

CHAPTER XXIII.

PASTORAL PRODUCTION.

NOTE.—All values of Australian oversea trade shown throughout this chapter are expressed as f.o.b., Australian currency, port of shipment, except where otherwise indicated. All export tables relate to exports of Australian produce only.

For greater detail on the subjects dealt with in this chapter, see the annual bulletins *Primary Industries, Part I.—Rural Industries* and *Part II.—Non-Rural Industries and Value of Production* published by this Bureau. For advance information on these subjects, the following mimeograph statistical bulletins should be consulted—*Livestock Numbers* (annual), *Meat Industry* (monthly), *Value of Production and Indexes of Price and Quantum of Farm Production* (annual), *Wool Production* (annual), *Wool Production and Utilization* (annual), and *Size Classification of Rural Holdings*, 1955–56. The annual mimeograph *Report on Food Production and the Apparent Consumption of Foodstuffs and Nutrients in Australia* contains details of the production, distribution and apparent consumption of foodstuffs obtained from the pastoral industry. Current information on meat and wool production is available in the *Monthly Review of Business Statistics* and the *Digest of Current Economic Statistics* (monthly).

§ 1. Initiation and Growth of the 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 1860 to 1950, and from 1956 onwards in single years, are given in the following table, and are shown continuously on the graph on page 965.

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 | 1956 .. | 770 | 16,457 | 139,124 | 1,166 |
| 1900 .. | 1,610 | 8,640 | 70,603 | 950 | 1957 .. | 737 | 17,257 | 149,802 | 1,325 |
| 1910 .. | 2,166 | 11,745 | 98,066 | 1,026 | 1958 .. | 694 | 16,892 | 149,315 | 1,423 |
| 1920 .. | 2,416 | 13,500 | 81,796 | 764 | 1959 .. | 671 | 16,257 | 152,685 | 1,289 |
| 1930 .. | 1,793 | 11,721 | 110,568 | 1,072 | 1960 .. | 640 | 16,503 | 155,174 | 1,424 |

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 impression 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, 1960 (155,174,000); and pigs, 1941 (1,797,000).

The distribution throughout Australia of beef cattle, dairy cattle, sheep and pigs as at 31st March, 1955, is shown in the maps on pages 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. **Carrying Capacity of Pastoral Holdings.**—The carrying capacity of pastoral holdings has been increased in recent years, due in some measure to the succession of good seasons experienced since 1946 (with the exception of the 1957–58 season, when prevailing dry conditions caused a slight decline in cattle and sheep numbers). Other important factors contributing to the progressive increase over this period have been the increased attention to pasture improvement and the reduction of rabbit infestation.

There was a considerable decline in the number of rabbits following the introduction in 1950 of the disease myxomatosis, which spread rapidly. The number of rabbits has also been kept at a low level in recent years by the use of poison baits, etc.

Statistics of the area under sown grasses and clovers which have been collected on a uniform basis in all States since 1952–53 reveal that the area sown has been considerably increased. In 1959–60, the area under sown grasses and clovers (excluding native grasses) totalled 33.3 million acres, a decrease of 0.3 million acres (1 per cent.) compared with 1958–59 but an increase of 12.6 million acres (61 per cent.) over 1952–53, the earliest year for which this comparison is available. 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 2.6 million acres being sown and/or top-dressed in the year ended March, 1960.

3. **Size Classification of Cattle Herds and Sheep Flocks.**—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 and sheep show classifications according to size of herd or flock, area of holding, area of wheat for grain and area of sown pastures. Similar details are being compiled for 1959–60, but details are not yet available.

4. **Value of Pastoral Production.**—(i) *Gross, Local and Net Values, 1959–60.* Values of pastoral production for each State are shown for 1959–60 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, 1959-60.

(£'000.)

| State. | Gross Production Valued at Principal Markets. | Marketing Costs. | Gross Production Valued at Farm. | Value of Materials used in Process of Production. | Net Value of Production. (a) |
|---------------------------------|---|------------------|----------------------------------|---|------------------------------|
| New South Wales | 229,653 | 17,840 | 211,813 | (b) 13,433 | 198,380 |
| Victoria | 160,138 | 14,723 | 145,415 | 9,785 | 135,630 |
| Queensland | 116,998 | 9,912 | 107,086 | 7,202 | 99,884 |
| South Australia | 61,675 | 4,178 | 57,497 | 7,430 | 50,067 |
| Western Australia | 50,128 | 3,642 | 46,486 | 6,827 | 39,659 |
| Tasmania | 13,382 | 822 | 12,560 | 4,714 | 7,846 |
| Northern Territory | 4,544 | 718 | 3,826 | .. | 3,826 |
| Australian Capital Territory .. | 1,076 | 72 | 1,004 | 81 | 923 |
| Australia | 637,594 | 51,907 | 585,687 | 49,472 | 536,215 |

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

(b) No allowance has been

(ii) *Net Values, 1955-56 to 1959-60.* The net value of pastoral production by States and the net value per head of population for the years 1955-56 to 1959-60 are shown below.

NET VALUE OF PASTORAL PRODUCTION.(a)

| Year. | N.S.W.(b) | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust.(c) |
|------------------------|-----------|---------|---------|----------|----------|------------|----------|
| NET VALUE. (£'000.) | | | | | | | |
| 1955-56 .. | 163,287 | 104,820 | 86,313 | 44,625 | 36,578 | (b) 7,282 | 446,780 |
| 1956-57 .. | 231,674 | 129,883 | 112,566 | 62,093 | 47,343 | (b) 10,666 | 597,681 |
| 1957-58 .. | 157,679 | 115,970 | 80,301 | 44,863 | 36,947 | (b) 8,078 | 447,247 |
| 1958-59 .. | 162,366 | 110,392 | 90,760 | 38,425 | 30,582 | 6,652 | 443,622 |
| 1959-60 .. | 198,380 | 135,630 | 99,884 | 50,067 | 39,659 | 7,846 | 536,215 |

NET VALUE PER HEAD OF POPULATION.
(£ s. d.)

| | | | | | | | |
|------------|---------|---------|----------|---------|----------|---------|----------|
| 1955-56 .. | 46 6 7 | 40 17 4 | 63 16 3 | 53 9 6 | 54 13 6 | 22 16 3 | 47 19 2 |
| 1956-57 .. | 64 11 4 | 49 3 11 | 81 10 10 | 72 1 9 | 69 3 3 | 32 14 1 | 62 13 8 |
| 1957-58 .. | 43 2 1 | 42 16 9 | 57 4 6 | 50 12 9 | 52 17 10 | 24 3 7 | 45 17 10 |
| 1958-59 .. | 43 11 6 | 39 15 5 | 63 12 11 | 42 6 1 | 42 18 9 | 19 9 10 | 44 11 5 |
| 1959-60 .. | 52 6 2 | 47 11 5 | 68 19 5 | 53 12 7 | 54 13 10 | 22 11 8 | 52 14 7 |

(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 Northern Territory and Australian Capital Territory.

5. Indexes of Quantum and Price of Pastoral Production, 1955-56 to 1959-60.—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. | 1955-56. | 1956-57. | 1957-58. | 1958-59. | 1959-60. |
|---|----------|----------|----------|----------|----------|
| <i>Quantum(a) produced—</i> | | | | | |
| Wool | 146 | 164 | 148 | 164 | 172 |
| Other products | 123 | 128 | 134 | 152 | 153 |
| <i>Total Pastoral</i> | 136 | 148 | 142 | 159 | 163 |
| <i>Total per Head of Population</i> | 100 | 106 | 100 | 109 | 110 |
| <i>Price—</i> | | | | | |
| Wool | 468 | 607 | 473 | 370 | 440 |
| Other products | 424 | 427 | 377 | 435 | 500 |
| <i>Total Pastoral</i> | 451 | 536 | 435 | 396 | 464 |

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

§ 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 1956 to 1960.

HORSES: NUMBER.
(‘000.)

| Year. | N.S.W. | Vic. | Q’land. | S. Aust. | W. Aust. | Tas. | N.T. | A.C.T. | Aust. |
|---------|--------|------|---------|----------|----------|------|------|--------|-------|
| 1956 .. | 247 | 119 | 261 | 44 | 46 | 15 | 37 | 1 | 770 |
| 1957 .. | 235 | 108 | 255 | 41 | 45 | 14 | 38 | 1 | 737 |
| 1958 .. | 221 | 98 | 243 | 35 | 44 | 13 | 39 | 1 | 694 |
| 1959 .. | 214 | 91 | 240 | 33 | 41 | 12 | 39 | 1 | 671 |
| 1960 .. | 204 | 81 | 234 | 30 | 41 | 11 | 38 | 1 | 640 |

The number of horses in Australia reached 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 1960, the decrease in numbers has averaged 45,000 per annum.

A graph showing the number of horses in Australia from 1860 onwards appears on page 965.

The percentage distribution of the number of horses in each State and Territory for 1960 was:—New South Wales, 32; Victoria, 13; Queensland, 36; South Australia, 5; Western Australia, 6; Tasmania, 2; and Northern Territory, 6.

2. **Oversea Trade in Horses.**—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, but has since declined. The 1959–60 exports amounted to 1,994 horses, valued at £635,755 (Australian produce 1,927 for £487,000; re-exports 67 for £149,000), made up of horses for breeding (111 valued at £131,506), horses for racing (555 valued at £283,678, shipped principally to New Zealand) and horses for other purposes (1,328 valued at £220,571, shipped principally to Hong Kong and India).

The few horses imported into Australia are mainly stud animals from the United Kingdom and racehorses from New Zealand. The total number imported in 1959–60 was 567 valued at £557,846.

§ 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 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. The effects of droughts and the ravages of tick fever subsequently 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. Numbers fluctuated in succeeding years, but from 1947 to 1957 there was a general upward movement to a record level of 17,257,000 in the latter year. Drought conditions together with a very high level of slaughtering in subsequent years have resulted in a reduction in numbers since then, but some recovery was made in 1960 when they increased to 16,503,000. A graph showing the number of cattle in Australia from 1860 onwards appears on page 965.

The numbers of cattle (beef and dairy) in the several States and Territories in each year 1956 to 1960, compared with the averages of the three-year periods ended 1939, 1949, and 1959 are shown below.

CATTLE: NUMBER.

('000.)

| Period. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Nor. Terr. | Aust. Cap. Terr. | Aust. |
|--------------------------------|--------|-------|---------|----------|----------|------|------------|------------------|--------|
| Average for three years ended— | | | | | | | | | |
| 1939 .. | 3,040 | 1,861 | 6,002 | 324 | 767 | 260 | 882 | 8 | 13,144 |
| 1949 .. | 3,122 | 2,153 | 5,971 | 443 | 830 | 244 | 1,006 | 9 | 13,778 |
| 1959 .. | 3,770 | 2,722 | 7,177 | 598 | 985 | 367 | 1,173 | 10 | 16,802 |
| Year— | | | | | | | | | |
| 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 |
| 1958 .. | 3,736 | 2,750 | 7,187 | 597 | 997 | 371 | 1,244 | 10 | 16,892 |
| 1959 .. | 3,664 | 2,651 | 6,884 | 576 | 1,000 | 374 | 1,099 | 9 | 16,257 |
| 1960 .. | 3,840 | 2,624 | 7,012 | 500 | 1,030 | 375 | 1,111 | 11 | 16,503 |

Although the proportion was not as high as it has been in some previous years, Queensland was carrying almost 43 per cent. of the cattle in Australia in 1960. 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 1960, 11,626,000 or 70 per cent. were classified as beef cattle. The numbers classified as beef cattle in the several States and Territories, during the years 1956 to 1960, compared with averages for the three-year periods ended 1949 and 1959, are shown in the following table:—

BEEF CATTLE: NUMBER.

('000.)

| Period. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Nor. Terr. | Aust. Cap. Terr. | Aust. |
|--------------------------------|--------|-------|---------|----------|----------|------|------------|------------------|--------|
| Average for three years ended— | | | | | | | | | |
| 1949 .. | 1,832 | 686 | 4,592 | 171 | 604 | 100 | 1,006 | 6 | 8,997 |
| 1959 .. | 2,462 | 1,023 | 5,882 | 341 | 763 | 165 | 1,173 | 7 | 11,816 |
| Year— | | | | | | | | | |
| 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 |
| 1958 .. | 2,429 | 1,026 | 5,917 | 338 | 771 | 167 | 1,244 | 6 | 11,898 |
| 1959 .. | 2,382 | 998 | 5,643 | 328 | 784 | 171 | 1,099 | 6 | 11,411 |
| 1960 .. | 2,562 | 946 | 5,757 | 260 | 814 | 168 | 1,111 | 8 | 11,626 |

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

4. **Size Classification of Cattle Herds.**—See § 1, para. 3, page 948 for information available.

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 relate to areas embraced by post-war boundaries, but do not in all cases cover identical areas for the two periods.

CATTLE: NUMBER IN VARIOUS COUNTRIES.

(Sources: Publications of United States Department of Agriculture and of Food and Agriculture Organization of United Nations.)

('000.)

| Country. | Average, 1936-40.(a) | Year and Month. | Number. |
|--------------------------------------|-------------------------|--------------------|---------|
| India(b) | 180,000 | 1956 (May) .. | 203,629 |
| United States of America | 66,706 | 1960 (January) .. | 101,520 |
| U.S.S.R. | 59,800 | 1960 (January) .. | 74,100 |
| Brazil | 40,807 | 1958 (December) .. | 71,420 |
| China | 25,600 | 1957 (December) .. | 44,600 |
| Argentina | 33,762 | 1960 (June) .. | 41,000 |
| Pakistan(b) | 33,000 | 1956 (December) .. | 37,569 |
| Mexico | 11,716 | 1960 (Spring) .. | 21,000 |
| Ethiopia | 18,000 | 1960 (estimate) .. | 20,000 |
| France | 15,504 | 1959 (October) .. | 18,671 |
| Australia | 13,285 | 1960 (March) .. | 16,503 |
| Colombia | 8,010 | 1959 (October) .. | 15,100 |
| Turkey(b) | 8,611 | 1959 (November) .. | 13,479 |
| Germany, Federal Republic of | 12,114 | 1959 (December) .. | 12,465 |
| Union of South Africa | 11,636 | 1959 (August) .. | 12,000 |

(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 1958-59, most of the cattle exported went to the Philippines for slaughter. However, in 1959-60, 10,343 head valued at £239,426 were exported to Hong Kong, while only 929 head, valued at £41,842 were exported to the Philippines. The number of cattle imported is small, and as in the case of horses, consists mainly of valuable animals for stud purposes. Since June, 1958, an embargo has been imposed on the import of cattle in order to prevent the possible introduction of the disease, blue-tongue. Details for the years 1955-56 to 1959-60 are shown in the following table:—

CATTLE: IMPORTS AND EXPORTS, AUSTRALIA.

| Year. | Imports. | | Exports. | |
|-----------------|----------|--------|----------|--------|
| | No. | Value. | No. | Value. |
| | | £'000. | | £'000. |
| 1955-56 | 304 | 229 | 8,025 | 475 |
| 1956-57 | 145 | 123 | 18,360 | 754 |
| 1957-58 | 272 | 174 | 23,933 | 932 |
| 1958-59 | 37 | 62 | 13,900 | 493 |
| 1959-60 | .. | .. | 13,602 | 456 |

The average value per head of the cattle imported during the last five years was £776 while the average value per head of the cattle exported during the same period was £40.

7. **Cattle Slaughtered.**—The numbers of cattle slaughtered during each of the years ended June, 1956 to 1960, compared with averages for the three-year periods ended June, 1939, 1949 and 1959, are shown in the following table:—

CATTLE (INCLUDING CALVES) SLAUGHTERED.

('000.)

| Period. | Slaughterings 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 for three years ended— | | | | | | | | | | |
| 1938–39 .. | 1,169 | 881 | 1,178 | 163 | 131 | 49 | 5 | 3 | 3,579 | 3,628 |
| 1948–49 .. | 1,094 | 759 | 1,119 | 168 | 146 | 42 | 14 | 4 | 3,346 | 3,378 |
| 1958–59 .. | 1,745 | 1,313 | 1,689 | 274 | 216 | 116 | 24 | 11 | 5,388 | 5,463 |
| Year— | | | | | | | | | | |
| 1955–56 .. | 1,547 | 1,023 | 1,502 | 227 | 191 | 88 | 25 | 9 | 4,612 | 4,675 |
| 1956–57 .. | 1,591 | 1,139 | 1,641 | 252 | 192 | 102 | 25 | 10 | 4,952 | 5,017 |
| 1957–58 .. | 1,742 | 1,404 | 1,541 | 282 | 216 | 118 | 24 | 12 | 5,339 | 5,411 |
| 1958–59 .. | 1,894 | 1,397 | 1,883 | 287 | 249 | 128 | 24 | 10 | 5,872 | 5,960 |
| 1959–60 .. | 1,499 | 1,277 | 1,527 | 238 | 243 | 145 | 24 | 9 | 4,962 | 5,024 |

8. **Production of Beef and Veal.**—Details of the production of beef and veal during each of the years ended June, 1956 to 1960, compared with averages for the three-year periods ended June, 1939, 1949 and 1959 are shown in the following table:—

PRODUCTION OF BEEF AND VEAL (CARCASS WEIGHT): AUSTRALIA.

('000 tons.)

| Period. | N.S.W. | Vic. | Qld. | S. Aust. | W.A. | Tas. | N.T. | A.C.T. | Aust. |
|--------------------------------|--------|------|------|----------|------|------|------|--------|-------|
| Average for three years ended— | | | | | | | | | |
| 1938–39 .. | 181 | 123 | 199 | 26 | 28 | 10 | 1 | 1 | 569 |
| 1948–49 .. | 160 | 106 | 206 | 27 | 30 | 9 | 3 | 1 | 542 |
| 1958–59 .. | 248 | 176 | 305 | 41 | 41 | 19 | 5 | 2 | 837 |
| Year— | | | | | | | | | |
| 1955–56 .. | 222 | 139 | 292 | 38 | 38 | 15 | 5 | 2 | 751 |
| 1956–57 .. | 236 | 159 | 317 | 40 | 38 | 18 | 5 | 2 | 815 |
| 1957–58 .. | 233 | 181 | 270 | 41 | 39 | 20 | 5 | 2 | 791 |
| 1958–59 .. | 275 | 189 | 328 | 42 | 45 | 20 | 5 | 2 | 906 |
| 1959–60 .. | 217 | 159 | 267 | 33 | 46 | 23 | 5 | 2 | 752 |

9. **Consumption of Beef and Veal.**—Since the 1939–45 War, consumption per head of beef and veal has been at a somewhat lower level than in the pre-war period (an average of 144 lb. carcass equivalent per head per annum for the three years ended 1938–39). For the three years 1946–47 to 1948–49, the average annual consumption per head was 112.5 lb. or 22 per cent. below the immediate pre-war level. There was a considerable recovery during the ensuing years to a post-war peak of 132.7 lb. per head in 1956–57. With the buoyant overseas market for beef and the high prices ruling in Australia, during the following three years consumption per head fell substantially and in 1959–60 amounted to only 100.0 lb. consisting of 97.5 lb. of carcass meat and 2.5 lb. (carcass equivalent) of canned meat. There was a marked substitution of mutton and lamb for beef in Australia during this period.

The figures quoted in the paragraph above include the consumption of canned beef and veal, and differ on that account from the figures shown in the last column of the next table.

In the following table, details of the production and disposal of beef and veal are shown for the years 1955-56 to 1959-60, compared with the averages for the three years ended 1938-39, 1948-49 and 1958-59.

**PRODUCTION AND DISPOSAL OF BEEF AND VEAL (CARCASS WEIGHT):
AUSTRALIA.**
(⁰000 tons.)

| Period. | Net Change. in Stocks. | Production. | Exports. (a) | For Canning. | Apparent Consumption in Australia. | |
|-----------------------------------|------------------------------|-------------|-----------------|-----------------|---------------------------------------|---------------------------|
| | | | | | Total. | Per Head per Annum. |
| Average for three years ended— | | | | | | lb. |
| 1938-39 | (b) | 569 | 121 | 18 | 430 | 140.3 |
| 1948-49 | + 1 | 542 | 101 | 67 | 373 | 109.1 |
| 1958-59 | + 5 | 837 | 209 | 85 | 538 | 123.8 |
| Year— | | | | | | |
| 1955-56 | - 7 | 751 | 163 | 100 | 495 | 119.1 |
| 1956-57 | + 4 | 815 | 177 | 85 | 549 | 128.9 |
| 1957-58 | + 4 | 791 | 155 | 88 | 544 | 125.1 |
| 1958-59 | + 8 | 906 | 296 | 80 | 522 | 117.5 |
| 1959-60 | - 11 | 752 | 266 | 55 | 442 | 97.5 |

(a) Includes carcass equivalent of boneless beef exported and ships' stores. (b) Not available.

10. Exports of Frozen Beef and Veal.—The quantity and value of frozen beef and veal exported in each year 1955-56 to 1959-60 are shown in the following table. The figures in this table represent actual weight shipped, not carcass equivalent.

EXPORTS OF FROZEN AND CHILLED 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. |
| 1955-56 | 318,059 | 22,936 | 4,689 | 495 |
| 1956-57 | 331,253 | 22,863 | 3,391 | 408 |
| 1957-58 | 276,607 | 20,961 | 5,397 | 609 |
| 1958-59 | 499,371 | 54,154 | 10,869 | 1,331 |
| 1959-60 | 414,749 | 54,568 | 6,827 | 897 |

Prior to 1959-60, the largest purchaser of Australian beef and veal was the United Kingdom. Exports to the United States of America have been growing in recent years, and in 1959-60 exceeded those to the United Kingdom. The total value of beef and veal exports to these two countries in 1959-60 were: United States of America, £29,944,000; United Kingdom, £20,192,000.

The export of frozen meat from Australia dates from about 1881, but because 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 1939-45 War seriously affected the export trade in chilled beef, which declined to a negligible amount after 1939-40. In 1959-60, chilled beef exports were 2,926,000 lb. valued at £326,000, whilst frozen beef exports amounted to 411,823,000 lb. valued at £54,242,000.

Both quantity and value of exports of beef and veal reached a record level during 1958-59 and, while there was some reduction in quantity during 1959-60, the value remained at about the same level in that year.

While beef and veal were previously shipped largely in carcass form, there has been in recent years a substantial increase in the amount of boneless beef exported. In 1958-59 and 1959-60, the quantity of boneless beef shipped exceeded that exported in carcass form. The trade in boneless beef has been developed principally with the United States of America.

11. Research.—*Cattle and Beef Research Scheme.* In May, 1960, legislation was enacted to provide for a Commonwealth scheme for an expanded programme of research into the scientific, technical and economic problems connected with the Australian beef industry.

Funds are raised by a levy on all cattle weighing over 200 lb. dressed which are slaughtered for human consumption, and the Commonwealth provides a matching contribution on a £1 for £1 basis to meet expenditure on new research. The scheme is administered by the Australian Cattle and Beef Research Committee, whose main function is to formulate plans for projects on which the funds may be expended. The actual research work is undertaken by existing bodies such as the universities, C.S.I.R.O. and State Departments of Agriculture.

The three Acts covering research arrangements are the Cattle and Beef Research Act 1960, Cattle Slaughter Levy Act 1960 and Cattle Slaughter Levy Collection Act 1960.

At its first meeting in June, 1960, the Committee agreed to recommend to the Minister for Primary Industry that the levy be fixed at the maximum provided in the Act, namely 2s. per head. The levy was operative from 1st July, 1960.

§ 4. Sheep.

1. 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 965. 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 resulted in a steady increase in sheep numbers, and although dry seasonal conditions were responsible for a slight decline at 31st March, 1958, a record level of 155.2 million was reached at 31st March, 1960.

The following table shows the approximate movement in sheep numbers in Australia in each year 1955-56 to 1959-60.

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 (—) |
|--------------|---------------|--------------------|------------------------------|---|-----------------------|---|
| 1955-56.. .. | 36,914 | 97 | 21,180 | 7,362 | 139,124 | + 8,275 |
| 1956-57.. .. | 39,902 | 122 | 19,503 | 9,599 | 149,802 | + 10,678 |
| 1957-58.. .. | (b) 36,850 | 120 | 24,417 | 12,800 | 149,315 | — 487 |
| 1958-59.. .. | 38,748 | 136 | 26,963 | 8,279 | 152,685 | + 3,370 |
| 1959-60.. .. | 44,150 | 226 | 32,084 | 9,351 | 155,174 | + 2,489 |

(a) Balance figure.

(b) Excludes Northern Territory prior to 1957-58.

2. **Distribution throughout Australia.**—With the exception of a short period in the early eighteen-sixties, when the flocks of Victoria outnumbered those of New South Wales, the latter State has occupied the premier position in sheep-raising, depasturing nearly 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 1956 to 1960 compared with average numbers for the three-year periods ended 1939, 1949 and 1959 are shown in the following table:—

SHEEP : NUMBER.

('000.)

| Period. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Nor. Terr. | Aust. Cap. Terr. | Australia. |
|--------------------------------|--------|--------|---------|----------|----------|-------|------------|------------------|------------|
| Average for three years ended— | | | | | | | | | |
| 1939 .. | 51,202 | 17,845 | 21,889 | 8,916 | 8,972 | 2,460 | 23 | 251 | 111,558 |
| 1949 .. | 46,525 | 17,900 | 16,442 | 8,793 | 10,368 | 2,060 | 24 | 227 | 102,339 |
| 1959 .. | 67,006 | 26,615 | 22,537 | 15,285 | 15,609 | 3,259 | 25 | 265 | 150,601 |
| Year— | | | | | | | | | |
| 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 |
| 1958 .. | 65,410 | 27,090 | 22,274 | 15,236 | 15,724 | 3,298 | 27 | 256 | 149,315 |
| 1959 .. | 67,936 | 26,925 | 22,148 | 15,634 | 16,215 | 3,536 | 19 | 272 | 152,685 |
| 1960 .. | 71,000 | 26,597 | 23,332 | 14,025 | 16,412 | 3,494 | 15 | 299 | 155,174 |

Except when affected by drought, the relative numbers of sheep in the different States have remained fairly constant in recent years. Numbers in South Australia and Victoria were adversely affected by very dry conditions during 1959–60.

The percentage distribution in 1960 was:—New South Wales, 46; Victoria, 17; Queensland, 15; South Australia, 9; Western Australia, 11; and Tasmania, 2.

3. **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 1956 to 1960.

SHEEP : AGE AND SEX, AUSTRALIA.

('000.)

| Description. | 1956. | 1957. | 1958. | 1959. | 1960. |
|---|---------|---------|---------|---------|---------|
| Rams, 1 year and over .. | 1,721 | 1,830 | 1,883 | 1,919 | 1,898 |
| Breeding ewes (including ewes intended for mating) .. | 62,483 | 66,844 | 66,059 | 69,470 | 68,455 |
| Other ewes, 1 year and over .. | 7,553 | 8,447 | 9,795 | 8,295 | 9,276 |
| Wethers, 1 year and over .. | 39,142 | 41,573 | 43,688 | 43,578 | 43,046 |
| Lambs and hoggets, under 1 year .. | 28,225 | 31,108 | 27,890 | 29,423 | 32,499 |
| Total, Sheep and Lambs. | 139,124 | 149,802 | 149,315 | 152,685 | 155,174 |

Particulars relating to the principal breeds of sheep at 31st March, 1959, the latest date for which these data are available (details are collected on a triennial basis only), are shown in the following table:—

SHEEP : PRINCIPAL BREEDS, 31st MARCH, 1959.

('000.)

| Breed. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | N.T. | A.C.T. | Aust. |
|----------------------------|--------|-----------|---------|----------|----------|-------|------|--------|---------|
| Merino .. | 52,467 | 11,410 | 21,725 | 13,112 | 14,921 | 325 | 19 | 245 | 114,224 |
| Other recognized breeds .. | 6,037 | 6,118 | 72 | 1,061 | 542 | 1,841 | .. | 12 | 15,683 |
| Merino comebacks(a) .. | 3,408 | 3,422 | 70 | 312 | 146 | 466 | .. | 2 | 7,826 |
| Crossbreds(b) .. | 6,024 | 5,975 | 281 | 1,149 | 606 | 904 | .. | 13 | 14,952 |
| Total .. | 67,936 | 26,925 | 22,148 | 15,634 | 16,215 | 3,536 | 19 | 272 | 152,685 |

(a) Merino comeback is the progeny of a crossbred merino ewe and a merino ram, i.e., finer than half-bred.

(b) Half-bred and coarser.

4. Numbers of Sheep on Rural Holdings.—See § 1, para. 3, page 948, for information available.

5. Comparison with other Countries.—Australia has long occupied a leading position amongst the sheep-raising countries of the world in respect of the size of its flocks and the quantity and quality of wool produced. In 1959–60, Australian flocks numbered 155 million sheep, compared with an estimate of 239 million for the U.S.S.R., China, and Eastern Europe combined, about 50 million in New Zealand, and about 49 million in Argentina. The total world sheep numbers were estimated at about 917 million in 1959–60. These figures relate to woolled sheep only, non-woolled sheep accounting for about 5 per cent. of the world total of all types of sheep. Further details of sheep numbers in the principal wool producing countries of the world for 1957–58 to 1959–60 are given in the table on page 964.

6. Imports and Exports of Sheep.—As in the case of cattle, the overseas 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 from Western Australia, to Singapore although in 1959–60 there were also substantial shipments from New South Wales to the United States of America. Since June, 1958, an embargo has been imposed on the import of sheep in order to prevent the possible introduction of the disease, blue-tongue. The following table shows the imports and exports of all sheep for the years 1955–56 to 1959–60.

SHEEP : IMPORTS AND EXPORTS, AUSTRALIA.

| Year. | Imports. | | Exports. | |
|---------------|----------|--------|----------|--------|
| | No. | Value. | No. | Value. |
| | | £'000. | | £'000. |
| 1955–56 | 4,437 | 89 | 101,897 | 332 |
| 1956–57 | 7,445 | 212 | 129,480 | 482 |
| 1957–58 | 2,256 | '90 | 122,628 | 466 |
| 1958–59 | 5 | 1 | 135,720 | 393 |
| 1959–60 | .. | .. | 225,757 | '805 |

7. **Sheep Slaughtered.**—The following table shows the numbers of sheep slaughtered in the several States during each of the years ended June, 1956 to 1960, compared with averages for the three-year periods ended June, 1939, 1949 and 1959:—

SHEEP (INCLUDING LAMBS) SLAUGHTERED.

(’000.)

| Period. | 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 for three years ended— | | | | | | | | | | |
| 1938-39 .. | 6,520 | 7,891 | 1,088 | 1,762 | 1,216 | 364 | .. | 25 | 18,866 | 18,925 |
| 1948-49 .. | 6,367 | 6,413 | 1,066 | 1,863 | 1,458 | 396 | 3 | 47 | 17,613 | 17,650 |
| 1958-59 .. | 7,857 | 9,058 | 1,429 | 2,917 | 2,059 | 775 | 3 | 71 | 24,169 | 24,278 |
| Year— | | | | | | | | | | |
| 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 |
| 1957-58 .. | 7,761 | 9,624 | 1,378 | 3,278 | 1,856 | 734 | 4 | 74 | 24,709 | 24,878 |
| 1958-59 .. | 8,861 | 10,514 | 1,633 | 3,145 | 2,415 | 909 | 4 | 71 | 27,552 | 27,646 |
| 1959-60 .. | 10,753 | 12,512 | 2,113 | 3,899 | 2,650 | 1,166 | 5 | 75 | 33,173 | 33,373 |

8. **Production of Mutton and Lamb.**—Details of the production of mutton and lamb in each State and Territory compared with averages for the three-year periods ended June, 1939, 1949 and 1959, are shown in the following table:—

PRODUCTION OF MUTTON AND LAMB.

(Tons.)

| Period. | N.S.W. | Victoria. | Q’land. | S. Aust. | W. Aust. | Tas. | N.T. | A.C.T. | Aust. |
|--------------------------------|---------|-----------|---------|----------|----------|--------|------|--------|---------|
| Average for three years ended— | | | | | | | | | |
| 1938-39 .. | 103,884 | 136,927 | 20,121 | 30,574 | 20,928 | 6,129 | 2 | 413 | 318,978 |
| 1948-49 .. | 109,084 | 111,677 | 18,587 | 34,772 | 23,846 | 7,214 | 64 | 839 | 306,083 |
| 1958-59 .. | 135,256 | 164,580 | 25,845 | 50,415 | 35,373 | 14,077 | 77 | 1,240 | 426,863 |
| Year— | | | | | | | | | |
| 1955-56 .. | 120,615 | 146,228 | 23,020 | 44,339 | 32,759 | 11,778 | 59 | 1,333 | 380,131 |
| 1956-57 .. | 121,947 | 131,253 | 23,866 | 42,563 | 33,303 | 12,607 | 49 | 1,198 | 366,786 |
| 1957-58 .. | 127,800 | 169,107 | 24,381 | 53,681 | 31,942 | 13,221 | 90 | 1,254 | 421,476 |
| 1958-59 .. | 156,020 | 193,379 | 29,286 | 55,001 | 40,875 | 16,403 | 93 | 1,269 | 492,326 |
| 1959-60 .. | 184,600 | 223,519 | 35,886 | 62,760 | 44,385 | 20,780 | 111 | 1,269 | 573,310 |

9. **Consumption of Mutton and Lamb.**—Civilian consumption of mutton and lamb (in carcass equivalent weight, including canned mutton) rose substantially during the 1939-45 War, but fell again in 1946-47, and up to 1951-52 was lower than in pre-war years (an average of 74.8 lb. carcass equivalent per head per annum for the three years ended 1938-39). It rose during succeeding years to 78 lb. per head in 1952-53, and except for slight drops in 1955-56 and 1956-57, this level was maintained up to 1957-58. There was a sharp rise in 1958-59 to 89 lb. per head, and in 1959-60 a level of 105 lb. per head was reached. In 1959-60, consumption of mutton and lamb exceeded that of beef and veal for the first time on record. Figures quoted in this paragraph include the consumption of canned mutton, and differ on that account from the figures in the last column of the table following.

The following table gives details of the production and disposal of mutton and lamb:—

**PRODUCTION AND DISPOSAL OF MUTTON AND LAMB (CARCASS WEIGHT):
AUSTRALIA.**
(⁰000 tons.)

| Period. | Changes in Stock. | Pro- duction. | Exports. (a) | For Canning and Dehydra- tion. | Apparent Consumption in Australia. | |
|--------------------------------|----------------------|------------------|-----------------|--|--|------------------------------------|
| | | | | | Total. | Per Head per Annum. (lb.) |
| MUTTON. | | | | | | |
| Average for three years ended— | | | | | | |
| 1938-39 | .. | 201 | 17 | .. | 184 | 59.8 |
| 1948-49 | .. | 177 | 15 | 8 | 154 | 45.1 |
| 1958-59 | .. | 268 | 27 | 19 | 222 | 50.9 |
| Year— | | | | | | |
| 1955-56 | — 1 | 234 | 15 | 16 | 204 | 49.1 |
| 1956-57 | + 2 | 224 | 10 | 13 | 199 | 46.8 |
| 1957-58 | + 1 | 270 | 23 | 25 | 221 | 50.7 |
| 1958-59 | — 3 | 310 | 49 | 19 | 245 | 55.1 |
| 1959-60 | .. | 370 | 48 | 33 | 289 | 63.7 |

| | | | | | | |
|--------------------------------|-----|-----|----|----|-----|------|
| LAMB. | | | | | | |
| Average for three years ended— | | | | | | |
| 1938-39 | .. | 118 | 72 | .. | 46 | 15.0 |
| 1948-49 | — 1 | 130 | 45 | .. | 86 | 25.2 |
| 1958-59 | .. | 159 | 31 | .. | 128 | 29.3 |
| Year— | | | | | | |
| 1955-56 | + 1 | 146 | 36 | .. | 109 | 26.2 |
| 1956-57 | + 1 | 143 | 24 | .. | 118 | 27.7 |
| 1957-58 | — 1 | 152 | 29 | .. | 124 | 28.4 |
| 1958-59 | — 1 | 182 | 41 | .. | 142 | 31.9 |
| 1959-60 | .. | 203 | 26 | .. | 177 | 38.9 |

(a) Includes carcass equivalent of boneless mutton exported.

10. Exports of Frozen Mutton and Lamb.—The export trade in mutton and lamb preserved by cold process has not since attained the level of 205 million lb. shipped in 1913, although in 1942-43 it almost reached this level again. In earlier years, shipments consisted mainly of frozen mutton, but commencing with 1923-24 lamb has subsequently predominated in almost every year.

The quantities and values of exports of frozen mutton and lamb in each year 1955-56 to 1959-60 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. |
| 1955-56.. .. . | 34,657 | 1,885 | 81,626 | 7,867 | 116,283 | 9,752 |
| 1956-57.. .. . | 23,012 | 1,322 | 53,262 | 4,773 | 76,274 | 6,095 |
| 1957-58.. .. . | 42,270 | 2,253 | 64,352 | 6,132 | 106,622 | 8,385 |
| 1958-59.. .. . | 74,650 | 5,851 | 91,192 | 8,151 | 165,842 | 14,002 |
| 1959-60.. .. . | 71,763 | 4,719 | 59,264 | 4,389 | 131,027 | 9,108 |

As with beef, the principal customer in this trade has normally been the United Kingdom, although the United States of America has become a major buyer of mutton in recent years. In 1959–60, exports of mutton and lamb to the United Kingdom represented 29 per cent. and 71 per cent., respectively, of the total quantities exported. Forty-five per cent. of the mutton exported went to the United States of America, largely in the form of boneless meat, and the proportion of lamb exported to that country was nine per cent.

§ 5. Consumption and Marketing of Meat.

1. **Consumption of Meat.**—The quantity of meat (including cured and canned meat) in terms of carcass weight and edible offal available for consumption in Australia in 1959–60 was 1,025,809 tons. This is equivalent to 237.6 lb. per head of population compared with 244.9 lb. per head in 1958–59, and an average of 253.0 lb. during the years 1936–37 to 1938–39. The latest data published by the Food and Agricultural Organization of the United Nations in its *Food Balance Sheets* show that of the countries for which information was available, Australia occupies a leading position in terms of consumption of meat per head. Details of consumption per head of all types of meat including poultry, rabbits and hares taken from the latest *Food Balance Sheets* are set out below for Australia in comparison with a number of other countries. Australian consumption per head is slightly greater than that of other principal meat exporting countries (Uruguay, New Zealand, Argentina), and is almost 40 per cent. greater than in the United States of America and Canada, and 76 per cent. greater than that of the United Kingdom.

MEAT CONSUMPTION PER HEAD OF POPULATION IN VARIOUS COUNTRIES. (lb. per annum.)

| Period Covered. | Country. | Quantity Consumed. |
|---------------------------------|--------------------------------|--------------------|
| Average— | | |
| Three years ended 1956–57 | Australia | 247.8 |
| 1954 and 1955 | Uruguay | 233.7 |
| Three years ended 1956 | New Zealand | 232.1 |
| 1954 and 1955 | Argentina | 226.9 |
| Three years ended 1956 | United States of America | 179.7 |
| “ “ “ 1956–57 | Canada | 177.7 |
| “ “ “ 1956–57 | United Kingdom | 140.4 |

2. **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 1935–1960 is given on page 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) are given on page 710 of Official Year Book No. 41 and in earlier issues.

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 such meat. It covers beef and veal, and mutton and lamb.

(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 pigmeat 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 (f.o.b. port of shipment), to operate until 30th September, 1955, were agreed upon:—Beef and veal, 13.18d. stg. per lb.; lamb, 13.61d. stg. per lb.; and mutton, 6.05d. stg. per lb., these minimum prices 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.* As part of the negotiations which have taken place in Australia and the United Kingdom at various times since 1954, minimum prices have been reviewed periodically. The result has been a general reduction in minimum prices, and up to the 1960–61 season this had amounted to 5 per cent. in the case of beef and veal and lamb, and about 25 per cent. in the case of mutton, compared with 1954–55 minimum prices. At the same time, however, Australia has been permitted to export increasing quantities of all types of meat to destinations other than the United Kingdom and the Colonies. For the years 1957–58 to 1960–61, the beef export “free quota” was set at a maximum of 7,500 tons a year of 1st and 2nd quality beef, without restriction as to the quantity of lower grades that may be exported to these other destinations.

Minimum beef prices for the three years to 1963–64 were fixed during the 1958 negotiations at 9 per cent. below the 1960–61 level.

After eight months of open trading, the Australian Meat 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 payment 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.

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.

From 1st October, 1955, until April, 1958, beef prices in the United Kingdom were consistently below the level of the guarantee and consequently Australia “earned” deficiency payments which enabled the Australian Meat Board to make substantial bounty payments on beef exported to the United Kingdom. The rates of payment made during the 1954–55 and 1955–56 seasons are given on pages 888–9 of Official Year Book No. 43 and on pages 920–1 of Official Year Book No. 44 for 1956–57. No deficiency payments have been received since 1956–57.

In 1958, a new “chiller” grade of export beef was introduced. Beef of the new grade, whether exported in the chilled or frozen form, received a bounty of 5d. per lb. The bounty on bone-out piece beef was 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. was maintained for other 1st and 2nd quality quarter beef. The bounty payments were discontinued on 27th December, 1958, on account of the relatively high prices being obtained in the United Kingdom.

During the 1958–59 season, as in previous years, the heaviest volume of beef exports went to the United Kingdom. However, with the new free quota arrangements which operated from 1st October, 1958, Australian exporters were able to take advantage of the market for boneless manufacturing meat in the United States, and a substantial quantity of lower-grade beef, including drought-stricken stock, etc., which otherwise might not have been marketed at all, was disposed of to American manufacturers. During 1959–60, the United States market eclipsed the United Kingdom for the first time as the principal market for Australian beef exports.

§ 6. Wool.

1. **General.**—Australia is the leading wool-growing country in the world. With about one-sixth of the world's woolled sheep, Australia produces more than one-quarter of the world's wool (30 per cent. in 1959–60) and about 55 per cent. 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, 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 page 964.

2. **Greasy and Scoured Wool.**—Comparisons between the wool clips of different seasons and of different countries are seriously affected according to whether the weight of the clip is expressed as "in the grease" or as "clean". The quantity of grease and other 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. The yield of clean wool from greasy wool has shown an almost uninterrupted increase during the period of assessment up to 1956–57, when it reached 57.7 per cent. It has remained almost stationary at about 56.7 per cent. during the three following years.

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 54 per cent. The quantity of this wool exported during 1959–60 was about 13 per cent. of the total raw wool exports (excluding wool exported on skins) in terms of greasy.

For the clean yield of Australian scoured wools, a standard factor of 93 per cent. is taken.

3. **Production.**—The production of wool in the States and Territories varies broadly in accordance with the number of sheep depastured and with seasonal conditions (*see* 4. below). In general, however, South Australia obtains from its large-framed Merinos a much heavier fleece per sheep than the Australian average, while Tasmania obtains from its predominantly non-Merino flocks a much lighter fleece per sheep. In addition, as a result of better management (improved pastures, fodder conservation, better breeding, control of diseases, etc.), the long-term trend has been towards higher fleece weights.

The following table shows details of total wool (i.e., shorn, dead and fellmongered, and exported on skins) produced by each of the States and Territories during the years 1955–56 to 1959–60 compared with averages for the three-year periods ended 1938–39, 1948–49 and 1958–59.

PRODUCTION OF WOOL (IN TERMS OF GREASY).
(*000 lb.)

| Period. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | N.T. | A.C.T. | Aust. |
|-------------------------------|---------|---------|---------|----------|----------|--------|------|--------|-----------|
| Average of three years ended— | | | | | | | | | |
| 1938–39 .. | 478,595 | 169,256 | 169,325 | 88,699 | 73,141 | 15,728 | 35 | 1,822 | 996,601 |
| 1948–49 .. | 439,363 | 200,229 | 151,679 | 108,126 | 95,031 | 16,272 | 305 | 1,927 | 1,012,932 |
| 1958–59 .. | 633,938 | 298,302 | 217,062 | 187,225 | 160,402 | 30,141 | 277 | 2,371 | 1,529,718 |
| Year— | | | | | | | | | |
| 1955–56 .. | 593,712 | 273,356 | 194,014 | 173,697 | 156,454 | 23,418 | 393 | 2,328 | 1,417,372 |
| 1956–57 .. | 660,343 | 299,572 | 227,664 | 188,808 | 156,402 | 28,663 | 346 | 2,457 | 1,564,255 |
| 1957–58 .. | 557,287 | 296,490 | 204,375 | 185,843 | 158,281 | 29,154 | 291 | 2,133 | 1,433,854 |
| 1958–59 .. | 684,184 | 298,844 | 219,148 | 186,842 | 166,522 | 32,605 | 195 | 2,522 | 1,590,862 |
| 1959–60 .. | 715,445 | 322,999 | 236,196 | 198,289 | 170,442 | 33,565 | 165 | 2,899 | 1,680,000 |

The bulk of the Australian wool production (about 93 per cent. in recent years) is shorn from live sheep. The remainder is obtained by fellmongering (about 2 per cent.), or is exported on skins (about 5 per cent.). The following table shows details of total wool production according to method of obtaining wool, and also the gross value of wool produced. Gross value is 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.

**QUANTITY (IN TERMS OF GREASY) AND VALUE OF WOOL PRODUCED:
AUSTRALIA.**

| Period. | Shorn (incl. Crutchings). | Dead and Fell- mongered. | Exported on Skins. | Total Production. | |
|--------------------------------------|---------------------------------|--------------------------------|-----------------------|-------------------|---------|
| | | | | Quantity. | Value. |
| | '000 lb. | '000 lb. | '000 lb. | '000 lb. | £'000. |
| Average of three years ended— | | | | | |
| 1938–39.. .. | 889,338 | 49,280 | 57,983 | 996,601 | 53,425 |
| 1948–49.. .. | 902,007 | 50,660 | 60,265 | 1,012,932 | 152,536 |
| 1958–59.. .. | 1,411,424 | 36,804 | 81,490 | 1,529,718 | 394,145 |
| Year— | | | | | |
| 1955–56.. .. | 1,303,944 | 44,051 | 69,377 | 1,417,372 | 354,064 |
| 1956–57.. .. | 1,457,387 | 37,724 | 69,144 | 1,564,255 | 507,615 |
| 1957–58.. .. | 1,319,941 | 30,894 | 83,019 | 1,433,854 | 363,406 |
| 1958–59.. .. | 1,456,759 | 41,795 | 92,308 | 1,590,862 | 311,415 |
| 1959–60.. .. | 1,529,362 | 38,894 | 111,744 | 1,680,000 | 389,761 |

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.

4. **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 1955–56 to 1959–60.

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

| State. | 1955–56. | 1956–57. | 1957–58. | 1958–59. | 1959–60. |
|---------------------------------|--------------|--------------|-------------|--------------|--------------|
| SHEEP. | | | | | |
| New South Wales | 10.01 | 9.92 | 8.45 | 9.88 | 10.10 |
| Victoria | 10.41 | 11.02 | 9.69 | 9.47 | 10.06 |
| Queensland | 9.96 | 9.98 | 8.93 | 9.75 | 10.09 |
| South Australia | 12.68 | 13.14 | 11.60 | 11.87 | 12.31 |
| Western Australia | 11.33 | 10.73 | 10.54 | 10.49 | 10.32 |
| Tasmania | 8.85 | 10.07 | 9.38 | 9.37 | 9.10 |
| Australian Capital Territory .. | 9.75 | 10.20 | 8.28 | 10.41 | 10.51 |
| Australia(a) | 10.45 | 10.51 | 9.30 | 10.03 | 10.31 |
| LAMB. | | | | | |
| New South Wales | 3.11 | 3.30 | 2.75 | 3.08 | 3.22 |
| Victoria | 2.78 | 3.11 | 2.71 | 2.59 | 2.73 |
| Queensland | 4.18 | 4.09 | 3.76 | 3.84 | 3.95 |
| South Australia | 3.92 | 4.11 | 3.37 | 3.52 | 3.39 |
| Western Australia | 2.88 | 2.78 | 2.77 | 2.60 | 2.56 |
| Tasmania | 2.36 | 2.46 | 2.40 | 2.31 | 2.13 |
| Australian Capital Territory .. | 1.33 | 1.52 | 1.19 | 1.45 | 1.56 |
| Australia(a) | 3.22 | 3.37 | 2.91 | 3.03 | 3.10 |

(a) Excludes Northern Territory.

5. **Wool classified according to Quality.**—The following table provides a detailed analysis of wool sold at auction, according to quality, for the years 1955–56 to 1959–60. These data are compiled by the Wool Statistical Service on the basis of catalogues of auction sales. "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. | 1955-56. | | 1956-57. | | 1957-58. | | 1958-59. | | 1959-60. | |
|-------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Quantity. | Per cent. | Quantity. | Per cent. | Quantity. | Per cent. | Quantity. | Per cent. | Quantity. | Per cent. |
| 70's and finer | 86,925 | 2.1 | 100,011 | 2.1 | 114,188 | 2.7 | 112,966 | 2.5 | 113,234 | 2.4 |
| 64/70's .. | 424,946 | 10.2 | 527,264 | 11.1 | 609,897 | 14.3 | 442,019 | 9.5 | 453,823 | 9.5 |
| 64's .. | 583,929 | 14.0 | 490,038 | 14.5 | 696,064 | 16.4 | 607,653 | 13.1 | 659,126 | 13.8 |
| 64/60's .. | 390,633 | 9.4 | 478,418 | 10.1 | 392,933 | 9.2 | 477,054 | 10.3 | 506,001 | 10.6 |
| 60/64's .. | 833,228 | 20.0 | 987,496 | 20.8 | 847,824 | 19.9 | 1,021,139 | 21.9 | 1,071,961 | 22.4 |
| 60's and 60/58's .. | 746,019 | 17.9 | 804,363 | 16.9 | 645,119 | 15.2 | 837,338 | 17.9 | 839,919 | 17.6 |
| Total 60's and finer | 3,065,680 | 73.6 | 3,587,590 | 75.5 | 3,306,025 | 77.7 | 3,498,169 | 75.2 | 3,644,064 | 76.3 |
| 58's .. | 503,868 | 12.1 | 502,566 | 10.6 | 435,436 | 10.2 | 519,238 | 11.2 | 491,277 | 10.3 |
| 56's .. | 350,219 | 8.4 | 376,660 | 7.9 | 297,662 | 7.0 | 363,968 | 7.8 | 375,391 | 7.9 |
| 50's .. | 146,640 | 3.5 | 162,533 | 3.4 | 116,329 | 2.7 | 149,356 | 3.2 | 152,056 | 3.2 |
| Below 50's .. | 47,505 | 1.1 | 50,055 | 1.0 | 38,514 | 0.9 | 44,292 | 1.0 | 46,429 | 0.9 |
| Oddments .. | 53,747 | 1.3 | 74,224 | 1.6 | 65,344 | 1.5 | 74,385 | 1.6 | 68,202 | 1.4 |
| Grand Total | 4,167,659 | 100.0 | 4,753,634 | 100.0 | 4,259,314 | 100.0 | 4,649,408 | 100.0 | 4,777,419 | 100.0 |

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

6. **World Sheep Numbers and Wool Production.**—The following table shows particulars of the woolled sheep numbers 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.

In 1959-60, Australia produced 30 per cent. of the world total of all types of wool, the share of all British Commonwealth countries combined representing approximately 50 per cent. The principal wool producers, other than Australia, were 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 19 per cent. World production of wool (all types) in 1959-60 exceeded the average for 1934-38 by approximately 1,800 million lb. or 50 per cent.

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 1959-60 was 45 per cent. above the average for 1934-38, and the production of crossbred types has risen by about 64 per cent. Carpet wool production has risen by about 32 per cent.

ESTIMATED WORLD WOOLLED SHEEP NUMBERS AND PRODUCTION OF WOOL.

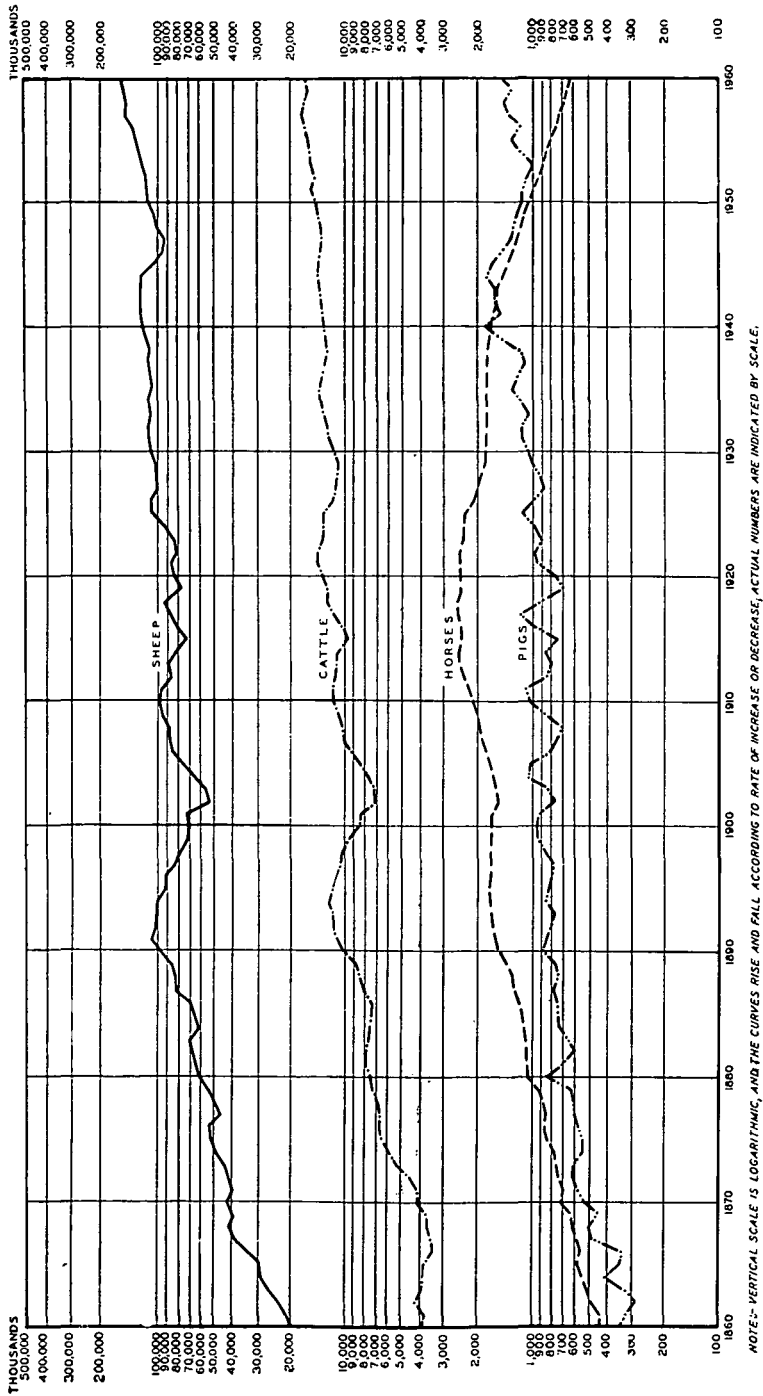
(Source: Reports published by Commonwealth Economic Committee.)

| Country. | Sheep Numbers (million). | | | Wool Production (million lb.—in terms of greasy). | | |
|--|--------------------------|----------|-----------------|---|----------|-----------------|
| | 1957-58. | 1958-59. | 1959-60. (a) | 1957-58. | 1958-59. | 1959-60. (a) |
| British Commonwealth— | | | | | | |
| Australia | 149 | 153 | 155 | 1,434 | 1,591 | 1,680 |
| New Zealand | 46 | 47 | 50 | 496 | 540 | 577 |
| South Africa(b) .. | 34 | 34 | 34 | 299 | 314 | 319 |
| Other Commonwealth .. | 80 | 81 | 82 | 249 | 254 | 265 |
| Total | 309 | 315 | 321 | 2,478 | 2,699 | 2,841 |
| Foreign— | | | | | | |
| U.S.S.R., China, Eastern Europe(c) | 214 | 231 | 239 | 923 | 1,010 | 1,093 |
| Argentina | 48 | 48 | 49 | 409 | 421 | 434 |
| United States of America .. | 31 | 33 | 34 | 293 | 293 | 316 |
| Uruguay | 23 | 21 | 22 | 200 | 175 | 159 |
| Other Foreign | 253 | 255 | 252 | 744 | 749 | 763 |
| Total | 569 | 588 | 596 | 2,569 | 2,648 | 2,765 |
| Grand Total | 878 | 903 | 917 | 5,047 | 5,347 | 5,606 |
| Type of Wool— | | | | | | |
| Apparel type— | | | | | | |
| Merino | .. | .. | .. | 2,042 | 2,212 | 2,284 |
| Crossbred | .. | .. | .. | 1,831 | 1,942 | 2,078 |
| Carpet type | .. | .. | .. | 1,174 | 1,193 | 1,244 |

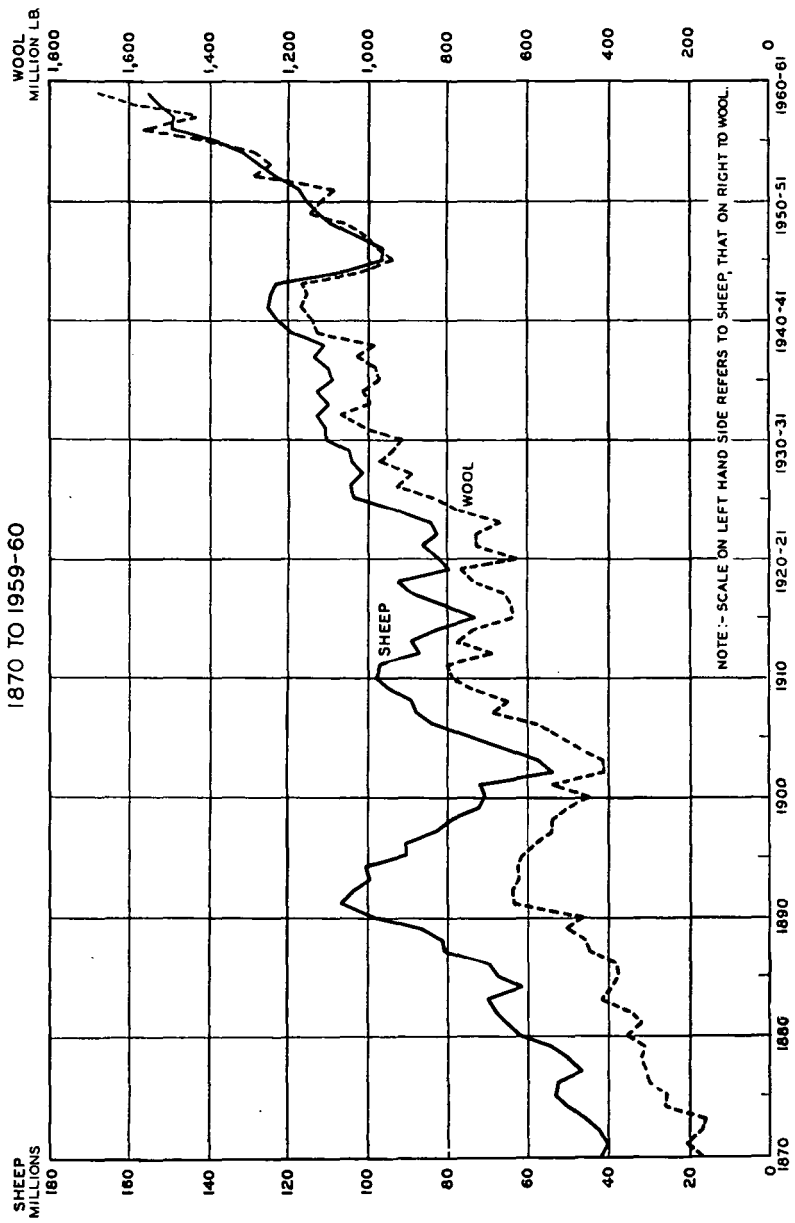
(a) Provisional. (b) Basutoland and S.W. Africa Territory excluded from sheep numbers but included in wool production. (c) Comprises Albania, Bulgaria, China and Dependencies, Czechoslovakia, Eastern Germany, Hungary, Mongolia, Poland, Romania, Tibet and U.S.S.R.

LIVESTOCK: AUSTRALIA, 1860 to 1960

RATIO GRAPH



SHEEP NUMBERS AND WOOL PRODUCTION: AUSTRALIA



7. *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.

8. *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 work 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 afterwards 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. Owing to some protracted litigation, known as the "Poulton Case" (see Official Year Book No. 45, p. 947), final distribution was not effected until 1959.

A residue of £2.4 million, representing unclaimed moneys, was paid to the Wool Research Trust Fund, under the terms of the Wool Realization (Distribution of Profits) Act, 1957.

9. *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 appointed by the Governor-General for a term of three years. Of the seven members, three represent the Australian Wool and Meat Producers' Federation, three the Australian Woolgrowers' and Graziers' Council and the other member is nominated by the Commonwealth Government.

(ii) *Wool Use Promotion.* The Wool Use Promotion Act 1953–1957 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 (iv) below.

(iii) *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 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.

(iv) *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 while the stores were held by the Commonwealth Government. Under the Act, the Bureau may dispose of these stores only 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 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.

(v) *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 woolgrowers on all shorn wool produced in Australia and sold 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, pages 675 and 819.

(vi) *The Wool Levy.* While the contributory charge legislation, mentioned above was in force, the Wool Levy, which was imposed by the Wool Tax Act 1936-1945 and the Wool Tax Assessment Act 1936, was temporarily suspended. When the Wool Levy was first imposed in 1936, the rate of tax on woolgrowers was 6d. a bale on all shorn wool produced in Australia and sold. 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 1st July, 1952), the Wool levy again became operative but at a higher rate. This rate was provided for in the Wool Tax Acts (Nos. 1 and 2) of 1952, under which a rate was prescribed between limits of 2s. and 5s. a bale on shorn wool produced in Australia and sold.

From 1952-53, the rate prescribed was 4s. a bale. The Wool Tax Acts (Nos. 1 and 2) of 1952 were repealed in May, 1957, and replaced by the Wool Tax Acts (Nos. 1 and 2) of 1957. The 1957 Acts maintained the levy on woolgrowers for wool promotion within the limits of 2s. to 5s. a bale on shorn wool produced in Australia and sold. In addition, provision was made under the 1957 Acts for woolgrowers to be levied at a maximum rate of 2s. a bale for wool research. Until 18th August, 1960, the operative rates prescribed were 4s. a bale for wool promotion purposes and 2s. a bale for wool research. On this date, the promotion levy was raised to 5s. a bale, which is the maximum permissible under current legislation.

10. *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 rejected at a referendum of woolgrowers in Australia in September, 1951, will be found in Official Year Book No. 39, page 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, page 727.

11. Wool 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 by the Commonwealth Government 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 Australia as from 1st July, 1952.

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 totalling 4s. a bale, effective from 1st July, 1957, and a contribution of 2s. a bale from woolgrowers, effective from 1st July, 1957, 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, Wool-growers' Organizations, the Australian Wool Bureau, and Textile Manufacturers.

Opportunity is afforded for co-operation with State Departments of Agriculture and other organizations in research and extension activities, by the inclusion on the Committee of a representative of the Australian Agricultural Council in the capacity of an observer.

The Australian Wool Testing Authority. The Australian Wool Testing Authority Act 1957, assented to on 12th September, 1957, constituted the Australian Wool Testing Authority, composed of representatives of woolbuyers, wool selling brokers, wool processors, the Australian Wool Bureau, the C.S.I.R.O. and the Commonwealth Government. It is intended that ultimately the Authority should be self-financing, but during the preliminary stages the Commonwealth Government is providing the initial capital by way of a loan.

The function of the Authority is to provide a service in Australia for carrying out various tests on wool and wool products, particularly with regard to the moisture content of scoured and carbonized wool. Testing on a commercial basis commenced in September, 1958.

In February, 1959, the Authority was notified by the International Wool Textile Organization that it would be included in the organization's list of official wool testing establishments. This is the standard of international recognition for wool testing houses and gives the Australian Wool Testing Authority the same standing as similar organizations in other countries.

Wool Marketing Committee of Enquiry. On 25th January, 1961, the names of the members and terms of reference of a Committee to inquire into Australian wool marketing methods was announced. The terms of reference are—

- (a) to inquire into the present systems of marketing and of promoting the sale of the Australian wool clip and matters relating thereto, and to report upon the efficacy of these systems;
- (b) to report upon the results of any other systems or of modifications of the present systems which may be advocated to the Committee of Enquiry or which the Committee itself considers would be of long-term benefit to the wool-growing industry and in the best interests of the nation.

12. 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 overseas trade in semi-processed wool (e.g., tops and yarns) 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 in the following table for the years 1955-56 to 1959-60.

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. |
| 1955-56 | 92,374 | 7,586 | 99,960 | 54,847 | 3,603 | 58,450 |
| 1956-57 | 108,255 | 5,218 | 113,473 | 65,504 | 2,479 | 67,983 |
| 1957-58 | 103,704 | 4,480 | 108,184 | 63,153 | 2,128 | 65,281 |
| 1958-59 | 103,180 | 3,992 | 107,172 | 62,834 | 1,896 | 64,730 |
| 1959-60 | 123,529 | 5,092 | 128,621 | 75,226 | 2,419 | 77,645 |

(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 in the following table for the years 1955-56 to 1959-60. 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 overseas trade in woollen piece goods, clothing, etc., because of the obvious difficulties of estimating accurately 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)(b) | Woollen Yarn Used. (b) | Scoured Wool used for Felt Manufacture (including Hats). | Total. | Worsted Yarn Used. (a)(b) | Woollen Yarn Used. (b) | Scoured Wool used for Felt Manufacture (including Hats). | Total. |
| 1955-56 | 43,041 | 27,837 | 7,586 | 78,464 | 25,176 | 17,014 | 3,603 | 45,793 |
| 1956-57 | 44,325 | 30,093 | 5,218 | 79,636 | 26,172 | 18,737 | 2,479 | 47,388 |
| 1957-58 | 40,716 | 32,288 | 4,480 | 77,484 | 24,201 | 20,253 | 2,128 | 46,582 |
| 1958-59 | 37,972 | 29,272 | 3,992 | 71,236 | 22,811 | 18,520 | 1,896 | 43,227 |
| 1959-60 | 45,456 | 35,442 | 5,092 | 85,990 | 27,070 | 22,169 | 2,419 | 51,658 |

(a) Includes hand knitting yarns used.
of wool and other fibres.

(b) Includes wool content of yarns containing a mi

13. **Exports of Wool.**—(i) *Quantities.* (a) *Greasy.* Prior to the 1939-45 War, Australian greasy wool exported overseas was sent principally to the United Kingdom and other European countries. During the 1939-45 War, exports to the United States of America showed great expansion but have since dwindled to about 2 per cent. Of the total shipments in 1959-60, 26 per cent. went to Japan, 21 per cent. to the United Kingdom, 13 per cent. to France, 10 per cent. to Italy and 8 per cent. to Belgium-Luxembourg. The following table shows the quantities of greasy and slipe wool exported, and the principal countries of consignment.

EXPORTS OF GREASY AND SLIPE WOOL.

('000 lb. actual weight.)

| Country of Consignment. | 1955-56. | 1956-57. | 1957-58. | 1958-59. | 1959-60. |
|---------------------------------|------------------|------------------|------------------|------------------|------------------|
| United Kingdom | 275,572 | 306,504 | 251,305 | 305,888 | 266,297 |
| Other Commonwealth Countries .. | 9,315 | 12,242 | 8,643 | 10,803 | 11,796 |
| Japan | 189,852 | 233,036 | 203,988 | 273,503 | 335,296 |
| France | 199,797 | 215,150 | 179,480 | 157,871 | 161,844 |
| Italy | 93,266 | 123,438 | 130,062 | 113,156 | 130,516 |
| Belgium-Luxembourg | 93,660 | 105,963 | 102,197 | 103,261 | 105,974 |
| Germany, Fed. Rep. of | 74,936 | 82,897 | 66,117 | 60,070 | 70,223 |
| United States of America | 48,059 | 37,454 | 21,235 | 28,299 | 24,323 |
| Other Foreign Countries | 82,347 | 92,509 | 119,279 | 134,138 | 188,081 |
| Total | 1,066,804 | 1,209,193 | 1,082,306 | 1,186,989 | 1,294,350 |

(b) *Scoured and Washed and Carbonized.* The exports of "scoured and washed" wool, whether carbonized or not, are shown in the following table according to principal countries of destination.

EXPORTS OF WOOL—SCOURED AND WASHED AND CARBONIZED.

('000 lb. actual weight.)

| Country of Consignment. | 1955-56. | 1956-57. | 1957-58. | 1958-59. | 1959-60. |
|---------------------------------|---------------|---------------|---------------|---------------|----------------|
| United Kingdom | 24,276 | 24,298 | 19,525 | 24,597 | 24,661 |
| Canada | 5,356 | 3,220 | 3,901 | 4,803 | 5,375 |
| Other Commonwealth Countries .. | 1,285 | 1,538 | 1,857 | 1,941 | 2,318 |
| United States of America | 16,919 | 13,294 | 13,575 | 14,815 | 14,482 |
| Germany, Fed. Rep. of | 8,329 | 10,583 | 12,252 | 8,692 | 9,406 |
| Italy | 6,017 | 7,671 | 7,405 | 7,117 | 8,668 |
| Japan | 2,428 | 3,890 | 720 | 4,325 | 4,345 |
| France | 5,309 | 6,245 | 6,205 | 3,732 | 3,842 |
| Belgium-Luxembourg | 3,601 | 4,017 | 2,734 | 1,754 | 1,855 |
| Other Foreign Countries | 11,397 | 15,928 | 20,068 | 18,775 | 25,574 |
| Total | 84,917 | 90,684 | 88,242 | 90,551 | 100,526 |

(c) *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. | 1955-56. | 1956-57. | 1957-58. | 1958-59. | 1959-60. |
|-----------------------|----------|----------|----------|----------|----------|
| Tops | 11,107 | 14,949 | 16,921 | 20,203 | 22,743 |
| Noils | 4,486 | 4,578 | 3,298 | 4,355 | 4,017 |
| Waste—Soft wool | 7,094 | 14,668 | 3,484 | 7,742 | 5,607 |
| Hard wool | 3,617 | 4,428 | 3,195 | 4,388 | 3,193 |

(d) *Total Quantity of Exports.* The following table shows the estimated greasy and clean weights of exports of raw and semi-processed wool for the years 1955–56 to 1959–60. As the figures in the following table are in terms of "greasy" or "clean" basis, they differ from those in the preceding tables which represent actual weight shipped.

EXPORTS OF WOOL—GREASY AND CLEAN BASES.

('000 lb.)

| Particulars. | 1955–56. | 1956–57. | 1957–58. | 1958–59. | 1959–60. |
|-----------------------------|------------------|------------------|------------------|------------------|------------------|
| GREASY BASIS. | | | | | |
| <i>Raw Wool—</i> | | | | | |
| Greasy and Slip | 1,067,654 | 1,209,840 | 1,082,724 | 1,187,399 | 1,294,598 |
| Scoured and Washed | 158,774 | 171,848 | 164,019 | 169,021 | 186,217 |
| Carbonized | 69,377 | 69,144 | 83,019 | 92,308 | 111,744 |
| Exported on Skins | | | | | |
| <i>Total</i> | <i>1,295,805</i> | <i>1,450,832</i> | <i>1,329,762</i> | <i>1,448,728</i> | <i>1,592,559</i> |
| <i>Semi-processed Wool—</i> | | | | | |
| Tops | 19,993 | 27,058 | 30,627 | 36,365 | 41,620 |
| Yarn | 123 | 149 | 158 | 128 | 89 |
| <i>Total</i> | <i>1,315,921</i> | <i>1,478,039</i> | <i>1,360,547</i> | <i>1,485,221</i> | <i>1,634,268</i> |
| CLEAN BASIS. | | | | | |
| Raw Wool | 741,653 | 841,371 | 760,229 | 827,418 | 911,389 |
| Semi-processed Wool | 11,510 | 16,080 | 18,364 | 21,690 | 24,841 |
| <i>Total</i> | <i>753,163</i> | <i>857,451</i> | <i>778,593</i> | <i>849,108</i> | <i>936,230</i> |

(ii) *Total Value of Exports.* The value of wool (other than wool on sheepskins) exported from Australia during the five years ended 1959–60 averaged 45 per cent. of the total value of exports of merchandise of Australian origin, and during 1959–60 the proportion was 43 per cent. The value for the five years ended 1959–60, together with the principal countries to which wool was exported, is shown in the following table.

VALUE OF WOOL EXPORTS.(a)

(£'000.)

| Country of Consignment. | 1955–56. | 1956–57. | 1957–58. | 1958–59. | 1959–60. |
|------------------------------------|----------------|----------------|----------------|----------------|----------------|
| United Kingdom | 83,088 | 117,372 | 79,582 | 73,082 | 75,947 |
| Other Commonwealth Countries | 8,060 | 9,920 | 8,026 | 7,762 | 9,567 |
| Japan | 64,761 | 103,750 | 74,301 | 68,923 | 95,626 |
| France | 53,388 | 73,494 | 52,831 | 34,162 | 40,040 |
| Italy | 29,259 | 47,905 | 41,703 | 28,181 | 38,556 |
| Belgium-Luxembourg | 23,600 | 32,987 | 24,592 | 15,415 | 20,733 |
| Germany, Fed. Rep. of | 21,391 | 29,608 | 22,130 | 16,479 | 19,774 |
| United States of America | 21,627 | 20,705 | 12,864 | 11,270 | 12,436 |
| Other Foreign Countries | 32,334 | 47,963 | 57,368 | 46,937 | 73,463 |
| <i>Total</i> | <i>337,508</i> | <i>483,704</i> | <i>373,397</i> | <i>302,211</i> | <i>386,142</i> |

(a) Excludes wool exported on sheepskins.

14. Stocks of Wool.—Stocks of raw wool held in Australia at 30th June, 1960, amounted to 244.9 million lb. (as in the grease) of which 65.3 million lb. (42.2 million lb. as greasy and 23.1 million lb. as scoured and carbonized) were held by woollen mills, wool scourers and fellmongers, and 179.6 million lb., assumed to be all greasy, were held by brokers. Of the wool held by brokers, 54.1 million lb. were unsold wool and 125.5 million lb. were sold wool held awaiting shipment. These stocks exclude wool on skins, since this wool is not recorded as production until fellmongered in Australia or exported on skins.

15. Price.—Wool is the chief factor in the pastoral wealth of Australia, and the nation's prosperity is largely dependent upon its satisfactory sale. Auction sales are conducted at Sydney, Goulburn, Newcastle, Albury, Melbourne, Geelong, Ballarat, Brisbane, Adelaide, Perth, Albany, 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. During the five years ended 1959–60, the price of greasy wool sold in the selling centres of Australia averaged 62.0d. 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. 7 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, and prices in the years 1951–52 to 1957–58 fluctuated in the range 61d. to 82d., while in 1958–59 they fell to 48.6d., the lowest for ten years. This was followed by a recovery to 57.8d. in 1959–60.

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.

16. 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 even though the quantity produced increased substantially, and in 1959–60 was £389,761,000.

Details of the value of wool production for the years 1955–56 to 1959–60 are shown in the following table:—

ESTIMATED GROSS VALUE OF TOTAL WOOL PRODUCTION.(a)

(£'000.)

| Season. | N.S.W. | Vic. | Qld. | S. Aust. | W.Aust. | Tas. | N.T.(b) | A.C.T. | Aust. |
|---------|---------|--------|--------|----------|---------|-------|---------|--------|---------|
| 1955–56 | 149,128 | 69,020 | 53,134 | 39,911 | 35,881 | 6,190 | 92 | 708 | 354,064 |
| 1956–57 | 217,124 | 97,659 | 77,522 | 57,289 | 46,965 | 9,974 | 106 | 976 | 507,615 |
| 1957–58 | 143,337 | 76,255 | 53,836 | 42,354 | 39,209 | 7,742 | 67 | 606 | 363,406 |
| 1958–59 | 134,764 | 59,471 | 45,075 | 33,797 | 30,915 | 6,844 | 36 | 513 | 311,415 |
| 1959–60 | 168,112 | 75,952 | 54,573 | 42,691 | 39,334 | 8,254 | 35 | 810 | 389,761 |

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

17. 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 1956 to 1960.

WOOL(a): IMPORTS INTO UNITED KINGDOM.

(Source: Board of Trade Accounts relating to Trade and Navigation of the United Kingdom.)
(’000 lb.)

| Country of Origin. | 1956. | 1957. | 1958. | 1959. | 1960. |
|------------------------------------|----------------|----------------|----------------|----------------|----------------|
| Australia | 310,585 | 315,310 | 292,407 | 333,565 | 266,348 |
| New Zealand | 163,550 | 166,050 | 168,241 | 170,882 | 162,147 |
| Union of South Africa | 61,194 | 45,563 | 52,594 | 64,883 | 48,449 |
| India and Pakistan | 25,912 | 29,889 | 22,717 | 25,442 | 25,652 |
| Other Commonwealth Countries | 9,583 | 11,410 | 9,671 | 10,544 | 10,037 |
| Argentina | 32,740 | 32,484 | 29,088 | 55,022 | 54,783 |
| France | 22,228 | 16,657 | 18,727 | 23,689 | 12,140 |
| Uruguay | 34,373 | 17,448 | 23,353 | 15,096 | 20,689 |
| Other Foreign Countries | 39,156 | 40,536 | 41,791 | 52,557 | 46,525 |
| <i>Total Quantity</i> | <i>699,321</i> | <i>675,347</i> | <i>658,589</i> | <i>751,680</i> | <i>646,770</i> |
| Total Value (£’000 sterling) | 167,927 | 188,754 | 134,001 | 146,801 | 134,898 |

(a) Greasy, Slipe, Washed and Scoured, and Carbonized.

Australian wool represented 41 per cent. of the total quantity imported into the United Kingdom during 1960. New Zealand supplied 25 per cent. and South Africa 7 per cent., while the total quantity received from British Commonwealth countries constituted 79 per cent. of all United Kingdom imports of wool.

18. **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 1959 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, 1959.

(Source: Information published by Commonwealth Economic Committee.)
(Million lb.)

| Importing Country. | Pro- duction of Importing Country. (a) | Quantity Imported from— (b) | | | | | Total Imports. |
|-----------------------------------|---|--------------------------------|-----------------|------------------------------|-----------------|---------------------|-------------------|
| | | Australia. | New Zealand. | Union of South Africa. | Argen- tina. | Other Countries. | |
| United Kingdom | 128 | 333.6 | 170.9 | 64.9 | 55.0 | 127.3 | 751.7 |
| Belgium | (c) | 110.0 | 27.0 | 9.0 | 26.8 | 24.8 | 197.6 |
| France | 55 | 168.6 | 97.2 | 42.6 | 39.2 | 18.4 | 366.0 |
| Germany (Federal Republic) | (c) | 83.5 | 32.4 | 36.4 | 26.3 | 59.6 | 238.2 |
| Italy | 32 | 112.6 | 24.0 | 20.7 | 23.2 | 56.0 | 236.5 |
| Japan | (c) | 302.5 | 18.8 | 11.3 | 18.3 | 18.1 | 369.0 |
| United States of America(d) | 316 | 34.5 | 66.6 | 23.1 | 69.8 | 98.1 | 292.1 |

(a) As in the grease, 1959–60. (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 395.7 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 is retained for their own consumption. The countries chiefly concerned with the transit trade are the United Kingdom (8 per cent. of total imports re-exported in 1959) and Belgium.

§ 7. Oversea 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, sheep and other skins, and skin pieces, sent overseas during 1959–60 amounted to £31,727,000, compared with a total of £23,525,000 in 1958–59 and £25,353,000 in 1957–58.

2. **Export of Sheepskins.**—(i) *With Wool.* Of the total exports of sheepskins with wool, amounting to 167,734,000 lb. valued at £23,238,000 during 1959–60, 123,518,000 lb. valued at £16,980,000 were shipped to France, 14,251,000 lb. valued at £2,314,000 to Italy, and 14,399,000 lb. valued at £1,799,000 to the United Kingdom. In the previous year, France obtained about three-quarters (by value) of all sheepskins with wool exported and the United Kingdom about 9 per cent. The exports of sheepskins with wool during each of the years 1955–56 to 1959–60 were as follows:—

EXPORTS OF SHEEPSKINS WITH WOOL: AUSTRALIA.

| Particulars. | 1955–56. | 1956–57. | 1957–58. | 1958–59. | 1959–60. |
|-------------------|----------|----------|----------|----------|----------|
| Number '000 | 14,891 | 14,239 | 19,441 | 20,180 | 25,560 |
| Value £'000 | 15,268 | 19,438 | 20,219 | 14,768 | 23,238 |

(ii) *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 the proportion shipped to the United States of America. In 1958–59, the United States received 66 per cent., and in 1959–60 only 28 per cent. In the latter year, France was the main importer, taking 30 per cent. (value, £112,551), while the United Kingdom purchased 25 per cent. (value, £92,758). In 1959–60, a total of 1,486,000 sheepskins without wool were exported valued at £372,000. Since 1954–55, the number exported has exceeded two million only once (in 1958–59), and the value has fluctuated about £400,000.

3. **Hides.**—(i) *Exports.* The export trade in cattle hides and calfskins during 1959–60 was distributed amongst the main importing countries as follows:—Japan, £2,469,000; Germany (Federal Republic), £702,300; Italy, £571,800; Netherlands, £532,900; United States of America, £352,100. The total quantity exported was 56,357,000 lb., valued at £5,752,000.

(ii) *Imports.* The imports of cattle hides and calfskins are fairly substantial, the chief sources of supply being New Zealand and the Pacific Islands. The quantity of cattle hides, including calfskins, imported into Australia during the year 1959–60 amounted to 1,589,000 lb. valued at £153,000, the highest figures attained since 1953–54.

4. **Furred Skins.**—The exports of furred skins in 1959–60 were valued at £1,755,000, of which rabbit and hare skins constituted £1,156,000. This is the highest total value recorded since 1955–56 (£2,013,000), when rabbit and hare skins accounted for £1,711,000. In 1958–59, they accounted for £1,288,000 out of a total of £1,477,000.

Skins were shipped principally to the United States of America, the United Kingdom, Belgium and Luxembourg, the values shipped to each in 1959–60 being:—United States of America, £1,207,200; United Kingdom, £333,700; and Belgium-Luxembourg, £64,400.

5. **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, page 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, page 930. Pelts have since reverted to open marketing without export restrictions.

(iii) *Hides and Leather.* A hide acquisition and marketing scheme operated from November, 1939, to August, 1954. 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. 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.

Pre-war, about 40 to 45 per cent. of Australian production of cattle hides and calf skins 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, page 931.

§ 8. Tallow.

1. **Consumption of Tallow in Factories.**—Details of consumption are collected from the principal factories using tallow. Consumption of inedible tallow in these factories (soap and candle, chemical and woolscouring works) for the five years 1955–56 to 1959–60 was as follows:—1955–56, 1,210,694 cwt.; 1956–57, 1,207,578 cwt.; 1957–58, 1,280,984 cwt.; 1958–59, 1,216,668 cwt.; 1959–60, 1,277,542 cwt. These figures are, however, deficient to the extent that no allowance has been made for small unrecorded amounts used in other types of establishments. Details of edible tallow consumed in factories are not available.

2. **Exports of Tallow.**—Particulars of exports of edible and inedible tallow are shown in the following table for the five years 1955–56 to 1959–60:—

TALLOW: EXPORTS, AUSTRALIA.
(cwt.)

| Particulars. | 1955–56. | 1956–57. | 1957–58. | 1958–59. | 1959–60. |
|----------------------|----------------|------------------|----------------|------------------|------------------|
| Edible | 127,275 | 120,194 | 116,986 | 74,053 | 118,848 |
| Inedible | 829,403 | 936,951 | 878,060 | 1,022,844 | 1,533,734 |
| Total | 956,678 | 1,057,145 | 995,046 | 1,096,897 | 1,652,582 |

3. **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.

§ 9. Exports of Principal Pastoral Products.

The quantities and values of the principal pastoral products of Australia exported for the years 1957–58 to 1959–60 were as follows:—

EXPORTS OF PASTORAL PRODUCTS: AUSTRALIA.

| Product. | Unit of Quantity. | Quantity. | | | Value (£'000.) | | |
|---|-------------------|-----------|-----------|-----------|----------------|----------|----------|
| | | 1957–58. | 1958–59. | 1959–60. | 1957–58. | 1958–59. | 1959–60. |
| Animals (living)— | | | | | | | |
| Cattle | No. | 23,933 | 13,900 | 13,602 | 932 | 493 | 456 |
| Horses | " | 681 | 300 | 1,927 | 191 | 161 | 487 |
| Sheep | " | 122,628 | 135,720 | 225,757 | 466 | 393 | 805 |
| Bones | '000 cwt. | 12 | 13 | 7 | 24 | 19 | 9 |
| Gelatine (Edible) .. | '000 lb. | 1,364 | 1,280 | 1,329 | 257 | 239 | 237 |
| Glycerine | " | 673 | 2,850 | 690 | 44 | 210 | 58 |
| Hair and Bristles .. | cwt. | 1,958 | 2,652 | 5,606 | 127 | 89 | 111 |
| Hoofs | " | 10,533 | 9,072 | 5,447 | 20 | 15 | 9 |
| Horns | " | 8,475 | 15,321 | 9,155 | 58 | 66 | 56 |
| Meats— | | | | | | | |
| Frozen Beef and Veal(a) | '000 lb. | 282,005 | 510,239 | 421,576 | 21,570 | 55,486 | 55,464 |
| " Mutton and Lamb | " | 106,622 | 165,842 | 131,027 | 8,384 | 14,002 | 9,108 |
| " Rabbits and Hares | Value only | .. | .. | .. | 2,802 | 3,047 | 2,822 |
| " Other | " | .. | .. | .. | .. | 5,461 | 5,089 |
| Preserved in Tins, etc. | '000 lb. | 131,833 | 127,049 | 107,649 | 15,100 | 15,434 | 13,319 |
| Other (excluding Bacon and Ham) | Value only | .. | .. | .. | 1,148 | 1,435 | 925 |
| Sausage Casings .. | " | .. | .. | .. | 2,610 | 2,223 | 1,768 |
| Hides and Skins— | | | | | | | |
| Cattle and Calf .. | '000 lb. | 50,557 | 85,324 | 56,357 | 3,240 | 6,490 | 5,752 |
| Horse | " | 2,220 | 1,595 | 1,723 | 125 | 99 | 173 |
| Sheep and Lamb .. | '000. | 20,255 | 22,249 | 26,003 | 20,451 | 15,200 | 24,652 |
| Rabbit and Hare .. | '000 lb. | 3,686 | 4,444 | 2,921 | 913 | 1,288 | 1,156 |
| Tallow (Edible and Inedible) | cwt. | 995,046 | 1,096,897 | 1,652,582 | 4,311 | 4,488 | 5,079 |
| Wool— | | | | | | | |
| Greasy and Slip | '000 lb. | 1,082,306 | 1,186,989 | 1,294,350 | 326,146 | 264,490 | 337,394 |
| Scoured, Tops, Noils, Waste | " | 115,140 | 127,240 | 136,086 | 47,251 | 37,721 | 48,748 |

(a) Includes chilled beef.