

CHAPTER XXIII.

PASTORAL PRODUCTION.

NOTE.—Except where otherwise indicated, values of Australian oversea trade shown throughout this chapter are expressed as f.o.b., Australian currency, port of shipment.

§ 1. Initiation and Growth of Pastoral Industry.

1. **Livestock Numbers.**—A detailed account of the various enumerations of livestock in Australia made prior to 1860 was given in previous issues of the Year Book. Since 1860, annual enumerations have been made, based, with few exceptions, on actual collections made through the agency of the State Police or by post. Particulars concerning the numbers of each of the principal kinds of livestock in Australia at decennial intervals from that year to 1950, and from 1953 onwards in single years, are given in the following table, and are shown continuously on the graph on p. 931.

LIVESTOCK : AUSTRALIA.
(*000.)

Year.	Horses.	Cattle.	Sheep.	Pigs.	Year.	Horses.	Cattle.	Sheep.	Pigs.
1860 ..	432	3,958	20,135	351	1940 ..	1,699	13,080	119,305	1,455
1870 ..	717	4,276	41,594	543	1950 ..	1,057	14,640	112,891	1,123
1880 ..	1,069	7,527	62,184	816					
1890 ..	1,522	10,300	97,881	891	1953 ..	895	15,247	123,072	993
1900 ..	1,610	8,640	70,603	950	1954 ..	850	15,601	126,944	1,197
1910 ..	2,166	11,745	98,066	1,026	1955 ..	803	15,836	130,849	1,297
1920 ..	2,416	13,500	81,796	764	1956 ..	770	16,457	139,124	1,166
1930 ..	1,793	11,721	110,568	1,072	1957 ..	737	17,257	149,802	1,325

While livestock numbers (particularly sheep) have increased substantially since 1860, marked fluctuations have taken place during the period, mainly on account of droughts which have from time to time left their impress on the pastoral history of Australia. These occurred in 1868, 1877, 1883-4, 1892, 1893, 1895, 1901-2, 1912, 1914, 1918, 1919, 1922-23, 1925-26, 1927-28, 1929-30, 1940-41 and 1944-45 to 1946-47.

The years in which the numbers of livestock attained their maxima are as follows:—Horses 1918 (2,527,000); cattle, 1957 (17,257,000); sheep, 1957 (149,802,000); and pigs, 1941 (1,797,000).

The distribution throughout Australia of beef cattle, dairy cattle, sheep and pigs as at 31st March, 1955 was shown in the maps on pp. 909-12 of Official Year Book No. 43.

The numbers of horses, beef cattle and sheep in each State and Territory are shown later in this chapter; similar information for dairy cattle and pigs appears in Chapter XXIV.—Farmyard, Dairy and Bee Products.

2. **Minor Classes of Livestock.**—Statistics of the minor classes of livestock (goats, camels, mules, donkeys, etc.) have not been collected in recent years. The last year in which all States, other than Victoria, collected this information was 1941, when total numbers were as follows:—Goats, 80,366; camels, 2,267; and mules and donkeys, 10,881. Of these, goats were most numerous in Queensland, and camels, mules and donkeys in Western Australia. Further details have been published in earlier issues of the Official Year Book.

3. **Carrying Capacity of Pastoral Holdings.**—The carrying capacity of pastoral holdings has been increased in recent years by the succession of good seasons since 1946-47. Other important contributing factors have been the reduction of rabbit infestation by the introduction of myxomatosis, and increased attention to pasture improvement.

Since myxomatosis was first introduced in 1950 there has been a dramatic increase in the spread of the disease over much of Australia and in many areas the rabbit population is at the lowest level for many years.

Statistics of the area under sown grasses and clovers have been collected on a uniform basis in all States since 1952-53 only, but here also there are indications that the area sown has been considerably increased. In 1956-57, the area under sown grasses and clovers

(excluding native grasses) totalled 32.6 million acres, an increase of 4.2 million acres (15 per cent.) over 1955-56 and 11.5 million acres (55 per cent.) over 1952-53. In recent years, the sowing and top-dressing of pastures has been facilitated by the increasing use of aircraft in these operations, an area of 1.0 million acres being sown and/or top-dressed in the year ended March, 1957.

4. Value of Pastoral Production.—(i) *Gross, Local and Net Values, 1955-56.* Values of pastoral production for each State are shown for 1955-56 in the following table. Further details of the source of the information and an explanation of the terms used in this compilation will be found in Chapter XXX.—Miscellaneous. Maintenance costs have not been computed in all States and depreciation has not been deducted; consequently the net values are inflated to the extent of these costs.

GROSS, LOCAL AND NET VALUES OF PASTORAL PRODUCTION, 1955-56.
(£'000.)

State.	Gross Production Valued at Principal Markets.	Marketing Costs.	Gross Production Valued at Farm.	Farm Costs.		Net Value of Production. (a)
				Seed used, and Fodder for Farm Stock.	Value of other Materials used in Process of Production.	
New South Wales	185,617	13,146	172,471	5,861	(b) 3,323	163,287
Victoria ..	123,757	11,716	112,041	2,637	4,584	104,820
Queensland ..	96,833	6,789	90,044	3,944	1,769	84,331
South Australia ..	50,441	3,098	47,343	700	2,018	44,625
Western Australia	44,646	2,875	41,771	2,051	3,142	36,578
Tasmania ..	10,123	602	9,521	1,835	(b) 404	7,282
Northern Territory	3,626	561	3,065	..	..	3,065
Aus. Cap. Territory	923	61	862	10	42	810
Australia ..	515,966	38,848	477,118	17,038	15,282	444,798

(a) No deduction has been made for depreciation and maintenance. (b) No allowance has been made for costs of power, power kerosene, petrol and other oils.

(ii) *Net Values, 1934-35 to 1955-56.* The net value of pastoral production by States and the net value per head of population for the years 1951-52 to 1955-56 together with the average for the years 1934-35 to 1938-39 are shown below.

NET VALUE OF PASTORAL PRODUCTION.(a)

Year.	N.S.W. (b)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas. (b)	Australia.
NET VALUE. (£'000.)							
Average, 1934-35 to 1938-39 ..	30,592	16,784	13,384	4,583	4,307	1,429	71,079
1951-52 ..	154,386	99,808	67,080	38,965	34,442	5,812	400,493
1952-53 ..	206,872	108,459	82,442	49,918	38,642	7,412	493,745
1953-54 ..	202,439	108,930	81,989	47,423	43,784	7,151	491,716
1954-55 ..	175,446	112,196	82,180	45,220	36,194	7,647	c 461,464
1955-56 ..	163,287	104,820	84,331	44,625	36,578	7,282	c 444,798

For footnotes see following page.

NET VALUE OF PASTORAL PRODUCTION—*continued*.

Year.	N.S.W.(b)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.(b)	Australia.
NET VALUE PER HEAD OF POPULATION. (£ s. d.)							
Average, 1934-35 to 1938-39	11 8 0	9 1 3	13 11 10	7 15 6	9 9 2	6 2 7	10 8 8
1951-52 ..	46 12 4	43 4 4	54 2 1	52 8 5	58 7 9	19 16 3	47 3 8
1952-53 ..	61 9 1	45 14 5	64 16 0	65 2 5	63 4 6	24 10 0	56 16 2
1953-54 ..	59 8 11	44 19 2	63 0 11	60 6 9	69 8 5	23 2 2	55 10 7
1954-55 ..	50 14 4	45 1 10	62 0 1	56 0 0	55 15 6	24 8 8	50 15 4
1955-56 ..	46 6 7	40 17 4	62 6 11	53 9 6	54 13 6	22 16 3	47 14 11

(a) No deduction has been made for depreciation and maintenance. Excludes payments to wool-growers of profits from the war-time wool disposal plan. (b) No allowance has been made for costs of power, power kerosene, petrol and other oils. (c) Includes estimates for Northern Territory and Australian Capital Territory.

5. *Indexes of Quantum and Price of Pastoral Production, 1952-53 to 1956-57.*—The quantum indexes relate to gross output of farm products valued at constant prices. The quantities of each farm product produced each year have been re-valued at the unit gross value for the period 1936-37 to 1938-39. The price indexes relate to average "prices" of farm products realized in the principal markets of Australia. Average quantities of each product marketed in the period 1946-47 to 1950-51 have been used as fixed weights. For further details of the methods of calculating these indexes and of the weights used see Chapter XXX.—Miscellaneous.

INDEXES OF QUANTUM(a) AND PRICE OF PASTORAL PRODUCTION:
AUSTRALIA.

(Base: Average 3 years ended June, 1939 = 100.)

Particulars.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.(b)
<i>Quantum(a) produced—</i>					
Wool	131	128	132	146	164
Other products	119	117	120	123	114
<i>Total Pastoral</i>	126	123	127	136	142
<i>Total per Head of Population</i>	97	95	96	100	102
<i>Price—</i>					
Wool	623	621	540	468	607
Other products	389	401	409	424	410
<i>Total Pastoral</i>	531	534	489	451	529

(a) Index of value at constant prices, i.e., quantities revalued at average unit values of base years (1936-37 to 1938-39). (b) Subject to revision.

6. *Consumption of Meats.*—The quantity of meat (including cured and canned meat) in terms of carcass weight and edible offal available for consumption in Australia in 1956-57 was 1,001,781 tons. This is equivalent to 235.3 lb. per head compared with 231.6 lb. per head in 1955-56, and an average of 253.0 lb. during the years 1936-37 to 1938-39.

Although it is not easy to obtain strictly comparable particulars for other countries, it appears from data published by the Food and Agricultural Organization of the United Nations in its *Food Balance Sheets* that in recent years consumption of meat in Australia has been at approximately twice the level of that in Canada and about one and a half times the level of that in the United States of America.

7. *Marketing of Meat.*—(i) *General.* The Australian Meat Board, consisting of representatives of producers, processors, exporters and the Commonwealth Government, is responsible for the control of all exports of Australian meat and meat products. Further information on the powers, etc., conferred on the Board under the Meat Export Control Act 1935–1953 was given on p. 801 of Official Year Book No. 40.

(ii) *United Kingdom Long-term Purchase Agreements.* Details of the long-term meat contracts with the United Kingdom Government from the outbreak of the 1939–45 War up to 30th June, 1952 and of the Fifteen Year Meat Agreement (1952–67) were given on p. 710 of Official Year Book No. 41 and in earlier issues of the Year Book.

The Fifteen Year Meat Agreement (1952–67) between the United Kingdom and Australian Governments has as its objectives the promotion of meat production in Australia enabling increased exports to be made to the United Kingdom and the provision of a satisfactory market in the United Kingdom for that meat. It covers chilled and frozen beef, frozen veal, frozen mutton and lamb, frozen cattle and sheep sundries and edible offal.

(iii) *Cessation of Bulk Purchasing.* Following the announcement in September, 1953, that the United Kingdom Ministry of Food would cease bulk purchasing of meat, arrangements were made between the Australian Meat Board and the Ministry for the reversion to private trading in the United Kingdom. The main features of the arrangements are:—

(a) Mutton and lamb exported after 1st July, 1954, and beef, veal and pig meats exported after 1st October, 1954, direct to United Kingdom importers are to be sold on the open market under methods similar to those which applied pre-war.

(b) The following minimum prices, to operate until 30th September, 1955, were agreed upon:—Beef and veal, 13.18d. stg. f.o.b. per lb.; lamb, 13.61d. stg. f.o.b. per lb.; and mutton, 6.05d. stg. f.o.b. per lb. The minimum prices are to be reviewed for subsequent years.

(c) In the event of market prices for the various classifications of meat averaging below the minimum, the Ministry is to make a payment to the Australian Government corresponding to the amount of the deficiency. So as to determine the extent of any deficiency, a procedure designed to measure as accurately as possible the weighted average level of wholesale prices of Australian meat on the United Kingdom market has been agreed upon.

(iv) *Private Trading.* After eight months of open trading, the Board estimated that a deficiency payment would be received in respect of beef for the first year. In order to make arrangements for this anticipated deficiency to be passed on to the producer, the Meat Agreement (Deficiency Payments) Act was passed by the Commonwealth Government in May, 1955. Payments were to be made on the understanding that they were, or would be, reflected in the price paid to producers.

To make provision for recoupment by the Board of any overpayment, the Meat Export (Additional Charge) Act was also passed in May, 1955.

Negotiations were made in Australia during August and September, 1955, to review minimum prices and the working of the Agreement generally. The following minimum prices were fixed for the three years ended 30th September, 1958:—For beef and veal and lamb the same as for the year ended 30th September, 1955, and for mutton the average prices realized to the end of April, 1955, (approximately 5.8d. stg. per lb.). In addition, minimum beef and veal prices were fixed for the three years 1958–61 at 5 per cent. below those for the 1955–58 period. Under the terms of the Agreement, Australia will be entitled to export 10,000 tons of beef, veal, lamb and mutton to destinations other than the United Kingdom and the Colonies. Additional free quotas can be requested and sympathetic consideration can be expected for any such requests should depressed prices or other circumstances justify an approach of this kind.

Under this arrangement, for the year ended 30th September, 1956, an additional 5,000 tons of beef for export to any destination was agreed upon.

Because of a rise in beef prices in the United Kingdom, the deficiency payments made by the Board during the year ended 30th September, 1955, exceeded the sum received from the United Kingdom for the same period. In an endeavour to recoup some of this overpayment, under the terms of the Meat Export (Additional Charge) Act, a levy of one eighth of a penny per lb. was imposed on certain classes of beef exported to the United Kingdom out of stocks placed into store from 1st February to 16th April, 1956.

Since the beginning of the 1955–56 season on 1st October, 1955, beef prices in the United Kingdom have been consistently below the level of the guarantee and consequently Australia has “earned” regular deficiency payments. The rates of payment made by the Australian Meat Board during the 1954–55 and 1955–56 seasons were given on pp. 888–9 of Official Year Book No. 43. For the 1956–57 season the rate was 1½d. per lb. to the end of December. It was increased to 3d. per lb. for January and February, and was continued at this rate for bone-in beef right through 1957; the rate on bone-out beef however, was increased to 4d. per lb. from the beginning of March until the end of December, 1957. The Australian

Meat Board not only maintained bounty payments at these rates on beef placed into store for export to the United Kingdom during 1957, but commenced 1958 with sufficient funds in hand to continue bounty payments at the same basic rates for that year.

Deficiency payments received from the United Kingdom in 1954-55 were £150,000; in 1955-56 they were £3.25 million and in 1956-57, £5.93 million.

For 1958, a new "chiller" grade of export beef was introduced. Beef of the new grade, whether exported in the chilled or frozen form receives a bounty of 5d. per lb. The bounty on bone-out piece beef has been increased from 4d. to 5d. per lb., and on certain classes of bone-in piece beef from 3d. to 5d. per lb. The basic rate of 3d. per lb. has been maintained for other 1st and 2nd quality quarter beef.

In July and August, 1956, the annual review of the operation of the Agreement took place in London. It was agreed that Australia be entitled to export 15,000 tons of beef, veal, mutton and lamb to destinations other than the United Kingdom and Colonies during each of the meat years 1956-57 and 1957-58.

§ 2. Horses.

1. **Distribution throughout Australia.**—About 80 per cent. of the total number of horses in Australia are in the States of New South Wales, Queensland and Victoria. In the following table, figures are shown for each State and Territory for the years 1953 to 1957 in comparison with the average for the years 1935 to 1939:—

HORSES : NUMBER.
(‘000.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
Average, 1935 to 1939 ..	537	355	444	198	154	31	33	1	1,753
1953 ..	298	154	282	57	50	18	35	1	895
1954 ..	280	141	273	52	49	17	37	1	850
1955 ..	258	132	267	49	47	16	33	1	803
1956 ..	247	119	261	44	46	15	37	1	770
1957 ..	235	108	255	41	45	14	38	1	737

The number of horses in Australia attained its maximum during 1918, when a total of 2,527,149 was recorded. The United States of America recorded its highest number in the same year and Canada in 1921. The number in Australia has declined considerably since 1918 owing to the mechanization of transport and farming. During the period 1918 to 1957, the decrease in numbers has averaged 45,000 per annum.

A graph showing the number of horses in Australia from 1860 onwards appears on p. 931.

The percentage distribution of the number of horses in each State and Territory for 1957 was:—New South Wales, 32; Victoria, 15; Queensland, 34; South Australia, 6; Western Australia, 6; Tasmania, 2; and Northern Territory, 5.

2. **Oversea Trade in Horses.**—(i) *Exports.* The export of horses from Australia during the early years of this century was fairly considerable, averaging about 15,000 head per annum between 1901 and 1920, exclusive of those used for war purposes during the 1914-18 War. Since then, exports have gradually declined and in 1956-57 amounted to only 682.

(ii) *Imports.* The few horses imported into Australia consist mainly of valuable stud animals from the United Kingdom and racehorses from New Zealand. The total number imported in 1956-57 was 374 valued at £376,715.

§ 3. Cattle.

1. **Purposes for which Raised.**—Cattle-raising is carried out in all the States, the main object in certain districts being the production of stock suitable for slaughtering purposes, and in others the raising of profitable dairy herds. The great impetus which the development of the export trade in Australian butter gave to the dairying industry led to a considerable increase in numbers and an improvement in quality of the dairy herds in the coastal districts of Victoria, New South Wales and southern Queensland in particular, the portion of Australia in the temperate zone which is best adapted to this industry. On the other hand, beef-producing cattle are more widely distributed, particularly in the eastern States, and are raised in areas unsuitable for dairy cattle, such as the tropical area of northern Queensland, the Northern Territory, and the Kimberley district in the north of Western Australia.

2. **Distribution throughout Australia.**—Until 1880, New South Wales was the principal cattle-raising State, but in that year Queensland took the leading position, which it has since maintained. There was a very rapid increase in the number of cattle in Australia up to the year 1894, when 12,312,000 head were depastured. From 1895 onwards, however, the effects of droughts and the ravages of tick fever reduced the number to 7,063,000 in 1902. Following the disastrous drought which terminated in the latter year, the herds were gradually built up, and, despite recurring droughts, they continued to increase up to 14,441,000 in 1921. Thereafter the number dropped each year till 1929, largely owing to the decline in the overseas demand for frozen beef. With the expansion of dairying it recovered to 14,049,000 in 1934, but from that year declined again to 1939 when it stood at 12,862,000. The upward movement which commenced in 1940 was continued until 1944, the total number of cattle (14,184,000) in the latter year being at its highest level since 1923. Drought conditions and other factors caused a decline in numbers to 13,427,000 in 1947. This was followed by a general upward movement in numbers to a record 17,257,000 in 1957. A graph showing the number of cattle in Australia from 1860 appears on p. 931.

The numbers of cattle (beef and dairy) in the several States and Territories in each year 1953 to 1957 compared with the average for the years 1935 to 1939 are shown below.

CATTLE : NUMBER.
(‘000.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Aust.
Average, 1935 to 1939	3,198	1,952	6,018	331	819	262	889	9	13,478
1953	3,649	2,297	6,751	483	846	275	936	10	15,247
1954	3,554	2,370	7,086	491	830	295	966	9	15,601
1955	3,461	2,456	7,238	524	861	319	969	8	15,836
1956	3,678	2,616	7,331	566	897	332	1,028	9	16,457
1957	3,911	2,765	7,462	621	957	354	1,176	11	17,257

Although the proportion was not as high as it has been in the past, Queensland was carrying 43 per cent. of the cattle in Australia in 1957. The percentage in each State and Territory during that year was:—New South Wales, 23; Victoria, 16; Queensland, 43; South Australia, 3; Western Australia, 6; Tasmania, 2; and Northern Territory, 7.

Maps showing the distribution of beef and dairy cattle in Australia have been published in previous issues of the Official Year Book (*see* No. 43, pp. 909–10 for 1955; No. 39, pp. 905–6, for 1948; No. 34, pp. 453–4, for 1938–39; and No. 22, p. 660, for 1924–25).

3. **Classification of Cattle According to Purpose.**—Of the total number of cattle in Australia in 1957, 12,139,000 or 70 per cent. were classified as beef cattle. The numbers classified as beef cattle in the several States and Territories during the years 1943 and 1953 to 1957 were as follows:—

BEEF CATTLE : NUMBER.
(‘000.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Aust.
1943	1,676	577	4,893	171	605	102	978	5	9,007
1953	2,357	820	5,378	231	612	113	936	6	10,453
1954	2,268	829	5,703	230	600	121	966	6	10,723
1955	2,196	856	5,861	255	633	129	969	5	10,904
1956	2,341	954	5,946	302	673	148	1,028	6	11,398
1957	2,577	1,044	6,087	356	733	158	1,176	8	12,139

A classification of numbers on this basis is not available prior to 1943.

Particulars relating to dairy cattle numbers will be found in Chapter XXIV.—Farm-yard, Dairy and Bee Products.

4. **Size Classifications of Cattle Herds.**—A special series of tabulations relating to rural holdings in Australia was compiled for 1955-56 and published in full detail in a series of mimeographed bulletins, *Size Classification of Rural Holdings, 1955-56*. Condensed tables also appear in *Primary Industries, Part I, Bulletin No. 51*. The tables relating to beef and dairy cattle show classifications according to size of herd, area of holding, area of wheat for grain and area of sown pastures.

5. **Comparison with other Countries.**—The following table shows the number of cattle in Australia and in some of the principal cattle-raising countries of the world for the years 1936-40 and at the latest available date. The figures, which, in general, have been compiled by the United States Department of Agriculture for publication in *Foreign Crops and Markets* and *Foreign Agriculture Circular*, relate to areas embraced by post-war boundaries, but do not cover identical areas for the two periods in all cases.

CATTLE : NUMBER IN VARIOUS COUNTRIES.
(‘000.)

Country.	Average, 1936-40.(a)	Year and Month.	Number.
India(b)	180,000	1955 (January) ..	209,000
United States of America	66,706	1957 (January) ..	95,166
U.S.S.R.	59,800	1957 (October) ..	70,400
Brazil	40,807	1956 (December) ..	64,000
Argentina	33,762	1956 (July) ..	45,400
Pakistan(b)	33,000	1955 (January) ..	30,000
China	25,600	1953 (May) ..	28,800
Ethiopia	18,000	1954 (July) ..	20,000
France	15,504	1957 (October) ..	17,792
Australia	13,285	1957 (March) ..	17,257
Mexico	11,716	1957 (December) ..	16,700
Colombia	8,010	1956 (December) ..	12,100
Turkey(b)	8,611	1956 (December) ..	12,005
Union of South Africa	11,636	1954 (August) ..	11,604
Germany, Federal Republic of	12,114	1957 (December) ..	11,815

(a) In some cases census for a single year, and in others an average for two to four years. (b) Includes buffaloes.

6. **Imports and Exports of Cattle.**—The products of the cattle-raising industry figure largely in the export trade of Australia, although until recently the export of live cattle has never been large. In 1956-57, exports of cattle mainly to the Philippines for slaughter, amounted to 18,360 valued at £754,000. The number of cattle imported is small, consisting, as in the case of horses, mainly of valuable animals for stud purposes. Details for the years 1952-53 to 1956-57 compared with the average for the years 1934-35 to 1938-39 are as follows.

CATTLE : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.	
	No.	Value.	No.	Value.
		£'000		£'000
Average, 1934-35 to 1938-39 ..	295	22	308	6
1952-53	494	201	1,643	81
1953-54	153	102	1,214	95
1954-55	1,679	155	6,786	346
1955-56	304	229	8,025	475
1956-57	145	123	18,360	754

The average value per head of the cattle imported during the last five years was £292, while the average value per head of the cattle exported during the same period was £48-

7. **Cattle Slaughtered.**—The numbers of cattle slaughtered during each of the years ended June, 1953 to 1957 compared with the average for the years 1934–35 to 1938–39 are shown in the following table:—

CATTLE (INCLUDING CALVES) SLAUGHTERED.

('000.)

Year ended June—	Slaughtering passed for Human Consumption.									Total Slaughtering including Boiled Down.
	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.	
Average, 1935 to 1939	(a)1,112	812	1,046	(b)156	(b)124	45	(b) 4	2	3,301	3,331
1953	1,406	848	1,272	194	154	70	14	8	3,966	4,008
1954	1,564	1,008	1,366	220	172	62	15	8	4,415	4,475
1955	1,518	1,024	1,430	233	181	75	16	8	4,485	4,550
1956	1,547	1,023	1,502	227	191	88	25	9	4,612	4,675
1957	1,591	1,139	1,641	252	192	102	25	10	4,952	5,017

(a) Year ended March.

(b) Year ended previous December.

8. **Production of Beef and Veal.**—Details of the production of beef and veal in each State and Territory are shown in the following table for the years indicated:—

PRODUCTION OF BEEF AND VEAL (BONE-IN WEIGHT) : AUSTRALIA.

('000 tons.)

Year ended June—	N.S.W.	Vic.	Qld.	S. Aust.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Average 1935 to 1939 ..	(a)173	115	181	(b) 25	(b) 27	9	(b) 1	..	531
1953	217	124	253	31	32	14	3	1	675
1954	221	140	258	34	35	11	3	2	704
1955	215	143	272	34	37	14	3	2	720
1956	222	139	292	38	38	15	5	2	751
1957	236	159	317	40	38	18	5	2	815

(a) Year ended March.

(b) Year ended previous December.

9. **Consumption of Beef and Veal.**—For the three years 1936–37 to 1938–39, the average annual production of beef and veal in Australia was 569,000 tons of which 127,000 tons were exported, leaving a balance of 442,000 tons (or the carcass equivalent of 144 lb. per head per annum) available for consumption as fresh and canned meat. Since the 1939–45 War, consumption per head of beef and veal has been at a somewhat lower level. In 1956–57 it amounted to 132.7 lb. per head, consisting of 129.3 lb. of carcass meat and 3.4 lb. of canned meat (carcass equivalent).

In the following table, details of the production and disposal of beef and veal are shown for the years 1952–53 to 1956–57 compared with the average for the three years 1936–37 to 1938–39.

**PRODUCTION AND DISPOSAL OF BEEF AND VEAL (BONE-IN WEIGHT) :
AUSTRALIA.**

('000 tons.)

Year.			Changes in Stock.	Production.	Exports.	For Canning.	Consumption in Aus- tralia as Human Food.	
							Total.	Per Head per Annum.
Average, 1938-39	1936-37	to						lb.
1938-39	..	..	..	569	127	(a)	442	144.1
1952-53	..	..	+ 6	675	96	106	467	119.7
1953-54	..	..	- 7	704	155	101	455	114.6
1954-55	..	..	+ 4	720	137	106	473	116.5
1955-56	..	..	- 7	751	163	100	495	119.1
1956-57	..	..	+ 3	815	177	84	551	129.3

(a) Included with exports.

10. **Exports of Frozen Beef and Veal.**—The export of frozen meat from Australia dates from about 1881, and since that year the trade has grown considerably. The quantities and values of frozen beef and veal exported during the five pre-war years ended 1938-39 and in each year 1952-53 to 1956-57 are shown in the following table:—

EXPORTS OF FROZEN BEEF AND VEAL : AUSTRALIA.

Year.	Exports of Frozen and Chilled Beef.		Exports of Frozen Veal.	
	Quantity.	Value.	Quantity.	Value.
	'000 lb.	£'000	'000 lb.	£'000
Average, 1934-35 to 1938-39	231,355	3,188	10,353	165
1952-53	189,176	13,443	3,324	339
1953-54	313,198	21,697	3,779	349
1954-55	271,772	21,408	4,626	491
1955-56	306,354	22,025	4,689	495
1956-57	331,170	22,835	3,391	409

The largest purchaser of Australian beef and veal is the United Kingdom, which during 1938-39 took about 90 per cent. of the total shipments. In 1956-57, shipments to the United Kingdom were valued at £17,007,000 or 73 per cent. of the total value of beef and veal exports whilst exports to other Commonwealth countries amounted to £2,573,000 or 11 per cent. of the total.

In view of the preference overseas for chilled beef, the Australian beef industry was at a serious disadvantage until investigations proved that beef could be successfully transported from Australia to the United Kingdom in a chilled condition. Trial shipments began in 1932-33 and exports in subsequent years increased to a maximum of 58,963,000 lb. in 1938-39. However, the advent of war seriously affected the export trade in chilled beef, which declined to a negligible amount after 1939-40. In 1956-57, chilled beef exports were 13,991,000 lb. valued at £943,000 whilst frozen beef exports amounted to 317,264,000 lb. valued at £21,920,000.

§ 4. Sheep.

1. **Initiation of the Pastoral Industry.**—The suitability of the Australian climate and general conditions for the production of a high class of wool were recognized at an early date by Captain Macarthur, one of the pioneer sheep-breeders of New South Wales. While it would appear that the introduction of the merino sheep into Australia was not due to Macarthur, a great deal of the credit for having successfully established the pastoral industry in Australia must certainly be his.

2. **Movement in Sheep Numbers in Australia.**—Fluctuations in the number of sheep recorded in Australia for each year from 1860 onwards may be seen from the graph on p. 931. Up to 1945, there were five marked periods of decline, but the losses were made up rapidly. In each of the years 1925 to 1945, the sheep flocks exceeded 100 million, reaching 125.2 million in 1942. During the three years ended 1947, however, a sharp decline to 95.7 million occurred. This was largely attributable to the severe drought conditions experienced during 1944, 1945 and 1946. The passing of the drought and consequent re-stocking have resulted in a steady increase in sheep numbers which at 31st March, 1957, amounted to 149.8 million, the highest ever recorded.

The following table shows the approximate movement in sheep numbers in Australia in 1938–39 and 1952–53 to 1956–57.

SHEEP AND LAMBS : ANALYSIS OF MOVEMENT IN NUMBERS, AUSTRALIA.
(‘000.)

Season.	Lambs Marked.	Excess of Exports.	Sheep and Lambs Slaughtered.	Estimated Number of Deaths from Disease, Drought, etc.(a)	Number at 31st March.	Annual Net Increase (+) or Decrease(—)
1938–39.. ..	25,469	67	18,900	8,817	(b)111,058	— 2,315
1952–53.. ..	31,778	84	21,034	5,235	123,072	+ 5,425
1953–54.. ..	32,231	86	20,922	7,351	126,944	+ 3,872
1954–55.. ..	32,804	97	22,454	6,348	130,849	+ 3,905
1955–56.. ..	36,914	97	21,180	7,362	139,124	+ 8,275
1956–57.. ..	39,902	122	19,142	9,960	149,802	+ 10,678

(a) Balance figure. (b) As at 1st January, 1939—Queensland, South Australia, Western Australia, Tasmania, Northern Territory; as at 1st March, 1939—Victoria.

3. **Distribution throughout Australia.**—With the exception of a short period in the early sixties, when the flocks of Victoria outnumbered those of New South Wales, the latter State has occupied the premier position in sheep-raising, depasturing almost one half of the sheep of Australia.

Maps showing the distribution of sheep in Australia have been published in previous issues of the Official Year Book (*see* No. 43, p. 911, for 1955; No. 39, p. 907, for 1948; No. 34, p. 432, for 1938–39; and No. 22, p. 659, for 1924–25).

The numbers of sheep in the several States and Territories at 31st March of each year 1953 to 1957 compared with the average for the years 1935 to 1939 are shown in the following table:—

SHEEP : NUMBER.

(‘000.)

Year.	N.S.W.	Vic.	Q’land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia.
Average, 1935 to 1939	51,774	17,555	21,061	8,515	9,839	2,312	23	240	111,319
1953	57,461	21,368	17,030	12,036	12,475	2,421	34	247	123,072
1954	59,639	21,438	18,194	11,838	13,087	2,465	31	252	126,944
1955	59,200	22,330	20,222	12,817	13,411	2,595	29	245	130,849
1956	62,988	23,343	22,116	13,585	14,128	2,673	33	258	139,124
1957	67,670	25,831	23,190	14,984	14,887	2,943	30	267	149,802

Except when affected by drought, the relative number of sheep depastured in the different States in recent years has remained fairly constant.

The percentage distribution in 1957 was:—New South Wales, 45 ; Victoria, 17 ; Queensland, 16 ; South Australia, 10 ; Western Australia, 10 ; and Tasmania, 2.

4. **Classification of Sheep According to Age, Sex and Breed.**—In the following table, numbers of sheep in Australia are classified according to age and sex at 31st March of the years 1953 to 1957.

SHEEP : AGE AND SEX, AUSTRALIA.
(’000.)

Description.	31st March—				
	1953.	1954.	1955.	1956.	1957.
Rams, 1 year and over ..	1,560	1,610	1,647	1,721	1,830
Breeding ewes (including ewes intended for mating) ..	55,351	55,528	58,614	62,480	66,844
Other ewes, 1 year and over ..	7,039	8,430	7,847	7,553	8,447
Wethers, 1 year and over ..	34,304	36,069	37,645	39,145	41,573
Lambs and hoggets, under 1 year ..	24,818	25,307	25,096	28,225	31,108
Total, Sheep and Lambs	123,072	126,944	130,849	139,124	149,802

Particulars relating to the principal breeds of sheep at 31st March, 1956, the last year for which these details are available are shown in the following table:—

SHEEP : PRINCIPAL BREEDS, 31st MARCH, 1956.
(’000.)

Breed.	N.S.W.	Victoria.	Q’land.	S. Aust.	W. Aust.	Tas.	N.T.(a)	A.C.T.	Aust.
Merino ..	49,994	9,934	21,777	11,482	12,987	301	33	236	106,744
Other recognized breeds ..	3,491	5,314	71	910	439	1,345	..	13	11,583
Merino comebacks(b) ..	3,792	2,449	64	281	140	377	..	4	7,107
Crossbreeds(c) ..	5,711	5,646	204	912	562	650	..	5	13,690
Total ..	62,988	23,343	22,116	13,585	14,128	2,673	33	258	139,124

(a) As at 31st December, 1955. (b) Merino comeback is the progeny of a crossbred merino ewe and a merino ram, i.e., finer than half-bred. (c) Half-bred and coarser.

5. **Numbers of Sheep on Rural Holdings.**—A special series of tabulations relating to rural holdings in Australia was compiled for 1955–56 and published in full detail in a series of mimeographed bulletins—*Size Classification of Rural Holdings 1955–56*. Condensed tables also appear in *Primary Industries, Part I*. Bulletin No. 51. The tables relating to sheep farming show classifications according to size of flock, area of holding, area of wheat for grain and area of sown pasture.

6. **Comparison with other Countries.**—As regards the size of its flocks and the quantity and quality of wool produced, Australia has long occupied a leading position amongst the sheep raising countries of the world. In 1955–56, Australian flocks numbered 139 million sheep, compared with an estimate of 200 million for the U.S.S.R., China, and Eastern Europe, with about 45 million in Argentina and about 40 million in New Zealand. The total world sheep population was estimated at about 890 million in 1955–56. Further details of sheep numbers in the principal wool producing countries of the world for 1938–39, 1954–55 and 1955–56 are given in the table on p. 935.

7. **Oversea Imports and Exports of Sheep.**—As in the case of cattle, the oversea exports of live sheep from Australia are of comparatively little importance. On 27th November, 1929, the export of stud merino sheep was prohibited, except with the approval of the

Minister for Primary Industry. Exports of sheep are now principally for slaughter overseas. Consignments for this purpose in recent years were made chiefly to Singapore from Western Australia. The following table shows the imports and exports of all sheep for the years 1952-53 to 1956-57 compared with the average for the years 1934-35 to 1938-39.

SHEEP : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.	
	No.	Value.	No.	Value.
		£'000.		£'000.
Average, 1934-35 to 1938-39 ..	3,795	30	65,188	67
1952-53	267	10	84,397	278
1953-54	247	14	86,526	304
1954-55	232	13	97,146	340
1955-56	4,437	89	101,837	332
1956-57	7,445	212	129,480	482

8. **Sheep Slaughtered.**—The following table shows the numbers of sheep slaughtered in the several States during each of the years ended June, 1953 to 1957 compared with the average for the years ended June, 1935 to 1939:—

SHEEP (INCLUDING LAMBS) SLAUGHTERED. (^{'000.})

Year.	Slaughterings Passed for Human Consumption.									Total Slaughterings including Boiled Down.
	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.	
Average, 1934-35 to 1938-39 ..	a 6,474	7,797	1,101	b 1,703	1,178	358	(b) ..	25	18,636	18,693
1952-53	7,065	8,405	1,076	2,740	1,817	577	3	68	21,751	21,833
1953-54	7,360	7,709	1,081	2,637	1,545	594	3	63	20,992	21,065
1954-55	7,318	8,714	1,009	2,799	1,673	643	3	74	22,233	22,303
1955-56	6,840	7,860	1,186	2,358	1,796	645	2	73	20,760	20,797
1956-57	6,951	7,038	1,270	2,329	1,907	684	2	66	20,247	20,310

(a) Average, years ended March.

(b) Average, years ended December 1934 to 1938.

9. **Production of Mutton and Lamb.**—Details of the production of mutton and lamb in each State and Territory are shown below:—

PRODUCTION OF MUTTON AND LAMB. (Tons.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
Average, 1934-35 to 1938-39 ..	103,706	135,149	20,166	29,710	20,476	6,035	1	396	315,639
1952-53	125,731	153,030	20,371	51,484	32,506	10,656	82	1,230	395,090
1953-54	124,530	135,622	19,692	45,471	27,266	11,073	72	1,086	364,812
1954-55	122,499	155,611	18,550	49,853	28,413	11,901	78	1,259	388,164
1955-56	120,615	146,228	23,020	44,339	32,759	11,778	59	1,333	380,131
1956-57	121,947	121,253	23,866	42,563	33,303	12,607	49	1,198	366,786

10. **Consumption of Mutton and Lamb.**—For the three years 1936-37 to 1938-39, the annual production of mutton and lamb averaged 319,000 tons of which 88,900 tons were exported leaving a balance of 230,100 tons (or the carcass equivalent of 74.8 lb. per head per annum) available for consumption.

Civilian consumption of mutton and lamb (in carcass equivalent weight including that used for canning) during the 1939-45 War rose substantially, but fell again in 1946-47 and up to 1951-52 was lower than in pre-war years. It rose during the years 1952-53 to 1954-55 to a steady level of just over 78 lb. per head, but fell again in 1955-56 to 76.1 lb. and in 1956-57 to 75.1 lb. per head.

In the following table details of the production and disposal of mutton and lamb are shown for the periods stated:—

**PRODUCTION AND DISPOSAL OF MUTTON AND LAMB (BONE-IN WEIGHT) :
AUSTRALIA.**

('000 tons.)

Year.	Changes in Stock.	Pro- duction.	Exports.	For Canning and Dehydra- tion.	Consumption in Australia.	
					Total.	Per Head per Annum. (lb.)

MUTTON.

Average 1936-37 to 1938-39	..	..	201	17	..	184	59.8
1952-53	..	..	249	36	20	193	49.5
1953-54	..	..	238	25	16	204	51.4
1954-55	..	..	240	15	15	211	52.1
1955-56	..	..	234	15	16	204	49.1
1956-57	..	..	224	10	13	199	46.8

LAMB.

Average 1936-37 to 1938-39	..	..	118	72	..	46	15.0
1952-53	..	..	146	39	..	112	28.8
1953-54	..	..	127	19	..	107	26.9
1954-55	..	..	148	42	..	106	26.0
1955-56	..	..	145	36	..	109	26.2
1956-57	..	..	143	24	..	118	27.7

11. **Exports of Frozen Mutton and Lamb.**—The export trade in mutton and lamb preserved by cold process expanded rapidly up to 1913 when 205 million lb. were shipped. It declined in subsequent years and it was not until 1942-43 that it almost reached this level again. In earlier years, shipments consisted mainly of frozen mutton, but in 1923-24 lamb supplanted mutton and the exports of lamb were largely responsible for the increase in total shipments during the ten years to 1942-43. Exports have, however, fallen again since 1942-43 and in 1956-57 amounted to only 76,274,000 lb. consisting of 53,262,000 lb. lamb and 23,012,000 lb. mutton.

The quantities and values of exports of frozen mutton and lamb in each year 1952–53 to 1956–57 compared with the average for the five years ended 1938–39 are shown in the following table:—

EXPORTS OF FROZEN MUTTON AND LAMB : AUSTRALIA.

Year.	Exports of Frozen Mutton.		Exports of Frozen Lamb.		Exports of Frozen Mutton and Lamb.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	'000 lb.	£'000.	'000 lb.	£'000.	'000 lb.	£'000.
Average, 1934–35 to 1938–39 ..	40,584	656	153,606	4,208	194,190	4,864
1952–53	80,774	2,790	86,070	5,971	166,844	8,761
1953–54	55,590	1,964	44,102	3,298	99,692	5,262
1954–55	33,811	1,626	94,982	10,191	128,793	11,817
1955–56	34,657	1,885	81,626	7,867	116,283	9,752
1956–57	23,012	1,326	53,262	4,773	76,274	6,099

As with beef, the principal customer in this trade is normally the United Kingdom. In 1956–57, exports of mutton and lamb to this country represented 66 per cent. and 83 per cent., respectively of the total quantities exported.

§ 5. Wool.

1. **General.**—Australia is the leading wool-growing country in the world. With less than one-sixth of the world's sheep, Australia produces more than one-quarter of the world's wool, (30 per cent. in 1956–57) and about one-half of the total fine-quality merino wool. The bulk of the production is exported, mainly as greasy wool, although substantial amounts of scoured and carbonized wool and wool on sheep skins and small quantities of semi-manufactured wool are also shipped. The remainder, which is used by Australian manufacturers, has amounted to only five per cent. of the total production (greasy basis) in recent years.

The important position held by Australia among the principal sheep and wool producing countries of the world is shown in the table on p. 935.

2. **Greasy and Scoured Wool.**—Whether the weight of the wool clip should be stated as “in the grease” or as “clean” is a matter which seriously affects comparisons between the clips of different seasons and of different countries. The quantity of grease and other extraneous matter in a fleece differs, not only between countries, but between districts in the same country. It fluctuates with the vagaries of the season, and with the breed and the condition of the sheep.

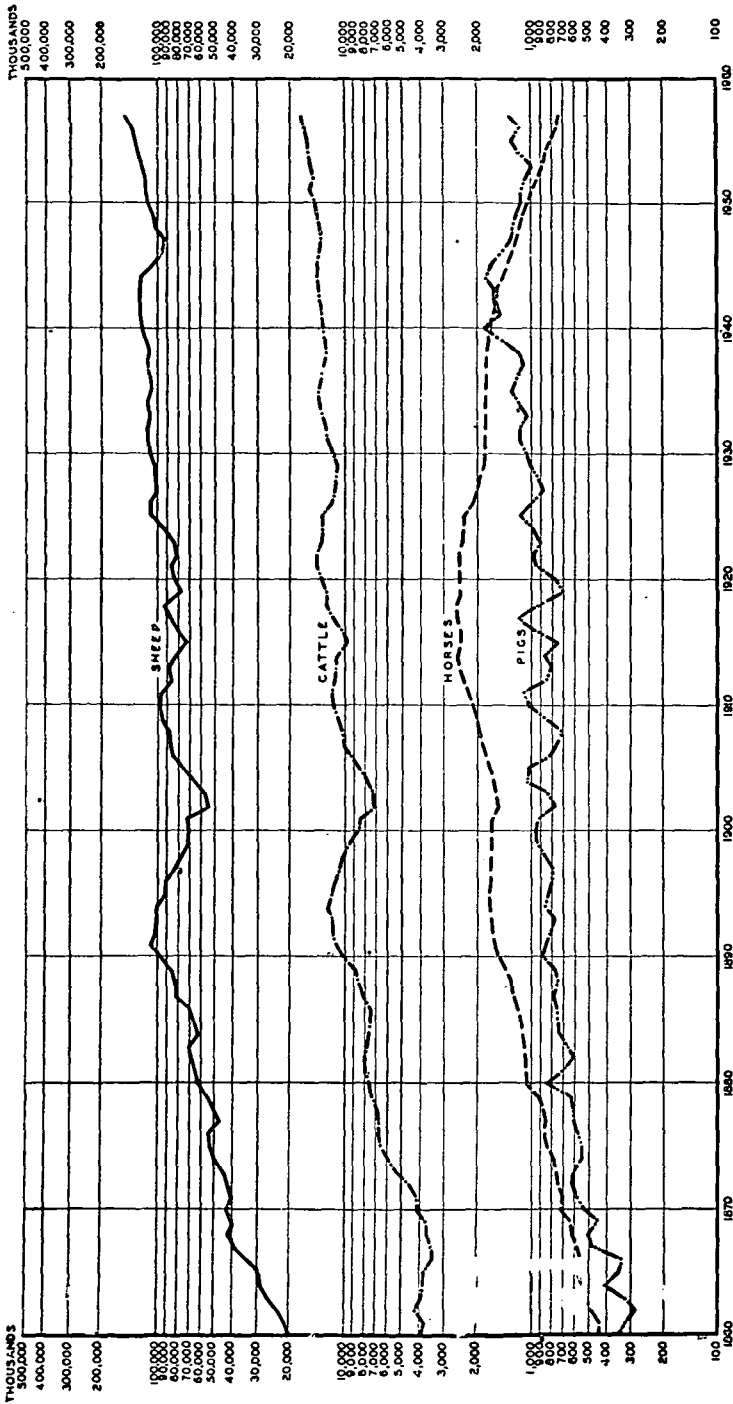
From 1946–47 to 1952–53, the Australian Wool Realization Commission, and from 1953–54, the Wool Statistical Service, has assessed annually the clean yield of the Australian wool clip. A steady rise was recorded from 53.4 per cent. clean yield from greasy in 1946–47 to 57.5 per cent. in 1951–52 and 1952–53. This was followed by a fall to 55.7 per cent. in 1953–54 but in succeeding years there was a further steady rise to 57.7 per cent. in 1956–57. A standard factor of 93 per cent. is taken as the clean yield of Australian scoured wools.

Wool scoured, washed and carbonized in Australia before export, however, has a clean yield somewhat lower than for the whole clip, because the grade of greasy wool treated locally for export as scoured, washed or carbonized includes a large proportion of dirty and low-grade wool. In recent years, it has approximated 53 per cent. The quantity of this wool exported during 1956–57 was approximately 12 per cent. of the total raw wool exports (excluding wool exported on skins) in terms of greasy.

3. **Production.**—The bulk of the Australian wool production is shorn from live sheep; in recent years, approximately 3 per cent. has been obtained by fellmongering and about 5 per cent. has been on skins exported. Statistics of wool production are compiled from data received from growers, fellmongers, etc. The following table shows the production for the five years 1952–53 to 1956–57 compared with average production for the five years ended 1938–39. Particulars of the gross value of wool produced are based, for shorn wool, upon the average price realized for greasy wool sold at auction, and for skin wools on prices recorded by fellmongers and skin exporters.

LIVESTOCK: AUSTRALIA, 1860 to 1957

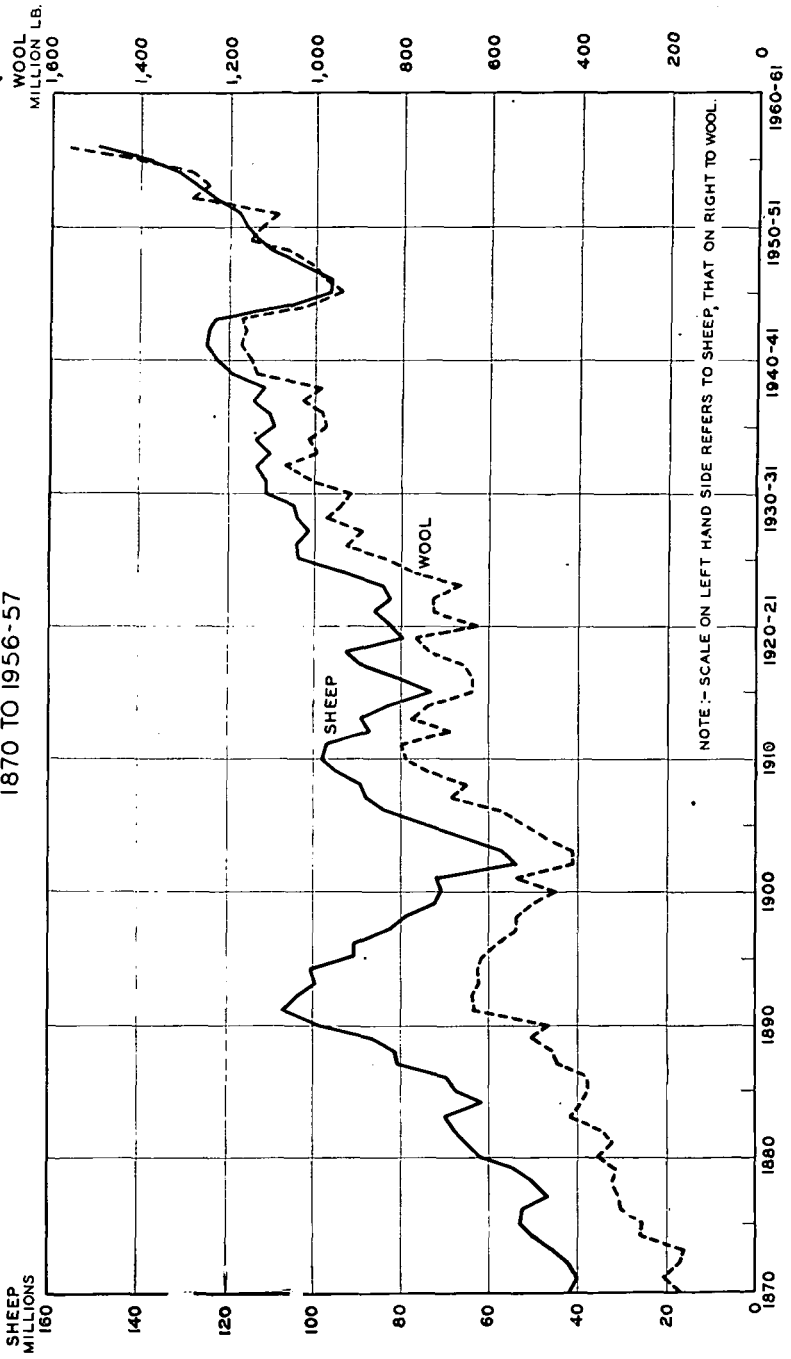
RATIO GRAPH



NOTE: VERTICAL SCALE IS LOGARITHMIC, AND THE CURVES RISE AND FALL ACCORDING TO RATE OF INCREASE OR DECREASE, ACTUAL NUMBERS ARE INDICATED BY SCALE.

SHEEP NUMBERS AND WOOL PRODUCTION: AUSTRALIA

1870 TO 1956-57



WOOL : TOTAL PRODUCTION (AS IN THE GREASE).

Particulars.	Average, 1934-35 to 1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.
New South Wales ..	480,670	556,552	544,934	540,977	593,712	660,343
Victoria ..	165,586	252,195	223,481	253,364	273,356	297,420
Queensland ..	164,971	163,149	174,414	176,548	194,014	227,664
South Australia ..	85,120	158,658	145,509	155,761	173,697	188,808
Western Australia ..	81,543	128,148	134,442	129,662	156,454	156,402
Tasmania ..	15,504	19,807	20,116	23,797	23,418	28,663
Northern Territory(a) ..	35	332	290	311	393	346
Australian Capital Territory ..	1,827	2,245	2,276	2,232	2,328	2,457
Australia—						
Shorn (including Crutchings) ..	888,677	1,168,699	1,138,108	1,173,906	1,303,944	1,457,387
Dead and Fellmongered ..	50,396	45,493	47,000	44,417	44,051	37,716
Exported on Skins ..	56,183	66,894	60,354	64,329	69,377	67,000
Total—Quantity ..	995,256	1,281,086	1,245,462	1,282,652	1,417,372	1,562,103
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
Value ..	51,182	425,807	409,768	367,138	354,064	510,013

(a) Estimated.

4. **Care Needed in Comparing Clips.**—In comparing successive clips, allowance must be made for the circumstance that, owing to climatic or other conditions, the time of shearing may be so far delayed in some areas that one clip may include almost thirteen months' growth of wool, while the succeeding one may include little more than eleven months' growth.

5. **Average Weights of Fleeces Shorn.**—The average weights of sheep and lamb fleeces shorn in each of the States of Australia and in the Australian Capital Territory are shown in the following table for each season 1952-53 to 1956-57 compared with the average for the five seasons 1934-35 to 1938-39.

AVERAGE WEIGHT OF SHEEP AND LAMB FLEECES SHORN.
(lb.)

State.	Average, 1934-35 to 1938-39. (a)	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
SHEEP.						
New South Wales ..	8.87	10.18	9.53	9.32	10.01	9.92
Victoria ..	7.84	9.63	9.04	9.83	10.41	11.02
Queensland ..	7.98	9.78	9.87	9.23	9.96	9.98
South Australia ..	10.06	13.14	11.72	11.86	12.68	13.14
Western Australia ..	8.53	10.16	10.53	9.76	11.33	10.73
Tasmania ..	7.62	8.17	8.13	9.31	8.85	10.07
Australian Capital Territory ..	8.32	9.81	9.38	9.03	9.75	10.20
Australia(b) ..	8.57	10.26	9.78	9.69	10.45	10.51
LAMB.						
New South Wales ..	2.75	3.24	3.02	2.90	3.11	3.30
Victoria ..	2.14	2.83	2.53	2.62	2.78	3.11
Queensland ..	2.89	3.72	3.66	3.61	4.18	4.09
South Australia ..	2.57	3.83	3.35	3.29	3.92	4.11
Western Australia ..	2.57	2.82	2.79	2.50	2.88	2.78
Tasmania ..	1.37	2.10	2.04	2.14	2.36	2.46
Australian Capital Territory ..	1.11	1.26	1.31	1.16	1.33	1.52
Australia(b) ..	2.57	3.19	2.97	2.91	3.22	3.37

(a) Mean of average weights in each season.

(b) Excludes Northern Territory.

6. **Wool classified according to Quality.**—Under control exercised during the 1939-45 War, records were kept of the classification of each lot of wool appraised according to quality, degree of fault and combing or carding type for each of the years 1940-41 to 1945-46. From the resumption of auctions in 1946-47 to 23rd October, 1953, this analysis was continued by the Australian Wool Realization Commission and from 23rd October, 1953, by the Wool Statistical Service, but the basis of the data has been changed to the catalogues of auction sales, and not upon appraisal as previously. The following table provides a detailed analysis of wool sold at auction according to quality, for the years 1952-53 to 1956-57. "Quality" ("64's, 60's, 58's," etc.) is a measure of the fineness and texture of wool for spinning purposes. Broadly, it means the maximum number of hanks of yarn, each of 560 yards length, which can be spun from 1 lb. of combed wool. For instance, wool of 64's quality is of a fineness and texture which will produce 64 hanks, each of 560 yards, from 1 lb. of tops (combed wool) of that particular wool.

CLASSIFICATION OF GREASY WOOL SOLD AT AUCTION(a) : AUSTRALIA.

(Bales of approximately 300 lb.)

Pre-dominating Quality.	1952-53.		1953-54.		1954-55.		1955-56.		1956-57.	
	Quantity.	Per cent.	Quantity.	Per cent.	Quantity.	Per cent.	Quantity.	Per cent.	Quantity.	Per cent.
70's and finer	110,903	3.0	98,307	2.7	95,055	2.5	86,925	2.1	100,011	2.1
64/70's ..	451,393	12.0	441,906	12.0	415,012	10.9	424,946	10.2	527,264	11.1
64's ..	557,885	14.9	612,776	16.6	595,519	15.6	583,929	14.0	690,038	14.5
64/60's ..	418,288	11.2	357,936	9.7	376,607	9.9	390,633	9.4	478,418	10.1
60/64's ..	690,981	18.4	702,871	19.1	752,490	19.7	833,228	20.0	987,496	20.8
60's and 60/58's ..	580,944	15.5	596,709	16.2	641,970	16.8	746,019	17.9	804,363	16.9
Total 60's and finer	2,810,394	75.0	2,810,505	76.3	2,876,653	75.4	3,065,680	73.6	3,587,590	75.5
58's ..	413,901	11.0	377,931	10.2	416,419	10.9	503,868	12.1	502,566	10.6
56's ..	324,074	8.6	293,926	8.0	312,055	8.2	350,219	8.4	376,660	7.9
50's ..	131,823	3.5	123,609	3.3	125,878	3.3	146,640	3.5	162,533	3.4
Below 50's ..	35,821	1.0	41,907	1.1	42,523	1.1	47,505	1.1	50,055	1.0
Oddments ..	35,617	0.9	39,212	1.1	44,209	1.1	53,747	1.3	74,226	1.6
Grand Total	3,751,630	100.0	3,687,090	100.0	3,817,737	100.0	4,167,659	100.0	4,753,630	100.0

(a) All greasy wool sold at auction except "wool re-offered account buyer".

7. **World Sheep Population and Wool Production.**—The following table shows particulars of the sheep population and total production of wool, in terms of greasy, in the principal wool-producing countries of the world, together with estimates of world production of merino, crossbred and carpet type wool for the latest available years compared with pre-war years. The data have been taken from reports published by the Commonwealth Economic Committee compiled from questionnaires prepared by the Committee and the International Wool Textile Organization and from other official sources.

In 1956-57, Australia produced 31 per cent. of the world total of all types of wool, the share of the British Commonwealth representing approximately 50 per cent. The principal wool producers, other than Australia, are New Zealand with 10 per cent. of the world total, Argentina, 8 per cent., United States of America, 6 per cent., and Union of South Africa, 6 per cent. Production in the U.S.S.R., China, and Eastern European countries together amounted to 16 per cent. World production of wool (all types) in 1956-57 was about 1,240 million lb. (33 per cent.) greater than the average for 1934-38.

Australia's wool clip is predominantly merino; New Zealand and Argentina produce mainly crossbred wool, while the clip of the U.S.S.R. is largely of the carpet type. World production of merino wool in 1956-57 was 26 per cent. above the average for 1934-38, and the production of crossbred types has risen by about 55 per cent. Carpet wool production has risen by about 14 per cent.

ESTIMATED WORLD SHEEP POPULATION AND PRODUCTION OF WOOL.

Country and Type.	Sheep Numbers ('000,000).			Wool Production ('000,000 lb.— in terms of greasy).		
	1938-39.	1954-55.	1955-56.	Average, 1934-38.	1955-56.	1956-57. (a)
British Commonwealth—						
Australia	111.1	130.8	139.1	995	1,410	1,565
New Zealand	31.9	39.1	40.0	300	462	491
South Africa (b) ..	39.0	37.1	38.0	261	314	320
Other Commonwealth ..	97.0	94.0	93.9	230	222	223
<i>Total</i>	<i>279.0</i>	<i>301.0</i>	<i>311.0</i>	<i>1,786</i>	<i>2,408</i>	<i>2,599</i>
Foreign—						
U.S.S.R., China, Eastern Europe (c)	142.0	188.0	200.0	435	800	823
Argentina	45.9	45.0	45.2	376	363	392
United States of America ..	51.3	31.6	31.1	470	305	300
Uruguay	18.0	24.5	23.0	114	188	180
Other Foreign	239.8	280.4	279.7	607	742	734
<i>Total</i>	<i>497.0</i>	<i>569.5</i>	<i>579.0</i>	<i>2,002</i>	<i>2,398</i>	<i>2,429</i>
Grand Total	776.0	870.5	890.0	3,788	4,806	5,028
Type of Wool.						
Apparel Type—						
Merino .. ..	..	..	..	1,579	1,874	1,995
Crossbred .. ..	..	..	..	1,265	1,876	1,960
Carpet type .. ..	..	..	..	944	1,056	1,073

(a) Provisional. (b) Basutoland and S.W. Africa Territory excluded from sheep population, but included in wool production. (c) Comprising U.S.S.R., Poland, Czechoslovakia, Hungary, Romania, Bulgaria, Eastern Germany, Albania, China and Dependencies, Outer Mongolia and Tibet.

8. War-time Contracts.—(i) *Wool*. Details of the contract entered into between the Governments of Australia and the United Kingdom for the purchase of the surplus wool clip of Australia for the duration of the war and one full clip thereafter (1939-40 to 1945-46) will be found in Official Year Book No. 36, p. 1106.

(ii) *Sheepskins*. Details of the war-time contract arrangements for the period April, 1940, to June, 1946, between the Australian and United Kingdom Governments for the purchase of Australia's exportable surplus of woolled sheepskins will be found in Official Year Book No. 37, p. 875.

9. Australian Wool Realization Commission.—The Australian Wool Realization Commission was the Australian subsidiary of a Joint Organization (commonly referred to as "J.O.") set up by the Governments of the United Kingdom, the Commonwealth of Australia, the Dominion of New Zealand and the Union of South Africa, under the title of "U.K.—Dominion Wool Disposals Limited" to dispose of accumulated war-time stocks of Dominion wool held by the United Kingdom Government at the end of the war. Details of the functions and operations of these organizations appear in earlier issues of the Year Book, particularly No. 38 (pp. 919-923).

By the end of 1951, the Joint Organization had disposed of all stocks of wool held and shortly after it went into voluntary liquidation. Liquidation proceedings were completed on 15th February, 1954.

Australia's share of the profits arising from the operations of J.O. amounted to approximately £93 million (including interest). The task of distributing the profits to growers was entrusted to the Australian Wool Realization Commission and up to May, 1956, all but £2.5 million of the total value of the profits, plus a small amount representing mainly unclaimed moneys, had been distributed to growers.

The distribution of the remaining £2.5 million was held up by the protracted litigation known as the "Poulton Case". The moneys concerned represented the profits on wool which was submitted by growers for wartime appraisalment through dealers. Mr. Poulton, a dealer, sought to establish the right of the dealers to these profits, but the High Court ruled against him on two occasions. The single High Court judgment was given in November 1953, and the unanimous decision of the Full High Court was given in December, 1953. However, as the possibility existed that Mr. Poulton might seek leave to appeal to the Privy Council against the High Courts's decision, the Government withheld distribution for that reason. By May, 1956, Mr. Poulton had not taken any action to seek leave to appeal to the Privy Council and the Government, after consulting its legal advisers, decided to distribute the profits to the growers. The Commission is now engaged in completing this task.

10. Australian Wool Bureau.—(i) *General.* The Australian Wool Bureau was constituted under the Wool Use Promotion Act 1953 and replaced the Australian Wool Board which was established in 1936. The Bureau's main function is to promote the use of wool by publicity and other means in Australia and overseas.

The Bureau consists of seven members. Of these, six represent wool-growers (three nominated by the Australian Woolgrowers' Council and three by the Australian Wool and Meat Producers' Federation) and are appointed by the Governor-General for a period of three years, while one (the Commonwealth Wool Adviser) represents the Commonwealth Government and is appointed by the Minister for Primary Industry.

Particulars of the wool promotional activities of the Bureau are given in paragraph 12, Wool Publicity and Research.

(ii) *Wool Statistical Service.* The Wool Statistical Service, formerly conducted by the Australian Wool Realization Commission, was taken over by the Australian Wool Bureau on 23rd October, 1953. The statistical Service is responsible for the preparation and publication of statistical material relating to the Australian wool market and the composition of the Australian clip and other special statistical work which may be assigned to it.

It is financed out of the income received by the Australian Wool Bureau from wool stores under its control and from an annual contribution by the Commonwealth Government.

A Statistical Service Committee, consisting of the representatives of the Australian Wool Bureau, the Commonwealth Government, wool buyers, wool growers and wool selling brokers' organizations, acts in an advisory capacity to the Australian Wool Bureau.

(iii) *Wool Stores.* Some three hundred wool stores, formerly the property of the Joint Organization and purchased from it by the Commonwealth Government, were transferred to the ownership of the Australian Wool Bureau by virtue of the Wool Stores Act 1953. The Bureau formally assumed control of these stores on 11th January, 1954, and at the same time received a substantial sum of money representing accumulated rentals and receipts from sales which had come to hand whilst the stores were held by the Commonwealth Government. Under the Act, the Bureau may only dispose of these stores with the permission of the Minister for Primary Industry and, in the event of war, may be required to return the stores without compensation to the Commonwealth Government. The stores are being let by the Wool Bureau as a commercial proposition. The rental income is used to meet the expenses of maintaining, managing and insuring the stores, to defray the cost of operating the Wool Statistical Service and to help finance the wool promotion activities of the Bureau.

(iv) *The Contributory Charge.*—Associated legislation, namely, the Wool (Contributory Charge) Act 1945 (subsequently replaced by the Wool (Contributory Charge) Act (No. 1) 1950–1951 and the Wool (Contributory Charge) Act (No. 2) 1950–1951) and the Wool (Contributory Charge) Assessment Act 1945–1951, provided for a contributory charge to be imposed on all wool produced in Australia and sold, purchased or processed by a manufacturer or exported on or after a date fixed by proclamation. The passage of amending Wool Tax legislation in June, 1952, made it possible to cease collection of the contributory charge at 30th June, 1952, and the legislation under which it was imposed was repealed. Further particulars of the Wool Contributory Charge and the amounts collected appear in Year Book No. 40, pp. 675 and 819.

(v) *The Wool Levy.* Whilst the contributory charge legislation, mentioned above, was in force, the Wool Levy, which was imposed by the Wool Tax Act 1936 and the Wool Tax Assessment Act 1936, was temporarily suspended. When the Wool Levy was first imposed in 1936, the rate of tax was 6d. per bale of wool delivered into the store of a wool dealer or wool selling broker, or exported. The proceeds were paid into the Wool Publicity and Research Fund administered by the Australian Wool Board.

When collection of the contributory charge ceased, (i.e., from July 1st, 1952), the Wool Levy again became operative but at a higher rate. This rate was provided for in the Wool Tax Acts (No. 1 and 2) of 1952, under which a rate can be prescribed between the limits of 2s. and 5s. per bale of shorn wool produced. For the years 1952–53 to 1956–57, the rate imposed was 4s. per bale.

11. Marketing of Wool:—(i) *Minimum Reserve Price Plan.* Details of the minimum reserve price plan which was completed by the Governments of Australia, New Zealand, South Africa and the United Kingdom in May, 1951, and which was subsequently rejected at a referendum of wool-growers in Australia, may be found in Official Year Book No. 39, p. 925.

(ii) *Subsidy on Woollen Goods, 1950–51.* Details of the subsidy paid on woollen goods manufactured for consumption in Australia from wool sold during the 1950–51 season will be found in Official Year Book No. 41, p. 727.

12. Wool Publicity and Research.—(i) *Wool Use Promotion.* The Wool Use Promotion Act of 1953 defines the powers and functions of the Australian Wool Bureau as including

measures for promoting, by publicity or other means, the use of wool in Australia or in other countries.

The Bureau is also authorized to take measures for improving the production of wool in Australia and encouraging research directed to the promotion of the use of wool.

The Bureau is associated with the New Zealand Wool Board and the South African Wool Board in maintaining the International Wool Secretariat, which was established in 1937 with head-quarters in London and with branches in fourteen countries. The function of the Secretariat is to promote the use of wool through a broad programme of publicity, education and research.

The activities of the Australian Wool Bureau are financed from the Wool Use Promotion Fund into which are paid the proceeds of the Wool Levy, and contributions from the rental income of the wool stores as mentioned in 10 (iii) above.

(ii) *Research.* Until 1945, the Australian Wool Board was responsible for the supervision of economic and scientific research but in that year the Commonwealth Scientific and Industrial Research Organization was made responsible for scientific, technical and biological research into sheep raising and wool production, as well as wool textile research. Economic wool research is the responsibility of the Bureau of Agricultural Economics, a division of the Commonwealth Department of Primary Industry. The economic research work falls into two main categories, namely, farm production economics dealing with economics of wool growing and sheep-station management generally, and commodity research dealing with the economic aspects of the wool industry in Australia and of wool as a commodity in world trade.

To finance the research programme, the Wool Research Trust Account was established under the Wool Use Promotion Act in 1945. Originally, a sum equal to the amount raised by the Wool Levy was paid annually into this account from Consolidated Revenue. The Wool Use Promotion Act, 1953, fixed the rate of contribution at 2s. for each bale of shorn wool produced.

In addition, finance was available for research from the Wool Industry Fund. This Fund was established in 1946 from various moneys accumulated by the Central Wool Committee in war-time.

Under the Wool Research Act, 1957, these sources of income together with an increased Government contribution (now totalling 4s. a bale) and a contribution of 2s. a bale from woolgrowers (collected under the Wool Tax Acts, 1957) were combined into one fund known as the Wool Research Trust Fund. The use of this Fund is limited to sheep and wool research and expenditure therefrom is based on the recommendations of the Wool Research Committee. This committee comprises representatives of the C.S.I.R.O., the Universities, the Department of Primary Industry and other interested bodies.

Ample opportunity is afforded for co-operation with State Departments of Agriculture and other organizations in research and extension activities.

13. Consumption of Wool.—(i) *Consumption of Raw Wool.* Statistics of raw wool consumption published in recent years for the purposes of broad international comparisons are based on the quantities of scoured or carbonized wool used on the woollen and worsted systems (mill consumption) plus quantities used in such processes as felting. Consumption estimates compiled on this basis have obvious defects as they disregard oversea trade in semi-processed wool (e.g., tops and yarn) as well as woollen goods. They are, however, comparatively simple to calculate and are useful in providing an approximate indication of trends in wool consumption. Estimates of raw wool used on the woollen and worsted systems and by felt manufacturers in Australia are shown below for the years 1938–39 and 1952–53 to 1956–57.

ESTIMATED CONSUMPTION OF RAW WOOL IN AUSTRALIA.
(’000 lb.)

Year.	Greasy Basis.			Clean Basis.		
	Used on Woollen and Worsted Systems	Used for Felt Manu- facture (including Hats).	Total.	Used on Woollen and Worsted Systems.	Used for Felt Manu- facture (including Hats).	Total.
1938–39.. ..	77,947	2,248	80,195	39,599	1,068	40,667
1952–53.. ..	69,868	5,622	75,490	41,745	2,670	44,415
1953–54.. ..	88,106	8,376	96,482	52,975	3,979	56,954
1954–55.. ..	82,923	7,552	90,475	48,930	3,587	52,517
1955–56.. ..	93,529	7,586	101,115	54,847	3,603	58,450
1956–57.. ..	107,633	8,944	116,577	63,118	4,248	67,366

(ii) *Consumption of Locally Processed Wool.* As considerable quantities of tops, noils and yarn are exported from Australia, the series on raw wool consumption shown above is over-stated to this extent. The series entitled "Consumption of Locally Processed Wool" provides a more reliable indication of wool consumption in Australia, as allowance has been made for exports of wool in semi-processed form. This series is shown below for the years 1938-39 and 1952-53 to 1956-57. Briefly, the series measures consumption of wool in terms of yarn used in Australian mills and other factories to produce woollen cloth and other woollen goods, yarn used for hand knitting purposes, and scoured wool used for felt manufacture. No allowance has been made for oversea trade in woollen piece goods, clothing, etc., because of the obvious difficulties of accurately estimating the wool content of these products.

ESTIMATED CONSUMPTION OF LOCALLY PROCESSED WOOL IN AUSTRALIA.
(⁰000 lb.)

Year.	Greasy Basis.				Clean Basis.			
	Worsted Yarn Used. (a)(b)	Woollen Yarn Used. (b)	Scoured Wool used for Felt Manu- facture (including Hats).	Total.	Worsted Yarn Used. (a)(b)	Woollen Yarn Used. (b)	Scoured Wool used for Felt Manu- facture (including Hats).	Total.
1938-39 ..	31,568	21,393	2,248	55,209	16,353	11,130	1,068	28,551
1952-53 ..	37,490	23,240	5,622	66,352	22,065	14,402	2,670	39,137
1953-54 ..	44,698	28,639	8,376	81,713	26,245	17,650	3,979	47,874
1954-55 ..	41,056	26,599	7,552	75,207	23,775	16,299	3,587	43,661
1955-56 ..	42,656	27,497	7,586	77,739	24,706	16,069	3,603	44,378
1956-57 ..	45,918	31,008	8,944	85,870	26,588	18,240	4,248	49,076

(a) Includes hand knitting yarns used except in 1938-39.
containing a mixture of wool and other fibres.

(b) Includes wool content of yarns

14. **Exports of Wool.**—(i) *Greasy—Quantities.* Prior to the 1939-45 War, Australian greasy wool exported overseas was sent principally to the United Kingdom and other European countries. In 1938-39, 42 per cent. of total shipments were sent to the United Kingdom, other important consignees being France, 20 per cent., Belgium, 13 per cent., and Japan, 9 per cent. During the 1939-45 War, exports to the United States of America showed great expansion but have since dwindled to about 3 per cent. Of the total shipments in 1956-57, 25 per cent. went to the United Kingdom, 19 per cent. to Japan, 18 per cent. to France, 10 per cent. to Italy and 9 per cent. to Belgium-Luxemburg. The following table shows the quantities of greasy wool exported, and the principal countries of recorded destination.

EXPORTS OF GREASY AND SLIPE WOOL.

(⁰000 lb. actual weight.)

Country to which Exported.	Average, 1934-35 to 1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
United Kingdom ..	288,450	353,195	286,509	299,571	275,573	306,504
Other Commonwealth Countries ..	2,188	8,705	9,672	9,973	9,315	12,246
Belgium-Luxemburg ..	108,120	76,327	87,814	90,078	93,668	105,963
France ..	100,511	154,441	162,536	159,764	199,797	215,150
Germany, Fed. Rep. of ..	(a) 36,856	40,446	52,974	64,779	74,945	82,897
Italy ..	21,730	92,943	114,354	89,457	93,266	123,438
Japan ..	131,305	147,612	95,121	124,718	189,852	233,036
United States of America ..	25,739	69,021	62,889	58,962	48,059	37,454
Other Foreign Countries ..	47,981	38,803	118,154	65,371	82,347	92,509
Total ..	762,880	981,493	990,023	962,673	1,066,822	1,209,197

(a) Pre-war Germany.

(ii) *Scoured and Washed and Carbonized—Quantities.* The exports of "scoured and washed" wool, whether carbonized or not, are shown below according to principal countries of destination.

EXPORTS OF WOOL—SCOURED AND WASHED AND CARBONIZED
(⁰⁰⁰ lb. actual weight.)

Country to which Exported.	Average, 1934-35 to 1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
United Kingdom ..	32,826	32,629	28,111	26,227	24,303	24,298
Canada ..	2,394	5,593	4,093	4,120	5,356	3,220
Other Commonwealth Countries ..	939	1,181	1,709	1,098	1,285	1,538
Belgium-Luxemburg ..	8,224	4,837	6,098	5,127	3,601	4,017
France ..	9,301	7,291	7,890	5,994	5,309	6,245
Germany, Fed. Rep. of.. (a)	3,007	4,264	5,594	5,818	8,329	10,583
Italy ..	361	5,913	6,314	4,657	6,017	7,671
Japan ..	736	6,596	1,699	836	2,428	3,943
United States of America ..	668	8,012	9,141	16,866	16,919	13,294
Other Foreign Countries ..	5,756	7,782	10,119	11,476	11,397	15,928
Total ..	64,212	84,098	80,768	82,219	84,944	90,737

(a) Pre-war Germany.

(iii) *Tops, Noils and Waste.* Particulars of the exports of tops, noils and waste are shown in the following table.

EXPORTS OF WOOL TOPS, NOILS AND WASTE.
(⁰⁰⁰ lb. actual weight.)

Particulars.	Average, 1934-35 to 1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Tops ..	5,948	8,423	4,970	5,911	11,107	14,949
Noils ..		2,805	3,722	3,625	4,507	4,578
Waste—Soft wool ..		2,960	3,705	2,238	7,094	14,697
Hard wool ..		9,258	3,272	3,928	3,617	4,428

(iv) *Total Exports—Greasy and Clean Bases.* The following table shows the estimated greasy and clean weights of exports of raw and semi-processed wool for the years 1938-39 and 1952-53 to 1956-57.

EXPORTS OF WOOL—GREASY AND CLEAN BASES.
(⁰⁰⁰ lb.)

Particulars.	1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
GREASY BASIS.						
<i>Raw Wool—</i>						
Greasy and Slips ..	795,728	981,493	990,023	963,583	1,067,654	1,209,840
Scoured and Washed ..	137,391	159,277	155,620	154,838	159,071	169,918
and Carbonized ..	58,187	66,894	60,354	64,329	69,377	68,000
Exported on Skins ..						
Total ..	991,306	1,207,664	1,205,997	1,182,750	1,296,102	1,447,758
<i>Semi-processed Wool—</i>						
Tops ..	10,124	14,993	8,946	10,403	20,215	27,207
Yarn ..	58	54	189	229	123	247
Total Wool ..	1,001,488	1,222,711	1,215,132	1,193,382	1,316,440	1,475,212
CLEAN BASIS.						
Raw Wool ..	(a)	696,985	676,033	667,347	741,653	840,675
Semi-processed Wool ..	5,071	8,791	5,376	6,160	11,621	15,688
Total Wool ..	(a)	705,776	681,409	673,507	753,274	856,363

(a) Not available.

(v) *Total Value of Exports.* The value of wool (other than wool on sheepskins) exported from Australia during the five years ended 1956–57 averaged 48 per cent. of the total value of exports of merchandise of Australian origin, and during 1956–57 the proportion was 50 per cent. The value during the period under review, together with the principal countries to which wool was exported, is shown in the following table.

VALUE OF WOOL EXPORTS(a).

(£'000.)

Country to which Exported.	Average, 1934–35 to 1938–39.	1952–53.	1953–54.	1954–55.	1955–56.	1956–57.
United Kingdom ..	19,235	142,278	117,718	107,917	83,096	117,372
Other Commonwealth Countries ..	705	6,836	6,901	6,839	8,060	9,920
Belgium-Luxemburg ..	5,863	23,897	27,522	25,620	21,391	29,608
France ..	5,618	54,910	58,448	50,473	53,388	73,494
Germany, Fed. Rep. of (b)	2,603	17,447	21,936	22,926	23,603	32,987
Italy ..	1,340	38,288	47,323	32,379	29,259	47,905
Japan ..	7,727	66,686	43,685	46,077	64,761	103,770
United States of America ..	2,247	30,992	30,239	29,801	21,636	20,705
Other Foreign Countries ..	3,429	21,573	56,661	31,076	32,335	47,964
Total ..	48,767	402,907	410,433	353,108	337,529	483,725

(a) Excludes wool exported on sheepskins.

(b) Pre-war Germany.

15. *Local Sales of Wool.*—Auction sales are conducted at Sydney, Goulburn, Newcastle, Albury, Melbourne, Geelong, Ballarat, Brisbane, Adelaide, Perth, Hobart and Launceston, and are attended by buyers representing manufacturers and merchants in the United Kingdom, France, the United States of America, Japan, U.S.S.R. and many other countries. More than 95 per cent. of the Australian wool clip is now disposed of at auction in Australia.

16. *Stocks of Wool.*—Stocks of raw wool held in Australia at 30th June, 1957, other than wool which had been sold but not shipped, amounted to 83.9 million lb. (as in the grease) of which 58.1 million lb. (39.7 million lb. as greasy and 18.4 million lb. as scoured and carbonized) were held by woollen mills, wool scourers and fellmongers and 25.8 million lb. (unsold wool assumed to be all greasy) were held by brokers. These stocks exclude wool on skins, since this wool is not recorded as production until fellmongered in Australia or exported on skins.

Stocks at 30th June, 1957, were higher than at the same time for any other year since 1950. During the war and post-war years up to 1951, raw wool stocks were exceptionally high because of the large quantities held in Australia by the Australian Wool Realization Commission on account of Joint Organization. They reached a maximum of 1,749.9 million lb. at 30th June, 1945, but declined in each successive year to 30th June, 1952, by which time all Joint Organization stocks had been sold.

17. *Price.*—Wool is the chief factor in the pastoral wealth of Australia and the nation's prosperity is largely dependent upon its satisfactory sale. During the five years ended 1956–57, the price of greasy wool sold in the selling centres of Australia averaged 74.9d. per lb. compared with the average selling price of 11.5d. per lb. during the ten years ended 1938–39. The average for the nine years ended 1928–29 was 18d. per lb., and for the seven years ended 1913–14, 9d. per lb.

As indicated in para. 8 above, the price of wool during the 1939–45 War was determined by the British Government wool contract. With the return to auction sales since 1945–46, the average price of greasy wool sold rose rapidly from the contract price of 15.45d. per lb. applicable in 1945–46 to the unprecedented level of 144.19d. per lb. in 1950–51. This was followed by a sharp fall in 1951–52 to 72.42d. per lb. or slightly more than half the price in 1950–51. There was, however, a partial recovery to 81.80d. per lb. in 1952–53 and 81.50d. per lb. in 1953–54. There was a further decline in the two following years to 70.88d. per lb. in 1954–55 and 61.46d. per lb. in 1955–56, the lowest recorded since 1948–49. In 1956–57, however, prices rose again to 79.66d. per lb.

The prices quoted above, except for United Kingdom contract prices, are as compiled by the National Council of Wool Selling Brokers and represent the average price realized for all greasy wool, of whatever type or quality, marketed during the years indicated.

18. Value.—Fluctuation in Australian wool prices has a marked effect on the nation's rural income. In 1945-46, the gross value of wool production was £58,597,000 representing 17.4 per cent. of the gross value of all rural industries while in 1950-51, when prices reached a peak, wool was valued at £651,902,000 or 55.6 per cent. of the total for all rural industries. The value of wool production fell in subsequent years and in 1956-57 was £510,941,000.

Details of the value of wool production for the years 1952-53 to 1956-57 compared with the average for the three pre-war years are shown below.

WOOL (AS IN THE GREASE)—ESTIMATED GROSS VALUE OF TOTAL PRODUCTION.(a)
(£'000.)

Season.	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	N.T.(b)	A.C.T.	Aust.
Average, 1936-37 to 1938-39	26,276	9,322	9,247	4,111	3,389	980	2	98	53,425
1952-53	192,124	78,761	59,903	48,579	39,164	6,380	103	793	425,807
1953-54	180,781	73,384	61,125	44,434	42,523	6,655	90	776	409,768
1954-55	155,335	75,125	52,109	41,602	35,013	7,232	68	654	367,138
1955-56	149,128	69,020	53,134	39,911	35,881	6,190	92	708	354,064
1956-57	217,124	97,646	81,015	57,289	46,965	9,974	106	822	510,941

(a) Includes shorn, dead and fellmongered wool and wool exported on skins. Excludes distributions of profits under the Wool Disposal Plan. (b) Estimated.

19. United Kingdom Importation of Wool.—The important position which Australia occupies in the supply of wool to the United Kingdom is indicated in the following statement of the quantities of wool imported into that country from the principal wool-producing countries during each year 1953 to 1957.

WOOL(a): IMPORTS INTO UNITED KINGDOM.
(°000 lb.)

Country of Origin.	1953.	1954.	1955.	1956.	1957.
Australia	364,931	291,704	336,800	310,585	315,392
New Zealand	191,781	186,352	185,440	163,550	166,057
Union of South Africa ..	57,200	61,826	64,315	61,194	45,568
India and Pakistan ..	30,794	35,235	30,505	25,912	29,925
Other Commonwealth Countries	8,027	9,396	9,785	9,583	11,428
Argentina	60,953	21,784	31,553	32,740	32,441
France	16,850	15,707	18,092	22,228	16,657
Uruguay	65,992	37,070	18,855	34,373	17,448
Other Foreign Countries ..	30,733	24,920	25,977	39,156	40,626
<i>Total Quantity</i>	<i>827,261</i>	<i>683,994</i>	<i>721,322</i>	<i>699,321</i>	<i>675,542</i>
Total Value (£'000 sterling) ..	229,408	184,670	176,995	167,927	188,824

(a) Greasy and Scoured.

Australian wool represented 47 per cent. of the total quantity imported into the United Kingdom during 1957. New Zealand supplied 24 per cent. and South Africa 7 per cent., while the total quantity received from British countries constituted 84 per cent. of all United Kingdom imports of wool.

20. Principal Importing Countries and Sources of Supply.—The following table, prepared from information published by the Commonwealth Economic Committee, furnishes, in respect of the principal importing countries, details of their production and imports of wool for 1956 together with the chief sources of supply. The quantities imported refer to the actual weight of wool without distinguishing between greasy and scoured except in the case of the United States of America where estimated clean content of raw wool is quoted.

WOOL: PRINCIPAL IMPORTING COUNTRIES AND SOURCES OF SUPPLY, 1956.

(Million lb.)

Importing Country.	Pro- duction of Importing Country. (a)	Quantity Imported from(b)—					Total Imports.
		Australia.	Union of South Africa.	Argen- tina.	New Zealand.	Other Countries.	
United Kingdom ..	102	310.6	61.2	32.7	163.6	131.2	699.3
Belgium	(c)	103.7	14.3	13.9	22.7	34.3	188.9
France	55	211.8	53.1	36.1	84.0	32.7	417.7
Germany (Federal Republic) ..	(c)	84.8	46.0	15.7	29.9	60.8	237.2
Italy	34	93.5	20.8	4.1	17.2	39.4	177.0
Japan	(c)	204.8	17.9	43.0	5.3	11.5	282.5
United States of America	305	(d) 41.8	(d) 13.5	(d) 62.5	(d) 39.7	(d) 89.1	(d) 246.6

(a) As in the grease, 1955-56. (b) Actual weight of greasy and scoured wool. (c) Not available. (d) Imports are in terms of estimated clean content of greasy and scoured wool. Actual weight of total United States of America imports was 340.6 million lb.

As a considerable transit trade exists between continental countries, it must not be assumed that the whole of the imports recorded by these countries are retained for their own consumption. The countries chiefly concerned with the transit trade are the United Kingdom (11 per cent. of total imports re-exported in 1956) and Belgium.

§ 6. Trade in Hides and Skins.

1. **Extent of Trade.**—In addition to the hides and skins treated locally, considerable quantities are exported: the value of cattle and horse hides, and sheep and other skins, sent overseas during 1956-57 amounted to £24,269,000 compared with a total of £20,882,000 in 1955-56 and £19,704,000 in 1954-55.

2. **Sheepskins with Wool.**—The exports of sheepskins with wool constitute the most important item in the values referred to in the preceding paragraph. Of the total exports of £19,438,000 during 1956-57, France obtained 83 per cent. by value and the United Kingdom 11 per cent. The exports of sheepskins with wool during each of the years 1952-53 to 1956-57 compared with the average for the years 1934-35 to 1938-39 were as follows:—

EXPORTS OF SHEEPSKINS WITH WOOL : AUSTRALIA.

Particulars.		Average, 1934-35 to 1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number ..	'000	12,009	15,681	13,647	14,841	14,891	14,239
Value ..	£'000	2,780	16,584	15,569	15,569	15,268	19,438

3. **Sheepskins without Wool.**—Up to 1943-44, sheepskins without wool were exported chiefly to the United States of America. During 1943-44, that country accounted for 97 per cent. of the total shipments. In subsequent years, however, there has been a decline in shipments to the United States of America and an increase in the quantities shipped to other countries; of the total value of £479,000 of sheepskins without wool exported in 1956-57 the United States of America received only 33 per cent., France received 39 per

cent. and the United Kingdom 19 per cent. Quantities and values for the five years 1952-53 to 1956-57 compared with the average for the years 1934-35 to 1938-39 are shown in the table hereunder:—

EXPORTS OF SHEEPSKINS WITHOUT WOOL: AUSTRALIA.

Particulars.	Average, 1934-35 to 1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number .. '000	808	3,242	2,482	2,147	1,771	1,353
Value.. .. £'000	70	749	671	372	424	479

4. Hides.—(i) *Exports.* The export trade in cattle hides and calf skins during 1956-57 was distributed as follows:—Italy, £514,000; Federal Republic of Germany, £421,000; Japan, £342,000; Panama, £335,000; United Kingdom, £301,000; Sweden, £153,000 and other countries, £458,000.

The exports during each of the five years 1952-53 to 1956-57 compared with the average for the years 1934-35 to 1938-39 are shown in the table below:—

EXPORTS OF CATTLE HIDES AND CALFSKINS: AUSTRALIA.

Particulars.	Average, 1934-35 to 1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Quantity .. '000 lb.	(a) 1,677	(a) 282	18,761	33,817	45,976	45,111
Value.. .. £'000	957	1,161	1,381	1,874	2,722	2,524

(a) '000 skins.

Horse hides exported during 1956-57 weighed 1,939,984 lb. and were valued at £116,928.

(ii) *Imports.* The imports of cattle hides and calfskins are fairly large, the chief sources of supply being New Zealand and the Pacific Islands. The quantities and values of cattle hides, including calfskins, imported into Australia during the years 1952-53 to 1956-57 compared with the average for the years 1934-35 to 1938-39 were as follows:—

IMPORTS OF CATTLE HIDES AND CALFSKINS: AUSTRALIA.

Particulars.	Average, 1934-35 to 1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Quantity .. cwt.	70,781	11,183	16,960	12,391	10,537	11,064
Value.. .. £'000	279	64	174	108	58	66

5. Furred Skins.—The exports of furred skins were valued as follows:—

EXPORTS OF FURRED SKINS: AUSTRALIA.

(£'000.)

Description.	Average, 1934-35 to 1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Rabbit and Hare ..	(a) 1,150	924	849	1,100	1,711	975
Opossum	125	31	104	42	15	53
Kangaroo and Wallaby ..	191	187	202	281	285	279
Other.. ..	69	9	1	7	2	6
Total	1,535	1,151	1,156	1,430	2,013	1,313

(a) Excludes hare skins.

These skins were shipped principally to the United States of America, the United Kingdom, and Belgium and Luxemburg, the values shipped to each in 1956–57, with 1955–56 values in parentheses, being:—United States of America, £952,000 (£1,427,000); United Kingdom, £147,000 (£407,000) and Belgium-Luxemburg, £125,000 (£146,000).

6. **Marketing of Hides and Skins.**—(i) *Sheepskins with Wool.* Details of the agreement between the United Kingdom and Commonwealth Governments for the purchase by acquisition of the “exportable surplus” of woolled sheepskins in Australia during the 1939–45 War were given in Official Year Book No. 37, p. 886. The contract expired on 30th June, 1946, and sheepskins have since been marketed mostly at open auction.

(ii) *Sheep and Lamb Pelts.* Details of the marketing control of sheep and lamb pelts were given in Official Year Book No. 38, p. 930. Pelts have reverted to open marketing without export restrictions.

(iii) *Hides and Leather.* A hide acquisition and marketing scheme operated from November, 1939 to August, 1954. Until 31st December, 1948, the scheme operated under the National Security Regulations. From 1st January, 1949, it continued under a Commonwealth Act and supporting State Acts. In June, 1952, the Tasmanian legislation lapsed and the scheme did not operate in Tasmania after that date. By August, 1954, the wide gap which had existed between fixed local prices and export prices for hides and leather had almost disappeared and, having in view certain legal difficulties which were hampering the operation of the scheme, the Commonwealth Government decided on its immediate termination.

The Australian Hide and Leather Industries Board, which administered the scheme, acquired all cattle hides and yearling and calf skins produced in Australia at set prices and allocated them to tanners at these prices. The prices were 15 per cent. to 20 per cent. above August, 1939 levels until May, 1952 when they were increased by an average of 50 per cent. Surplus hides were disposed of by tender or open auction. The Board retained the amounts realized in excess of appraised values, and supplemented the price to the producers in cases where the realized amount was less than the appraisal values.

Returns from sales of surplus hides and deferred payments levied on leather exported, based on the difference between world and Australian prices for the hides involved, were paid into a fund by the Board. From this fund, premiums were paid to producers as a proportion of appraised values. These premiums compensated hide producers to some extent for the margin between local and overseas prices. Further details of the war-time operations of the scheme will be found in Official Year Book No. 37, p. 887 and Official Year Book No. 38, pp. 930–1.

Pre-war, about 40 to 45 per cent. of Australian production was exported, but with the development of the local tanning industry, the proportion is now approximately 30 per cent.

(iv) *Rabbit Skins.* A marketing control scheme for rabbit skins was introduced under the National Security (Rabbit Skins) Regulations on 10th June, 1940, and terminated in April, 1949. Details of the scheme will be found in Official Year Book No. 38, p. 931.

§ 7. Tallow and Lard.

1. **Production.**—Australia's production of tallow and lard is in excess of local requirements and considerable quantities are normally available for export. Details of the production of edible and inedible tallow and lard in each State are shown in the table below for the years 1954–55 and 1955–56.

TALLOW AND LARD : PRODUCTION.
(cwt.)

State.	1954-55.			1955-56.		
	Tallow.		Lard.	Tallow.		Lard.
	Edible.	Inedible.		Edible.	Inedible.	
New South Wales	92,553	463,839	4,145	107,424	532,167	3,718
Victoria ..	308,026	495,870	7,919	351,679	566,822	7,898
Queensland ..	378,218	221,601	19,421	402,399	157,523	17,473
South Australia ..	56,106	112,446	6,932	54,434	132,930	4,348
Western Australia	15,165	66,807	3,353	18,645	95,564	6,667
Tasmania ..	1,227	33,153	1,176	1,786	42,484	1,369
Australia ..	851,295	1,393,716	42,946	936,367	1,527,490	41,473

2. Consumption of Tallow in Factories.—Details of consumption are collected from the principal factories using tallow (soap and candle, chemical and woolscouring works).

Total consumption of tallow in factories as shown in the table below for the years 1938-39 and 1952-53 to 1956-57 is deficient, however, to the extent that no allowance is made for the small unrecorded amounts used in other types of establishments.

TALLOW : CONSUMPTION IN FACTORIES, AUSTRALIA.
(cwt.)

Year.	Quantity Used.	Year.	Quantity Used.
1938-39	539,095	1953-54	1,172,710
1951-52	1,205,307	1954-55	1,193,368
1952-53	1,068,181	1955-56	1,210,694

3. Exports of Tallow and Lard.—Particulars of exports of edible (including lard) and inedible tallow are shown in the following table for the five years 1952-53 to 1956-57 in comparison with the average for the five years ended 1938-39.

TALLOW AND LARD : EXPORTS, AUSTRALIA.
(cwt.)

Particulars.	Average, 1934-35 to 1938-39.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Edible(a) ..	(b)	111,020	158,875	74,401	142,498	128,649
Inedible ..	606,934	430,227	823,816	365,985	829,403	936,951
Total ..	(b)	541,247	982,691	440,386	971,901	1,065,600

(a) Including lard and sweetened fats.

(b) Not available.

4. Marketing of Tallow.—Until 30th September, 1952, the bulk of Australia's exportable surplus tallow, other than collar white mutton tallow was sold to the United Kingdom Ministry of Food under a series of annual contracts. The 1951-52 contract was not renewed and on 9th November, 1952, tallow export control was removed following termination of the industry's equalization pool arrangement and price de-control in most States.

§ 8. Exports of Principal Pastoral Products.

The quantities and values of the principal pastoral products of Australia exported for the years 1954-55 to 1956-57 were as follows:—

EXPORTS OF PASTORAL PRODUCTS: AUSTRALIA.

Product.	Unit of Quantity.	Quantity.			Value (£'000.)		
		1954-55.	1955-56.	1956-57.	1954-55.	1955-56.	1956-57.
Animals (living)—							
Cattle	No.	6,786	8,025	18,360	346	475	754
Horses	"	607	582	682	251	264	326
Sheep	"	97,146	101,837	129,480	340	332	482
Bones	'000 cwt.	23	24	1,145	50	49	132
Glycerine	'000 lb.	27	1,379	1,011	2	129	57
Hair and Bristles	cwt.	3,410	1,928	2,299	89	98	151
Hoofs	"	10,447	10,461	10,936	18	24	23
Horns	"	10,014	9,347	9,104	69	76	81
Meats—							
Frozen Beef and Veal(a)	'000 lb.	276,398	322,748	334,646	21,899	23,431	23,272
" Mutton and Lamb	"	128,793	116,283	76,274	11,817	9,752	6,095
" Rabbits and Hares	Value only	..	..	..	1,478	1,855	2,513
" Other .. ..	"	..	..	..	4,221	3,833	3,202
Preserved in Tins, etc.	'000 lb.	141,115	130,591	112,193	20,568	18,230	13,175
Other (excluding Bacon and Ham)	Value only	..	..	..	1,248	1,005	849
Sausage Casings .. ..	"	..	..	..	1,905	2,128	1,700
Hides and Skins—							
Cattle and Calf	'000 lb.	33,817	45,981	45,111	1,874	2,722	2,524
Horse	"	2,303	2,204	1,940	138	136	117
Sheep and Lamb	'000.	16,988	16,661	15,593	15,941	15,691	19,917
Rabbit and Hare	'000 lb.	4,586	3,327	2,464	1,100	1,711	975
Tallow (Edible and Inedible)	cwt.	415,543	956,678	1,057,145	1,771	4,027	4,373
Wool—							
Greasy	'000 lb.	959,040	1,063,493	1,206,625	310,904	293,839	425,728
Scoured, Tops, Noils, Waste	"	101,555	114,598	131,961	42,204	43,690	57,997

(a) Includes chilled beef.