

CHAPTER XIX.

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. *General.*—A detailed account of the various enumerations of livestock in Australia made prior to 1860 was given in previous issues of the Year Book. The numbers recorded between 1800 and 1860 are regarded as somewhat defective. Doubtless the growth of population, the expansion in the area settled and the increase in private ownership made it difficult in those early times to secure accurate returns. Since 1860 however, the annual enumerations have been based, with few exceptions, on actual collections made through the agency of the State Police or by post and reliably record the movement in livestock numbers from year to year.

2. *Livestock Numbers since 1860.*—Particulars concerning the numbers of each of the principal kinds of livestock in Australia at decennial intervals from 1860 to 1940 and from 1949 onwards in single years are given in the following table, and are shown continuously on the graph on page 713.

LIVESTOCK : AUSTRALIA.
(‘000.)

Year.	Horses.	Cattle.	Sheep.	Pigs.	Year.	Horses.	Cattle.	Sheep.	Pigs.
1860 ..	432	3,958	20,135	351	1930 ..	1,793	11,721	110,568	1,072
1870 ..	717	4,276	41,594	543	1940 ..	1,699	13,080	119,305	1,455
1880 ..	1,069	7,527	62,184	816	1949 ..	1,115	14,124	108,735	1,196
1890 ..	1,522	10,300	97,881	891	1950 ..	1,057	14,640	112,891	1,123
1900 ..	1,610	8,640	70,603	950	1951 ..	999	15,229	115,596	1,134
1910 ..	2,166	11,745	98,066	1,026	1952 ..	937	14,893	117,647	1,022
1920 ..	2,416	13,500	81,796	764	1953 ..	895	15,247	123,072	993

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, 1953 (15,247,000); sheep, 1942 (125,189,000); and pigs, 1941 (1,797,000).

The distribution throughout Australia of beef cattle, dairy cattle, sheep and pigs as at 31st March, 1948 was shown in the graphs on pages 905-8 of Official Year Book No. 39.

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 XXI.—Farmyard, Dairy and Bee Products.

3. *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. In the raising of goats, some attention has been devoted to the angora goat and its product (mohair), and upwards of 5,000 angora goats are included in the number shown above. Of these, 1,640 were in New South Wales, 1,000 in Queensland, 1,531 in South Australia, and 284 in Tasmania.

New South Wales ceased collecting these details after 1941 and Queensland, South Australia, and Tasmania after 1942.

4. Value of Pastoral Production.—(i) *Gross, Local and Net Values, 1952-53.* Values of pastoral production for each State are shown for 1952-53 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 XXIX. —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, 1952-53.
(£'000.)

State.	Gross Production Valued at Principal Markets. (a)	Marketing Costs.	Gross Production Valued at Farm.	Farm Costs.		Net Value of Production. (b)
				Seed used, and Fodder for Farm Stock.	Value of other Materials used in Process of Production.	
N.S. Wales ..	226,312	14,510	211,802	3,005	(c) 1,925	206,872
Victoria ..	124,305	10,449	113,856	1,169	4,228	108,459
Queensland ..	96,142	8,970	87,172	3,380	1,350	82,442
Sth. Australia	54,577	3,091	51,486	688	880	49,918
W. Australia ..	45,319	2,644	42,675	1,469	2,564	38,642
Tasmania ..	10,840	599	10,241	2,558	(c) 271	7,412
Total ..	557,495	40,263	517,232	12,269	11,218	493,745

(a) Excludes £15,140,000 comprising an interim distribution of profits under the Wool Disposals Plan made in March, 1953. (b) No deduction has been made for depreciation and maintenance. (c) No allowance has been made for costs of power, power kerosene, petrol and other oils.

(ii) *Net Values, 1934-35 to 1952-53.* The net value of pastoral production by States and the net value per head of population for the years 1948-49 to 1952-53 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.(c)							
(£'000.)							
Average, 1934-35 to 1938-39 ..	30,592	16,784	13,384	4,583	4,307	1,429	71,079
1948-49 ..	95,640	53,714	43,869	21,456	20,802	5,374	240,855
1949-50 ..	140,027	77,629	57,327	28,558	26,442	7,138	337,121
1950-51 ..	302,642	162,409	100,526	65,797	61,463	11,972	701,809
1951-52 ..	154,386	99,808	67,080	38,905	34,442	5,812	400,493
1952-53 ..	206,872	108,459	82,442	49,918	38,642	7,412	493,745

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.(c) (£ 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
1948-49 ..	31 4 3	25 8 4	38 13 3	32 5 2	39 16 9	20 0 8	31 0 2
1949-50 ..	44 2 11	35 15 4	49 5 9	41 11 7	48 8 11	25 14 8	41 17 7
1950-51 ..	92 8 9	72 12 2	84 5 5	92 10 10	107 11 6	41 12 7	85 3 9
1951-52 ..	46 0 1	43 7 4	54 18 8	53 8 6	58 5 3	19 9 4	47 2 7
1952-53 ..	60 9 8	45 18 3	66 0 4	66 12 0	63 1 3	23 19 10	56 14 8

(a) 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) No deduction has been made for depreciation and maintenance.

5. Indexes of Quantity and Price of Pastoral Production, 1948-49 to 1952-53.—For details of the methods of calculating these indexes and of the weights used see Chapter XXIX.—Miscellaneous.

INDEXES OF QUANTITY AND PRICE OF PASTORAL PRODUCTION :
AUSTRALIA.

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

Particulars.	1948-49.	1949-50.	1950-51.	1951-52.	1952-53.
Quantity produced—					
Wool	108	115	116	112	131
Other products	101	109	100	95	119
Total Pastoral	105	112	109	105	126
Total per Head of Population	92	96	90	84	97
Price—					
Wool	366	483	1,098	552	623
Other products	230	264	386	423	409
Total Pastoral	313	396	818	501	539

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 1952-53 was 878,267 tons. This is equivalent to 224.9 lb. per head compared with 216.5 lb. per head in 1951-52, 226.6 lb. in 1950-51 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) *War-time Marketing.* Details of arrangements for the marketing of meat during the 1939-45 War were given on page 1107 of Official Year Book No. 36.

(iii) *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 page 1107 of Official Year Book No. 36, page 903 of Official Year Book No. 38 and page 903 of Official Year Book No. 39.

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.

The following table sets out the prices of representative descriptions of Australian beef and lamb which have been sold to the United Kingdom on a Government-to-Government basis from the beginning of the 1939-45 War to the cessation of bulk purchasing in 1954.

CONTRACT PRICES : BEEF AND LAMB SOLD TO THE UNITED KINGDOM.

Beef.			Lamb.		
Contract approved from—	First Quality Ox Sides.		Contract approved from—	First Quality. (37-42 lb.)	
	Per lb. Sterling.	Per lb. Australian.		Per lb. Sterling.	Per lb. Australian.
	d.	d.		d.	d.
October, 1939..	3.406	4.266	October, 1939 ..	5.438	6.811
„ 1941..	3.781	4.736	„ 1941 ..	5.813	7.281
December, 1943..	3.969	4.971	„ 1944 ..	6.250	7.828
January, 1946..	4.344	5.441	„ 1946 ..	7.790	9.757
October, 1946..	4.844	6.067	„ 1948 ..	8.667	10.855
April, 1948..	5.344	6.693	„ 1949 ..	9.688	12.134
October, 1948..	6.063	7.594	July, 1949 ..	9.688	12.134
„ 1949..	7.063	8.846	„ 1950 ..	10.438	13.074
„ 1950..	7.906	9.902	„ 1951 ..	12.26	15.33
„ 1951..	10.90	13.63	„ 1952 ..	14.30	17.87
„ 1952..	12.594	15.74	„ 1953 ..	15.37	19.21
„ 1953..	13.248	16.56			

Pig meats were not included in the Fifteen Year Meat Agreement, but a two-year arrangement terminating on 30th September, 1954 was negotiated. This arrangement did not limit shipments of pig meats to other markets.

(iv) *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) A schedule of minimum prices to operate until 30th September, 1955 was drawn up. These prices represented in the case of beef 95 per cent., lamb 93 per cent. and mutton 75-93 per cent. of the contract prices for 1953-54. Minimum prices to operate after 30th September, 1955 are to be negotiated before that date.
- (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.

§ 2. Horses.

1. Distribution throughout Australia.—The States of New South Wales, Queensland and Victoria together depasture about 80 per cent. of the total number of horses in Australia. In the following table figures are shown for each State and Territory for the years 1949 to 1953 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.	Australia.
Average, 1935 to 1939 ..									
1949 ..	537	355	444	198	154	31	33	1	1,753
1950 ..	358	213	325	94	69	22	33	1	1,115
1951 ..	343	200	317	83	59	21	33	1	1,057
1952 ..	329	187	307	71	55	20	29	1	999
1953 ..	311	169	289	63	53	19	32	1	937
1953 ..	298	154	282	57	50	18	35	1	895

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 made its highest recording 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 1953 the decrease in numbers averaged 46,000 per annum, the rate of decline being 54,000 per annum during the five years ended 1953.

The number of horses in Australia from 1860 onwards may be obtained from the graph on page 713.

The proportion per cent. of the number of horses in each State and Territory for 1953 was :—New South Wales, 33.3 ; Victoria, 17.2 ; Queensland, 31.5 ; South Australia, 6.4 ; Western Australia, 5.6 ; Tasmania, 2.0 ; Northern Territory, 3.9 ; and Australian Capital Territory, 0.1.

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 averaged only about 4,000 for the five years ended 1938-39 and 1,000 for the five years ended 1952-53.

(ii) *Imports.* The few horses imported into Australia consist mainly of valuable stud animals from the United Kingdom and racehorses from New Zealand. During the five years ended 1952-53 an average of 394 horses valued at £323,000 (equivalent to £320 per head) was imported annually.

§ 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 occupied 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. After that year the number dropped continuously till 1929, largely owing to the decline in the oversea demand for frozen beef. With the expansion of dairying it recovered to 14,049,000 in 1934, but from that year declined continuously 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 during 1944-45 and 1945-46 caused a decline in numbers to 14,133,000 in 1945, to 13,878,000 in 1946 and to 13,427,000 in 1947. This was followed by an upward movement in numbers to 15,229,000 in 1951, and a slight decline in 1952 to 14,893,000. In 1953 cattle numbers reached 15,247,000, the highest number yet recorded. A graph showing the number of cattle in Australia from 1860 appears on page 713.

The numbers of cattle (beef and dairy) in the several States and Territories in each year 1949 to 1953 compared with the average for the years 1935 to 1939 are shown below.

CATTLE : NUMBER.
('000.)

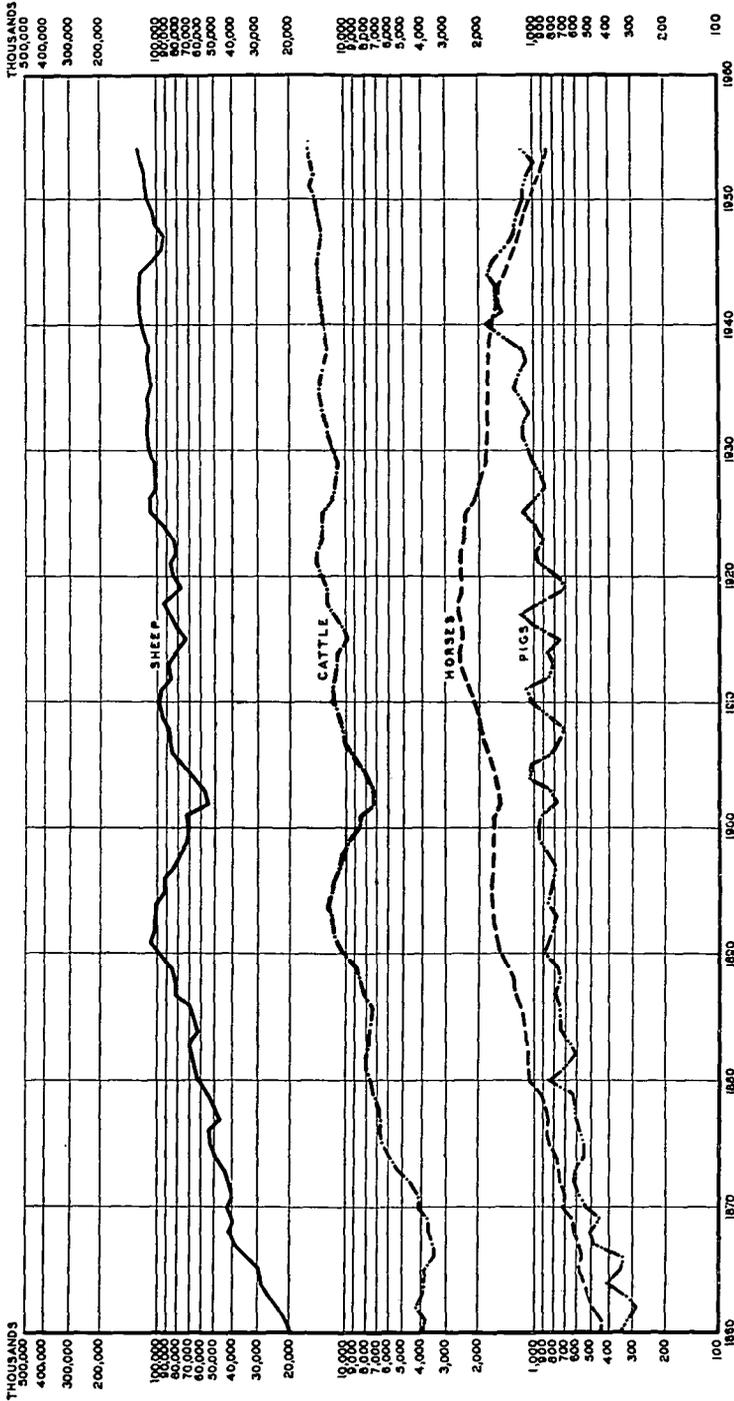
Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Aust.
Average, 1935 to 1939	3,198	1,952	6,018	331	819	262	889	9	13,478
1949	3,253	2,225	5,992	461	864	266	1,053	10	14,124
1950	3,440	2,231	6,305	464	865	275	1,049	11	14,640
1951	3,703	2,216	6,734	433	841	272	1,019	11	15,229
1952	3,621	2,215	6,434	437	852	266	1,058	10	14,893
1953	3,649	2,297	6,751	483	846	275	936	10	15,247

Although the proportion is not as high as it has been in the past, Queensland was carrying 44.3 per cent. of the cattle in Australia in 1953. The percentage in each State and Territory during that year was:—New South Wales, 23.9; Victoria, 15.1; Queensland, 44.3; South Australia, 3.2; Western Australia, 5.5; Tasmania, 1.8; Northern Territory, 6.1; Australian Capital Territory, 0.1.

Graphs indicating the distribution of beef and dairy cattle separately in Australia at 31st March, 1948 were shown on pages 905-6 of Official Year Book No. 39. A graph showing the distribution in 1924-25 of the total cattle in Australia appeared on page 660 of Official Year Book No. 22, while in Official Year Book No. 34 similar graphs showing for 1938-39 the distribution of total cattle and of dairy cows may be found on pp. 453-4.

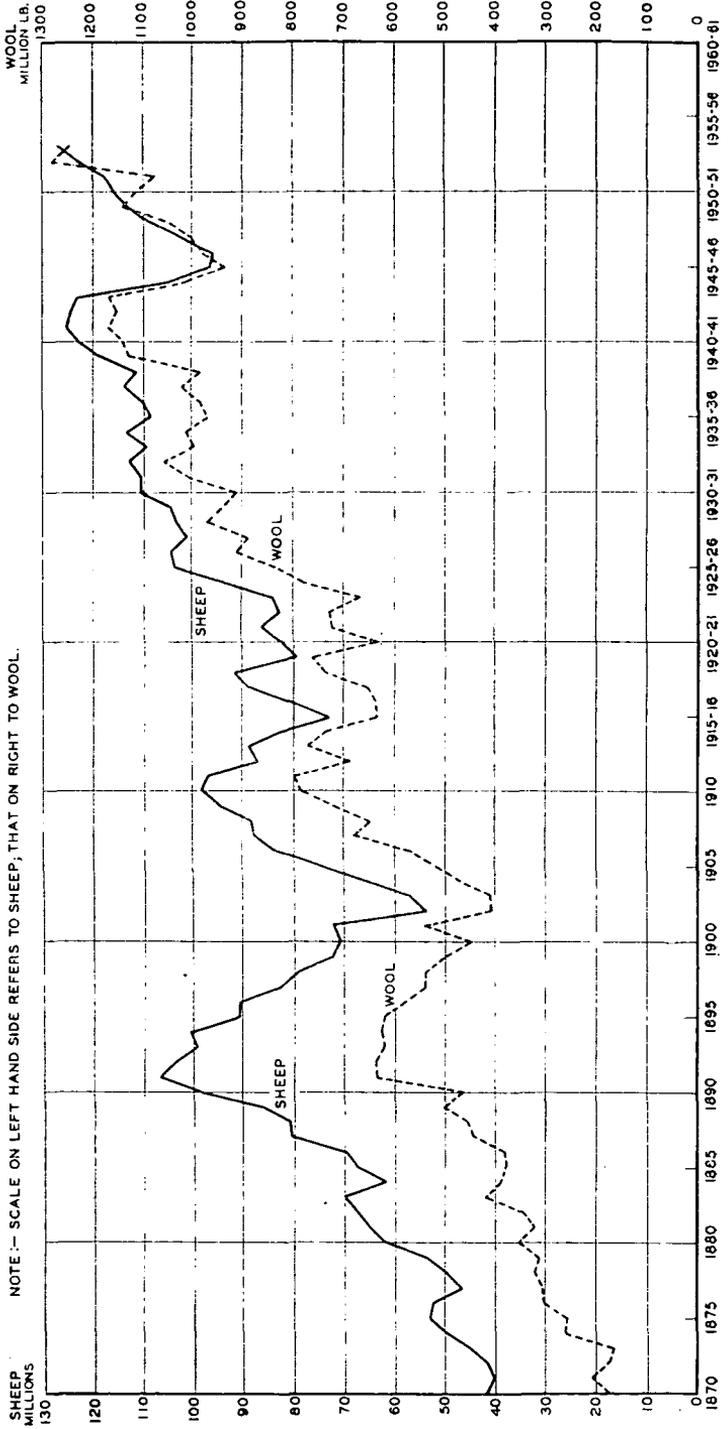
LIVESTOCK: AUSTRALIA, 1860 TO 1954

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 1953-54



3. Classification of Cattle According to Purpose.—Of the total number of cattle in Australia in 1953, 10,501,000 or 68.9 per cent. were classified as beef cattle. The numbers classified as beef cattle in the several States and Territories during the years 1943 and 1949 to 1953 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
1949	1,994	711	4,569	182	634	111	1,053	7	9,261
1950	2,167	706	4,872	193	638	117	1,049	8	9,750
1951	2,457	727	5,293	189	618	115	1,019	8	10,426
1952	2,416	776	5,138	201	621	110	1,058	7	10,327
1953	2,405	820	5,378	231	612	113	936	6	10,501

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

Particulars relating to dairy cattle numbers will be found in Chapter XXI.—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 1949–50 and published in Primary Industries Bulletin No. 44. The tables relating to beef and dairy cattle show classifications according to size of herd and area of the holdings.

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*, 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	1952 (January) ..	193,200
United States of America	66,706	1953 (January) ..	93,637
Brazil	40,807	1952 (December) ..	55,854
U.S.S.R.	59,800	1953 (January) ..	56,600
Argentina	33,762	1953 (July) ..	41,000
Pakistan(b)	33,000	1952 (January) ..	29,049
Ethiopia	18,000	1954	20,000
China	23,081	1948 (April) ..	18,200
France	15,504	1953 (October) ..	16,280
Colombia	8,010	1951 (December) ..	15,090
Australia	13,285	1953 (March) ..	15,247
Mexico	11,716	1952 (December) ..	15,000
Germany, Federal Republic of	12,114	1952 (December) ..	11,641
Union of South Africa	11,636	1952 (August) ..	11,767
Turkey(b)	8,611	1952 (December) ..	11,708

(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 the export of live cattle has never been large. The number of cattle imported is also small, consisting, as in the case of horses, mainly of valuable animals for stud purposes. Details for the years 1948–49 to 1952–53 compared with the average for the years 1934–35 to 1938–39 are as follows:—

CATTLE : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	No.	Value.	No.	Value.	No.	Value.
Average, 1934-35 to 1938-39	295	£'000 22	308	£'000 6	13	— 16
1948-49 ..	147	76	1,087	48	940	— 28
1949-50 ..	160	89	485	40	325	— 49
1950-51 ..	201	123	876	70	675	— 53
1951-52 ..	318	214	681	58	363	— 156
1952-53 ..	494	201	1,643	81	1,149	— 120

NOTE.—The minus sign (—) signifies net imports.

The average value per head of the cattle imported during the last five years was £533, while the average value per head of the cattle exported during the same period was £62.

7. Cattle Slaughtered.—The numbers of cattle slaughtered during each of the years ended June, 1949 to 1953 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, 1934-35 to 1938-39	(a) 1,112	812	1,046	(b) 156	(b) 124	45	(b) 4	2	3,301	3,331
1949 ..	1,136	850	1,089	195	159	45	15	5	3,494	3,523
1950 ..	1,156	893	1,102	213	166	58	14	6	3,608	3,648
1951 ..	1,160	915	1,181	226	160	70	15	8	3,735	3,794
1952 ..	1,247	966	1,029	197	152	71	15	9	3,686	3,738
1953 ..	1,406	848	1,272	194	154	70	14	8	3,966	4,008

(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
1949 ..	180	118	202	30	33	10	3	1	577
1950 ..	186	125	212	33	35	12	3	1	607
1951 ..	193	137	232	36	34	14	4	2	652
1952 ..	184	138	178	31	32	14	3	2	582
1953 ..	217	124	253	31	32	14	3	1	675

(a) Year ended March.

(b) Year ended previous December.

9. Consumption of Beef and Veal.—For the three pre-war 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.

Due mainly to the effects of rationing, civilian consumption during the war and immediate post-war years was considerably lower than previously but following the return to more normal conditions it rose to 131.6 lb. per head in 1950-51. In 1951-52, consumption fell again, to 121.8 lb. per head, and in 1952-53 to 118.3 lb. per head.

In the following table details of the production and disposal of beef and veal are shown for the periods stated.

**PRODUCTION AND DISPOSAL OF BEEF AND VEAL (BONE-IN WEIGHT) :
AUSTRALIA.
(⁰⁰⁰ tons.)**

Year.	Changes in Stock.	Production.	Exports.	For Canning.	Consumption in Australia as Human Food.	
					Total.	Per Head per Annum.
Average, 1936-37 to						lb.
1938-39 .. ..	.. ..	569	127	(a)	442	144.1
1948-49 .. ..	.. .. - 4	577	98	61	422	121.3
1949-50 .. ..	.. .. - 9	607	94	75	447	124.3
1950-51 .. ..	.. .. + 10	651	81	72	488	131.6
1951-52 .. ..	.. .. - 4	582	52	70	464	121.8
1952-53 .. ..	.. .. + 6	675	96	111	462	118.3

(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 quantity of frozen beef and veal exported in 1938-39 amounted to 271,964,000 lb., valued at £4,324,000, but there was a decline during the war years owing to reduced production and the diversion of supplies to meet the requirements of the Australian and Allied Services based on Australia. By 1947-48 the quantity exported had risen again to 237,150,000 lb., valued at £6,193,000, but this was followed by a steady decline until 1951-52 when exports amounted to only 95,876,000 lb. valued at £5,230,000. There was a marked increase in 1952-53 when 192,500,000 lb. valued at £13,782,000 was exported. The quantities and values of frozen beef and veal exported during the five pre-war years ended 1938-39 and in each year 1948-49 to 1952-53 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
1948-49	189,007	5,716	2,646	100
1949-50	178,128	6,522	4,233	182
1950-51	154,832	6,440	3,478	207
1951-52	92,926	5,009	2,950	221
1952-53	189,176	13,443	3,324	339

Prior to the war the largest purchaser of Australian beef and veal was the United Kingdom, which during 1938-39 took about 90.2 per cent. of the total shipments. However, at the request of the United Kingdom Government there was a considerable diversion from that country to nearer British possessions during the war years. In 1952-53 shipments to the United Kingdom were valued at £9,690,000 or 70.3 per cent. of the total value of beef and veal exports compared with £2,031,000 or 38.8 per cent. in 1951-52. Exports to other British countries amounted to £2,832,000 or 20.5 per cent. of the total in 1952-53 and £2,489,000 or 47.6 per cent. in 1951-52.

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 United Kingdom in a chilled condition. Trial shipments of 254,000 lb. in 1932-33 and 1,515,000 lb. in 1933-34 were made, and the 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.

§ 4. Sheep.

1. **Initiation of the Pastoral Industry.**—Fortunately for Australia, the suitability of its climate and general conditions for the production of a high class of wool were, at an early date in the history of its settlement, surmised and tested by Captain Macarthur, one of the pioneer sheep-breeders of New South Wales. To the energy of this enterprising pastoralist is due in large measure the rapid and extremely satisfactory development of Australia as a producer of fine wool, and 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 page 714. 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, the greatest number recorded in Australia. At no previous period have such large numbers been depastured continuously, and the development took place despite an increase in the annual slaughter for the meat trade over this period, from about 10 million to 25 million.

However, a sharp decline to 105 million occurred in 1945, followed by a further reduction to 96.4 million in 1946 and to 95.7 million in 1947. This represented a loss from all causes other than slaughtering of about 37 million sheep (30 per cent.) since 1944 and was largely attributable to the severe drought conditions experienced during 1944, 1945 and 1946. The passing of the drought and consequent re-stocking has resulted in a steady increase in sheep numbers which at 31st March, 1953 amounted to 123.1 million or only about 2 million below the record number in 1942.

The following table shows the approximate movement in sheep numbers in Australia in 1938-39 and 1948-49 to 1952-53.

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
1948-49 ..	30,642	84	17,745	6,637	108,735	+ 6,176
1949-50 ..	30,382	96	20,929	5,201	112,891	+ 4,156
1950-51 ..	29,816	84	16,083	10,944	115,596	+ 2,705
1951-52 ..	27,183	79	15,116	9,637	117,647	+ 2,051
1952-53 ..	31,778	84	21,097	5,172	123,072	+ 5,425

(a) Balance figure.

(b) As at commencement of last year shown.

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 about one half of the sheep of Australia.

A graph indicating the distribution of sheep in Australia at 31st March, 1948, is shown on page 907 of Official Year Book No. 39. Similar graphs for the years 1938-39 and 1924-25 were published in Official Year Books No. 34, page 452 and No. 22, page 659, respectively.

The numbers of sheep in the several States and Territories for each year 1949 to 1953 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
1949 ..	50,404	19,170	16,499	9,366	10,872	2,160	26	238	108,735
1950 ..	53,298	19,161	17,582	9,477	10,923	2,170	26	254	112,891
1951 ..	54,111	20,012	17,478	10,166	11,362	2,181	29	257	115,596
1952 ..	53,676	21,537	16,164	11,470	12,188	2,338	31	243	117,647
1953 ..	57,461	21,368	17,030	12,036	12,475	2,421	34	247	123,072

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 1953 was:—New South Wales, 46.7; Victoria, 17.4; Queensland, 13.8; South Australia, 9.8; Western Australia, 10.1; Tasmania, 2.0; Northern Territory, 0.0; Australian Capital Territory, 0.2.

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 1943 and 1949 to 1953. Data in this form are not available prior to 1943.

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

Description.	31st March—					
	1943.	1949.	1950.	1951.	1952.	1953.
Rams, 1 year and over ..	1,651	1,443	1,497	1,473	1,507	1,560
Breeding ewes (including ewes intended for mating)	56,674	50,855	52,122	52,794	52,954	55,351
Other ewes, 1 year and over	9,036	6,796	6,982	6,760	7,451	7,039
Wethers, 1 year and over ..	31,986	26,199	29,251	31,516	34,032	34,304
Lambs and hoggets, under 1 year ..	24,667	23,442	23,039	23,053	21,703	24,818
Total, Sheep and Lambs	124,614	108,735	112,891	115,596	117,647	123,072

Particulars relating to the principal breeds of sheep at 31st March, 1953 are shown in the following table:—

SHEEP : PRINCIPAL BREEDS, 31st MARCH, 1953.
('000.)

Breed.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T. (a)	A.C.T.	Australia.
Merino ..	43,713.7	8,271.3	16,776.0	10,135.2	11,273.5	278.6	33.3	223.4	90,705.0
Other recognized breeds	3,541.5	5,220.4	54.2	818.8	461.2	1,100.1	.1	15.6	11,211.9
Merino comb-backs(b) ..	4,141.8	2,251.0	50.0	209.1	185.6	338.5	.1	2.9	7,179.0
Crossbreeds(c) ..	6,064.0	5,025.5	149.4	873.4	554.4	704.3	.3	4.9	13,976.2
Total ..	57,461.0	21,368.2	17,029.6	12,036.5	12,474.7	2,421.5	33.8	246.8	123,072.1

(a) As at 31st December, 1952. Distribution between categories has been estimated. (b) Merino comb-back 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 1949–50 and published in *Primary Industries Bulletin* No. 44. The tables relating to sheep farming show classifications according to areas of the holdings on which the sheep were carried.

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 1952–53, Australian flocks numbered

123 million sheep, compared with the estimate of 162 million for the U.S.S.R., China and Eastern Europe, with about 55 million in Argentina and about 46 million in India and Pakistan together. The total world population was estimated at about 814 million in 1952-53. Further details of sheep numbers in the principal wool producing countries of the world for 1938-39, 1951-52 and 1952-53 are given in the table on p. 725.

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 sheep was prohibited, except with the approval of the Minister for Trade and Customs. Sheep for breeding purposes were being exported in increasing numbers up to the outbreak of war in the Pacific, and shipments in 1939-40 amounted to 23,329 sheep valued at £80,000, compared with 940 valued at £28,000 in 1952-53. The chief countries to which sheep for breeding purposes were consigned in 1939-40 were New Zealand, South Africa, Japan and Korea and, in 1952-53 to New Zealand and Japan. During the last five years the principal consignments of ordinary sheep have been made to Singapore from Western Australia. The following table shows the imports and exports of breeding and flock sheep for the years 1948-49 to 1952-53 compared with the average for the years 1934-35 to 1938-39.

SHEEP : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	No.	Value.	No.	Value.	No.	Value.
Average, 1934-35 to 1938-39	3,795	£30,000	65,188	£67,000	61,393	£37,000
1948-49 ..	303	12	84,278	207	83,975	195
1949-50 ..	260	10	96,595	245	96,335	235
1950-51 ..	103	11	83,799	343	83,696	332
1951-52 ..	300	14	79,177	369	78,877	355
1952-53 ..	267	10	84,397	278	84,130	268

8. **Sheep Slaughtered.**—The following table shows the numbers of sheep slaughtered in the several States during each of the years ended June, 1949 to 1953 compared with the average for the years ended June, 1935 to 1939 :—

SHEEP (INCLUDING LAMBS) SLAUGHTERED. (‘000.)

Year.	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, 1934-35 to 1938-39 ..	a 6,474	7,797	1,101	b 1,703	b 1,178	358	(b) ..	25	18,636	18,693
1948-49 ..	6,456	6,692	994	2,208	1,515	420	3	48	18,336	18,384
1949-50 ..	6,787	8,366	959	2,284	1,347	508	3	59	20,313	20,386
1950-51 ..	5,493	5,799	745	1,892	1,230	485	1	51	15,696	15,782
1951-52 ..	5,521	6,082	820	1,680	1,319	482	1	53	15,967	16,019
1952-53 ..	7,065	8,405	1,076	2,740	1,817	577	3	68	21,751	21,833

(a) Average, years ended March.

(b) Average, years ended previous December.

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
1948-49 ..	114,338	114,738	18,440	39,452	24,872	7,574	83	886	320,383
1949-50 ..	119,815	148,254	17,673	39,913	22,446	8,926	57	1,049	358,133
1950-51 ..	92,463	103,052	13,567	34,012	21,550	8,661	27	921	274,253
1951-52 ..	94,076	108,983	14,420	31,222	23,686	8,975	34	960	282,356
1952-53 ..	125,731	153,030	20,371	51,484	32,506	10,656	82	1,230	395,090

10. **Consumption of Mutton and Lamb.**—For the three pre-war years 1936-37 to 1938-39 the annual production of mutton and lamb averaged 319,000 tons of which 89,000 tons were exported leaving a balance of 230,000 tons (or the carcass equivalent of 74.9 lb. per head per annum) available for consumption.

Civilian consumption of mutton and lamb during the war years rose substantially. This was a direct result of the preference of the Defence Service and export demand for beef and of the system of rationing which was introduced (the coupon rating for mutton and lamb being low compared with beef). Consumption per head fell steeply in 1946-47 and up to 1951-52 was lower than in pre-war years. In 1952-53 consumption per head rose again to 77.8 lb.

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
1948-49	+ 6	181	12	7	156	44.9
1949-50	- 3	206	31	14	164	45.7
1950-51	+ 3	162	4	13	142	38.4
1951-52	+ 5	176	3	11	157	41.0
1952-53 .. .. .	..	249	36	21	192	49.1
LAMB.						
Average 1936-37 to 1938-39	..	118	72	..	46	15.0
1948-49	+ 2	139	39	..	98	28.2
1949-50	- 1	152	55	..	98	27.4
1950-51	+ 1	112	20	..	91	24.6
1951-52	+ 4	107	11	..	92	24.0
1952-53	- 5	146	39	..	112	28.8

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. Progress was interrupted during the 1914-18 War and, owing probably to high wool prices, the exports of mutton and lamb for a number of years after were considerably less than earlier shipments. Exports commenced to rise again in 1929-30 and from that year onwards they continued to expand almost uninterruptedly until 1942-43, in which year 203,682,000 lb. of mutton and lamb, valued at £5,496,000, were exported. 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. Due to reduced production as a result of drought conditions and the diversion of supplies to meet the requirements of the Australian and Allied Services based in Australia, there was subsequently a marked decline in mutton and lamb exports, which fell to 56,575,000 lb., valued at £1,540,000, in 1945-46. The maximum quantity exported in the post-war years amounted to 193,092,000 lb. (£7,453,000) in 1949-50. In 1950-51 exports fell steeply to 54,108,000 lb. (£2,684,000) and in 1951-52 to 31,153,000 lb. (£1,918,000), the lowest quantity recorded this century with the single exception of the war year 1917-18. There was a substantial recovery in 1952-53 when 166,844,000 lb. (£8,761,000) were shipped.

The quantities and values of exports of frozen mutton and lamb in each year 1948-49 to 1952-53 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
1948-49	27,509	651	87,355	3,571	114,864	4,222
1949-50	69,744	1,695	123,348	5,758	193,092	7,453
1950-51	8,424	290	45,684	2,394	54,108	2,684
1951-52	5,907	297	25,246	1,621	31,153	1,918
1952-53	80,774	2,790	86,070	5,971	166,844	8,761

As with beef, the principal customer in this trade is normally the United Kingdom. In 1952-53 exports of mutton and lamb to this country represented 88.4 per cent. and 87.1 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 and of the total fine-quality merino wool, Australia produces about one-half. 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 amounted to only 6 per cent. of total production (greasy basis) in 1952-53.

The important position held by Australia among the principal sheep and wool producing countries of the world is shown in the table on p. 725.

2. **Greasy and Scoured Wool.**—Whether the weight of the wool clip should be stated as "in the grease" or as "scoured and washed" 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.

Commencing with 1946-47, the Australian Wool Realization Commission has assessed annually the clean yield of the Australian wool clip. A steady rise has been recorded from 53.4 per cent. clean yield from greasy in 1946-47 to 57.5 per cent. in 1951-52 and 1952-53. 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 of only about 44 per cent., 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. The quantity of this wool exported during the five years ended 1952-53 was approximately 20.0 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 4 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 1948-49 to 1952-53 compared with average table production for the five years ended 1938-39. Particulars of the gross value of wool produced are based in the case of shorn wool upon the average price realized for greasy wool sold at auction and in the case of skin wools on prices recorded by fellmongers and skin exporters.

WOOL : TOTAL PRODUCTION (AS IN THE GREASE).

Particulars.	Average. 1934-35 to 1938-39	1948-49.	1949-50.	1950-51.	1951-52.	1952-53.
	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.
New South Wales ..	480,670	463,208	515,043	492,130	437,837	556,552
Victoria ..	165,586	204,080	225,243	218,266	224,958	252,195
Queensland ..	164,971	156,655	162,256	154,667	138,767	163,149
South Australia ..	85,120	114,905	121,248	125,384	135,484	158,658
Western Australia(a) ..	81,543	99,429	98,889	107,341	120,401	128,148
Tasmania ..	15,504	16,846	16,958	17,250	20,513	19,807
Northern Territory(b) ..	35	305	230	235	252	332
Australian Capital Territory	1,827	1,977	2,123	2,266	1,765	2,245
Australia—						
Shorn(includingCrutchings)	888,677	958,860	1,027,949	1,029,149	998,708	1,168,699
Dead and Fellmongered ..	50,396	45,478	51,910	45,337	36,124	45,493
Exported on Skins ..	56,183	53,067	62,131	43,953	45,145	66,894
Total—Quantity ..	995,250	1,057,405	1,141,990	1,117,539	1,079,977	1,281,086
„ Valuo ..	£'000. 51,182	£'000. 201,959	£'000. 289,205	£'000. 651,902	£'000. 322,615	£'000. 425,807

(a) For year ended previous December.

(b) Estimated.

Production for 1953-54 was 1,244 million lb., valued at £412,000,000 (subject to revision).

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 the Australian Capital Territory are shown in the following table for each season 1948-49 to 1952-53 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)	1948-49.	1949-50.	1950-51.	1951-52.	1952-53.
SHEEP.						
New South Wales ..	8.87	9.97	9.82	9.68	8.43	10.18
Victoria ..	7.84	9.37	9.76	9.92	9.62	9.63
Queensland ..	7.98	9.57	9.83	9.10	8.08	9.78
South Australia ..	10.06	11.65	12.28	12.52	12.62	13.14
Western Australia ..	8.53	9.43	8.97	9.61	10.27	10.16
Tasmania ..	7.62	8.03	7.63	7.63	8.88	8.17
Australian Capital Territory	8.32	9.29	9.36	9.19	7.66	9.81
Australia(b) ..	8.57	9.85	9.89	9.83	9.18	10.26
LAMB.						
New South Wales ..	2.75	3.29	3.20	3.02	2.74	3.24
Victoria ..	2.14	2.89	2.72	2.83	2.87	2.83
Queensland ..	2.89	4.00	3.80	3.49	3.23	3.72
South Australia ..	2.57	3.56	3.52	3.67	3.70	3.83
Western Australia ..	2.57	2.68	2.62	2.73	2.90	2.82
Tasmania ..	1.37	1.91	1.76	1.91	2.05	2.10
Australian Capital Territory	1.11	1.51	1.17	1.30	1.04	1.26
Australia(b) ..	2.57	3.21	3.09	3.05	2.94	3.19

(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 appraised or sold at auction according to quality, for the years 1949-50 to 1952-53 compared with 1940-41, according to the records compiled by the Australian Wool Realization Commission. "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 1lb. 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 1lb. of tops (combed wool) of that particular wool.

**CLASSIFICATION OF GREASY WOOL APPRAISED OR SOLD AT AUCTION :
AUSTRALIA.**
(Bales of approximately 300 lb.)

Pre-dominating Quality.	1940-41.(a)		1949-50.(b)		1950-51.(b)		1951-52.(c)		1952-53.(c)	
	Quantity.	Per cent.	Quantity.	Per cent.	Quantity.	Per cent.	Quantity.	Per cent.	Quantity.	Per cent.
70's and finer	200,951	6.2	132,931	4.0	124,877	3.7	141,234	4.3	110,903	3.0
64/70's ..	679,377	20.8	518,492	15.4	523,670	15.0	579,117	17.6	451,393	12.0
64's ..	866,117	26.7	618,226	18.4	625,749	18.6	536,872	16.4	557,885	14.9
64/60's ..	236,138	7.2	305,412	9.1	296,029	8.8	229,926	7.0	418,288	11.2
60/64's ..	408,534	12.5	524,380	15.6	525,883	15.7	458,170	13.9	690,981	18.4
60's and 60/58's ..	387,164	11.9	415,646	12.3	427,673	12.7	449,716	13.7	580,944	15.5
Total 60's and finer	2,781,281	85.3	2,515,087	74.8	2,523,881	75.1	2,395,035	72.9	2,810,394	75.0
58's ..	270,371	8.3	369,930	11.0	371,143	11.1	406,786	12.4	413,901	11.0
56's ..	135,232	4.2	307,876	9.2	300,375	9.0	306,996	9.4	324,074	8.6
50's ..	39,619	1.2	114,482	3.4	112,295	3.3	119,758	3.7	131,823	3.5
Below 50's	21,089	0.6	31,413	0.9	27,978	0.8	30,460	0.9	35,821	1.0
Oddments ..	12,955	0.4	21,918	0.7	23,107	0.7	24,643	0.7	35,617	0.9
Grand total	3,260,547	100.0	3,360,706	100.0	3,358,779	100.0	3,283,678	100.0	3,751,630	100.0

(a) Appraised greasy wool. (b) Greasy wool sold at auction to which Joint Organization's reserves were applicable. (c) 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 each season 1951-52 and 1952-53 compared with pre-war years. The data for countries other than Australia have been taken from reports published by the Commonwealth Economic Committee compiled from questionnaires prepared by the Committee and the International Wool Textile Organization.

In 1952-53 Australia produced 30 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, 9 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 13 per cent. World production of wool (all types) in 1952-53 was about 528 million lb. (11 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. While world production of merino wool in 1952-53 was at about the same level as pre-war, the production of crossbred types has risen by about 24 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.	1951-52.	1952-53. (a)	Average, 1934-38.	1951-52.	1952-53. (a)
British Commonwealth—						
Australia	111.1	117.6	123.1	595	1,080	1,281
New Zealand	31.9	35.4	36.2	300	407	418
South Africa(b)	39.0	34.8	35.5	261	249	268
Other Commonwealth	99.0	95.2	97.2	230	211	220
Total	281.0	283.0	292.0	1,786	1,947	2,187
Foreign—						
U.S.S.R., China, Eastern Europe(c)	134.0	153.0	162.0	450	557	570
Argentina	45.9	55.0	54.7	376	420	407
United States of America	51.3	32.1	31.9	446	260	277
Uruguay	18.0	26.0	27.0	114	188	190
Other Foreign	224.8	236.9	246.4	630	679	699
Total	474.0	503.0	522.0	2,016	2,104	2,143
Grand Total	755.0	786.0	814.0	3,802	4,051	4,330
Type of Wool.						
Apparel Type—						
Merino				1,475	1,325	1,524
Crossbred				1,518	1,820	1,880
Carpet type				809	906	926

(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, page 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, page 875.

9. Australian Wool Realization Commission.—The Australian Wool Realization Commission was the Australian subsidiary of a Joint Organization 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" (commonly referred to as "J.O.") 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 (pages 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 £92 million and, of this amount, £80.5 million had been distributed by the Australian Wool Realization Commission to growers up to June, 1954.

10. Australian Wool Bureau.—(i) *General.* The Australian Wool Bureau was constituted under the Wool Use Promotion Act 1953. It replaced the Australian Wool Board which was originally set up in 1936 to take measures for improving the production and increasing the use of wool.

The Bureau consists of seven members, one the Commonwealth Wool Adviser or the Deputy Commonwealth Wool Adviser appointed by the Minister for Commerce and Agriculture, and six members (three nominated by the Australian Woolgrowers' Council and three by the Australian Wool and Meat Producers' Federation) appointed by the Governor-General for a period of three years.

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 sources 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, and wool buyers, wool growers and wool selling brokers' organization, 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 accumulated rentals and receipts from sales of the stores 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 Commerce and Agriculture 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 partly to defray the cost of operating the Wool Statistical Service and the remainder to help finance the wool promotion activities of the Bureau.

(iv) *The Contributory Charge.* Associated legislation, viz., 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 charge in 1951-52 was limited to a rate (one-eighth of one per cent.) which, it was calculated, would equal the amount which would otherwise have been raised by the Wool Tax for payment into the Wool Use Promotion Fund. 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, pages 675 and 819.

(v) *The Wool Tax.* Whilst the contributory charge legislation, mentioned above, was in force, the Wool Tax, which was imposed by the Wool Tax Act 1936 and the Wool Tax Assessment Act 1936, was not collected. When the Wool Tax was first imposed in 1936, the rate of tax was 6d. per bale, 3d. per fadge or 1d. per bag 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, the Wool Tax again became operative (i.e. from 1st July, 1952) but for the years 1952-53 and 1953-54 at a higher rate of 4s. per bale, 2s. per fadge and 8d. per bag of wool. The new rate was provided for in the Wool Tax Act (No. 1) 1952 and the Wool Tax Act (No. 2) 1952, which also provided that in subsequent years the rate could be prescribed, by regulation, between limits of 2s. per bale and 5s. 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 will be found in Official Year Book No. 39, page 925.

(ii) *Subsidy on Woollen Goods, 1950-51.* In order to reduce the effects of greatly increased wool prices in the 1950-51 season (*see* para. 17 following), the Commonwealth Government paid a subsidy on woollen goods manufactured for consumption in Australia from wool sold during the 1950-51 season. The subsidy was equivalent to about 45d. per lb. of all greasy wool (1950-51 clip) consumed in Australia, the total amount paid being approximately £17,000,000.

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 improving the production of wool and the encouragement of research in Australia and other countries directed to the promotion of the use of wool.

The Bureau is also authorized to make arrangements with other bodies in Australia and overseas likely to be conducive to promoting the use of wool, improving the production of wool in Australia and encouraging research. By virtue of this power the Bureau is represented on the International Wool Secretariat, which was established in 1937 with head-quarters in London, 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 Tax.

(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 Commerce and Agriculture. The economic research work falls into two main categories, viz., 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.

Finance for research is provided from a Wool Research Trust Account into which, since 1945, has been paid annually from the Commonwealth Consolidated Revenue a sum equal to the amount which is raised by the wool tax or its equivalent. In 1952-53 the Commonwealth's contribution to the Wool Research Trust Account was set at one-half of the amount raised under the wool tax at its new rate. In addition, expenditure on items of a capital nature for the research programme may be met from the Wool Industry Fund which was constituted as a Trust Account from various moneys accumulated by the Central Wool Committee in war-time.

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

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 consumption on the woollen and worsted systems and by felt manufacturers in Australia are shown below for the years 1938-39 and 1948-49 to 1952-53.

ESTIMATED CONSUMPTION OF RAW WOOL IN AUSTRALIA.

('000 lb.)

Year.	Greasy Basis.			Clean Basis.		
	Used on Woollen and Worsted Systems.	Used for Felt Manufacture (including Hats).	Total.	Used on Woollen and Worsted Systems.	Used for Felt Manufacture (including Hats).	Total.
1938-39 ..	77,947	2,248	80,195	39,599	1,068	40,667
1948-49 ..	109,430	13,382	122,812	60,794	6,356	67,150
1949-50 ..	97,281	9,356	106,637	54,046	4,444	58,490
1950-51 ..	90,891	8,700	99,591	51,397	4,133	55,530
1951-52 ..	72,868	5,546	78,414	42,731	2,634	45,365
1952-53 ..	70,213	5,620	75,833	41,689	2,669	44,358

(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 1948-49 to 1952-53. 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 (since 1949-50) 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.

('000 lb.)

Year.	Greasy Basis.				Clean Basis.			
	Worsted Yarn Used. (a)	Woollen Yarn Used.	Scoured Wool used for Felt Manufacture (including Hats).	Total.	Worsted Yarn Used. (a)	Woollen Yarn Used.	Scoured Wool used for Felt Manufacture (including Hats).	Total.
1938-39 ..	31,568	21,393	2,248	55,209	16,353	11,130	1,068	28,551
1948-49 ..	48,461	38,642	13,382	100,485	26,752	22,384	6,356	55,492
1949-50 ..	53,821	37,724	9,356	100,901	29,730	21,557	4,444	55,731
1950-51 ..	47,215	34,069	8,700	89,984	26,050	19,818	4,133	50,001
1951-52 ..	41,354	25,079	5,546	71,979	23,603	15,081	2,634	41,318
1952-53 ..	37,806	23,567	5,620	66,993	22,135	14,402	2,669	39,206

(a) Includes hand knitting yarns used from 1949-50.

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, 41.9 per cent. of total shipments were sent to the United Kingdom, other important consignees being France, 20.4 per cent., Belgium, 13.1 per cent., and Japan, 9.1 per cent. During the war, exports to the United Kingdom declined and shipments to the European continent and to Japan virtually ceased, while the quantity shipped to the United States of America showed great expansion. Of the total quantity of greasy wool exported overseas during the five years ended 1952-53, 11.4 per cent. was sent to the United States of America and 33.7 per cent. to the United Kingdom. Of the total shipments in 1952-53, 36.0 per cent. went to the United Kingdom, 15.7 per cent. to France, 15.0 per cent. to Japan and 9.5 per cent. to Italy. The following table shows the quantities of greasy wool exported, and the principal countries of recorded destination.

EXPORTS OF GREASY WOOL (AUSTRALIAN PRODUCE).

('000 lb.)

Country to which Exported.	Average, 1934-35 to 1938-39.	1948-49.	1949-50.	1950-51.	1951-52.	1952-53.
United Kingdom ..	288,436	355,403	379,804	274,442	238,748	353,195
Other British Countries ..	2,158	6,848	7,652	8,773	4,589	8,705
Belgium ..	107,928	94,944	120,913	93,147	58,936	76,327
France ..	100,476	195,855	142,528	131,117	134,199	154,441
Germany ..	36,955	16,801	53,338	37,321	25,437	40,446
Italy ..	21,748	104,252	66,632	63,359	84,212	92,943
Japan ..	131,302	22,561	55,392	69,383	96,002	147,612
United States of America ..	25,739	70,338	116,743	154,203	129,691	69,021
Other Foreign Countries ..	48,138	115,034	114,651	75,686	52,149	38,803
Total ..	762,880	982,036	1,057,653	907,431	823,963	981,493

(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 for selected years.

EXPORTS OF WOOL—SCOURED AND WASHED AND CARBONIZED (AUSTRALIAN PRODUCE).

('000 lb. actual weight.)

Country to which Exported.	Average, 1934-35 to 1938-39.	1948-49.	1949-50.	1950-51.	1951-52.	1952-53.
United Kingdom ..	32,806	55,088	66,537	42,365	19,977	32,629
Canada ..	2,394	10,076	10,545	7,648	4,572	5,593
Other British Countries ..	935	3,869	1,183	1,472	886	1,181
Belgium ..	8,226	7,465	9,695	5,057	4,651	4,837
France ..	9,301	25,328	11,630	6,974	7,218	7,291
Germany ..	3,007	882	5,450	3,118	3,602	4,264
Italy ..	360	10,523	6,010	6,081	6,821	5,913
Japan ..	724	98	934	7,186	1,085	6,596
United States of America ..	668	4,867	11,630	21,793	23,215	8,012
Other Foreign Countries ..	5,754	20,525	22,711	13,281	10,155	7,782
Total ..	64,175	138,721	146,325	114,975	82,272	84,098

(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 (AUSTRALIAN PRODUCE).

('000 lb. actual weight.)

Particulars.	Average, 1934-35 to 1938-39.	1948-49.	1949-50.	1950-51.	1951-52.	1952-53.
Tops ..	5,948	4,827	3,946	2,633	3,725	8,423
Noils ..		5,076	3,715	2,728	2,647	2,805
Waste—Soft wool ..		3,399	3,324	2,815	1,438	2,960
Hard wool ..		4,135	5,672	4,450	7,692	9,258

(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 1948-49 to 1952-53.

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

Particulars.	1938-39.	1948-49.	1949-50.	1950-51.	1951-52.	1952-53.
GREASY BASIS.						
Raw Wool—						
Greasy	795,728	982,036	1,057,653	907,446	823,963	981,493
Scoured and Washed and Carbonized ..	137,391	289,792	307,627	243,154	172,150	176,973
Exported on Skins ..	58,187	53,067	62,131	43,053	45,145	66,894
Total	991,306	1,324,895	1,427,411	1,193,653	1,041,258	1,225,360
Semi-processed Wool—						
Tops	10,124	9,461	7,458	5,003	7,078	15,330
Yarn	58	1,965	1,029	1,321	861	54
Total Wool ..	1,001,488	1,336,321	1,435,898	1,199,977	1,049,197	1,240,744
CLEAN BASIS.						
Raw Wool	(a)	719,899	778,339	666,602	589,674	696,985
Semi-processed Wool ..	5,071	6,336	4,652	3,520	4,552	8,959
Total Wool ..	(a)	726,235	782,991	670,122	594,226	705,944

(a) Not available.

(v) *Total Value of Exports.* The value of wool of Australian origin exported from Australia during the five years ended 1952-53 averaged 52.7 per cent. of the total value of exports of merchandise of Australian origin, and during 1952-53 the proportion was 47.9 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 (AUSTRALIAN PRODUCE).
(£’000.)

Country to which Exported.	Average, 1934-35 to 1938-39.	1948-49.	1949-50.	1950-51.	1951-52.	1952-53.
United Kingdom ..	19,233	80,495	114,983	193,598	89,067	142,277
Other British Countries ..	703	5,804	6,248	14,169	5,999	6,837
Belgium	5,863	15,808	24,124	42,161	17,036	23,897
France	5,618	40,262	34,851	76,352	43,813	54,910
Germany	2,602	3,877	15,504	23,822	11,443	17,147
Italy	1,340	23,680	17,627	40,027	30,357	38,287
Japan	7,727	4,808	14,003	51,524	40,624	66,686
United States of America ..	2,252	20,722	40,162	132,570	59,047	30,992
Other Foreign Countries ..	3,429	35,940	45,634	59,075	26,042	21,572
Total	48,767	231,396	313,136	633,298	323,428	402,905

15. *Local Sales of Wool.*—In 1946-47 following the cessation of the war-time acquisition scheme which ended with the 1945-46 season, auction sales were resumed in Australia. 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, 1953 amounted to 64.0 million lb. (as in the grease) of which 50.2 million lb. (36.6 million lb. as greasy and 13.6 million lb. as scoured and carbonized) were held by woollen mills, wool scourers and fellmongers and 13.8 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, 1953 were slightly higher than at 30th June, 1952 when, at 56.1 million lb., they were the lowest recorded since the outbreak of the war. During the war-time 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 three years ended 1952-53 the price of greasy wool sold in the selling centres of Australia averaged 99.5d. per lb. compared with the average United Kingdom contract price of 14.59d. per lb. during the years 1939-40 to 1945-46 and 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 to 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.

The following table shows the average auction room price of greasy wool in Australia for 1938-39 and 1948-49 to 1952-53 as compiled by the National Council of Wool Selling Brokers. This latter price represents the average price realized for all greasy wool of whatever type or quality marketed during the year indicated.

WOOL : AVERAGE MARKET PRICE PER LB.(a)
(Pence.)

Description.	1938-39.	1948-49.	1949-50.	1950-51.	1951-52.	1952-53.
Greasy	10.39	48.07	63.35	144.19	72.42	81.80

(a) Average price realized for all greasy wool of whatever type or quality marketed in Australia during the year. (Source—National Council of Wool Selling Brokers of Australia).

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 whilst 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 to £322,615,000 in 1951-52 but rose again to £425,807,000 in 1952-53.

Details of the value of wool production for the years 1948-49 to 1952-53 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
1948-49	86,095	38,895	32,623	20,134	20,000	3,765	61	386	201,959
1949-50(c)	126,948	57,415	46,878	28,134	25,193	4,765	58	514	289,905
1950-51	288,697	32,946	88,818	66,247	61,575	12,113	135	1,371	654,902
1951-52(c)	135,864	63,638	47,190	36,197	33,187	5,891	86	562	322,615
1952-53(c)	192,174	78,761	59,903	42,579	33,104	6,380	103	793	425,807

(a) Including shorn, dead and fellmongered wool and wool exported on skins.

(b) Estimated.

(c) Excludes distributions of profits under the Wool Disposal Plan: 1949-50, £23,662,000; 1951-52, £23,662,000; 1952-53, £15,140,000.

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 1938 and each year 1949 to 1953.

WOOL(a) : IMPORTS INTO UNITED KINGDOM.
(^{'000} lb.)

Country of Origin.	1938.	1949.	1950.	1951.	1952.	1953.
Australia	365,519	472,500	383,643	255,941	320,653	365,135
New Zealand	197,995	209,449	180,144	138,546	190,007	191,826
Union of South Africa	106,601	59,596	59,747	45,900	64,015	57,213
India and Pakistan	46,049	27,194	30,269	27,184	26,492	30,932
Other British Countries	14,269	13,392	15,932	11,747	13,772	19,167
Argentina	79,303	4,223	2,280	7,698	23,643	60,954
France	25,211	19,210	19,450	8,793	13,812	16,847
Other Foreign Countries	46,379	8,793	11,375	10,103	42,479	85,637
Total Quantity	881,326	814,357	702,840	505,912	694,873	827,711
Total Value (£'000 sterling)	40,996	126,781	185,118	238,394	170,957	229,506

(a) Greasy and Scoured.

Australian wool represented 50.7 per cent. of the total quantity imported into the United Kingdom during the five years ended 1953. New Zealand supplied 26.3 per cent. and South Africa 8.3 per cent., while the total quantity received from British countries constituted 90.3 per cent. of all United Kingdom imports.

20. **Principal Importing Countries and Sources of Supply.**—The following table furnishes in respect of the principal importing countries details of their production and imports of wool for 1953 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, 1953.
(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	96	365.1	57.2	61.0	191.8	152.6	827.7
Belgium	(c)	91.9	10.7	38.0	14.0	26.2	180.8
France	49	181.6	43.8	19.2	64.9	28.7	338.2
Germany (Federal Republic)	(c)	56.0	35.2	33.6	24.1	54.0	202.9
Italy	37	104.3	27.7	12.3	16.0	41.0	201.3
Japan	(c)	127.4	13.8	30.3	5.5	20.3	197.3
United States of America	277	(d) 46.2	(d) 11.2	(d) 109.5	(d) 34.2	(d) 93.2	(d) 294.3

(a) As in the grease, 1952-53. (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 448.9 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 (10 per cent. of total imports re-exported in 1953), Belgium and France.

§ 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 the five years ended 1952-1953 amounted to £91,833,000 or an average of £18,367,000 per annum.

2. **Sheepskins with Wool.**—The exports of sheepskins with wool, aggregating £68,732,000 during these five years, constitute the most important item in the values referred to in the preceding paragraph. During 1938-39 France was the largest purchaser of sheepskins with wool, taking 74 per cent. of the total consignments, while the United Kingdom ranked next with 15 per cent., followed by Germany with 7 per cent. In 1952-53, France obtained 74.9 per cent. of total exports and the United Kingdom 14.7 per cent. The exports of sheepskins with wool during each of the years 1948-49 to 1952-53 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.	1948-49.	1949-50.	1950-51.	1951-52.	1952-53.
Number .. '000	12,009	11,255	14,919	10,201	10,611	15,681
Value .. £'000	2,780	7,339	10,877	20,773	13,159	16,584

3. **Sheepskins without Wool.**—Up to 1943-44 sheepskins without wool were exported chiefly to the United States of America. During the year mentioned this country accounted for 97 per cent. of the total shipments while the remaining 3 per cent. were exported to the United Kingdom, Canada and the U.S.S.R. There has, however, since been a decline in shipments to the United States of America and an increase in the quantities shipped to the United Kingdom and other countries; in 1952-53 the United States of America received 73 per cent. of total shipments; the United Kingdom 20 per cent. and other countries 7 per cent. Quantities and values for the five years 1948-49 to 1952-53 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.	1948-49.	1949-50.	1950-51.	1951-52.	1952-53.
Number .. '000	808	814	3,441	3,000	1,454	3,242
Value .. £'000	70	108	826	1,272	518	749

4. **Hides.**—(i) *Exports.* The export trade in cattle hides and calf skins during 1952-53 was distributed as follows:—Japan, £711,000; Turkey, £123,000; United Kingdom, £120,000; Italy, £52,000; Sweden, £49,000 and other countries, £106,000.

The exports during each of the five years 1948-49 to 1952-53 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.	1948-49.	1949-50.	1950-51.	1951-52.	1952-53.
Number	1,677,402	292,390	287,850	210,871	178,714	281,625
Value £'000	957	1,186	1,358	1,345	1,109	1,161

Exports of horse hides during the five years ended 1952-53 numbered 286,179, valued at £1,095,000.

(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 1948-49 to 1952-53 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.	1948-49.	1949-50.	1950-51.	1951-52.	1952-53
Quantity .. cwt.	70,781	14,245	13,490	12,126	28,590	11,183
Value .. £'000	279	82	76	112	402	64

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.	1948-49.	1949-50.	1950-51.	1951-52.	1952-53.
Rabbit and Hare ..	(a) 1,150	3,004	1,640	2,995	1,358	924
Opossum	125	7	44	6	26	31
Kangaroo	173	408	187	309	530	181
Fox	58	5	7	14	6	1
Wallaby	18	5	6	14	8	6
Other	11	(b)	4	17	4	8
Total	1,535	3,429	1,888	3,355	1,932	1,151

(a) Excludes hare skins. (b) Less than £500.

These skins were shipped principally to the United States of America, the United Kingdom and Belgium and Luxemburg, the values taken by each in 1952-53 being shown in the following table:—

**FURRED SKINS : EXPORTS TO PRINCIPAL COUNTRIES OF DESTINATION, 1952-53.
(£'000.)**

Country.	Rabbit and Hare Skins.	Kangaroo Skins.	Other (Opossum, Wallaby, Fox, etc.)	Total.
United Kingdom	35	8	15	58
United States of America	705	172	28	905
Belgium and Luxemburg	63	..	(a)	63
Other Countries	61	1	3	65
Total	924	181	46	1,151

(a) Less than £500.

6. *Marketing of Hides and Skins.*—(i) *Sheepskins with Wool.* Details of the war-time agreement between the United Kingdom and Commonwealth Governments for the purchase by acquisition of the "exportable surplus" of woolled sheepskins in Australia were given in Official Year Book No. 37, page 886. The contract expired on 30th June, 1946, and sheepskins are marketed 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, page 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 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 differential which had existed between fixed local prices and export prices for hides and leather had almost disappeared and, having in view certain legal weaknesses which had hampered the operation of the scheme for some time, 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. Until May, 1952 the prices were 15 per cent. to 20 per cent. above August, 1939 levels but in May, 1952 they were increased by 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 appraisement values.

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 approximately 12½ per cent.

Returns from export sales of 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 oversea prices. Further details of the war-time operations of the scheme will be found in Official Year Book No. 37, page 887 and Official Year Book No. 38, pages 930-1.

(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, page 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. The recorded production in factories is incomplete, as production in establishments which do not come within the definition of a factory is excluded. Details of production of tallow and lard were collected on a calendar year basis from slaughtering establishments up to 1951. These also proved defective in certain respects and, as a result, the table appearing in issues of the Official Year Book up to No. 39 has been deleted until more complete information becomes available.

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 year 1938-39 and 1948-49 to 1952-53 is however deficient 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	1950-51	1,217,027
1948-49.. ..	1,054,040	1951-52	1,205,307
1949-50.. ..	1,063,194	1952-53	1,068,181

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 1948-49 to 1952-53 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.	1948-49.	1949-50.	1950-51.	1951-52.	1952-53.
Edible	(a)	60,171	75,497	31,957	27,346	111,020
Inedible	606,934	142,179	348,214	260,569	126,618	430,227
Total	(a)	202,350	423,711	292,526	153,964	541,247

(a) 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.

Price control on tallow now operates only in Queensland and there are no restrictions on the export of tallow to any destination from any part of Australia.

§ 8. Net Exports Of Principal Pastoral Products.

The quantities and values by which the exports of the principal pastoral products of Australia exceeded the imports for the years 1938-39, 1951-52 and 1952-53 were as follows :—

NET EXPORTS OF PASTORAL PRODUCTS : AUSTRALIA.

Product.	Unit of Quantity.	Quantity.			Value (£'000).		
		1938-39.	1951-52.	1952-53.	1938-39.	1951-52.	1952-53.
Animals (living)—							
Cattle	No.	405	363	1,149	1	156	120
Horses	"	2,294	283	893	..	124	46
Sheep	"	66,739	78,877	84,130	43	356	268
Bones	cwt.	21,497	26,447	19,880	11	59	41
Glue-pieces and Sinews	"	11,145	18,505	13,258	7	66	41
Glycerine	'000 lb.	79	1,754	1,487	1	293	205
Hair and Bristles	"	1,003	13	1,595	7	1,192	261
Hoofs	cwt.	(a)	10,095	11,484	8	24	20
Horns	"	(a)	7,220	10,144	19	48	61
Meats—							
Frozen Beef and Veal(b)	'000 lb.	271,949	95,876	192,500	4,323	5,230	13,782
" Mutton and Lamb	"	186,488	31,110	166,714	4,807	1,915	8,752
" Rabbits and Hares	'000 prs.	(a)	16,667	11,391	232	4,500	3,400
" Other	'000 lb.	19,588	20,505	23,207	419	1,148	1,530
Potted and Concentrated Preserved in Tins, etc. ..	"	(a)	1,033	1,848	28	286	921
Other (excluding Bacon and Ham)	"	14,779	112,177	202,213	494	13,101	27,858
Sausage Casings	cwt.	308	3,479	2,801	6	313	302
Hides and Skins—							
Cattle	No.	(a)	94,629	207,803	690	760	1,083
Calf	"	(a)	44,124	11,873	133	52	13
Horse	"	(a)	59,615	83,778	7	281	313
Sheep and Lamb	"	(a)	11,935,629	18,885,011	2,340	13,607	17,321
Rabbit and Hare	cwt.	37,544	57,660	63,336	397	1,333	907
Tallow (Edible and Inedible)	"	(c)560,241	144,975	508,018	(c)481	889	16
Wool—							
Greasy	'000 lb.	779,782	820,198	978,980	36,688	277,315	355,649
Scoured, Tops, Nolls, Waste	"	70,300	97,165	106,540	5,282	44,705	46,401
Total					56,547	364,520	479,611

(a) Quantity not available.

(b) Includes chilled beef.

(c) Inedible Tallow only.

NOTE.—Minus sign (—) signifies net imports.