1996–97 7113.0

Australian Bureau of Statistics

# AGRICULTURE

AUSTRALIA

EMBARGO: 11:30AM (CANBERRA TIME) FRI 18 SEPT 1998

## CONTENTS



■ For further information about these and related statistics, contact Nigel Gibson on Hobart 03 6222 5939, or any ABS office shown on the back cover of this publication.

# NOTES

SYMBOLS AND OTHER USAGES

| | |
|---|---|
| al | alcohol |
| ha | hectares |
| kg | kilograms |
| L | litres |
| n.e.c. | not elsewhere classified |
| n.e.i. | not elsewhere included |
| n.p. | not available for publication but included in totals where applicable |
| p | preliminary figures |
| r | figure or series revised since previous issue |
| SE | standard error |
| t | tonnes |
| . . | not applicable |
| * | subject to sampling variability too high for most practical purposes |
| — | nil or rounded to zero |

ABBREVIATIONS

| | |
|---|---|
| ABARE | Australian Bureau of Agricultural and Resource Economics |
| ABS | Australian Bureau of Statistics |
| ACS | Agricultural Commodity Survey |
| AER | Agro-Ecological Regions |
| AFS | Agricultural Finance Survey |
| ANZSIC | Australian and New Zealand Standard Industrial Classification |
| ASIC | Australian Standard Industrial Classification |
| EVAO | Estimated Value of Agricultural Operations |
| f.o.b. | free on board |
| GDP | Gross Domestic Product |
| GFP | Gross Farm Product |
| IPD | Implicit Price Deflator |
| IRDB | Integrated Regional Database |
| VACP | Value of Agricultural Commodities Produced |

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# SECTION 1 AGRICULTURE AND THE AUSTRALIAN ECONOMY

## OVERVIEW

While the number of agricultural establishments has been steadily declining in recent years, agriculture still occupies an important place in Australian industry. In particular, it has a major influence on downstream economic activity and is a significant contributor to Australia's merchandise exports.

Australian agriculture also occupies an important place in global rural trade, particularly in Asian countries, where many new markets have been forged in recent times for our wheat, beef, fruit, sugar and dairy produce.

A strong performance by the cropping sector, highlighted by a record wheat crop, together with improved commodity prices for livestock products such as wool, led to continued growth in the agricultural sector in 1996–97. Highlights included:

- the gross value of agricultural production was $28,039 million, up 3.0% on the previous year;
- Gross farm product (GFP) was 3.0% of gross domestic product (GDP);
- the agricultural sector employed 379,500 persons; and
- rural exports amounted to $22,739 million, representing 28.3% of the total value of Australia's merchandise exports.

## GROSS VALUE OF AGRICULTURAL PRODUCTION

The gross value of agricultural commodities produced rose 3.0% to $28,039 million. This was mainly due to a strong performance in the value of crops, complemented by a 1.0% increase in the gross values of livestock products.

The increase in gross value of production of crops was primarily due to the increase in the value of wheat harvested, up 13.3% to $4,878 million. Cotton and sugar were also major contributors, contributing $1,342 million (8.3%) and $1,186 million (7.4%) respectively.

The gross value of total livestock slaughterings fell marginally to $6,190 million, even though the number of livestock slaughterings increased in all groupings except sheep and pigs (which recorded small decreases).

The gross value of livestock products produced increased by 1.0% to $5,754 million, primarily due to an increase in the gross value of wool of 2.8% to $2,621 million. This increase followed a fall of 23.2% in the gross value of wool in 1995–96 as a result of a decline of wool production and a drop in the average unit value.

## GROSS VALUE OF AGRICULTURAL PRODUCTION

| | AUST. | | | 1996–97 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *1994–95* | *1995–96r* | *1996–97* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* | *NT* | *ACT* |
| | $m | $m | $m | $m | $m | $m | $m | $m | $m | $m | $m |
| Crops (incl. pastures and grasses) | 11 131.7 | 15 330.5 | 16 137.6 | 4 923.0 | 2 527.4 | 3 508.8 | 2 067.2 | 2 762.0 | 317.2 | 29.2 | 2.8 |
| Livestock slaughterings and other disposals(a) | 6 618.8 | 6 192.7 | 6 190.1 | 1 709.8 | 1 419.6 | 1 613.9 | 416.6 | 685.1 | 117.1 | 226.1 | 1.9 |
| Livestock products(b) | 5 995.0 | 5 707.3 | 5 753.6 | 1 629.3 | 2 115.5 | 554.4 | 472.7 | 749.3 | 225.8 | n.p. | 6.5 |
| **Total agriculture(c)** | **23 754.8** | **27 242.0** | **28 089.7** | **8 262.1** | **6 062.5** | **5 677.1** | **2 956.5** | **4 196.4** | **660.1** | **263.8** | **11.2** |

(a) Incomplete; excludes pigs and poultry slaughterings in the Northern Territory.

(b) Excludes the Northern Territory.

(c) Includes pigs, poultry slaughterings and livestock products in the Northern Territory.

## GROSS FARM PRODUCT

GFP in 1996–97 increased in both current and constant price terms, by 7.8% and 9.2% respectively, reflecting the continued improvement in the level of production of grains, a high contributor to GFP. The difference between the two measures reflects a slight weakening in average prices compared to the previous year.

The farm sector's direct contribution to GDP in 1996–97 was 3.0%, down 0.4 percentage points on the level recorded in 1995–96.

### GROSS FARM PRODUCT

| | AUST. | | |
|---|---|---|---|
| | *1994–95r* | *1995–96r* | *1996–97* |
| *Price* | $m | $m | $m |
| Current prices | 10 920 | 14 364 | 15 478 |
| Average 1989–90 | 12 438 | 17 050 | 18 620 |

## EMPLOYMENT

There was a small increase in the level of employment in the agricultural sector during 1996–97, following the small rise in 1995–96. The overall level of employment has remained relatively constant over many years.

EMPLOYMENT(a), Agriculture Sector

| | AUST. | | | 1996–97 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | *1994–95* | *1995–96* | *1996–97* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* |
| | '000 | '000 | '000 | '000 | '000 | '000 | '000 | '000 | '000 |
| Males | 241.6 | 255.0 | 259.4 | 71.0 | 65.2 | 56.5 | 30.7 | 27.3 | 7.5 |
| Females | 115.9 | 117.9 | 120.1 | 31.6 | 30.7 | 25.7 | 14.0 | 13.7 | 3.8 |
| **Persons** | **357.5** | **372.9** | **379.5** | **102.6** | **95.9** | **82.2** | **44.8** | **41.0** | **11.3** |

(a) *Labour Force, Australia* (Cat. no. 6203.0).

## RURAL EXPORTS

The value of rural exports increased by 6.8% to $22,739 million during 1996–97. Cereal grains and cereal preparations, with a combined increase of 20.9% to $5,954 million, were the commodities contributing most to this increase. This was due to the high level of grain production during the year. The increase in the value of grain exports was offset by a reduction in the value of meat and meat preparation exports, down 10.2% to $2,957 million.

Since 1990–91 the value of rural exports has increased by 62.2%. The commodities contributing most to this increase were cereals, with an increase of 144.4% to $5,954 million, and sugar, which rose by 78.7% to $1,694 million. Meat and meat preparations is currently 6.8% lower than in 1990–91. The proportion of total exports represented by rural exports has remained relatively constant over that period, between 27.0% and 29.0%.

RURAL MERCHANDISE(a), Exports f.o.b.

| | *1990–91* | *1991–92* | *1992–93* | *1993–94* | *1994–95* | *1995–96* | *1996–97* |
|---|---|---|---|---|---|---|---|
| *Commodity* | $m | $m | $m | $m | $m | $m | $m |
| Rural exports f.o.b. | | | | | | | |
| Meat and meat preparations | 3 173 | 3 434 | 3 750 | 4 043 | 3 654 | 3292 | 2 957 |
| Cereal grains and cereal preparations | 2 436 | 2 352 | 2 954 | 3 205 | 2 523 | 4 926 | 5 954 |
| Sugar, sugar preparations and honey | 948 | 747 | 1 072 | 1 315 | 1 730 | 1 712 | 1 694 |
| Wool and sheepskins | 2 887 | 3 829 | 3 367 | 3 369 | 4 216 | 3 664 | 3 744 |
| Other rural | 4 578 | 5 241 | 5 937 | 6 513 | 6 922 | 7 706 | 8 390 |
| *Total rural* | *14 022* | *15 603* | *17 080* | *18 445* | *19 045* | *21 300* | *22 739* |
| *Non-rural* | *38 133* | *39 271* | *42 942* | *45 377* | *47 401* | *54 006* | *57 655* |
| **Total exports f.o.b.** | **52 155** | **54 874** | **60 022** | **63 822** | **66 446** | **75 306** | **80 394** |

(a) Data are for merchandise on a balance of payments basis.

## SECTION 2 STRUCTURE OF AGRICULTURAL INDUSTRY ...

### OVERVIEW

The number of establishments with agricultural activity with an Estimated Value of Agricultural Operations (EVAO) of $5,000 or more fell by 1.0% to 145,086 between 1 April 1996 and 31 March 1997. This fall was greater than in 1995–96 when the number of establishments with agricultural activity decreased by 0.3%. The fall continued the downward trend of recent years. The State with the largest decrease was Queensland, down 3.7%, followed by Tasmania with a fall of 2.2%. New South Wales recorded an increase in the number of establishments with agricultural activity, up 0.6% to 42,758.

Note: A fall in the total number of establishments does not necessarily mean that all those establishments have ceased operations or have been taken over by other establishments; some of these farms may have moved out of scope of the Census due to changes in their operations and less favourable economic performance and they may become in scope of the collection in following years.

### INDUSTRY ANALYSIS

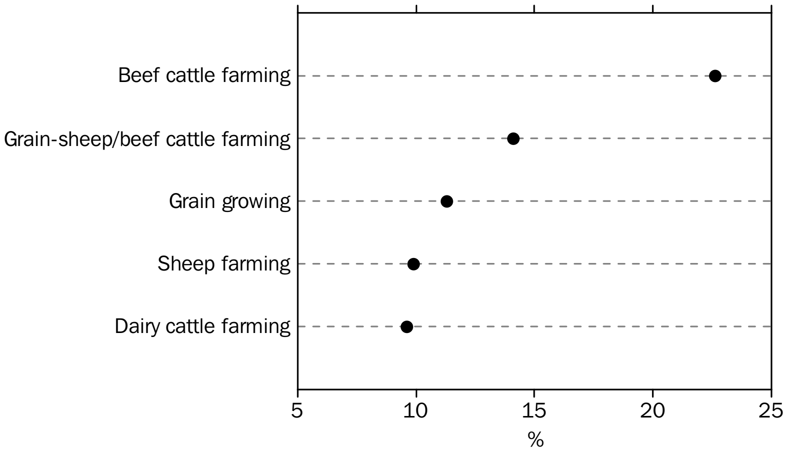
As favourable crop producing conditions continued in 1996–97, the number of establishments classified to the grain growing and grain-sheep/beef industries rose by 11.6% and 10.5% respectively. Industries in which numbers declined included the sheep, beef and sheep-beef sectors, reflecting increased grain growing activity by many farms that had previously been predominantly livestock producers.

The number of establishments classified to sheep-beef cattle farming fell 13.0% to 9,621, while the number classified to beef cattle farming fell 6.2%. Other industries to record declining numbers were the deer and pig industries which suffered decreases of 42.8% and 10.4% respectively.

In the year ended 31 March 1997, the beef cattle farming industry remained the largest industry in terms of farm numbers, accounting for 22.6% (32,822) of total establishments with agricultural activity. Queensland had the largest number of establishments classified to the beef cattle farming industry with 10,924 (33.3% of all establishments classified to beef cattle), followed by New South Wales with 9,821 (29.9%) and Victoria 7,766 (23.7%).

The next largest industry was the mixed farming sector, grain-sheep/beef cattle farming. It accounted for 20,517 establishments at 31 March 1997, of which 8,071 (39.3%) were in New South Wales.

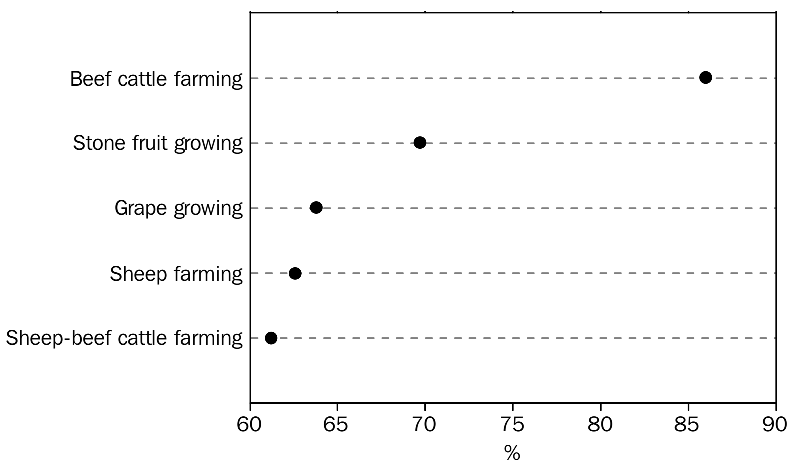
ESTABLISHMENTS WITH AGRICULTURAL ACTIVITY: Industry breakup




## SIZE OF OPERATIONS ANALYSIS

Over half (52.4% or 76,072) of agricultural establishments had an Estimated Value of Agricultural Operations (EVAO) of less than $100,000 in 1996–97. Major industries dominated by smaller producers included beef cattle farming (86.0%), sheep farming (62.6%) and sheep-beef cattle farming (61.2%). Small farms also dominated the grape growing industry, with 63.8% (3,193) below the $100,000 level, compared with 58.3% in 1995–96. In 1994–95, 70.5% of establishments classified to grape growing had an EVAO less than $100,000.

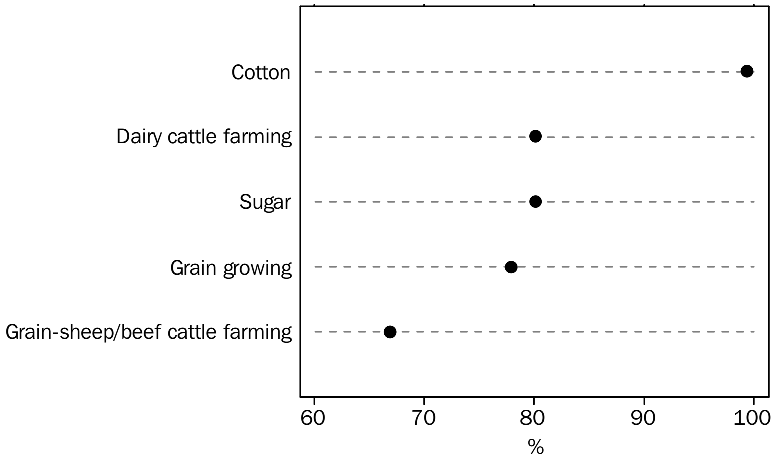
EVAO LESS THAN $100,000: Industry breakup




Since 1975–76, the proportion of farms with EVAO greater than $100,000 has increased from 5.4% (9,695) to 47.6% (69,014) of all agricultural establishments in 1996–97. Industries dominated by these larger farms included cotton growing with 99.4% (960), poultry farming (meat) 92.3% (686), dairy cattle farming 80.1% (11,197), sugar cane growing 80.1% (4,022), poultry farming (eggs) 78.7% (398), grain growing 77.9% (12,744), apple and pear growing 69.9% (886), grain-sheep/beef cattle farming 66.9% (13,733) and vegetable growing 58.9% (2,827).

There were 803 (83.1%) establishments classified to cotton growing with an EVAO greater than $500,000, reflecting the scale of operations of cotton farms.

EVAO GREATER THAN $100,000: Industry breakup

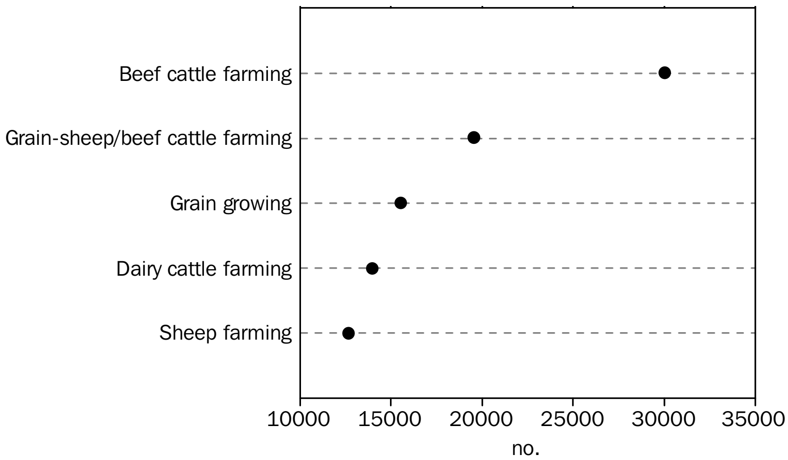



## AREA OF OPERATIONS ANALYSIS

Farms with an area of less than 2,500 hectares represented 90.5% (131,363) of total establishments with agricultural activity. Apple and pear growing 100.0% (1,267), stone fruit growing 99.9% (1,371), plant nurseries 99.8% (2,074) and dairy cattle farming 99.8% (13,947), were the industries dominated by small farms in terms of area.

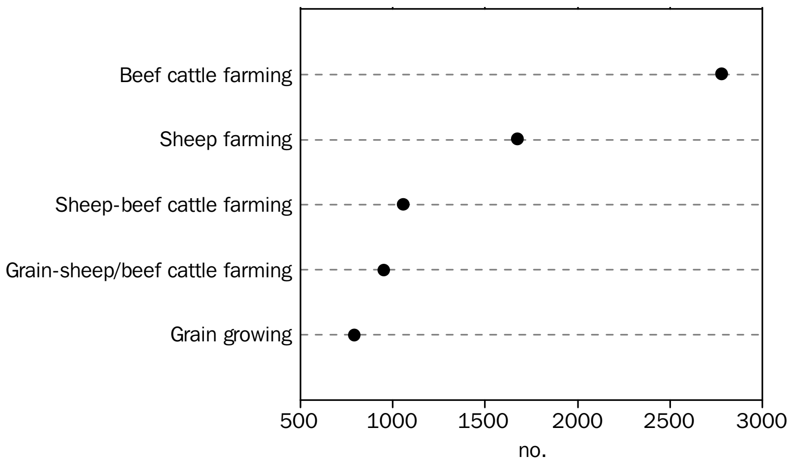
A significant number of farms classified to beef cattle farming (23,080 or 70.3%) operated an area of less than 500 hectares.

AREA OF HOLDING LESS THAN 2,500 HECTARES: Industry breakup




Farms with an area of 2,500 hectares or more represented only 9.5% (13,723) of total establishments with agricultural activity. Establishments classified to grain growing, grain-sheep/beef cattle farming, sheep-beef cattle farming, sheep farming and beef cattle farming dominated in this size category.

AREA OF HOLDING MORE THAN 2,500 HECTARES: Industry breakup




ESTABLISHMENTS WITH AGRICULTURAL ACTIVITY, Years ended 31 March

| *Establishments(a)* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* | *NT* | *ACT* | *Aust.* |
|---|---|---|---|---|---|---|---|---|---|
| 1987(b) | 37 355 | 34 383 | 25 860 | 15 369 | 13 852 | 3 637 | 290 | 68 | 130 814 |
| 1988 | 50 687 | 41 827 | 36 272 | 18 081 | 15 827 | 5 250 | 307 | 88 | 168 339 |
| 1989 | 50 791 | 40 995 | 36 059 | 18 258 | 16 106 | 5 311 | 307 | 107 | 167 934 |
| 1990(b) | 37 539 | 33 306 | 26 619 | 14 636 | 13 410 | 3 699 | 257 | 73 | 129 539 |
| 1991(b) | 36 812 | 32 620 | 25 364 | 14 482 | 13 202 | 3 563 | 270 | 79 | 126 392 |
| 1992 | 44 443 | 39 170 | 33 181 | 17 511 | 14 790 | 4 884 | 302 | 99 | 154 380 |
| 1993 | 43 227 | 37 773 | 33 531 | 17 386 | 14 910 | 4 719 | 322 | 98 | 151 966 |
| 1994 | 42 817 | 37 330 | 34 268 | 16 345 | 14 555 | 4 663 | 316 | 95 | 150 389 |
| 1995 | 42 287 | 37 070 | 32 849 | 15 952 | 13 973 | 4 554 | 337 | 93 | 147 115 |
| 1996 | 42 497 | 36 905 | 32 186 | 15 939 | 13 987 | 4 640 | 355 | 103 | 146 612 |
| 1997 | 42 758 | 36 656 | 30 987 | 15 817 | 13 872 | 4 536 | 357 | 103 | 145 086 |

(a) See Explanatory Notes, paragraph 10.

(b) Not adjusted for changes in EVAO cutoff, see Explanatory Notes, paragraphs 3 and 4.

## ESTABLISHMENTS WITH AGRICULTURAL ACTIVITY, By State—As at 31 March 1997

| ANZSIC code | Description | NSW | Vic. | Qld | SA | WA | Tas. | NT | ACT | Aust. |
|---|---|---|---|---|---|---|---|---|---|---|
| 0111 | Plant nurseries | 729 | 318 | 685 | 128 | 147 | 43 | 20 | 4 | 2 074 |
| 0112 | Cut flower and flower seed growing | 238 | 233 | 192 | 125 | 147 | 48 | 6 | — | 989 |
| 0113 | Vegetable growing | 706 | 1 001 | 1 367 | 535 | 549 | 627 | 12 | 2 | 4 799 |
| 0114 | Grape growing | 837 | 1 901 | 98 | 1 802 | 294 | 72 | — | 1 | 5 008 |
| 0115 | Apple and pear growing | 222 | 427 | 106 | 128 | 218 | 164 | — | 2 | 1 267 |
| 0116 | Stone fruit growing | 461 | 245 | 99 | 359 | 184 | 23 | — | 1 | 1 372 |
| 0117 | Kiwi fruit growing | 20 | 8 | 7 | — | 4 | — | — | — | 39 |
| 0119 | Fruit growing n.e.c. | 1 839 | 386 | 2 097 | 671 | 309 | 38 | 66 | 2 | 5 408 |
| 0121 | Grain growing | 4 599 | 3 014 | 2 240 | 3 882 | 2 593 | 20 | 4 | — | 16 352 |
| 0122 | Grain-sheep/beef cattle farming | 8 071 | 3 308 | 2 165 | 2 822 | 4 056 | 94 | 1 | — | 20 517 |
| 0123 | Sheep-beef cattle farming | 3 917 | 2 795 | 925 | 956 | 568 | 438 | — | 22 | 9 621 |
| 0124 | Sheep farming | 5 043 | 4 749 | 748 | 1 502 | 1 602 | 673 | — | 29 | 14 346 |
| 0125 | Beef cattle farming | 9 821 | 7 766 | 10 924 | 1 090 | 1 873 | 1 106 | 218 | 24 | 32 822 |
| 0130 | Dairy cattle farming | 2 031 | 8 064 | 1 825 | 821 | 460 | 773 | — | 1 | 13 975 |
| 0141 | Poultry farming (meat) | 328 | 167 | 110 | 68 | 55 | 14 | 1 | — | 743 |
| 0142 | Poultry farming (eggs) | 141 | 118 | 98 | 44 | 84 | 14 | 5 | 2 | 506 |
| 0151 | Pig farming | 327 | 192 | 376 | 145 | 111 | 35 | 1 | — | 1 187 |
| 0152 | Horse farming | 622 | 401 | 509 | 101 | 113 | 55 | — | 2 | 1 803 |
| 0153 | Deer farming | 59 | 63 | 39 | 26 | 15 | 20 | — | — | 222 |
| 0159 | Livestock farming n.e.c. | 661 | 464 | 317 | 142 | 114 | 54 | 5 | 2 | 1 759 |
| 0161 | Sugar cane growing | 467 | — | 4 555 | — | 1 | — | — | — | 5 023 |
| 0162 | Cotton growing | 497 | — | 469 | — | — | — | — | — | 966 |
| 0169 | Crop and plant growing n.e.c. | 233 | 376 | 474 | 111 | 56 | 73 | 10 | — | 1 333 |
| | *Total (ANZSIC Code 01)* | *41 869* | *35 996* | *30 425* | *15 458* | *13 553* | *4 384* | *352* | *94* | *142 131* |
| 02 | Services to agriculture; hunting and trapping | 82 | 61 | 36 | 46 | 41 | 11 | — | — | 277 |
| 03 | Forestry and logging | 13 | 2 | 8 | — | 4 | 16 | — | — | 43 |
| 04 | Commercial fishing | 1 | 1 | 2 | 6 | 12 | 5 | — | — | 27 |
| | *Total (ANZSIC Division A)* | *41 965* | *36 060* | *30 471* | *15 510* | *13 610* | *4 416* | *352* | *94* | *142 478* |
| B | Mining | 10 | 3 | 4 | — | 5 | — | — | — | 25 |
| C | Manufacturing | 73 | 46 | 13 | 41 | 27 | 5 | — | — | 205 |
| D | Electricity, gas and water supply | — | 2 | — | — | — | — | — | — | 2 |
| E | Construction | 65 | 71 | 47 | 29 | 24 | 19 | — | — | 255 |
| F | Wholesale trade | 69 | 40 | 25 | 17 | 14 | 5 | — | — | 170 |
| G | Retail trade | 37 | 21 | 29 | 13 | 10 | 10 | 1 | 2 | 123 |
| H | Accommodation, cafes and restaurants | 19 | 11 | 8 | 5 | 11 | 6 | — | — | 60 |
| I | Transport and storage | 68 | 92 | 40 | 48 | 30 | 20 | — | — | 298 |
| J | Communication services | 1 | — | — | — | — | — | — | — | 1 |
| K | Finance and insurance | 9 | — | 1 | 3 | 1 | 1 | — | — | 15 |
| L | Property and business services | 69 | 16 | 42 | 20 | 20 | 7 | — | 1 | 175 |
| M | Government administration and defence | 8 | — | — | — | — | — | — | — | 8 |
| N | Education | 13 | — | 8 | 2 | 15 | 5 | 1 | 1 | 45 |
| O | Health and community services | 7 | 2 | 7 | 1 | 2 | — | — | — | 19 |
| P | Cultural and recreational services | 17 | 16 | 3 | 5 | 5 | 2 | — | 1 | 49 |
| Q | Personal and other services | 6 | 2 | 9 | 2 | 6 | 1 | — | — | 26 |
| | Unclassified | 322 | 274 | 280 | 121 | 92 | 36 | 3 | 4 | 1 132 |
| | **Total all industries** | **42 758** | **36 656** | **30 987** | **15 817** | **13 872** | **4 536** | **357** | **103** | **145 086** |

## ESTABLISHMENTS WITH AGRICULTURAL ACTIVITY, By EVAO—As at 31 March 1997

| | | EVAO ($'000) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ANZSIC code* | *Description* | *Less than 22.5* | *22.5–29.9* | *30.0–39.9* | *40.0–49.9* | *50.0–59.9* | *60.0–74.9* | *75.0–99.9* | *100.0–149.9* | *150.0–199.9* | *200.0–499.9* | *500.0 or more* | *Total establishments* |
| 0111 | Plant nurseries | 293 | 107 | 86 | 180 | 103 | 85 | 292 | 223 | 196 | 353 | 156 | 2 074 |
| 0112 | Cut flower and flower seed growing | 185 | 56 | 82 | 70 | 43 | 75 | 136 | 108 | 66 | 112 | 56 | 989 |
| 0113 | Vegetable growing | 568 | 200 | 226 | 213 | 176 | 250 | 339 | 497 | 401 | 1 102 | 827 | 4 799 |
| 0114 | Grape growing | 712 | 322 | 414 | 350 | 335 | 443 | 617 | 720 | 394 | 548 | 153 | 5 008 |
| 0115 | Apple and pear growing | 83 | 33 | 52 | 38 | 34 | 56 | 85 | 170 | 137 | 332 | 247 | 1 267 |
| 0116 | Stone fruit growing | 290 | 107 | 130 | 83 | 87 | 132 | 127 | 143 | 78 | 143 | 52 | 1 372 |
| 0117 | Kiwi fruit growing | 22 | 2 | 3 | 2 | 1 | 2 | 2 | 1 | — | 2 | 2 | 39 |
| 0119 | Fruit growing n.e.c. | 1 117 | 339 | 399 | 298 | 251 | 361 | 467 | 592 | 387 | 832 | 365 | 5 408 |
| 0121 | Grain growing | 625 | 302 | 391 | 388 | 413 | 571 | 918 | 1 716 | 1 739 | 5 964 | 3 325 | 16 352 |
| 0122 | Grain-sheep/beef cattle farming | 996 | 540 | 725 | 773 | 738 | 1 163 | 1 849 | 3 210 | 2 600 | 6 128 | 1 795 | 20 517 |
| 0123 | Sheep-beef cattle farming | 1 549 | 623 | 736 | 625 | 552 | 792 | 1 015 | 1 305 | 803 | 1 352 | 269 | 9 621 |
| 0124 | Sheep farming | 2 580 | 970 | 1 077 | 930 | 842 | 1 131 | 1 449 | 2 001 | 1 194 | 1 845 | 327 | 14 346 |
| 0125 | Beef cattle farming | 16 323 | 3 090 | 2 787 | 1 835 | 1 349 | 1 408 | 1 451 | 1 616 | 830 | 1 513 | 620 | 32 822 |
| 0130 | Dairy cattle farming | 292 | 179 | 247 | 231 | 291 | 466 | 1 072 | 2 827 | 2 656 | 5 080 | 634 | 13 975 |
| 0141 | Poultry farming (meat) | 20 | 3 | 5 | 8 | 4 | 10 | 7 | 40 | 50 | 287 | 309 | 743 |
| 0142 | Poultry farming (eggs) | 39 | 7 | 6 | 11 | 12 | 10 | 23 | 33 | 47 | 146 | 172 | 506 |
| 0151 | Pig farming | 100 | 40 | 41 | 41 | 30 | 47 | 74 | 149 | 118 | 313 | 234 | 1 187 |
| 0152 | Horse farming | 763 | 212 | 188 | 141 | 86 | 98 | 107 | 87 | 60 | 50 | 11 | 1 803 |
| 0153 | Deer farming | 145 | 13 | 25 | 13 | 5 | 11 | 4 | 2 | 1 | 3 | — | 222 |
| 0159 | Livestock farming n.e.c. | 837 | 164 | 188 | 124 | 81 | 91 | 75 | 81 | 36 | 54 | 28 | 1 759 |
| 0161 | Sugar cane growing | 48 | 39 | 77 | 78 | 110 | 192 | 457 | 987 | 788 | 1 764 | 483 | 5 023 |
| 0162 | Cotton growing | — | — | 1 | — | — | 3 | 2 | 6 | 21 | 130 | 803 | 966 |
| 0169 | Crop and plant growing n.e.c. | 275 | 83 | 76 | 83 | 68 | 78 | 98 | 181 | 102 | 203 | 86 | 1 333 |
| | *Total (ANZSIC Code 01)* | *27 862* | *7 431* | *7 962* | *6 515* | *5 611* | *7 475* | *10 666* | *16 695* | *12 704* | *28 256* | *10 954* | *142 131* |
| 02 | Services to agriculture; hunting and trapping | 124 | 27 | 18 | 12 | 18 | 14 | 17 | 14 | 9 | 17 | 7 | 277 |
| 03 | Forestry and logging | 23 | 1 | 3 | 4 | 4 | — | 2 | 1 | 2 | 1 | 2 | 43 |
| 04 | Commercial fishing | 15 | — | 3 | — | 1 | — | 1 | 3 | 1 | 3 | — | 27 |
| | *Total (ANZSIC Division A)* | *28 024* | *7 459* | *7 986* | *6 531* | *5 634* | *7 489* | *10 686* | *16 713* | *12 716* | *28 277* | *10 963* | *142 478* |
| B | Mining | 11 | 1 | 1 | 3 | 2 | 2 | — | 1 | 1 | 2 | 1 | 25 |
| C | Manufacturing | 57 | 13 | 16 | 11 | 3 | 13 | 14 | 18 | 16 | 25 | 19 | 205 |
| D | Electricity, gas and water supply | — | — | — | — | — | — | — | — | — | — | 2 | 2 |
| E | Construction | 138 | 31 | 21 | 12 | 8 | 13 | 9 | 9 | 4 | 7 | 3 | 255 |
| F | Wholesale trade | 41 | 10 | 11 | 8 | 13 | 10 | 15 | 22 | 16 | 14 | 10 | 170 |
| G | Retail trade | 54 | 8 | 7 | 11 | 5 | 4 | 13 | 9 | 6 | 5 | 1 | 123 |
| H | Accommodation, cafes and restaurants | 31 | 4 | 7 | 3 | 5 | 1 | 1 | 3 | 2 | 2 | 1 | 60 |
| I | Transport and storage | 146 | 22 | 37 | 13 | 12 | 15 | 11 | 14 | 10 | 12 | 6 | 298 |
| J | Communication services | 1 | — | — | — | — | — | — | — | — | — | — | 1 |
| K | Finance and insurance | 13 | 1 | — | 1 | — | — | — | — | — | — | — | 15 |
| L | Property and business services | 66 | 14 | 17 | 10 | 6 | 8 | 11 | 10 | 8 | 22 | 3 | 175 |
| M | Government administration and defence | — | — | — | — | — | — | 2 | 1 | 2 | 2 | 1 | 8 |
| N | Education | 5 | 2 | 2 | — | 3 | 5 | 3 | 2 | 3 | 12 | 8 | 45 |
| O | Health and community services | 5 | 3 | — | — | 2 | — | 1 | 4 | 1 | 3 | — | 19 |
| P | Cultural and recreational services | 30 | 2 | 4 | 1 | 2 | 1 | 4 | 2 | 1 | 1 | 1 | 49 |
| Q | Personal and other services | 4 | 1 | — | 1 | 1 | 2 | — | 4 | 1 | 8 | 4 | 26 |
| | Unclassified | 1 132 | — | — | — | — | — | — | — | — | — | — | 1 132 |
| | **Total all industries** | **29 758** | **7 571** | **8 109** | **6 605** | **5 696** | **7 563** | **10 770** | **16 812** | **12 787** | **28 392** | **11 023** | **145 086** |

## ESTABLISHMENTS WITH AGRICULTURAL ACTIVITY, By Area—As at 31 March 1997

| | | AREA (hectares) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *ANZSIC code* | *Description* | *0–49* | *50–99* | *100–499* | *500–999* | *1 000–2 499* | *2 500–4 999* | *5 000–9 999* | *10 000–24 999* |
| 0111 | Plant nurseries | 1 787 | 127 | 136 | 12 | 9 | — | 3 | — |
| 0112 | Cut flower and flower seed growing | 778 | 86 | 98 | 15 | 9 | 3 | — | — |
| 0113 | Vegetable growing | 2 414 | 790 | 1 289 | 182 | 98 | 18 | 4 | 2 |
| 0114 | Grape growing | 4 202 | 352 | 385 | 39 | 25 | 1 | 1 | 2 |
| 0115 | Apple and pear growing | 805 | 225 | 211 | 24 | 2 | — | — | — |
| 0116 | Stone fruit growing | 1 114 | 133 | 109 | 10 | 5 | 1 | — | — |
| 0117 | Kiwi fruit growing | 27 | 6 | 6 | — | — | — | — | — |
| 0119 | Fruit growing n.e.c. | 4 040 | 708 | 549 | 62 | 36 | 6 | 3 | 1 |
| 0121 | Grain growing | 234 | 544 | 4 722 | 3 704 | 4 436 | 1 917 | 655 | 112 |
| 0122 | Grain-sheep/beef cattle farming | 137 | 459 | 5 525 | 5 420 | 6 071 | 1 950 | 621 | 266 |
| 0123 | Sheep-beef cattle farming | 264 | 584 | 3 716 | 1 954 | 1 596 | 447 | 258 | 405 |
| 0124 | Sheep farming | 461 | 855 | 5 773 | 3 039 | 2 036 | 506 | 354 | 584 |
| 0125 | Beef cattle farming | 4 338 | 5 584 | 13 158 | 3 271 | 2 545 | 1 147 | 827 | 849 |
| 0130 | Dairy cattle farming | 1 289 | 3 080 | 8 774 | 652 | 152 | 20 | 3 | 3 |
| 0141 | Poultry farming (meat) | 576 | 67 | 82 | 13 | 5 | — | — | — |
| 0142 | Poultry farming (eggs) | 370 | 43 | 67 | 12 | 12 | 1 | 1 | — |
| 0151 | Pig farming | 359 | 193 | 445 | 107 | 66 | 8 | 5 | 3 |
| 0152 | Horse farming | 818 | 386 | 500 | 59 | 23 | 10 | 5 | 1 |
| 0153 | Deer farming | 103 | 42 | 66 | 7 | 3 | — | — | 1 |
| 0159 | Livestock farming n.e.c. | 1 397 | 136 | 159 | 33 | 19 | 5 | 2 | 3 |
| 0161 | Sugar cane growing | 1 092 | 1 654 | 2 037 | 149 | 59 | 16 | 12 | 4 |
| 0162 | Cotton growing | 7 | 13 | 281 | 201 | 257 | 117 | 61 | 21 |
| 0169 | Crop and plant growing n.e.c. | 470 | 306 | 433 | 79 | 33 | 8 | 1 | 1 |
| | *Total (ANZSIC Code 01)* | *27 082* | *16 373* | *48 521* | *19 044* | *17 497* | *6 181* | *2 816* | *2 258* |
| 02 | Services to agriculture; hunting and trapping | 80 | 56 | 94 | 25 | 14 | 1 | 2 | 2 |
| 03 | Forestry and logging | 7 | 8 | 18 | 2 | 4 | 3 | 1 | — |
| 04 | Commercial fishing | 7 | 1 | 10 | 1 | 6 | 1 | 1 | — |
| | *Total (ANZSIC Division A)* | *27 176* | *16 438* | *48 643* | *19 072* | *17 521* | *6 186* | *2 820* | *2 260* |
| B | Mining | 4 | 3 | 11 | 3 | 2 | 1 | 1 | — |
| C | Manufacturing | 103 | 34 | 47 | 12 | 7 | 2 | — | — |
| D | Electricity, gas and water supply | — | — | — | — | — | — | 1 | 1 |
| E | Construction | 97 | 47 | 84 | 19 | 6 | 1 | — | 1 |
| F | Wholesale trade | 117 | 13 | 31 | 4 | 5 | — | — | — |
| G | Retail trade | 97 | 7 | 10 | 4 | 2 | 2 | — | 1 |
| H | Accommodation, cafes and restaurants | 21 | 10 | 21 | 3 | 2 | 1 | — | — |
| I | Transport and storage | 78 | 52 | 131 | 21 | 11 | 3 | 2 | — |
| J | Communication services | — | — | — | 1 | — | — | — | — |
| K | Finance and insurance | 4 | 4 | 5 | 2 | — | — | — | — |
| L | Property and business services | 49 | 33 | 49 | 15 | 17 | 6 | 4 | 1 |
| M | Government administration and defence | — | 1 | 3 | 3 | — | 1 | — | — |
| N | Education | 5 | 3 | 17 | 3 | 10 | 2 | 2 | 1 |
| O | Health and community services | 8 | 4 | 4 | 2 | 1 | — | — | — |
| P | Cultural and recreational services | 18 | 12 | 14 | 4 | — | 1 | — | — |
| Q | Personal and other services | 5 | 2 | 6 | 5 | 4 | — | — | 1 |
| | Unclassified | 480 | 167 | 324 | 64 | 46 | 10 | 9 | 15 |
| | **Total all industries** | **28 262** | **16 830** | **49 400** | **19 237** | **17 634** | **6 216** | **2 839** | **2 281** |

ESTABLISHMENTS WITH AGRICULTURAL ACTIVITY, By Area—As at 31 March 1997 *continued*

| | | AREA (hectares) | | | | | |
|---|---|---|---|---|---|---|---|
| *ANZSIC code* | *Description* | *25 000–49 999* | *50 000–99 999* | *100 000–199 999* | *200 000–499 999* | *500 000 or more* | *Total establishments* |
| 0111 | Plant nurseries | — | — | — | — | — | 2 074 |
| 0112 | Cut flower and flower seed growing | — | — | — | — | — | 989 |
| 0113 | Vegetable growing | 2 | — | — | — | — | 4 799 |
| 0114 | Grape growing | — | — | — | 1 | — | 5 008 |
| 0115 | Apple and pear growing | — | — | — | — | — | 1 267 |
| 0116 | Stone fruit growing | — | — | — | — | — | 1 372 |
| 0117 | Kiwi fruit growing | — | — | — | — | — | 39 |
| 0119 | Fruit growing n.e.c. | 3 | — | — | — | — | 5 408 |
| 0121 | Grain growing | 23 | 5 | — | — | — | 16 352 |
| 0122 | Grain-sheep/beef cattle farming | 49 | 12 | 7 | — | — | 20 517 |
| 0123 | Sheep-beef cattle farming | 239 | 84 | 35 | 35 | 4 | 9 621 |
| 0124 | Sheep farming | 334 | 195 | 120 | 83 | 6 | 14 346 |
| 0125 | Beef cattle farming | 354 | 206 | 165 | 283 | 95 | 32 822 |
| 0130 | Dairy cattle farming | 1 | — | 1 | — | — | 13 975 |
| 0141 | Poultry farming (meat) | — | — | — | — | — | 743 |
| 0142 | Poultry farming (eggs) | — | — | — | — | — | 506 |
| 0151 | Pig farming | 1 | — | — | — | — | 1 187 |
| 0152 | Horse farming | 1 | — | — | — | — | 1 803 |
| 0153 | Deer farming | — | — | — | — | — | 222 |
| 0159 | Livestock farming n.e.c. | 3 | 2 | — | — | — | 1 759 |
| 0161 | Sugar cane growing | — | — | — | — | — | 5 023 |
| 0162 | Cotton growing | 5 | 2 | 1 | — | — | 966 |
| 0169 | Crop and plant growing n.e.c. | — | 2 | — | — | — | 1 333 |
| | *Total (ANZSIC Code 01)* | *1 015* | *508* | *329* | *402* | *105* | *142 131* |
| 02 | Services to agriculture; hunting and trapping | — | 2 | — | 1 | — | 277 |
| 03 | Forestry and logging | — | — | — | — | — | 43 |
| 04 | Commercial fishing | — | — | — | — | — | 27 |
| | *Total (ANZSIC Division A)* | *1 015* | *510* | *329* | *403* | *105* | *142 478* |
| B | Mining | — | — | — | — | — | 25 |
| C | Manufacturing | — | — | — | — | — | 205 |
| D | Electricity, gas and water supply | — | — | — | — | — | 2 |
| E | Construction | — | — | — | — | — | 255 |
| F | Wholesale trade | — | — | — | — | — | 170 |
| G | Retail trade | — | — | — | — | — | 123 |
| H | Accommodation, cafes and restaurants | — | 1 | — | 1 | — | 60 |
| I | Transport and storage | — | — | — | — | — | 298 |
| J | Communication services | — | — | — | — | — | 1 |
| K | Finance and insurance | — | — | — | — | — | 15 |
| L | Property and business services | 1 | — | — | — | — | 175 |
| M | Government administration and defence | — | — | — | — | — | 8 |
| N | Education | 1 | 1 | — | — | — | 45 |
| O | Health and community services | — | — | — | — | — | 19 |
| P | Cultural and recreational services | — | — | — | — | — | 49 |
| Q | Personal and other services | — | 2 | — | 1 | — | 26 |
| | Unclassified | 4 | 3 | 4 | 6 | — | 1 132 |
| | **Total all industries** | **1 021** | **517** | **333** | **411** | **105** | **145 086** |

# SPECIAL ARTICLE — THE CHANGING FACE OF AUSTRALIAN AGRICULTURE ................

## INTRODUCTION

Approaching the end of the 20th century, the pastoral and grain growing industries dominate Australian farming. These industries account for almost three-quarters of farm establishments and the commodities they produced account for about 60% of the gross value of agricultural production. Milk, from the dairying industry, accounts for a further 10%.

At the broadest level, the basic structure of agriculture at the end of the century is very similar to the pattern at the start of the century in terms of the activities and commodities which dominate agricultural production. This article focuses briefly on changes which have occurred during the latter part of the century.

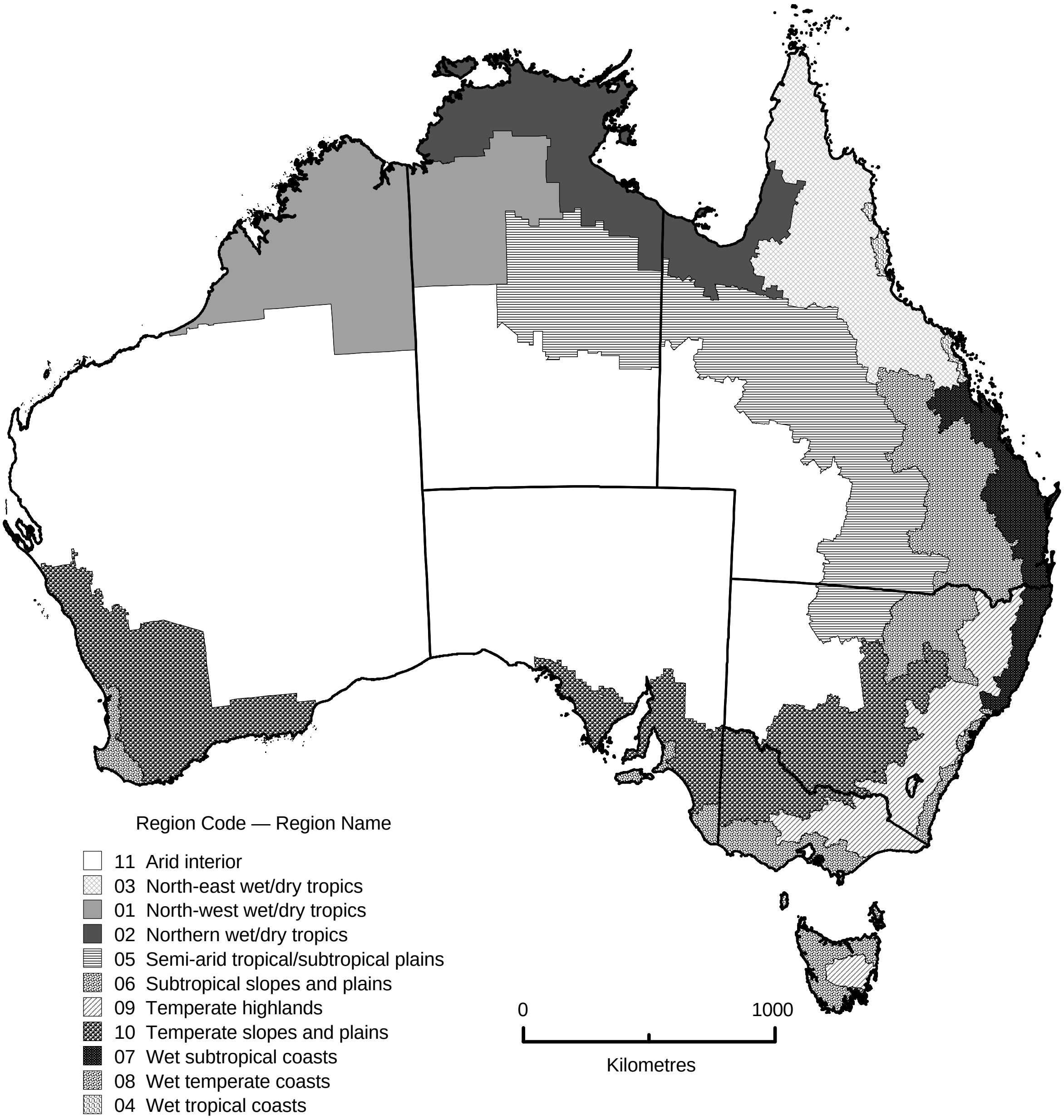
## GEOGRAPHY OF AUSTRALIAN AGRICULTURE

The majority of agricultural land in Australia is devoted to the pastoral activities of sheep and beef. The key agricultural industries are located as follows:

- Cattle and sheep grazing is mainly carried out in inland New South Wales, Queensland, South Australia and Western Australia (apart from the Ord River irrigation area). The Gulf country of Queensland, the Northern Territory and the far north of Western Australia are exclusively cattle areas.
- Horticultural activities occur mainly in the irrigation area of the Murray-Darling basin, on the Darling Downs, and in the north west and east of Tasmania. While horticulture is a major rural industry, the total land area of horticultural activity is relatively insignificant when compared with grain growing and pastoralism.
- Extensive vineyards are to be found in the Hunter Valley (New South Wales), the Murray Darling irrigation area, Eden and Barossa Valleys in South Australia, south of Adelaide in the McClaren area, and in the Margaret River area of Western Australia. In recent years, grape growing has expanded into a number of regions not traditionally used for this activity.
- Grains are grown extensively in New South Wales, west of the Great Dividing Range, on the Darling Downs, in the Wimmerra and Mallee areas of Victoria, Yorke and Eyre Peninsulas and eastward to the Murray region of South Australia. In Western Australia the grain belt extends in a broad band from the south-west, northward to around Geraldton.
- Sugar cane is grown extensively along the north Queensland coast and also on the north coast of New South Wales.

## GEOGRAPHY OF AUSTRALIAN AGRICULTURE *continued*

The following map of Australia divides the nation into Agro-Ecological Regions (AER). In general terms the Temperate Slopes and Plains AER (region 10 in the map below) is the principal grain growing region of Australia, extending into the Semi Arid Tropical/Sub-tropical AER (region 5) and Sub Tropical AER (region 6), notably the Darling Downs in Queensland. AER regions 1, 2 and 3 are dominated by beef cattle farming.



## SUMMARY OF MAIN CHANGES IN FINAL DECADES OF THIS CENTURY

Some of the significant changes that have occurred or are emerging in the final decades of the 20th century include:

- relative decline of commodity prices, due in part to subsidised agricultural output from major competitors in international markets;
- vertical integration of agricultural activity with manufacturing industries. This is particularly apparent in the grape growing and meat poultry farming industries. It is also of growing importance in beef cattle industry where feedlotting is often associated with abattoirs;
- increased mechanisation and capitalisation in farming activities, leading to larger farming units and farm amalgamations;
- in the post World War II era many new horticultural crops have emerged. Immigration in particular has given impetus to the introduction of a wide range of new horticultural commodities, both fruit and vegetables;
- for the wool industry, changes in world fibre demand, withdrawal of the floor price scheme and consequent fall in wool prices has led to a significant reduction in the national sheep flock;
- emergence of land care, sustainable agricultural practises and environmental issues;
- decline in relative importance of agriculture as an export earner, particularly due to the decline of the wool industry in the 1950s and 1960s; and
- reduced tariff protection as a result of the Uruguay round of General Agreement on Tariff and Trade (GATT) negotiations.

In the early to mid 1960s, the national sheep flock numbered around 165 million, fluctuating between 160 and 170 million. In the late 1960s it had climbed past the 170 million mark, reaching a total of 180 million in 1970. Numbers declined throughout the 1970s, and by the mid 1990s the flock had dropped to 120 million as a result of significantly reduced prices for wool.

In the mid 1960s the dairy cattle herd was approximately 4.8 million. However, by the mid 1990s the number had fallen to 2.7 million, largely as a result of the loss of traditional markets for dairy products and industry restructuring.

The beef cattle herd has shown considerable growth, from around 13.5 million in the mid 1960s to almost 24 million in 1997. Expansion has been in response to growth in the meat export trade, particularly to Japan, the United States of America and Korea. In recent years, live export trade in meat cattle to the Philippines and Indonesia has provided additional impetus to cattle numbers.

At the start of the 1970s, before industry restructuring and tree pull schemes emerged, there were 9.0 million apple and 2.5 million pear trees in total. The early 1970s saw the start of a significant decline in apple and pear orchards. By 1976, the number of apple trees had declined to 6.5 million and pear trees to 1.9 million. By 1997 apple trees numbered 5.7 million and pear trees 1.4 million. In contrast, the total area of grapevines expanded from 62,000 hectares in the mid 1970s to almost 90,000 hectares in 1997, a reflection of the expansion of the domestic wine market and substantial inreases in exports of wine.

## STRUCTURE

The structure of the agriculture industry can be analysed from several perspectives:

- size in terms of land area or Estimated Value of Agricultural Operations (EVAO);
- industry (ANZSIC class); and
- financial measures, e.g. turnover, value of assets.

### SIZE STRUCTURE AS MEASURED BY ESTIMATED VALUE OF AGRICULTURAL OPERATIONS (EVAO)

Because of the many different activities undertaken within Australian agriculture, area alone is not the only meaningful measure of size. A 100 hectare vegetable growing farm's contribution to the value of agricultural output will not compare with value of output from a 100 hectare farm on which sheep are raised. The concept of EVAO provides a common denominator which relates to the relative size of the agricultural activity of each farm. It allows comparison across industries, agricultural activities and commodities.

About one-fifth of agricultural establishments have an EVAO of less than $22,500. They contribute less than 5% to agricultural commodity production.

At the other end of the scale, the top 25% of agricultural establishments (measured in EVAO terms) generally account for 75 to 90% of the value of production. The following table highlights this aspect of Australian agriculture.

ESTABLISHMENTS NUMBER AND AREA, By EVAO Range—1996–97

| *Item* | *Less than $22 500* | *$22 500 to $49 999* | *$50 000 to $99 999* | *$100 000 to $199 999* | *$200 000 to $499 999* | *$500 000 or more* | *Total* |
|---|---|---|---|---|---|---|---|
| Establishments | | | | | | | |
| Number | 29 758 | 22 285 | 24 029 | 29 599 | 28 392 | 11 023 | 145 086 |
| Percent | 20.5 | 15.4 | 16.6 | 20.4 | 19.6 | 7.6 | 100.0 |
| Area of holding | | | | | | | |
| '000 ha | 11 549.5 | 14 891.5 | 30 700.8 | 65 184.5 | 142 133.6 | 201 692.1 | 466 152.1 |
| Percent | 2.5 | 3.2 | 6.6 | 14.0 | 30.5 | 43.3 | 100.0 |

### STRUCTURE IN AREA AND INDUSTRY TERMS

Small farms (in area terms) dominate in the nursery/horticultural industries. This is to be expected as these industries remain relatively labour intensive but highly productive in terms of land use.

In 1977, 21% of farms (38,300) had an area less than 50 hectares. By 1997 the proportion was 20% (28,300). During this period, the distribution of farms based on physical size has changed, but only marginally. Overall, the proportion of farms of 1,000 hectares or larger rose from 18% in 1976–77 to 22% in 1996–97. The decrease in the number of farms over this period has been due to amalgamation of farm establishments rather than land being withdrawn from agriculture.

NUMBER OF AGRICULTURAL ESTABLISHMENTS

| | 1977 | | 1997 | | CHANGE 1997 TO 1977 | |
|---|---|---|---|---|---|---|
| Area | '000 | % | '000 | % | % | % |
| Less than 50 ha | 38.3 | 20.6 | 28.3 | 19.5 | –26.1 | –5.3 |
| 50 to 99.9 ha | 24.0 | 12.9 | 16.8 | 11.6 | –30.0 | –10.1 |
| 100 to 499.9 ha | 65.8 | 35.4 | 49.4 | 34.0 | –24.9 | –4.0 |
| 500 to 999.9 ha | 24.6 | 13.2 | 19.2 | 13.3 | –22.0 | 0.8 |
| 1 000 to 4 999.9 ha | 25.3 | 13.6 | 23.9 | 16.4 | –5.5 | 20.6 |
| 5 000 to 9 999 ha | 2.8 | 1.5 | 2.8 | 2.0 | — | 33.3 |
| 10 000 to 49 999 ha | 3.8 | 2.0 | 3.3 | 2.3 | –13.2 | 15.0 |
| 50 000 ha and more | 1.3 | 0.7 | 1.4 | 0.9 | 7.7 | 28.6 |
| Total area | 185.9 | 100.0 | 145.1 | 100.0 | –21.9 | — |

## FARM FINANCIAL PERFORMANCE

Over the past two decades farming rates of return have declined significantly. In 1974–75, farm businesses showed averages for profit margin of 33%, return on farm costs of 48% and rate of return on farm assets of over 6%. In 1996–97 average profit margin had fallen to 22%, return on farm costs to 27% and return on assets to 5%. Over the past two decades total farm operating costs have increased sevenfold while cash operating surplus has increased only threefold.

Increases in costs, together with declining real commodity prices, have given impetus to amalgamation of small farms into larger, more economically viable units.

Two performance measures which help explain the move to larger farm businesses over the past two decades are return on farm operating costs and profit margin:

- Return on farm operating costs in the mid 1970s was 48%, across all industries. That is, for every dollar of operating cost, farm businesses generated 48 cents of cash operating surplus. In 1996–97, return on farm operating costs was 27%. In 1991–92, the first year that the removal of the wool floor price scheme fully impacted upon farming, return on operating costs was only 19%.
- For all agricultural industries, the average profit margin (cash operating surplus as a proportion of turnover) was 22% in 1996–97 (a good year for the grain industries). In 1991–92 it was 17%.

From an industry perspective, the overall structure of the sector has not changed in any marked way since the 1970s. Turnover in the broadacre industries has decreased from 62% to 60% during the period while the other major industries, horticulture, dairying and pigs, have increased their share from 10% to 13%; 10% to 12% and 2% to 3% respectively.

Results from the ABS Agricultural Finance Survey (AFS) also highlight the economic dominance of large agricultural businesses. In 1996–97 there were an estimated 106,100 farm businesses. Some 83,300 (78%) made less than $300,000 in turnover. Their contribution to total turnover in the agricultural industry was 37% and they generated 38% of cash operating surplus. The proportion of farm businesses with a turnover of $500,000 or more was 11% in 1996–97. These businesses accounted for just over 47% of turnover and cash operating surplus generated.

FARM BUSINESSES, By Size of Turnover—1996–97

| Amount of turnover | Number '000 | Number % | Turnover % | Cash operating surplus % |
|---|---|---|---|---|
| Less than $300 000 | 83.3 | 78.4 | 37.1 | 38.1 |
| $300 000 to $499 999 | 11.0 | 10.3 | 15.5 | 16.9 |
| $500,000 to $999,999 | 8.3 | 7.9 | 20.5 | 21.9 |
| $1 000 000 or more | 3.6 | 3.4 | 26.9 | 23.1 |
| Total | 106.1 | 100.0 | 100.0 | 100.0 |

The movement towards larger farming operations to offset the squeeze on returns and the high cost of capital equipment is well illustrated by the wheat growing industry. In 1983 the median area of wheat grown was 137 hectares, by 1997 it had increased to 154 hectares. More telling is the increase in the proportion of establishments growing 500 hectares or more of wheat. In 1982–83 just on 14% of wheat growers grew 500 hectares or more and accounted for 54% of the wheat area grown. In 1997, the proportion of establishments growing 500 hectares or more had increased to 18% and accounted for almost 62% of the area of wheat grown. The picture that emerges for the other major cereal grain crops is similar to that for wheat.

## SUMMARY

In summary, although there has been growth in intensive agriculture and livestock activities, Australian agriculture as a whole continues to be dominated by the traditional grain-growing and pastoral activities. However, the need to rationalise farming businesses has become evident as profitability has fallen during the latter period of this century. Falling real commodity prices, together with increasing costs, have led to farm amalgamation and minor adjustments to industry structure.

# SECTION 3 LAND MANAGEMENT

## LAND USE

The area of land used for agricultural activity in 1996–97 totalled 466.2 million hectares or 60.7% of Australia's land mass. Queensland remained the State with the largest land area used for agriculture, with 151.1 million hectares (87.0% of the State) used for agricultural purposes, or 32.4% of the national total.

The area planted to crops increased 8.9% to 21.1 million hectares in 1996–97, while at the same time the area devoted to sown pastures and grasses increased 11.4% to 19.0 million hectares.

LAND USE, Area—Years ended 31 March

| | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* | *NT* | *ACT* | *Aust.* |
|---|---|---|---|---|---|---|---|---|---|
| | '000 ha | '000 ha | '000 ha | '000 ha | '000 ha | '000 ha | '000 ha | '000 ha | '000 ha |
| CROPS(a) | | | | | | | | | |
| 1995 | 3 433 | 2 296 | 2 056 | 2 991 | 6 182 | 77 | 4 | — | 17 040 |
| 1996 | 4 757 | 2 439 | 2 495 | 3 219 | 6 419 | 75 | 4 | — | 19 409 |
| 1997 | 5 589 | 2 552 | 2 685 | 3 279 | 6 950 | 73 | 5 | — | 21 133 |
| SOWN PASTURES AND GRASSES | | | | | | | | | |
| 1995 | (b) | (b) | (b) | (b) | (b) | (b) | (b) | (b) | (b) |
| 1996 | r3 687 | r3 936 | r2 543 | r2 008 | r4 272 | r612 | 19 | r13 | r17 090 |
| 1997 | 4 436 | 3 945 | 3 219 | 2 214 | 4 542 | 633 | 37 | 13 | 19 039 |
| AGRICULTURAL LAND(c) | | | | | | | | | |
| 1995 | 60 300 | 12 719 | 149 688 | 56 101 | 113 956 | 1 933 | 68 604 | 48 | 463 349 |
| 1996 | 61 009 | 12 768 | 149 748 | 56 901 | 114 521 | 1 949 | 68 276 | 50 | 465 221 |
| 1997 | 60 901 | 12 745 | 151 067 | 56 219 | 112 482 | 1 920 | 70 769 | 49 | 466 152 |
| NON-AGRICULTURAL LAND(d) | | | | | | | | | |
| 1995 | 19 843 | 10 041 | 23 012 | 42 337 | 138 594 | 4 897 | 66 016 | 195 | 304 935 |
| 1996 | 19 134 | 9 992 | 22 952 | 41 537 | 138 029 | 4 881 | 66 344 | 193 | 303 063 |
| 1997 | 19 242 | 10 015 | 21 633 | 42 219 | 140 068 | 4 910 | 63 851 | 194 | 302 133 |
| TOTAL LAND | | | | | | | | | |
| **1997** | **80 143** | **22 760** | **172 700** | **98 438** | **252 550** | **6 830** | **134 620** | **243** | **768 284** |

(a) Excludes pastures and grasses harvested for hay and seed which have been included in 'sown pastures and grasses'.

(b) Data not collected.

(c) Total area of establishments with an EVAO of $5,000 or more.

(d) Comprises conserved land, forestry, urban and unused land such as vacant Crown land, commercially unused land on Aboriginal and other Crown reserves and waste land, ephemeral lakes, mangrove swamps etc. as well as establishments not included in Census (i.e. those with EVAO of below $5,000).

NOTE: Agricultural land is generally divided into cropped land, land sown to pastures and grasses and a broad balance comprising grazing land, land lying idle or under fallow, etc. Agricultural land use presently occupies about 60.7% of Australia's land mass.

## TREES PLANTED

Details regarding number of trees planted, seedlings sown and timber harvested were collected in the 1996–97 Agricultural Census.

During 1996–97 the number of seedlings planted for timber/pulp production has shown an increase of 35.5% to nearly 11 million seedlings. Victoria showed the largest increase in plantings up, 114.9% to over 2 million seedlings; South Australia increased 51.6% to 1 million seedlings. Queensland was the only State to record a decrease, down 8.7% to 200,000 seedlings. The area planted to seedlings increased by 36.5% to 9,700 hectares.

### TREES PLANTED(a)—Years ended 31 March

| | AUST. | | 1997 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *1996* | *1997* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* | *NT* | *ACT* |
| **Seedlings planted for timber/pulp** | | | | | | | | | | |
| Number planted ('000) | 8 081 | 10 952 | 1 036 | 2 192 | 200 | 1 243 | 5 540 | 734 | 6 | 1 |
| Area planted (ha) | 6 985 | 9 681 | 1 173 | 2 047 | 253 | 1 044 | 4 611 | 545 | 9 | — |
| **Seedlings planted for other purposes** | | | | | | | | | | |
| Number planted ('000) | 10 113 | 20 726 | 3 731 | 2 569 | 534 | 2 289 | 11 343 | 251 | — | 8 |
| Area planted (ha) | 25 510 | 71 862 | 17 890 | 10 093 | 2 084 | 8 074 | 33 021 | 513 | 5 | 182 |
| **Tree and shrub seed sown** | | | | | | | | | | |
| Seed sown (kg) | 38 004 | 27 032 | 5 677 | 8 133 | 6 049 | 2 142 | 4 615 | 417 | — | — |
| Area sown (ha) | 21 204 | 15 035 | 2 491 | 5 627 | 2 688 | 1 647 | 2 531 | 52 | — | — |
| **Timber harvested** | | | | | | | | | | |
| Hardwood (t) | 81 655 | 274 184 | 7 983 | 6 820 | 18 992 | 85 | 17 426 | 222 879 | — | — |
| Softwood (t) | 60 326 | 83 575 | 16 374 | 25 723 | 4 823 | 12 851 | 4 673 | 19 132 | — | — |

(a) Data in this table are an aggregation of responding establishments. No imputation has been made for non-responding establishments.

# SPECIAL ARTICLE — AGRO/FARM FORESTRY

## INTRODUCTION

The term 'forest' describes:

> An area, incorporating all living and non-living components, that is dominated by trees having usually a single stem and a mature or potentially mature stand height exceeding 2 metres and with existing or potential crown cover of overstorey strata about equal to or greater than 20%. This definition includes Australia's diverse native forests and plantations, regardless of age. It is also sufficiently broad to encompass areas of trees that are sometimes described as woodlands. (Source: National Forest Inventory.)

The forests and wood products industries based on native and plantation forests contribute substantially to Australia's economy, especially employment in regional areas.

Forest vegetation cover protects the soil from water and wind erosion, reduces flooding and siltation of water bodies and maintains water quality. Forests provide habitats for a wide variety of native animals and plants. They also help to absorb greenhouse gases. Forest ecosystems provide a unique opportunity for scientific investigation; a source of food and medicines; and a resource base for education, tourism, recreation and other purposes.

## AGRO/FARM FORESTRY

Agro/farm forestry is becoming increasingly important as a potential commercial source of wood. A broad range of programs have been implemented by government and private agencies to promote tree planting on Australian farms.

Many farming industries face declining productivity of cleared land because of land and water resource degradation and environmental effects of native vegetation clearing. Incorporating different forms of commercial tree growing into farming systems can help reverse land degradation, improving financial prospects as well as providing an expanded plantation for Australia's forest industries.

The ABS collected information on the planting of trees and harvesting of timber in the 1995–96 and 1996–97 Agricultural Censuses. The results of these collections are discussed below.

Tree plantings on agricultural land increased 74% between 1995–96 and 1996–97, with increases in all States. In proportional terms, the increase in both Victoria and South Australia exceeded 100% and almost 100% in New South Wales. In absolute terms, the largest increase occurred in Western Australia with an additional 6.1 million trees planted.

AGRO/FARM FORESTRY *continued*

On a regional basis, increases occurred in most of the 54 Statistical Divisions reporting tree plantings, the exceptions being Richmond-Tweed and Mid-North Coast in New South Wales, Moreton and Northern in Queensland, Outer Adelaide in South Australia and Mersey-Lyell in Tasmania.

Significant plantings occurred in the Murray and North-Western Statistical Divisions in New South Wales, Murray Lands and South East in South Australia and most Statistical Divisions in Western Australia.

On an industry basis, broadacre farmers planted 27.6 million trees over 71,800 hectares in 1996-97, with those engaged in the grain-sheep/beef cattle industry planting 9.0 million trees over 24,600 hectares.

Establishments classified to the grain growing industry planted 6.9 million trees over 20,200 hectares, while the sheep farming industry added a further 4.4 million trees over 9,500 hectares.

TREE PLANTINGS, By Statistical Division—As at 31 March

| | *1996* | *1997* |
|---|---|---|
| | '000 | '000 |
| New South Wales | | |
| Sydney | 17.2 | 41.6 |
| Hunter | 62.6 | 219.8 |
| Illawarra | 15.3 | 80.5 |
| Richmond-Tweed | 321.7 | 276.5 |
| Mid-North-Coast | 136.0 | 113.4 |
| Northern | 154.3 | 453.8 |
| North Western | 326.1 | 741.1 |
| Central West | 311.1 | 489.8 |
| South Eastern | 267.9 | 679.5 |
| Murrumbidgee | 153.1 | 711.8 |
| Murray | 653.4 | 897.5 |
| Far West | — | 62.3 |
| *Total* | *2 418.7* | *4 767.5* |
| Victoria | | |
| Melbourne | 81.4 | 193.3 |
| Barwon | 184.3 | 304.0 |
| Western District | 703.7 | 1 666.1 |
| Central Highland | 120.6 | 315.9 |
| Wimmera | 158.2 | 402.3 |
| Mallee | 82.7 | 321.5 |
| Loddon | 129.1 | 256.3 |
| Goulburn | 358.5 | 626.7 |
| Ovens-Murray | 44.8 | 227.7 |
| East Gippsland | 65.9 | 198.0 |
| Gippsland | 122.8 | 249.4 |
| *Total* | *2 052.0* | *4 761.2* |

TREE PLANTINGS, By Statistical Division—As At 31 March *continued*

| | *1996* | *1997* |
|---|---|---|
| | '000 | '000 |
| Queensland | | |
| Brisbane | 6.1 | 17.0 |
| Moreton | 178.8 | 70.5 |
| Wide Bay-Burnett | 96.2 | 182.8 |
| Darling Downs | 57.0 | 65.6 |
| South West | 8.1 | 125.6 |
| Fitzroy | 3.9 | 63.3 |
| Central West | — | 1.1 |
| Mackay | 26.0 | 46.3 |
| Northern | 13.1 | 11.5 |
| Far North | 120.7 | 150.3 |
| North West | — | 0.7 |
| *Total* | *509.8* | *734.6* |
| South Australia | | |
| Adelaide | 21.0 | 28.9 |
| Outer Adelaide | 432.0 | 361.1 |
| Yorke and Lower | 87.6 | 277.0 |
| Murray Lands | 354.5 | 732.6 |
| South East | 537.4 | 1 391.5 |
| Eyre | 133.6 | 458.4 |
| Northern | 49.1 | 282.6 |
| *Total* | *1 615.2* | *3 532.1* |
| Western Australia | | |
| Perth | 40.0 | 125.0 |
| South West | 627.7 | 1 228.6 |
| Lower Great South | 4 151.2 | 5 181.2 |
| Upper Great South | 1 252.7 | 2 483.9 |
| Midlands | 2 785.4 | 5 113.3 |
| South Eastern | 858.0 | 1 139.2 |
| Central | 1 094.2 | 1 611.9 |
| Pilbara | — | — |
| Kimberley | 2.0 | 0.3 |
| *Total* | *10 811.0* | *16 883.3* |
| Tasmania | | |
| Greater Hobart | 4.3 | 28.6 |
| Southern | 68.6 | 384.1 |
| Northern | 369.6 | 382.3 |
| Mersey-Lyell | 338.7 | 190.1 |
| *Total* | *781.1* | *985.1* |
| **Total Australia(a)** | **18 193.2** | **31 678.3** |

(a) Includes the Northern Territory and the Australian Capital Territory.

NUMBER OF TREES PLANTED, By Industry—As at 31 March

| | | AUST.(a) | | 1997 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | *1996* | *1997* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* |
| *ANZSIC code* | *Description* | '000 | '000 | '000 | '000 | '000 | '000 | '000 | '000 |
| 0111 | Plant nurseries | 509.0 | 240.3 | 43.5 | 132.1 | 34.0 | 10.8 | 17.8 | 2.1 |
| 0112 | Cut flower and flower seed growing | 94.2 | 123.5 | 26.4 | 25.2 | 10.7 | 11.9 | 48.7 | 0.6 |
| 0113 | Vegetable growing | 160.3 | 305.0 | 17.8 | 45.4 | 20.2 | 54.3 | 56.6 | 110.7 |
| 0114 | Grape growing | 15.1 | 157.6 | 19.4 | 49.4 | 0.2 | 70.9 | 16.5 | 1.2 |
| 0115 | Apple and pear growing | 14.3 | 124.7 | 1.7 | 9.7 | 0.2 | 9.4 | 101.6 | 2.2 |
| 0116 | Stone fruit growing | 16.2 | 138.9 | 17.7 | 9.9 | 1.7 | 13.9 | 93.1 | 2.6 |
| 0117 | Kiwi fruit growing | 5.0 | 0.9 | 0.7 | 0.2 | — | — | — | — |
| 0119 | Fruit growing n.e.c. | 127.1 | 233.2 | 122.7 | 24.5 | 69.8 | 6.9 | 4.3 | 5.1 |
| 0121 | Grain growing | 3 306.5 | 6 890.0 | 652.1 | 165.5 | 14.4 | 914.0 | 5 120.3 | 23.6 |
| 0122 | Grain-sheep/beef cattle farming | 4 310.3 | 9 041.9 | 1 392.7 | 517.2 | 187.8 | 818.6 | 6 101.9 | 23.7 |
| 0123 | Sheep-beef cattle farming | 1 190.5 | 3 464.9 | 521.1 | 1 028.4 | 3.9 | 624.7 | 1 004.9 | 282.8 |
| 0124 | Sheep farming | 3 660.5 | 4 447.2 | 525.2 | 970.2 | 1.0 | 354.5 | 2 412.1 | 184.4 |
| 0125 | Beef cattle farming | 2 545.8 | 3 710.4 | 815.4 | 960.1 | 167.1 | 493.2 | 1 150.7 | 123.8 |
| 0130 | Dairy cattle farming | 618.6 | 1 084.7 | 133.6 | 561.6 | 36.8 | 65.4 | 128.2 | 159.3 |
| 0141 | Poultry farming (meat) | 6.3 | 40.4 | 4.2 | 14.0 | 7.9 | 0.5 | 13.1 | 0.6 |
| 0142 | Poultry farming (eggs) | 0.5 | 3.5 | 1.7 | 1.1 | 0.3 | 0.1 | 0.1 | 0.2 |
| 0151 | Pig farming | 93.1 | 98.8 | 13.2 | 12.3 | 1.6 | 31.4 | 40.3 | — |
| 0152 | Horse farming | 14.8 | 139.6 | 86.5 | 31.6 | 6.7 | 6.5 | 7.1 | 1.3 |
| 0153 | Deer farming | 20.0 | 25.4 | 2.2 | 11.3 | 4.3 | 5.2 | 2.1 | 0.3 |
| 0159 | Livestock farming n.e.c. | 109.3 | 55.5 | 6.1 | 19.9 | 6.0 | 9.2 | 12.4 | 2.0 |
| 0161 | Sugar cane growing | 58.2 | 38.7 | 2.8 | — | 35.9 | — | — | — |
| 0162 | Cotton growing | 27.9 | 283.7 | 276.1 | — | 7.5 | — | — | — |
| 0169 | Crop and plant growing n.e.c. | 61.9 | 165.4 | 13.6 | 23.5 | 97.0 | 5.4 | 22.1 | 3.8 |
| | *Total (ANZSIC Code 01)* | *16 965.4* | *30 814.1* | *4 696.5* | *4 612.8* | *715.1* | *3 506.4* | *16 353.0* | *930.2* |
| 02 | Services to agriculture; hunting and trapping | 4.2 | 45.3 | 24.9 | 2.5 | 1.4 | 1.2 | 15.4 | — |
| 03 | Forestry and logging | 251.0 | 1.1 | 0.6 | 0.3 | — | — | — | 0.2 |
| 04 | Commercial fishing | 0.5 | 0.6 | — | — | — | 0.6 | — | — |
| | *Total (ANZSIC Division A)* | *17 221.2* | *30 861.1* | *4 722.1* | *4 615.6* | *716.5* | *3 508.1* | *16 368.4* | *930.4* |
| | ANZSIC divisions n.e.c. | 159.3 | 266.3 | 32.0 | 65.6 | 6.7 | 18.0 | 140.2 | 3.9 |
| | Unclassified | 807.4 | 536.4 | 13 .4 | 80.0 | 11.4 | 6.0 | 374.8 | 50.8 |
| | **Total all industries(a)** | **18 193.2** | **31 678.3** | **4 767.5** | **4 761.2** | **734.6** | **3 532.1** | **16 883.3** | **985.1** |

(a) Includes the Northern Territory and the Australian Capital Territory.

AGRO/FARM FORESTRY *continued*

The results of earlier plantings can be seen in the 1996–97 Agricultural Census data which show a rise in trees harvested for timber or woodpulp of 152% on 1995–96.

TIMBER HARVESTED, By Farmers—for timber or woodpulp production

| | *1995–96* | *1996–97* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* |
|---|---|---|---|---|---|---|---|---|
| | t | t | t | t | t | t | t | t |
| Hardwood | 81 654 | 274 184 | 7 983 | 6 820 | 18 992 | 85 | 17 426 | 222 879 |
| Softwood | 60 325 | 83 575 | 16 374 | 25 723 | 4 823 | 12 851 | 4 673 | 19 132 |
| Total | 141 979 | 357 759 | 24 356 | 32 542 | 23 815 | 12 936 | 22 099 | 242 011 |

## OPPORTUNITIES PROVIDED BY AGRO/FARM FORESTRY

### Environmental

Developing farm forests can help address the many problems currently facing our rural environment. Increasing land degradation due to salinity, erosion, loss of fertility and loss of native fauna and flora can be halted and even reversed with well-considered tree planting programs.

A smarter distribution of waste water from industrial and domestic sources could be used to irrigate the new forests and therefore reduce the load on our river systems.

Even the quality of the air we breathe would be improved in that tree plantations would help counter greenhouse gas emissions. In the 1991 draft report, the Resource Assessment Commision accepted that 10% of current domestic $CO_2$ emissions would be absorbed by large-scale expansion of plantation development.

### Economic

With exploitable forest resources in many countries becoming scarce, commercial timber production has the potential to become a major new farm industry. Full-time farmers can plant trees to help diversify their incomes and under-utilised properties of part-time farmers could be made profitable with minimum outlay. These part-time farmers may also enjoy some tax benefits. Joint venture agreements with State authorities and private enterprise can defray the costs in establishing plantations. Farm forestry can also be used to improve productivity of existing agricultural activities by providing shelter for stock and crops.

## POLICY INITIATIVES/FUTURE DEVELOPMENTS

Governments at all levels in Australia are recognising the need to maintain a wood resource sympathetic to our environment and commercially attractive to farmers. The individual goals of three major initiatives supported by government are outlined below with all three serving Government objectives for integration of industry and conservation in Australia's native forests and plantations.

*The Farm Forestry Program* administered by the Forests Branch of the Commonwealth Department of Primary Industries and Energy (DPIE) aims to raise national awareness of farm forestry and promote a shift in the culture of land owners towards growing trees for commercial purposes. The program will support landholder and community led initiatives relating to commercial tree growing, improve availability of information and appropriate training to farmers and develop and enhance regional farm forestry strategies.

*The National Forest Policy Statement* (NFPS) is endorsed by all Commonwealth, State and Territory Governments and plans to expand Australia's commercial plantations and rehabilitate cleared land, improve water quantity and meet other environmental, economic or aesthetic objectives.

*The Wood and Paper Industry Strategy* is a four-year Commonwealth initiative, costing $18 million over four years, to encourage investment, value adding and jobs growth in the forest industries. These initiatives will support industry's objective of trebling the area of plantations by 2020 and promote continued development of a diverse, internationally competitive industry based on ecologically sustainable management practices.

## REFERENCES

*Integrating forestry and farming: commercial wood production on cleared agricultural land*, National Plantations Advisory Committee, November 1991

*Commercial Farm Forestry in Australia*, Rural Industries Research and Development Corporation, January 1996

*Resource Assessment Commission,* Draft report, 1991

SECTION **4** 

# FINANCE

## FINANCE

The significant improvement in financial performance of the Australian farm sector in 1995–96 slowed in 1996–97. In particular, the slump in meat cattle prices that began in 1995–96 held back growth in turnover in 1996–97.

Low interest rates have aided farmers in reducing their overall debt, following the high levels of debt experienced in 1995–96. However, the level of debt reduction in 1996–97 was relatively low at 1.1%.

## TURNOVER

Aggregate turnover for all agricultural industries in 1996–97 was $26,404 million, a 1.2% fall on 1995–96. Improved performance from the sale of livestock products was offset by falls in sales from crops and livestock. Lower prices in 1996–97 for beef and grain were the main cause of these falls.

Average turnover increased marginally, due mainly to the reduction in the number of farm businesses operating in 1996–97.

The main contributors to the fall in aggregate turnover were the livestock industries. The sheep-beef cattle industry experienced a 12.0% fall while the beef industry was down 8.5%. Sales of livestock fell in the sheep-beef cattle industry by 13.7%, from $781 million to $674 million. Significant falls in the sales from livestock were also recorded in the beef and sheep industries (8.0% and 7.8% respectively).

The cotton industry experienced an increase in turnover of 15.2%, from $1,095 million in 1995–96 to $1,262 million in 1996–97. While cotton prices fell in 1996–97 there was a substantial increase in production.

AGGREGATE TURNOVER OF ALL INDUSTRIES(a)


(a) Data for 1996–97 is preliminary.

TURNOVER *continued*

Aggregate and average turnover per farm business are shown in the following table for 1996–97 for each State.

FARM BUSINESS TURNOVER

| | *Aggregate* | *Average* |
|---|---|---|
| *State* | $m | $'000 |
| New South Wales(a) | 7 229.0 | 237.7 |
| Victoria | 5 299.3 | 195.2 |
| Queensland | 6 273.1 | 277.1 |
| South Australia | 2 617.4 | 219.3 |
| Western Australia | 4 160.3 | 380.9 |
| Tasmania | 628.9 | 199.0 |
| **Australia**(b) | **26 404.2** | **248.2** |

(a) Includes the Australian Capital Territory.

(b) Includes the Northern Territory.

VALUE ADDED

During 1996–97, farm businesses contributed $10,441 million in value added to the Australian economy, $745 million (6.7%) lower than for 1995–96. The biggest reduction in value added occurred in the grain industry. Value added for grain industry farm businesses in 1996–97 was $1,573 million, 40.3% lower than in 1995–96.

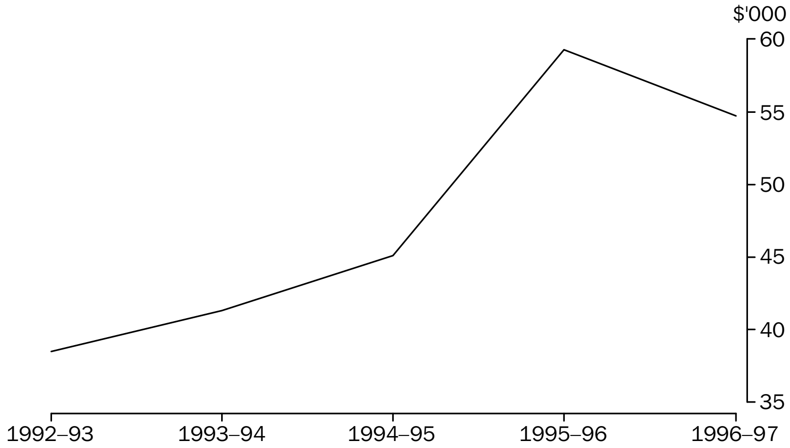
CASH OPERATING SURPLUS

The fall in turnover experienced in 1996–97 has been reflected in a fall in cash operating surplus of 9.5% for the same period. The grain industry is the biggest contributor to cash operating surplus in Australian agriculture, accounting for $1,569 million in 1996–97. This figure was 16.6% lower than the $1,882 million recorded in 1995–96. The next largest contributor in terms of cash operating surplus was the grain-sheep/beef cattle industry with $920 million, 12.6% lower than in 1995–96. Cash operating surplus for the beef industry fell 41.5% to $264 million in 1996–97.

Pig and sheep-beef cattle were the only industries to experience significant increases in cash operating surplus in 1996–97, up 40.8% and 28.8% respectively.

Total farm business profit margin in 1996–97 was 22.0%, compared with 24.1% in 1995–96. On an industry basis, the highest profit margin was recorded by the grain industry (31.8%), closely followed by the sugar industry (30.9%). The beef cattle farming industry had the lowest profit margin (9.5%).

AVERAGE CASH OPERATING SURPLUS(a)

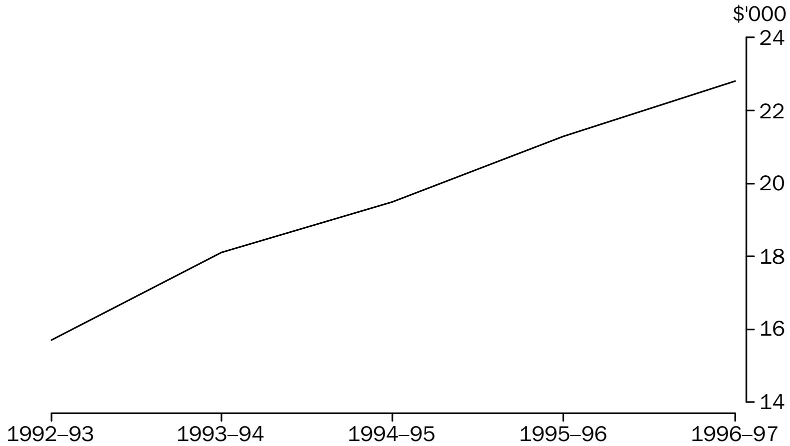



(a) Data for 1996–97 is preliminary.

## NET CAPITAL EXPENDITURE

Net capital expenditure by farm businesses in 1996–97 was estimated at $2,422 million, a 4.9% increase on the previous year. Average net capital expenditure per farm business in 1996–97 was $22,800, compared with $21,300 the previous year.

AVERAGE NET CAPITAL EXPENDITURE(a)




(a) Data for 1996–97 is preliminary.

## DEBT AND INTEREST PAYMENTS

Australian farm businesses owed $19,377 million at the end of 1996–97. This was 1.1% lower than the level of debt at the end of 1995–96. Net indebtedness (gross indebtedness less the value of financial assets) was $11,162 million.

The average gross indebtedness per farm business at the end of 1996–97 was $182,200, up slightly from $180,700 at the end of 1995–96. The level of average net indebtedness of Australian farm businesses was little changed from 1995–96 at $104,900. Western Australian farm businesses, with an average gross indebtedness of $264,300, had the highest level of debt per farm business of the States. However, this was an improvement of $56,300 (17.6%) on the level recorded in 1995–96.

Queensland farm businesses had the highest average net indebtedness of any State at $155,300.

AVERAGE GROSS AND NET INDEBTEDNESS

| *State* | *Gross* $'000 | *Net* $'000 |
|---|---|---|
| New South Wales(a) | 172.4 | 87.9 |
| Victoria | 126.0 | 84.8 |
| Queensland | 228.0 | 155.3 |
| South Australia | 169.8 | 95.3 |
| Western Australia | 264.3 | 109.3 |
| Tasmania | 177.3 | 125.5 |
| **Australia(b)** | **182.2** | **104.9** |

(a) Includes the Australian Capital Territory.

(b) Includes the Northern Territory.

Total interest payments by farm businesses in 1996–97 were $1,646 million, similar to the 1995–96 figure. Average interest payments per farm business in 1996–97 were $15,500.

## ASSET VALUE AND NET WORTH

The estimated value of farm business assets at the end of 1996–97 was $131,500 million, almost the same as at the end of 1995–96 but still well above the level recorded in 1994–95. The majority of farm business asset values is tied up in land, building and other structures.

Average farm business asset value at the end of 1996–97 was $1,236,000.

AVERAGE FARM BUSINESS ASSET VALUE

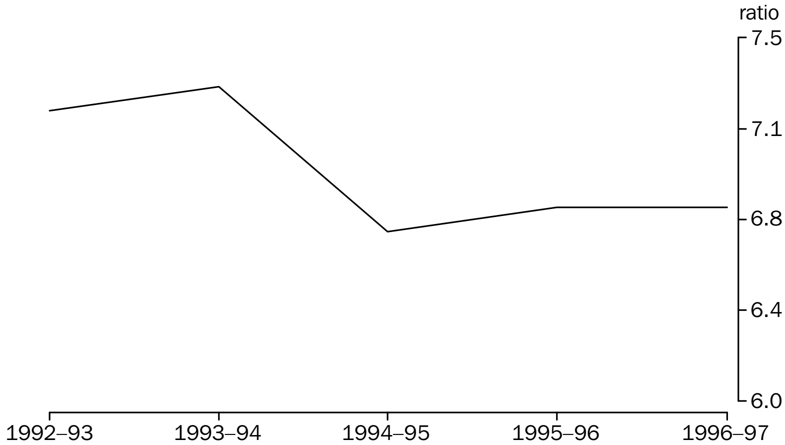
| *State* | $'000 |
|---|---|
| New South Wales(a) | 1 225.4 |
| Victoria | 934.5 |
| Queensland | 1 408.0 |
| South Australia | 1 030.7 |
| Western Australia | 1 899.4 |
| Tasmania | 950.8 |
| **Australia(b)** | **1 236.0** |

(a) Includes the Australian Capital Territory.

(b) Includes the Northern Territory.

The debt to asset ratio (value of assets divided by gross indebtedness) remained at 1:6.8 in 1996–97. That is, for every dollar of debt there was $6.80 of asset backing.

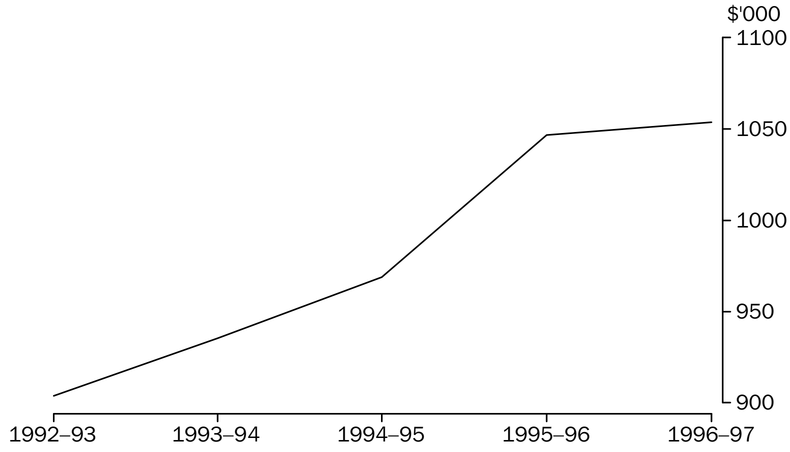
DEBT TO ASSET RATIO(a)




(a) Data for 1996–97 is preliminary.

Aggregate net worth (value of assets less gross indebtedness) of all farm businesses at the end of 1996–97 was $112,100 million. The average net worth per farm business was $1,053,900.

AVERAGE NET WORTH(a)




(a) Data for 1996–97 is preliminary.

## FARM BUSINESSES

The population from which the sample for the Agricultural Finance Survey was drawn comprised all farm businesses classified to ANZSIC Subdivision 01: Agriculture, based on their principal activity, and which had an EVAO of $22,500 or more.

The table below shows estimates of the numbers of farm businesses classified to Agriculture with an EVAO of $22,500 or more.

### FARM BUSINESSES

| | *1994–95* | *1995–96* | *1996–97p* |
|---|---|---|---|
| *State* | no. | no. | no. |
| New South Wales(a) | 30 632 | 31 601 | 30 407 |
| Victoria | 27 551 | 27 693 | 27 150 |
| Queensland | 22 595 | 22 543 | 22 638 |
| South Australia | 12 283 | 12 303 | 11 933 |
| Western Australia | 10 914 | 10 873 | 10 922 |
| Tasmania | 3 078 | 3 127 | 3 160 |
| **Australia(b)** | **107 286** | **108 413** | **106 379** |

(a) Includes the Australian Capital Territory.

(b) Includes the Northern Territory.

FARM BUSINESSES, Selected Financial Statistics—Years ended 30 June

| | AGGREGATES | | | | AVERAGES | | | |
|---|---|---|---|---|---|---|---|---|
| | *1994–95* | *1995–96* | *1996–97p* | | *1994–95* | *1995–96* | *1996–97p* | |
| *Items* | $m | $m | $m | SE% | $'000 | $'000 | $'000 | SE% |
| FRUIT (0114–0119) | | | | | | | | |
| Sales from crops | 1 519.4 | 1 744.5 | 1 741.6 | 6 | 165.5 | 188.0 | 179.9 | 5 |
| Sales from livestock | 37.5 | 30.7 | 20.2 | 32 | 4.1 | 3.3 | 2.1 | 5 |
| Sales from livestock products | 13.7 | 11.4 | 16.2 | 49 | 1.5 | 1.2 | 1.7 | 5 |
| Turnover | 1 773.6 | 1 949.0 | 1 956.7 | 6 | 193.1 | 210.0 | 202.1 | 5 |
| Purchases and selected expenses | 814.4 | 882.9 | 948.8 | 7 | 88.7 | 95.2 | 98.0 | 5 |
| Value added(a) | 948.0 | 1 055.9 | 996.9 | 7 | 103.2 | 113.8 | 103.0 | 5 |
| Adjusted value added(a) | 835.2 | 960.4 | 880.1 | 8 | 91.0 | 103.5 | 90.9 | 5 |
| Gross operating surplus | 488.4 | 610.6 | 514.0 | 10 | 53.2 | 65.8 | 53.1 | 6 |
| Interest paid | 87.8 | 88.7 | 86.0 | 12 | 9.6 | 9.6 | 8.9 | 5 |
| Cash operating surplus(b) | 435.7 | 549.8 | 461.2 | 12 | 47.5 | 59.3 | 47.6 | 6 |
| Gross indebtedness | 1 172.7 | 921.2 | 941.9 | 11 | 127.7 | 99.3 | 97.3 | 5 |
| Total net capital expenditure | 88.6 | 152.7 | 131.4 | 17 | 9.6 | 16.5 | 13.6 | 5 |
| Total value of assets | 6 243.8 | 6 012.5 | 7 372.5 | 8 | 679.9 | 648.0 | 761.4 | 5 |
| Net indebtedness | 526.9 | 299.2 | 204.5 | ** | 57.4 | 32.2 | 21.1 | — |
| Net worth | 5 071.1 | 5 091.4 | 6 430.6 | 8 | 552.2 | 548.7 | 664.1 | 5 |
| VEGETABLES (0113) | | | | | | | | |
| Sales from crops | 1 266.9 | 1 348.7 | 1 275.5 | 9 | 295.7 | 333.3 | 321.1 | 8 |
| Sales from livestock | 62.8 | 73.3 | 91.0 | 17 | 14.7 | 18.1 | 22.9 | 9 |
| Sales from livestock products | 61.8 | 59.5 | 14.5 | 28 | 14.4 | 14.7 | 3.7 | 9 |
| Turnover | 1 493.3 | 1 589.3 | 1 518.6 | 7 | 348.5 | 392.7 | 382.2 | 8 |
| Purchases and selected expenses | 781.5 | 860.4 | 856.9 | 8 | 182.4 | 212.6 | 215.7 | 8 |
| Value added(a) | 709.8 | 718.1 | 649.8 | 9 | 165.6 | 177.4 | 163.5 | 8 |
| Adjusted value added(a) | 653.0 | 645.3 | 582.8 | 10 | 152.4 | 159.5 | 146.7 | 8 |
| Gross operating surplus | 410.9 | 401.9 | 351.9 | 12 | 95.9 | 99.3 | 88.6 | 8 |
| Interest paid | 55.0 | 65.3 | 63.8 | 11 | 12.8 | 16.1 | 16.1 | 9 |
| Cash operating surplus(b) | 354.1 | 354.6 | 314.8 | 13 | 82.6 | 87.6 | 79.2 | 8 |
| Gross indebtedness | 630.2 | 833.9 | 849.2 | 13 | 147.1 | 206.1 | 213.7 | 9 |
| Total net capital expenditure | 125.8 | 157.0 | 109.5 | 14 | 29.4 | 38.8 | 27.6 | 8 |
| Total value of assets | 3 344.0 | 4 157.7 | 4 274.1 | 7 | 780.4 | 1 027.4 | 1 075.8 | 8 |
| Net indebtedness | 414.1 | 482.2 | 511.0 | 18 | 96.6 | 119.1 | 128.6 | 9 |
| Net worth | 2 713.7 | 3 323.7 | 3 424.9 | 10 | 633.3 | 821.3 | 862.0 | 8 |
| GRAIN (0121) | | | | | | | | |
| Sales from crops | 2 119.4 | 4 331.4 | 3 991.7 | 4 | 221.7 | 316.0 | 304.9 | 6 |
| Sales from livestock | 284.7 | 467.5 | 378.5 | 8 | 29.8 | 34.1 | 28.9 | 6 |
| Sales from livestock products | 217.4 | 236.3 | 241.4 | 20 | 22.7 | 17.2 | 18.4 | 7 |
| Turnover | 2 790.0 | 5 332.2 | 4 933.9 | 4 | 291.9 | 389.0 | 376.9 | 6 |
| Purchases and selected expenses | 1 607.1 | 2 751.1 | 2 715.4 | 4 | 168.1 | 200.7 | 207.4 | 6 |
| Value added(a) | 1 169.4 | 2 634.2 | 1 572.8 | 6 | 122.3 | 192.2 | 162.9 | 6 |
| Adjusted value added(a) | 1 003.4 | 2 366.2 | 1 880.5 | 5 | 105.0 | 172.6 | 143.7 | 6 |
| Gross operating surplus | 855.0 | 2 154.6 | 1 667.1 | 6 | 89.4 | 157.2 | 127.4 | 6 |
| Interest paid | 156.3 | 283.0 | 247.9 | 9 | 16.4 | 20.6 | 18.9 | 6 |
| Cash operating surplus(b) | 731.3 | 1 882.1 | 1 569.4 | 5 | 76.5 | 137.3 | 119.9 | 6 |
| Gross indebtedness | 2 015.6 | 2 982.7 | 2 899.7 | 7 | 210.9 | 217.6 | 221.5 | 6 |
| Total net capital expenditure | 363.6 | 705.5 | 578.8 | 10 | 38.0 | 51.5 | 44.2 | 6 |
| Total value of assets | 11 623.1 | 19 301.3 | 17 750.4 | 4 | 1 215.9 | 1 408.1 | 1 356.0 | 6 |
| Net indebtedness | 1 230.0 | 1 763.7 | 1 644.8 | 17 | 128.7 | 128.7 | 125.7 | 6 |
| Net worth | 9 607.5 | 16 318.6 | 14 850.7 | 5 | 1 005.1 | 1 190.5 | 1 134.5 | 6 |

(a) Includes an estimate for the value of the increase in livestock.

(b) Excludes an estimate for the value of the increase in livestock.

FARM BUSINESSES, Selected Financial Statistics—Years ended 30 June *continued*

| | AGGREGATES | | | | AVERAGES | | | |
|---|---|---|---|---|---|---|---|---|
| | *1994–95* | *1995–96* | *1996–97p* | | *1994–95* | *1995–96* | *1996–97p* | |
| *Items* | $m | $m | $m | SE% | $'000 | $'000 | $'000 | SE% |
| GRAIN–SHEEP/BEEF (0122) | | | | | | | | |
| Sales from crops | 1 624.8 | 2 301.0 | 3 991.7 | 4 | 96.3 | 153.1 | 139.4 | 5 |
| Sales from livestock | 726.3 | 874.8 | 836.4 | 7 | 43.0 | 58.2 | 50.4 | 4 |
| Sales from livestock products | 815.8 | 574.2 | 734.2 | 6 | 48.3 | 38.2 | 44.3 | 5 |
| Turnover | 3 397.3 | 4 007.8 | 4 227.5 | 4 | 201.3 | 266.7 | 254.8 | 5 |
| Purchases and selected expenses | 2 059.3 | 2 227.5 | 2 503.1 | 4 | 122.0 | 148.2 | 150.9 | 5 |
| Value added(a) | 1 249.1 | 1 806.1 | 1 572.8 | 6 | 74.0 | 120.2 | 94.8 | 5 |
| Adjusted value added(a) | 1 012.1 | 1 572.6 | 1 285.0 | 7 | 60.0 | 104.7 | 77.4 | 5 |
| Gross operating surplus | 820.5 | 1 343.3 | 1 021.3 | 8 | 48.6 | 89.4 | 61.6 | 5 |
| Interest paid | 286.7 | 300.3 | 290.3 | 9 | 17.0 | 20.0 | 17.5 | 5 |
| Cash operating surplus(b) | 616.5 | 1 052.8 | 920.3 | 8 | 36.5 | 70.1 | 55.5 | 5 |
| Gross indebtedness | 3 151.8 | 3 526.8 | 3 059.7 | 8 | 186.8 | 234.7 | 184.4 | 5 |
| Total net capital expenditure | 377.2 | 416.6 | 431.6 | 9 | 22.3 | 27.7 | 26.0 | 5 |
| Total value of assets | 18 315.7 | 19 289.7 | 21 103.9 | 4 | 1 085.2 | 1 283.7 | 1 271.9 | 5 |
| Net indebtedness | 2 241.3 | 2 615.7 | 2 096.7 | 14 | 132.8 | 174.1 | 126.4 | 5 |
| Net worth | 15 163.9 | 15 762.9 | 18 044.2 | 5 | 898.3 | 1 049.0 | 1 087.5 | 5 |
| SHEEP–BEEF CATTLE (0123) | | | | | | | | |
| Sales from crops | 126.0 | 111.5 | 89.8 | 26 | 11.8 | 11.3 | 10.3 | 5 |
| Sales from livestock | 890.0 | 780.8 | 674.0 | 5 | 83.2 | 79.1 | 77.7 | 5 |
| Sales from livestock products | 698.4 | 469.0 | 461.0 | 8 | 65.3 | 47.5 | 53.1 | 6 |
| Turnover | 1 857.3 | 1 489.4 | 1 311.2 | 4 | 173.6 | 150.8 | 151.1 | 5 |
| Purchases and selected expenses | 1 084.0 | 897.9 | 742.4 | 6 | 101.3 | 90.9 | 85.6 | 5 |
| Value added(a) | 665.2 | 598.0 | 506.4 | 9 | 62.2 | 60.5 | 58.4 | 6 |
| Adjusted value added(a) | 509.7 | 456.6 | 391.4 | 11 | 47.6 | 46.2 | 45.1 | 6 |
| Gross operating surplus | 363.5 | 306.6 | 247.2 | 18 | 34.0 | 31.0 | 28.5 | 6 |
| Interest paid | 144.8 | 131.7 | 122.2 | 14 | 13.5 | 13.3 | 14.1 | 6 |
| Cash operating surplus(b) | 346.3 | 189.2 | 243.6 | 21 | 32.4 | 19.2 | 28.1 | 6 |
| Gross indebtedness | 1 585.1 | 1 336.2 | 1 352.1 | 13 | 148.2 | 135.3 | 155.8 | 6 |
| Total net capital expenditure | 102.8 | 66.4 | 65.5 | 14 | 9.6 | 6.7 | 7.6 | 5 |
| Total value of assets | 14 865.1 | 13 862.8 | 12 094.5 | 5 | 1 389.7 | 1 403.5 | 1 393.7 | 5 |
| Net indebtedness | 731.8 | 916.2 | 676.4 | 50 | 68.4 | 92.8 | 77.9 | 6 |
| Net worth | 13 280.0 | 12 526.6 | 10 742.4 | 6 | 1 241.5 | 1 268.3 | 1 237.9 | 5 |
| SHEEP (0124) | | | | | | | | |
| Sales from crops | 105.0 | 159.6 | 133.8 | 22 | 9.0 | 14.3 | 13.0 | 5 |
| Sales from livestock | 392.0 | 424.4 | 391.3 | 9 | 33.6 | 38.1 | 37.9 | 6 |
| Sales from livestock products | 1 060.1 | 776.5 | 776.8 | 7 | 90.8 | 69.6 | 75.3 | 6 |
| Turnover | 1 652.1 | 1 498.9 | 1 399.2 | 4 | 141.6 | 134.4 | 136.5 | 6 |
| Purchases and selected expenses | 863.6 | 895.6 | 784.4 | 5 | 74.0 | 80.3 | 76.0 | 6 |
| Value added(a) | 658.1 | 924.9 | 641.6 | 8 | 56.4 | 82.9 | 62.2 | 6 |
| Adjusted value added(a) | 513.8 | 792.3 | 518.7 | 9 | 44.0 | 71.0 | 50.3 | 6 |
| Gross operating surplus | 373.0 | 652.0 | 377.9 | 12 | 32.0 | 58.5 | 36.6 | 6 |
| Interest paid | 134.3 | 120.7 | 96.5 | 14 | 11.5 | 10.8 | 9.3 | 6 |
| Cash operating surplus(b) | 372.1 | 242.6 | 283.8 | 11 | 31.9 | 21.8 | 27.5 | 5 |
| Gross indebtedness | 1 417.0 | 1 403.6 | 151.5 | 13 | 121.4 | 125.8 | 111.6 | 6 |
| Total net capital expenditure | 148.3 | 98.7 | 109.4 | 12 | 12.7 | 8.8 | 10.6 | 5 |
| Total value of assets | 10 933.7 | 13 596.9 | 11 246.9 | 7 | 936.8 | 1 219.1 | 1 089.7 | 5 |
| Net indebtedness | 950.1 | 397.3 | 431.3 | 43 | 81.4 | 35.6 | 41.8 | 6 |
| Net worth | 9 516.7 | 12 193.3 | 10 095.4 | 7 | 815.4 | 1 093.3 | 978.1 | 5 |

(a) Includes an estimate for the value of the increase in livestock.

(b) Excludes an estimate for the value of the increase in livestock.

FARM BUSINESSES, Selected Financial Statistics—Years ended 30 June *continued*

| | AGGREGATES | | | | AVERAGES | | | |
|---|---|---|---|---|---|---|---|---|
| | *1994–95* | *1995–96* | *1996–97p* | | *1994–95* | *1995–96* | *1996–97p* | |
| *Items* | $m | $m | $m | SE% | $'000 | $'000 | $'000 | SE% |
| BEEF CATTLE (0125) | | | | | | | | |
| Sales from crops | 119.1 | 159.1 | 217.0 | 21 | 6.8 | 9.0 | 12.5 | 3 |
| Sales from livestock | 2 617.4 | 2 398.1 | 2 205.9 | 5 | 148.4 | 135.8 | 126.8 | 3 |
| Sales from livestock products | 77.5 | 25.8 | 36.0 | 21 | 4.4 | 1.5 | 75.3 | 6 |
| Turnover | 3 163.9 | 3 046.7 | 2 787.1 | 5 | 179.3 | 172.5 | 160.2 | 3 |
| Purchases and selected expenses | 2 002.6 | 1 898.9 | 1 860.4 | 5 | 113.5 | 107.5 | 107.0 | 3 |
| Value added(a) | 954.0 | 265.6 | 465.6 | 18 | 54.1 | 15.0 | 26.8 | 3 |
| Adjusted value added(a) | 723.6 | 4.8 | 228.4 | 37 | 41.0 | 0.3 | 13.1 | 3 |
| Gross operating surplus | 473.7 | –248.2 | 2.8 | ** | 26.8 | –14.1 | 0.2 | 11 |
| Interest paid | 221.4 | 249.9 | 267.4 | 9 | 12.5 | 14.2 | 15.4 | 3 |
| Cash operating surplus(b) | 503.1 | 450.7 | 263.8 | 24 | 28.5 | 25.5 | 15.2 | 3 |
| Gross indebtedness | 3 071.2 | 3 299.4 | 3 211.8 | 9 | 174.1 | 186.8 | 184.7 | 3 |
| Total net capital expenditure | 285.3 | 156.4 | 190.1 | 11 | 16.2 | 8.9 | 10.9 | 3 |
| Total value of assets | 26 674.7 | 27 305.5 | 24 137.8 | 5 | 1 511.9 | 1 546.2 | 1 387.7 | 3 |
| Net indebtedness | 1 471.6 | 1 664.8 | 1 954.9 | 18 | 83.4 | 94.3 | 112.4 | 3 |
| Net worth | 23 603.5 | 24 006.1 | 20 925.9 | 5 | 1 337.8 | 1 359.3 | 1 203.1 | 3 |
| DAIRY CATTLE (0130) | | | | | | | | |
| Sales from crops | 39.6 | 43.9 | 38.0 | 28 | 2.9 | 3.3 | 2.9 | 5 |
| Sales from livestock | 310.7 | 307.5 | 282.8 | 11 | 23.0 | 23.3 | 21.6 | 6 |
| Sales from livestock products | 2 285.4 | 2 419.7 | 2 627.8 | 4 | 169.0 | 183.6 | 200.3 | 6 |
| Turnover | 2 718.2 | 2 858.5 | 3 051.0 | 4 | 201.0 | 216.9 | 232.5 | 6 |
| Purchases and selected expenses | 1 674.6 | 1 705.9 | 1 858.6 | 5 | 123.8 | 129.5 | 141.7 | 6 |
| Value added(a) | 1 375.4 | 1 115.5 | 1 186.1 | 6 | 101.7 | 84.7 | 90.4 | 6 |
| Adjusted value added(a) | 1 232.0 | 992.9 | 1 039.5 | 7 | 91.1 | 75.4 | 79.2 | 6 |
| Gross operating surplus | 1 071.4 | 857.4 | 850.9 | 9 | 79.2 | 65.1 | 64.9 | 6 |
| Interest paid | 185.7 | 205.7 | 216.7 | 9 | 13.7 | 15.6 | 16.5 | 6 |
| Cash operating surplus(b) | 546.9 | 711.8 | 670.7 | 11 | 40.4 | 54.0 | 51.1 | 6 |
| Gross indebtedness | 1 995.9 | 2 061.0 | 2 383.5 | 9 | 147.6 | 156.4 | 181.7 | 6 |
| Total net capital expenditure | 227.2 | 193.5 | 367.2 | 14 | 16.8 | 14.7 | 28.0 | 6 |
| Total value of assets | 13 690.7 | 13 732.9 | 15 852.3 | 4 | 1 012.2 | 1 042.2 | 1 208.2 | 6 |
| Net indebtedness | 1 128.5 | 1 281.4 | 1 401.6 | 16 | 83.4 | 97.2 | 106.8 | 6 |
| Net worth | 11 694.7 | 11 672.0 | 13 468.9 | 4 | 864.7 | 885.8 | 1 026.5 | 6 |
| PIGS (0151) | | | | | | | | |
| Sales from crops | 37.0 | 39.3 | 25.7 | 29 | 28.3 | 36.9 | 24.3 | 17 |
| Sales from livestock | 558.3 | 583.6 | 635.3 | 6 | 426.8 | 548.7 | 601.1 | 12 |
| Sales from livestock products | 25.6 | 12.6 | 15.3 | 17 | 19.6 | 11.8 | 14.4 | 9 |
| Turnover | 666.6 | 673.8 | 714.9 | 6 | 509.6 | 633.3 | 676.3 | 12 |
| Purchases and selected expenses | 495.3 | 476.7 | 474.7 | 6 | 378.7 | 448.0 | 449.1 | 12 |
| Value added(a) | 172.6 | 168.0 | 271.1 | 12 | 132.0 | 157.9 | 256.5 | 14 |
| Adjusted value added(a) | 142.9 | 140.4 | 240.4 | 13 | 109.3 | 132.0 | 227.4 | 14 |
| Gross operating surplus | 84.9 | 83.7 | 172.8 | 16 | 64.9 | 78.7 | 163.5 | 14 |
| Interest paid | 26.7 | 23.4 | 16.5 | 18 | 20.4 | 22.0 | 15.6 | 12 |
| Cash operating surplus(b) | 56.4 | 91.6 | 129.0 | 16 | 43.1 | 86.1 | 122.0 | 12 |
| Gross indebtedness | 321.4 | 295.6 | 246.2 | 16 | 245.7 | 277.8 | 232.9 | 12 |
| Total net capital expenditure | 45.4 | 25.7 | 47.3 | 9 | 34.7 | 24.2 | 44.7 | 9 |
| Total value of assets | 1 549.8 | 1 576.7 | 1 424.3 | 9 | 1 184.9 | 1 481.9 | 1 347.5 | 13 |
| Net indebtedness | 215.5 | 220.9 | 143.8 | 31 | 164.8 | 207.6 | 136.0 | 11 |
| Net worth | 1 228.3 | 1 281.1 | 1 178.1 | 10 | 939.1 | 1 204.0 | 1 114.6 | 14 |

(a) Includes an estimate for the value of the increase in livestock.

(b) Excludes an estimate for the value of the increase in livestock.

FARM BUSINESSES, Selected Financial Statistics—Years ended 30 June *continued*

| | AGGREGATES | | | | AVERAGES | | | |
|---|---|---|---|---|---|---|---|---|
| | *1994–95* | *1995–96* | *1996–97p* | | *1994–95* | *1995–96* | *1996–97p* | |
| *Items* | $m | $m | $m | SE% | $'000 | $'000 | $'000 | SE% |
| SUGAR (0161) | | | | | | | | |
| Sales from crops | 1 246.2 | 1 188.8 | 1 190.8 | 9 | 258.1 | 241.5 | 252.0 | 12 |
| Sales from livestock | 12.4 | 15.0 | 18.4 | 60 | 2.6 | 3.0 | 3.9 | 14 |
| Sales from livestock products | — | — | — | — | — | — | — | — |
| Turnover | 1 375.2 | 1 326.9 | 1 310.6 | 8 | 284.8 | 269.6 | 277.3 | 12 |
| Purchases and selected expenses | 621.7 | 626.6 | 664.6 | 9 | 128.8 | 127.3 | 140.6 | 12 |
| Value added(a) | 754.7 | 697.0 | 630.1 | 10 | 156.3 | 141.6 | 133.3 | 12 |
| Adjusted value added(a) | 685.8 | 623.5 | 240.4 | 13 | 142.0 | 126.7 | 119.6 | 12 |
| Gross operating surplus | 565.7 | 496.8 | 432.0 | 13 | 117.2 | 100.9 | 91.4 | 12 |
| Interest paid | 40.6 | 45.7 | 56.4 | 27 | 8.4 | 9.3 | 11.9 | 11 |
| Cash operating surplus(b) | 533.5 | 483.2 | 404.7 | 11 | 110.5 | 98.2 | 85.6 | 12 |
| Gross indebtedness | 754.4 | 743.1 | 867.2 | 19 | 156.3 | 151.0 | 183.5 | 11 |
| Total net capital expenditure | 140.6 | 154.7 | 144.6 | 21 | 29.1 | 31.4 | 30.6 | 12 |
| Total value of assets | 5 224.7 | 5 746.1 | 6 593.1 | 12 | 1 082.2 | 1 167.4 | 1 395.1 | 12 |
| Net indebtedness | 326.7 | 336.8 | 610.9 | 29 | 67.7 | 68.4 | 129.3 | 10 |
| Net worth | 4 470.3 | 5 003.0 | 5 725.9 | 12 | 925.9 | 1 016.5 | 1 211.6 | 12 |
| COTTON (0162) | | | | | | | | |
| Sales from crops | 676.9 | 893.1 | 1 134.4 | 7 | 867.8 | 1 137.7 | 1 373.3 | 18 |
| Sales from livestock | 17.0 | 56.9 | 33.6 | 19 | 21.8 | 72.5 | 40.7 | 16 |
| Sales from livestock products | 7.5 | 5.0 | 14.1 | 23 | 9.6 | 6.4 | 17.0 | 11 |
| Turnover | 790.1 | 1 095.2 | 1 261.6 | 7 | 1 012.9 | 1 395.2 | 1 527.4 | 17 |
| Purchases and selected expenses | 484.0 | 714.7 | 789.9 | 6 | 620.5 | 910.4 | 956.3 | 18 |
| Value added(a) | 313.0 | 381.4 | 467.0 | 11 | 401.3 | 485.9 | 565.4 | 17 |
| Adjusted value added(a) | 265.8 | 328.1 | 398.2 | 12 | 340.8 | 418.0 | 482.1 | 17 |
| Gross operating surplus | 193.0 | 239.9 | 281.3 | 16 | 247.4 | 305.6 | 340.6 | 16 |
| Interest paid | 63.1 | 58.8 | 87.3 | 11 | 80.9 | 74.9 | 105.7 | 20 |
| Cash operating surplus(b) | 125.5 | 186.4 | 209.2 | 24 | 160.9 | 237.5 | 253.2 | 14 |
| Gross indebtedness | 890.4 | 910.1 | 1 263.7 | 11 | 1 141.5 | 1 159.5 | 1 529.9 | 19 |
| Total net capital expenditure | 80.4 | 91.0 | 128.4 | 22 | 103.1 | 115.9 | 155.5 | 19 |
| Total value of assets | 3 060.7 | 2 619.2 | 3 589.1 | 8 | 3 924.0 | 3 336.6 | 4 345.1 | 19 |
| Net indebtedness | 436.0 | 567.9 | 762.4 | 24 | 559.0 | 723.4 | 923.0 | 21 |
| Net worth | 2 170.3 | 1 709.1 | 2 325.4 | 10 | 2 782.4 | 2 177.2 | 2 815.2 | 19 |
| OTHER AGRICULTURE (0111–0112, 0151–0159, 0169) | | | | | | | | |
| Sales from crops | 924.0 | 838.9 | 977.7 | 14 | 133.3 | 108.7 | 141.3 | 5 |
| Sales from livestock | 370.1 | 327.1 | 244.9 | 21 | 53.4 | 42.4 | 35.4 | 4 |
| Sales from livestock products | 333.1 | 385.3 | 342.0 | 20 | 48.0 | 49.9 | 49.4 | 5 |
| Turnover | 1 838.9 | 1 857.2 | 1 932.1 | 9 | 265.2 | 240.7 | 279.3 | 5 |
| Purchases and selected expenses | 1 028.7 | 1 010.4 | 1 004.4 | 10 | 148.4 | 131.0 | 145.2 | 5 |
| Value added(a) | 798.9 | 820.6 | 921.2 | 9 | 115.2 | 106.4 | 133.2 | 5 |
| Adjusted value added(a) | 656.8 | 669.5 | 780.9 | 10 | 94.7 | 86.8 | 112.9 | 5 |
| Gross operating surplus | 306.0 | 278.1 | 413.6 | 13 | 44.1 | 36.0 | 59.8 | 5 |
| Interest paid | 106.4 | 93.4 | 95.5 | 14 | 15.3 | 12.1 | 13.8 | 5 |
| Cash operating surplus(b) | 214.5 | 234.4 | 347.1 | 15 | 30.9 | 30.4 | 50.2 | 5 |
| Gross indebtedness | 1 261.8 | 1 279.0 | 1 151.0 | 15 | 182.0 | 165.8 | 166.4 | 5 |
| Total net capital expenditure | 105.6 | 89.6 | 117.8 | 23 | 15.2 | 11.6 | 17.0 | 5 |
| Total value of assets | 6 672.5 | 5 885.8 | 6 049.6 | 9 | 962.3 | 762.9 | 874.5 | 5 |
| Net indebtedness | 713.2 | 802.7 | 723.3 | 24 | 102.9 | 104.0 | 104.6 | 5 |
| Net worth | 5 410.7 | 4 606.8 | 4 898.5 | 9 | 780.3 | 597.1 | 708.1 | 5 |

(a) Includes an estimate for the value of the increase in livestock.

(b) Excludes an estimate for the value of the increase in livestock.

FARM BUSINESSES, Selected Financial Statistics—Years ended 30 June *continued*

| | AGGREGATES | | | | AVERAGES | | | |
|---|---|---|---|---|---|---|---|---|
| | *1994–95* | *1995–96* | *1996–97p* | | *1994–95* | *1995–96* | *1996–97p* | |
| *Items* | $m | $m | $m | SE% | $'000 | $'000 | $'000 | SE% |
| AGRICULTURE, ALL INDUSTRIES | | | | | | | | |
| Sales from crops | 9 804.2 | 13 159.6 | 13 128.2 | 2 | 91.4 | 121.4 | 123.4 | 2 |
| Sales from livestock | 6 279.1 | 6 339.7 | 5 812.2 | 3 | 58.5 | 58.5 | 54.6 | 2 |
| Sales from livestock products | 5 596.3 | 4 975.1 | 5 279.2 | 3 | 52.2 | 45.9 | 49.6 | 2 |
| Turnover | 23 516.3 | 26 724.9 | 26 404.2 | 2 | 219.2 | 246.5 | 248.2 | 2 |
| Purchases and selected expenses | 13 517.0 | 14 948.6 | 15 203.8 | 2 | 126.0 | 137.9 | 142.9 | 2 |
| Value added(a) | 9 768.1 | 11 185.3 | 10 440.7 | 2 | 91.0 | 103.2 | 98.1 | 2 |
| Adjusted value added(a) | 8 234.3 | 9 552.5 | 8 791.1 | 3 | 76.7 | 88.1 | 82.6 | 2 |
| Gross operating surplus | 6 006.0 | 7 176.6 | 6 333.0 | 3 | 56.0 | 66.2 | 59.5 | 2 |
| Interest paid | 1 508.9 | 1 666.7 | 1 646.5 | 3 | 14.1 | 15.4 | 15.5 | 2 |
| Cash operating surplus(b) | 4 835.7 | 6 429.3 | 5 817.6 | 3 | 45.1 | 59.3 | 54.7 | 2 |
| Gross indebtedness | 18 267.7 | 19 592.7 | 19 377.5 | 3 | 170.3 | 180.7 | 182.2 | 2 |
| Total net capital expenditure | 2 090.8 | 2 307.9 | 2 421.6 | 4 | 19.5 | 21.3 | 22.8 | 2 |
| Total value of assets | 122 198.4 | 133 087.1 | 131 488.3 | 2 | 1 139.0 | 1 227.6 | 1 236.0 | 2 |
| Net indebtedness | 10 385.8 | 11 348.9 | 11 161.6 | 7 | 96.8 | 104.7 | 104.9 | 2 |
| Net worth | 103 930.7 | 113 494.4 | 112 110.7 | 2 | 968.7 | 1 046.9 | 1 053.9 | 2 |

(a) Includes an estimate for the value of the increase in livestock.

(b) Excludes an estimate for the value of the increase in livestock.

SECTION 5 **CROPS AND PASTURES**

## WHEAT

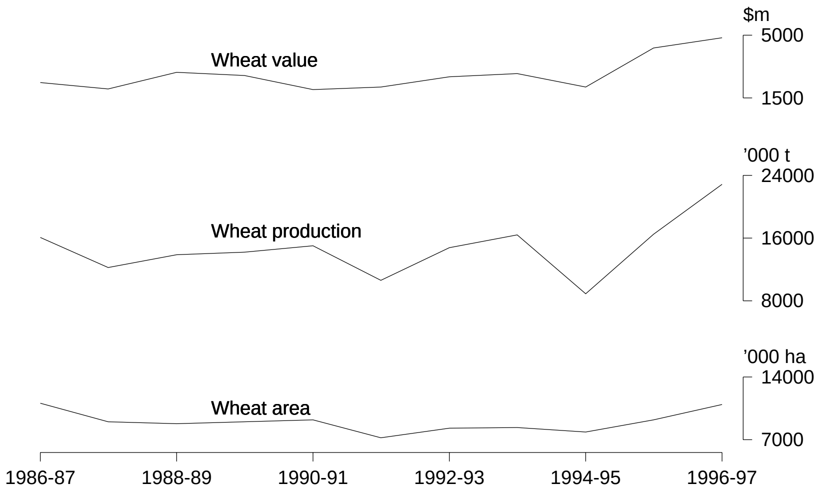
The strong growth experienced in wheat production in 1995–96 after the drought of the previous season continued in 1996–97.

Favourable growing conditions saw many farmers move out of livestock and into grain growing in 1996–97. Consequently the area planted to wheat increased 18.6% to 10.9 million hectares. Production of wheat for the year ended 31 March 1997 was a record 22.9 million tonnes, 38.9% higher than the 16.5 million tonnes recorded for 1995–96.

Queensland experienced the largest growth in wheat production, recording 2.0 million tonnes in 1996–97, compared to 0.5 million tonnes in 1995–96. Yield increased from 0.8 tonnes per hectare to 2.0 tonnes per hectare.

New South Wales overtook Western Australia as Australia's largest wheat producing State, its 8.4 million tonnes comprising 36.5% of the Australian total. Western Australia contributed 32.8% after accounting for 41.4% the year before.

The gross value of wheat produced increased 13.3% to $4,878.0 million in 1996–97. The average gross unit value for wheat was $212.78 per tonne, an 18.4% decrease on 1995–96.



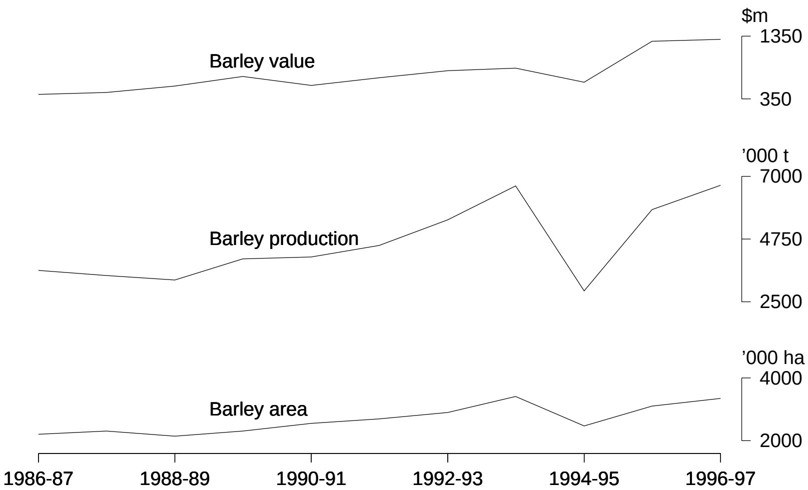

## OATS

While the Australian wheat industry experienced strong growth in 1996–97, oats production declined. The area of oats sown for grain decreased by 7.4% to 1.1 million hectares. Production also decreased, by 11.8%, to 1.7 million tonnes and yield fell slightly, to 1.6 tonnes per hectare. Much of the decline in production was experienced in Victoria and New South Wales, where falls of 22.4% and 14.6% respectively were recorded. Gross value of oats for grain fell by 21.7% to $226.7 million, the result of a fall in production and drop in average gross unit value of 11.2% to $137.12 per tonne.

## BARLEY

Barley, Australia's second largest cereal crop, experienced growth in all States except Victoria and Tasmania in 1996–97. The area sown to barley increased 8.2% to 3.4 million hectares, while production was up 15.0%, to 6.7 million tonnes, following a doubling of production in 1995–96. Yield increased slightly, to 2.0 tonnes per hectare, up from 1.9 tonnes per hectare recorded in 1995–96. Queensland, New South Wales and Western Australia all experienced strong growth in barley production (up 120.0%, 38.1% and 23.6% respectively) while Victoria experienced an 11.4% drop in production.

After a large increase of 105.1% in 1995–96, in 1996–97 the gross value of barley rose 2.3%, to $1,306.1 million; this is the highest value recorded for barley. South Australia was the State with the largest production, contributing $358.6 million (27.5%) of the gross value of the total barley crop. The average gross unit value for barley decreased by 11.0% to $195.06 per tonne.




## GRAIN SORGHUM

As producers moved out of livestock industries into grains such as wheat and barley, the demand for feed crops such as grain sorghum decreased in 1996–97. As a result there were decreases in production levels in New South Wales and Queensland.

The area of grain sorghum sown in 1996–97 decreased by 29.4% to 544,000 hectares. Production decreased by 10.5% to 1.4 million tonnes. While falls were evident in area and production, yield increased to 2.6 tonnes per hectare, from 2.1 tonnes per hectare in 1995–96.

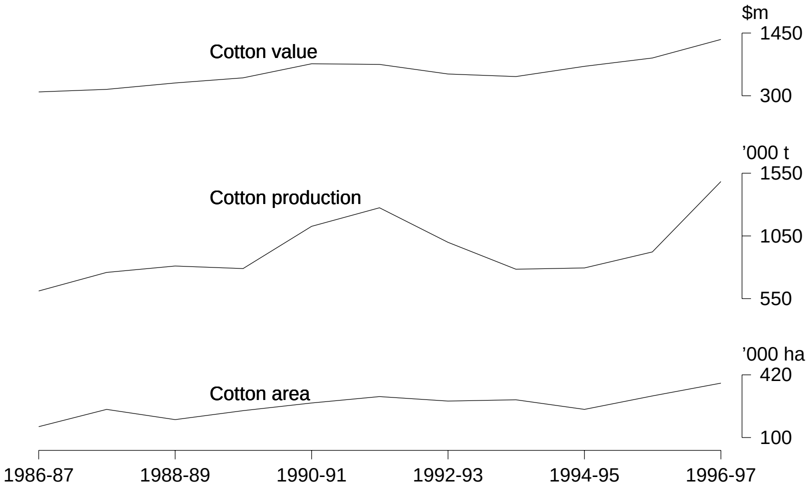
The gross value of grain sorghum decreased by 19.7% to $257.2 million. Queensland produced 70.4% (1.0 million tonnes) of the total crop, with a gross value of $179.0 million.

## RICE

The area of rice sown increased by 10.9% to 152,000 hectares in 1996–97. Production of rice increased by 29.9%, to 1.3 million tonnes, after a 4.9% fall in 1995–96. Yield increased significantly to 8.2 tonnes per hectare from 7.1 tonnes per hectare. The gross value of rice rose by 37.3% to $310.3 million. Production in 1993–94 was 1.0 million tonnes, with a gross value $261.5 million.

## COTTON

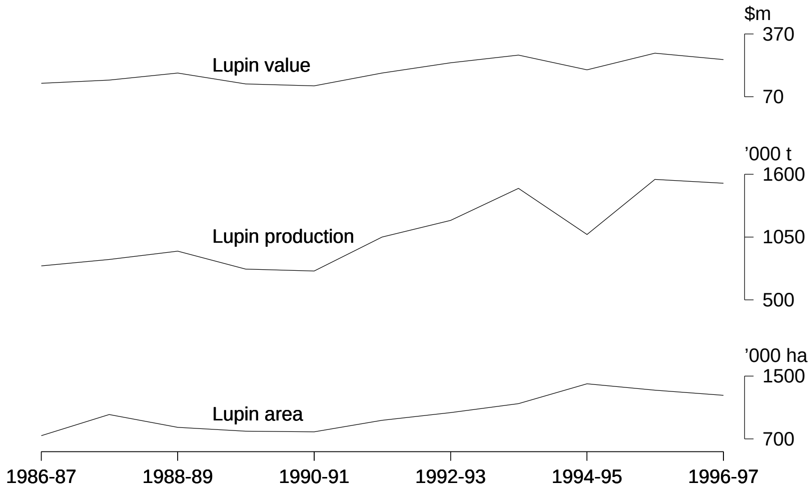
The area planted to cotton in 1996–97 increased by 20.0% to 378,000 hectares. Production of cotton increased by 60.9% to 1.5 million tonnes. Gross value for cotton increased by 33.9%, to $1,342.4 million, making it Australia's second most valuable crop in gross value terms after wheat, and surpassing sugar and barley.




## LUPINS

The area of lupins sown in 1996–97 fell by 4.8% to 1.3 million hectares, while production remained virtually unchanged at 1.5 million tonnes. Western Australia is Australia's largest lupin producer, accounting for 83.6% of the total crop.

Gross value of lupins fell by 10.6% to $249.5 million, with Western Australia recording a gross value of $193.0 million.



## CANOLA

Canola makes up the bulk of Australia's oilseed production and it has shown steady growth in production over the last three years. Since 1988–89 the area sown to canola (43,000 hectares) has increased almost tenfold, while production (58,000 tonnes) has increased over tenfold.

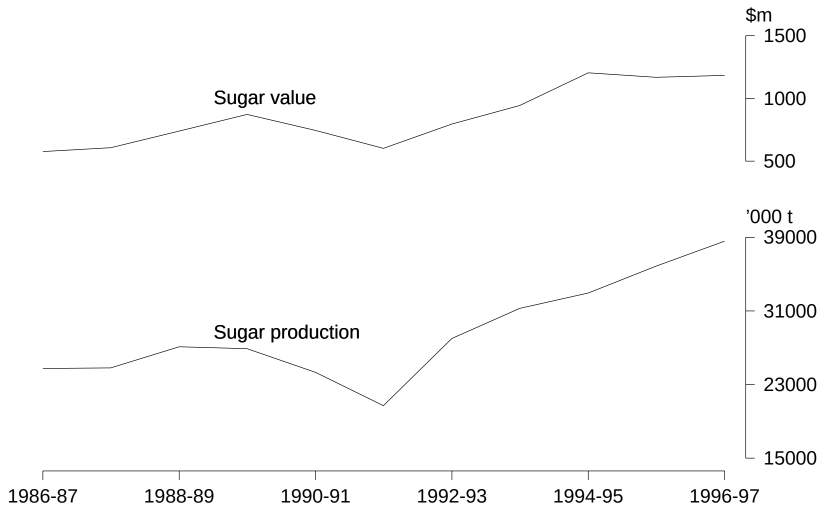
The area of canola sown in 1996–97 increased by 8.0% to 407,000 hectares. Production was up 11.8%, to 623,000 tonnes, while yield remained steady at 1.5 tonnes per hectare. Gross value of canola increased by 14.8% to $238.6 million.

## CROPS AND PASTURES CUT FOR HAY

Pastures made up 71.6% of all production of crops and pastures for hay while accounting for 71.8% of area planted. There was a fall of 30.0% in cereals cut for hay in 1996–97, while the production of pastures and grasses cut for hay fell 25.3% over the same period.

## SUGAR

Production of sugar cane for crushing increased by 7.6% to 38.6 million tonnes; the yield increased 4.0% to 99.0 tonnes per hectare. The gross value of sugar cane for crushing increased by 1.5% to $1,186.4 million, despite the average gross unit value for sugar cane falling by 5.7% to $30.71 per tonne.



PRINCIPAL CROPS, Production, Area and Yield—Years ended 31 March

| | AUST. | | | 1997 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *1995* | *1996* | *1997* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* | *NT* |
| **Cereals for grain** | | | | | | | | | | |
| Barley | | | | | | | | | | |
| Production ('000 t) | 2 913 | 5 823 | 6 696 | 1 483 | 1 189 | 429 | 1 923 | 1 635 | 35 | 1 |
| Area ('000 ha) | 2 470 | 3 111 | 3 367 | 668 | 585 | 180 | 1 009 | 909 | 15 | 1 |
| Yield (t/ha) | 1.2 | 1.9 | 2.0 | 2.2 | 2.0 | 2.4 | 1.9 | 1.8 | 2.4 | 1.9 |
| Grain sorghum | | | | | | | | | | |
| Production ('000 t) | 1 273 | 1 592 | 1 425 | 417 | 3 | 1 003 | (a) | 2 | — | — |
| Area ('000 ha) | 687 | 770 | 544 | 117 | 1 | 424 | (a) | 1 | — | — |
| Yield (t/ha) | 1.9 | 2.1 | 2.6 | 3.6 | 1.9 | 2.4 | . . | 1.6 | — | — |
| Maize | | | | | | | | | | |
| Production ('000 t) | 242 | 311 | 398 | 256 | 7 | 130 | — | 5 | (a) | — |
| Area ('000 ha) | 50 | 56 | 67 | 31 | 1 | 34 | — | 1 | (a) | — |
| Yield (t/ha) | 4.8 | 5.5 | 6.0 | 8.3 | 6.5 | 3.8 | — | 8.5 | . . | — |
| Oats | | | | | | | | | | |
| Production ('000 t) | 924 | 1 875 | 1 653 | 607 | 304 | 26 | 156 | 546 | 14 | (a) |
| Area ('000 ha) | 897 | 1 136 | 1 052 | 393 | 175 | 39 | 121 | 316 | 8 | (a) |
| Yield (t/ha) | 1.0 | 1.7 | 1.6 | 1.5 | 1.7 | 0.7 | 1.3 | 1.7 | 1.7 | . . |
| Rice | | | | | | | | | | |
| Production ('000 t) | 1 016 | 966 | 1 255 | 1 248 | 6 | (a) | (a) | (a) | (a) | — |
| Area ('000 ha) | 119 | 137 | 152 | 151 | 1 | (a) | (a) | (a) | (a) | — |
| Yield (t/ha) | 8.5 | 7.1 | 8.2 | 8.2 | 7.9 | . . | . . | . . | . . | — |
| Triticale | | | | | | | | | | |
| Production ('000 t) | 182 | 469 | 674 | 317 | 167 | 6 | 141 | 35 | 7 | (a) |
| Area ('000 ha) | 153 | 221 | 346 | 118 | 93 | 2 | 105 | 26 | 2 | (a) |
| Yield (t/ha) | 1.2 | 2.1 | 1.9 | 2.7 | 1.8 | 2.8 | 1.3 | 1.4 | 3.3 | . . |
| Wheat | | | | | | | | | | |
| Production ('000 t) | 8 961 | 16 504 | 22 924 | 8 363 | 2 262 | 1 980 | 2 795 | 7 516 | 8 | 1 |
| Area ('000 ha) | 7 891 | 9 221 | 10 936 | 3 192 | 963 | 980 | 1 535 | 4 264 | 2 | 1 |
| Yield (t/ha) | 1.1 | 1.8 | 2.1 | 2.6 | 2.4 | 2.0 | 1.8 | 1.8 | 3.9 | 0.9 |
| **Legumes** | | | | | | | | | | |
| Lupins for grain | | | | | | | | | | |
| Production ('000 t) | 1 076 | 1 559 | 1 522 | 96 | 52 | — | 102 | 1 272 | — | (a) |
| Area ('000 ha) | 1 407 | 1 323 | 1 259 | 64 | 43 | — | 71 | 1 080 | — | (a) |
| Yield (t/ha) | 0.8 | 1.2 | 1.2 | 1.5 | 1.2 | — | 1.4 | 1.2 | — | . . |
| Field peas for grain | | | | | | | | | | |
| Production ('000 t) | 240 | 530 | 454 | 18 | 213 | — | 195 | 26 | 1 | (a) |
| Area ('000 ha) | 461 | 382 | 336 | 15 | 174 | 1 | 119 | 26 | — | (a) |
| Yield (t/ha) | 0.5 | 1.4 | 1.4 | 1.2 | 1.2 | — | 1.6 | 1.0 | 1.7 | . . |
| **Crops cut for hay** | | | | | | | | | | |
| Cereal crops for hay | | | | | | | | | | |
| Production ('000 t) | 968 | 1 742 | 1 220 | 229 | 189 | 52 | 330 | 413 | 6 | 1 |
| Area ('000 ha) | 349 | 469 | 326 | 62 | 51 | 16 | 92 | 104 | 1 | — |
| Yield (t/ha) | 2.8 | 3.7 | 3.7 | 3.7 | 3.7 | 3.3 | 3.6 | 4.0 | 3.9 | 3.5 |
| Non cereal crops for hay | | | | | | | | | | |
| Production ('000 t) | 106 | 223 | 109 | 15 | 26 | 21 | 23 | 19 | 4 | 2 |
| Area ('000 ha) | 135 | 62 | 36 | 5 | 9 | 7 | 8 | 6 | 1 | — |
| Yield (t/ha) | 3.0 | 3.6 | 3.0 | 2.9 | 2.8 | 3.1 | 3.0 | 3.1 | 4.0 | 4.3 |

(a) Data not collected.

PRINCIPAL CROPS, Production, Area and Yield—Years ended 31 March *continued*

| | AUST. | | | 1997 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *1995* | *1996* | *1997* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* | *NT* |
| **Oilseeds** | | | | | | | | | | |
| Canola | | | | | | | | | | |
| Production ('000 t) | 264 | 557 | 623 | 331 | 132 | — | 53 | 108 | — | (a) |
| Area ('000 ha) | 356 | 377 | 407 | 173 | 92 | — | 36 | 107 | — | (a) |
| Yield (t/ha) | 0.7 | 1.5 | 1.5 | 1.9 | 1.4 | — | 1.5 | 1.0 | — | . . |
| Other | | | | | | | | | | |
| Production ('000 t) | 154 | 139 | 240 | 101 | 15 | 120 | 4 | — | — | (a) |
| Area ('000 ha) | 184 | 146 | 215 | 74 | 23 | 112 | 6 | — | — | (a) |
| Yield (t/ha) | 0.8 | 1.0 | 1.1 | 1.4 | 0.7 | 1.1 | 0.7 | — | — | . . |
| **Other crops** | | | | | | | | | | |
| Sugar cane cut for crushing | | | | | | | | | | |
| Production ('000 t) | 32 971 | 35 889 | 38 633 | 2 231 | (a) | 36 232 | (a) | 170 | (a) | (a) |
| Area ('000 ha) | 363 | 377 | 390 | 18 | (a) | 371 | (a) | 1 | (a) | (a) |
| Yield (t/ha) | 90.8 | 95.2 | 99.0 | 124.0 | . . | 97.6 | . . | 164.7 | . . | . . |
| Seed cotton | | | | | | | | | | |
| Production ('000 t) | 796 | 923 | 1 485 | 1 027 | (a) | 458 | (a) | — | (a) | (a) |
| Area ('000 ha) | 245 | 315 | 378 | 249 | (a) | 129 | (a) | — | (a) | (a) |
| Yield (t/ha) | 3.2 | 2.9 | 3.9 | 4.1 | . . | 3.5 | . . | — | . . | . . |
| Peanuts (in shell) | | | | | | | | | | |
| Production ('000 t) | 23 | 38 | 47 | 1 | (a) | 46 | (a) | (a) | (a) | (a) |
| Area ('000 ha) | 13 | 21 | 24 | 1 | (a) | 23 | (a) | (a) | (a) | (a) |
| Yield (t/ha) | 1.8 | 1.8 | 2.0 | 1.8 | . . | 2.0 | . . | . . | . . | . . |
| Tobacco | | | | | | | | | | |
| Production ('000 t) | 7 | 8 | 9 | (a) | 4 | 5 | (a) | (a) | (a) | (a) |
| Area ('000 ha) | 3 | 3 | 3 | (a) | 2 | 2 | (a) | (a) | (a) | (a) |
| Yield (t/ha) | 2.3 | 2.7 | 2.6 | . . | 2.4 | 2.8 | . . | . . | . . | . . |
| **Pastures and grasses cut for hay** | | | | | | | | | | |
| Lucerne | | | | | | | | | | |
| Production ('000 t) | 822 | 989 | 897 | 412 | 187 | 179 | 84 | 21 | 12 | 1 |
| Area ('000 ha) | 177 | 210 | 184 | 95 | 37 | 22 | 22 | 5 | 3 | — |
| Yield (t/ha) | 4.6 | 4.7 | 4.9 | 4.3 | 5.1 | 8.2 | 3.8 | 3.9 | 4.8 | 8.0 |
| Other | | | | | | | | | | |
| Production ('000 t) | 2 115 | 3 066 | 2 461 | 355 | 1 255 | 66 | 249 | 325 | 204 | 7 |
| Area ('000 ha) | 622 | 827 | 738 | 108 | 392 | 18 | 81 | 86 | 49 | 2 |
| Yield (t/ha) | 3.4 | 3.7 | 3.3 | 3.3 | 3.2 | 3.7 | 3.1 | 3.8 | 4.2 | 3.8 |
| *Total cut for hay* | | | | | | | | | | |
| *Production ('000 t)* | *3 353* | *4 496* | *3 358* | *767* | *1 442* | *245* | *333* | *346* | *216* | *8* |
| *Area ('000 ha)* | *915* | *1 152* | *922* | *204* | *429* | *40* | *103* | *92* | *52* | *2* |
| *Yield (t/ha)* | *3.7* | *3.9* | *3.6* | *3.8* | *3.4* | *6.1* | *3.2* | *3.8* | *4.2* | *4.0* |
| **Pasture seed** | | | | | | | | | | |
| Production ('000 t) | 19 | 26 | 25 | 3 | 10 | 1 | 9 | 2 | 1 | — |
| Area ('000 ha) | 82 | 102 | 100 | 14 | 26 | 17 | 28 | 12 | 2 | — |
| Yield (t/ha) | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 | 0.3 | 0.3 | 0.2 | 0.5 | — |

(a) Data not collected.

PRINCIPAL CROPS, Gross Value—Years ended 30 June

| | AUST.(a) | | | 1996–97 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | *1994–95* | *1995–96* | *1996–97* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* |
| | $m | $m | $m | $m | $m | $m | $m | $m | $m |
| **Cereal for grain** | | | | | | | | | |
| Barley | 622.2 | 1 276.4 | 1 306.1 | 332.6 | 242.0 | 66.7 | 358.6 | 299.6 | 6.6 |
| Grain sorghum | 241.8 | 320.4 | 257.2 | 77.2 | 0.6 | 179.0 | — | 0.3 | — |
| Maize | 59.3 | 69.4 | 79.7 | 51.1 | 1.8 | 25.4 | — | 1.3 | — |
| Oats | 165.8 | 289.4 | 226.7 | 87.3 | 42.7 | 4.6 | 19.2 | 70.7 | 2.2 |
| Rice | 216.1 | 226.0 | 310.3 | 307.6 | 2.7 | — | — | — | — |
| Triticale | 35.4 | 94.7 | 106.5 | 49.2 | 29.1 | 1.0 | 20.8 | 5.1 | 1.3 |
| Wheat | 2 127.2 | 4 304.7 | 4 878.0 | 1 746.8 | 484.9 | 421.6 | 602.1 | 1 621.1 | 1.4 |
| **Legumes** | | | | | | | | | |
| Lupins for grain | 199.0 | 279.2 | 249.5 | 21.1 | 12.2 | 0.1 | 23.0 | 193.0 | 0.1 |
| Field peas for grain | 63.7 | 131.5 | 111.0 | 4.4 | 52.7 | 0.1 | 47.7 | 6.0 | 0.1 |
| **Crops for hay** | | | | | | | | | |
| Cereals | 145.8 | 208.9 | 142.3 | 24.9 | 22.4 | 6.2 | 39.0 | 48.9 | 0.9 |
| Other | 12.3 | 28.1 | 12.6 | 2.2 | 3.8 | 2.3 | 1.7 | 2.2 | 0.2 |
| *Total* | *158.1* | *237.1* | *154.9* | *27.1* | *26.2* | *8.5* | *40.7* | *51.1* | *1.1* |
| **Oilseeds** | | | | | | | | | |
| Canola | 96.7 | 207.9 | 238.6 | 126.5 | 48.1 | — | 21.4 | 42.6 | — |
| Other oilseeds | 62.4 | 53.4 | 86.8 | 38.2 | 6.1 | 40.9 | 1.6 | 0.1 | — |
| **Other crops** | | | | | | | | | |
| Sugar cane cut for crushing | 1 207.7 | 1 168.7 | 1 186.4 | 71.6 | — | 1 112.0 | — | 2.9 | — |
| Cotton | 851.2 | 1 002.8 | 1 342.4 | 933.1 | — | 409.1 | — | 0.2 | — |
| Peanuts | 17.4 | 28.2 | 35.0 | 0.8 | — | 34.1 | — | — | — |
| Tobacco | 39.7 | 45.5 | 53.7 | — | 24.8 | 28.8 | — | — | — |
| **Pastures and grasses** | | | | | | | | | |
| Cut for hay | | | | | | | | | |
| Lucerne | 187.8 | 179.3 | 126.2 | 47.0 | 27.7 | 31.7 | 12.3 | 4.3 | 3.0 |
| Other | 400.5 | 484.8 | 296.7 | 30.4 | 154.7 | 10.1 | 43.7 | 30.5 | 26.3 |
| *Total* | 588.3 | 664.1 | 422.9 | 77.4 | 182.4 | 41.8 | 56.0 | 34.8 | 29.3 |
| Harvested for seed | | | | | | | | | |
| Pasture seed | 53.2 | 63.3 | 55.5 | 8.6 | 22.0 | 2.6 | 14.0 | 5.9 | 2.2 |
| *Total* | *641.5* | *727.4* | *478.4* | *86.0* | *204.4* | *44.5* | *70.0* | *40.7* | *31.5* |
| **Total** | **6 805.2** | **10 462.5** | **11 101.2** | **3 960.6** | **1 178.3** | **2 376.2** | **1 205.0** | **2 334.7** | **44.2** |

(a) Includes the Northern Territory and the Australian Capital Territory.

## INTRODUCTION

The specialist oilseed crops grown in Australia are canola, sunflower, soybeans and safflower. In 1996–97 this group in total produced 862,000 tonnes of oilseed crops, valued at $325 million, of which 36% was exported.

The current dominant crop in the oilseed industry is canola. Production in 1996–97 stood at 623,000 tonnes, with 283,000 tonnes being exported. In 1986–87, production was 76,000 tonnes and exports were negligible.

This dramatic increase in production of canola is due to a number of factors. Farmers have seen the benefits of including oilseeds in crop rotations which has coincided with an increase in worldwide demand for canola. Changing attitude to foods containing animal fats and the use of oilseed meals in the manufacture of stockfeeds for intensive livestock industries have pushed prices to record levels.

In 1986–87, only 1,158 agricultural establishments reported growing canola whereas over three times that number (4,504) reported the crop in 1996–97. By comparison, the number of producers of sunflower and soybeans have fallen 52% (to 868) and 20% (to 1,064) respectively over the ten years. During this period, the number of safflower producers has fluctuated, with the current number 44% higher than in 1986–87.

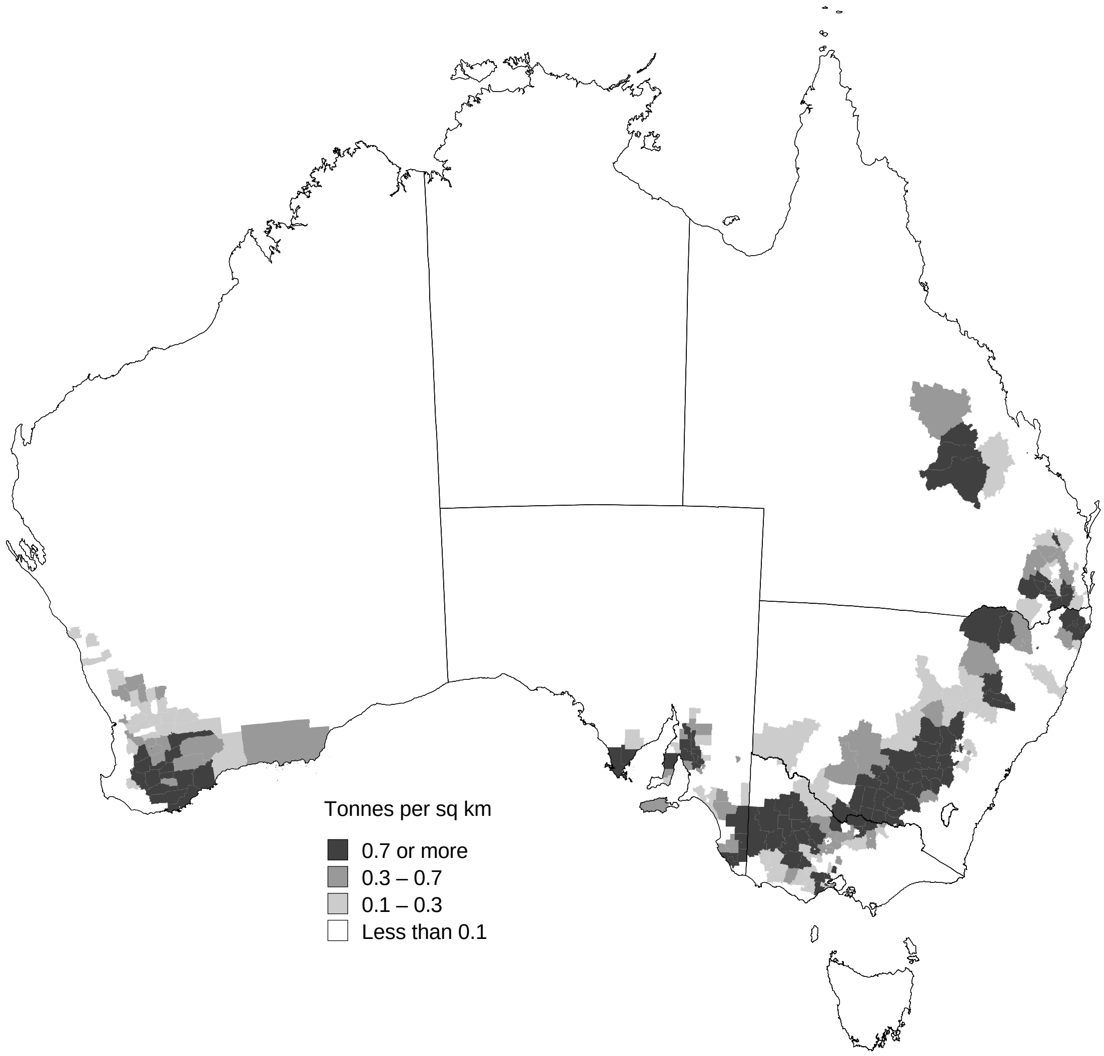
OILSEED PRODUCERS

| | *1986–87* | *1992–93* | *1993–94* | *1994–95* | *1995–96* | *1996–97* |
|---|---|---|---|---|---|---|
| | no. | no. | no. | no. | no. | no. |
| Canola | 1 158 | 1 512 | 2 459 | 4 240 | 4 281 | 4 504 |
| Safflower | 351 | 434 | 747 | 460 | 606 | 507 |
| Soybeans | 1 324 | 951 | 1 034 | 570 | 724 | 1 064 |
| Sunflower | 1 809 | 624 | 834 | 791 | 684 | 868 |

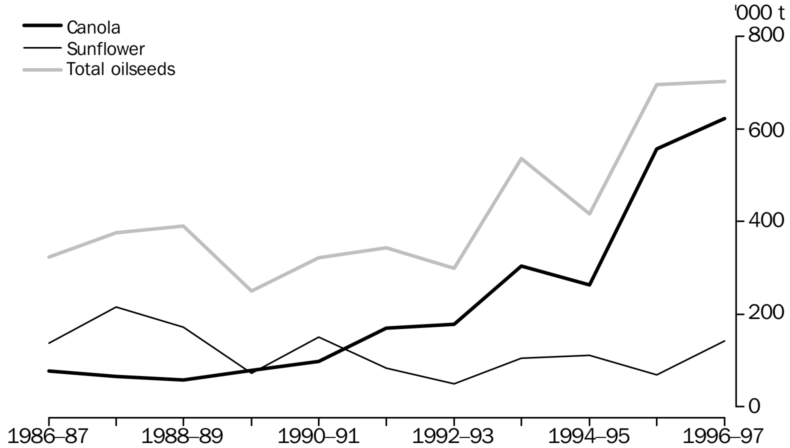
## PRODUCTION

Results from the 1996–97 Agricultural Census show the area planted to the four major oilseed crops increased 19% over the previous year, with canola and sunflower plantings representing 66% and 22% respectively of the total area. Canola production rose to 623,000 tonnes, 12% more than the 1995–96 level, and eight times the production achieved in 1986–87. New South Wales continues to grow the most canola with 331,000 tonnes, 53% of the Australian harvest. The significant increase in canola contrasts with the more modest 4% increase in production of sunflower since 1986–87 to 143,000 tonnes.

OILSEED PRODUCTION, by region—1996–97




MAJOR OILSEED PRODUCTION



MAJOR OILSEEDS, By area, production and gross value

| | 1986–87 | 1987–88 | 1988–89 | 1989–90 | 1990–91 | 1991–92 | 1992–93 | 1993–94 | 1994–95 | 1995–96 | 1996–97 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Canola | | | | | | | | | | | |
| Area ('000 ha) | 65 | 58 | 43 | 50 | 73 | 151 | 107 | 177 | 356 | 377 | 407 |
| Production ('000 t) | 76 | 66 | 58 | 78 | 98 | 170 | 178 | 305 | 264 | 557 | 623 |
| Value ($m) | 19 | n.a. | n.a. | n.a. | 28.3 | 48.3 | 56.8 | 108.0 | 96.7 | 207.9 | 238.6 |
| Safflower | | | | | | | | | | | |
| Area ('000 ha) | 30 | 38 | 47 | 33 | 19 | 39 | 32 | 54 | 30 | 40 | 35 |
| Production ('000 t) | 19 | 25 | 31 | 21 | 10 | 26 | 23 | 45 | 15 | 26 | 21 |
| Value ($m) | n.a. | n.a. | n.a. | n.a. | 3.0 | 8.0 | 8.9 | 17.1 | 5.4 | 10.2 | 7.8 |
| Soybeans | | | | | | | | | | | |
| Area ('000 ha) | 54 | 43 | 71 | 49 | 40 | 30 | 30 | 41 | 18 | 24 | 39 |
| Production ('000 t) | 90 | 69 | 130 | 77 | 62 | 63 | 49 | 81 | 27 | 45 | 74 |
| Value ($m) | 25.9 | 26.7 | 50.9 | 28.6 | 22.0 | 23.1 | 18.8 | 35.8 | 10.8 | 17.8 | 31.3 |
| Sunflower | | | | | | | | | | | |
| Area ('000 ha) | 193 | 200 | 185 | 66 | 166 | 79 | 60 | 113 | 136 | 82 | 139 |
| Production ('000 t) | 137 | 216 | 172 | 73 | 152 | 84 | 50 | 105 | 112 | 68 | 143 |
| Value ($m) | 34.3 | 64.6 | 55.2 | 24.6 | 41.6 | 28.4 | 16.4 | 39.6 | 46.2 | 25.4 | 47.2 |

VALUE

In 1996–97, gross value of oilseeds stood at $325 million, a rise of 24% on the previous year and over twice the 1986–87 value of $85 million. The current canola crop value of $239 million is 15% more than the 1995–96 crop, and over twelve times that of the 1986–87 crop of $19 million.

Since 1986–87, the canola average unit price per year has risen from $242 to $383 per tonne. Over the same period, average unit prices for soybean, rose from $295 to $420 and sunflower unit prices increased from $247 to $329. During this period, average unit prices for wheat rose from $147 to $213. In 1990–91, while the average unit price of wheat was $132, canola enjoyed a return of $287, soybeans $354 and sunflower $275.

CANOLA GROSS VALUE

## CONSUMPTION

The form in which most oilseed is consumed is in margarine. In 1996–97, 163,000 tonnes of margarine were produced in Australia, with 41,000 tonnes being exported. This left enough for each Australian to consume 6.6 kg of margarine per person while 2.7 kg of butter per capita was consumed. Over the last ten years, production of margarine has remained around the 160,000 tonne level despite current per capita consumption falling 25% from the 1986-87 level. Increasing exports have taken up the remainder.

### TOTAL MARGARINE

| | *1991–92* | *1992–93* | *1993–94* | *1994–95* | *1995–96* | *1996–97* |
|---|---|---|---|---|---|---|
| Total production ('000 t) | 161 988 | 159 668 | 162 486 | 150 058 | 174 272 | 162 716 |
| Exports ('000 t) | 18 160 | 19 729 | 22 071 | 25 249 | 30 932 | 41 176 |
| Available for consumption ('000 t) | 148 467 | 139 903 | 139 465 | 130 958 | 143 318 | 121 540 |
| Per capita consumption(kg) | 8.5 | 8.0 | 7.9 | 7.3 | 7.9 | 6.6 |

## EXPORTS

In 1996–97, Australia exported 309,000 tonnes of the major oilseeds crop with a total value of $143 million. Of these sales, 283,000 tonnes of canola were shipped, to earn $124 million. Five years earlier, sunflower out-sold canola five to one when the combined major oilseed group exported 72,000 tonnes. In 1986–87, canola exports where negligible and only 12,000 tonnes of sunflower were sold on the overseas market, about half of it to Mexico.

Currently, Japan is our best customer for oilseeds, taking 205,000 tonnes of canola, 11,000 of safflower and 3,000 tonnes of soybean. Bangladesh purchased 78,000 tonnes of canola in 1996–97 while a handful of countries purchase less than 1,000 tonnes.

### OILSEED EXPORTS

| | *1991–92* | *1992–93* | *1993–94* | *1994–95* | *1995–96* | *1996–97* |
|---|---|---|---|---|---|---|
| Canola | | | | | | |
| tonnes | 10 560 | 48 702 | 106 167 | 84 517 | 347 775 | 283 438 |
| $m | 3.2 | 19.0 | 47.6 | 37.6 | 137.9 | 124.0 |
| Safflower | | | | | | |
| tonnes | 12 212 | 22 056 | 21 050 | 19 862 | 10 518 | 17 536 |
| $m | 4.7 | 9.5 | 9.2 | 8.3 | 4.6 | 8.3 |
| Soybeans | | | | | | |
| tonnes | 997 | 2 865 | 4 338 | 4 359 | 2 386 | 3 649 |
| $m | 0.6 | 1.7 | 2.9 | 3.1 | 1.8 | 2.4 |
| Sunflower | | | | | | |
| tonnes | 48 454 | 1 052 | 1 976 | 10 527 | 3 534 | 4 444 |
| $m | 16.4 | 3.1 | 3.7 | 9.3 | 6.9 | 8.2 |

## FUTURE DEVELOPMENTS

A report, released in February 1998 by Australian Bureau of Agricultural and Resource Economics (ABARE), on the short and medium outlook for the oilseed industry forecast increased domestic production and strong international demand, along with higher world prices in 1997–98.

Increased meat consumption in the three largest East Asian economies has lead to expanding animal numbers throughout the region. This herd growth has generated demand, not only for grain, but protein supplements based on oilseed meal in feed rations. ABARE expects this demand to increase over the next five years as Asian feed production is unlikely to match the rising demand.

ABARE has forecast Australia's canola harvest will reach 812,000 tonnes in 1997–98, 30% more than the 1996–97 ABS measure. Projections to the year 2002–03 suggest the canola crop increasing to approximately three and half times the existing level. While in 1996–97 sunflower has enjoyed its best year in nearly a decade, production is likely to fall in 1997–98, but ABARE projections indicate a gradual return to current levels.

Despite indications that production is expected to increase, Australia is still likely to remain a net importer of oilseed products.

## REFERENCES

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*Apparent Consumption of Foodstuffs* (Cat. no. 4306.0)

J. Delforce, I. Hussain, S. Hooper, T. Podbury, S. Hardcastle and S. Gordon, *Outlook for grains, oilseeds and pulses, Australian Bureau of Agricultural and Resource Economics, OUTLOOK 98 Vol 2.*

SECTION **6** **HORTICULTURE**

OVERVIEW

The gross value of fruit and nuts produced in Australia increased by 9.5% to $2,423 million in 1996–97. All States recorded an increase, with New South Wales recording the largest increase of 26.0% to $579 million. Victoria continued to be the major contributor with 25.2% ($610 million) of the gross value of fruit and nuts.

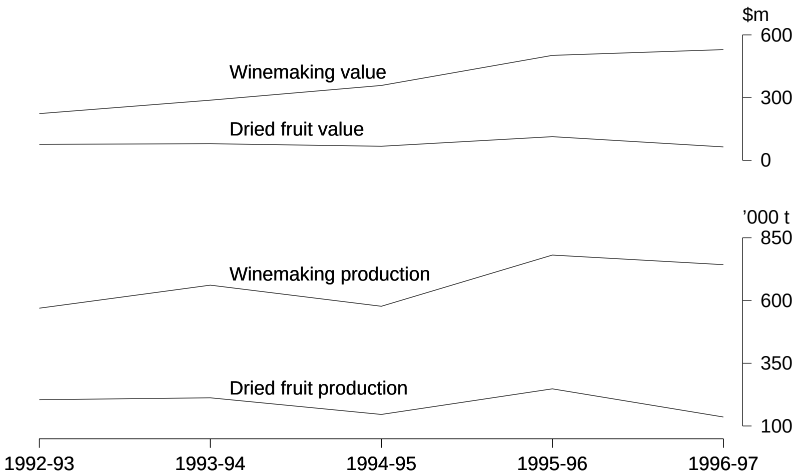
The gross value of vegetables increased by 3.2% to $1,668 million; Tasmania recorded the largest increase of 14.0% to $155 million. Queensland continued to be the major contributor, making up 27.2% of the total, with a value of $454 million.

GRAPES

The Australian grape growing industry, while performing strongly in 1996–97, did not achieve the record yields experienced in the year 1995–96.

The area planted to grapes (both bearing and non-bearing) was 89,800 hectares, 11.5% higher than the 80,600 hectares reported in 1995–96. Yield decreased from 16.8 tonnes per hectare to 13.1 tonnes per hectare in 1996–97. Production of wine grapes decreased by 5.0% to 743,400 tonnes. While total grape production decreased 13.2%, the total grape gross value recorded an increase of 1.0% to $721 million. This was due to the strong export prices for fresh grapes (an increase of 12.7% over the previous year), resulting in an increase in average gross unit value of 11.5% to $715.34 per tonne.

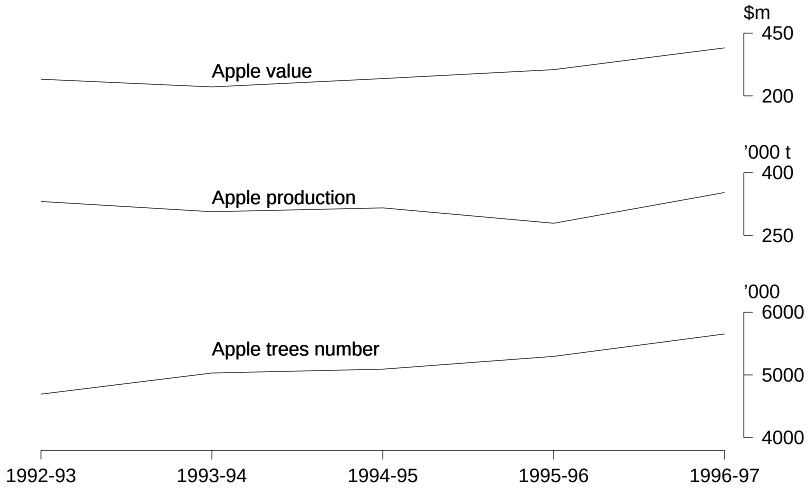
Production of dried grapes fell by 45.1% to 136,400 tonnes, back to the levels experienced in 1994–95. The reduced production was caused from frosts, reduced yields, and a shift towards wine grapes from sultanas to attract premium prices. In 1996–97, the gross value of dried grapes was $66 million.



## APPLES

After a poor crop in 1995–96, apple production increased 26.0% to 353,100 tonnes in 1996–97, due to a return to high pre 1995–96 yields. Production in Victoria rose 50.6%, along with a significant rise in New South Wales (up 34.6%). Victoria was Australia's biggest contributor to apple production, its 119,000 tonnes supplying 33.7% of the Australian total.

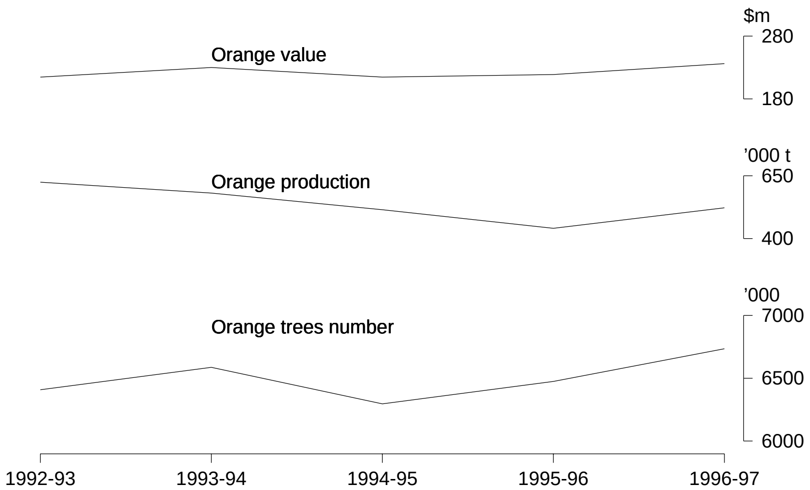
The gross value increased by 28.9% to $393 million, with increases in all States except Queensland.




## ORANGES

After a poor season in 1995–96, establishments growing oranges reported a much better year in 1996–97. While tree numbers rose slightly to 6.7 million (up 4.0%), production increased significantly to 522,600 tonnes, up 18.2% on the 442,100 reported in 1995–96. The increase in production resulted from an increase in yield to 77.6 kg per tree. New South Wales and Victoria recorded increases in production of 30.3% to 231,500 tonnes and 22.9% to 89,000 tonnes respectively.

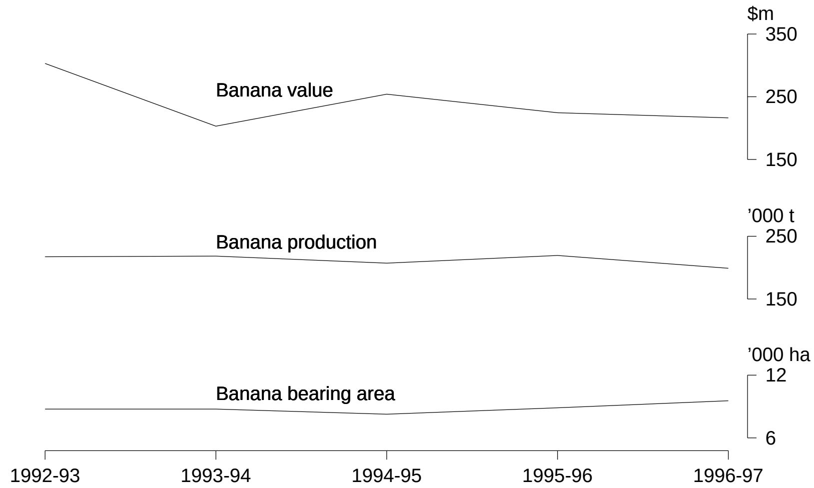
The gross value of oranges increased by 20.1% to $264 million; New South Wales recorded the largest increase of 70.2% to $116 million, followed by Victoria with 18.6% to $48 million.



## BANANAS

While the area planted to bananas increased from 8,900 hectares to 9,600 hectares (up 7.8%) in 1996–97, production fell 9.3% to 199,600 tonnes. The decline in production was due to a 13.2% decrease in production in Queensland.

Despite an increase of 6.2% in the average gross unit value of bananas to $1,085 per tonne, the estimated gross value decreased by 3.7% to $216.6 million. This was largely due to a fall of 13.9% in Queensland, while New South Wales recorded an increase of 23.4% ($53 million).




## PEARS

Production of pears improved from the 1995–96 figure of 156,000 tonnes, up 7.4% to 167,600 tonnes in 1996–97 (compared with 175,700 tonnes in 1991–92). Victoria was Australia's largest pear producer, accounting for 87.2% of production. The Victorian crop of 146,100 tonnes was 8.0% higher than the 135,200 tonnes reported in 1995–96.

The gross value of pears increased by 16.9% to $106 million (compared to $127 million in 1991–92).

## MANGOES

Production of mangoes increased by 19.0% to 32,400 tonnes (compared to 2,900 tonnes in 1986–87) and yield increased to 48.3 kg per tree. Queensland was Australia's largest mango producer at 28,400 tonnes which was 87.5% of the total Australian production of mangoes, and a 21.9% increase on 1996–97.

The gross value of mangoes decreased by 5.0% to $70 million (compared to $6.7 million in 1986–87), as a result of a significant drop in average gross unit value.

## PEACHES

Production of peaches increased by 19.4% to 72,100 tonnes (compared to 66,000 tonnes in 1987–88), while tree numbers rose 13.8% to 1.5 million (compared to 1.1 million in 1987–88).

Total gross value of production of peaches increased by 19.4% to $60 million (compared to $45 million in 1987–88).

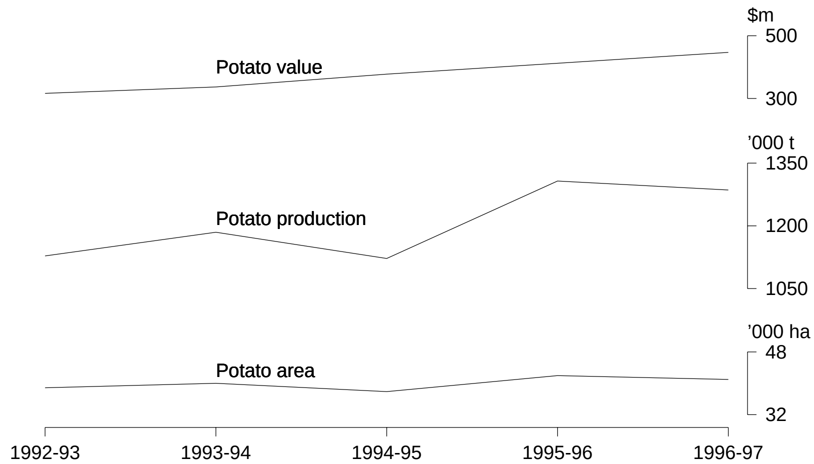
## APRICOTS

Production of apricots increased by 19.8% to 25,900 tonnes (compared to 31,800 tonnes in 1991–92), despite a slight reduction in tree numbers in 1996–97. The improved production was due to an increase in yield to 41.2 kg per tree.

The gross value of apricots increased by 38.1% to $42 million (compared to $38 million in 1991–92).

## POTATOES

Production of potatoes decreased by 1.7% to 1.3 million tonnes, while area planted fell marginally to 41,100 hectares. Tasmania is Australia's largest potato producer, accounting for 24.7% of the total production. The gross value of potatoes increased by 8.3% to $448 million. The average gross unit value of potatoes increased by 10.2% to $348.73 per tonne.




## TOMATOES

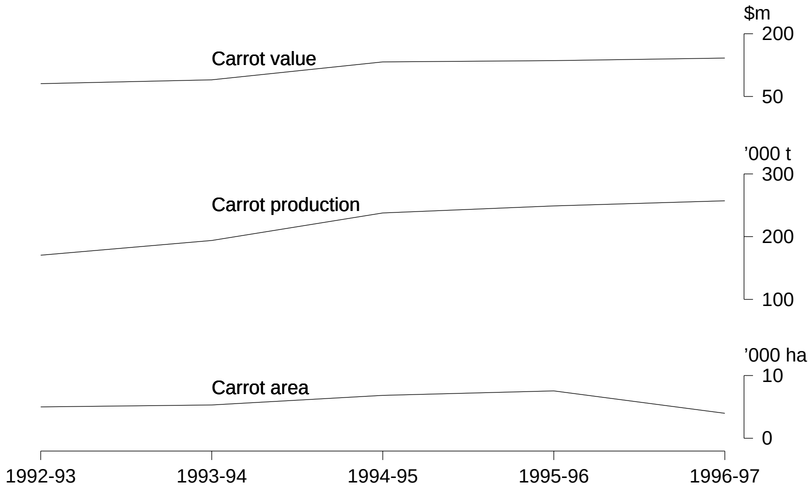
Production of tomatoes increased by 6.0% to 393,100 tonnes (compared to 364,100 tonnes in 1990–91). Victoria accounted for 42.6% of the Australian tomato crop.

The total gross value of tomatoes increased slightly, to $177 million (compared to $183.8 million in 1990–91), while the average gross unit value decreased by 5.3% to $450.00 per tonne.

## CARROTS

Production of carrots was 257,400 tonnes in 1996–97, 3.0% higher than the 1995–96 figure. This was despite a fall in area of 6.8% to 7,000 hectares. Yield increased from 33.0 tonnes per hectare to 36.5 tonnes per hectare in 1996–97. Victoria produced 38.6% (99,300 tonnes) of the total production.

The total gross value of carrots increased by 4.2% to $142 million. The average gross unit value increased by 1.2% to $551.95 per tonne.




## ONIONS

Production of onions decreased by 19.6% to 196,500 tonnes (compared to 222,300 tonnes in 1990–91) after a 22.0% increase (244,500 tonnes) in 1995–96. Due to adverse weather conditions in Tasmania production fell by 34.5% to 59,700 tonnes.

The gross value of onions also decreased, by 19.2% to $91 million (compared to $76.3 million in 1990–91), although there was a slight increase in the average gross unit value to $465.54 per tonne.

FRUIT, Production, Tree Numbers or Area and Yield(a)—Years ended 31 March

| Fruit or nut | AUST. 1995 | AUST. 1996 | AUST. 1997 | 1997 NSW | 1997 Vic. | 1997 Qld | 1997 SA | 1997 WA | 1997 Tas. | 1997 NT |
|---|---|---|---|---|---|---|---|---|---|---|
| **Citrus** | | | | | | | | | | |
| Oranges | | | | | | | | | | |
| Production (t) | 517 242 | 442 077 | 522 622 | 231 543 | 88 963 | 16 126 | 180 683 | 5 308 | (b) | (b) |
| Trees ('000) | 6 297 | 6 478 | 6 737 | 3 305 | 1 194 | 208 | 1 868 | 162 | (b) | (b) |
| Yield (kg/tree) | 82.1 | 68.2 | 77.6 | 70.1 | 74.5 | 77.5 | 96.7 | 32.7 | . . | . . |
| Lemons and limes | | | | | | | | | | |
| Production (t) | 33 873 | r30 614 | 32 991 | 5 679 | 6 371 | 6 428 | 13 706 | 794 | (b) | 12 |
| Trees ('000) | 383 | 403 | 389 | 117 | 95 | 71 | 91 | 15 | (b) | — |
| Yield (kg/tree) | 88.4 | 76.0 | 84.9 | 48.5 | 67.1 | 90.5 | 150.6 | 52.9 | . . | — |
| Mandarins | | | | | | | | | | |
| Production (t) | 58 630 | 62 017 | 72 937 | 5 566 | 5 319 | 44 566 | 16 004 | 1 472 | (b) | 9 |
| Trees ('000) | 729 | 824 | 1 074 | 128 | 108 | 630 | 156 | 53 | (b) | — |
| Yield (kg/tree) | 80.4 | 75.3 | 67.9 | 43.6 | 49.4 | 70.8 | 102.7 | 27.8 | . . | — |
| **Pome** | | | | | | | | | | |
| Apples | | | | | | | | | | |
| Production (t) | 316 555 | 280 147 | 353 069 | 83 231 | 118 968 | 28 045 | 28 865 | 38 218 | 55 649 | (b) |
| Trees ('000) | 5 101 | 5 302 | 5 656 | 1 318 | 1 516 | 545 | 553 | 620 | 1 103 | (b) |
| Yield (kg/tree) | 62.1 | 52.8 | 62.4 | 63.2 | 78.5 | 51.5 | 52.2 | 61.7 | 50.5 | . . |
| Pears (excl. Nashi) | | | | | | | | | | |
| Production (t) | 151 750 | 156 022 | 167 562 | 3 195 | 146 060 | 1 496 | 6 136 | 9 932 | 742 | (b) |
| Trees ('000) | 1 317 | 1 384 | 1 416 | 53 | 1 115 | 27 | 81 | 123 | 16 | (b) |
| Yield (kg/tree) | 115.2 | 112.7 | 118.3 | 60.3 | 131.0 | 55.4 | 75.6 | 80.6 | 46.4 | . . |
| **Stone** | | | | | | | | | | |
| Apricots | | | | | | | | | | |
| Production (t) | 29 753 | 21 640 | 25 920 | 926 | 8 936 | 277 | 15 235 | 341 | 205 | (b) |
| Trees ('000) | 642 | 634 | 629 | 34 | 202 | 23 | 329 | 13 | 28 | (b) |
| Yield (kg/tree) | 46.3 | 34.1 | 41.2 | 27.1 | 44.2 | 12.0 | 46.3 | 26.2 | 7.3 | . . |
| Cherries | | | | | | | | | | |
| Production (t) | 5 766 | 4 783 | 6 683 | 3 439 | 2 008 | 2 | 948 | 101 | 185 | (b) |
| Trees ('000) | 480 | 571 | 625 | 378 | 127 | — | 63 | 20 | 38 | (b) |
| Yield (kg/tree) | 12.0 | 8.4 | 10.7 | 9.1 | 15.8 | — | 15.1 | 5.1 | 4.9 | . . |
| Nectarines | | | | | | | | | | |
| Production (t) | 16 914 | 18 248 | 21 887 | 8 030 | 7 033 | 2 556 | 1 362 | 2 859 | 41 | (b) |
| Trees ('000) | 644 | 781 | 850 | 347 | 213 | 150 | 32 | 102 | 6 | (b) |
| Yield (kg/tree) | 26.3 | 23.4 | 25.7 | 23.1 | 33.0 | 17.0 | 42.7 | 28.2 | 6.8 | . . |
| Peaches | | | | | | | | | | |
| Production (t) | 58 665 | 60 390 | 72 099 | 15 411 | 43 487 | 3 297 | 7 694 | 2 191 | 17 | (b) |
| Trees ('000) | 1 247 | 1 296 | 1 475 | 490 | 609 | 168 | 125 | 80 | 3 | (b) |
| Yield (kg/tree) | 47.0 | 46.6 | 48.9 | 31.5 | 71.4 | 19.7 | 61.5 | 27.3 | 5.6 | . . |
| Plums and prunes | | | | | | | | | | |
| Production (t) | 21 347 | 21 429 | 25 187 | 10 409 | 4 618 | 1 972 | 4 271 | 3 912 | 6 | (b) |
| Trees ('000) | 905 | 902 | 931 | 398 | 157 | 129 | 98 | 148 | 2 | (b) |
| Yield (kg/tree) | 23.6 | 23.8 | 27.0 | 26.2 | 29.5 | 15.3 | 43.6 | 26.5 | 3.9 | . . |

(a) Yield derived based on number of trees six years and over.

(b) Data not collected.

FRUIT, Production, Tree Numbers or Area and Yield(a)—Years ended 31 March *continued*

| | AUST. | | | 1997 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| *Fruit or nut* | *1995* | *1996* | *1997* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* | *NT* |
| **Other orchard n.e.i.** | | | | | | | | | | |
| Avocados | | | | | | | | | | |
| Production (t) | 15 640 | 16 416 | 20 072 | 4 199 | 1 783 | 11 744 | 901 | 1 445 | (b) | (b) |
| Trees ('000) | 387 | 414 | 440 | 94 | 32 | 247 | 18 | 49 | (b) | (b) |
| Yield (kg/tree) | 40.4 | 39.7 | 45.6 | 44.5 | 55.7 | 47.6 | 50.1 | 29.3 | . . | . . |
| Mangoes | | | | | | | | | | |
| Production (t) | 29 603 | 27 236 | 32 403 | 273 | (b) | 28 366 | (b) | 1 095 | (b) | 2 668 |
| Trees ('000) | 515 | 608 | 671 | 21 | (b) | 559 | (b) | 27 | (b) | 64 |
| Yield (kg/tree) | 57.5 | 44.8 | 48.3 | 13.0 | . . | 50.7 | . . | 40.6 | . . | 41.8 |
| **Nuts** | | | | | | | | | | |
| Almonds (kernel) | | | | | | | | | | |
| Production (t) | 5 028 | 5 021 | 5 893 | 144 | 3 731 | 1 | 2 014 | 3 | — | (b) |
| Trees ('000) | 894 | 913 | 947 | 11 | 407 | 1 | 525 | 3 | — | (b) |
| Yield (kg/tree) | 5.6 | 5.5 | 6.2 | 13.1 | 9.2 | 1.7 | 3.8 | 0.8 | — | . . |
| Macadamia | | | | | | | | | | |
| Production (t) | 11 503 | 13 587 | 16 053 | 9 675 | (b) | 6 374 | — | 3 | (b) | (b) |
| Trees ('000) | 1 167 | 1 511 | 1 846 | 1 077 | (b) | 768 | — | 1 | (b) | (b) |
| Yield (kg/tree) | 9.9 | 9.0 | 8.7 | 9.0 | . . | 8.3 | — | 4.6 | . . | . . |
| **Currants (black)** | | | | | | | | | | |
| Production (t) | 633 | 665 | 933 | — | (b) | (b) | 4 | (b) | 928 | (b) |
| Area (ha) | 137 | 163 | 153 | 1 | (b) | (b) | — | (b) | 151 | (b) |
| Yield (t/ha) | 4.6 | 4.1 | 6.1 | — | . . | . . | — | . . | 6.1 | . . |
| **Kiwifruit** | | | | | | | | | | |
| Production (t) | 4 280 | 3 422 | 3 381 | 418 | 2 255 | 255 | — | 453 | (b) | (b) |
| Area (ha) | 457 | 330 | 481 | 89 | 329 | 35 | 4 | 25 | (b) | (b) |
| Yield (t/ha) | 9.4 | 10.4 | 7.0 | 4.7 | 6.9 | 7.4 | — | 18.1 | . . | . . |
| **Raspberries** | | | | | | | | | | |
| Production (t) | 399 | 370 | 361 | 31 | 208 | 10 | 5 | 2 | 105 | (b) |
| Area (ha) | 167 | 173 | 181 | 35 | 90 | 4 | 7 | 1 | 44 | (b) |
| Yield (t/ha) | 2.4 | 2.1 | 2.0 | 0.9 | 2.3 | 2.2 | 0.7 | 1.6 | 2.4 | . . |
| **Strawberries** | | | | | | | | | | |
| Production (t) | 8 532 | 10 808 | 11 242 | 210 | 3 376 | 3 755 | 1 322 | 2 444 | 129 | — |
| Area (ha) | 584 | 637 | 701 | 34 | 221 | 242 | 74 | 106 | 20 | — |
| Yield (t/ha) | 14.6 | 17.0 | 16.0 | 6.2 | 15.3 | 15.5 | 17.9 | 23.1 | 6.5 | — |
| **Tropical** | | | | | | | | | | |
| Bananas | | | | | | | | | | |
| Production (t) | 208 102 | 220 047 | 199 581 | 38 914 | (b) | 143 748 | (b) | 13 360 | (b) | 3 559 |
| Area (ha) | 8 281 | 8 893 | 9 589 | 3 128 | (b) | 5 957 | (b) | 375 | (b) | 129 |
| Yield (t/ha) | 25.1 | 24.7 | 20.8 | 12.4 | . . | 24.1 | . . | 35.7 | . . | 27.6 |
| Papaw | | | | | | | | | | |
| Production (t) | 6 225 | 5 726 | 6 108 | 124 | (b) | 5 793 | (b) | 174 | (b) | 18 |
| Area (ha) | 320 | 316 | 321 | 10 | (b) | 300 | (b) | 9 | (b) | 2 |
| Yield (t/ha) | 19.5 | 18.1 | 19.0 | 13.0 | . . | 19.3 | . . | 19.6 | . . | 7.5 |
| Pineapples | | | | | | | | | | |
| Production (t) | 138 503 | 127 864 | 122 981 | 1 | (b) | 122 980 | (b) | (b) | (b) | — |
| Area (ha) | 3 209 | 2 824 | 2 668 | 1 | (b) | 2 667 | (b) | (b) | (b) | — |
| Yield (t/ha) | 43.2 | 45.3 | 46.1 | 0.7 | . . | 46.1 | . . | . . | . . | — |

(a) Yield derived based on number of trees six years and over.

(b) Data not collected.

## PRODUCTION OF GRAPES(a), Area of Vines and Yield—Years ended 31 March

| | AREA OF VINES AT HARVEST | | | | GRAPE PRODUCTION (fresh weight) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | *Bearing* | *Not yet bearing; planted or grafted prior to collection year* | *Not yet bearing; planted or grafted during collection year* | *Total* | *Winemaking* | *Drying* | *Table and other* | *Total* | *Yield* |
| | ha | ha | ha | ha | t | t | t | t | t/ha |
| **Australia** | | | | | | | | | |
| 1995 | 62 542 | (b)4 446 | (b)5 981 | 72 969 | (b)577 896 | (b)147 006 | (b)44 456 | 769 359 | 12.3 |
| 1996 | r64 845 | 8 900 | 6 815 | 80 559 | 782 381 | 248 342 | 55 786 | 1 086 509 | 16.8 |
| 1997 | 72 119 | 9 615 | 8 063 | 89 797 | 743 382 | 136 435 | 63 296 | 943 113 | 13.1 |
| **1997** | | | | | | | | | |
| NSW | 15 898 | 1 802 | 2 290 | 19 990 | 174 265 | 24 364 | 11 273 | 209 901 | 13.2 |
| Vic. | 21 338 | 2 416 | 1 602 | 25 356 | 181 772 | 106 662 | 41 253 | 329 687 | 15.5 |
| Qld | 1 048 | 123 | 154 | 1 325 | 746 | — | 3 784 | 4 530 | 4.3 |
| SA | 30 270 | 4 741 | 3 535 | 38 546 | 367 792 | 4 245 | 2 551 | 374 589 | 12.4 |
| WA | 3 106 | 430 | 432 | 3 969 | 17 295 | 1 164 | 3 337 | 21 796 | 7.0 |
| Tas. | 341 | 102 | 41 | 484 | 1 497 | — | — | 1 497 | 4.4 |
| NT | 107 | — | 8 | 115 | — | — | 1 099 | 1 099 | 10.3 |
| ACT | 12 | 1 | 1 | 14 | 15 | — | — | 15 | 1.3 |

(a) Varietal information is available in *Australian Wine and Grape Industry* (Cat. no. 1329.0).

(b) Excludes the Northern Territory and the Australian Capital Territory.

## FRUIT, Gross Value—Years ended 30 June

| | AUST.(a) | | | 1996–97 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | *1994–95* | *1995–96* | *1996–97* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* |
| *Fruit* | $m | $m | $m | $m | $m | $m | $m | $m | $m |
| **Citrus** | | | | | | | | | |
| Oranges | 214.8 | 219.5 | 263.6 | 116.2 | 48.3 | 11.0 | 86.1 | 2.2 | — |
| Lemons and limes | 18.9 | 26.9 | 31.1 | 9.9 | 3.1 | 7.3 | 10.2 | 0.5 | — |
| Mandarins | 70.8 | 70.7 | 86.9 | 7.1 | 7.0 | 56.7 | 13.9 | 2.1 | — |
| **Pome** | | | | | | | | | |
| Apples | 269.8 | 305.3 | 393.4 | 98.0 | 124.4 | 26.8 | 48.7 | 41.3 | 54.2 |
| Pears (excl. Nashi) | 73.4 | 90.7 | 106.1 | 1.8 | 87.1 | 1.0 | 7.4 | 8.1 | 0.6 |
| **Stone** | | | | | | | | | |
| Apricots | 28.8 | 30.7 | 42.4 | 2.5 | 6.5 | 0.5 | 32.1 | 0.5 | 0.4 |
| Cherries | 27.2 | 22.7 | 34.0 | 13.8 | 8.3 | — | 8.4 | 1.1 | 2.2 |
| Nectarines | 37.0 | 40.1 | 41.2 | 14.0 | 12.3 | 4.8 | 3.6 | 6.4 | 0.1 |
| Peaches | 50.0 | 50.3 | 60.1 | 15.6 | 27.4 | 5.2 | 8.2 | 3.7 | — |
| Plums and prunes | 31.9 | 33.4 | 38.6 | 16.8 | 5.0 | 3.1 | 6.6 | 7.0 | — |
| **Other orchard n.e.i.** | | | | | | | | | |
| Avocados | 39.5 | 37.5 | 42.1 | 7.7 | 3.3 | 24.7 | 2.4 | 3.9 | — |
| Mangoes | 73.0 | 73.3 | 69.6 | 0.7 | — | 54.9 | — | 4.8 | — |
| Almonds | 28.5 | 40.0 | 39.1 | 0.8 | 24.9 | — | 13.4 | — | — |
| Macadamia | 40.7 | 61.6 | 54.8 | 36.8 | — | 18.0 | — | — | — |
| **Small, berry and tropical fruit** | | | | | | | | | |
| Kiwifruit | 5.7 | 5.3 | 6.0 | 0.8 | 3.6 | 0.4 | 0.1 | 1.2 | — |
| Raspberries | 2.9 | 3.0 | 3.3 | 0.3 | 2.0 | 0.3 | — | — | 0.7 |
| Strawberries | 45.6 | 54.1 | 56.0 | 0.9 | 13.3 | 22.0 | 8.3 | 10.8 | 0.6 |
| Bananas | 254.7 | 224.9 | 216.6 | 53.0 | — | 140.6 | — | 18.9 | — |
| Pawpaw | 6.9 | 6.8 | 6.3 | 0.1 | — | 5.7 | — | 0.4 | — |
| **Grapes** | | | | | | | | | |
| Winemaking | 358.4 | 503.0 | 531.8 | 125.8 | 89.7 | 0.4 | 290.1 | 22.7 | 3.0 |
| Drying | 68.5 | 115.9 | 66.3 | 11.7 | 50.6 | — | 2.9 | 1.1 | — |
| Table and other | 84.2 | 95.4 | 123.4 | 19.3 | 74.4 | 14.0 | 5.3 | 5.4 | — |
| **Other fruit n.e.c.** | 106.3 | 101.8 | 110.1 | 25.8 | 18.4 | 53.4 | 7.7 | 2.9 | 1.2 |
| **Total fruit and nuts** | **1 937.4** | **2 213.2** | **2 422.7** | **579.4** | **609.7** | **450.8** | **555.7** | **144.8** | **63.0** |

(a) Includes the Northern Territory and the Australian Capital Territory.

VEGETABLES, Production, Area and Yield—Years ended 31 March

| | AUST. | | | 1997 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1995 | 1996 | 1997 | NSW | Vic. | Qld | SA | WA | Tas. | NT | ACT |
| **Asparagus** | | | | | | | | | | | |
| Production (t) | 6 216 | 7 415 | 7 884 | 2 534 | 4 252 | 821 | 123 | 111 | 13 | 31 | — |
| Area (ha) | 1 785 | 1 877 | 2 139 | 483 | 1 276 | 279 | 25 | 44 | 11 | 22 | — |
| Yield (t/ha) | 3.5 | 4.0 | 3.7 | 5.3 | 3.3 | 2.9 | 5.0 | 2.5 | 1.2 | 1.4 | — |
| **Beans, French and runner** | | | | | | | | | | | |
| Production (t) | 29 407 | 32 014 | 37 609 | 2 197 | 2 038 | 18 391 | 128 | 690 | 14 154 | 11 | — |
| Area (ha) | 6 057 | 7 102 | 7 899 | 821 | 633 | 4 523 | 37 | 212 | 1 668 | 6 | — |
| Yield (t/ha) | 4.9 | 4.5 | 4.8 | 2.7 | 3.2 | 4.1 | 3.5 | 3.3 | 8.5 | 1.8 | — |
| **Beetroot** | | | | | | | | | | | |
| Production (t) | 27 833 | 28 015 | 29 304 | 2 871 | 664 | 25 524 | 117 | 128 | — | — | — |
| Area (ha) | 878 | 956 | 894 | 119 | 51 | 708 | 9 | 8 | — | — | — |
| Yield (t/ha) | 31.7 | 29.3 | 32.8 | 24.1 | 13.0 | 36.1 | 13.0 | 16.8 | — | — | — |
| **Broccoli** | | | | | | | | | | | |
| Production (t) | 31 694 | 37 804 | 40 546 | 3 407 | 19 198 | 9 116 | 1 828 | 2 649 | 4 253 | — | 96 |
| Area (ha) | 5 673 | 6 979 | 6 961 | 733 | 3 384 | 1 619 | 305 | 384 | 515 | — | 20 |
| Yield (t/ha) | 5.6 | 5.4 | 5.8 | 4.6 | 5.7 | 5.6 | 6.0 | 6.9 | 8.3 | — | 4.8 |
| **Cabbages and brussels sprouts** | | | | | | | | | | | |
| Production (t) | 76 051 | 76 213 | 66 001 | 11 124 | 25 375 | 13 920 | 7 131 | 5 075 | 3 376 | — | — |
| Area (ha) | 2 379 | 2 493 | 2 152 | 417 | 783 | 435 | 279 | 148 | 139 | — | — |
| Yield (t/ha) | 32.0 | 30.6 | 30.7 | 26.7 | 32.4 | 32.0 | 31.1 | 34.3 | 24.3 | — | — |
| **Capsicum, chillies and peppers** | | | | | | | | | | | |
| Production (t) | 27 662 | 30 398 | 32 221 | 559 | 3 353 | 24 403 | 1 542 | 2 226 | 8 | 130 | — |
| Area (ha) | 1 574 | 1 649 | 1 875 | 70 | 215 | 1 325 | 113 | 139 | 1 | 12 | — |
| Yield (t/ha) | 17.6 | 18.4 | 17.2 | 8.0 | 15.6 | 18.4 | 13.6 | 16.0 | 13.8 | 10.8 | — |
| **Carrots** | | | | | | | | | | | |
| Production (t) | 238 539 | 249 926 | 257 405 | 13 765 | 99 274 | 28 522 | 40 307 | 52 992 | 22 546 | — | — |
| Area (ha) | 6 887 | 7 564 | 7 046 | 630 | 2 620 | 1 033 | 970 | 1 319 | 474 | — | — |
| Yield (t/ha) | 34.6 | 33.0 | 36.5 | 21.8 | 37.9 | 27.6 | 41.5 | 40.2 | 47.6 | — | — |
| **Cauliflowers** | | | | | | | | | | | |
| Production (t) | 66 105 | 71 052 | 64 391 | 11 691 | 17 409 | 10 518 | 3 709 | 16 213 | 4 851 | — | — |
| Area (ha) | 3 741 | 3 968 | 3 997 | 635 | 1 243 | 519 | 220 | 1 076 | 306 | — | — |
| Yield (t/ha) | 17.7 | 17.9 | 16.1 | 18.4 | 14.0 | 20.3 | 16.9 | 15.1 | 15.9 | — | — |
| **Celery** | | | | | | | | | | | |
| Production (t) | 38 631 | 47 996 | 44 873 | 195 | 22 403 | 11 717 | 4 247 | 5 922 | 389 | — | — |
| Area (ha) | 765 | 896 | 953 | 8 | 514 | 243 | 46 | 125 | 16 | — | — |
| Yield (t/ha) | 50.5 | 53.6 | 47.1 | 24.4 | 43.6 | 48.1 | 92.3 | 47.3 | 24.3 | — | — |
| **Cucumbers** | | | | | | | | | | | |
| Production (t) | 14 144 | 16 523 | 15 876 | 5 264 | 795 | 6 778 | 1 153 | 1 726 | 157 | 4 | — |
| Area (ha) | 1 020 | 1 106 | 1 002 | 409 | 37 | 423 | 46 | 85 | 2 | — | — |
| Yield (t/ha) | 13.9 | 14.9 | 15.9 | 12.9 | 21.6 | 16.0 | 25.2 | 20.4 | 87.1 | — | — |
| **Peas** | | | | | | | | | | | |
| Processing | | | | | | | | | | | |
| Production (t) | 43 603 | 36 179 | 42 207 | 4 689 | 11 | 3 399 | — | 1 751 | 32 356 | — | — |
| Area (ha) | 9 350 | 7 748 | 8 737 | 1 114 | 10 | 596 | — | 803 | 6 213 | — | — |
| Yield (t/ha) | 4.7 | 4.7 | 4.8 | 4.2 | 1.1 | 5.7 | — | 2.2 | 5.2 | — | — |
| Sold in pod | | | | | | | | | | | |
| Production (t) | 1 973 | 1 175 | 1 380 | 414 | 195 | 167 | 42 | 8 | 553 | — | — |
| Area (ha) | 469 | 494 | 580 | 230 | 146 | 61 | 18 | 5 | 119 | — | — |
| Yield (t/ha) | 4.2 | 2.4 | 2.4 | 1.8 | 1.3 | 2.7 | 2.4 | 1.6 | 4.6 | — | — |

VEGETABLES, Production, Area and Yield—Years ended 31 March *continued*

| | AUST. | | | 1997 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *1995* | *1996* | *1997* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* | *NT* | *ACT* |
| **Lettuces** | | | | | | | | | | | |
| Production (t) | 92 454 | 107 243 | 110 834 | 12 967 | 36 557 | 42 251 | 6 085 | 10 197 | 2 457 | 180 | 140 |
| Area (ha) | 4 012 | 4 690 | 4 730 | 650 | 1 969 | 1 352 | 267 | 325 | 141 | 16 | 10 |
| Yield (t/ha) | 23.0 | 22.9 | 23.4 | 19.9 | 18.6 | 31.2 | 22.8 | 31.4 | 17.4 | 11.3 | 14.0 |
| **Marrows, squashes and zucchinis** | | | | | | | | | | | |
| Production (t) | 13 453 | 13 956 | 13 442 | 1 859 | 1 035 | 8 942 | 163 | 750 | 669 | 19 | 5 |
| Area (ha) | 1 690 | 1 825 | 2 006 | 235 | 171 | 1 387 | 39 | 105 | 65 | 3 | 2 |
| Yield (t/ha) | 8.0 | 7.6 | 6.7 | 7.9 | 6.1 | 6.4 | 4.1 | 7.1 | 10.3 | 6.3 | 2.5 |
| **Melons** | | | | | | | | | | | |
| Water | | | | | | | | | | | |
| Production (t) | 72 263 | 79 279 | 86 658 | 6 058 | 1 155 | 55 262 | 463 | 22 950 | — | 771 | — |
| Area (ha) | 3 963 | 4 228 | 4 346 | 339 | 57 | 3 037 | 23 | 858 | — | 34 | — |
| Yield (t/ha) | 18.2 | 18.8 | 19.9 | 17.9 | 20.3 | 18.2 | 20.1 | 26.8 | — | 22.7 | — |
| Rock and cantaloupe | | | | | | | | | | | |
| Production (t) | 69 925 | 72 294 | 71 873 | 11 094 | 7 856 | 36 890 | 3 703 | 10 454 | — | 1 877 | — |
| Area (ha) | 3 099 | 3 093 | 3 162 | 577 | 338 | 1 369 | 204 | 569 | — | 106 | — |
| Yield (t/ha) | 22.6 | 23.4 | 22.7 | 19.2 | 23.2 | 27.0 | 18.1 | 18.4 | — | 17.8 | — |
| **Mushrooms** | | | | | | | | | | | |
| Production (t) | 33 337 | 34 945 | 35 485 | 12 260 | 14 237 | 4 165 | 2 653 | 1 315 | 856 | — | — |
| Area (ha) | 166 | 165 | 145 | 53 | 61 | 15 | 10 | 6 | 1 | — | — |
| Yield (t/ha) | 200.8 | 211.8 | 244.1 | 231.3 | 233.4 | 277.7 | 265.3 | 219.2 | 658.2 | — | — |
| **Onions, white and brown** | | | | | | | | | | | |
| Production (t) | 200 432 | 244 484 | 196 491 | 13 816 | 15 615 | 21 789 | 65 274 | 20 321 | 59 677 | — | — |
| Area (ha) | 5 165 | 5 492 | 4 756 | 719 | 529 | 651 | 1 276 | 389 | 1 192 | — | — |
| Yield (t/ha) | 38.8 | 44.5 | 41.3 | 19.2 | 29.5 | 33.5 | 51.2 | 52.2 | 50.1 | — | — |
| **Parsnips** | | | | | | | | | | | |
| Production (t) | 6 507 | 9 358 | 10 263 | 460 | 7 238 | 84 | 339 | 851 | 1 290 | — | — |
| Area (ha) | 395 | 418 | 464 | 41 | 286 | 8 | 19 | 70 | 40 | — | — |
| Yield (t/ha) | 16.5 | 22.4 | 22.1 | 11.2 | 25.3 | 10.2 | 18.0 | 12.2 | 32.1 | — | — |
| **Potatoes** | | | | | | | | | | | |
| Production (t) | 1 122 417 | 1 308 099 | 1 286 130 | 136 173 | 315 727 | 115 435 | 285 344 | 116 004 | 317 448 | — | — |
| Area (ha) | 37 642 | 41 812 | 41 083 | 5 959 | 11 352 | 4 697 | 8 618 | 3 022 | 7 436 | — | — |
| Yield (t/ha) | 29.8 | 31.3 | 31.3 | 22.9 | 27.8 | 24.6 | 33.1 | 38.4 | 42.7 | — | — |
| **Pumpkins** | | | | | | | | | | | |
| Production (t) | 76 678 | 96 463 | 87 086 | 19 731 | 4 595 | 38 688 | 6 895 | 14 513 | 1 885 | 779 | — |
| Area (ha) | 5 390 | 6 628 | 6 289 | 1 379 | 313 | 3 352 | 329 | 755 | 107 | 54 | — |
| Yield (t/ha) | 14.2 | 14.6 | 13.8 | 14.3 | 14.7 | 11.5 | 20.9 | 19.2 | 17.6 | 14.6 | — |
| **Sweet corn** | | | | | | | | | | | |
| Production (t) | 74 055 | 81 901 | 64 785 | 34 273 | 7 366 | 14 822 | 1 294 | 1 668 | 5 352 | 11 | — |
| Area (ha) | 5 488 | 6 472 | 5 434 | 2 408 | 743 | 1 697 | 96 | 163 | 321 | 6 | — |
| Yield (t/ha) | 13.5 | 12.7 | 11.9 | 14.2 | 9.9 | 8.7 | 13.5 | 10.2 | 16.7 | 1.6 | — |
| **Tomatoes** | | | | | | | | | | | |
| Production (t) | 340 033 | 370 913 | 393 117 | 102 795 | 167 563 | 109 911 | 3 069 | 9 038 | 682 | 60 | — |
| Area (ha) | 8 657 | 8 580 | 8 830 | 2 035 | 2 661 | 3 753 | 150 | 218 | 11 | 2 | — |
| Yield (t/ha) | 39.3 | 43.2 | 44.5 | 50.5 | 63.0 | 29.3 | 20.4 | 41.5 | 59.8 | 30.0 | — |
| **Total area (ha)** | 129 057 | 131 421 | 129 749 | 20 640 | 30 563 | 34 663 | 13 331 | 11 114 | 19 133 | 268 | 34 |

## VEGETABLES, Gross Value—Years ended 30 June

| | AUST.(a) | | | 1996–97 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | *1994–95* | *1995–96* | *1996–97* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* |
| | $m | $m | $m | $m | $m | $m | $m | $m | $m |
| Asparagus | 36.4 | 37.7 | 37.5 | 12.5 | 18.3 | 4.9 | 0.8 | 0.7 | 0.1 |
| Beans, French and runner | 38.5 | 42.6 | 41.4 | 1.9 | 4.4 | 27.8 | 0.3 | 1.6 | 5.5 |
| Broccoli | 51.0 | 53.6 | 60.8 | 6.0 | 28.0 | 15.1 | 2.9 | 3.5 | 5.2 |
| Cabbages and brussels sprouts | r39.9 | r40.3 | 41.8 | 4.6 | 11.5 | 10.5 | 7.6 | 5.1 | 2.4 |
| Capsicums, chillies and peppers | 41.2 | 43.8 | 40.6 | 0.5 | 3.4 | 28.6 | 4.5 | 3.3 | — |
| Carrots | 132.7 | 136.4 | 142.1 | 5.6 | 61.2 | 14.5 | 20.4 | 32.1 | 8.3 |
| Cauliflowers | 44.5 | 48.3 | 48.1 | 6.0 | 11.5 | 4.8 | 3.1 | 19.9 | 2.7 |
| Celery | 21.9 | 26.1 | 31.1 | 0.1 | 16.5 | 6.2 | 3.1 | 4.7 | 0.4 |
| Cucumbers | 15.5 | 17.8 | 16.3 | 3.4 | 1.1 | 7.2 | 1.6 | 2.7 | 0.4 |
| Green peas (pod weight) | 16.5 | 14.1 | 18.1 | 2.3 | 0.4 | 1.7 | 0.1 | 0.9 | 12.8 |
| Lettuces | 69.6 | 76.8 | 75.9 | 10.9 | 20.7 | 29.5 | 4.6 | 7.4 | 2.5 |
| Marrows and zucchini | 16.8 | 19.7 | 20.2 | 2.4 | 2.4 | 10.7 | 0.4 | 1.9 | 2.4 |
| Watermelons | 23.4 | 20.3 | 29.9 | 1.9 | 0.7 | 18.0 | 0.1 | 8.8 | — |
| Rockmelons/cantaloupes | 51.5 | 53.3 | 57.7 | 6.4 | 6.8 | 25.4 | 3.2 | 13.5 | — |
| Mushrooms(b) | 125.5 | 127.9 | 131.0 | 39.0 | 59.7 | 15.0 | 11.5 | 5.7 | (c) |
| Onions, white and brown | 79.1 | 113.3 | 91.5 | 5.8 | 5.8 | 12.8 | 41.8 | 8.9 | 16.3 |
| Potatoes | 377.9 | 414.1 | 448.5 | 49.4 | 123.5 | 52.3 | 100.6 | 38.0 | 84.8 |
| Pumpkins | 29.5 | 28.2 | 37.8 | 9.7 | 1.1 | 15.6 | 3.8 | 6.5 | 0.5 |
| Sweet corn | 30.6 | 35.4 | 26.5 | 8.5 | 7.2 | 6.7 | 1.2 | 1.9 | 0.9 |
| Tomatoes | 166.2 | 176.2 | 176.9 | 16.9 | 36.6 | 111.9 | 4.8 | 5.8 | 1.0 |
| Other vegetables | r83.4 | r90.3 | 89.2 | 9.5 | 24.3 | 29.1 | 8.9 | 8.4 | 9.0 |
| **Total vegetables** | **1 491.6** | **1 616.1** | **1 663.0** | **203.2** | **445.1** | **448.2** | **225.3** | **181.3** | **155.1** |

(a) Includes the Northern Territory and the Australian Capital Territory.

(b) Incomplete; excludes Tasmania.

(c) Not available for publication; included in 'Other vegetables'.

# SECTION 7 LIVESTOCK AND LIVESTOCK PRODUCTS .....

## OVERVIEW

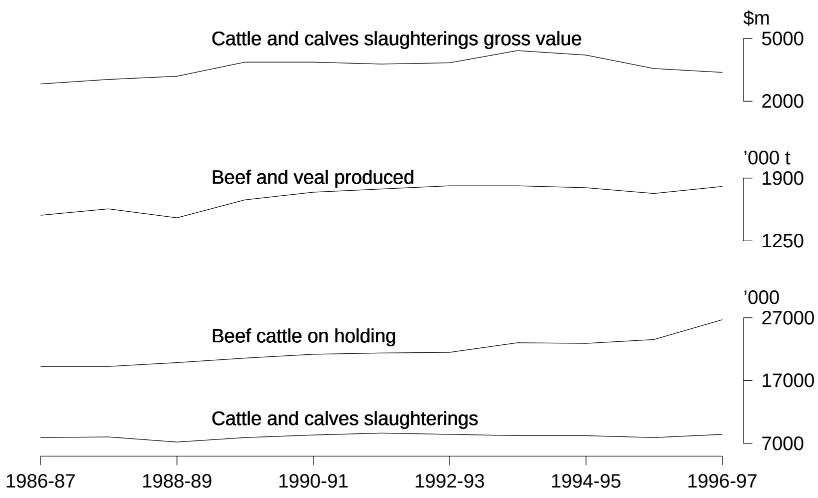
Seasonal conditions improved in the eastern States in 1996–97. Cattle stocks increased marginally but the number of sheep and lambs decreased slightly, falling below the levels of 1994–95.

The gross value of livestock slaughterings and other disposals fell marginally (1.2%) to $6,190 million, while the gross value of livestock products increased by 0.8% to $5,754 million, due mainly to higher wool prices..

## BEEF CATTLE

At 31 March 1997, there were 23.8 million beef cattle and calves, a marginal increase on the previous year. The Northern Territory, Queensland and New South Wales were the only States to record an increase in the number of beef cattle, with increases of 7.1%, 2.0% and 1.6% respectively.

While the number of beef cattle increased slightly, the number of establishments reporting beef cattle continued to fall. Establishments with beef cattle numbered 81,946 at 31 March 1997, down 1.6% on the figure recorded at 31 March 1996 (83,255).




The number of cattle and calves slaughtered in the year ended 30 June 1997 increased 6.4% to 8,442,000. As a result, production of beef and veal increased 4.1% to 1.8 million tonnes. The gross value of cattle and calves slaughtered decreased 5.2% despite the rise in production, as average gross unit values decreased.

BEEF CATTLE *continued*

Live cattle exports increased 40.3% as the industry continued to show improvement during 1996–97, mainly due to the increased exports to Asian markets such as Indonesia and the Philippines. The value of these exports was $428 million, an increase of 24.4% on 1995–96.

LIVE CATTLE EXPORTS(a)—Years ended 30 June

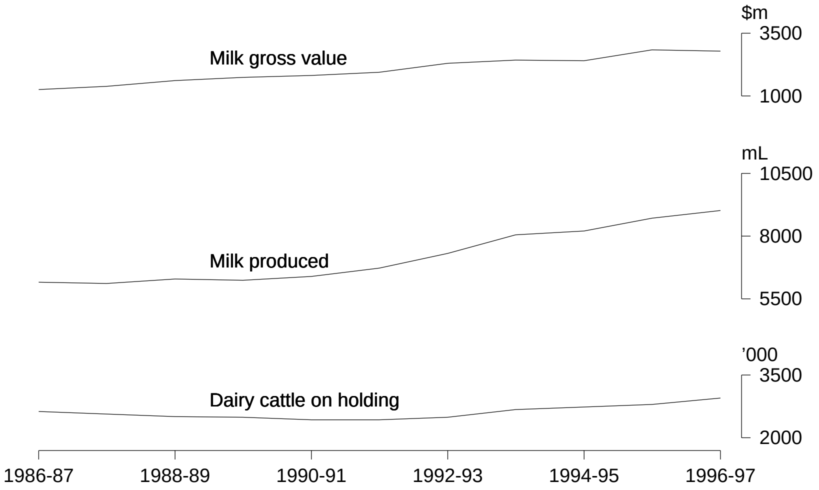
| | *1994–95* | *1995–96* | *1996–97* |
|---|---|---|---|
| Number ('000) | 385.7 | 615.9 | 863.8 |
| Gross weight ('000 t) | 136.5 | 219.0 | 313.9 |
| Gross value ($'000) | 201 948 | 343 699 | 427 721 |
| Unit value ($)(b) | 523.52 | 558.07 | 495.16 |

(a) Excludes cattle for breeding.

(b) Obtained by dividing the gross value by the number of cattle exported.

DAIRY CATTLE

The number of dairy cattle at 31 March 1997 increased by 5.3% to 3.0 million. All States recorded an increase in dairy cattle numbers, the largest being in Tasmania (7.1%) and Victoria (6.1%). The Western Australian dairy cattle herd showed a slight increase after a 4.0% fall in the year ended 31 March 1996. The dairy cattle herd accounted for 11.0% of all cattle and calves. The number of establishments reporting dairy cattle fell by 1.2% to 15,485, with the average dairy cattle herd at 191, up from 179 in 1995–96. Milk production rose by 3.5% to 9,024 million litres, with Victoria producing 62.3% of the total. The gross value of milk production decreased slightly to $2,809 million, reflecting lower overall average prices.

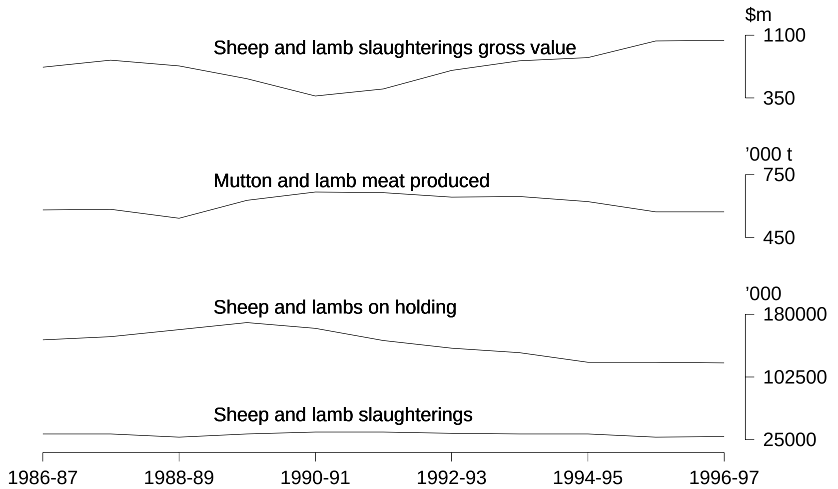


## SHEEP

Sheep and lamb numbers declined 0.7% to 120.2 million at 31 March 1997. Western Australia suffered the biggest loss in sheep numbers, down 6.7% to 27.8 million. South Australia recorded a 3.5% drop in sheep and lamb numbers.

The number of establishments reporting sheep and lambs fell by 2.1% to 56,083, with all States recording a decrease. New South Wales reported the most establishments with sheep and lambs at 19,592, down 1.7% on the figure at 31 March 1996.

Sheep and lamb slaughterings rose 1.7% to 29.3 million for the year ended 30 June 1997. Mutton and lamb meat production remained unchanged over the same period.




The gross value of sheep and lamb slaughterings remained virtually unchanged at $1,039 million. Exports of live sheep decreased by 10.9%, resulting in a fall in the value of these exports by 16.3% to $190 million. Average gross unit value fell slightly to $36.27.

### LIVE SHEEP EXPORTS(a)—Years ended 30 June

| | *1994–95* | *1995–96* | *1996–97* |
|---|---|---|---|
| Number ('000) | 5 697.0 | 5 879.9 | 5 237.2 |
| Gross weight ('000 t) | 290.2 | 296.9 | 269.8 |
| Gross value ($'000) | 184 291 | r226 913 | 189 944 |
| Unit value ($)(b) | 32.35 | 38.59 | 36.27 |

(a) Excludes sheep for breeding.

(b) Obtained by dividing the gross value by the number of sheep exported.

The number of ewes mated during 1996–97 increased marginally to 51.3 million. The number of lambs marked increased by 3.2% to 40.4 million while the proportion of lambs marked to ewes mated was 78.8%, slightly better than the 77.0% recorded in 1995–96 and well up on the 1994–95 figure of 72.2%.

SHEEP *continued*

Wool production increased by 6.8% to 731,400 tonnes. New South Wales remained Australia's largest wool producer, contributing 35.0% (256,200 tonnes) of the country's wool clip. The gross value of wool production increased by 2.8% to $2,621 million.

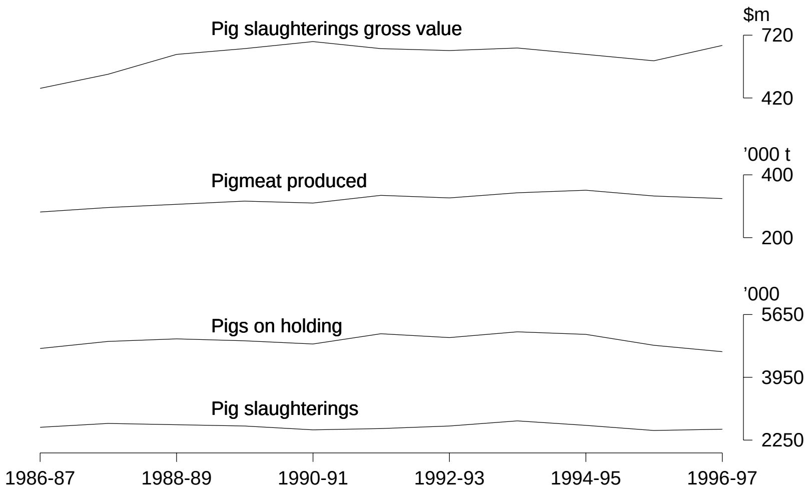

PIGS

Pig numbers remained steady at 2.6 million during 1996–97. Victoria and New South Wales were the only States to record significant increases in the number of pigs, with rises of 5.9% and 2.6% respectively.

While pig numbers where largely unchanged in 1996–97, the number of establishments reporting pigs fell 11.3% to 4,003. Restructuring of the pig industry was evident, with all States recording a decline in the number of establishments reporting pigs. Queensland and Western Australia suffered the biggest loss in numbers of establishments, recording falls of 13.9% and 12.8% respectively.

Pig slaughterings fell by 3.5% to 4.7 million, and pig meat production decreased by 2.4% to 326,000 tonnes.

The gross value of pig slaughterings rose by 12.3% to $671 million. Most of this increase was in Victoria, where gross value of production increased 19.1% to $169 million, while New South Wales experienced a 14.2% increase to 214 million.



## POULTRY

Total poultry numbers at 31 March 1997 increased by 7.0% to 83.9 million. The total number of chickens on holdings increased 7.5% to 81.4 million, and meat strain chickens increased by 8.1% to 67.4 million. The number of chickens slaughtered increased by 2.7% to 345.6 million, and the production of chicken meat increased by 3.1% to 496,000 tonnes. The gross value of poultry slaughterings rose by 11.1% to $1,053 million.

Egg production rose by 1.9% to 177.4 million dozen. The gross value of egg production rose by 7.0% to $275 million.

## BEEKEEPING

The number of beekeepers decreased by 12.2% to 1,186 during 1996–97. Despite the fall in the number of beekeepers, the amount of honey produced increased 4.3% to 27,000 tonnes in 1996–97. Average production per hive increased to 71.0 kg in 1996–97, up from 68.2 kg in 1995–96. New South Wales was the biggest contributor to the Australian beekeeping industry, contributing 46.7% of the total honey produced. New South Wales produced 12,620 tonnes of honey, up 6.2% on the 11,884 tonnes reported in 1995–96.

The gross value of honey rose by 17.7% to $46 million with New South Wales increasing by 18.1% to $21 million.

Beeswax production decreased by 17.4% to 492 tonnes from the high of 596 tonnes the previous year. The gross value decreased by 15.6% to $3 million.

### LIVESTOCK—Years ended 31 March

| | AUST. | | | 1997 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *1995* | *1996* | *1997* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* | *NT* | *ACT* |
| *Livestock* | '000 | '000 | '000 | '000 | '000 | '000 | '000 | '000 | '000 | '000 | '000 |
| Milk cattle(a) | 2 740 | 2 808 | 2 958 | 393 | 1 784 | 292 | 157 | 122 | 211 | — | — |
| Meat cattle | 22 991 | 23 569 | 23 822 | 6 118 | 2 627 | 10 130 | 1 024 | 1 787 | 515 | 1 609 | 13 |
| Sheep and lambs | 120 862 | 121 116 | 120 228 | 42 388 | 22 325 | 10 528 | 13 106 | 27 821 | 3 977 | (b) | 84 |
| Pigs | 2 653 | 2 526 | 2 555 | 729 | 485 | 600 | 417 | 297 | 24 | 2 | — |
| Deer | 144 | 136 | 152 | 44 | 40 | 20 | 21 | 12 | 17 | — | — |
| Poultry | 67 682 | 78 417 | 83 942 | 41 188 | 17 204 | 13 097 | 4 878 | 6 838 | 310 | 230 | 197 |
| Horses | | | | | | | | | | | |
| Stud | 66 | 80 | 69 | 24 | 16 | 18 | 4 | 5 | 1 | — | — |
| Other | (b) | (b) | 165 | 61 | 15 | 63 | 6 | 11 | 3 | 6 | 1 |
| *Total* | *(b)* | *(b)* | *234* | *85* | *32* | *81* | *9* | *16* | *4* | *6* | *1* |

(a) Excluding house cows.

(b) Data not collected.

## LIVESTOCK SLAUGHTERINGS AND PRODUCTS—Years ended 30 June

| | AUST. | | | 1996–97 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *1994–95* | *1995–96* | *1996–97* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* | *NT* | *ACT* |
| **Livestock slaughterings(a)(b)** | | | | | | | | | | | |
| Cattle ('000) | 7 220 | 6 950 | 7 300 | 2 040 | 1 676 | 2 518 | 369 | 407 | 204 | 58 | 28 |
| Calves ('000) | 1 048 | 985 | 1 142 | 257 | 697 | 121 | 16 | 6 | 44 | 1 | 1 |
| Sheep ('000) | 17 500 | 14 581 | 14 451 | 5 241 | 2 807 | 977 | 2 312 | 2 635 | 384 | — | 95 |
| Lambs ('000) | 15 289 | 14 223 | 14 837 | 3 621 | 5 979 | 785 | 1 754 | 2 081 | 364 | — | 254 |
| Pigs ('000) | 5 120 | 4 823 | 4 654 | 1 338 | 1 197 | 1 002 | 427 | 550 | 75 | 7 | 4 |
| Chicken ('000)(c)(d) | 330 495 | 336 380 | 345 554 | 133 364 | 86 733 | 61 089 | 28 008 | 36 360 | n.p. | n.p. | n.p. |
| **Livestock products(a)** | | | | | | | | | | | |
| Meat(e) | | | | | | | | | | | |
| Beef ('000 t) | 1 766 | 1 711 | 1 778 | 471 | 374 | 688 | 86 | 91 | 52 | 11 | 5 |
| Veal ('000 t) | 38 | 34 | 38 | 16 | 14 | 6 | 1 | — | 1 | — | — |
| Mutton ('000 t) | 354 | 310 | 298 | 109 | 56 | 20 | 52 | 52 | 8 | — | 2 |
| Lamb ('000 t) | 268 | 265 | 275 | 67 | 111 | 14 | 35 | 36 | 7 | — | 5 |
| Pigmeat ('000 t) | 351 | 334 | 326 | 89 | 86 | 74 | 30 | 39 | 5 | n.p. | n.p. |
| Chicken meat ('000 t) (d)(f) | 467 | 481 | 496 | 200 | 130 | 80 | 39 | 47 | n.p. | n.p. | n.p. |
| Wool | | | | | | | | | | | |
| Shorn wool (incl. crutchings) (t)(g) | r679 435 | 641 290 | 685 345 | 242 357 | 131 682 | 47 008 | 84 434 | 160 076 | 19 503 | — | 284 |
| Other wool (t)(h) | 48 511 | 43 636 | 46 090 | 13 802 | 13 524 | 2 650 | 6 360 | 8 613 | 1 123 | — | 18 |
| *Total wool produced (t)* | *r727 946* | *684 926* | 731 435 | 256 159 | 145 206 | 49 659 | 90 794 | 168 689 | 20 626 | — | 302 |
| Whole milk (mill. L)(i) | 8 206 | 8 716 | 9 024 | 1 192 | 5 622 | 797 | 535 | 349 | 529 | n.p. | (j) |
| Eggs ('000 doz.) | 177 288 | 174 053 | 177 409 | 74 870 | 44 670 | 22 225 | 10 706 | 15 684 | 4 001 | 1 933 | 3 319 |
| **Beekeeping** | | | | | | | | | | | |
| Honey produced (t) | 18 839 | 25 925 | 27 044 | 12 620 | 4 403 | 4 190 | 3 036 | 1 729 | 1 012 | 41 | 13 |
| Beeswax produced (t) | 341 | 596 | 492 | 234 | 76 | 68 | 58 | 40 | 14 | 2 | — |

(a) Source: *Livestock Products, Australia* (Cat no. 7215.0).

(b) Includes estimates of animals slaughtered on farms and by country butchers.

(c) Comprises broilers, fryers and roasters.

(d) Excludes Tasmania, the Northern Territory and the Australian Capital Territory.

(e) Dressed carcass weight, excluding offal.

(f) Dressed weight of whole birds, pieces and giblets.

(g) Unpublished ABS Data: ABS Brokers and Dealers collection of wool receivals, purchases and sales.

(h) Comprises dead and fellmongered wool and wool exported on skins.

(i) Source: Australian Dairy Corporation.

(j) Australian Capital Territory data is included in New South Wales.

CATTLE, By Type and Number of Establishments—Years ended 31 March

| | AUST. | | | 1997 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *1995* | *1996* | *1997* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* | *NT* | *ACT* |
| | | | | CATTLE | | | | | | | |
| **Milk cattle** | | | | | | | | | | | |
| Cows in milk and dry ('000) | 1 821 | 1 884 | 1 977 | 244 | 1 229 | 194 | 101 | 71 | 137 | — | — |
| Other milk cattle ('000) | 919 | 923 | 982 | 149 | 555 | 98 | 56 | 51 | 73 | — | — |
| *Total milk cattle ('000)(a)* | *2 740* | *2 808* | *2 958* | *393* | *1 784* | *292* | *157* | *122* | *211* | — | — |
| **Meat cattle** | | | | | | | | | | | |
| Intended for service ('000) | 555 | 553 | 553 | 124 | 66 | 225 | 27 | 46 | 12 | 53 | — |
| Under one year ('000) | 5 806 | 5 768 | 6 047 | 1 783 | 746 | 2 236 | 283 | 481 | 160 | 353 | 4 |
| Cows and heifers one year and over ('000) | 11 213 | 11 667 | 11 931 | 3 040 | 1 286 | 4 962 | 528 | 928 | 242 | 939 | 7 |
| Other cattle one year and over ('000) | 5 418 | 5 581 | 5 291 | 1 171 | 529 | 2 706 | 186 | 332 | 101 | 264 | 1 |
| *Total meat cattle ('000)* | *22 991* | *23 569* | *23 822* | *6 118* | *2 627* | *10 130* | *1 024* | *1 787* | *515* | *1 609* | *13* |
| **Total cattle and calves ('000)(a)** | **25 731** | **26 377** | **26 780** | **6 511** | **4 411** | **10 422** | **1 181** | **1 909** | **725** | **1 609** | **13** |
| **Proportion of total herd** | | | | | | | | | | | |
| Milk cattle (%) | 10.7 | 10.6 | 11.0 | 6.0 | 40.4 | 2.8 | 13.3 | 6.4 | 29.0 | — | 2.3 |
| Meat cattle (%) | 89.4 | 89.4 | 89.0 | 94.0 | 59.6 | 97.2 | 86.7 | 93.6 | 71.0 | 100.0 | 98.5 |
| | | | | NUMBER OF ESTABLISHMENTS WITH AGRICULTURAL ACTIVITY REPORTING CATTLE | | | | | | | |
| **Milk cattle** | | | | | | | | | | | |
| Cows in milk and dry | 14 227 | 14 255 | 14 192 | 2 072 | 7 934 | 2 032 | 865 | 462 | 825 | 1 | 1 |
| Other milk cattle | 14 035 | 13 787 | 14 005 | 2 054 | 7 862 | 1 899 | 874 | 462 | 853 | — | 1 |
| *Total milk cattle(b)* | *15 445* | *15 667* | *15 485* | *2 313* | *8 585* | *2 194* | *964* | *483* | *944* | *1* | *1* |
| **Meat cattle** | | | | | | | | | | | |
| Intended for service | 65 170 | 63 483 | 62 885 | 22 282 | 13 989 | 15 939 | 4 132 | 4 014 | 2 269 | 204 | 56 |
| Under one year | 68 758 | 66 825 | 65 190 | 23 224 | 14 429 | 16 255 | 4 421 | 4 093 | 2 522 | 194 | 52 |
| Cows and heifers one year and over | 71 870 | 71 926 | 71 766 | 25 877 | 15 965 | 17 612 | 4 849 | 4 571 | 2 619 | 213 | 60 |
| Other cattle one year and over | 53 406 | 55 769 | 54 086 | 17 957 | 12 231 | 15 111 | 3 305 | 3 132 | 2 121 | 195 | 34 |
| *Total meat cattle* | *84 042* | *83 255* | *81 946* | *28 492* | *19 716* | *19 507* | *5 588* | *5 177* | *3 175* | *227* | *64* |
| **Total establishments(b)** | **90 076** | **89 663** | **88 792** | **29 466** | **23 781** | **20 441** | **6 001** | **5 280** | **3 532** | **227** | **64** |

(a) Excluding house cows and heifers.

(b) Excludes establishments with house cows and heifers only.

SHEEP, By Type, Lambing and Number of Establishments—Years ended 31 March

| | AUST. | | | 1997 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *1995* | *1996* | *1997* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* | *NT* | *ACT* |
| | | | | SHEEP | | | | | | | |
| **Sheep and lambs** | | | | | | | | | | | |
| Sheep ('000) | 94 030 | 91 706 | 89 767 | 31 195 | 17 071 | 8 292 | 9 566 | 20 682 | 2 892 | (a) | 68 |
| Lambs and hoggets under one year ('000) | 26 830 | 29 410 | 30 461 | 11 193 | 5 253 | 2 236 | 3 540 | 7 139 | 1 085 | (a) | 15 |
| **Total sheep and lambs ('000)** | **120 862** | **121 116** | **120 228** | **42 388** | **22 325** | **10 528** | **13 106** | **27 821** | **3 977** | **(a)** | **84** |
| | | | | LAMBING | | | | | | | |
| Ewes actually mated ('000)(b) | 52 528 | 50 874 | 51 291 | 18 238 | 8 959 | 3 669 | 6 180 | 12 735 | 1 481 | (a) | 30 |
| Lambs marked ('000) | 37 943 | 39 187 | 40 436 | 14 829 | 7 569 | 2 365 | 5 087 | 9 248 | 1 316 | (a) | 23 |
| Proportion of lambs marked to ewes mated (%) | 72.2 | 77.0 | 78.8 | 81.3 | 84.5 | 64.4 | 82.3 | 72.6 | 88.9 | (a) | 76.1 |
| Ewes intended to be mated ('000)(c) | 51 900 | 52 917 | 53 780 | 19 204 | 9 339 | 4 079 | 6 465 | 13 094 | 1 567 | (a) | 32 |
| | | | | NUMBER OF ESTABLISHMENTS WITH AGRICULTURAL ACTIVITY REPORTING SHEEP | | | | | | | |
| **Sheep and lambs** | | | | | | | | | | | |
| Sheep | 55 167 | 56 279 | 54 945 | 19 260 | 13 890 | 2 590 | 8 603 | 8 630 | 1 914 | (a) | 58 |
| Lambs and hoggets under one year | 44 238 | 45 763 | 46 227 | 16 309 | 11 302 | 2 022 | 7 368 | 7 580 | 1 596 | (a) | 50 |
| **Total establishments** | **56 878** | **57 313** | **56 083** | **19 592** | **14 327** | **2 618** | **8 811** | **8 727** | **1 949** | **(a)** | **59** |

(a) Data not collected.

(b) Ewes mated to produce lambs marked in the season shown.

(c) Forecast made at the beginning of each season.

## PIGS AND ESTABLISHMENTS(a)—Years ended 31 March

| | AUST. | | | 1997 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *1995* | *1996* | *1997* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* | *NT* | *ACT* |
| PIGS | | | | | | | | | | | |
| **Pigs** | | | | | | | | | | | |
| Boars | (b) | (b) | 20 | 6 | 4 | 4 | 3 | 3 | — | — | — |
| Breeding sows and gilts | (b) | (b) | 303 | 91 | 58 | 68 | 48 | 36 | 3 | — | — |
| Other | (b) | (b) | 2 232 | 633 | 424 | 528 | 366 | 259 | 20 | 2 | — |
| **Total** | **2 653** | **2 526** | **2 555** | **729** | **485** | **600** | **417** | **297** | **24** | **2** | **—** |
| NUMBER OF ESTABLISHMENTS WITH AGRICULTURAL ACTIVITY REPORTING PIGS | | | | | | | | | | | |
| **Pigs** | | | | | | | | | | | |
| Boars | (b) | (b) | 3 203 | 831 | 443 | 646 | 677 | 518 | 83 | 5 | — |
| Breeding sows and gilts | (b) | (b) | 3 547 | 926 | 478 | 734 | 735 | 578 | 91 | 5 | — |
| Other | (b) | (b) | 3 792 | 966 | 523 | 794 | 785 | 625 | 94 | 5 | — |
| **Total establishments** | **5 140** | **4 511** | **4 003** | **1 032** | **556** | **821** | **821** | **661** | **107** | **5** | **—** |

(a) Number of establishments with agricultural activity reporting pigs.

(b) Data not collected.

## POULTRY—Years ended 31 March

| | AUST.(a) | | | 1997 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *1995* | *1996* | *1997* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* | *NT* | *ACT* |
| **Chickens** | | | | | | | | | | | |
| For egg production ('000) | 11 148 | 13 413 | 13 772 | 5 244 | 3 419 | 2 639 | 872 | 1 269 | 287 | 133 | 197 |
| For meat production ('000) | 54 445 | 62 331 | 67 373 | 33 973 | 13 374 | 10 432 | 3 981 | 5 517 | n.p. | 97 | — |
| *Total chickens ('000)* | *65 593* | *75 744* | 81 432 | 39 217 | 16 793 | 13 070 | 4 852 | 6 786 | 287 | 230 | 197 |
| **Other poultry ('000)** | *2 088* | *2 673* | 2 510 | 1 971 | 411 | 27 | 26 | 52 | 23 | — | — |
| **Total poultry ('000)** | **67 682** | **78 417** | **83 942** | **41 188** | **17 204** | **13 097** | **4 878** | **6 838** | **310** | **230** | **197** |

(a) Excludes some establishments in Tasmania.

## BEEKEEPING—Years ended 31 March

| | AUST. | | | 1996 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *1994* | *1995* | *1996* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* | *NT* | *ACT* |
| **Beekeepers (no.)** | 1 271 | 1 351 | 1 186 | 527 | 212 | 218 | 127 | 66 | 30 | 2 | 4 |
| **Beehives** | | | | | | | | | | | |
| Productive ('000)(a) | 314 | 380 | 381 | 158 | 65 | 72 | 52 | 20 | 12 | 2 | — |
| Unproductive ('000) | 151 | 109 | 86 | 34 | 13 | 25 | 5 | 6 | 3 | — | — |
| *Total ('000)* | *465* | *489* | *466* | *192* | *77* | *96* | *57* | *27* | *15* | *2* | — |
| **Honey** | | | | | | | | | | | |
| Quantity produced (t) | 18 839 | 25 925 | 27 044 | 12 620 | 4 403 | 4 190 | 3 036 | 1 729 | 1 012 | 41 | 13 |
| Average production per productive beehive (kg) | 60.0 | 68.2 | 71.0 | 80.0 | 67.7 | 58.2 | 58.4 | 84.5 | 85.1 | 19.2 | 45.4 |
| **Beeswax (t)** | 341 | 596 | 492 | 234 | 76 | 68 | 58 | 40 | 14 | 2 | — |

(a) Beehives from which honey is taken.

## GROSS VALUE, LIVESTOCK SLAUGHTERINGS AND PRODUCTS—Years ended 30 June

| | AUST. | | | 1996–97 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *1994–95* | *1995–96* | *1996–97* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* | *NT* | *ACT* |
| | $m | $m | $m | $m | $m | $m | $m | $m | $m | $m | $m |
| LIVESTOCK SLAUGHTERINGS AND OTHER DISPOSALS(a) | | | | | | | | | | | |
| Cattle and calves(b) | 4 213.5 | 3 575.9 | 3 390.1 | 772.6 | 662.5 | 1 232.9 | 137.6 | 282.1 | 75.1 | 225.9 | 1.4 |
| Sheep and lambs(c) | 836.8 | 1 035.7 | 1 038.9 | 247.5 | 347.3 | 53.2 | 134.5 | 237.1 | 18.9 | — | 0.4 |
| Pigs(d) | 630.6 | 597.8 | 671.1 | 214.3 | 168.6 | 160.3 | 54.4 | 73.5 | n.p. | n.p. | — |
| Poultry(d) | 902.0 | 948.1 | 1 053.3 | (e)467.5 | 240.7 | 166.5 | 89.2 | 89.4 | n.p. | n.p. | (f) |
| Other(g) | 14.2 | 14.7 | 13.6 | 7.9 | 0.6 | 0.9 | 1.0 | 3.1 | n.p. | 0.1 | — |
| **Total slaughterings and other disposals(h)** | **6 618.8** | **6 192.7** | **6 190.1** | **1 709.8** | **1 419.6** | **1 613.9** | **416.6** | **685.1** | **117.1** | **226.1** | **1.9** |
| LIVESTOCK PRODUCTS | | | | | | | | | | | |
| Wool | | | | | | | | | | | |
| Shorn | 3 200.7 | r2 475.3 | 2 536.1 | 962.0 | 487.8 | 175.9 | 270.0 | 559.5 | 79.8 | — | 1.2 |
| Other(i) | 118.5 | 84.5 | 85.0 | 27.4 | 25.1 | 5.0 | 10.2 | 15.0 | 2.3 | — | — |
| *Total wool* | *3 319.3* | *r2 559.7* | *2 621.2* | *989.4* | *512.9* | *180.8* | *280.2* | *574.6* | 82.1 | — | *1.2* |
| Liquid whole milk used for | | | | | | | | | | | |
| Manufacturing | 1 511.2 | 1 897.8 | 1 830.2 | 160.4 | 1 330.8 | 107.3 | 84.0 | 38.8 | 108.8 | — | — |
| Human consumption(j) | 907.9 | 950.5 | 978.7 | 333.6 | 206.1 | 222.2 | 88.7 | 103.8 | 23.8 | n.p. | 0.5 |
| *Total wholemilk production(j)* | *2 419.1* | *2 848.3* | *2 808.9* | 494.0 | 1 536.9 | 329.5 | 172.7 | 142.6 | 132.6 | n.p. | 0.5 |
| Eggs(j) | 230.6 | 256.9 | 274.9 | 123.1 | 57.8 | 36.7 | 14.4 | 29.3 | 9.0 | n.p. | 4.7 |
| Honey | 24.6 | 39.0 | 45.9 | 21.5 | 7.5 | 7.0 | 5.2 | 2.6 | 2.0 | n.p. | — |
| Beeswax | 1.5 | 3.2 | 2.7 | 1.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.1 | — | — |
| **Total livestock products(k)** | **5 995.0** | **r5 707.3** | **5 735.6** | **1 629.3** | **2 115.5** | **554.4** | **472.7** | **749.3** | **225.8** | **n.p.** | **6.5** |

(a) Includes net exports of livestock.

(b) Includes dairy cattle slaughtered.

(c) Excludes value of wool on skins.

(d) Excludes pigs and poultry in the Northern Territory and Tasmania.

(e) Includes the Australian Capital Territory.

(f) Included in New South Wales.

(g) Excludes goats in Tasmania.

(h) Excludes the Northern Territory pigs and poultry.

(i) Includes dead and fellmongered wool on skins.

(j) Excludes the Northern Territory.

(k) Excludes milk and eggs in the Northern Territory.

# SECTION 8 APPARENT CONSUMPTION OF FOODSTUFFS

## MEAT, MEAT PRODUCTS AND POULTRY

The apparent per capita consumption of total meat and meat products increased by 5.9% to 75.9 kg in 1996–97, compared with a fall of 5.6% in 1995–96.

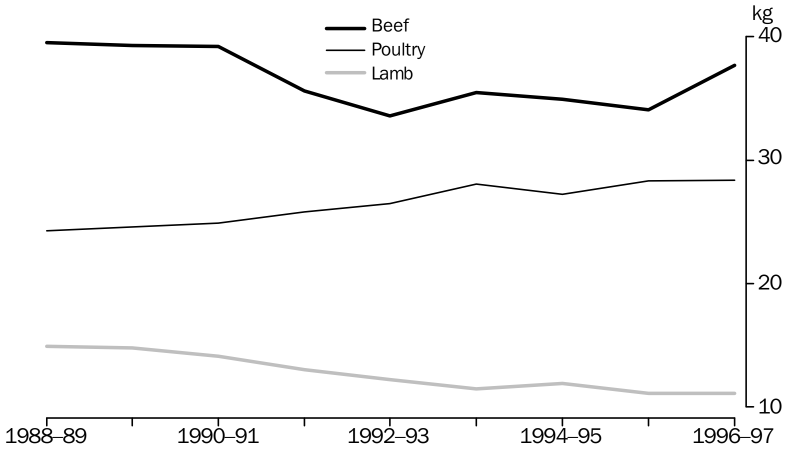
Beef remained the most popular meat consumed, increasing 10.3% in 1996–97, to 37.7 kg per capita. Demand for veal rose 24.5% to 1.8 kg per capita after falling 4.5% in 1995–96. The per capita consumption of lamb remained level at 11.1 kg in 1996–97, after a fall in 1995–96 of 6.4%. The per capita consumption of mutton rose in 1996–97, by 18.8% to 6.5 kg, and follows a fall in 1995–96 of 16.5%.

Consumption of pigmeat showed a fall, with intake in 1996–97 at 17.5 kg per capita, a decrease of 3.0% on the previous year. Despite the declining intake of pigmeat, the per capita consumption of bacon and ham continued to grow in 1996–97 to 8.4 kg.

Offal intake continued the decline of previous years with a record low of 1.4 kg per capita in 1996–97 (down 6.3%). This compares with a sharper fall in 1995–96 of 20.6% to 1.5 kg per capita.

The apparent per capita consumption of poultry rose marginally in 1996–97 to 28.4 kg per capita, after an increase of 3.9% in 1995–96.

Apparent per capita consumption




## SEAFOOD

Seafood intake fell by 2.3% in 1996–97 to 10.2 kg per capita when compared with the previous year. The major contributor to the fall was the reduced consumption of Australian fish, at 3.1 kg per capita, a decline of 9.7% when compared with the previous year. This fall was partly offset by increased consumption of imported fish, which rose 12.0% to 2.2 kg per capita. Smaller falls were also recorded for Australian prepared seafood and imported prepared fish products.

## DAIRY PRODUCTS

The consumption of dairy products increased by 2.0% to 25.7 kg per capita in 1996–97. The per capita consumption of full cream condensed milk increased from 2.4 kg in 1995–96 to 2.9 kg in 1996–97. This was partially offset by a fall in the consumption of condensed skim milk, down 15.4% to 1.8 kg per capita. Increases were also recorded for powdered full cream milk, at 1.3 kg per capita (up 18.4%), and cheese, at a record high of 10.7 kg per capita (up 2.0%).

## FRUIT AND FRUIT PRODUCTS

The consumption of fruit (including fruit for fruit juices) decreased marginally to 122.9 kg per capita in 1996–97, following a similar fall in the previous year. The most significant movement for per capita consumption of fruit was recorded for jams and conserves, which fell 13.3% to 1.8 kg. Consumption of processed fruit also fell, by 3.9% to 7.8 kg per capita. The per capita consumption of citrus and other fresh fruit both remained level, while dried fruit increased by 2.3% to 2.8 kg per capita.

## VEGETABLES

Per capita consumption of vegetables fell 3.2% in 1996–97 to 160.9 kg, after the record high of 166.1 kg in 1995–96. Potatoes remained the most popular vegetable, although per capita consumption fell by 2.7% to 68.2 kg. The consumption of other root and bulb vegetables also fell, by 2.2% to 23.8 kg per capita, while tomatoes rose 5.5% in 1996–97 to 25.2 kg per capita. The per capita consumption of leafy and green vegetables fell marginally in 1996–97 to 21.4 kg, while other vegetables fell 15.4% to 22.3 kg; this compares with an increase of 16.1% for 1995–96.

## EGGS AND EGG PRODUCTS

Egg consumption remained steady at 132 eggs per capita in 1996–97, compared with the previous year when consumption fell by 2.3%.

## GRAIN PRODUCTS

The apparent per capita consumption of grain products rose by 5.7% to 96.9 kg in 1996–97. The major contributor to this increase was flour consumption which rose 5.6% to 81.8 kg per capita, due mainly to increased production. Increases were also recorded for rice at 7.3 kg per capita (up 11.7%), and other breakfast foods from grain, at 7.2 kg per capita (up 2.5%). The only grain product to show a fall was oatmeal and rolled oats, which decreased by 11.0% to 0.7 kg per capita. Bread consumption per capita increased by 3.5% in 1996–97 to 51.2 kg.

## NUTS

The per capita consumption of peanuts rose 8.0% to 2.3 kg in 1996–97, compared with a fall of 12.3% in 1995–96. The consumption of tree nuts remained level at 4.5 kg per capita.

## OILS AND FATS

In 1996–97, the apparent consumption of fats fell 6.3% to 18.0 kg per capita; this compares with a 1.8% rise in 1995–96. The most significant contributions to this decline in per capita consumption were recorded for table and other margarine, which fell to 4.7 kg (down 13.4%) and 1.9 kg (down 22.6%) respectively. Intake of butter and dairy spreads also fell in 1996–97; butter was down by 5.5% to 2.7 kg per capita and dairy spreads fell 10.4% to 0.7 kg per capita.

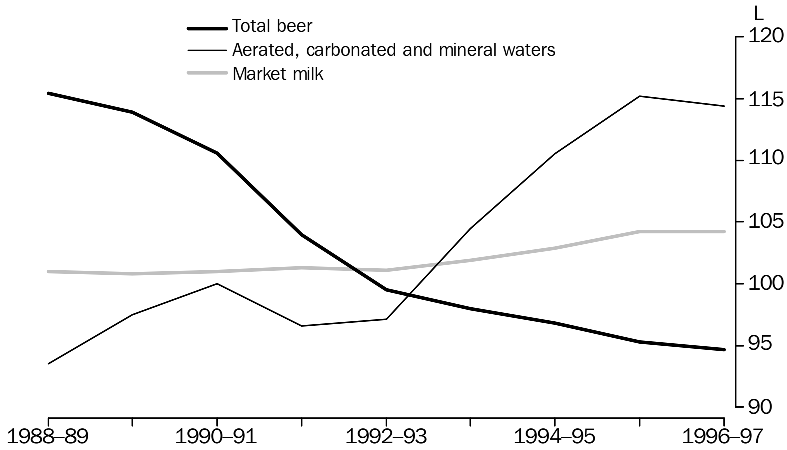
## SUGARS

The per capita consumption of sugars increased marginally in 1996–97 to 48.4 kg. Refined cane sugar consumption rose 11.7% to 11.1 kg per capita but sugar consumed in manufactured products fell, by 1.8%, to 31.7 kg per capita. In 1996–97, the per capita consumption of honey fell 7.2% to 0.8 kg.

## BEVERAGES

In 1996–97, the per capita consumption of tea fell 7.0% to 0.8 kg, while coffee fell 6.6% to 2.0 kg. Carbonated and aerated waters remained the most popular beverage, despite falling marginally to 114.4 litres per capita.

Apparent per capita consumption




The apparent per capita consumption of low alcohol beer rose 6.7% to 23.9 litres in 1996–97, while the consumption of other beer fell by 2.9% to 70.8 litres per capita. Overall, beer consumption showed a marginal decline, with consumption at 94.7 litres per capita. The consumption of wine rose 4.0% to 19.0 litres per capita in 1996–97.

## ALCOHOL CONTENT

The trends in the consumption of beer and wine are reflected in the apparent per capita consumption of alcohol (expressed in terms of alcohol content). The per capita consumption of alcohol consumed as low alcohol beer rose 6.6% to 0.74 litres per capita in 1996–97. However, alcohol consumed as other beer fell in 1996–97 by 2.6%, to 3.38 litres per capita. Alcohol consumed as wine rose 3.0%, to 2.16 litres per capita. The consumption of alcohol as spirits decreased by 5.4% in 1996–97, to 1.28 litres per capita. The total per capita consumption of alcohol fell marginally, to 7.55 litres in 1996–97.

AVAILABLE AND APPARENT CONSUMPTION OF SELECTED FOODSTUFFS—Years ended 30 June

| | AVAILABLE FOR CONSUMPTION | | | APPARENT PER CAPITA CONSUMPTION | | |
|---|---|---|---|---|---|---|
| | *1994–95* | *1995–96* | *1996–97* | *1994–95* | *1995–96* | *1996–97* |
| | t | t | t | kg | kg | kg |
| **Meat and meat products** | | | | | | |
| Carcass meat | | | | | | |
| Beef | 626 921 | 621 104 | 6 993 826 | 34.9 | 34.1 | 37.7 |
| Veal | 26 421 | 25 570 | 32 248 | 1.5 | 1.4 | 1.8 |
| Lamb | 212 905 | 201 895 | 203 924 | 11.9 | 11.1 | 11.1 |
| Mutton | 117 635 | 99 350 | 119 691 | 6.5 | 5.5 | 6.5 |
| Pigmeat | 346 623 | 328 799 | 322 868 | 19.3 | 18.1 | 17.5 |
| *Total* | *1 330 505* | *1 276 898* | *1 372 556* | *74.1* | *70.2* | *74.5* |
| Offal and meat n.e.i. | *33 984* | *27 333* | *25 922* | *1.9* | *1.5* | *1.4* |
| **Total meat and meat products** | **1 364 489** | **1 304 231** | **1 398 478** | **76.0** | **71.7** | **75.9** |
| Bacon and ham (cured carcass weight) | 134 624 | 150 047 | 154 189 | 7.5 | 8.2 | 8.4 |
| **Poultry** | | | | | | |
| Poultry (dressed weight) | 489 373 | 515 268 | 523 303 | 27.2 | 28.3 | 28.4 |
| **Seafood** | | | | | | |
| Fresh and frozen (edible weight) | | | | | | |
| Fish | | | | | | |
| Australian | 62 565 | 62 455 | 57 108 | 3.5 | 3.4 | 3.1 |
| Imported | 36 500 | 35 468 | 40 238 | 2.0 | 1.9 | 2.2 |
| Crustacea and molluscs | 33 730 | 32 731 | 32 726 | 1.9 | 1.8 | 1.8 |
| Seafood otherwise prepared (product weight) | | | | | | |
| Australian | 8 449 | 7 666 | 7 405 | 0.5 | 0.4 | 0.4 |
| Imported | | | | | | |
| Fish | 37 476 | 36 482 | 35 038 | 2.1 | 2.0 | 1.9 |
| Crustacea and molluscs | 15 556 | 15 385 | 15 637 | 0.9 | 0.8 | 0.8 |
| **Total seafood** | **194 276** | **190 188** | **188 152** | **10.8** | **10.5** | **10.2** |
| | '000 L | '000 L | '000 L | L | L | L |
| **Dairy products** | | | | | | |
| Market milk (fluid whole) | 1 848 900 | 1 895 429 | 1 919 874 | 102.9 | 104.2 | 104.2 |
| | t | t | t | kg | kg | kg |
| **Dairy products** | | | | | | |
| Condensed, concentrated and evaporated milk | | | | | | |
| Full-cream sweetened and unsweetened | 51 408 | 43 334 | 54 197 | 2.9 | 2.4 | 2.9 |
| Skim | 42 553 | 38 654 | 33 126 | 2.4 | 2.1 | 1.8 |
| Powdered milk | | | | | | |
| Full-cream | 16 402 | 19 977 | 23 951 | 0.9 | 1.1 | 1.3 |
| Skim | 39 424 | 40 907 | 43 187 | 2.2 | 2.2 | 2.3 |
| Infants' and invalids' food | 21 601 | 22 574 | 24 859 | 1.2 | 1.2 | 1.3 |
| Cheese (natural equivalent weight) | 184 291 | 191 564 | 197 819 | 10.3 | 10.5 | 10.7 |
| **Total (converted to milk solids, fat and non-fat)** | **446 481** | **458 635** | **473 923** | **24.9** | **25.2** | **25.7** |
| **Fruit and fruit products** | | | | | | |
| Fresh fruit (incl. fruit for fruit juice) | | | | | | |
| Citrus | 812 369 | 809 457 | 820 756 | 45.2 | 44.5 | 44.5 |
| Other | 972 156 | 995 702 | 1 007 988 | 54.1 | 54.7 | 54.7 |
| Jams, conserves, etc. (product weight) | 35 821 | 38 678 | 33 967 | 2.0 | 2.1 | 1.8 |
| Dried fruit (product weight) | 52 519 | 49 136 | 50 883 | 2.9 | 2.7 | 2.8 |
| Processed fruit (product weight) | 133 069 | 148 063 | 144 107 | 7.4 | 8.1 | 7.8 |
| **Total (fresh fruit equivalent)** | **2 212 178** | **2 237 740** | **2 263 674** | **123.2** | **123.0** | **122.9** |

AVAILABLE AND APPARENT CONSUMPTION OF SELECTED FOODSTUFFS—Years ended 30 June *continued*

| | AVAILABLE FOR CONSUMPTION | | | APPARENT PER CAPITA CONSUMPTION | | |
|---|---|---|---|---|---|---|
| | *1994–95* | *1995–96* | *1996–97* | *1994–95* | *1995–96* | *1996–97* |
| | t | t | t | kg | kg | kg |
| **Vegetables** | | | | | | |
| Potatoes | 1 104 999 | 1 274 815 | 1 255 919 | 61.5 | 70.1 | 68.2 |
| Other root and bulb vegetables | 387 269 | 442 937 | 438 663 | 21.6 | 24.3 | 23.8 |
| Tomatoes | 373 367 | 433 913 | 463 615 | 20.8 | 23.8 | 25.2 |
| Leafy and green vegetables | 366 097 | 391 184 | 394 407 | 20.4 | 21.5 | 21.4 |
| Other vegetables | 408 212 | 480 220 | 411 590 | 22.7 | 26.4 | 22.3 |
| **Total (fresh equivalent weight)** | **2 639 944** | **3 023 068** | **2 964 193** | **147.0** | **166.1** | **160.9** |
| **Grain products** | | | | | | |
| Flour(a) | 1 389 362 | 1 409 240 | 1 506 902 | 77.4 | 77.5 | 81.8 |
| Breakfast foods | 150 820 | 140 283 | 144 283 | 8.4 | 7.7 | 7.8 |
| Table rice | 108 510 | 118 180 | 133 708 | 6.0 | 6.5 | 7.3 |
| **Total grain products** | **1 648 693** | **1 668 257** | **1 784 892** | **91.8** | **91.7** | **96.9** |
| **Bread** | 845 565 | 899 357 | 943 081 | 47.1 | 49.4 | 51.2 |
| | '000 doz | '000 doz | '000 doz | no. | no. | no. |
| **Eggs and egg products** | | | | | | |
| Number of eggs(b) | 201 436 | 199 400 | 202 239 | 135 | 132 | 132 |
| | t | t | t | kg | kg | kg |
| **Nuts (in shell)** | | | | | | |
| Peanuts | 43 288 | 38 440 | 42 044 | 2.4 | 2.1 | 2.3 |
| Tree nuts | 79 715 | 81 618 | 83 556 | 4.4 | 4.5 | 4.5 |
| **Oils and fats** | | | | | | |
| Butter(c) | 55 655 | 51 886 | 49 687 | 3.1 | 2.9 | 2.7 |
| Margarine | | | | | | |
| Table margarine | 95 721 | 98 704 | 86 576 | 5.3 | 5.4 | 4.7 |
| Other margarine | 35 237 | 44 614 | 34 964 | 2.0 | 2.5 | 1.9 |
| *Total* | *130 958* | *143 318* | *121 540* | *7.3* | *7.9* | *6.6* |
| Dairy blends (product weight) | *12 121* | *13 808* | *12 533* | *0.7* | *0.8* | *0.7* |
| **Total (fat content)(d)** | **339 637** | **350 160** | **332 271** | **18.9** | **19.2** | **18.0** |
| **Sugars** | | | | | | |
| Cane sugar | | | | | | |
| As refined sugar | 164 273 | 181 063 | 204 769 | 9.1 | 10.0 | 11.1 |
| In manufactured foods | 534 551 | 588 023 | 584 782 | 29.8 | 32.3 | 31.7 |
| *Total* | *698 824* | *769 086* | *789 551* | *38.9* | *42.3* | *42.9* |
| Honey | *9 192* | *16 185* | *15 217* | *0.5* | *0.9* | *0.8* |
| **Total(e)** | **807 693** | **872 312** | **891 688** | **45.0** | **47.9** | **48.4** |
| **Beverages** | | | | | | |
| Tea | 16 579 | 16 090 | 15 152 | 0.9 | 0.9 | 0.8 |
| Coffee(f) | 39 211 | 39 396 | 37 251 | 2.2 | 2.2 | 2.0 |

(a) Includes flour used for breadmaking.

(b) Includes commercial disposals and an estimate for backyard production.

(c) Includes butter equivalent of butter oil, butter concentrate and ghee.

(d) Includes an estimate for vegetable oils and other fats.

(e) Includes sugar content of syrups and glucose.

(f) Coffee and coffee products in terms of roasted coffee.

AVAILABLE AND APPARENT CONSUMPTION OF SELECTED FOODSTUFFS—Years ended 30 June *continued*

| | AVAILABLE FOR CONSUMPTION | | | APPARENT PER CAPITA CONSUMPTION | | |
|---|---|---|---|---|---|---|
| | *1994–95* | *1995–96* | *1996–97* | *1994–95* | *1995–96* | *1996–97* |
| | '000 L | '000 L | '000 L | L | L | L |
| **Beverages** | | | | | | |
| Aerated, carbonated and mineral waters(a) | 1 985 100 | 2 095 820 | 2 107 574 | 110.5 | 115.2 | 114.4 |
| Beer | | | | | | |
| Low alcohol | 384 062 | 407 232 | 439 943 | 21.4 | 22.4 | 23.9 |
| Other beer | 1 355 321 | 1 326 722 | 1 304 720 | 75.5 | 72.9 | 70.8 |
| *Total* | *1 739 384* | *1 733 954* | *1 744 663* | *96.8* | *95.3* | *94.7* |
| Wine | 329 929 | 332 191 | 349 868 | 18.4 | 18.3 | 19.0 |
| | '000 L al | '000 L al | '000 L al | L al | L al | L al |
| **Alcohol content** | | | | | | |
| Beer | | | | | | |
| Low alcohol | 11 859 | 12 597 | 13 594 | 0.66 | 0.69 | 0.74 |
| Other beer | 64 743 | 63 118 | 62 253 | 3.60 | 3.47 | 3.38 |
| *Total* | *76 602* | *75 715* | *75 847* | *4.26* | *4.16* | 4.12 |
| Wine | 37 805 | 38 122 | 39 753 | 2.10 | 2.10 | 2.16 |
| Spirits | 23 211 | 24 620 | 23 594 | 1.29 | 1.35 | 1.28 |
| **Total** | **137 618** | **138 456** | **139 194** | **7.66** | **7.61** | **7.55** |

(a) Includes bulk pre-mix and post-mix concentrates in terms of drink equivalent.

# SECTION 9 TRADE

## OVERVIEW

The total value of agricultural commodities exported in 1996–97 was $22,739 million, 28.3% of total merchandise exports. The two major commodity groupings, in terms of value, were cereal grains and cereal preparations, at $5,954 million, and wool and sheepskins at $3,744 million.

The value of agricultural commodities exported increased by 6.8% in 1996–97.

## CROPS

In 1996–97, total wheat exports stood at 18.2 million tonnes, an increase of 52.0% over the previous year. The value of wheat exported in 1996–97 increased by 27.9% to $4,301.4 million.

Total barley exports rose by 29.3% in 1996–97 to 3.9 million tonnes; the value of barley exported stood at $815.0 million, an increase of 14.6%. Rice exports recorded a decrease in both quantity (7.0%) and value (4.3%). The volume of grain sorghum exports fell by 27.2% to 299,100 tonnes, and the value fell by 27.5%. The total quantity of cotton seed exported increased by 34.3% to 211,500 tonnes; the total value of cotton seed exported stood at $45.1 million, an increase of 8.2%.

## FRUIT

In 1996–97, fresh and dried grapes were the principal fruit exports in terms of value. The combined value rose by 47.1% to $119.0 million while the quantity exported increased 43.6% to 52.0 million tonnes. Oranges were the next largest contributor in terms of value, with $108.8 million, up 33.5% over 1995–96. There were 116,300 tonnes of oranges exported, an increase of 31.3%, for the same period.

## VEGETABLES

Asparagus exports rose by 8.3% to 5.2 million tonnes, though the value of asparagus exports fell by 1.6% to $30.4 million. The quantity and value of carrots exported increased by 5.1% and 5.6%, respectively, from 1995–96 to 1996–97.

## LIVESTOCK

In 1996–97, the total number of cattle and calves exported was 895,300, a 37.8% increase over the previous year. The majority of exports were from the Northern Territory, Western Australia and Queensland, contributing 43.7%, 27.1% and 21.6%, respectively. The value of cattle and calves exported rose to $445.1 million, an increase of 20.8% over the previous year, despite low world cattle prices.

The number of live sheep exported decreased by 9.9% to 5.3 million; at the same time the value of live sheep exported was $193.1 million, a decrease of 15.1% from the previous year. Western Australia was the principal State in terms of sheep and lamb exports contributing 71.9% of the number exported and 72.3% of the value of exports.

EXPORTS OF SELECTED AGRICULTURAL COMMODITIES(a)—Years ended 30 June

| | AUST. | | | 1996–97 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *1994–95* | *1995–96* | *1996–97* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* | *NT* |
| **Crops** | | | | | | | | | | |
| Barley | | | | | | | | | | |
| Production ('000 t) | 2 030.1 | 3 029.6 | 3 916.3 | n.p. | 2.4 | 3.0 | n.p. | 1.5 | — | — |
| Value ($'m) | 296.4 | 710.9 | 815.0 | n.p. | 0.6 | 0.6 | n.p. | 0.3 | — | — |
| Canola | | | | | | | | | | |
| Production ('000 t) | 84.5 | 347.8 | 283.4 | 63.3 | 141.9 | — | 19.6 | 58.6 | — | — |
| Value ($'m) | 37.6 | 137.9 | 123.9 | 26.9 | 61.5 | — | 8.8 | 26.6 | — | — |
| Cotton seed | | | | | | | | | | |
| Production ('000 t) | 131.5 | 157.4 | 211.5 | 122.6 | — | 88.8 | — | — | — | — |
| Value ($'m) | 34.4 | 41.7 | 45.1 | 25.0 | — | 20.1 | — | — | — | — |
| Grain Sorghum | | | | | | | | | | |
| Production ('000 t) | 110.6 | 410.6 | 299.1 | 2.9 | 0.3 | 295.9 | 0.1 | — | — | — |
| Value ($'m) | 18.6 | 97.2 | 70.5 | 0.7 | 0.1 | 69.7 | — | — | — | — |
| Rice | | | | | | | | | | |
| Production ('000 t) | 504.4 | 591.9 | 550.7 | 544.8 | 5.8 | — | — | 0.1 | — | — |
| Value ($'m) | 286.1 | 326.7 | 312.8 | 310.1 | 2.6 | — | — | 0.1 | — | — |
| Wheat | | | | | | | | | | |
| Production ('000 t) | 7 856.4 | 11 998.3 | 18 238.6 | 4 677.8 | 1 956.3 | 1 896.3 | 3 053.5 | 6 654.7 | — | — |
| Value ($'m) | 1 617.8 | 3 363.3 | 4 301.4 | 1 115.0 | 426.8 | 466.5 | 676.8 | 1 616.3 | — | — |
| **Fruit** | | | | | | | | | | |
| Apples | | | | | | | | | | |
| Production ('000 t) | 33.7 | 28.9 | 24.8 | 1.6 | 3.8 | 1.5 | 1.1 | 3.5 | 13.4 | — |
| Value ($'m) | 34.9 | 33.1 | 27.9 | 1.8 | 4.8 | 2.3 | 1.8 | 5.1 | 12.1 | — |
| Grapes (fresh or dried) | | | | | | | | | | |
| Production ('000 t) | 28.0 | 36.2 | 52.0 | 4.9 | 44.0 | 0.5 | 1.9 | 0.7 | — | — |
| Value ($'m) | 62.0 | 80.9 | 119.0 | 12.5 | 97.3 | 1.4 | 5.3 | 2.5 | — | — |
| Pears (excluding Nashi) | | | | | | | | | | |
| Production ('000 t) | 24.2 | 19.9 | 23.6 | 0.5 | 20.8 | 0.3 | — | 2.0 | — | — |
| Value ($'m) | 27.4 | 24.4 | 27.6 | 0.5 | 24.3 | 0.4 | 0.1 | 2.3 | — | — |
| Oranges | | | | | | | | | | |
| Production ('000 t) | 92.0 | 88.6 | 116.3 | 28.9 | 31.7 | 3.9 | 50.9 | 0.8 | — | — |
| Value ($'m) | 79.8 | 81.5 | 108.8 | 26.7 | 31.4 | 4.2 | 45.7 | 0.8 | — | — |
| **Vegetables** | | | | | | | | | | |
| Asparagus | | | | | | | | | | |
| Production ('000 t) | 3.3 | 4.8 | 5.2 | 2.2 | 2.7 | 0.2 | — | — | — | — |
| Value ($'m) | 23.2 | 30.9 | 30.4 | 13.5 | 15.5 | 1.3 | — | — | — | — |
| Broccoli | | | | | | | | | | |
| Production ('000 t) | 8.8 | 8.2 | 7.9 | 1.2 | 3.5 | 2.5 | 0.2 | 0.3 | 0.2 | — |
| Value ($'m) | 19.1 | 17.6 | 16.1 | 3.1 | 6.8 | 5.0 | 0.3 | 0.5 | 0.4 | — |
| Carrots | | | | | | | | | | |
| Production ('000 t) | 36.8 | 42.6 | 44.8 | 0.4 | 0.2 | 1.4 | 1.2 | 38.9 | 2.6 | — |
| Value ($'m) | 28.3 | 28.7 | 30.3 | 0.5 | 0.2 | 1.1 | 0.8 | 25.9 | 1.8 | — |
| Cauliflower | | | | | | | | | | |
| Production ('000 t) | 14.8 | 18.9 | 19.3 | 0.2 | 2.3 | 0.3 | — | 16.4 | — | — |
| Value ($'m) | 20.6 | 24.4 | 25.2 | 0.5 | 3.2 | 0.4 | 0.1 | 21.0 | — | — |

(a) International merchandise trade statistics are complied by the Australian Bureau of Statistics from information submitted by exporters and importers or their agents to the Australian Customs Office.

Individual export consignments of less than $500 are not recorded.

The value of exports is the free on board (f.o.b.) transactions value of the good expressed in Australian dollars. Commodity exports in this table are presented according to the codes and descriptions of the Australian Harmonised Export Commodity Classification (AHECC).

EXPORTS OF SELECTED AGRICULTURAL COMMODITIES(a)—Years ended 30 June *continued*

| | AUST. | | | 1996–97 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *1994–95* | *1995–96* | *1996–97* | *NSW* | *Vic.* | *Qld* | *SA* | *WA* | *Tas.* | *NT* |
| **Livestock(b)** | | | | | | | | | | |
| Live cattle and calves | | | | | | | | | | |
| Production ('000) | 400.1 | 649.7 | 895.3 | 12.6 | 31.0 | 193.3 | 15.9 | 242.9 | 8.1 | 391.4 |
| Value ($m) | 214.4 | 368.4 | 445.1 | 9.8 | 15.1 | 103.1 | 7.8 | 122.2 | 4.3 | 182.8 |
| Live sheep | | | | | | | | | | |
| Production ('000) | 5 699.9 | 5 879.8 | 5 299.0 | 0.8 | 835.9 | — | 653.5 | 3 808.8 | — | — |
| Value ($m) | 185.2 | 227.4 | 193.1 | 0.1 | 29.7 | — | 23.7 | 139.6 | — | — |

(a) International merchandise trade statistics are complied by the Australian Bureau of Statistics from information submitted by exporters and importers or their agents to the Australian Customs Office.

Individual export consignments of less than $500 are not recorded.

The value of exports is the free on board (f.o.b.) transactions value of the good expressed in Australian dollars. Commodity exports in this table are presented according to the codes and descriptions of the Australian Harmonised Export Commodity Classification (AHECC).

(b) Includes exports for breeding.

## EXPORTS BY AGRICULTURAL ESTABLISHMENTS

The following table shows the values of exports, of selected industries classified by the Australian and New Zealand Standard Industrial Classification (ANZSIC).

### EXPORTS BY INDUSTRY(a)

| ANZSIC code | Description | 1994–95 $'000 | 1995–96 $'000 | 1996–97 $'000 |
|---|---|---|---|---|
| 0111 | Plant nurseries | 7 216 | 6 705 | 5 694 |
| 0112 | Cut flower and flower seed growing | 24 763 | 28 482 | 26 024 |
| 0113 | Vegetable growing | 217 154 | 213 380 | 201 123 |
| 0114 | Grape growing | 61 962 | 80 937 | 119 036 |
| 0115 | Apple and pear growing | 61 855 | 57 714 | 57 692 |
| 0116 | Stone fruit growing | 14 526 | 15 667 | 20 260 |
| 0117 | Kiwi fruit growing | 1 757 | 2 003 | 1 804 |
| 0119 | Fruit growing n.e.c. | 134 509 | 140 360 | 190 123 |
| 0121 | Grain growing | 1 719 716 | 3 644 574 | 5 380 986 |
| 0124 | Sheep farming | 2 743 819 | 2 189 472 | 2 372 103 |
| 0125 | Beef cattle farming | 214 408 | 368 388 | 445 059 |
| 0141 | Poultry farming (meat) | 528 | 1 094 | 494 |
| 0142 | Poultry farming (eggs) | 3 119 | 5 490 | 3 247 |
| 0151 | Pig farming | 1 987 | 944 | 1 351 |
| 0152 | Horse farming | 36 016 | 42 211 | 37 796 |
| 0159 | Livestock farming n.e.c. | 21 740 | 27 096 | 35 473 |
| 0161 | Sugar cane growing | 151 | 218 | 164 |
| 0169 | Crop and plant growing n.e.c. | 74 281 | 81 510 | 72 019 |
| | *Total (ANZSIC Code 01)* | *5 339 507* | *6 906 246* | *8 970 447* |
| 02 | Services to agriculture; hunting and trapping | 724 788 | 820 241 | 1 146 567 |
| 03 | Forestry and logging | 35 054 | 44 636 | 60 967 |
| 04 | Commercial fishing | 401 880 | 452 514 | 577 052 |
| | **Total (ANZSIC Division A)** | **6 501 229** | **8 223 635** | **10 755 033** |

(a) This table contains export statistics classified by Australian and New Zealand Standard Industry Classification (ANZSIC). The statistics are compiled by allocating statistical items of the Australian Harmonised Export Commodity Classification (AHECC) to the ANZSIC industry of origin based on the main economic activities of these industries with which the commodities are associated.

# EXPLANATORY NOTES

## INTRODUCTION

**1** This publication contains detailed statistics on crops, livestock and livestock products and characteristics of farms. Also included is summary information on the financial performance of agricultural industries, the value of agricultural commodities produced (VACP), apparent consumption of foodstuffs and exports of agricultural commodities.

## SCOPE AND COVERAGE

**2** The statistics on crops (including horticulture), livestock numbers, structure of agricultural industries, land management and farm inputs in this publication are derived from the annual Agricultural Census conducted throughout Australia at 31 March. The 1996–97 Census was the final annual Census. The next Agricultural Census will be conducted in respect to 2001–02.

**3** The scope of the 1996–97 Census was establishments with an estimated value of agricultural operations (EVAO) of $5,000 or more. The scope of the Census for earlier years was set at different levels. The table below indicates the change in scope of the Agricultural Census since 1985–86 based on the EVAO of establishments.

| *Year* | *EVAO cut–off level* $ |
|---|---|
| 1985–86 | 2 500 |
| 1986–87 | 20 000 |
| 1987–88 | 20 000 |
| 1988–89 | 20 000 |
| 1989–90 | 20 000 |
| 1990–91 | 20 000 |
| 1991–92 | 22 500 |
| 1992–93 | 22 500 |
| 1993–94 | 5 000 |
| 1994–95 | 5 000 |
| 1995–96 | 5 000 |
| 1996–97 | 5 000 |

**4** In addition to the Census, some basic data has been previously collected via an Activity Collection for a limited range of commodities from those establishments having an EVAO of between $5,000 and $22,499. These data can be used together with census data to derive estimates of totals for selected commodities for all establishments having an EVAO greater than $5,000. Results for 1993–94 to 1996–97 based on $22,500 EVAO for crops (including fruit and vegetables) are available on request.

## STRUCTURE

### Agricultural establishments

**5** For the Agricultural Census, the concept of an establishment is the same as that used by the Australian Bureau of Statistics (ABS) for all industry statistics collections. The establishment is the smallest accounting unit of business within a State or Territory, controlling its productive activities and maintaining a specified range of detailed data including data enabling value added to be calculated. In general an establishment covers all operations at a physical location, but may consist of a group of locations provided they are within the same State or Territory. The majority of establishments operate at one location only.

### Industry and size classification

**6** Since 1991–92, units in the Agricultural Census have been classified according to the methodology described in *Australian and New Zealand Standard Industrial Classification (ANZSIC)* (Cat. no. 1292.0). Prior to 1991–92, establishments were classified according to the methodology described in the 1983 edition of the *Australian Standard Industrial Classification (ASIC), Volume 1 — The Classification* (Cat. no. 1201.0). Therefore, care should be taken when making comparisons between years where different classifications have been used.

**7** The process of determining the industry class for ANZSIC is the step-by-step method of classification described in Chapter 4 of the *Australian Standard Industrial Classification (ASIC)*, *Volume 1 — The Classification* (Cat. no. 1201.0). This method requires that the Division code of the unit be determined first. The Subdivision code within the major Division of the unit is then determined, followed by the Group code and finally the Class code of the unit. Certain departures from this basic method are outlined in the description of individual classes within Subdivision 01: Agriculture.

**8** The Group and Class codes of agricultural units are determined annually by valuing physical crop and livestock information collected in the Agricultural Census. The valuation procedure allows for the industry classification of individual units to be changed to reflect significant or long-term changes in their activities.

**9** However, the procedure provides for a dampening or resistance effect to offset instability in allocation to particular classes of the classification which would arise from short-term factors such as floods and drought. To obviate such effects, the valuation procedure takes into account (without double counting) the area of crops sown and numbers of livestock on holdings at a point in time, as well as the crops produced and livestock turnoff during the year. The resultant aggregation of these commodity values is termed the EVAO. It should be noted that EVAO is applicable *only* for industry coding and size determination purposes. It is not an indicator of receipts obtained by units or of the value of agricultural commodities produced by these units.

## DEFINITIONS

**10** Following are definitions of terms used in the tables of this publication:

- *Agricultural establishment* is an establishment which is engaged *mainly* in agricultural activities.
- *Establishment with agricultural activity* is an establishment which is engaged in agricultural activity, regardless of the unit's predominant activity.
- *Gross domestic product,* which is commonly referred to as GDP, is formally defined as 'the total market value of goods and services produced in Australia after deducting the cost of goods and services used up (intermediate consumption) in the process of production, but before deducting allowances for the consumption of fixed capital (depreciation)'.

## AGRICULTURAL FINANCE SURVEY

**11** Estimates of financial performance in this publication have been derived from the 1996–97 Agricultural Finance Survey (AFS). The survey provides annual financial statistics on a consistent basis across all agricultural industries in each State and Australia.

**12** More detailed information is published in *Agricultural Industries, Financial Statistics, Australia* (Cat. no. 7507.0).

### Scope and content

**13** The population of the AFS consists of all economic units (management units), the principal activity of which resulted in them being classified within Subdivision 01: Agriculture of ANZSIC, and which had an EVAO of $22,500 or more.

## MANAGEMENT UNITS/FARM BUSINESSES

**14** The management unit is the highest level accounting unit within a business, having regard for industry homogeneity, for which accounts are maintained; in nearly all cases it coincides with the legal entity owning the business. Management units which have a predominant activity in the agricultural sector are called farm businesses.

**15** The 1996–97 AFS consisted of approximately 2,500 farm businesses, selected at random from all in-scope farm businesses on the ABS business register.

**16** The financial details collected in the AFS relate to the agricultural and (where applicable) non-agricultural business activities of the selected farm businesses. Any management unit which was predominantly engaged in non-agricultural activity was regarded as out of scope of the AFS even though it may have had one or more establishments engaged in agriculture.

## RELIABILITY OF ESTIMATES

**17** The estimates are based on information obtained from a sample drawn from the total farm business population, and are subject to sampling variability; that is, they may differ from the figures that would have been produced if all farm businesses had been included in the AFS. One measure of the likely difference is given by the standard error, which indicates the extent of which an estimate might have varied by chance because only a sample of farm businesses was included. For more information, refer to *Agricultural Industries, Financial Statistics, Australia* (Cat. no. 7507.0).

## CROPS, PASTURES AND HORTICULTURE

**18** Statistics of area and production of crops relate, in the main, to crops sown during the year ended 31 March. Statistics of perennial crops relate to the position as at 31 March and the production during the year ended on that date, or of fruit set by that date. For example, particulars of area, production and yield per hectare of wheat in Australia refer to wheat sown during the period from April to September and harvested between October and the following February, i.e. the 1996–97 season relates to the harvesting period October 1996 to February 1997. Statistics of other crops which in some States are harvested after 31 March 1997 (e.g. maize, potatoes, apples and pears) are collected by supplementary census returns and are included in this publication.

## LIVESTOCK SLAUGHTERING AND LIVESTOCK PRODUCTS

**19** The statistics on livestock slaughtering and meat production are based on a monthly collection from abattoirs and other major slaughtering establishments and include estimates of animals slaughtered on farms and by country butchers and other small slaughtering establishments. Care should be taken when using this information as the figures only relate to slaughtering for human consumption and do not include animals condemned or those killed for boiling down. Definitions of livestock categories may differ between States and within States, particularly with regard to calves.

## WOOL

**20** Wool production statistics contained in this publication are derived from the monthly ABS Wool Brokers and Dealers Receivals Collection.

**21** Wool receivals statistics show the amount of taxable wool received by brokers and dealers from wool producers. It excludes wool received by brokers on which wool tax has already been paid by other dealers (private buyers) or brokers. The information shown is on the basis of the State in which the wool has actually been produced and is different to the receivals of wool by State data that is published monthly in *Livestock Products, Australia* (Cat. no. 7215.0).

## MILK

**22** Milk statistics have been collected and provided to the ABS by the Australian Dairy Corporation.

## POULTRY

**23** Poultry slaughtering statistics have been compiled from returns supplied by commercial poultry slaughtering establishments. Producers in Tasmania, the Northern Territory and the Australian Capital Territory are not included in the aggregates derived from the collection. However, the statistics represent a high level of coverage.

## BEEKEEPING

**24** Beekeepers were included in the scope of the 1996–97 Agricultural Census if they had an EVAO (whether from beekeeping alone or in conjunction with other agricultural activities) of $5,000 or more. In 1991–92 and 1992–93 only those beekeepers with an EVAO of $22,500 or more were included in the scope of the Agricultural Census.

## VALUE OF AGRICULTURAL COMMODITIES PRODUCED

**25** This publication contains summary information on the VACP compiled annually for all States and Australia. They include gross values of production for selected agricultural commodities. More detailed information is available in *Value of Agricultural Commodities Produced, Australia* (Cat. no. 7503.0).

**26** Gross value of commodities produced is defined as the value placed on recorded production at the wholesale prices realised in the market place.

### Scope and coverage

**27** The statistics are derived by multiplying quantity data by price (or unit value) data. The quantity data are collected in Agricultural censuses and other ABS collections with some information from external sources. Most price information is obtained from non-ABS sources.

### Information sources

**28** For quantity data, production of crops relates, in the main, to crops sown during the year ended 31 March. Statistics of perennial crops relate to the position as at 31 March and production during the year ended on that date. Information covering such commodities as livestock slaughtering, dairy produce and beekeeping is obtained from separate collections and from organisations such as the Australian Dairy Corporation.

### Price and marketing costs data

**29** The method of collection of relevant prices for, and the costs of marketing of, agricultural commodities varies considerably between States and between commodities. Where a statutory authority handles marketing of the whole or portion of a product (e.g. Australian Wheat Board, Australian Barley Board) data are usually obtained from this source. Information is also obtained from marketing reports, wholesalers, brokers and auctioneers. For all commodities, values are in respect of production during the year (or season) irrespective of whether or when payments are made. For that portion of production not marketed (e.g. hay grown on farm for own use, milk used in farm household, etc.) estimates are made from the best available information and, in general, are valued on a local value basis.

## PUBLICATION STRATEGY

**30** The aim of the Agriculture Program is to disseminate statistics to the user community in a timely and appropriate form. The strategy for the release of agricultural commodity data will change as a consequence of the cessation of the conduct of annual agricultural censuses. From 1997–98, the initial Agricultural Commodity Survey (ACS), preliminary estimates will be released at the end of August with final results available approximately twelve months after the reference period. There is no pre-release of data ahead of the August preliminary publication.

**31** Separate State publications will no longer be produced.

**32** The derived series, VACP, is produced annually, using data from the ACS, the quarterly livestock collections and a range of other sources. Preliminary results are released in July each year, with final results by May of the following year.

**33** For the annual AFS, preliminary results are released by early February each year, with final results by the following August.

PUBLICATION STRATEGY *continued*

**34** The quarterly livestock products series are published within five weeks of the end of the reference period. Preliminary results of Apparent Consumption of Foodstuffs are released in November each year, while final estimates are released within two years.

**35** The ABS package, AgStats, offers a wider range of census and VACP data aggregated to Statistical Local Area. This package has been developed for the first time in 1996–97 using the Integrated Regional Database (IRDB) as the software platform, and is available on CD-ROM only. For the years in which commodity data are collected via sample survey, estimates will be available as a component of the annual IRDB release. AgStats will be produced in Census years only. Livestock products data are available via PCAusstats.

**36** Current publications produced by the ABS are listed in the *Catalogue of Publications and Products* (Cat. no. 1101.0). The ABS also issues, on Tuesdays and Fridays, a *Release Advice* (Cat. no. 1105.0) which lists publications to be released in the next few days. The Catalogue and Release Advice are available from any ABS office.

UNPUBLISHED STATISTICS

**37** Unpublished statistics and customised output are available as a special data service and can be obtained by contacting Nigel Gibson on Hobart 03 6222 5939 or Information Services in any ABS office.

GENERAL ACKNOWLEDGMENT

**38** ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated: without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the *Census and Statistics Act 1905.*

RELATED PUBLICATIONS

**39** A range of agricultural publications is produced by the ABS, including:

*Agricultural Industries, Financial Statistics, Australia* (Cat. no. 7507.0)

*Agricultural Industries, Financial Statistics, Australia, Preliminary Estimates* (Cat. no. 7506.0)

*Agriculture, New South Wales* (Cat. no. 7113.1)

*Agriculture, Queensland* (Cat. no. 7113.3)

*Agriculture, South Australia* (Cat. no. 7113.4)

*Agriculture, Tasmania* (Cat. no. 7114.6)

*Agriculture, Victoria* (Cat. no. 7113.2)

*Agriculture, Western Australia* (Cat. no. 7113.5)

*Agriculture and Fishing, Northern Territory* (Cat. no. 7113.7)

*Apparent Consumption of Foodstuffs, Australia* (Cat. no. 4306.0)

*Apparent Consumption of Selected Foodstuffs, Australia, Preliminary* (Cat. no. 4315.0)

*Livestock Products, Australia* (Cat. no. 7215.0)

*Principal Agricultural Commodities, Australia, Preliminary* (Cat. no. 7111.0)

RELATED PUBLICATIONS *continued*

*Value of Agricultural Commodities Produced, Australia* (Cat. no. 7503.0)

*Value of Principal Agricultural Commodities Produced, Australia, Preliminary* (Cat. no. 7501.0)

**40** For comparisons of the agriculture industry with other industries, users are referred to:

*Australian National Accounts: National Income, Expenditure and Product* (Cat. no. 5206.0)

*Business Operations and Industry Performance, Australia* (Cat. no. 8140.0)

# GLOSSARY

**Agricultural establishment** An establishment which is engaged *mainly* in agricultural activities.

**Gross domestic product (GDP)** Defined as 'the total market value of goods and services produced in Australia after deducting the cost of goods and services used up (intermediate consumption) in the process of production, but before deducting allowances for the consumption of fixed capital (depreciation)'.

**Gross farm product (GFP)** Defined as 'the part of gross domestic product arising from production in agriculture and services to agriculture and is equal to the estimated gross value of production (after stock valuation adjustment) less estimated production costs other than wages paid and consumption of fixed capital for all enterprises engaged in agriculture and services to agriculture'.

**Turnover** Includes all proceeds received during the year from the sale of crops, livestock, livestock products and other miscellaneous revenue. Proceeds are the gross receipts obtained by farm businesses prior to deductions by agents or marketing boards. They are those receipts obtained during the financial year and do not necessarily relate to the production of that year. For example, receipts from wheat could include the first advance payment on that current season's crop and pool payments received during the year for previous crops.

**Value of Agricultural Commodities Produced (VACP)** Defined as the value placed on recorded production at the wholesale prices realised in the market place.

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