to agricultural property. The flood damage repair work, the cost of which is being met from public funds, imposed a heavy strain upon the Department's engineering and administrative staff. The work was carried out under the direct supervision of the Department's engineers. Over 100 machines belonging to private contractors were employed, in addition to machinery owned by the Department. Some work was also done

<sup>1</sup> Section 7 (3) (b) of the Agriculture (Scotland) Act, 1948, now Section 26 (1) (b) of the Agricultural Holdings (Scotland) Act, 1949.

<sup>2</sup> Section 17 of the Agriculture (Scotland) Act, 1948, now Section 2 of the Agricultural Holdings (Scotland) Act, 1949.

<sup>3</sup> Section 23 of the Agriculture (Scotland) Act, 1948, now Section 76 of the Agricultural Holdings (Scotland) Act, 1949.

<sup>4</sup> The Agricultural Records (Scotland) Regulations, 1948.

<sup>5</sup> Leaflet No. 11 (New Series).

by proprietors with the aid of 100 per cent. grants. Altogether remedial works were carried out on about 170 miles of the rivers Tweed, Whiteadder, Blackadder, Leader, Gala, Eddleston, Ale (Roxburgh), Eye, Ale (Berwickshire), Tyne and Biel, and of tributaries of these rivers. Expenditure up to 31st December, 1949, amounted to £469,476 of which £28,243 went to meet claims for work executed privately by land-owners. The work was nearing completion at the end of the year.<sup>1</sup>

*Land drainage schemes.*—In addition to this flood damage restoration work, drainage work under various statutory provisions was carried out during the year. In some cases the work was done by the Department; in others, land-owners carried it out with the aid of grants from the Department. Such grants were at the rate of 50 per cent. of the approved cost.

Grants amounting to £428,220 were approved for 6,386 cases of field, hill and arterial drainage work.<sup>2</sup> In all, 6,489 applications for assistance were received. Grants paid numbered 4,042 and amounted to £255,732 and the area improved by this work was 55,613 acres of arable land and 200,304 acres of hill land. Included in the applications were 339 relating to work on water courses. Of these, 226, estimated to cost £70,261 and to improve 13,942 acres, were approved for grant. Details of grants paid and acreages improved are given by counties in Appendix 4, Table 1.

Work was completed during the year on the River Kelvin drainage scheme at a cost of £45,000. Maintenance work costing £458 was also carried out on the Annan, Clyde and Kelvin schemes.<sup>3</sup>

Maintenance work costing £1,864 was carried out on nine other schemes previously completed.<sup>4</sup> The River Annan (No. 2) scheme, which is nearing completion, is the last of the ten undertaken under this statutory authority.

On the basis of voluntary co-operation with owners or occupiers, the Department undertook 42 drainage schemes in 1949 benefiting 2,696 acres at a cost of £13,923.<sup>5</sup> Two schemes were also completed by the Department after directions had been served on the proprietors by the Agricultural Executive Committees concerned.<sup>6</sup> These schemes improved 695 acres and cost £5,071. Grants of 50 per cent. of approved cost were paid towards the expenditure on all these schemes.

*Land Drainage (Scotland) Committee.*—This committee was appointed by the Secretary of State in July, 1947, under the chairmanship of Dr. Joseph Duncan, to consider the necessity and desirability of further large-scale drainage in Scotland and to make recommendations for new legislation. During the year the committee received evidence from a number of organisations and private persons and made two extensive tours of areas where difficult drainage conditions exist. The committee were expected to report early in 1950.

*Inland water survey.*—The Department have a number of hydrological gauging stations on various rivers. These were maintained throughout the year and continuity of records preserved. The information obtained is made available as required to the Scottish Water Advisory Committee, to other Government Departments and to industrial undertakings. The cost of maintaining this service in 1949 amounted to £237.

### Hill farming improvement schemes

Owners and occupiers of hill sheep farms are offered financial assistance amounting to one half of the approved cost of carrying out comprehensive schemes of improvement for the benefit of their farms.<sup>7</sup> Schemes may cover a

<sup>1</sup> A fuller description of what was involved in this flood restoration work was published in *Scottish Agriculture*, Vol. XXIX, No. 3, January, 1950.

<sup>2</sup> Section 16 of the Agriculture Act, 1937.

<sup>3</sup> The Land Drainage (Scotland) Acts, 1930 and 1935.

<sup>4</sup> The Land Drainage (Scotland) Act, 1941.

<sup>5</sup> The Agriculture (Scotland) Act, 1948—Section 76.

<sup>6</sup> Defence Regulation 62.

<sup>7</sup> The Hill Farming Act, 1946.

wide range of improvements, such as the erection and modernisation of farm houses, cottages and buildings, the construction and improvement of roads and bridges, the provision of water and electricity supplies, the improvement of grazings, drainage and fencing and the planting of shelter belts.<sup>1</sup> Schemes may be submitted at any time until November, 1951 (*i.e.* within five years from the passing of the Act) but there is no time limit set for the carrying out of the works.

By the end of 1949 the total number of hill farming rehabilitation schemes submitted in Scotland was 914. Of these 183 had been rejected, mainly because they did not relate to hill farming land. The remaining 731 schemes related to 1,073 farms covering an area of some 2,500,000 acres and involved works estimated to cost about £2,750,000. At the end of the year, 153 schemes estimated to cost £804,571 had been formally approved, 262 schemes had been approved in principle and were awaiting completion of documents by the applicants, and 316 schemes had still to be examined. Provisional authority had been given to 228 applicants whose schemes had not reached the stage of final approval to enable them to proceed with urgent works estimated to cost £255,104. An analysis of proposed schemes by counties and by the nature of the work is given in Appendix 4, Tables 2 and 3.

During the year two Orders were made extending the list of items of improvement eligible for inclusion in hill farming land improvement schemes. The first Order<sup>2</sup> added to the list the erection of new farmhouses. Previously only alteration, enlargement or reconditioning of existing farmhouses was eligible. The second Order<sup>3</sup> extended the list to cover the making or improvement of piers, jetties and slips.

### **Muirburn**

The Hill Farming Act, 1946, amended the law relating to muirburn mainly by way of giving tenants the right to make muirburn notwithstanding any prohibitions or restrictions in their leases. A landlord who is dissatisfied with his tenant's proposals to make muirburn may refer the matter to the Secretary of State who, after making enquiries and considering representations by the parties interested, will give his decision in a formal direction.<sup>4</sup> Only one such case was referred to the Secretary of State during 1949.

### **Bracken eradication**

The control of bracken has been assisted by grant since 1936. In 1949, assistance was principally given under scheme "B," whereby a proportion not greater than half the cost of cutting bracken by any approved means is refunded to applicants. The original scheme "A," under which half the cost of privately purchased bracken-cutting machines is refunded, is now being wound up although some assistance of this sort has been given during the year. Particulars by counties of acreage cut and grants paid are given in Appendix 4, Table 4.

### **Improvement of Land Acts, 1864 and 1899**

During the year the Department issued seven orders under these Acts provisionally sanctioning an aggregate expenditure of £8,208 on works of improvement. On completion of improvements provisionally approved, absolute orders were issued creating rent charges against the estates concerned for a total expenditure of £18,286. Orders were issued in seven cases releasing from the charges under the absolute orders certain lands which the landowners had sold.

### **Fertilisers**

The use of fertilisers during 1949 again showed an increase compared with the previous year. The increase is marked in the case of potash and phosphates.

<sup>1</sup> A full list of the 23 separate items of improvement is given in the First Schedule to the Act.

<sup>2</sup> The Hill Farming Improvements Order, 1949.

<sup>3</sup> The Hill Farming Improvements (Piers, etc.) Order, 1949.

<sup>4</sup> Section 24 of the Act.

There was, however, a very slight drop in the use of nitrogenous fertilisers.

Table 15 gives details of fertilisers used during 1948/49 in comparison with the previous year.

TABLE 15.—CONSUMPTION OF FERTILISERS  
Year ended 30th June

	1948/49	1947/48
Total .. .. .	916,123	815,921
Compounds .. .. .	437,512	406,257
Superphosphates .. .. .	313,985	274,417
Nitrogen (tons N) .. .. .	28,769	29,153
Potash (tons K <sub>2</sub> O) .. .. .	42,357	32,517
Basic Slags .. .. .	93,500	73,577 <sup>1</sup>

### Lime

Subsidies are available for the delivery and spreading of lime on agricultural land, and a delivery and spreading service operated by many contractors continued to find favour with Scottish farmers. This service, allied to the grants for the application of lime available under the Marginal Agricultural Production Scheme and accompanied by propaganda designed to make farmers lime conscious, has resulted in a remarkable increase in the use of lime. Consumption has increased steadily during the last ten years, and at 732,100 tons during the year ended 31st May, 1949, was about 100,000 tons more than in the previous year and over three times more than pre-war. Production of lime in Scotland has also increased, and, at 436,800 tons during 1948/49 was about four times as great as in pre-war days.

### Grassland development

In the endeavour to secure increased output of livestock and livestock products, and particularly to increase supplies of winter keep and of home-grown protein, much more attention is now being paid to the management and improvement of grass land. The process of reseedling old and inferior grazings has continued, but as a result of experience greater emphasis is being placed on the application of adequate dressings of lime and artificial fertilisers, and on the more efficient use of the increased production which follows such treatment. This includes better grazing control, permitting more stock to be carried and waste to be avoided, and better conservation of surplus summer grass for winter use. Farmers are becoming increasingly grass conscious and more disposed to respect grass as they would an arable crop. This involves more frequent application of fertilisers and increased labour costs, but the greater stock carrying capacity that results is enough to justify these outlays.

During 1949 about twice the amount of grass silage was made as in the previous year. Previously grass silage was most popular on larger dairy farms, but a better realisation of its value, and increased mechanical equipment for collecting the cut grass, has made it more popular on smaller dairy farms. Farmers who breed and rear and also feed beef cattle are also giving it a trial, some going in for it on a substantial scale. Experience indicates that it is excellent for breeding cows and store cattle. On fattening farms it is also a useful feed but it has yet to be proved that it is as effective as the traditional oat straw and roots, although it may well replace part at least of these with financial advantage.

As an alternative method of conservation, grass drying made considerable advances in 1949, although the dry summer weather restricted the quantity of

<sup>1</sup> Revised figure.



dried grass that could be produced during July and August. Some driers had to be closed down during that period. Several new driers were installed and three co-operative grass drying plants were in operation.

Financial assistance towards the cost of setting up grass-drying plants is available under two schemes introduced during the year. Under the first of these,<sup>1</sup> grants or loans may be made to assist in the establishment of collective projects for the artificial drying of grass or forage crops as a service to farmers. To qualify for assistance, projects must come into operation before 1st June, 1951. Three applications for grants and loans have been approved under the scheme. The second scheme<sup>2</sup> makes loans available to any person towards the capital expenses of grass or forage crop drying projects established before 1st June, 1951. Three applications under this latter scheme were under consideration at the end of the year.

## CHAPTER VIII—CROP IMPROVEMENT

The year 1949 has been marked by several developments designed to raise still further the quality of Scottish crops. The standards for seed potato certificates have been tightened up, and a new scheme for virus-tested stocks will be introduced in 1950. New special stock classes have been introduced for strawberry runners and raspberry canes and a certification scheme for oats will be introduced next year. Details of these changes, and of schemes and duties which have continued largely unaltered, are given in the following paragraphs.

### Seed Testing

An important part of crop improvement work is the testing of seeds. Statutory requirements for seeds are laid down in Regulations made under the Seeds Act of 1920, and it is a responsibility of the Secretary of State to see that seeds offered for sale fulfil these requirements.

During the year ended 31st July, 1949, and in course of inspections, 124 samples of clover, grass, root, vegetable and cereal seeds were taken from stocks in 72 retail premises and tested at the Seed Testing Station. Two samples were found to be outside the statutory limits of latitude so far as germination was concerned and one on the grounds of purity. The sellers of these seeds were warned. Five licensed seed testing stations were inspected and 78 samples taken for official test. Two of these samples were found to fail in the germination test and the firms concerned were asked to retest. Two alleged contraventions of the Act concerning seed potatoes were being investigated at the end of the year.

Other sampling work done by the Seed Testing Station included testing seeds for sowing on lands in the ownership or occupation of the Secretary of State, and the testing of rye-grass and timothy seed for the purposes of price determination.<sup>3</sup>

In all, during the year under review, nearly 19,000 samples were submitted for test. This number included 6,867 samples of cereal seed, 518 of forage seed, 3,333 of root and vegetable seed, 2,752 of clover seed, 5,186 of grass seed, 24 of linseed and 183 of tree seeds.

### Plant registration

Another important duty in the realm of crop improvement is the making of field trials to establish the merits of new or existing varieties or strains of plants.

<sup>1</sup> The Grass and Forage Crop Co-operative Drying (Financial Assistance) (Scotland) Scheme, 1949, and the Grass and Forage Crop Co-operative Drying (Financial Assistance) (Scotland) (No. 2) Scheme, 1949.

<sup>2</sup> The Grass and Forage Crop Drying (Loans) (Scotland) Scheme, 1949.

<sup>3</sup> The Grass Seed (Growers' Fixed Prices) (Scotland) Order, 1949.

Work done at the Plant Registration Station at East Craigs during 1949 was principally concerned with potatoes, oats and grasses.

*Potatoes.*—Table 16 shows the results of potato registration trials conducted during 1949.

TABLE 16.—RESULT OF POTATO REGISTRATION TRIALS

	<i>Number of varieties</i>		
	Under test	Recommended for further trial	Not recommended for further trial
Preliminary registration (first year) trials .. .. .	22	13	9
Maturity and yield (second year) trials .. .. .	6	2	4
Extended maturity and yield (third year) trials .. .. .	1	1	—
Extended maturity and yield (fourth year) trials .. .. .	1	—	1

After careful consideration of all the reports on the two varieties in the extended maturity and yield trials in 1949 the Potato Registration Committee decided that neither could be recommended for registration. One of the seedlings (1092a (4)) was thought to be worth a further (fourth year) trial in 1950, but the other (834c (29)) was not sufficiently outstanding to deserve further consideration.

With the agreement of the Ministry of Agriculture and Fisheries, seedlings from English breeders will be accepted in future for entry in the full Scottish trials. The English official wart disease immunity trials will be discontinued.

As in previous years, facilities were provided for testing samples of new seedling potatoes in the first or second year of their existence so as to be able to eliminate at an early stage varieties found to be susceptible to wart disease. Eight breeders took advantage of this service. Of the 260 samples they submitted, 26 were found to be susceptible to wart disease. Blight testing facilities were also continued, and one breeder submitted eight samples for test. All of these were found on test to be resistant in the foliage to the common strain of blight, and, in addition, one was also resistant in the tuber. Reports on the results of all these tests were issued to the breeders.

*Oats.*—A trial oat inspection scheme was carried out in 1948, and more extensive trials were conducted in 1949, to obtain further data on suitable field and other standards for a proposed official scheme for the inspection of élite crops of oats of selected varieties.

After considering the results of these trials it was decided to introduce such a scheme in 1950. The scheme will be confined to selected varieties of oats, and certificates will be issued concerning their purity, trueness to variety, germination and health.

The terms of the scheme have been drawn up in consultation with the Oats Sub-Committee of the Plant Registration Committee and with representatives of the growers' and trade organisations.

*Grasses.*—The Turnips and Grasses Sub-Committee of the Plant Registration Committee propose to prepare, for the guidance of growers, a classified list and description of varieties of grasses at present in commercial use in Scotland. With this in view seeds of various strains of cocksfoot, timothy, and ryegrass have been sown at East Craigs during the past three seasons, and the plots are

being kept under observation for purposes of comparison and classification. In other plots, random samples (16 plants of each strain, grown from the same seed as that used for the former plots) were planted out singly so that the type and habit within each strain could be better assessed.

To assist the Sub-Committee in their work, the three agricultural colleges in Scotland have undertaken to carry out co-ordinated yield trials of certain strains of grasses in their respective areas, under as many different soil and climatic conditions as possible.

### Certification schemes

Perhaps the best known of the Department's crop improvement duties are those connected with the inspection and certification of growing crops. Certified Scottish seed potatoes in various grades have been available to commercial growers, gardeners and allotment holders for many years, and more recently growers have been able to obtain certified stocks of soft fruit and shallots. During the past year it has been possible to improve further the standards applying to all these stocks.

*Potatoes.*—For 1949, only crops grown from certified stock seed, or from approved foundation stocks, were accepted for stock seed inspection. The necessary conditions for "A" grade certification were tightened up by the introduction of a separate tolerance of 2 per cent. for mild mosaic, and by the restriction of roguing to a limit of 5 per cent. The inspection fees for both stock seed and ordinary inspection were increased to cover rising costs.

The number of applications for inspection received was 9,584. These covered 106,763 acres of potatoes, of which 86,013 acres were of varieties immune to wart disease. To assist in the inspection of the crops, 192 temporary inspectors were trained and employed. The usual register of crops inspected and certified was issued in October, 1949.

Table 17 summarises the results of the 1949 inspections. Further details by varieties, and particulars of the conditions for each grade, are given in Appendix 5, Table 1.

TABLE 17.—SEED POTATO INSPECTION, 1949

	Area inspected	Certificate granted			Grade B report	No grade
		Stock Seed ("S.S.")	"A"	"H"		
Total .. ..	106,763	11,720	71,681	16,551	721	6,090
Immune varieties ..	86,013	7,620	57,062	15,606	605	5,120
Non-immune varieties	20,750	4,100	14,619	945	116	970

To complement the excellent work being done by private breeders, measures have been taken by the Department since 1947 to produce virus-tested stocks of potatoes. The Department's main nursery centre is in Lanarkshire, and in 1949 ten acres were rented at farms in Angus, Lanark and Peebles. The conditions and standards which it is proposed to apply in operating a scheme for the inspection, certification and distribution of virus-tested stocks of seed potatoes in 1950 have been drawn up after consultation with all the interested parties. This scheme will further enhance the reputation of Scottish seed potatoes by making available to growers of the most popular commercial varieties—especially of those varieties susceptible to mild mosaic—new stocks which have been tested throughout and found to be free from virus infection.

The voluntary sealing service at the disposal of the seed potato growers' associations was also continued. The object of the service is to show that consignments of seed potatoes have been officially examined, certified and sealed before dispatch. The conditions of the scheme for the 1948/49 season were substantially the same as those which applied in the previous year. The inspection and sealing fee was kept at 1s. 6d. per ton for both stock seed and grade A seed.

The Ross-shire, Moray and Nairn, and Strathallan (Perthshire) associations participated in the scheme. Between January and April, 1949, 349 consignments representing 2,510 tons of seed were found to attain the requisite standards and were certified and sealed. Only 11 consignments involving 132 tons were refused certification.

It was decided to continue the service on similar conditions during 1949/50. In addition to the three associations mentioned above, the Aberdeenshire Seed Potato Growers' Association agreed to participate. The inspection fee for grade A seed remained at 1s. 6d. per ton, but the fee for stock seed was raised to 2s. 6d. per ton. The scheme was put into operation in October and up to the end of the year 220 consignments, representing 1,685 tons of seed, were passed and sealed, while five consignments involving 27 tons were refused certification.

In January, 1949, the service was extended to growers outside the association areas who were sending stock seed consignments to England and Wales. The inspection fee was 1s. 6d. per ton. Partly because of a glut on the stock seed market as a result of which stock seed was being sold at grade A prices or even lower, and partly for other reasons, little use was made of this extended service. However, the service has been continued for stock seed consignments for sale in Scotland as well as in England for 1949/50 at an increased fee of 2s. 6d. per ton inspected, and up to the end of the year the demand for sealing was greater than in the previous loading season.

*Soft fruits and shallots.*—The schemes for the inspection and certification of strawberry and raspberry plants, blackcurrant bushes and shallots were continued.<sup>1</sup> A special certificate was introduced for strawberry and raspberry stocks which were the progeny of plants found on testing to be free from virus infection.

The number of applications received and the number of certificates issued, are shown in Table 18. The two sets of figures are not strictly related, since an application may cover two or more stocks. Details of the stocks inspected and certified are given in Appendix 5, Table 2.

TABLE 18.—SOFT FRUIT AND SHALLOTS CERTIFICATION SCHEMES

	Applications		Certificates issued	
	1949	1948	1949	1948
Strawberries .. .. .	149	190	144	128
Raspberries .. .. .	49	52	46	40
Blackcurrants .. .. .	64	57	54	48
Shallots .. .. .	26	15	22	12

### Commercial control.

Apart from duties under the Orders restricting the import of certain plants,<sup>2</sup>

<sup>1</sup> The Sale of Strawberry Plants and Blackcurrant Bushes (Scotland) Order, 1947, forbids the sale of uncertified strawberry plants or blackcurrant bushes.

<sup>2</sup> The Importation of Plants (Scotland) Orders, made under the Destructive Insects and Pests Acts, 1877 to 1927.

the Secretary of State is responsible for the examination of Scottish applications for import licences for nursery stock, etc., and for the submission of recommendations to the licensing Department both on individual applications and on the general regulation of this branch of the import trade. He has also to ensure that exporters of plants and seeds comply with the regulations of the importing country and are issued with the necessary certificates.

*Imports.*—The import of nursery stock from Holland, Belgium, France and Denmark by commercial nurserymen was allowed during the year June, 1949, to May, 1950, the permitted value of such imports being determined according to the applicant's 1939 acreage of nursery stock :

<i>1939 Acreage</i>	<i>Value of permitted imports</i>
One acre or less .. ..	£35 (£50 for Belgian Azalea Indica).
One to five acres .. ..	£25 per acre (£30 for Belgian Azalea Indica).
Over five acres .. ..	£20 per acre.

Nurserymen who had started in business since 1939, and Local Authorities and similar bodies who maintained their own nurseries before the war, were also granted facilities to import nursery stock. Between June, 1949 and the end of the year the Department had recommended the issue of import licences for nursery stock in 359 cases, mainly from Holland, valued ex-nursery at approximately £32,500. One application to import orchid plants from Siam was unsuccessful.

The import of nursery stock from the Irish Republic by nurserymen in excess of the nursery acreage allowance was also permitted. Between June and December, 1949, approval of 26 applications valued at approximately £8,000 ex-nursery was recommended.

In order to assist the glasshouse industry to replenish stocks, the arrangements were continued by which glasshouse owners could import glasshouse plants and succulents from Holland in 1949/50. The maximum value of stocks was limited to £150 (ex-nursery) for each applicant. During 1949, recommendations were made for the approval of applications totalling £1,740 from 37 glasshouse owners.

Further arrangements were made for the importation of seed shallots and onion sets from Holland during the 1949/50 season. During 1949 a total of 38 applications to import 60 tons were recommended for approval.

In October, 1949, the condition that licences to import seeds or to buy scheduled seeds from growers in this country would be issued only to seedsmen who could produce evidence of pre-war trade in the seeds in question was withdrawn. Since then, four new licences have been granted.<sup>1</sup>

*Exports.*—A total of 370 phytopathological certificates for the export of plants and nursery stock and 390 certificates for the export of seed potatoes were issued during the year. Appendix 6 gives details of these. Four applications for certificates for plants and nursery stock were refused.

The Ministry of Food agreed that the seed potato export trade would be handled by private traders in 1949/50 subject to safeguards to ensure adequate supplies for home planting.

## CHAPTER IX—IMPROVEMENT OF LIVE STOCK

### Horses

*Licensing.*—On 1st January, 1949, certain changes in the law governing the licensing of stallions came into force, and from that date, with certain

<sup>1</sup> The Agricultural and Vegetable Seeds Order, 1941.

exceptions, all stallions of the prescribed age (two years old and over) must be licensed.<sup>1</sup> The exceptions include Shetland ponies and stallions foaled before 1st January, 1945. Stallions in the excepted classes must be licensed if they are travelled for breeding purposes or if it is intended that they should be used for breeding purposes away from their owner's premises. Unless it is revoked, a licence granted after 1st January, 1949, remains in force for the life of the stallion. The owner of a stallion has the right of appeal against the decision to refuse or to revoke a licence. Arrangements have been made for annual inspections in accordance with the Acts. In exceptional circumstances permits may be granted enabling stallion owners to retain unlicensed stallions entire, normally for purposes other than breeding.

During the 1949 season, 270 applications for licences were received of which 251 were granted, including two on appeal. Ten applications were withdrawn; four were refused because of disease and four because of defective or inferior conformation or physique; while a permit was granted in one case. One application for a permit was refused. The total number of appeals was ten. Particulars by breeds are given in Appendix 7, Table 1.

*Highland Pony Improvement Scheme.*—The demand from the Congested Districts for Highland Pony stallions from the Department's stud again declined in 1949. This reflects the general reduction in the number of agricultural work horses. The service fees were £1 5s. per mare to crofters and small farmers and £3 per mare to other persons.

Six stallions were travelled in Caithness, Ross-shire (Kyle), Orkney, Skye, North and South Uist and Benbecula. These stallions served 101 mares, compared with 240 mares served by 9 stallions in 1948. A further 38 mares were served by six stallions standing at the Department's stud farm at Beechwood, Inverness, compared with 54 mares served by the same number of stallions in 1948. In addition, two stallions were hired to the Highland Pony Society. One of these was travelled by the Society in Wester Ross and Sutherland, and the other in England.

*Shetland Pony Improvement Scheme.*—Five stallions, selected by the Shetland Pony Stud-Book Society and approved by the Department were travelled in Unst, Veensgarth and Walls. Altogether 113 selected mares were served. A grant of £20 was paid by the Department in respect of each stallion. The owners were charged a nominal fee of 10s. per mare and these fees were retained by the grooms as their remuneration. The cost of transport and insurance of the stallions was met by the Society.

*Heavy Horse Breeding Scheme.*—In 1949 grants amounting to approximately £3,425 were offered to help approved heavy horse breeding societies to hire stallions of good quality. Grants fall into three categories: direct grants, payable up to a maximum of £40 per stallion if 40 or more mares are served; premium grants of the same maximum amount per stallion, payable to allow "small farmer" members to have their mares served at reduced cost; and Island grants, to assist societies operating in the Islands to transport stallions from the mainland.

Fifty-five applications for grants were received, of which three were subsequently withdrawn and one was refused.

Late payments made in 1949 brought the total sum paid in grants under the 1948 Scheme to £2,574.

Additional assistance for heavy horse breeding is given by the Racecourse Totalisator Charity Trust. In 1949, 15 heavy horse breeding societies in Scotland benefited in this way, the total amount disbursed being £1,300.

<sup>1</sup> The Horse Breeding Rules, 1948, made under the Horse Breeding Act, 1918, as amended by Part II of the Animals Act, 1948.

## Cattle

*Bull Licensing.*—At present in Scotland there is only one type of bull licence. Under new regulations which it is proposed to bring into operation on 1st June, 1950, there will, in future, be five types of licence—two for beef bulls, two for dairy bulls which will be based on the milk yield and butter-fat records of certain ancestors, and a general licence. The regulations were framed after discussions with the principal Scottish cattle breeding societies and other agricultural interests.<sup>1</sup>

Particulars of the numbers of bulls licensed and rejected in 1949 are given in Appendix 7, Table 2.<sup>2</sup>

During the year 25 owners were convicted of keeping bulls which had attained the prescribed age without having a licence or permit while one owner was convicted for failing to comply with the terms of notice refusing a licence.

A small advisory panel was set up to advise the Secretary of State on applications for permits for experimental breeding purposes.<sup>3</sup>

*Cattle breeding schemes.*—The Department continued their practice of lending bulls to township and similar committees in the Congested Districts. Under this scheme committees are responsible for the care and maintenance of the bulls for two or three years, the period varying according to the breed of the animal. The bulls are delivered free of charge to the nearest or most convenient railway station or steamer port, the only charge falling on committees being for insurance against death by accident and against third party risks for a sum not exceeding £1,000. Particulars of bulls supplied are shown in Appendix 7, Table 3.

As in previous years, grants were made to approved township committees or societies throughout Scotland which provided, either by purchase or other arrangement, bulls approved by the Department for the service of cows belonging to their members. This scheme is commonly known as the Premium Bulls Scheme. The 1949 scheme differed from those in operation in previous years mainly by providing for an increased total grant per bull of £130 (spread over four years) and by advancing the dates of payment of instalments of grant. Particulars of grants paid are given in Appendix 7, Table 4.

## Sheep

*Sheep breeding schemes.*—The object of these schemes is the improvement of sheep in the Highland counties. In 1949, 1,050 Blackface and Cheviot rams (as compared with 1,148 in 1948) were hired to approved committees for the service season. The fee payable was £4 per ram, £1 5s. of which was refunded when the ram was returned to the Department's Stud Farm. The Department also offered grants to committees towards the cost of hiring Blackface, Cheviot and Border Leicester rams from neighbouring farms or clubs. The maximum grant payable in respect of each of these rams was £2 10s., and 457 rams were hired as compared with 436 in 1948. Particulars of the distribution of the rams are given in Appendix 7, Table 5.

In order to assist in the maintenance of the Shetland breed assistance was again offered to small farmers in Zetland to purchase pure-bred Shetland rams, including ram lambs. The rate of grant was one-half of the purchase price, subject to a maximum of £2 per ram. During the year grants amounting to £84 were paid towards the purchase of 49 rams.

The Department also continued the special scheme for the improvement of sheep stock in Lewis and Harris under which a number of good commercial ram lambs were sold to townships at £2 per ram, this charge including cost of delivery. During the year 22 committees in Lewis and nine in Harris bought 42 and 32 ram lambs respectively.

<sup>1</sup> The Agriculture (Miscellaneous Provisions) Act, 1944—Section 6.

<sup>2</sup> Improvement of Live Stock (Licensing of Bulls) Act, 1931.

<sup>3</sup> Improvement of Live Stock (Licensing of Bulls) Act, 1931—Section 4 (4).

## Pigs

*Boar licensing.*—Fresh Regulations, in replacement of those operative since 1946, have been issued concerning the licensing of boars. The new Regulations<sup>1</sup> include revised procedure for the marking of boars for licensing purposes and the licensing of boars brought into Scotland.

Particulars of boars licensed and rejected in 1949 are given in Appendix 7, Table 6. Six owners were convicted during the year of keeping boars which had attained the prescribed age but for which no licence or permit was in force.

*Pig Breeding Scheme.*—As in previous years grants were made to committees or societies throughout Scotland which provided, by purchase or other arrangement, boars approved by the Department for the service of sows belonging to their members. Grants were also made to individual owners of approved boars in districts where it had been found impracticable to form a society.

The 1949 scheme differed from those in operation in previous years in that the first year's grant was payable as soon as a boar was provided and the second year's grant, also paid in advance, was increased from one-fourth to one-third of the price or value of the boar. A total grant of £25 per boar may be earned over two years. Particulars of the grants paid are given in Appendix 7, Table 7.

## Poultry

*Scheme for the Accreditation of Poultry Breeding Stations.*—The object of this scheme is to provide information about reliable breeders from whom poultry (including ducks and turkeys) of good quality may be obtained with a minimum of risk as regards disease. A Register of Accredited Poultry Breeding Stations and Accredited Poultry Hatcheries (see below) is compiled yearly and is widely circulated. The annual period of accreditation runs from 1st December to 30th November. Accredited station holders receive free veterinary services and may qualify for extra rations of feeding-stuffs.

For 1949 the scheme was continued unchanged except that a special "breeders" grade was introduced. During the year, 1,334 applications were received for the General and the Breeders Grade; of these 999 were fully approved (including 52 in the Breeders Grade), 210 were placed on probation and 125 were refused or withdrawn.

*Standard bred poultry (exhibition stock).*—Breeders of exhibition poultry which conformed to standards laid down by the specialist breed clubs and endorsed by the Poultry Club and whose stocks were considered suitable by the Department were also given the benefits available to accredited station holders. In 1949, 13 breeders of exhibition stock were approved.

*Accredited Hatcheries Scheme.*—Under the 1949/50 scheme there were 33 applications from hatcheries for accreditation. Of these 29 were accredited, three were placed on probation and one was refused accreditation.

*Highland Poultry Improvement Scheme.*—This scheme is designed to improve poultry stocks (including ducks and turkeys) in Argyll, Caithness, Inverness, Ross and Cromarty, Sutherland and Zetland. A bonus of 1s. 3d. per dozen for hatching eggs and 2s. 6d. per dozen for day-old chicks was paid in 1949 to approved station-holders for sales at prescribed maximum prices. Bonuses paid amounted to £15 for 103 dozen eggs and 70 dozen day-old chicks. Under the scheme for 1950, 13 applications have been received; six of these have been approved and seven placed on probation.

*Outbreaks of fowl pest.*—An outbreak of fowl pest at Stromness, Orkney, was confirmed on 6th September, 1949, and was followed by a series of outbreaks in the Orkney Islands and in other islands and coastal districts throughout Scotland. In all, about 200 outbreaks were confirmed. The disease is com-

<sup>1</sup> The Improvement of Live Stock (Licensing of Boars) (Scotland) Regulations, 1949



pulsorily notifiable to the police. Measures for dealing with it were taken by the Ministry of Agriculture and Fisheries who are responsible for animal health throughout Great Britain. These measures included the prohibition of the movement of live or dead poultry from Orkney into any other part of Great Britain. The restrictions were finally removed on 22nd December, 1949.

### Goats

*Goat Breeding Scheme.*—The Department offered grants to approved committees or societies and in certain circumstances to individuals, for registered stud goats of approved merit. Maximum grants for 20 services were £6 and £10 according to the quality of the stud goat. Particulars of this scheme are given in Appendix 7, Table 8.

### Miscellaneous

*Stud farms.*—Highland ponies and Highland cattle were bred and bulls and rams accommodated at the farms of Knocknagael, Beechwood, Balrobert and Balvonie, near Inverness. These animals are used in the live stock improvement schemes previously mentioned.

*Assistance to agricultural shows.*—Grants amounting to £828 were paid to smallholders' agricultural shows and shows at which there were classes confined to smallholders, and to agricultural shows in the Congested Districts at which there were classes confined to small farmers' stock. Particulars of the operation of the scheme are given in Appendix 7, Table 9.

*Artificial insemination of live stock.*—Licences<sup>1</sup> were issued for the distribution of semen from bulls kept at the centres at Hoddum Castle (Ecclefechan, Lockerbie, Dumfriesshire), Chapel Croft (Craibstone, near Aberdeen) and Southbar (Inchinnan, Renfrewshire). The first of these centres is operated by the Dumfriesshire Cattle Breeders Association Ltd., the second by the Aberdeen and District Milk Marketing Board and the third by the Scottish Milk Marketing Board. A further seven licences were also issued for the distribution of semen from dairy bulls belonging to private owners. Regulations<sup>2</sup> have been made which govern the payment of grants to meet initial losses incurred in the operation of centres for the artificial insemination of cattle.

*Highlands and Islands Veterinary Services Scheme.*—During the year grants amounting to £8,869 were paid, through the appropriate County Councils, towards the salaries of twenty-three veterinary surgeons who provided professional services at reduced rates to crofters, small-holders and others of like class in the Highlands and Islands. Particulars of the grants paid are shown in Appendix 7, Table 10.

*Export and import of live stock.*—The Minister of Agriculture and Fisheries, and the Secretary of State for Scotland, with the concurrence of other Ministers concerned, set up a Committee under the Chairmanship of Lord Rosebery to enquire into the conditions governing the export of horses for work and slaughter. At the end of the year arrangements were being made to publish the Committee's report.

The general question of importing polled cattle (Ayrshires and Shorthorns) was under consideration by the Department during the year in consultation with the Ministry of Agriculture and Fisheries, the Royal Highland and Agricultural Society, the National Farmers' Union of Scotland and the respective breed societies.

On the Department's recommendation, the Board of Trade granted export and import licences for the numbers of live stock shown in Appendix 8, Table 1.

<sup>1</sup> The Artificial Insemination (Cattle and Horses) (Scotland) Regulations, 1943.

<sup>2</sup> The Agriculture (Artificial Insemination) (Financial Matters) (Scotland) Regulations, 1949.

In addition, ten licences were granted for the import of colonies, skeps, and queen bees to the value of £4,385 from France, Holland, Italy and Eire, and for the import of 680 poultry hatching eggs.

## CHAPTER X—RURAL AND HIGHLAND DEVELOPMENT

### RURAL DEVELOPMENT

#### Housing

Housing is perhaps the greatest problem in rural development to-day, and as part of the Government's general housing programme priority has been given to the housing needs of agriculture.

Under the special programme which includes 5,100 houses to be built by Local Authorities for agricultural workers over the period 1947-51, 3,600 houses have been allocated to Local Authorities throughout the country. Up to 31st December, 1949, 1,040 of these houses had been completed. It is hoped that the allocation of the remaining 1,500 houses will be made in the near future.

These houses have been offered to Local Authorities on condition that they will be built on sites approved by the Department and that, on completion, they will be let to agricultural workers. The selection of tenants is the responsibility of the Local Authority, but in order to ensure the maximum benefit to agriculture, Local Authorities have been asked to consult the Agricultural Executive Committees on the selection of tenants.

The foregoing figures relate to houses erected by Local Authorities. So far as private work is concerned, the Department are responsible for observing on the agricultural merits of applications for licences to build houses. During 1949 they considered 606 applications to build or recondition farm workers' cottages or to replace unfit cottages.<sup>1</sup> These applications referred to 895 cottages. The Department were able to support applications for 708 of the cottages, and approval was subsequently given for the erection of 401 new houses and the reconditioning of 242 others.

In the present housing shortage progress on the Department's own housing programme has been limited to cases of sheer necessity. Approval was obtained during the year to the building of seven houses.

#### Water Supplies and Electricity

A census taken in September, 1948, showed that only about one-half of the farms in Scotland have adequate water supplies, and only about one-fifth have electricity.

Since 1942 there has been an agricultural water supplies scheme for the purpose of providing grants-in-aid of piped water supplies to farm land and buildings. During 1949, 1,176 applications were approved in respect of work estimated to cost £129,760. Grants actually paid during the year amounted to £94,960. Appendix 9 gives details of approvals by counties.

Although the Department have no specific duties in connection with the supply of electricity, an approach was made during the year to the appropriate electricity authority on behalf of a number of farmers whose operations depended upon a supply of electricity. Because of the limitations on capital expenditure and those imposed by material and manpower shortages the Department can only sponsor applications for priority of supply where electricity is essential for agricultural purposes.

<sup>1</sup> The Housing (Agricultural Population) (Scotland) Act, 1938.

## Telephones

The same consideration applies also in the case of another service rendered by the Department, viz. the sponsoring of applications by farmers, or those whose business is connected with farming, for telephone service. The Post Office has, since the beginning of the agricultural expansion programme, given priority to applications from agriculture, but supply difficulties—bearing in mind the remoteness of many Scottish farms—has prevented the provision of telephone service as freely and quickly as could have been desired, and there was at the end of the year an outstanding list of some 2,500 applications.

## Rural Industries

Part of the Government's rural development policy is directed towards integrating suitable local industries with agriculture and forestry. Of considerable importance are the traditional rural crafts and the development of natural sources of raw materials.

The Scottish Country Industries Development Trust, which has for its purpose the promotion of rural crafts and industries, is wholly financed from Government funds, and the Department have obtained approval for a grant not exceeding £17,933 to meet expenditure during the financial year ending 31st March, 1950. The Trust's activities during 1949 covered such matters as instruction in welding, binder work, farriery, wrought iron and wood work, weaving and pottery. They investigated applications by rural craftsmen for assistance from the Rural Industries Loan Fund, Ltd., for building, reconstructing or equipping rural workshops, and they assisted in the administration of the scheme for training apprentice blacksmiths and farriers.

Even more closely linked to agriculture, and important for its effect on rural development, is the work of the Scottish Agricultural Organisation Society. The main function of the Society is the promotion of agricultural co-operation, and details of its activities can be obtained from its annual report. Grants in aid of the Society's work were approved for 1949 up to a maximum of £12,850.

The Scottish coasts, particularly in the crofting counties, provide an abundant harvest of seaweed, and modern scientific methods suggest that it may be possible to capitalise these rich natural resources. To study this question, the Scottish Seaweed Research Association was formed in 1944 and has been financed with the aid of grants from the Development Fund. During 1949 the provisional board of the proposed Scottish Seaweed Co. Ltd. reported on the possibility of establishing a rock-weed harvesting, drying and grinding project at Lochmaddy, in North Uist. The commercial implications of the proposal are being further examined by the Association.

Peat is another raw material available in quantity in Scotland, and its use for industrial purposes is being investigated in conjunction with the Scottish Home Department, the Ministry of Fuel and Power and various other interested Departments. The investigations centre in the use of peat as a primary fuel for electricity generation by gas-turbines, and the Department's responsibility lies in investigating methods of winning, de-watering, transporting and handling the peat. On 26th September, 1949, the Secretary of State appointed the Scottish Peat Committee under the Chairmanship of Sir Edward Appleton to advise him on the survey of Scottish bogs, methods of winning and handling peat, a programme of research for the burning of peat in gas turbines and the commercial exploitation of Scottish peat deposits. A grant has been received from the Development Commissioners to meet the Department's share of the work. In addition to the Departments mentioned above, the Department of Scientific and Industrial Research, the Macaulay Institute for Soil Research, the Royal Technical College, Glasgow, and the Nature Conservancy are collaborating in the investigations.

## **Social Services**

No programme of rural development would be complete which catered for the material needs of the countryside but ignored social, cultural and educational activities.

Approval has been obtained to a grant not exceeding £3,230 from the Development Fund in aid of the work of the Scottish Council of Social Service during the year ending 31st March, 1950. In addition to organising normal rural social services, the Council acts in an advisory capacity on the provision of social amenities (*e.g.* village halls) and has undertaken special duties in Skye, where a Local Council has been established.

Country folk and ex-service men and women will not need to be reminded of the part played in rural social life by the Scottish Women's Rural Institutes. The objects of the movement are the promotion of educational, recreational, and social activities in rural communities, and much useful work has been accomplished. The movement is largely self-supporting by means of annual membership fees, but Government grants are made to assist the organisation and development of institutes in certain Highland and Island areas, and in the work of the Handicrafts and Housewives Guilds.

Last, but by no means least of the organisations with which the Department are concerned, is the Scottish Association of Young Farmers' Clubs. This movement is becoming more and more a part of the life of the rural community and has for its aim the development of educational and cultural activities amongst the younger generation of farmers and farm workers. The headquarters organisation in Edinburgh co-ordinates the various activities of the clubs and provides services of organisers in the areas.

On the financial side the Association is endeavouring to become self-sufficient. This may take some time, however, and the Department and the Scottish Education Department, jointly, have approved assistance not exceeding £3,000 towards any deficiency there may be on the Association's workings in the financial year 1949/50.

## **HIGHLAND DEVELOPMENT**

The Highlands and Islands of Scotland present a special development problem, a problem with which the Department have been intimately concerned since the Board of Agriculture for Scotland (later the Department) took over the duties of the Congested Districts Board in 1912. Since 1945 a sociological and economic survey of conditions in the West Highland area has been carried out under the direction of Dr. F. Darling. The field work of this survey was completed early in 1949 and it is hoped that the report on this work will be available soon.

Land settlement has been dealt with in this and previous reports. The following paragraphs, therefore, give particulars of some of the other duties carried out by the Department during the year.

### **Public Works**

The provision authorised for public works and miscellaneous services in the Congested Districts in 1949/50 was £120,000 as in each of the previous two years. The grants offered during 1949 amounted to £104,022 for works estimated to cost £140,527 while the sum actually paid in grants was £69,008 compared with £47,500 in 1948. Particulars of the grants offered during 1949 are given in Appendix 10.

No special comment is called for in the case of the 38 road schemes concerned. These were a further instalment of the full programmes of County Councils for construction and improvement of township roads. The roads thus assisted will be placed on the list of County highways.

*Gigha Pier, Argyll.*—This pier has been taken over by the County Council and the grant was in respect of urgent works which they carried out in order to keep the pier open pending its complete reconstruction which will soon be necessary.

*Raasay Pier, Inverness.*—The grant and loan in this case are to enable the County Council, who acquired the pier during the war, to carry out a complete reconstruction of the face of the pierhead and other works of restoration and improvement.

*Linkshouse Pier, Mid Yell, Zetland.*—Following the submission of tenders for the construction of the new pier the amount of assistance offered was increased as shown. The County Council are taking steps to obtain the required Provisional Order authorising the execution of the works.

*Lochmaddy Pier, North Uist.*—Inverness County Council have obtained a Provisional Order authorising the reconstruction of this pier and work is expected to commence in 1950.

*North Ford, North Uist, Benbecula.*—The detailed Survey of the works required for a road-link between North Uist and Benbecula, referred to in the Report for the years 1939–48, has been completed. The estimated cost is £160,000.

*Transport Services.*—Grants have been offered to Inverness County Council for the reconstruction of jetties at Lochailort and Glenuig and the Department have also undertaken to pay a subsidy of £2 a week towards the cost of operating the motor boat service between these two points.

The Loch Torridon Goods Transport Service has continued to operate as in former years and subsidies have also been paid towards the cost of the North Ronaldshay Steamer Service and the Skerries steamer service.

### Crofter Housing and Buildings

During the year arrangements were completed for making grants<sup>1</sup> to landholders and cottars in the Highlands and Islands towards the cost of erecting, rebuilding or improving dwelling houses and other farm buildings. Regulations for that purpose<sup>2</sup> were laid before Parliament on 18th May and came into operation on the following day. The amount of grant payable is one half of the cost of the skilled labour and materials, subject to a maximum of £500 for a new house and £250 for new farm buildings or for the improvement of a house or farm buildings. The provision of grants towards the cost of steadings is an innovation, and it is hoped it will encourage a considerable improvement in the standard of these buildings in the Highlands and Islands. Assistance may also be given by way of loan<sup>3</sup> to supplement the amount of an approved grant. Much of this building work is done by the crofters themselves and the extent of the financial help given to them is designed to permit this practice to be continued, particular regard being had to increased costs of materials and skilled labour since the war.

The grants scheme is administered by the Department and up to the end of the year 1,170 applications had been received. A number of applications have already been approved and it is hoped that a considerable amount of work will be in progress by the spring of 1950.

In addition to the assistance referred to above the Department approved eight loans, totalling £3,780, to assist landholders to erect or improve their dwelling houses and steadings.

Particulars of grants and loans approved are given in Appendix 11, Table 1.

<sup>1</sup> The Agriculture (Scotland) Act, 1948—Section 77.

<sup>2</sup> The Landholders and Cottars (Building Grant) (Scotland) Regulations, 1949.

<sup>3</sup> The Small Landholders (Scotland) Act, 1911—Section 9.

The scheme for the supply of building materials to landholders was continued during the year. The total sum received in respect of sales at the stores in the Western Isles, and centrally, was £77,152 as shown in Appendix 11, Table 2.

### Special Live Stock Improvement Schemes

Under the heading "Live Stock Improvement" this report has given details of special schemes applicable to the Highlands and Islands. These are the Highland and Shetland pony improvement schemes, and the Scheme of Island grants for heavy horse breeding; the "supply bulls" scheme; the four sheep improvement schemes; the Highlands and Islands veterinary service; and the Highland poultry improvement scheme.

### Other Development

Previous chapters of this report have referred to the development of natural resources. Seaweed and peat, though occurring throughout the country, are of particular interest in the Highlands and Islands, and the other resources mentioned are located in the Highland areas. There are also functions of the Department (*e.g.* work under the Hill Farming Act) which, although applying generally to the whole of Scotland, are of particular importance to the Highlands.

## CHAPTER XI—RESEARCH, EDUCATION, ADVISORY SERVICES AND PUBLICITY

Research is being carried out continuously and intensively into new and improved methods of husbandry, soil problems, plant and animal genetics and diseases, and many other problems that affect agriculture. Simultaneously, the educational and advisory services of the agricultural colleges are carrying out an intensive campaign to bring into everyday farming practice the latest scientific knowledge and the results of this research.

In this report on the work of the Department it is not possible to discuss the work that is being done on all these problems. The institutes, colleges and other bodies engaged in the work put out their own reports and special reports on various subjects are published from time to time and are available for readers interested. This chapter deals with the organisational side of the work in so far as the Department are concerned with it.

### Research

*Finance.*—The total grant in aid of the maintenance expenses of the five established Scottish agricultural research institutes during the financial year 1949/50 was £232,287, including £53,913 as a contingent provision to be made available as required for additional appointments to staff and new equipment.

Expenditure of £89,730 was also sanctioned towards the cost of building extensions at the Hannah Dairy Research Institute, the Macaulay Institute for Soil Research and the Rowett Research Institute, and for preliminary work in connection with the proposal to provide alternative accommodation for the Scottish Society for Research in Plant Breeding on the Bush and Dryden estates of the Edinburgh Centre of Rural Economy. These building schemes form part of the general ten-year programme referred to in the report for 1939–48 for the development and expansion of agricultural research in Great Britain.

*Hill farming.*—The Hill Farm Research Committee appointed by the

Secretary of State in November 1945 presented its report on completion of its term of office on 31st March, 1949. The report gave a resumé of the committee's work and of the research proceeding or projected over a wide field. It concluded with recommendations for the future organisation of hill farm research. The report will be published early in 1950.

The Secretary of State, after discussion with the Minister of Agriculture and Fisheries and in consultation with the Agricultural Research Council, appointed a new Hill Farm Research Committee for a period of three years from 1st April, 1949. The new committee, which is mainly scientific in character, includes a number of members from south of the Border to provide for closer linkage with hill farm research in England and Wales. Professor T. J. Mackie, C.B.E., Professor of Bacteriology at Edinburgh University, who was Chairman of the previous committee, was appointed Chairman of the new committee.

The North of Scotland College of Agriculture, the West of Scotland Agricultural College, and the Edinburgh and East of Scotland College of Agriculture, respectively undertake the day to day management of the three Scottish hill farm research stations at Glensaugh in Kincardineshire, at Lephimore in Argyllshire and at Sourhope in Roxburghshire. The Hill Farm Research Committee is responsible for the programmes of scientific work carried out at these three stations. The main lines of research carried out at Glensaugh during the year related to the management of rough grazings and the management of sheep and cattle on rough grazings. The work at Lephimore and Sourhope has been confined to carrying out initial scientific surveys of the soil, the vegetation and the health of the stock. Grants totalling £10,650 were made available for the running of these stations.

Experimental work on certain hill farming problems was also carried out on the Secretary of State's estate of Glenetive where, during the year, the Department continued the development policy of building up a stock of hardy breeding sheep and cattle suitable for the conditions of highland deer forests, of breaking in cultivable low ground to provide winter fodder and of improving the condition of hill pastures.

*Marginal land.*—The experiment into the problems of management and husbandry on marginal farms which the Department began on the farms of Clashnoir, Deskie and Thain, Glenlivet, at Martinmas, 1948, was continued during the year. Clashnoir farm, which extends to 158 acres, is the subject of a special economic experiment to ascertain whether the income from the sale of animals or animal products, under conditions where modern methods of management are applied, is adequate for the labour required on a family farm of this type.

*Agricultural engineering.*—On 1st October, 1949, the National Institute of Agricultural Engineering became a grant-aided research institute with an independent governing body. The work and, with certain exceptions, the staff of the main station at Wrest Park, Silsoe, Bedfordshire, and of the Scottish sub-station at Howden, Mid Calder, were transferred from the Ministry of Agriculture and Fisheries and the Department respectively to the new governing body. The institute is financed by grant-aid from the Ministry and the Department and comes under the scientific oversight of the Agricultural Research Council.

The governing body has a Scottish committee, under the Chairmanship of John Mackie, Esq., Bent, Laurencekirk, which is particularly concerned with the station at Howden. The Scottish station was opened to public inspection later in October when an opportunity was given of seeing testing and development work in progress. Illustrations of recent developments in agricultural engineering and machines recently tested, together with the reports on these tests, were also on view.

*Sugar beet.*—A programme of demonstrations and experiments was carried

out during the year. The programme was prepared by the Scottish Sub-Committee of the Sugar Beet Research and Education Committee.

### Education

*Agricultural colleges.*—Net expenditure of £437,905 was approved for the maintenance in the financial year 1949/50 of the various services provided by the three agricultural colleges. The Scottish Education Department, who share to a certain extent the cost of these services, provided £24,742 out of the above sum. Excluding administrative staffs and laboratory technicians, the number of approved posts at the colleges was 391, made up of 185 county agricultural advisers, 124 specialist advisory officers and 82 central class teachers.

For capital expenditure at the colleges grants totalling £167,120 were also approved. It has not unfortunately been possible to proceed with much of this work and expenditure will, therefore, be lower than was expected.

Particulars of the numbers of students taking advantage of the study facilities available at the colleges are given in Appendix 12, Tables 1 and 2. Table 3 of the same appendix gives some measure of the work done in the advisory field.

*Veterinary colleges.*—In accordance with the recommendations made by the Loveday Committee<sup>1</sup> and in terms of the Veterinary Surgeons Act of 1948, Glasgow Veterinary College became part of the University of Glasgow from 1st October, 1949. Negotiations are proceeding between the Royal (Dick) Veterinary College, Edinburgh, and the University of Edinburgh with a view to a similar development.

After the Universities have taken over the responsibility for veterinary education, the necessary funds fall to be provided through the University Grants Committee and no further financial responsibility will rest with the Department. For administrative convenience, however, in the case of the Glasgow Veterinary College, the Department have retained financial responsibility for the period to 31st March, 1950. A grant of £33,069 was advanced for maintenance and capital expenditure of £11,000 was approved. The maintenance and capital expenditure grants provided for the Royal (Dick) Veterinary College were £49,272 and £16,000 respectively.

The Royal (Dick) Veterinary College have taken the first steps in the establishment of a veterinary field station by entering into Easter Bush farm on the Bush and Dryden estates of the Edinburgh Centre of Rural Economy. An additional £7,300 was provided for this development: It had not been possible by the end of the year to start work on the field station planned for the West of Scotland.

As has been the case for a number of years, competition for places at the veterinary colleges has been keen, many students taking advantage of the Further Education and Training Scheme to enter upon training as veterinary surgeons. At the Royal (Dick) Veterinary College 325 students, including 20 women, enrolled for the courses of instruction for the Diploma of M.R.C.V.S. In addition there were 11 post-graduate students, including ten for the course of the Diploma of Veterinary State Medicine, four research students and 95 students attending for instruction in veterinary hygiene and preventive medicine. At the Glasgow Veterinary College (later Glasgow University), 286 students, including 29 women, enrolled for the course of instruction for the Diploma of M.R.C.V.S.

*Agricultural scholarships.*—A limited number of post-graduate scholarships for training for research, advisory and teaching posts in agricultural economics, statistics and agricultural and dairy engineering and for advisory and teaching posts in husbandry are awarded by the Department each year. The scholarships

<sup>1</sup> Report of the Committee on Veterinary Education in Great Britain (Cmd. 6517).



are tenable for not more than three years, part of which may be spent abroad, and the awards cover maintenance, tuition fees and allowances for travelling and books. During 1949 seven new scholarships were awarded as follows :—

*Husbandry* : ... .. A. J. Gill, B.Sc. (Agric.), Aberdeen University.  
R. M. MacIver, B.Sc. (Agric.), Aberdeen University.  
Miss M. J. Ore, B.Sc. (Agric.), Aberdeen University.  
A. R. McGhee, B.Sc. (Agric.), Edinburgh University.  
C. D. Reekie, B.Sc. (Agric.), Reading University.

*Agricultural economics* : K. A. Ingersent, B.Sc. (Agric.), Aberdeen University.

*Statistics* : ... .. J. A. Pope, M.A. (Hons.), Aberdeen University

The scheme for the award of agricultural scholarships to the sons and daughters of agricultural workers and to certain other young persons was terminated in 1948. During 1949 assistance was continued to several beneficiaries to enable them to complete their approved course of study.

*Further Education and Training Scheme.*—The Department continued to administer awards to Scottish applicants under this scheme for training in agricultural subjects and in veterinary science. At 31st December, 1949, 1,122 applications had been received and 893 awards had been made. Awards had also been promised, subject to acceptance for the proposed classes of study, in an additional 47 cases.

*Vocational training.*—Training in agriculture and horticulture for men and women released from war service and for disabled persons continued to be provided throughout 1949 on the same lines as in previous years. The number of applications received from non-disabled persons, which had begun to diminish in 1948, showed a progressive decline throughout the year. The total for 1949 was 111 as compared with 253 for 1948. Applications from disabled persons remained fairly constant at about 60. During the year 107 applicants started training either on farms or market gardens or in short courses at agricultural colleges. Of these 36 withdrew from the scheme before completing their course.

The scope of vocational training was widened by a new scheme introduced during the year.<sup>1</sup> Under this scheme, a year's practical training in farming or horticulture may be given to persons over school leaving age. The scheme does not include training at agricultural colleges. At the end of the year seven applications had been received and four applicants had started training.

During the year 98 trainees, including 20 disabled persons, completed their training. Of these, 64 had obtained employment in agriculture or horticulture at the end of the year, including six who were working on their own account. Further studies were being undertaken by 23, other employment had attracted two, and nine were unplaced. Of the 20 disabled trainees included above, 15 were employed (including two self-employed), and two were engaged on further studies. The remaining three were unplaced.

### Advisory services

The advisory work done by the agricultural colleges is well known to farmers and agriculturists throughout Scotland and, indeed, beyond her borders. It has an important and direct bearing upon the technical efficiency of Scottish agriculture.

The proposed establishment by the Secretary of State of Agricultural

<sup>1</sup> The Agriculture (Miscellaneous Provisions) Act, 1949—Section 8.

Advisory Committees<sup>1</sup> marks a new and important development in the field of advisory work and education. The committees will advise the Secretary of State or any agricultural college or other body concerned with agricultural education or agricultural advisory services in Scotland on matters relating to (a) technical education and development in agriculture, (b) the improvement of farming practice or estate management in general or in relation to any particular land, and (c) agricultural development and improvement schemes administered by the Secretary of State.

The committees, 35 in number and each consisting of 14 members, will be appointed early in 1950 from nominations submitted by the agricultural colleges, by organisations representing farmers, landowners, farm workers, Young Farmers' Associations and Scottish Women's Rural Institutes and by the respective County Councils. In addition to these nominations, the Secretary of State will make two direct appointments to each committee. He also has power to fill vacancies left by the nominating bodies.

The committees will function in the districts which correspond generally with those served by the county agricultural advisers of the three agricultural colleges and will be served by regional directors and county agricultural advisers of the colleges, who will act as joint technical secretaries. The Director of Education and the Medical Officer of Health of the county in which the committee district is situated are entitled to attend meetings of the committees in the capacity of assessors.

### Publicity

It is essential that the latest discoveries in the many fields of research should be passed on to the agricultural community as soon as possible, and to this end the media of wireless, films and publications are important. The value in this respect of the weekly "Farm Forum" programme and the "News for Farmers" on the Scottish Home Service of the British Broadcasting Corporation is apparent. The Department are represented on the British Broadcasting Corporation's Scottish Agricultural Advisory Committee which considers suitable programmes for broadcasting.

Films also have their place in educational development, in rural areas in particular, and by arrangement the mobile units of the Scottish Information Office exhibit suitable films to farming audiences. The agricultural colleges are also preparing film strips of an instructional nature for advisory and other purposes.

The agricultural colleges and research institutes issue reports, bulletins and leaflets on various aspects of their work. The Department also issue special bulletins and leaflets and early in 1949 they began the publication of a new series of advisory leaflets. At the close of the year leaflets had been published on Oat Varieties; New Varieties of the Potato; Fertiliser Placement for Arable Crops; Improving Marginal Land; Shelter Woods or Belts; Pit Silage; Raspberry Diseases in Scotland; Strawberry Cultivation; Strawberry Diseases; Tree Fruits—Varieties of Apples, Pears and Plums suitable for Growing in Scotland; Residual Values of Fertilisers and Feeding-stuffs; Blackcurrants and Redcurrants; and Gooseberries.

The fortnightly publication *Notes for Farmers* continues to be widely read and its circulation now stands at about 10,000 copies per issue. The Department's quarterly journal, *Scottish Agriculture*, is increasing in popularity and, by the end of 1949, its circulation had increased to some 3,500 copies per issue. Two further editions of *Farm Economics* were issued in collaboration with the agricultural economists at the colleges.

A pamphlet giving the names and addresses of the advisory officers in each college area was issued in March, and was followed by a pamphlet entitled

<sup>1</sup> The Agriculture (Scotland) Act, 1948—Section 73

*Farmers' Guide to Supplies, Subsidies, Services, etc.*, which set out to answer farmers' questions on the various subsidies and services administered either by the Department or by Agricultural Executive Committees. A revised edition of the pamphlet *Scottish Farmers' Guide to the Sale of Corn* was also published.

The Royal Highland and Agricultural Society's annual Highland Show held at Dundee was one of the outstanding events of the year. The Department's pavilion had sections dealing with seed testing, the potato schemes and drainage work (with special reference to the rehabilitation work carried out in Berwickshire after the disastrous floods in that area). There were facilities, too, for the sale and distribution of leaflets and publications on the Department's work and other matters of agricultural interest.

An educational and research exhibit was staged by the Edinburgh and East of Scotland College of Agriculture on behalf of the colleges and research institutes and attracted wide interest. It covered crop husbandry, animal husbandry, horticulture and bee-keeping.

#### Conferences, visits, etc.

To assist those engaged in agricultural research, education and advisory work to keep abreast of developments in fields other than those in which they themselves are engaged, a conference of institute and college staffs was held in 1949 at the Edinburgh college. Addresses were given on the work of the Animal Diseases Research Association and of the Scottish Society for Research in Plant Breeding. A programme of machinery films was shown, and visits were made to the experimental farm at Boghall, the Bush and Dryden estates, the Commonwealth Bureau of Animal Genetics and the market gardens of Messrs. David Lowe & Sons at Musselburgh.

Arrangements were made for suitable officers from the institutes and colleges to attend international conferences and congresses. Scottish establishments also welcomed during the year a number of visitors from other countries. Visitors from overseas included an official party of Canadian agricultural scientists and administrators and the Chief Grassland Officer of the Department of Scientific and Industrial Research in New Zealand.

## CHAPTER XII—LABOUR

### General.

The numbers of workers employed in agriculture in Scotland at 4th June, 1949, showed little change compared with previous years. The figures are given in Table 19.

TABLE 19.—AGRICULTURAL WORKERS  
At 4th June

	1949	1948	1939
<b>Regular workers :</b>			
Total .. .. .	89,337	89,414	89,670
Male .. .. .	75,039	74,282	75,291
Female .. .. .	14,298	15,132	14,379
Women's Land Army .. ..	879	1,240	—
<b>Casual workers :</b>			
Total .. .. .	16,481	17,993	14,463
Male .. .. .	10,827	11,538	8,628
Female .. .. .	5,654	6,455	5,835

The Control of Engagement Order, 1947, unchanged so far as farm labour was concerned, remained in force throughout the year. Its operation was further extended to 10th December, 1950,<sup>1</sup> but the Government announced on 14th December, 1949, that it had been decided to remove the "ring fence" from the coalmining and agricultural industries on 1st January, 1950. From that date agricultural workers wishing to leave agricultural employment will be in the same position as other workers covered by the Order and will be offered the same range of choice of important jobs. They will thus cease to be confined strictly to their own industry.

During the year 177 applications from agricultural workers for release from the industry were referred to the Department for recommendation. Most of the applications were made on medical grounds. In no case had compulsory measures to be taken to retain a worker in the industry.

Men born between 1st January, 1931, and 31st December, 1931 (both dates inclusive), were required to register during the year under the National Service Acts. As in previous years, the call-up of those who registered as regular workers in the main agricultural occupations was automatically suspended. Applications for deferment of call-up of men employed in the subsidiary agricultural occupations (pigmen, poultrymen, etc.) were dealt with by the Ministry of Labour and National Service after consultation with the Department. The existing arrangements for the deferment of agricultural workers will be continued until the end of 1950.

The Ministry of Labour and National Service asked the Department for their observations on 19 applications for voluntary enlistment in H.M. Forces made by agricultural workers whose employers had indicated that they wished to retain their services. In 11 cases no objection was raised to the proposed enlistments but in the remaining eight cases the Department recommended retention in the industry.

In February, 1949, the Department were informed by the Service Departments that owing to shortage of man-power, the arrangements under which service personnel were granted agricultural leave would not operate during 1949.

### Wages and Conditions

The Agricultural Wages (Scotland) Act, 1949, consolidated the provisions of the Agricultural Wages (Regulation) (Scotland) Act, 1937, the Agricultural Wages (Regulation) Act, 1947, and such parts of the Holidays with Pay Act, 1938, as referred to agriculture. This meant no change in the law.

The Scottish Agricultural Wages Board met on two occasions during 1949, and the District Committees held 39 meetings. Sub-committees appointed to deal with applications for permits of exemption from payment of the statutory minimum wage rates, met 51 times during the year. Sir John J. W. Handford, C.B., O.B.E., was appointed by the Secretary of State to fill the vacancy on the Board caused by the death of J. B. Clark, Esq., O.B.E., LL.D., M.A., and the appointment of successors to fill vacancies caused by the resignations of Sir John Sutherland, C.B.E., LL.D., F.R.S.E., and Miss E. V. Baxter, M.B.E., was under consideration at the end of the year. There were also changes in the representative members of the Board and in the membership of Committees.

As a result of a motion by workers' representatives for an increase in the minimum wage rates, the Board made Orders, with effect from 23rd May, 1949, raising the minimum rate for an adult male general worker to 94s. per week. The new minimum rate for shepherds became 104s. 3d. per week, and for other specialists 102s. 3d. per week. The minimum rates for female workers and juveniles were increased proportionately. Hourly and overtime rates were advanced, and the values of benefits were revised.

<sup>1</sup> The Control of Engagement (Amendment) Order, 1949.

A total of 87 applications for permits of exemption from the statutory minimum rates was received during the year. Out of this number (together with one brought forward from 1948), permits were granted in 78 cases. Eight applications were refused or withdrawn and two were outstanding at the end of the year. In addition to the 88 cases referred to above, 624 cases were reviewed by the Committees, of which 493 were renewed, 62 revoked, and it was found that in 69 cases the workers had retired. The number of permits in force at the end of the year was thus 652 as compared with 705 at 1st January, 1949. The following is an analysis of the amounts by which the weekly rates of wages specified in existing permits are lower than the appropriate minimum rates of wages :—

Less than 5s.	..	..	..	..	..	..	..	12
Over 5s. and under 10s.	..	..	..	..	..	..	..	45
Over 10s. and under 15s.	..	..	..	..	..	..	..	76
Over 15s. and under 20s.	..	..	..	..	..	..	..	84
Over 20s. and under 25s.	..	..	..	..	..	..	..	98
Over 25s. and under 30s.	..	..	..	..	..	..	..	83
Over 30s. and under 35s.	..	..	..	..	..	..	..	61
Over 35s. and under 40s.	..	..	..	..	..	..	..	45
Over 40s.	..	..	..	..	..	..	..	94
Casual workers	..	..	..	..	..	..	..	53
Permit with no rate specified	..	..	..	..	..	..	..	1
								652

In 1949 in the course of their statutory duties the Department examined the circumstances of 4,073 workers, including 217 cases not disposed of in 1948. Of the 3,856 cases brought to the Department's notice in 1949, 346 arose from complaints, 959 as a result of inspections where complainants were employed, and 2,551 from test inspections covering 743 farms.

Investigation showed that in 3,537 cases the workers were being paid in accordance with the terms of the Orders. Following discovery of contraventions, £3,201 was recovered as underpayment of wages on behalf of 202 other workers. In 260 cases no proceedings could be instituted. As a result of Court proceedings, decrees were obtained in six cases. At the end of the year 74 cases were still under examination. In addition to the above inspections, 13 complaints of contravention of the directions regarding holidays with pay were investigated. As a result, arrears of holiday remuneration amounting to £7 were collected on behalf of two workers. No proceedings could be instituted in the remaining cases.

Table 20 shows the average rates of wages of certain classes of farm workers in Scotland during the years 1935, 1947, 1948 and 1949, as estimated from the returns made by the Department's Crop Reporters at Martinmas and Whitsuntide in each year.

TABLE 20.—AVERAGE WEEKLY WAGES OF AGRICULTURAL WORKERS

	1935	1947	1948	1949
Ploughmen (married)	34s. 1d.	98s. 0d.	102s. 9d.	106s. 9d.
Ploughmen (single)	28s. 4d.	97s. 8d.	101s. 7d.	104s. 9d.
Cattlemen (married)	35s. 6d.	103s. 4d.	107s. 11d.	111s. 11d.
Shepherds (married)	36s. 0d.	102s. 11d.	108s. 2d.	112s. 11d.

## Supplementary Labour

The Department maintained in their employment throughout 1949 a supplementary labour force made up as shown in Table 21.

TABLE 21.—SUPPLEMENTARY LABOUR FORCE

	Male workers				Female workers
	Total	British	European volunteer workers	Poles	
At beginning of year ..	5,678	289	5,357	32	114
At end of year .. ..	2,959	97	2,835	27	39

The reduction in numbers during the year followed increasing redundancy through lack of demand from farmers. Efforts to place workers in the direct employment of farmers have not been very successful, only 457 men having been so placed up to 31st December, 1949.

Most of the workers were accommodated in hostels provided by the Department, from which they were conveyed by the Department's transport to and from their work. All were paid in accordance with the Orders of the Scottish Agricultural Wages Board and were hired out to farmers at daily or weekly rates. These rates were increased from 28th February, 1949, with a view to reducing the deficit arising from the scale of charges in force up to that date. They were again raised on 23rd May, 1949, following the increase in the minimum wage rates for agricultural workers fixed by the Scottish Agricultural Wages Board. Table 22 shows the principal rates in operation after 23rd May.

TABLE 22.—CHARGES FOR SUPPLEMENTARY LABOUR

	Weekly hire	Daily hire		Overtime hire (per hour)	
		Monday to Friday	Saturday	Monday to Friday	Saturday and Sunday
Male workers ..	111s. 0d.	21s. 3d.	10s. 3d.	2s. 8d.	3s. 2d.
Female workers ..	84s. 0d.	16s. 9d.	8s. 2d.	2s. 2d.	2s. 5d.

The arrangement made with the Scottish Home Department whereby selected civilian prisoners and boys from civil prisons and borstal homes in the counties of Midlothian, Stirling, Aberdeen, Perth and Dumfries are hired out to farmers were continued in 1949.

At the beginning of the year the Department were operating six W.L.A. hostels and 74 camps and hostels for supplementary labour. The number of workers accommodated was 5,506. Following a reduction in the number of supplementary workers, partly as a result of the policy of placing workers, wherever possible, in the direct employment of farmers, many of these hostels were closed, and at the end of the year rather less than 3,000 workers were accommodated in 46 hostels.

The Y.M.C.A. continued to be responsible for catering and household arrangements in the hostels which, together with their equipment, were supplied by the Ministry of Works. The appropriate sum for board and lodging was deducted by the Department from the worker's pay.

The reduction in the number of workers also enabled a reduction to be made in the number of vehicles needed for carrying workers to and from their work. At the beginning of the year the Department had 920 motor vehicles and 1,199 bicycles for this purpose ; the corresponding figures at the end of the year were 560 and 709 respectively. During the year, these vehicles were involved in 190 accidents. Claims amounting to £849 had been paid by the end of the year for 52 of these accidents. Further claims paid for 70 accidents which occurred before 1949 brought the total sum paid during the year to approximately £5,500.

### Harvest Labour

To attract recruits to the Scottish Harvesting Scheme a vigorous publicity campaign by Press, radio and poster was undertaken in collaboration with the Scottish Information Office and the Ministry of Labour and National Service. Recruiting centres were set up in Edinburgh and Glasgow and three trailers were shown at Scottish cinemas. For the grain harvest 6,052 volunteers, representing 10,594 "man weeks," worked from 55 hostels. Seven schools formed groups. Two hostels adopted by industrial firms and two by the Scottish Union of Students were kept going throughout the grain harvest. About 100 service men also helped with the grain harvest.

In the event, exceptionally favourable weather allowed farmers to make an early start with the harvest and to continue work, practically without interruption, until the potato crop had been lifted. Labour problems were not serious ; on the contrary, the labour at the Department's disposal was not fully used. Recruitment of supplementary labour was confined almost entirely to civilian sources. It was again found necessary to billet school-children during the potato harvest.

With the co-operation of the Ministry of Labour and National Service a scheme was launched to recruit a mobile force of seasonal workers to assist with the grain and potato harvests. Suitable men were offered six weeks' guaranteed employment at minimum agricultural wage rates and accommodation (mainly in European Volunteer Workers' hostels) at the normal charge of 30s. per week. Dependants' allowances and free travel to and from hostels were paid by the Ministry of Labour. On average, 300 men a week were made available in this way for hiring to farmers from mid-August until early November.

For the potato harvest a force of 56,000 schoolchildren was recruited. Of these some 44,000 helped locally and 8,000 were transported daily from towns to the main growing areas. Children in billets numbering 4,000 were drawn from Glasgow and Edinburgh and worked from 69 hostels. Assistance at potato lifting was also given by 650 civilian volunteers and 200 service men, a number of whom were moved at the Department's request to Perth, Fife and Ross-shire.

Special arrangements for the transport of harvest workers were made in co-operation with the Ministry of Transport and British Railways.

### Harvest Labour Enquiry

In February, 1949, the Secretary of State set up an independent Committee, under the Chairmanship of Sir Garnet Wilson, LL.D., to enquire into the supply of harvest labour. The terms of reference were :—" To examine the problem of supplying the temporary additional labour required every year for the grain and potato harvest in Scotland, having regard to food production requirements and all other relevant circumstances ; to review the existing sources of such labour and any new potential sources ; and to report."

The Committee submitted an Interim Report on 1st July in which they made the following recommendations :—

1. The early issue of a statement making clear that the help of school-children at potato lifting would be necessary for some years to come ; and emphasising the necessity for maximum assistance in this work by Education Authorities, teachers and parents.

2. Further consideration at the highest level to the provision of maximum assistance by the Armed Forces.

3. The intensification of research and the offer of a monetary award as an incentive towards the production of a suitable complete potato harvesting machine ; or, alternatively, the provision of financial assistance in the production and improvement of proto-types of potential merit.

The Secretary of State issued the statement recommended by the Committee and steps were taken to give it the widest publicity. An assurance was given by the Secretary of State for War that the Army would co-operate as fully as possible in assisting with harvest work, provided that the release of troops for this work did not interfere with training requirements. Consideration is being given to the Committee's recommendation concerning production of potato harvesting machinery.

### **Women's Land Army**

The Government have decided to maintain the Women's Land Army for a further 12 months but to disband it finally at the end of November, 1950. It is hoped that many of the members will continue their good work after that date as regular workers in agriculture. Numbers declined by roughly one quarter during the year, but this was due to reduced enrolments rather than to any acceleration in the rate of releases.

Certain adjustments were made in the organisation of the Scottish W.L.A., largely as a result of the reduced membership. Training continued, however, and 12 members received a special course of instruction in dairying and 315 recruits underwent initial training.

Contributions to the Welfare and Benevolent Fund amounted in all to £45,986 by the end of 1949. This included a Government grant of £20,000. Over £25,000 has so far been paid out of the Fund.

### **German ex-Prisoners of War**

By the end of 1949, 1,586 Germans had been finally repatriated and 2,534 had entered into direct employment with Scottish farmers. The latter were offered 28 days leave without pay for the purpose of visiting Germany, and 1,194 accepted the offer. The cost of travel was met by the Department, and, as in the case of final repatriates, arrangements were made for conveying the men to and from Harwich in escorted parties. Only 106 men failed to return from leave.

No German ex-prisoners of war have been retained in the employment of the Department.

## **CHAPTER XIII—FEEDING STUFFS**

The general picture during 1949 was one of steady improvement, both in home-grown and imported supplies. Protein feeding stuffs continued to be scarce, but large deliveries of coarse grains from the U.S.S.R. and the Argentine have enabled increased quantities of cereals to be distributed. There is, of course,



no guarantee that cereal supplies will continue at this level. Success in the live stock expansion programme will continue to depend upon reaching still higher standards of self-sufficiency in animal feeding stuffs. The recent fall in the acreage of feeding grains is therefore serious. Fortunately there can be set against it, to some extent, a marked improvement in grassland management and an expansion of grass conservation.

The main problem of 1949 arose from the prolonged spell of fine weather during the summer. Grazings, particularly in the dairying area of the South West of Scotland, suffered seriously, so much so that an emergency issue of cereal feeding stuffs was made. With this help milk production was maintained.

The following paragraphs give details of ration issues made during the year and of other matters concerning feeding stuffs. Particulars of the quantities of feeding stuffs issued are given in Appendix 13.

*Dairy Cows.*—During the winter periods (January to April and October to December) milk production rations were at the rate of 1 cwt. protein and 3 cwt. cereal for every 105 gallons of milk in excess of a gallon per cow per day, either sold or supplied for human consumption two months before. Farmers are expected to provide a proportion of the cereal they need, and a deduction of 60 lbs. per cow was made from the cereal ration so calculated. Improved supplies enabled this deduction to be suspended for December. For the summer period (May to September) issues were based on the daily average sales of milk per cow (including dry cows). The monthly allowance varied from 28 lbs. to 98 lbs. per cow where the average daily milk sales varied from  $1\frac{1}{2}$  to 4 gallons per cow. In certain circumstances milk producers obtained concessions. Examples of these were the issue of rations on estimated sales of milk, the temporary deferment of the self-sufficiency deduction of cereal (as in the case of a farmer unable to thresh grain which he had in stack) and an option (for summer producers) of the month during which feeding stuff coupons were available.

*Calves.*—An issue of  $\frac{1}{2}$  cwt. of calf-food per month during the winter periods and  $\frac{3}{8}$  cwt. per month during the summer period was made for calves up to the age of six months. From 1st October, 1949, an issue of  $\frac{1}{4}$  cwt. protein and  $\frac{3}{4}$  cwt. cereal was made for calves between six and twelve months old. This issue was increased from 1st December, 1949, by  $\frac{1}{4}$  cwt. cereal.

*Calving cows or heifers.*—The usual allowance of  $\frac{1}{4}$  cwt. protein and  $1\frac{1}{2}$  cwt. cereal for cows and heifers calving in October or November was supplemented in 1949 by a special bonus of 1 cwt. cereal to offset the effect of the shortage of grass during the summer months.

*Pigs and Poultry.*—Basic rations based on the number of pigs and poultry kept at June, 1939 or December, 1940, were at the rate of 1 cwt. for every five pigs or 100 birds. A small acreage deduction was again made. The usual summer increase of 50 per cent. was given for poultry, and the basic pig ration was increased from 1st September, 1949, to 9 cwt. for every 40 pigs kept at the qualifying date.

The basis of the rationing scheme for pigs and poultry was extended on 1st May, 1949, to allow holders who did not keep pigs or poultry in 1939/40, and who otherwise would not be in a position to qualify for an issue of feeding stuffs, to obtain rations for a specified number of pigs or poultry according to the acreage of their holding. The specified number of pigs for which rations could be drawn was increased in July, 1949. Approximately 10,000 holders received benefit from this extended scheme.

Under the Bonus Ration Scheme for pigs and poultry, introduced in January, 1949, feeding stuff rations were made available, on application, to pig and poultry keepers who sold pigmeat or eggs to the Ministry of Food through approved channels. Issues were made three times a year and were

related to sales in the preceding four months. With special "Pig or Poultry" coupons the producer could obtain certain compounds containing a proportion of protein feeding stuffs. The ration scales were dictated by the general supply position and were liable to variation in each period. The rates for 1949 were :—

	<i>Eggs</i>	<i>Pigmeat</i>
Period I (January–April) ..	1 cwt. per 80 doz.	1 cwt. per 8 score.
Period II (May–August) ..	1 cwt. per 160 doz.	1 cwt. per 8 score.
Period III (September–December)	1 cwt. per 160 doz.	3 cwt. per 8 score.

The farrowing allowance for sows was 8 cwts. in the ratio of 1 part protein to 8 parts cereal during the early part of the year. From July, 1949, this allowance was increased to 9 cwts. and pig producers had the option of the old 1 : 8 ratio of protein and cereal or a new issue of 3 cwts. pig starter,  $\frac{1}{2}$  cwt. protein and  $5\frac{1}{2}$  cwts. cereal.

Chick food coupons were issued at the rate of 1 cwt. for every 40 birds kept on the holding in June, 1948.

The issue of coupons for pedigree pigs, cottagers' pigs, whey-fed pigs, accredited poultry stocks and poultry kept by blind persons, and the arrangements made for ex-service pig and poultry keepers (including disabled persons) were continued. The last arrangements were extended to include ex-servicemen of the 1914–18 war.

With the exception of allowances for cottagers' pigs, chicks and farrowing sows, all coupons for pigs and poultry were issued in the proportion of 1 part protein to 9 parts cereal.

*Horses.*—On proof of need, rations varying from  $1\frac{1}{2}$  cwts. per month during the summer months to 4 cwts. per month in winter were issued for agricultural work horses. Special arrangements were again made for stallions during the period January to June.

*Pedigree ram lambs.*—An issue of 1 cwt. protein was made during the period March to August for pedigree ram lambs used for service in the first year of life.

*Hill cattle.*—From 1st December, 1949, a cereal reserve was made available for the feeding of hill cattle.

*Sheep dogs.*—Dogs working among sheep on farms receiving hill sheep subsidy were granted coupons valid for the purchase of  $\frac{3}{4}$  cwt. of maize per month. Other sheep dogs received an allowance of  $\frac{1}{4}$  cwt. cereal per month.

*Milch goats.*—Rations at the rate of 14 lbs. per month were issued during the summer period for milch goats producing more than six pints of milk per day for human consumption. The rations allowed in the winter periods were calculated on the same basis as those for dairy cows.

*Molasses.*—An allocation of molasses was made during the winter periods. This was intended primarily for feeding with straw to fattening cattle, but applications were also entertained from farmers who were short of other fodder for dairy cows and young stock. As in the previous year, molasses was also made available for silage making without farmers having to deposit feeding stuff coupons.

*Bran.*—Supplies were made available for hackney stallions, rabbits and other live stock, and for mixing with insecticides.

*Discretionary reserve.*—A discretionary reserve of protein and cereal was again provided out of which small allowances could be given for stock for which specific rations were not provided under the rationing scheme, and for emergency use.

*Other issues.*—Quite outside the rationing scheme, growers of linseed were permitted to purchase one ton of linseed cake for every three tons of clean linseed which they delivered to the crushing mills or sold for seed. The allowance was increased in October, 1949, to 12 cwts. of cake per ton of clean linseed sold.

If they could prove need, growers of oats or beans and peas of feeding varieties were granted cereal coupons in exchange for oats, beans or peas sold for seed. A similar concession was given to smallholders who, from lack of storage, were obliged to sell oats they had grown. In both cases coupons could only be used for home-grown cereals.

*Domestic Poultry Rationing Scheme.*—During the year a total of 40,458 ration cards were issued representing the surrender of 167,380 shell egg registrations. In addition, one ration card was issued to a public elementary school where poultry were kept primarily for educational purposes. No shell egg registrations were surrendered in this case, but it was a condition of the issue that all the eggs produced would be sold to an egg packing station. Feeding stuff coupons under this scheme are issued by the Ministry of Food.

*Collection of kitchen waste.*—No further Direction Orders were issued by the Board of Trade to Local Authorities in Scotland during 1949 and no licences were issued by the Department. The number of licences so far issued in the three scheduled areas remains at 24.

The maximum price of unboiled kitchen waste was increased<sup>1</sup> from 2nd May, 1949, from £1 10s. to £2 12s. 6d. per ton net weight.

## CHAPTER XIV—PEST CONTROL

The Secretary of State has certain statutory duties connected with the control in Scotland of pests injurious to agriculture and food. These include plant pests and diseases,<sup>2</sup> rats and mice,<sup>3</sup> birds and other animal pests,<sup>4</sup> food infestation<sup>5</sup> and injurious weeds.<sup>6</sup>

The Prevention of Damage by Pests Act, 1949, which comes into operation on 31st March, 1950, replaces existing legislation for the control of rats and mice and infestation of food.

Part III of the Agriculture (Scotland) Act, 1948, which will come into operation early in 1950, replaces existing powers for the control of bird and animal pests and gives the Secretary of State power to vary, at his discretion, the list of injurious weeds. Responsibility for the control of bird and animal pests and of injurious weeds on agricultural land will be delegated to the Agricultural Executive Committees. Control of injurious weeds on other land (e.g. building sites, gardens or allotments) will remain the responsibility of the Secretary of State.

### Destructive insects and pests

Various Orders have been made<sup>7</sup> designed to prevent the introduction of certain injurious plant diseases and insect pests into Scotland and to ensure that appropriate action is taken to control certain diseases and pests which are already established. Particulars of action taken under these Orders in 1949 are given in the following paragraphs.

*Import of plants.*—The Principal Order of 1947 was amended from 15th October, 1949,<sup>7</sup> following an alteration in the kinds of trees which may not be imported except under licence.<sup>8</sup>

Eighteen licences to bring into Scotland living plants and parts thereof

<sup>1</sup> The Kitchen Waste Order, 1949.

<sup>2</sup> The Destructive Insects and Pests Acts, 1877 to 1927.

<sup>3</sup> The Rats and Mice (Destruction) Act, 1919, The Rats and Mice (Scotland) Order, 1943, and the Rats (Scotland) Order, 1944.

<sup>4</sup> Defence Regulation 63.

<sup>5</sup> Infestation Orders of 1943 and 1945, made under Defence Regulations.

<sup>6</sup> The Corn Production Acts (Repeal) Act, 1921.

<sup>7</sup> The Importation of Plants (Amendment) (Scotland) Order, 1949.

<sup>8</sup> The Importation of Forest Trees (Prohibition) (Scotland) Order, 1949.

unaccompanied by the prescribed certificates, were issued in terms of the Orders. Three of these licences were issued for plant material imported for scientific purposes. A licence was also issued authorising the importation of a consignment of chrysanthemum plants from Holland.

Consignments subject to the provisions of the Orders were received as shown in Table 23.

TABLE 23.—IMPORT OF PLANTS

*Number of consignments*

	Bulbs	Plants	Onions and shallots
Consignments accompanied by prescribed certificates ..	1,251	352	66
Consignments unaccompanied by prescribed certificates ..	3	12	68

Consignments unaccompanied by the prescribed certificates were detained by H.M. Customs ; in addition 21 postal packages unaccompanied by the prescribed certificates were detained by the Postal Authorities. These consignments and packages were examined and their release authorised after the removal and destruction of any diseased material.

*Import of raw cherries.*—The restrictions on the import of raw cherries into Scotland during the period of the year when there is danger of the introduction of the Cherry Fruit Fly were continued for 1949.<sup>1</sup>

*Import of forest trees.*—A new Order,<sup>2</sup> which came into operation on 15th October, 1949, made alterations in the kinds of trees which may not be imported except under licence. The purpose of this Order, like its predecessors,<sup>3</sup> is to prevent the introduction of injurious diseases and pests from abroad.

*Chrysanthemum midge.*—Two outbreaks of Chrysanthemum Midge were reported in nurseries in Ayr, and one in Midlothian. The nurseries were inspected and notices served requiring the occupiers to burn all chrysanthemum plants and to fumigate the glasshouses and frames where the plants were situated.<sup>4</sup> Neighbouring nurseries were inspected but no further evidence of the Midge was found.

*Sale of diseased plants.*—Twenty complaints were received that consignments of Scottish seed potatoes were found to be diseased, rotted or frosted, on arrival in England. None of the cases was submitted for legal action but, where applicable, letters were addressed to the Scottish merchants and growers concerned advising them of the importance and necessity for greater care in dressing future consignments.<sup>5</sup>

During the year 8,227 consignments representing 51,458 tons of seed potatoes were examined at docks, railway stations and merchants' premises in Scotland. Of these consignments 226 (1,052 tons) were found to be sub-standard principally because of scab diseases, and another 210 (1,132 tons) were below standard mainly because of faulty dressing of the potatoes for size. In 46 cases where the incidence of disease was found to be considerable, the grower or merchant responsible was warned of the necessity for ensuring that future consignments were of a better standard. Size and dressing cases were referred to the Ministry of Food.

<sup>1</sup> The Importation of Raw Cherries (Scotland) Order, 1949.

<sup>2</sup> The Importation of Forest Trees (Prohibition) (Scotland) Order, 1949.

<sup>3</sup> The Importation of Elm Trees and Conifers (Prohibition) (Scotland) Order, 1933, and the Importation of Elm Trees and Conifers (Prohibition) (Scotland) (Amendment) Order, 1935.

<sup>4</sup> The Destructive Insects and Pests (Scotland) Order, 1933.

<sup>5</sup> The Sale of Diseased Plants (Scotland) Orders, 1936 and 1937.

In the course of inspection 96 visits were made to premises of nurserymen, seedsmen, retailers, etc., where bulbs, plants, fruit trees, etc., were examined. In 29 cases notices were served on owners of stock found to be affected with pests or disease advising them on the control measures to be taken.

*Sale of strawberry plants and blackcurrant bushes.*—No licences were granted to growers to sell uncertified strawberry plants or blackcurrant bushes, although ten applications for licences were received. Eight growers who advertised uncertified strawberry plants and blackcurrant bushes were warned.<sup>1</sup>

*Blackcurrant mite.*—In the course of inspection and as a result of complaints, notices were issued to the occupiers of 273 gardens, allotments, etc., in the counties of Aberdeen (18), Midlothian (119), Perth (12) and Renfrew (124), requiring them to destroy all bushes affected by Big Bud.<sup>2</sup>

*Wart disease of potatoes.*—One new outbreak of wart disease was reported during the year, and a notice was served on the occupier.<sup>3</sup> The number of holdings in Scotland scheduled in whole or in part of their area is now 310. No fresh outbreaks in private gardens or allotments were reported in 1949, as compared with nine in 1948 and 18 in 1947.

A general licence was issued authorising the planting in 1949, in gardens and allotments in any parts of Scotland, of certain first-early varieties of potatoes susceptible to wart disease. The licence did not, of course, apply to any land on which wart disease had occurred or which had been scheduled as infested with wart disease.

*Colorado beetle.*—As in previous years, precautionary measures were taken against a possible appearance of this pest. A fleet of caravans was retained for accommodating staff in the field, arrangements were continued for a firm of spraying contractors to keep machines and insecticides ready, and a publicity campaign was undertaken. Apart from notices in the press and circular letters to agricultural and food distributing organisations, some 3,000 posters and 7,000 leaflets were distributed.

### Rats and mice

Grants are paid to Local Authorities to assist them to control rats and mice. During the year payments totalling £4,366 were made to 12 Local Authorities for expenditure incurred before 31st March, 1949. Subsidy amounting to £214 was also paid towards the purchase of 3,332 lbs. of gas powder used by farmers and others for rat destruction.

If asked to do so by Local Authorities, the Department's rat destruction staff undertake destruction work. This service is centred on headquarters in Edinburgh, Perth, Aberdeen, Inverness, Glasgow and Girvan and the staff consists of eight pests officers and 51 trappers and foremen. The pests officers also advise on the control of animal and bird pests.

The control measures usually adopted for the destruction of rats and mice are trapping, snaring, poisoning and gassing. The poisons used are red squill, zinc phosphide and arsenic, while Cymag (hydrogen cyanide) is used as a gassing agent.

From 18th July, 1949, the charges for the rats and mice destruction service were increased from 3s. 2d. per man hour to 5s. per man hour, with a minimum charge of 5s. per visit.

### Injurious animals and birds

Schemes of financial assistance to encourage farmers and others to destroy animals and birds injurious to agriculture were continued during the year. Particulars are given below.

*Vermin destruction schemes.*—These schemes are mainly concerned with

<sup>1</sup> The Sale of Strawberry Plants and Blackcurrant Bushes (Scotland) Order, 1947.

<sup>2</sup> The Blackcurrant Mite (Scotland) Order, 1947.

<sup>3</sup> The Wart Disease of Potatoes (Scotland) Order, 1941.

fox destruction but in some cases deal with other pests such as hoodie crows, wild cats, etc. Six schemes, towards the cost of which local farmers and land-owners contribute, are administered directly by Agricultural Executive Committees, and 18 schemes, voluntary in character, are operated by local bodies receiving grants-in-aid.

During the year ended 31st March, 1949, approximately 8,000 foxes were killed under six committee schemes and 16 voluntary schemes. Financial assistance, not exceeding 40 per cent. of expenditure in each case, amounted to £1,678. During the current financial year maximum grants amounting to £2,361 have been approved for the six committee schemes and 18 other schemes referred to above.

*Rabbit destruction scheme.*—Grants amounting to £666 were paid towards the cost of purchasing 10,444 lbs. of Cymag for gassing rabbits in burrows.

*Organised shoots.*—Agricultural Executive Committees organised 118 rook shoots in areas where there were heavy local concentrations of these birds. The cost of this scheme was £859.

*Control of rearing of pheasants.*—No land in Scotland may be used for the hatching or rearing of pheasants by artificial means except under licence.<sup>1</sup> During the year 13 such licences were issued.

### **Worrying of Live Stock by Dogs**

Complaints continued to be received from the agricultural community about damage done by dogs to live stock and particularly to sheep. Wide publicity was given in the press and through Agricultural Executive Committees to the necessity for keeping dogs under proper control, especially during the lambing season.

### **Food infestation**

For the purpose of discovering and controlling insect pests in stored food a staff of scientific officers is employed. These officers are stationed at Glasgow, Edinburgh, Dundee and Aberdeen, and act in the capacity of inspectors. Ships carrying food cargoes subject to insect infestation are examined on arrival and dock silos, warehouses and mills are also inspected. A check is thus made on imported food at various stages after its arrival in this country. If insects are found in substantial numbers either in the food or in premises or vehicles, the inspectors recommend treatment by fumigation, spraying, cleaning or other appropriate means. Compulsory powers exist to ensure that these recommendations are carried out, but it has not been found necessary to use such powers.

A staff of operators is maintained to carry out the actual work of spraying and cleaning recommended by the inspectors. Fumigation of foodstuffs or premises, however, is undertaken by commercial fumigation companies under the directions of the scientific officers.

### **Injurious weeds**

The presence of injurious weeds was reported in 132 cases during the year. Most of the complaints referred to private gardens, building sites and vacant plots of ground; in a few instances where weeds on agricultural land were reported, the appropriate Agricultural Executive Committee was informed.

In 112 instances it was sufficient to remind the occupiers of their statutory obligations to get the weeds destroyed. No formal notices were required. The remaining 20 complaints were left over for examination in 1950, as belated action in the autumn would have been useless.

### **Pest control articles .**

The manufacture or preparation of articles for controlling pests harmful

<sup>1</sup>The Rearing of Pheasants (Prohibition) (Scotland) Order, 1940.

to stored food may not be carried out in Scotland except under licence.<sup>1</sup> During the year licences were granted authorising the manufacture or preparation of ten substances for rodent destruction.

The scheme, operated by the Department jointly with the Ministry of Agriculture and Fisheries, under which official approval may be given to proprietary insecticides and fungicides used for the protection of growing crops was extended during the year to cover herbicides. Lists of approved articles are issued from time to time, and additional publicity was also given to the scheme during 1949.

## CHAPTER XV—MACHINERY, TRANSPORT AND SUPPLY OF MATERIALS

### Machinery

One of the most striking changes in farming in recent years has been increasing mechanisation. This development still continues, and the next census of farm machinery (in 1950) is expected to show further big increases in equipment. At the time of the last census (January, 1948) farm tractors had increased from 20,000 in 1944 to almost 30,000. Combined harvesters, of which there was no record in Scotland in 1937, numbered about 100 in 1944 and 260 in 1948. The figure is now estimated to be about 400.

Control of the manufacture and supply of British-made farm machinery was ended on 1st June, 1949,<sup>2</sup> and with one exception control of distribution of all home-produced machines ceased. The exception was that Massey-Harris combines for the 1949 harvest were allocated by arrangement with the manufacturers. From 9th May an increase in the price of controlled items of farm machinery was authorised and at the same time assurances were given on behalf of the manufacturers that the removal of controls would not be followed by immediate further increases in price.

Control of the distribution of certain classes of imported machinery—crawler tractors, combined harvesters and pick-up balers—was continued for the remainder of 1949 by arrangement with the importers concerned. Distribution of other imported machinery was freed from control apart from some machines which had been allocated in advance of delivery. Particulars of the distribution of imported machinery are given in Appendix 14.

Returns obtained from Scottish manufacturers with an annual output of 15 machines and over showed little change in production for the home and export markets as compared with the previous manufacturing year (year ended 30th September). Table 24 gives details.

TABLE 24.—PRODUCTION OF AGRICULTURAL MACHINERY IN SCOTLAND<sup>3</sup>

	<i>Year ended 30th September</i>	<i>Number of machines</i>
	1949	1948
Total .. .. .	46,695	43,114
Home .. .. .	43,315	37,276
Export .. .. .	6,380	5,838

<sup>1</sup> The Infestation Orders, 1943 and 1945.

<sup>2</sup> The Farm Machinery (Control of Manufacture and Supply) Order, 1946 (Revocation) Order, 1949.

<sup>3</sup> Figures are not available of production by manufacturers with less than the above minimum annual output.

## Tractor Service

Special services, such as crop spraying and drainage, were discontinued during the year on the recommendation of the Working Party which was appointed in 1948 to review the organisation, etc., of the Tractor Service. Effect was also given to recommendations that they made for the disposal of certain types of machinery either because their continued operation was uneconomic or because their retention did not fit in with the policy of standardising, as far as possible, the machinery held for general use.

This policy, and the general contraction of the service in accord with the reduced demand from farmers, has resulted in a considerable reduction in the number of machines and implements held. Disposals, and limited acquisitions of new machinery during the year, are reflected in Table 25.

TABLE 25.—TRACTOR SERVICE—IMPLEMENTS AND MACHINERY HELD

*Number*

	At 1st January, 1949	At 31st December, 1949
Tractors :		
wheeled .. .. .	1,007	662
crawler .. .. .	142	99
Ferguson implements, sets ..	195	162
Ploughs :		
trailer .. .. .	1,051	553
mounted (Fordson Major) ..	175	175
Harrows :		
disc .. .. .	537	395
seed .. .. .	413	383
Drills :		
combined .. .. .	162	151
seed .. .. .	236	199
Broadcast sowers .. .. .	112	87
Cultivators and grubbers :		
trailer .. .. .	279	146
mounted .. .. .	—	130
Manure distributors .. .. .	258	204
Rollers .. .. .	189	148
Row-crop implements .. .. .	31	13
Potato diggers :		
trailer .. .. .	286	147
mounted .. .. .	100	101
Binders .. .. .	864	628
Mowers .. .. .	132	188
Mills .. .. .	120	90
Balers .. .. .	65	58
Trailers .. .. .	1,366	957
Combined harvesters .. .. .	23	25



These changes have also permitted staff reductions to be made and a number of premises to be vacated. For requisitioned premises released £468 was paid as compensation.<sup>1</sup>

Three tractor drivers have continued to receive compensation in respect of disablement prior to 1948, and during the year there were 20 new cases of injury which have been dealt with under the National Health Scheme. There were also 17 cases in which Tractor Service vehicles were the cause of damage to property.

In view of falling demand, it was decided to withdraw the service from the Outer Isles, Lewis and Zetland.

Returns for the 1948/49 cultivating season and for the 1949 harvest show a considerable reduction in the work done. Details are given in table 26.

TABLE 26.—WORK DONE BY THE TRACTOR SERVICE

*Thousand acres*

	1948/49	1947/48
<i>Cultivations—</i>		
Total .. .. .	165.9	252.9
Ploughing : total .. .. .	49.7	82.3
lea .. .. .	18.0	36.7
stubble .. .. .	31.7	45.6
Other cultivations .. .. .	116.2	170.6
<i>Harvesting—</i>		
Total .. .. .	62.9	102.0
Cutting : total .. .. .	60.8	98.0
binder work .. .. .	44.4	76.8
hay mowing .. .. .	11.8	16.3
combined harvesting .. .. .	4.6	4.9
Potato digging .. .. .	2.1	4.0

In addition a large amount of threshing, baling and other work which is not recorded on an acreage basis was undertaken. For this work cash receipts of some £62,000 were obtained in the year to 31st May, 1949, as compared with £47,422 in the previous year.

Since 1939 the Department's outfits have ploughed over 820,000 acres, have cultivated more than 1,340,000 acres and have harvested a total of over 960,000 acres of crops.

### Transport

Arrangements were again made to ensure that sufficient transport was available to secure the harvest. Orders<sup>2</sup> were made relating to the use of vehicles for carrying agricultural workers during harvest and to the relief from excise duty of agricultural goods vehicles used for harvesting operations. As in previous years, the War Department also agreed to grant the use of service vehicles for the grain harvest.

The period during which land tractors (first registered on or before 1st June, 1947) are exempt from the need to comply with the requirements of Regulation 31 of the Motor Vehicles (Construction and Use) Regulations, 1947, so far as concerns the tyres of steering road wheels, was extended until 31st December, 1949.<sup>3</sup>

<sup>1</sup> The Compensation (Defence) Act, 1939—Section 2 (1) (b).

<sup>2</sup> The Use of Vehicles during Harvesting Order, 1949, and the Agricultural Goods Vehicles (Temporary Relief from Duty) Order, 1949.

<sup>3</sup> The Motor Vehicles (Construction and Use) (Amendment) Regulations, 1949.

## Supply of Materials

Improvements in the supply of some materials during 1949 enabled several controls to be relaxed or removed. Clothes rationing was ended in March, 1949. With the exception of a few scarce species, hardwoods were de-controlled at the same time. The restrictions on the supply of coke for horticultural purposes were removed, and the Control of Binder Twine Order was revoked at the end of July, 1949. Some minor schemes, e.g. that for the supply of thermos flasks, were also dropped. The following paragraphs give particulars of other responsibilities exercised during the year.

*Building Licences.*—Recommendations were made to the Ministry of Works on 459 applications for building licences to the value of £974,000. The Department also made application for starting dates for 132 projects not requiring building licences.

*Timber.*—A total of 3,326 licences were issued for timber for agricultural work.

*Iron and Steel.*—On 1st January, 1949, the "Small Consumers Scheme" for iron and steel distribution was introduced. Under this scheme all consumers requiring less than 25 tons of steel per quarter drew their allocation from the Ministry of Supply. The Department continued to advise on such cases in so far as the agricultural needs of the consumers were concerned. Approximately 750 authorisations for iron and steel were issued.

*Wire.*—In the early part of the year fencing wire was scarce. The amount available increased later and, although production is not yet adequate, delays in delivery have been substantially reduced.

*Asbestos Cement.*—Asbestos cement goods were also very scarce owing to the greatly increased demand and to a world-wide shortage of asbestos fibre. Every effort has been made to improve matters but even so there is a long delay in delivery. Where possible, the Department tried to obtain earlier delivery in urgent cases such as fire damage. Nevertheless, with the competing demand for housing and other essential services the position remains difficult.

*Coal.*—A number of complaints from farmers and others engaged in agriculture about the quantity and quality of coal allocated to them for non-domestic purposes, had to be taken up with the Ministry of Fuel and Power.

*Paraffin.*—The quantity and quality of paraffin available gave rise to a few complaints from poultry keepers and others, and these were taken up with the Ministry of Fuel and Power (Kerosene Branch) and the Local Fuel Overseers concerned.

*Petrol.*—Numerous requests were received from farmers and others engaged in agricultural work for the Department's support to their applications for additional supplies of petrol for use in private vehicles. Where appropriate, recommendations were made to Regional Petroleum Officers.

*Glasshouse Fuel.*—Arrangements were made with the Ministry of Fuel and Power to continue during the year the scheme for the supply of fuel to glasshouse owners who undertook to devote not less than 50 per cent. of their heated glasshouse space to producing food crops. However, as a result of the removal of restrictions on the supply of coke for horticultural purposes, fewer growers (about 1,200) took advantage of this scheme in 1949 than did so in 1948

## CHAPTER XVI—MISCELLANEOUS ADMINISTRATIVE SERVICES

### Organisation

As an administrative unit, the Department consists of two complementary parts, the head office in Edinburgh and the area organisation. The headquarters organisation is shown in Appendix 15, Table 1, together with the names of the principal administrative, executive and professional officers. The area organisation is based on 11 areas which coincide with those covered by the Agricultural Executive Committees described in Chapter II of this report. Details of the area organisation are given in Appendix 15, Table 2.

On 1st October, 1949, effect was given to a change in the responsibility for the staffing of the Scottish Machinery Testing Station at Howden. The scientific, technical and office staff employed, with the exception of those who chose to return to departmental duties, were taken over by the governing body of the new agricultural engineering research institute.

The comprehensive review of the Department's work by Treasury Organisation and Methods Division, which was begun in 1946, continued throughout 1949. The reports of the O. & M. officers proved to be very helpful and many recommendations made by them for improved methods of work were accepted.

### Committees of the Department

An Advisory Committee on Departmental Organisation was appointed during the year with the following terms of reference :—

(i) To consider the provisional programme of investigations to be carried out by the O. & M. service and to modify it as necessary.

(ii) To give consideration to any major questions arising from reports on Divisions of the Department already reviewed.

(iii) To direct the review, to receive reports on the progress made in applying agreed recommendations and to investigate further any major questions arising out of the review.

Three new sub-committees of the Technical Committee of the Scottish Agricultural Advisory Council were set up during the year. The Fruit Trials Sub-Committee has the function of advising the agricultural colleges and the Department on the fruit trials they consider necessary and of co-ordinating such work in Scotland. The Artificial Insemination Investigation Sub-committee will advise the Department on the planning and conduct of an investigation into the effects of artificial insemination of cattle in Scotland and the interpretation of the results. The Grassland Sub-committee has the task of advising on all problems of grassland development and management, and of co-ordinating experimental and research work in that sphere.

Details of all the standing committees of the Department are given in Appendix 15, Table 3.

## Staffing

Table 27 shows the number of staff (excluding industrial staff) employed at 31st December, 1949, in comparison with the corresponding figures for 1948.

TABLE 27.—STAFF EMPLOYED  
As 31st December

	1949	1948
Total .. .. .	2,057	2,070
Whole-time :		
Total .. .. .	1,947	1,957
Administrative .. .. .	34	33
Executive .. .. .	251	244
Clerical and sub-clerical .. .. .	1,053	1,078
Technical .. .. .	609	602
Part-time .. .. .	110	113

Of the officers in employment on 31st December, 1949, 54 were employed on a seasonal basis, eight were on loan to other Departments and 14 were absent on military service.

A staff training scheme was continued and expanded during the year. The scheme is under the general direction of a sub-committee of the Whitley Council and embraces both reception training for new entrants and "background training." Features of the year's general training activities were conferences of supervisory officers, lectures by Heads of Divisions, visits to places of agricultural interest and the showing of training films.

Mr. W. M. Sinclair was promoted to the post of Senior Inspector (Livestock), Miss M. M. MacLeod, N.D.D., C.D.D., to the post of Senior Inspector (Poultry), and Mr. D. F. MacKenzie, B.Sc. (Forestry), B.Sc. (Agric.) to the post of Senior Inspector (General Duties).

Mr. A. F. Wilson, C.D.A., Divisional Lands Officer, was made an officer of the Order of the British Empire, and Mr. A. MacCallum, M.C., Lands Officer, was made a member of the Order of the British Empire in the Birthday Honours List.

Mr. J. T. Steele, O.B.E., M.A., B.Sc. (Agric.), who joined the Board of Agriculture in 1920, retired from the post of deputy Chief Inspector (Livestock), and was succeeded by Mr. A. J. Bean, B.Sc. (Agric.). Mr. A. Nicolson, M.B.E., who joined the Congested Districts Board in 1904, retired from the post of Lands Officer but continued in the Department's service as local factor (part-time) for Sunart estate, Argyll.

It is with regret that the deaths during the year are recorded of Dr. J. M. Caie, C.B., formerly Deputy Secretary of the Department and Chairman of the Technical Committee of the Scottish Agricultural Advisory Council; Miss R. B. Clark, Senior Assistant (Scientific); Mr. E. S. MacKenzie, B.Sc. (Agric.), Assistant Lands Officer; Mr. W. J. McLehose, Clerk of Works; Mr. A. F. Mackay, Technical Assistant (General Duties), Grade II; Mr. W. Dewar, Technical Assistant (General Duties), Grade III; Mr. W. Kay, Pest Trapper; Mr. F. J. Sweeney, Mr. J. Lancaster, Mr. N. McLeod, and Mr. T. D. Beattie, Temporary Clerks; and Mr. J. Low, Messenger.

## Finance

The net amount provided by Parliament in the main Vote (Class VI, 21) for the expenses of the Department in the financial year ended 31st March, 1949,

was £3,062,491. Certain major projects involving capital expenditure for which provision was made were postponed or delayed and mainly for that reason the actual expenditure from the Vote was restricted to £2,556,812. In addition the Development Commissioners made available for expenditure by the Department grants of £29,688 of which £21,853 was spent.

The expenditure from the Vote included payment to the credit of the Agriculture (Scotland) Fund of grants amounting to £240,977. In February repayment was made from the Fund to the Public Works Loan Commissioners of the outstanding amounts (£753,794) of the loans made by them under Section 26 of the Land Settlement (Scotland) Act, 1919, and in accordance with directions given by the Treasury under Section 67 of the Agriculture (Scotland) Act, 1948, the Fund was wound up at 31st March, 1949. The balance of £68,895 remaining in the Fund was paid into the Exchequer. Expenditure on land settlement and crofter housing previously met from the Agriculture (Scotland) Fund is now met as a direct charge on the Department's main Vote.

The net amount provided for the financial year 1948/49 in the Food Production Services Vote (Class VI, 22) for certain food production services of the Department was £10,369,250. The net expenditure from that Vote was £9,380,900.

The Accounts, as audited by the Comptroller and Auditor General, detailing the expenditure under the various subheads of the two Votes and the payments into and from the Agriculture (Scotland) Fund are printed in the Appropriation Accounts for 1948/49 (H.C. 319, pages 375 to 388.) The printed volume of Trading Accounts and Balance Sheets of trading or commercial services conducted by Government Departments in the year 1948/49 contains such accounts in respect of the Department's management and farming of agricultural lands and the operation of the agricultural labour and agricultural machinery services.

The net amounts provided by Parliament for the financial year 1949/50 in the main Vote and the Food Production Services Vote for the Department are £3,524,007 and £8,150,000 respectively. Details of the estimated expenditure are given in the Civil Estimates (H.C. 77, Class VI, pages 187 to 212).

### **Farm Economics**

A large part of the work of the Department's Farm Economics Branch is now concerned with the preparation of economic data for the annual (and special) reviews into the general economic conditions and prospects of the agricultural industry for which provision was made in the Agriculture Act, 1947. The data, which are also used for other purposes, may be classified under four main heads : (i) the net income of farming, (ii) agricultural output, (iii) costs of production of individual farm products, and (iv) wage rates, earnings and other conditions of employment of farm workers. Details of this work, and of other investigations, are given below.

*Net income.*—Information about net income is obtained from accounts kept by farmers throughout Scotland in collaboration with the agricultural economists at the colleges. The Department received 629 such accounts for the financial year 1947/48. The anonymity of the individuals providing accounts is carefully preserved and they are unknown to the Department.

Net income represents the difference between gross receipts and gross expenses (including family labour) plus or minus any changes in the valuation of farm crops, livestock and equipment on hand at the beginning and end of the financial year.

*Agricultural output* may be defined as that part of the total agricultural production which leaves the "national farm" and is available for human

consumption. The estimated value of the gross output of Scottish agriculture in 1948/49 was provisionally estimated at £100,000,000. For comparison with the volume of output in earlier years it is necessary to eliminate changes in prices and also to obtain a figure of net output so as to allow for changes in the quantity of imported feeding-stuffs, seeds and store cattle, which are used in producing gross output.

*Costs of production.*—The investigation into the economics of milk production has been continued at the three colleges and the Department has received anonymous records relating to 351 farms for 1946/47 and 355 farms for 1947/48. A report<sup>1</sup> was published during 1949 covering the investigation for the year 1946/47.

The Milk Marketing Boards in Scotland again met one-half of the expenditure incurred by the colleges in carrying out this investigation.

Other enterprises costed at one or more of the colleges in 1948/49 were oats, mashlum, beans, sugar beet, potatoes, turnips, linseed, kale, mangolds, arable silage, grass silage, temporary grass, cattle and sheep. The results are given in college reports. A small number of full cost accounts continue to be kept, particularly at the North of Scotland College.

*Wages and employment.*—Labour is by far the largest item of expenditure on the average farm and a wages and employment enquiry is being conducted to provide an accurate and continuous body of information for the annual review of prices. During the year information relating to the earnings and hours of work of more than 12,000 workers was obtained from a sample of 2,000 farms representing all types and sizes. At the same time some information was collected on the labour supply position.

*Economics of hill farming.*—Economic appraisals of 200 schemes submitted by landlords and tenants of hill farms under the terms of the Hill Farming Act, 1946, were undertaken during the year. As in former years data were collected from all the more important sheep auction markets relating to numbers and prices of hill lambs and ewes sold at the autumn sales. These, together with data on the general economic position of hill farms derived from a sample of financial accounts formed the basis of an assessment of the amount of subsidy required to maintain the level of income on hill sheep farms.

Research work of a more general nature into the economics of hill farming was also undertaken at the request of the Hill Farm Research Committee.

*Farm classification.*—Work has been started on a new economic classification of holdings in Scotland based on the June, 1947, agricultural returns. Hitherto, there has been little systematic information about the economic significance of the 77,000 holdings in Scotland—how many are full-time units, how many part-time or spare-time, how many are seasonal grazings, accommodation land and so on. The classification will show the number of holdings in each of these and a number of other categories and will analyse the full-time farms by type, rent, acreage, etc., groups in each county. Statistics will also be obtained about the organisation and structure of the various farming types as shown by the crops they grow and the livestock and labour they carry.

*Work simplification.*—Investigations are to be developed to study the extent to which it is possible to economise in the use of labour on Scottish farms by the introduction of new techniques and practices. This is a sphere of work which has been developed in the United States, but not as yet to any significant extent in this country. Two appointments have been made specifically for this work, at the Economics Departments of North and West colleges respectively. Work has begun at the West college on labour saving on dairy farms and at the North college into labour organisation and requirements of silage making.

<sup>1</sup> Investigation into the Economics of Milk Production in Scotland—Report No. 2—1946/47.

*Capital investment.*—Work has been undertaken in co-ordinating statistics relating to capital investment programmes for agriculture and in preparing related memoranda.

## Statistics

The Department continued to collect the various returns for which the Secretary of State is responsible, and to make available agricultural statistics for Departmental or public use. The following paragraphs give details of these returns.

*Agricultural return and quarterly censuses.*—In addition to the agricultural return taken on 4th June, 1949, quarterly censuses were taken on 4th March, 3rd September and 3rd December, 1949. The December return included an additional panel for the purposes of the F.A.O. World Census, 1950.

*Return of livestock entering markets.*—From information received in 1949 from livestock auctioneers and from the Ministry of Food a statement was prepared showing the numbers of cattle, sheep and pigs entered for sale in Scotland during 1947 and 1948.

*Electricity and water supplies on agricultural holdings.*—A summary of the information collected in September, 1948, was circulated and published in September, 1949.

*Deer forest returns* were issued to the proprietors of deer forests to obtain particulars of the acreage of each forest and the numbers of cattle and sheep which each was carrying at 4th June, 1949.

*Return of varieties of potatoes.*—The collection of returns of acreages under the different varieties of potatoes in Scotland was undertaken, as in recent years, by the Ministry of Food and the results made available to the Department.

*Monthly agricultural reports* on the condition and prospects of crops and stock, forecast of yields, etc., based on returns received from the Department's crop reporters were issued throughout the year.

*Notes on trade.*—Weekly summaries were also issued of the prices of agricultural produce at certain representative Scottish markets, as returned by the Department's market reporters.

# APPENDIX 1.—LIST OF THE PRINCIPAL ACTS AND ORDERS MADE DURING 1949 WHICH AFFECT SCOTTISH AGRICULTURE

## Acts

Agricultural Holdings (Scotland) Act, 1949.  
Agricultural Marketing Act, 1949.  
Agricultural Wages (Scotland) Act, 1949.  
Agriculture (Miscellaneous Provisions) Act, 1949.  
Coast Protection Act, 1949.  
Expiring Laws Continuance Act, 1949.  
Docking and Nicking of Horses Act, 1949.  
Housing (Scotland) Act, 1949.  
Milk (Special Designations) Act, 1949.  
Prevention of Damage by Pests Act, 1949.  
Slaughter of Animals (Scotland) Act, 1949.  
Water (Scotland) Act, 1949.

## Orders in Council

Summer Time Order, 1949. S.I. 1949 No. 373.  
Transfer of Functions (Food and Drugs) (Scotland) Order, 1949. S.I. 1949 No. 1047 (S.68).

## Orders made by the Secretary of State<sup>1</sup>

Agriculture (Artificial Insemination) (Financial Matters) (Scotland) Regulations, 1949. S.I. 1949 No. 1319 (S.93).  
Agriculture (Maximum Area of Pasture) (Scotland) Order, 1949. S.I. 1949 No. 2371 (S.163).  
Agriculture (Scotland) Regulations, 1949. S.I. 1949 No. 2425 (S.164).  
Agricultural Marketing (Committee of Investigation) Regulations, 1949. S.I. 1949 No. 2452.  
Agricultural Marketing (Public Inquiry) Rules, 1949. S.I. 1949 No. 2094.  
Crop Acreage Payments (Scotland) Order, 1949. S.I. 1949 No. 1457 (S.101).  
Calf Rearing Subsidy (Scotland) Scheme, 1949. S.I. 1949 No. 2238 (S.152).  
Calf Rearing Subsidy Scheme (Extension and Payment) (Scotland) Order, 1949. S.I. 1949 No. 2442 (S.166).  
Claims for Depreciation of Land Values (Scotland) (Amendment) Regulations, 1949. S.I. 1949 No. 1193 (S.76).  
Claims for Depreciation of Land Values (Mineral Undertakings) (Scotland) Regulations, 1949. S.I. 1949 No. 1194 (S.77).  
Compulsory Purchase of Land (Scotland) Regulations, 1949. S.I. 1949 No. 1888 (S.126).  
Farm Machinery (Control of Manufacture and Supply) Order, 1946 (Revocation) Order, 1949. S.I. 1949 No. 1023.  
Grass and Forage Crop Co-operative Drying (Financial Assistance) (Scotland) Scheme, 1949. S.I. 1949 No. 1366 (S.95).  
Grass and Forage Crop Drying (Loans) (Scotland) Scheme, 1949. S.I. 1949 No. 1468 (S.103).  
Grass and Forage Crop Co-operative Drying (Financial Assistance) (Scotland) (No. 2) Scheme, 1949. S.I. 1949 No. 2319 (S.158).  
Grass Seed (Growers' Fixed Prices) (Scotland) Order, 1949. S.I. 1949 No. 1000 (S.66).  
Hill Farming Improvements Order, 1949. S.I. 1949 No. 548.  
Hill Farming Improvements (Piers, etc.) Order, 1949. S.I. 1949 No. 2169.  
Hill Sheep Subsidy Payment (Scotland) Order, 1949. S.I. 1949 No. 244 (S.13).  
Home Grown Wool Order, 1949. S.I. 1949 No. 710.  
Improvement of Livestock (Licensing of Boars) (Scotland) Regulations, 1949. S.I. 1949 No. 1912 (S.132).  
Importation of Raw Cherries (Scotland) Order, 1949. S.I. 1949 No. 825 (S.44).  
Importation of Plants (Amendment) (Scotland) Order, 1949. S.I. 1949 No. 1860 (S.122).  
Importation of Forest Trees (Prohibition) (Scotland) Order, 1949. S.I. 1949 No. 1861 (S.123).  
Landholders and Cottars (Building Grant) (Scotland) Regulations, 1949. S.I. 1949 No. 946 (S.56).  
Landlord and Tenant (Rent Control) (Scotland) Regulations, 1949. S.I. 1949 No. 1257 (S.90).

<sup>1</sup> Includes Orders made by the Secretary of State in conjunction with other Ministers.



Licensing of Boars (Application to Scotland) Order, 1949. S.I. 1949 No. 1191 (S.131).  
Lochmaddy Pier Order, 1949. S.I. 1949 No. 1516 (S.107).  
Marginal Agricultural Production (Scotland) Scheme, 1949. S.I. 1949 No. 610 (S.32).  
Milk (Special Designations) (Scotland) (Amendment) Order, 1949. S.I. 1949 No. 1856 (S.121).  
Potato Marketing Scheme, 1933 (Modification and Suspension) (Amendment) Order, 1949.  
S.I. 1949 No. 1259.  
Straw (Revocation) Order, 1949. S.I. 1949 No. 308.  
Sugar Industry (Provision for Research and Education in the Growing of Sugar Beet in Great Britain) Order, 1949. S.I. 1949 No. 1081.  
Threshing of Grain (Amendment) (Scotland) Order, 1949. S.I. 1949 No. 1408 (S.97).  
Town and Country Planning (General Development) (Scotland) (Amendment) Order, 1949.  
S.I. 1949 No. 779 (S.42).  
Wheat Commission (Scales of Allowances) Regulations, 1949. S.I. 1949 No. 729.

#### Orders made by other Ministers

##### *Grains and pulses*

Barley (Great Britain and Northern Ireland) (Amendment) Order, 1949. S.I. 1949 No. 502.  
Barley (Great Britain) Order, 1949. S.I. 1949 No. 1185.  
Pearl Barley (Revocation) Order, 1949. S.I. 1949 No. 2407.  
Oats (Great Britain) (Amendment) Order, 1949. S.I. 1949 No. 1162.  
Oats (Great Britain) (Amendment No. 2) Order, 1949. S.I. 1949 No. 2038.  
Oat Products (Revocation) Order, 1949. S.I. 1949 No. 2027.  
Wheat (Great Britain) Order, 1949. S.I. 1949 No. 1164.  
Rye (Great Britain) Order, 1949. S.I. 1949 No. 1192.  
Rye (Great Britain and Northern Ireland) (Amendment) Order, 1949. S.I. 1949 No. 1743.  
Dredge Corn (Great Britain and Northern Ireland) (Amendment) Order, 1949. S.I. 1949  
No. 503.  
Dredge Corn (Great Britain) Order, 1949. S.I. 1949 No. 1191.  
Home Grown Grains (Sack Charges) Order, 1949. S.I. 1949 No. 1395.  
Pulse (Amendment) Order, 1949. S.I. 1949 No. 1525.  
Beans and Peas (Sack Charges) (Amendment) Order, 1949. S.I. 1949 No. 1166.

##### *Potatoes*

Potatoes (General Provisions) (Amendment) Order, 1949. S.I. 1949 No. 1019.  
Seed Potatoes (1949 Crop) Order, 1949. S.I. 1949 No. 1722.  
Seed Potatoes (Export) (Charges) Order, 1948 (Revocation) Order, 1949. S.I. 1949 No. 1698.  
Ware Potatoes (1948 Crop) (Amendment No. 2) Order, 1949. S.I. 1949 No. 407.  
New Potatoes (1949 Crop) Order, 1949. S.I. 1949 No. 1020.  
Ware Potatoes (1949 Crop) (No. 1) Order, 1949. S.I. 1949 No. 1459.  
Ware Potatoes (1949 Crop) (No. 2) Order, 1949. S.I. 1949 No. 1818.  
Ware Potatoes (Amendment) Order, 1949. S.I. 1949 No. 2134.  
Ware Potatoes (Amendment No. 2) Order, 1949. S.I. 1949 No. 2436.  
Ware Potatoes (1949 Crop) (Restrictions on Sales) Order, 1949. S.I. 1949 No. 1723.  
Ware Potatoes (Restrictions on Sales) (Revocation) Order, 1949. S.I. 1949 No. 2273.  
Stockfeed Potatoes (Amendment) Order, 1949. S.I. 1949 No. 2345.

##### *Fruit and Vegetables*

Carrots (Amendment) Order, 1949. S.I. 1949 No. 473.  
Carrots (Revocation) Order, 1949. S.I. 1949 No. 1298.  
Carrots Order, 1949. S.I. 1949 No. 1978.  
Home Grown Apples (Revocation) Order, 1949. S.I. 1949 No. 1415.  
Home Grown Apples Order, 1949. S.I. 1949 No. 2085.  
Home Grown Apples (Amendment) Order, 1949. S.I. 1949 No. 2439.  
Pears (Amendment) Order, 1949. S.I. 1949 No. 1012.  
Pears (Revocation) Order, 1949. S.I. 1949 No. 1555.  
Soft Fruit and Root Vegetables (Revocation) Order, 1949. S.I. 1949 No. 252.  
Fresh Fruit and Vegetables (Restriction on Dealing) (Revocation) Order, 1949. S.I. 1949  
No. 2437.

##### *Feeding-stuffs*

Feeding Stuffs (Prices) Order, 1949. S.I. 1949 No. 500.  
Feeding Stuffs (Prices) (Amendment) Order, 1949. S.I. 1949 No. 1160.  
Feeding Stuffs (Prices) (Amendment No. 2) Order, 1949. S.I. 1949 No. 1388.  
Feeding Stuffs (Prices) (Amendment No. 3) Order, 1949. S.I. 1949 No. 1963.  
Feeding Stuffs (Prices) (Amendment No. 4) Order, 1949. S.I. 1949 No. 2009.

Feeding Stuffs (Manufacture) Order, 1949. S.I. 1949 No. 1067.  
Feeding Stuffs (Rationing) Order, 1949. S.I. 1949 No. 1584.  
Feeding Stuffs (Rationing) (General Licence) Order, 1949. S.I. 1949 No. 2260.  
Hay (Revocation) Order, 1949. S.I. 1949 No. 1022.  
Kitchen Waste Order, 1949. S.I. 1949 No. 748.

#### *Livestock and livestock products*

Livestock (Sales) Order, 1949. S.I. 1949 No. 1253.  
Live Poultry (Regulation of Sales, Exhibitions and Movements) (Amendment) Order, 1949. S.I. 1949 No. 108.  
Live Poultry (Regulation of Sales, Exhibitions and Movements) (Amendment) (No. 2) Order, 1949. S.I. 1949 No. 255.  
Live Poultry (Regulation of Sales, Exhibitions and Movements) Order, 1949. S.I. 1949 No. 1335.  
Movement of Live Poultry from Orkney Islands (Prohibition) Order, 1949. S.I. 1949 No. 1690.  
Movement of Poultry Carcasses from Orkney Islands (Regulation) Order, 1949. S.I. 1949 No. 1731.  
Movement of Poultry Carcasses from Orkney Islands (Revocation) Order, 1949. S.I. 1949 No. 2117.  
Movement of Live Poultry from Orkney Islands (Revocation) Order, 1949. S.I. 1949 No. 2428.  
Rabbits and Hares (Amendment) Order, 1949. S.I. 1949 No. 55.  
Rabbits and Hares (Amendment No. 2) Order, 1949. S.I. 1949 No. 1254.  
Eggs (Great Britain) (Amendment) Order, 1949. S.I. 1949 No. 272.  
Eggs (Great Britain) Order, 1949. S.I. 1949 No. 612.  
Eggs (Great Britain and Northern Ireland) (Amendment) Order, 1949. S.I. 1949 No. 1377.  
Eggs (Great Britain) (Amendment No. 2) Order, 1949. S.I. 1949 No. 1748.  
Eggs (Great Britain) (Amendment No. 3) Order, 1949. S.I. 1949 No. 1937.

#### *Miscellaneous*

Control of Flax (Various Orders) (Revocation) Order, 1949. S.I. 1949 No. 2194.  
Control of Fertilisers (Revocation) Order, 1949. S.I. 1949 No. 98.  
Fertilisers (Prices) (Amendment No. 2) Order, 1949. S.I. 1949 No. 1136.  
Control of Binder Twine (Revocation) Order, 1949. S.I. 1949 No. 1143.  
Control of Building Operations (No. 13) Order, 1949. S.I. 1949 No. 1102.  
Control of Building Operations (No. 14) Order, 1949. S.I. 1949 No. 2278.  
Motor Vehicles (Construction and Use) (Amendment) Regulations, 1949. S.I. 1949 No. 887.  
Use of Vehicles during Harvesting Order, 1949. S.I. 1949 No. 932.  
Mechanically Propelled Vehicles (Termination of Emergency Provisions) Order, 1949. S.I. 1949 No. 1237.  
Agricultural Goods Vehicles (Temporary Relief from Duty) Order, 1949. S.I. 1949 No. 1249.  
Control of Engagement (Amendment) Order, 1949. S.I. 1949 No. 2251.  
Poison Rules, 1949. S.I. 1949 No. 539.

#### **Order made by the Scottish Land Court**

Scottish Land Court (Exchequer Fees) (Amendment) Rules, 1949. S.I. 1949 No. 144 (S.10).

## Appendix 2

### Prices of agricultural produce

	Unit	1948/49		1949/50		1950/51	
		s.	d.	s.	d.	s.	d.
<b>CROPS :</b>							
Wheat :							
Millable <sup>1</sup> .. .. .	Per cwt.	23	0	23	3	28	0
Acreage payment (on first 10 acres)	Per acre.	60	0	60	0	—	
Barley :							
Malting (maximum price) .. ..	Per cwt.	30	0	30	3	— <sup>2</sup>	
Milling (minimum price) .. ..	"	23	0	23	3	—	
Feeding (maximum price) .. ..	"	—		19	9	21	6 <sup>3</sup>
Oats : <sup>1</sup>							
Milling (maximum price) .. ..	"	20	6	20	9	21	6
Feeding :							
Maximum price .. .. .	"	20	3	20	6	21	3
Minimum price .. .. .	"	18	7	18	10	19	4
Rye :							
Fixed price .. .. .	"	23	0	23	3	23	5 <sup>4</sup>
Acreage payment (on first 10 acres)	Per acre.	60	0	60	0	60	0
Sugar beet (15.5% sugar content) ..	Per ton.	103	4	105	1	105	4
Potatoes :							
Main Crop <sup>5</sup> .. .. .	"	175	0	181	9	185	0
Acreage payment :							
On first 10 acres .. .. .	Per acre.	240	0	240	0	} 200	0 <sup>6</sup>
On area in excess of 10 acres ..	"	160	0	160	0		
<b>LIVESTOCK AND LIVESTOCK PRODUCTS.</b>							
Fat cattle (steers, heifers and cow-heifers) .. .. .	Per live cwt.	98	3	102	9	—	
Fat sheep (first grade) .. .. .	Per lb. dead weight.	2	1½	2	2	—	
Fat lambs (average of first and second grades) .. .. .	"	2	3	2	3½	—	
Fat pigs (standard weight range of clean pigs) .. .. .	Per score dead weight.	36	0	42	9	—	
Milk <sup>7</sup> .. .. .	Per gallon.	2	6	2	8½	—	
Eggs <sup>1</sup> .. .. .	Per dozen.	4	0	4	1	—	

<sup>1</sup> Average annual price.

<sup>2</sup> A maximum malting price for barley has not been fixed. The position will be reviewed early in 1950 and a further announcement made.

<sup>3</sup> Fixed price. The guarantee will operate in 1950/51 at this price; previously it operated at the minimum milling price.

<sup>4</sup> Minimum price.

<sup>5</sup> Average annual price of King Edward and Majestic varieties at selected markets.

<sup>6</sup> On total acreage.

<sup>7</sup> Average pool price plus quality premiums and temporary bonus.

## Appendix 3

### Land managed or farmed by the Department of Agriculture

At 31st December, 1949

Acres

	Total managed	Farmed <sup>1</sup>
Total .. .. .	849,608	168,920
Land vested in the Secretary of State .. ..	464,588	25,906
Forestry Commission land .. .. .	220,831	51,375
Requisitioned properties .. .. .	121,987	55,387
Other land .. .. .	42,202	36,252

<sup>1</sup> Also included in "total managed."

## Appendix 4

TABLE 1.—Grants paid for agricultural drainage<sup>1</sup>

Year ended 31st December, 1949

	Grants paid	Amount of grants paid			Area improved		
		Total	Hill land	Arable land	Total	Hill land	Arable land
	Number	£			Acres		
Total .. .. .	4,042	255,732	47,573	208,159	256,917	200,304	56,613
Aberdeen .. .. .	651	18,314	17	18,297	6,790	42	6,748
Angus .. .. .	115	12,286	1,593	10,693	11,558	9,066	2,492
Argyll .. .. .	178	14,195	6,766	7,429	30,038	27,268	2,770
Ayr .. .. .	282	29,963	5,463	24,500	19,592	17,728	1,864
Banff .. .. .	130	6,767	—	6,767	2,768	—	2,768
Berwick .. .. .	85	7,306	818	6,488	4,892	3,205	1,687
Bute .. .. .	28	2,262	28	2,234	193	11	182
Caithness .. .. .	149	4,066	1,939	2,127	12,321	10,762	1,559
Clackmannan .. .. .	11	3,891	—	3,891	658	—	658
Dumfries .. .. .	243	18,821	7,008	11,813	25,298	23,397	1,901
Dunbarton .. .. .	68	5,298	796	4,502	2,441	1,838	603
East Lothian .. .. .	42	6,383	329	6,054	2,009	1,065	944
Fife .. .. .	148	9,670	44	9,626	3,396	400	2,996
Inverness .. .. .	108	5,939	947	4,992	8,395	6,725	1,670
Kincardine .. .. .	142	6,355	272	6,083	3,492	630	2,862
Kinross .. .. .	32	1,728	—	1,728	483	—	483
Kirkcudbright .. .. .	141	8,316	2,721	5,595	6,490	5,308	1,182
Lanark .. .. .	225	17,138	1,727	15,411	9,073	7,035	2,038
Midlothian .. .. .	67	5,245	895	4,350	2,674	1,670	1,004
Moray .. .. .	97	4,047	78	3,969	2,820	400	2,420
Nairn .. .. .	30	877	—	877	524	—	524
Orkney .. .. .	68	833	40	793	545	58	487
Peebles .. .. .	40	3,842	1,105	2,737	7,159	6,465	694
Perth .. .. .	293	23,392	3,663	19,729	32,600	24,878	7,722
Renfrew .. .. .	88	5,693	1,415	4,278	2,992	2,448	544
Ross .. .. .	161	7,771	433	7,338	5,669	1,830	3,839
Roxburgh .. .. .	96	6,072	3,450	2,622	17,132	16,084	1,048
Selkirk .. .. .	43	2,367	1,539	828	8,394	7,965	429
Stirling .. .. .	96	6,072	1,210	4,862	4,525	3,420	1,105
Sutherland .. .. .	41	2,991	2,715	276	19,146	19,020	126
West Lothian .. .. .	34	1,714	—	1,714	569	—	569
Wigtown .. .. .	98	5,945	410	5,535	1,919	1,265	654
Zetland .. .. .	12	173	152	21	362	321	41

<sup>1</sup> The Agriculture Act, 1937.

TABLE 2.—Hill Farming Act, 1946. Proposals for improvement schemes analysed by counties

At 31st December, 1949

	Proposals received	Proposals rejected	"Live" schemes (approved or still to be examined)			
			Schemes	Farms concerned	Area involved	Estimated cost
			Number			Acres
Total .. ..	914	183	731	1,073	2,444,200	2,714,965
Argyll area .. ..						
Argyll (Mainland)	73	7	66	103	202,600	209,227
Argyll (Islands) ..	27	7	20	30	64,000	79,874
Border area .. ..						
Berwick .. ..	18	7	11	12	25,200	73,961
Peebles .. ..	33	5	28	34	87,000	101,548
Roxburgh .. ..	35	4	31	38	56,600	93,902
Selkirk .. ..	32	4	28	33	58,400	109,512
Central area .. ..						
Clackmannan .. ..	1	—	1	1	3,000	3,250
Perth (West) .. ..	27	1	26	37	152,300	156,333
Stirling .. ..	15	3	12	16	25,600	44,116
Clyde area .. ..						
Bute (Bute and Cumbraes) .. ..	—	—	—	—	—	—
Dunbarton .. ..	7	2	5	5	4,900	16,256
Lanark .. ..	48	4	44	47	70,500	108,172
Renfrew .. ..	6	2	4	4	2,800	10,685
Eastern area .. ..						
Angus .. ..	15	1	14	33	43,700	82,492
Fife .. ..	10	5	5	7	3,400	12,190
Kinross .. ..	3	1	2	2	2,200	11,089
Perth (East) .. ..	34	4	30	53	147,600	233,924
Highland area .. ..						
Inverness (Main- land) .. ..	67	8	59	95	421,000	334,327
Inverness (Islands)	44	13	31	41	111,500	56,364
Moray .. ..	11	6	5	5	5,200	3,027
Nairn .. ..	1	—	1	2	4,800	1,022
Ross & Cromarty (Mainland) .. ..	33	5	28	74	233,500	76,192
Ross & Cromarty (Islands) .. ..	13	9	4	8	11,900	11,730
Lothian area .. ..						
East Lothian .. ..	13	3	10	10	18,000	20,186
Midlothian .. ..	21	3	18	23	30,500	49,853
West Lothian .. ..	—	—	—	—	—	—
North eastern area .. ..						
Aberdeen .. ..	10	6	4	15	21,800	60,400
Banff .. ..	6	5	1	3	1,200	932
Kincardine .. ..	1	1	—	—	—	—
Northern area .. ..						
Caithness .. ..	23	11	12	23	93,100	58,574
Orkney .. ..	12	12	—	—	—	—
Sutherland .. ..	28	4	24	47	189,700	48,280
Zetland .. ..	22	12	10	30	18,400	11,759
South western area .. ..						
Ayr .. ..	67	10	57	77	109,700	188,835
Bute (Arran) .. ..	7	6	1	1	7,300	1,990
Wigtown .. ..	10	1	9	12	14,000	8,918
Southern area .. ..						
Dumfries .. ..	69	3	66	76	117,100	279,801
Kirkcudbright .. ..	72	8	64	76	85,700	156,244

TABLE 3.—Hill Farming Act, 1946. Estimated cost of "live" schemes analysed by nature of work proposed

At 31st December, 1949

	Estimated cost	Percentage of total cost
	£	
Total .. .. .	2,714,965	100.0
Buildings :		
Total .. .. .	1,022,551	37.7
Farm buildings .. .. .	362,775	13.4
Farm houses .. .. .	175,185	6.5
Farm cottages .. .. .	484,591	17.8
Roads and bridges .. .. .	227,246	8.4
Water supplies .. .. .	49,482	1.8
Electricity .. .. .	126,481	4.6
Dipping, etc., accommodation .. .. .	90,945	3.4
Silos .. .. .	3,020	0.1
Fencing .. .. .	381,725	14.0
Grids .. .. .	4,260	0.2
Drainage .. .. .	214,532	7.9
Reclamation of wasteland .. .. .	4,156	0.2
Shelter belts .. .. .	84,099	3.1
Liming .. .. .	139,380	5.2
Manuring .. .. .	63,742	2.3
Re-seeding .. .. .	112,064	4.1
Removal of bracken, etc. .. .. .	73,420	2.7
Muirburn .. .. .	14,234	0.5
Machinery and implements .. .. .	5,151	0.2
Pest destruction .. .. .	5,015	0.2
Miscellaneous .. .. .	11,265	0.4
Unspecified .. .. .	82,197	3.0

TABLE 4.—Scheme for the destruction of bracken

Year ended 31st December, 1949

	Applica- tions approved	Applica- tions effective <sup>1</sup>	Claims out- standing	Claims paid	Claims paid			
					Area cut		Cost of work	Grant paid
					First cut	Second cut		
					Number			
Total .. ..	465	362	95	267	25,551	13,707	21,334	10,667
Angus .. ..	7	7	—	7	220	220	210	105
Argyll .. ..	144	113	20	93	6,530	3,477	6,008	3,004
Ayr .. ..	12	11	3	8	443	301	406	203
Berwick .. ..	4	2	—	2	68	20	60	30
Bute .. ..	5	3	—	3	136	80	132	66
Clackmannan .. ..	3	2	—	2	230	—	114	57
Dumfries .. ..	41	31	12	19	2,101	1,188	1,384	692
Dunbarton .. ..	9	8	1	7	496	356	440	220
East and West Lothian .. ..	7	5	—	5	138	128	152	76
Fife .. ..	1	1	—	1	10	10	22	11
Inverness .. ..	10	6	1	5	112	38	126	63
Kincardine .. ..	1	1	—	1	480	160	400	200
Kirkcudbright .. ..	64	51	23	28	2,429	1,501	1,598	799
Lanark .. ..	7	4	1	3	341	101	206	103
Midlothian .. ..	3	3	1	2	94	—	94	47
Moray .. ..	4	4	2	2	98	98	160	80
Nairn .. ..	1	1	—	1	8	8	6	3
Peebles .. ..	14	13	4	9	1,071	343	960	480
Perth .. ..	50	40	6	34	7,083	4,252	6,526	3,263
Renfrew .. ..	2	2	1	1	7	7	10	5
Ross .. ..	9	5	3	2	60	60	30	15
Roxburgh .. ..	16	12	3	9	1,418	630	772	386
Selkirk .. ..	15	12	3	9	630	352	454	227
Stirling .. ..	17	12	6	6	842	107	670	335
Sutherland .. ..	11	9	3	6	290	214	226	113
Wigtown .. ..	8	4	2	2	216	56	168	84

<sup>1</sup> For various reasons, applicants cannot always carry out approved proposals.

## Appendix 5

TABLE 1.—Schemes for the inspection of growing crops of seed potatoes

Year ended 31st December, 1949

Acres

	Total area inspected	Certificate granted				No Grade <sup>6</sup>
		Stock seed <sup>1</sup>	"A" certificate <sup>2</sup>	"H" certificate <sup>3</sup>	Grade B report <sup>4</sup>	
All varieties .. ..	106,763	11,720	71,681	16,551	721	6,090
Immune varieties.						
Total .. ..	86,013	7,620	57,062	15,606	605	5,120
Majestic .. ..	28,476	1,537	17,812	7,508	104	1,515
Home Guard .. ..	11,153	1,462	8,569	709	70	343
Arran Pilot .. ..	10,124	588	8,033	1,032	48	423
Kerr's Pink .. ..	8,333	1,261	5,468	1,247	40	317
Redskin .. ..	6,112	159	3,140	1,904	205	704
Gladstone .. ..	5,594	579	3,777	710	49	479
Arran Banner .. ..	3,984	460	2,469	730	22	303
Great Scot .. ..	3,804	269	2,677	452	24	382
Arran Peak .. ..	1,999	368	1,274	254	18	85
Doon Star .. ..	1,230	15	709	349	—	157
Craig's Defiance .. ..	645	95	480	49	5	16
Arran Consul .. ..	565	31	271	153	—	110
Golden Wonder .. ..	548	88	263	128	1	68
Ulster Chieftain .. ..	516	158	312	40	3	3
Record .. ..	504	78	300	68	—	58
Dunbar Standard .. ..	397	52	237	71	—	37
Dunbar Rover .. ..	392	97	179	78	4	34
Dr. McIntosh .. ..	327	124	172	23	—	8
Vanguard .. ..	305	25	219	19	—	42
Stormont Dawn .. ..	217	1	187	15	—	14
Catriona .. ..	171	30	125	10	—	6
Di Vernon .. ..	103	2	94	4	3	—
Conference .. ..	85	65	19	—	—	1
Dunbar Yeoman .. ..	81	—	64	8	9	—
Arran Viking .. ..	70	—	57	6	—	7
Ballydoon .. ..	58	22	35	—	—	1
King George .. ..	44	8	33	3	—	—
Arran Comrade .. ..	29	3	25	1	—	—
Craig's Royal .. ..	25	21	4	—	—	—
Arran Victory .. ..	19	3	10	4	—	2
Ben Lomond .. ..	17	—	11	6	—	—
Craig's Snow-White .. ..	7	7	—	—	—	—
Orion .. ..	2	—	—	—	—	—
Others .. ..	77	10	37	25	—	5
Non-immune varieties.						
Total .. ..	20,750	4,100	14,619	945	116	970
King Edward .. ..	7,070	1,905	4,773	87	8	297
Epicure .. ..	5,608	930	4,187	76	73	342
Eclipse .. ..	2,129	327	1,468	180	1	153
Sharpe's Express .. ..	1,323	122	958	188	12	43
Up-to-date .. ..	1,276	105	1,039	78	2	52
Red King Edward .. ..	1,081	387	682	—	—	12
Duke of York .. ..	990	268	602	84	7	29
Arran Chief .. ..	704	—	562	122	5	15
British Queen .. ..	204	26	141	19	6	12
Ninetyfold .. ..	169	28	136	—	2	3
Royal Kidney .. ..	141	—	34	107	—	—
May Queen .. ..	41	2	29	2	—	8
Others .. ..	14	—	8	2	—	4

For Footnote see page 88



TABLE 2.—Schemes for the inspection of growing crops of soft fruit and shallots

Year ended 31st December

	Stocks inspected		Quantity	
	1949	1948	1949	1948
	Number		Acres	
<b>Shallots.</b>				
Stocks entered .. .. .	34	17	6.97	3.23
Stocks certified .. .. .	27	13	3.81	2.20
Stocks rejected .. .. .	7	4	3.16	1.03
<b>Strawberries.</b>				
Stocks entered .. .. .	286 <sup>1</sup>	411 <sup>2</sup>	171.91	216.57
Stocks certified :				
Total .. .. .	212	242	123.96	114.61
Standard (S) .. .. .	162	168	79.85	82.76
Stock runner (SR) .. .. .	46	74	41.46	31.85
Special stock runner (SSR) .. .. .	4	—	2.65	—
Stocks rejected .. .. .	63	128	42.19	79.84
Stocks passed for re-inspection .. .. .	11	41	5.76	22.12
<b>Raspberries.</b>				
Stocks entered .. .. .	83	77	177.28	142.86
Stocks certified :				
Total .. .. .	68	48	148.79	85.48
Standard (S) .. .. .	45	23	117.62	49.31
Stock cane (SC) .. .. .	22	25	30.42	36.17
Special stock cane (SSC) .. .. .	1	—	0.75	—
Stocks rejected .. .. .	15	29	28.49	57.38
<b>Blackcurrants.</b>				
Stocks entered .. .. .	313	250	376,270	232,334
Stocks certified .. .. .	264	202	362,446	214,297
Stocks rejected .. .. .	49	48	13,824	18,037

<sup>1</sup> Includes 21 stocks passed in 1948 for re-inspection in 1949.<sup>2</sup> Includes 18 stocks passed in 1947 for re-inspection in 1948.

## Footnote to Table 1 Appendix 5

<sup>1</sup> *S.S.(Scot.)* and *S.S.(Scot.) N.I.*—Crops which have been found in the growing state to be 99.95 per cent. pure and true to type (i.e. containing not more than 0.05 per cent. of rogues, including undesirable variations and bolters); to contain not more than (a) four plants per acre Leafroll, Severe Mosaic and Wildings, or (b) 0.25 per cent. Mild Mosaic, or (c) 0.1 per cent. semi-bolters, or (d) 5.0 per cent. Blackleg, and to be free from visible infestation with Potato Root Eelworm.

<sup>2</sup> *A.(Scot.)* and *A.(Scot.) N.I.*—Crops which have been found in the growing state to be true to type containing not more than 1.0 per cent. undesirable variations or 1.0 per cent. bolters; to attain a standard of purity of not less than 99.5 per cent.; to contain not more than (a) 2.0 per cent. in all of the diseases of Leafroll and Severe Mosaic and Wildings, or (b) 10.0 per cent. Mild Mosaic, or (c) 0.5 per cent. Leafroll, Severe Mosaic and Wildings, or (d) 10.0 per cent. Blackleg, and to be free from visible infestation with Potato Root Eelworm.

<sup>3</sup> *H.(Scot.)* and *H.(Scot.) N.I.*—Crops which have been found in the growing state to be true to type (containing not more than 5.0 per cent. undesirable variations or 5.0 per cent. bolters); to attain a standard of purity of not less than 99.5 per cent.; to contain not more than (a) 2.0 per cent. in all of the diseases of Leafroll and Severe Mosaic and Wildings, or (b) 10.0 per cent. Mild Mosaic, or (c) 10.0 per cent. Blackleg, and to be free from visible infestation with Potato Root Eelworm.

<sup>4</sup> *Grade B.*—Crops which have been found in the growing state to attain a standard of purity of less than 99.5 per cent. but not less than 97.0 per cent.; to contain not more than (a) 2.0 per cent. in all of the diseases of Leafroll and Severe Mosaic and Wildings, or (b) 10.0 per cent. Mild Mosaic, or (c) 5.0 per cent. undesirable variations, or (d) 5.0 per cent. bolters, or (e) 10.0 per cent. Blackleg and to be free from visible infestation of Potato Root Eelworm.

<sup>5</sup> *No grade.*—Crops which have been found in the growing state to attain a standard of purity of less than 97.0 per cent. or which contain more than (a) 2.0 per cent. of the diseases of Leafroll and Severe Mosaic and Wildings, or (b) 10.0 per cent. Mild Mosaic, or (c) 5.0 per cent. undesirable variations, or (d) 5.0 per cent. bolters, or (e) 10.0 per cent. Blackleg, or any crop which is not free from visible infestation with Potato Root Eelworm.

## Appendix 6

Certificates issued for the export of plants, etc., and seed potatoes

*Year ended 31st December, 1949*

*Number*

	Plants, etc.	Seed potatoes
Total .. .. .	370	390
Europe :		
Total .. .. .	281	79
Irish Republic .. .. .	249	—
Spain .. .. .	2	41
Channel Islands .. .. .	1	25
Other European countries .. .. .	29	13
Africa :		
Total .. .. .	27	287
South Africa .. .. .	7	231
Rhodesia .. .. .	5	36
Other African countries .. .. .	15	20
America :		
Total .. .. .	35	10
North America .. .. .	26	3
Central and South America .. .. .	9	7
Asia .. .. .	14	14
New Zealand .. .. .	13	—

## Appendix 7

TABLE 1.—Horse Breeding Acts, 1918 and 1948—licensing of stallions

*Year ended 31st December, 1949*

*Number*

	Applications received	Licences granted
Total .. .. .	270	251 <sup>1</sup>
Clydesdale .. .. .	168	154 <sup>1</sup>
Arab .. .. .	7	7
Hackney .. .. .	17	16
Highland .. .. .	29	27
Percheron .. .. .	7	6
Shetland Pony .. .. .	18	18
Suffolk .. .. .	1	—
Thoroughbred .. .. .	3	3
Non-Pedigree .. .. .	20	20

<sup>1</sup> Plus 1 permit.

Appendix 7

TABLE 2.—Improvement of Livestock (Licensing of Bulls) Act, 1931—bull licensing

Year ended 31st December, 1949

Number

	Bulls licensed	Bulls rejected
Total .. .. .	8,236	402
Aberdeen Angus .. .. .	1,216	50
Ayrshire .. .. .	5,309	223
British Friesian .. .. .	467	18
Galloway .. .. .	237	27
Guernsey .. .. .	11	—
Highland .. .. .	88	9
Jersey .. .. .	29	2
Hereford .. .. .	12	2
Red Poll .. .. .	16	1
Shetland .. .. .	12	—
Dairy Shorthorn .. .. .	<del>8732</del>	<del>48</del>
Beef Shorthorn .. .. .	<del>807</del>	<del>49</del>
Cross-bred .. .. .	—	13



TABLE 4.—Scheme for the improvement of cattle—“ premium ” bulls

Year ended 31st December, 1949

	Bulls						Committees and Societies to whom grants were offered	Cows served	Amount of grants paid £
	Total	Aberdeen Angus	Shorthorn	Ayrshire	Shetland	Highland			
	Number								
Total .. ..	536	411	113	7	4	1	317	27,610	15,535
Aberdeen .. ..	130	117	13	—	—	—	57	6,385	3,934
Angus .. .. .	13	11	2	—	—	—	3	522	420
Argyll .. .. .	9	—	5	4	—	—	8	536	179
Ayr .. .. .	1	—	—	1	—	—	1	38	52
Banff .. .. .	64	57	7	—	—	—	24	3,193	1,890
Bute .. .. .	1	—	—	1	—	—	1	95	22
Caithness .. .	58	46	12	—	—	—	51	3,055	1,518
Dumfries .. .	1	—	1	—	—	—	1	28	32
Inverness .. .	23	16	6	—	—	1	23	1,120	704
Kincardine ..	17	15	2	—	—	—	3	749	409
Moray .. .. .	29	24	5	—	—	—	7	1,316	967
Nairn .. .. .	2	2	—	—	—	—	2	82	60
Orkney .. .. .	109	68	41	—	—	—	69	6,186	3,224
Perth .. .. .	11	9	2	—	—	—	10	400	330
Ross .. .. .	29	22	6	1	—	—	25	1,543	856
Stirling .. ..	1	—	1	—	—	—	1	65	38
Sutherland ..	23	18	5	—	—	—	18	1,296	619
Zetland .. ..	15	6	5	—	4	—	13	1,001	281

TABLE 5.—Schemes for the improvement of sheep

Year ended 31st December, 1949

Number

	Scheme I				Scheme II				
	Committees supplied	Rams supplied by the Department			Committees supplied	Rams hired by committees from farmers			
		Total	Blackfaced	Cheviot		Total	Blackfaced	Cheviot	Border-Leicester
Total .. ..	159	1,050	643	407	64	457	19	434	4
Argyll .. ..	12	42	41	1	—	—	—	—	—
Caithness .. ..	2	3	—	3	2	5	—	1	4
Inverness :									
Mainland .. ..	17	204	178	26	1	4	—	4	—
Skye .. ..	59	393	257	136	4	18	14	4	—
North Uist .. ..	1	7	7	—	—	—	—	—	—
South Uist .. ..	3	11	11	—	—	—	—	—	—
Barra .. ..	2	5	5	—	—	—	—	—	—
Ross :									
Mainland .. ..	38	254	128	126	4	18	5	13	—
Sutherland .. ..	20	116	16	100	53	412	—	412	—
Zetland .. ..	5	15	—	15	—	—	—	—	—

TABLE 6.—Boars licensed or rejected  
Year ended 31st December, 1949

Number

	Licensed	Rejected
Total .. .. .	1,098	124
Large White .. .. .	883	101
Large Black .. .. .	90	10
Essex .. .. .	14	1
Wessex .. .. .	103	8
Tamworth .. .. .	8	—
Cross-bred .. .. .	—	4

TABLE 7.—Scheme for the encouragement of pig-breeding—premium boars  
Year ended 31st December, 1949

	Societies or individuals providing boars	Boars		Sows served	Grants paid		Total amount paid
		Large White	Large Black		First year	Second year	
		Number				£	
Total .. .. .	32	47	2	1,579	34	15	572
Aberdeen .. .. .	13	19	1	657	15	5	251
Angus .. .. .	2	3	1	108	2	2	39
Banff .. .. .	8	14	—	502	9	5	159
Caithness .. .. .	3	3	—	91	1	2	20
Dumfries .. .. .	1	1	—	18	1	—	10
Kincardine .. .. .	2	4	—	94	4	—	54
Orkney .. .. .	2	2	—	71	1	1	24
Wigtownshire .. .. .	1	1	—	38	1	—	15

TABLE 8.—Scheme for the encouragement of goat breeding  
Year ending 31st March, 1950

	Applications approved	Grants offered
	Number	£
Total .. .. .	16	132
Aberdeen .. .. .	1	6
Angus .. .. .	1	10
Argyll .. .. .	2	20
Ayr .. .. .	1	6
Banff .. .. .	1	10
Caithness .. .. .	1	6
Dunbarton .. .. .	1	10
Kirkcudbright .. .. .	1	10
Lanark .. .. .	1	6
Moray .. .. .	1	10
Renfrew .. .. .	1	6
Ross .. .. .	1	6
Stirling .. .. .	1	10
West Lothian .. .. .	1	10
Zetland .. .. .	1	6

TABLE 9.—Scheme for assisting local agricultural shows

Year ended 31st December, 1949

	Shows assisted	Grants paid <sup>1</sup>			
		Total	General prize fund	Special prizes	Equipment
	Number	£			
Total .. ..	33	828	378	344	106
Aberdeen .. ..	2	60	25	15	20
Angus .. ..	1	40	—	13	27
Argyll .. ..	7	166	72	85	9
Bute .. ..	1	28	17	11	—
Caithness .. ..	2	46	15	16	15
Fife .. ..	1	2	—	2	—
Inverness .. ..	5	236	125	91	20
Kincardine .. ..	1	9	5	4	—
Kirkcudbright .. ..	1	8	—	8	—
Moray .. ..	1	28	21	7	—
Orkney .. ..	6	95	42	46	7
Ross .. ..	1	9	5	4	—
Sutherland .. ..	1	39	20	11	8
West Lothian .. ..	1	18	—	18	—
Zetland .. ..	2	44	31	13	—

<sup>1</sup> In addition, special grants amounting to £105 were also paid. These were (a) a grant of £35 for the best kept smallholding, and (b) a grant of £70 to the Royal Highland and Agricultural Society for prizes for Highland ponies and goats at the Royal Highland Show.

TABLE 10.—Highland and Islands Veterinary Service Scheme

Year ended 31st December, 1949

	Veterinary surgeons	Grants paid
	Number	£
Total .. ..	23	8,869
Argyll .. ..	6	1,470
Caithness .. ..	2	500
Inverness .. ..	7	3,204
Orkney .. ..	1	395
Perth .. ..	1	350
Ross and Cromarty .. ..	3	1,500
Sutherland .. ..	2	950
Zetland .. ..	1	500



## Appendix 8

**TABLE 1.—Live stock recommended for export or import**  
*Year ended 31st December, 1949*

	Export		Import	
	Number	Value	Number	Value
		£		£
Cattle .. .. .	566	168,125	1	189
Sheep .. .. .	294	9,506	—	—
Horses .. .. .	67	6,464	1	300
Pigs .. .. .	127	4,867	6	—
Poultry .. .. .	264	1,668	1	13

*Appendix 8*

**TABLE 2.—Exports of Scottish live stock, 1946 to 1949**

	Number				Value			
	1946	1947	1948	1949	1946	1947	1948	1949
	£							
Total .. .. .	889	1,035	1,172	1,318	156,707	204,100	230,516	190,630
America :								
Total .. .. .	416	529	791	689	105,414	148,407	169,702	125,221
Canada .. .. .	157	103	259	284	19,964	18,639	44,502	38,240
U.S.A. .. .. .	132	207	387	161	36,670	34,589	27,225	34,405
S. America (exclud- ing Argentine) ..	85	4	—	167	44,542	3,800	—	2,989
Argentine .. .. .	42	215	145	77	4,238	91,379	97,975	49,587
Australia .. .. .	29	51	17	64	7,559	19,010	10,074	18,964
New Zealand .. .. .	13	50	78	46	7,475	3,258	12,684	10,341
Africa .. .. .	150	136	142	85	17,063	18,068	28,758	19,685
Europe .. .. .	269	231	124	344	18,545	9,681	3,998	13,339
Other destinations ..	12	38	20	90	651	5,676	5,300	3,080

**Appendix 9**  
**Agricultural Water Supplies Scheme**  
*Year ended 31st December, 1949*

	Applications approved		Grants paid	
	Number	£	Number	£
Total .. .. .	1,176	129,760	853	94,960
Aberdeen .. .. .	248	36,478	163	21,629
Angus .. .. .	82	7,322	63	5,853
Argyll .. .. .	16	2,454	13	1,328
Ayr .. .. .	107	8,053	102	8,845
Banff .. .. .	55	7,445	40	5,822
Berwick .. .. .	21	4,286	20	3,360
Bute .. .. .	—	—	2	77
Caithness .. .. .	21	3,065	20	1,511
Clackmannan .. .. .	1	25	2	492
Dumfries .. .. .	37	1,699	30	2,319
Dunbarton .. .. .	11	534	5	256
East Lothian .. .. .	22	2,748	7	896
Fife .. .. .	54	3,328	33	3,651
Inverness .. .. .	35	2,204	25	3,795
Kincardine .. .. .	27	5,567	26	4,217
Kinross .. .. .	9	1,310	9	1,583
Kirkcudbright .. .. .	45	3,224	24	2,493
Lanark .. .. .	38	2,970	26	2,530
Midlothian .. .. .	12	689	11	479
Moray .. .. .	31	2,927	28	2,323
Nairn .. .. .	8	1,056	5	589
Orkney .. .. .	66	4,002	25	1,889
Peebles .. .. .	5	667	5	413
Perth .. .. .	54	3,663	57	7,424
Renfrew .. .. .	7	1,102	6	578
Ross .. .. .	31	5,496	19	2,502
Roxburgh .. .. .	33	7,037	13	2,182
Selkirk .. .. .	—	—	2	286
Stirling .. .. .	23	1,614	23	1,103
Sutherland .. .. .	15	1,305	17	1,411
West Lothian .. .. .	15	1,231	5	885
Wigtown .. .. .	39	5,595	19	1,670
Zetland .. .. .	8	664	8	569

## Appendix 10

### Grants offered by the Department in aid of Public Works in the Congested Districts

Year ended 31st December, 1949

	Estimated cost	Assistance offered by Department
	£	
<b>Total</b> .. .. .	140,527	104,022
<i>Roads, paths and bridges.</i>		
<b>Total</b> .. .. .	87,997	58,926
<b>Argyll :</b>		
Lussagiven-Ardlussa Road, Jura <sup>1</sup> ..	4,730	3,548
Knockkrome-Ardfernal Road, Jura ..	1,809	1,357
1 Road in Ardnamurchan .. .. .	900	675
<b>Inverness :</b>		
Maaruig Road, Harris .. .. .	7,500	5,625
2 Paths in Harris .. .. .	1,800	1,350
1 Road in Barra .. .. .	370	278
<b>Orkney :</b>		
5 Township Roads <sup>2</sup> .. .. .	4,825	3,619
<b>Ross and Cromarty :</b>		
Ardross Mains Road .. .. .	6,017	4,513
5 other roads on Mainland .. .. .	12,168	9,127
2 Township Roads in Lewis .. .. .	7,026	5,270
<b>Sutherland :</b>		
Rhiconich to Loch Clash Road <sup>3</sup> ..	14,150	3,538 (25%)
5 Township Roads <sup>1</sup> .. .. .	8,232	6,174
5 Township Roads <sup>4</sup> .. .. .	13,520	10,140
<b>Zetland :</b>		
7 Township Roads .. .. .	4,950	3,712
<i>Marine works.</i>		
<b>Total</b> .. .. .	52,530	45,096
<b>Argyll :</b>		
Mingary Pier, Ardnamurchan (crane and landing ramp) .. .. .	703	527
Gigha Pier (immediate repairs) ..	1,700	1,275
Arinagour Pier, Coll (crane) .. ..	400	200 (50%)
<b>Caithness :</b>		
Dunbeath Harbour and Retaining Wall <sup>1</sup>	6,392	4,794
<b>Inverness :</b>		
Armadaile Pier, Skye (preliminary re- pairs) .. .. .	1,609	1,609 (100%)
Castlebay Pier, Barra (store waiting rooms and offices) <sup>1</sup> .. .. .	3,250	2,438
Raasay Pier .. .. .	9,500	7,125
Loan .. .. .	—	1,425 (15%)
Saltavaig Jetty, South Uist .. .. .	450	338
Petersport Pier, Benbecula .. .. .	732	549
<b>Ross :</b>		
Portmahomack Harbour .. .. .	1,325	994
<b>Zetland :</b>		
Linkshouse Pier, Yell <sup>1</sup> .. .. .	26,469	19,852
Loan .. .. .	—	3,970 (15%)

Revised offer of grant (made in 1948) owing to increase in estimated cost.

<sup>1</sup> Includes increased offer for one road for which grant was offered in 1948.

<sup>2</sup> In supplement of Ministry of Transport grant of 50 per cent.

<sup>4</sup> Grant offered (£720) for one road subsequently cancelled at County Council request.

## Appendix 11

**TABLE 1.—Grants and loans approved for building purposes**  
*Year ended 31st December, 1949*

	Grants		Loans		Purpose		
	Number	Estimated Amount	Number	Estimated Amount	New House	House Improvement	New Steading
		£		£			
Total .. ..	48	22,010	49	19,458	49	6	1
Argyll .. ..	1	70	2	120	—	1	1
Inverness :							
Total .. ..	8	3,406	5	1,706	7	1	—
Skye .. ..	5	2,075	2	375	4	1	—
Harris .. ..	1	500	1	500	1	—	—
South Uist ..	2	831	2	831	2	—	—
Ross & Cromarty:							
Lewis .. ..	36	17,750	41	17,332	41	2	—
Sutherland ..	2	284	—	—	—	2	—
Zetland .. ..	1	500	1	300	1	—	—

**TABLE 2.—Proceeds from the sale of building materials**  
*Year ended 31st December, 1949.*

	Total sales	Cash sales	Credit sales <sup>1</sup>
	£		
Total .. .. .	77,152	54,429	22,723
At rural housing stores :			
Total .. .. .	51,698	37,298	14,400
Broadford, Skye .. .. .	5,109	4,869	240
Uig, Skye .. .. .	3,727	3,340	387
Tarbert, Harris .. .. .	6,100	5,054	1,046
Carlway, Lewis .. .. .	6,875	2,995	3,880
Cross, Lewis .. .. .	4,792	3,585	1,207
Stornoway, Lewis .. .. .	25,095	17,455	7,640
Through head office .. .. .	25,454	17,131	8,323

<sup>1</sup> i.e. Advances against building loans.

## Appendix 12

**TABLE 1.—Courses undertaken by students at agricultural colleges during 1948/49 and enrolments for 1949/50**

*Academic year ended 30th September, 1949*

*Number*

	Students in attendance 1948/49				Enrolments to beginning of spring term, 1949/50			
	Total	East	West	North	Total	East	West	North
<b>COLLEGE COURSES :</b>								
<b>Diploma courses—</b>								
Total .. .. .	362	99	192	71	312	103	141	68
Agriculture .. .. .	249	44	134	71	195	44	83	68
Dairying .. .. .	49	17	32	—	39	17	22	—
Dairy technology .. .. .	6	—	6	—	13	—	13	—
Poultry-keeping .. .. .	4	—	4	—	3	—	3	—
Horticulture .. .. .	32	20	12	—	32	19	13	—
Agriculture and dairying .. .. .	18	18	—	—	23	23	—	—
Dairying and poultry-keeping .. .. .	4	—	4	—	7	—	7	—
<b>Other courses—</b>								
Planters' course .. .. .	29	—	—	29	28	—	—	28
Certificate course in agriculture .. .. .	32	—	—	32	16	—	—	16
Farmers' course .. .. .	52	—	52	—	51	—	51	—
Other day courses (special short courses, etc.) .. .. .	39	34	2	3	38	34	—	4
Potato classes .. .. .	365	220	62	83	—	—	—	—
Evening classes .. .. .	826	296	393	137	766	354	377	35
<b>COURSES GIVEN TO POST-GRADUATE STUDENTS :</b>								
Ph.D. and Diploma in Agricultural Science .. .. .	6	6	—	—	5	5	—	—
<b>COURSES GIVEN TO DEGREE STUDENTS :</b>								
Total .. .. .	278	129	89	60	192	60	78	54
B.Sc. Agriculture .. .. .	213	64	89	60	162	30	78	54
B.Sc. Pure Science (Bacteriology) .. .. .	30	30	—	—	—	—	—	—
B.Sc. Forestry (Forest Chemistry) .. .. .	35	35	—	—	30	30	—	—

TABLE 2.—Students attending additional courses at Aberdeen, Auchincruive and Edinburgh

<i>Academic year ended 30th September, 1949</i>		<i>Number</i>
		Students
<b>ABERDEEN (CRAIBSTONE) :</b>		
Total .. .. .		105
Rural domestic economy (two courses) .. .. .		70
Bee keeping .. .. .		17
Short course :		
Crops and grassland .. .. .		18
<b>AUCHINCUIVE :</b>		
Total .. .. .		216
Dairying (courses I and II) .. .. .		35
Poultry keeping (junior, senior and advanced courses) .. .. .		22
Short courses :		
Bee keeping .. .. .		42
Milk recorders (four courses) .. .. .		72
Farm dairying .. .. .		11
Poultry keeping .. .. .		6
Grain merchants (1 week course) .. .. .		14
Farmers (4 week course) .. .. .		14
<b>EDINBURGH :</b>		
Special course for bacteriologists .. .. .		8

TABLE 3.—Agricultural Colleges—Advisory work

<i>Academic year ended 30th September, 1949</i>		<i>Number</i>		
		Edinburgh and East of Scotland College of Agriculture	West of Scotland Agricultural College	North of Scotland College of Agriculture
<b>SYSTEMATIC COURSES :</b>				
Courses .. .. .		82	36	13
Meetings .. .. .		712	468	111
Attendances .. .. .		13,262	15,400	2,655
<b>LECTURES AND DEMONSTRATIONS :</b>				
Centres .. .. .		286	324	784
Meetings .. .. .		348	693	1,857
Attendances .. .. .		14,915	27,562	57,769
<b>EXPERIMENTS :</b>				
Centres .. .. .		166	121	317
Experiments .. .. .		187	119	447
ADVISORY VISITS .. .. .		12,171	19,016	23,281

## Appendix 13

Animal Feeding Stuffs Rationing Scheme—amount of feeding stuffs issued

Year ended 31st December, 1949

Thousand cwts.

	Total for year	January to April	May to September <sup>1</sup>	October to December <sup>2</sup>
Total .. .. .	9,236	3,110	2,943	3,183
Dairy cows .. .. .	2,872	1,070	743	1,059
Calves .. .. .	1,136	273	249	614
Calfing cows and heifers .. .. .	497	25	463	9
Pigs and poultry :				
Total .. .. .	3,677	1,167	1,308	1,202
Basic issue .. .. .	2,919	994	1,024	901
Bonus issue .. .. .	407	63	129	215
Other issues .. .. .	351	110	155	86
Other live stock .. .. .	438	165	76	197
Miscellaneous issues .. .. .	616	410	104	102

<sup>1</sup> May to August for pigs and poultry.

<sup>2</sup> September to December for pigs and poultry.

## Appendix 14

Distribution of imported machinery

Year ended 31st December, 1949

Number

	On quota	Outwith quota
<i>Crawler tractors.</i>		
Class III : International TD 14 .. .. .	—	1
Class IV : Allis Chalmers HD 5 .. .. .	4	—
Caterpillar D 4 .. .. .	6	16 <sup>1</sup>
International TD 9 .. .. .	1	6 <sup>2</sup>
Class V : Caterpillar D 2 .. .. .	10	15 <sup>3</sup>
International TD 6 .. .. .	16	4
Cletrac ADH .. .. .	1	—
Cletrac HG 42 .. .. .	2	—
Caterpillar R 4 .. .. .	—	1
<i>High-power wheeled tractors.<sup>4</sup></i>		
Standard : Allis Chalmers U .. .. .	2	—
Case "Dex" .. .. .	1	—
International W 6 .. .. .	1	—
Rowcrop : Case DC 4 .. .. .	38	—
Oliver 80 .. .. .	1	—
<i>Binders.</i>		
Massey-Harris and International .. .. .	264	—
<i>Combined harvesters.</i>		
Massey-Harris (12ft.), International, John Deere, Allis Chalmers and Cockshutt .. .. .	42	—
<i>Pick-up balers.</i>		
International 50 T .. .. .	42	—
New Holland .. .. .	33	—
Allis-Chalmers .. .. .	12	—
<i>Drills.</i>		
Massey Harris .. .. .	161	—

<sup>1</sup> Includes five reconditioned machines.

<sup>2</sup> Includes one reconditioned machine.

<sup>3</sup> Includes five second hand machines.

<sup>4</sup> Figures are for the period ended 31st May, 1949.

## Appendix 15

**TABLE 1.—Headquarters organisation of the Department of Agriculture for Scotland**

*At 31st December, 1949*

Secretary .. .. .	..	..	..	..	..	Sir Patrick R. Laird, C.B., F.R.S.F.
Deputy Secretary .. .. .	..	..	..	..	..	A. Glen, C.B., M.C.
Private Secretary to Secretary .. .. .	..	..	..	..	..	E. M. Dishington

### DIVISION A

(Price Policy, Statistics, Economics, Marketing and Subsidies)

L. G. Davidson—Assistant Secretary

Price Policy and Marketing Branch I and						
Statistics .. .. .	..	..	..	..	..	G. Wilkie, Principal
Price Policy and Marketing Branch II .. .. .	..	..	..	..	..	E. E. Hunter, Principal
Subsidies Branch .. .. .	..	..	..	..	..	J. Lawless, Principal

### DIVISION B

(Establishment)

E. H. Lyon—Assistant Secretary and Establishment Officer

Establishment Branch I .. .. .	..	..	..	..	..	H. M. Ritchie, Principal (Assistant Establishment Officer)
Establishment Branch II .. .. .	..	..	..	..	..	C. G. Donald, Chief Executive Officer (Controller of Office Services)

### DIVISION C

(Land Cultivation)

W. Bakel—Assistant Secretary

Land Cultivation Branch I .. .. .	..	..	..	..	..	R. C. Tucker, Principal
Land Cultivation Branch II .. .. .	..	..	..	..	..	W. B. Niven, Principal
Land Cultivation Branch III .. .. .	..	..	..	..	..	H. Ross, Senior Executive Officer

### DIVISION D

(Land Settlement, Estate Management, Land Utilisation and Rural Development)

M. Campbell—Assistant Secretary

Land Settlement, etc., Branch .. .. .	..	..	..	..	..	J. R. B. Cassie, M.C., Chief Settlement Officer
Land Utilisation and Rural Development						
Branch .. .. .	..	..	..	..	..	W. M. Ramsay, Principal

### DIVISION E

(Labour and Hill Farming Improvement)

R. G. C. Nisbet, M.B.E., M.S.M.—Assistant Secretary

Labour Branch I .. .. .	..	..	..	..	..	W. Duncan, Principal
Labour Branch II .. .. .	..	..	..	..	..	R. Mackinnon, O.B.E., Principal
Hill Farming Improvement Branch .. .. .	..	..	..	..	..	J. Cumming, Principal

### DIVISION F

(Education, Research and Publicity)

W. H. Senior, F.R.S.E.—Assistant Secretary

Education and Publicity Branch .. .. .	..	..	..	..	..	G. F. Porthouse, Principal
Research Branch .. .. .	..	..	..	..	..	D. Edwards, Principal

### DIVISION G

(Horticulture, Supplies and Pests)

J. R. McCallum, M.C.—Assistant Secretary

Supplies Branch I .. .. .	..	..	..	..	..	G. Page, Principal
Supplies Branch II .. .. .	..	..	..	..	..	A. J. McLelland, Principal
Horticulture, Seeds and Pests Branch .. .. .	..	..	..	..	..	J. W. Reid, Principal



## DIVISION H

(Live Stock and Land Improvement)

G. D. Sharman—Assistant Secretary

Live Stock Improvement Branch .. .. G. A. Macleod, Principal  
Land Improvement Branch .. .. S. M. Ward, Principal

## DIVISION I

(Finance)

R. G. Hattle—Finance Officer and Accountant

Finance Branch I .. .. J. Stewart, Deputy Finance Officer and  
Accountant  
Finance Branch II .. .. J. I. Logan, Assistant Finance Officer and  
Accountant

## LIAISON STAFF (LONDON)<sup>1</sup>

H. Crow, O.B.E. .. .. Principal Assistant Secretary  
W. Ness .. .. Principal  
R. A. Fasken .. .. Temporary Higher Executive Officer

## ENGINEERING, ARCHITECTURAL AND SURVEYING SERVICES

Chief Engineer, Architect and Surveyor .. A. G. Ingham, O.B.E., M.I.C.E., F.R.I.C.S.,  
M.R.San.I.  
Deputy Chief Engineer .. .. A. Scott, M.I.C.E.  
Deputy Chief Architects and Surveyors .. W. F. Lownie, F.F.A.S.  
T. Henderson, A.R.I.C.S., M.Inst.R.A.  
D. S. MacPhail, A.R.I.B.A., M.S.A.

## LANDS TECHNICAL SERVICE

Chief Lands Officer .. .. T. B. Manson, O.B.E., B.Sc.(Agr.), N.D.A.  
(Hons), F.R.I.C.S.  
Divisional Lands Officers .. .. A. F. Wilson, O.B.E., C.D.A.  
M. A. M. Dickie, O.B.E., M.A., B.Sc.(Agr.)  
A. Paton, B.Sc.(Agr.), N.D.A., N.D.D.

## INSPECTORATE

Chief Inspector .. .. J. A. Symon, D.S.O., O.B.E., T.D., M.A.,  
B.Sc.(Agr.)  
Deputy Chief Inspector (General Duties) .. A. S. Fortune, T.D., B.Sc.(Agr.)  
Deputy Chief Inspector (Live Stock) .. A. J. Bean, B.Sc.(Agr.)

## OTHER SERVICES

Technical Development Officer .. .. A. R. Wannop, O.B.E., B.Sc.(Agr.), B.Eng.  
Advisory Officer in Agricultural Economics .. H. Whitby, B.Sc.(Agr.)  
Senior Principal Scientific Officer : Director  
of the Seed Testing and Plant Registra-  
tion Station and Plant Pathology and  
Entomology Services .. .. T. P. McIntosh, B.Sc., Ph.D.  
Principal Scientific Officer (Food Infestation  
Control) .. .. D. W. Williams, B.Sc., M.Sc., Ph.D.  
Chief Labour Officer .. .. J. White, C.D.A.  
Senior Machinery Officer .. .. J. F. Yuille  
Senior Pests Officer .. .. A. D. Campbell  
Marketing Officer .. .. A. F. Smith, M.B.E., N.D.A., N.D.D., C.D.D.

<sup>1</sup> At Fielden House, 10 Great College Street, London, S.W.1.

TABLE 2.—Regional organisation of the Department of Agriculture for Scotland

At 31st December, 1949

	Counties	Area Office	Local Offices
Argyll area ..	Argyll.	Oban.	Campbeitown, Bridgend (Islay), Lochgilphead.
Border area ..	Berwick, Peebles, Roxburgh, Selkirk.	Edinburgh.	Hawick, Lauder, Peebles, Selkirk.
Central area ..	Clackmannan, Perth (West), Stirling.	Stirling.	—
Clyde area ..	Bute (excluding Arran), Dunbarton, Lanark, Renfrew.	Glasgow.	Lanark, Rothesay.
Eastern area ..	Angus, Fife, Kinross, Perth (East).	Dundee.	Cupar, Dunfermline, Forfar, Perth.
Highland area ..	Inverness, Moray, Nairn, Ross and Cromarty.	Inverness.	Benbecula, Dingwall, Elgin, Lochmaddy (N. Uist), Nairn, Portree (Skye), Stornoway.
Lothians area ..	East Lothian, Midlothian, West Lothian.	Edinburgh.	—
North Eastern area	Aberdeen, Banff, Kincardine.	Aberdeen.	Aboyne, Keith, Maud, Turriff.
Northern area ..	Caithness, Orkney, Sutherland, Zetland.	Thurso.	Dornoch, Kirkwall, Lerwick.
South Western area	Ayr, Bute (Arran), Wigtown.	Ayr.	Dunragit, Stranraer.
Southern area. ..	Dumfries, Kirkcudbright.	Dumfries.	Castle Douglas.

TABLE 3.—Committees of the Department of Agriculture for Scotland

At 31st December, 1949

## Scottish Agricultural Advisory Council

Sir Patrick R. Laird, C.B., F.R.S.E. (*Chairman*)

Sir John Milne Home, D.L., J.P. ( <i>Vice-Chairman</i> )	Professor John Kirkwood, O.B.E.
Thomas Black, Esq.	John Mackie, Esq.
Joseph M. Budge, Esq., C.B.E.	David Marshall, Esq., M.C., M.A., B.L.
Joseph F. Duncan, Esq., LL.D.	J. Ure Primrose, Esq.
Thomas Elliot, Esq., O.B.E.	F. W. Roger, Esq.
The Rt. Hon. Lord Glentanar, D.L., J.P.	Sir George Wilson
J. E. Kerr, Esq., C.B.E.	W. J. Wright, Esq.
	<i>Assessor from the Agricultural Research Council</i>

## Technical Committee (Committee of Advisory Council)

Professor T. J. Mackie, C.B.E. (*Chairman*)

Professor T. L. Bywater  
D. P. Cuthbertson, Esq., D.Sc., M.D.(Hons.),  
F.R.S.E.  
J. F. Duncan, Esq., LL.D.  
A. W. Greenwood, Esq., D.Sc., Ph.D.,  
F.R.S.E.  
J. Russell Greig, Esq., C.B.E., Ph.D.,  
M.R.C.V.S., F.R.S.E.  
Professor John Kirkwood, O.B.E.  
D. N. McArthur, Esq., D.Sc., Ph.D., F.R.I.C.  
J. N. Ritchie, Esq., B.Sc., M.R.C.V.S.,  
D.V.S.M.  
W. Robb, Esq., N.D.A., F.R.S.E.  
J. A. Symon, Esq., D.S.O., O.B.E., T.D.,  
M.A., B.Sc.  
A. R. Wannop, Esq., O.B.E., B.Sc., B.Eng.  
Professor S. J. Watson, F.R.S.E.  
W. J. West, Esq., B.A.  
Professor R. G. White, C.B.E., F.R.S.E.  
Sir George Wilson  
N. C. Wright, Esq., M.A., Ph.D., D.Sc.  
W. J. Wright, Esq.  
*Assessor from the Agricultural Research  
Council*

## Grassland Committee (Sub-Committee of Technical Committee)

Professor T. L. Bywater (*Chairman*)

J. L. Dawson, Esq., B.Sc.  
J. W. Gregor, Esq., Ph.D., D.Sc., F.L.S.  
R. G. Heddle, Esq., M.A., B.Sc.  
W. Holmes, Esq., B.Sc., Ph.D.  
P. J. Jones, Esq., B.Sc.  
Sir James Denby Roberts, Bart., J.P.  
A. B. Stewart, Esq., M.A., B.Sc., Ph.D.,  
F.R.I.C.  
A. R. Wannop, Esq., O.B.E., B.Sc., B.Eng.

## Field Trials Committee (Sub-Committee of Technical Committee)

A. R. Wannop, Esq., O.B.E., B.Sc., B.Eng. (*Chairman*)

R. Bain, Esq., B.Sc.  
W. M. Findlay, Esq., M.B.E., B.Sc., N.D.A.  
P. J. Jones, Esq., B.Sc.  
W. Robb, Esq., N.D.A., F.R.S.E.  
A. B. Stewart, Esq., M.A., B.Sc., Ph.D.,  
F.R.I.C.  
A. S. B. Wilson, Esq., B.Sc.

## Fruit Trials Committee (Sub-Committee of Technical Committee)

A. R. Wannop, Esq., O.B.E., B.Sc., B.Eng. (*Chairman*)

H. F. Dovaston, Esq., B.Sc., Ph.D., F.R.H.S.  
J. W. Hall, Esq., N.D.H.  
R. E. Johnston, Esq., B.Sc., N.D.H.  
R. L. Scarlett, Esq., O.B.E.  
D. L. Storrie, Esq.  
G. M. Stuart, Esq., M.B.E., N.D.H.  
M. A. H. Tincker, Esq., M.A., D.Sc., F.L.S.  
J. H. Warnock, Esq.

## Artificial Insemination Investigation Committee

(Sub-Committee of Technical Committee)

W. J. Wright, Esq. (*Chairman*)

H. P. Donald, Esq., D.Sc., F.R.S.E.  
J. N. Ritchie, Esq., B.Sc., M.R.C.V.S.,  
D.V.S.M.  
A. R. Wannop, Esq., O.B.E., B.Sc., B.Eng.  
H. Whitby, Esq., B.Sc.

## Hill Farm Research Committee (Committee of Advisory Council)

Professor T. J. Mackie, C.B.E. (*Chairman*)

J. V. Allen, Esq.  
Professor T. L. Bywater  
A. E. Cameron, Esq., M.A., D.Sc., F.R.S.E.  
Ian M. Campbell, Esq.  
Allan H. H. Fraser, Esq., M.D., B.Sc.  
J. W. Gregor, Esq., Ph.D., D.Sc., F.L.S.  
J. Russell Greig, Esq., C.B.E., Ph.D.,  
M.R.C.V.S., F.R.S.E.  
George Hedley, Esq.  
Professor John Kirkwood, O.B.E.  
Alastair McNaughton, Esq.  
A. McVicar, Esq., B.Sc., N.D.A., N.D.D.  
A. T. Phillipson, Esq., B.A., Ph.D.,  
M.R.C.V.S.  
Professor E. J. Roberts  
W. H. Senior, Esq., M.Sc., F.R.S.E.  
A. B. Stewart, Esq., M.A., B.Sc., Ph.D.,  
F.R.I.C.  
Professor J. Walton  
A. R. Wannop, Esq., O.B.E., B.Sc., B.Eng.  
Professor S. J. Watson, F.R.S.E.  
Professor R. W. Wheldon  
Professor R. G. White, C.B.E., F.R.S.E.

**Sugar Beet Research and Education Committee (Scottish Sub-Committee)**

Lt. Col. F. C. C. Balfour, C.I.E., C.B.E., M.C. (*Chairman*)

Lord Forbes  
A. Howie, Esq.  
J. McCloy, Esq.  
J. Provan, Esq.

F. W. Roger, Esq.  
O. S. Rose, Esq.  
F. W. Sutton, Esq.  
A. R. Wannop, Esq., O.B.E., B.Sc., B.Eng.

**Scottish Horticultural Advisory Committee**

R. L. Scarlett, Esq., O.B.E. (*Chairman*)

J. H. Alexander, Esq.  
Professor K. W. Braid  
A. E. Cameron, Esq., M.A., D.Sc., F.R.S.E.  
D. Carmichael, Esq.  
H. F. Dovaston, Esq., B.Sc., Ph.D., F.R.H.S.  
W. Fife, Esq.  
C. H. Gilchrist, Esq.  
W. Inverarity, Esq.  
David Lowe, Esq.

A. McCallum, Esq., O.B.E., M.A., LL.B.  
R. McIvor, Esq.  
J. Milne, Esq.  
R. W. Paine, Esq.  
W. Robertson, Esq.  
R. B. Stewart, Esq.  
G. M. Stuart, Esq., M.B.E., N.D.H.  
M. A. H. Tincker, Esq., M.A., D.Sc., F.L.S.  
Sir William Wright Smith

**Hill Farming Advisory Committee for Scotland**

W. T. Scott-Elliot, Esq., M.P. (*Chairman*)

W. H. Hamilton, Esq., W.S. (*Vice-Chairman*)  
John A. Cameron, Esq.  
Ian M. Campbell, Esq.  
David Dow, Esq.  
Captain T. Elliot, O.B.E.  
John Glendinning, Esq.  
J. Russell Greig, Esq., C.B.E., Ph.D.,  
M.R.C.V.S., F.R.S.E.

Colin MacDonald, Esq., O.B.E.  
David MacLennan, Esq., M.B.E.  
Alastair McNaughton, Esq.  
J. J. Paterson, Esq.  
J. Faed Sproat, Esq.  
D. M. Stewart, Esq.  
Professor S. J. Watson, F.R.S.E.

**Scottish Poultry Advisory Committee**

A. Glen, Esq., C.B., M.C. (*Chairman*)

Colonel E. W. S. Balfour, C.V.O., D.S.O.,  
O.B.E., M.C.  
T. Elliot, Esq.  
T. Haining, Esq.  
W. K. Leggat, Esq.  
Maitland Mackie, Esq.  
T. Milne, Esq., M.B.E., M.C.  
H. Morison, Esq.  
C. A. Munro, Esq.  
A. G. Norrie, Esq.

J. G. Penny, Esq., M.B.E.  
G. H. Tarbolton, Esq.  
R. G. Chalmers Watson, Esq.  
Sir George Wilson  
D. P. Wright, Esq.  
*Assessors from the Agricultural Research  
Council, the Department of Agriculture  
for Scotland, the Ministry of Agriculture  
and Fisheries and the West of Scotland  
Agricultural College*

**Supervisory Committee on Artificial Insemination of Live Stock**

W. J. Wright, Esq. (*Chairman*)

A. J. Bean, Esq., B.Sc.  
H. P. Donald, Esq., D.Sc., F.R.S.E.  
Principal A. A. Forsyth, M.R.C.V.S.,  
D.V.S.M.  
A. Gofton, Esq., F.R.C.V.S.  
Professor J. Gray, C.B.E., F.R.S.  
F. MacGillivray, Esq.

Professor W. M. Mitchell, M.C.  
J. Picken, Esq.  
J. N. Ritchie, Esq., B.Sc., M.R.C.V.S.,  
D.V.S.M.  
J. A. Symon, Esq., D.S.O., O.B.E., T.D.,  
M.A., B.Sc.  
W. Young, Esq.

**Scottish Agricultural Statistics Advisory Committee**

A. Glen, Esq., C.B., M.C. (*Chairman*)

J. F. Duncan, Esq., LL.D.  
J. G. Milne Home, Esq.  
Lt. Col. A. Mackenzie, D.S.O., D.L., J.P.

J. Rennie, Esq.  
A. R. Semple, Esq.

**Scottish Plant Registration Station—Standing Committee of Management**

**G. G. Mercer, Esq., C.B.E. (*Chairman*)**

David Bell, Esq.	Professor J. R. Matthews
Major R. F. Brebner, C.B.E.	F. G. Milne, Esq., M.B., Ch.B.
Professor K. W. Braid	W. Murray, Esq.
P. B. Burke, Esq.	J. W. Reid, Esq.
J. H. Elder, Esq., B.Sc.	W. Robb, Esq., N.D.A., F.R.S.E.
W. Fife, Esq.	R. L. Scarlett, Esq., O.B.E.
J. O. Gordon, Esq.	W. D. Simpson, Esq.
T. Hogg, Esq.	J. A. Symon, Esq., D.S.O., O.B.E., T.D., M.A., B.Sc.
R. Howie, Esq., B.Sc.	A. R. Wannop, Esq., O.B.E., B.Sc., B. Eng.
David Lowe, Esq.	A. S. B. Wilson, Esq., B.Sc.
J. R. McCallum, Esq., M.C.	J. Wither, Esq.
T. P. McIntosh, Esq., O.B.E., Ph.D., B.Sc.	

**Potato Registration Committee (Sub-Committee of Standing Committee of Management)**

**R. L. Scarlett, Esq., O.B.E. (*Convenor*)**

W. M. Findlay, Esq., M.B.E., B.Sc., N.D.A.	Sir James Denby Roberts, Bt., J.P.
A. A. McAlister, Esq.	G. M. Stuart, Esq., M.B.E., N.D.H.
T. P. McIntosh, Esq., O.B.E., Ph.D., B.Sc.	G. Samuel, Esq., M.Sc.

**Oats Sub-Committee (of Standing Committee of Management)**

**A. S. B. Wilson, Esq., B.Sc. (*Convenor*)**

J. H. Elder, Esq., B.Sc.	W. D. Simpson, Esq.
R. Howie, Esq., B.Sc.	J. Wither, Esq.
T. P. McIntosh, Esq., O.B.E., Ph.D., B.Sc.	W. Robb, Esq., N.D.A., F.R.S.E.
F. G. Milne, Esq., M.B., Ch.B.	

**Turnips and Grasses Sub-Committee (of Standing Committee of Management)**

**David Bell, Esq. (*Convenor*)**

Major R. F. Brebner, C.B.E.	David Lowe, Esq.
W. M. Findlay, Esq., M.B.E., B.Sc., N.D.A.	T. P. McIntosh, Esq., O.B.E., Ph.D., B.Sc.
R. G. Heddle, Esq., M.A., B.Sc.	G. G. Mercer, Esq., C.B.E.
P. J. Jones, Esq., B.Sc.	F. Mills, Esq., M.C., J.P.

**Scottish Standing Committee for the Calculation of the Residual Value of Fertilisers and Feeding Stuffs**

**D. N. McArthur, Esq., D.Sc., Ph.D., F.R.I.C. (*Chairman*)**

H. C. Falconer, Esq., O.B.E.	W. M. Robertson, Esq., F.R.I.C.S.
James Reid, Esq.	Professor S. J. Watson, F.R.S.E.

**Advisory Committee on Departmental Organisation**

**A. Glen, Esq., C.B., M.C. (*Chairman*)**

Howard Cunningham, Esq., C.B.E.	R. G. C. Nisbet, Esq., M.B.E., M.S.M.
A. F. Clark, Esq.	J. W. Foster, Esq.

# SCOTTISH AGRICULTURE

**A** JOURNAL for Farmers and all interested in Scottish Farming and Scottish Country Life with articles by Farmers, Scientists, Technicians and others. It keeps its readers in touch with the results of research, etc., regarding :—

Cropping and Cultivation  
Implements and Machinery  
Breeding, Feeding and  
Diseases of Farm Animals  
Management of Pastures  
Plant Breeding and Diseases  
Agricultural Economics

*Articles in recent issues have dealt with :—*

Virus-tested Potato Stocks  
Hill Cattle in the North  
Farming and Forestry  
National Policy Examined  
Fighting the Deluge—  
the Border Floods of August, 1948  
Developing Domestic Beef Production  
A Future in Pig Keeping

**Keep in touch with Farming Progress  
by ordering your copy now**

Published quarterly and obtainable from H.M. STATIONERY OFFICE from the addresses shewn on the back of this cover or through any bookseller.

Annual Subscription 4/6

Single Copies 1/- (1/2 post free)

**EDINBURGH: PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE.**

To be purchased directly from H.M. Stationery Office at the following addresses :

13a Castle Street, Edinburgh, 2 ; York House, Kingsway, London, W.C.2 ;

39 King Street, Manchester, 2 ; 2 Edmund Street, Birmingham, 3 ;

1 St. Andrew's Crescent, Cardiff ; Tower Lane, Bristol, 1 ;

80 Chichester Street, Belfast

OR THROUGH ANY BOOKSELLER

1950

Price 3s 0d net