Australian Bureau of Statistics

2001–02

7121.0

AGRICULTURAL COMMODITIES

AUSTRALIA

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- For more information about these and related statistics, contact either the National Information and Referral Service on 1300 135 070, or Jackie Wynwood on Hobart (03) 6222 5948.

NOTES

ABOUT THIS PUBLICATION

This publication contains final estimates for the main commodities collected in the 2001–02 Agricultural Survey. It contains detailed statistics on crops, livestock and livestock products, land management and characteristics of farms. Also included is a reprint of an article previously published in *Australian Social Trends 2003* (cat. no. 4102.0) on living arrangements for farming families.

Please note that these data apply to the year ended 30 June 2002, and do not reflect the impact of the drought which has affected most areas of Australia since that time.

CHANGES IN THIS ISSUE

This publication makes use of a new symbol, the caret (i.e. ^), in relation to the level of sampling error associated with estimates. If an estimate is identified by a caret (e.g. ^8) the relative standard error (RSE) is equal to or greater than 10% but less than 25%. If an estimate is identified by a single asterisk (e.g. *2) the RSE is equal to or greater than 25% but less than or equal to 50%. If an estimate is identified by a double asterisk (e.g. **) the RSE is above 50% and is not published. Separate indication of the RSEs for all estimates is available on request.

Dennis Trewin
Australian Statistician

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The 2001–02 Agricultural Survey found that the number of farms fell by 4% in the 12 months ending 30 June 2002, down from 141,000 to 135,000 farms. Farm numbers were down in all states and followed similar falls in the previous year.

Although numbers fell, the composition of agricultural industries in Australia in 2001–02 was little changed from the previous year. The beef cattle farming industry remained the largest in terms of farm numbers, with around 25% of all farms. The grain growing industry and the mixed farming sector (grain-sheep/beef cattle) were the next largest industries in terms of farm numbers, with each accounting for around 12% of all farms.

SIZE OF OPERATIONS

The number of farms in most size groupings fell in 2001–02, as overall numbers fell. As in previous years, it was the number of smallest farms that decreased most, while the number of larger farms increased.

EVAO of operations

The median estimated value of agricultural operations (EVAO) of all farms was approximately $100,000 in 2001–02. Around 19% of all farm establishments (25,800 farms) had an EVAO below $22,500, while at the other end of the scale, 11% (14,500 farms) had an EVAO above $500,000. The majority of farms with EVAO below $22,500 were involved in beef cattle farming (14,900 farms) and sheep farming (3,100 farms) while the majority of farms with EVAO above $500,000 were involved in grain growing (4,500 farms), mixed grain-sheep/beef cattle farming (1,700 farms) or dairy farming (1,500 farms).

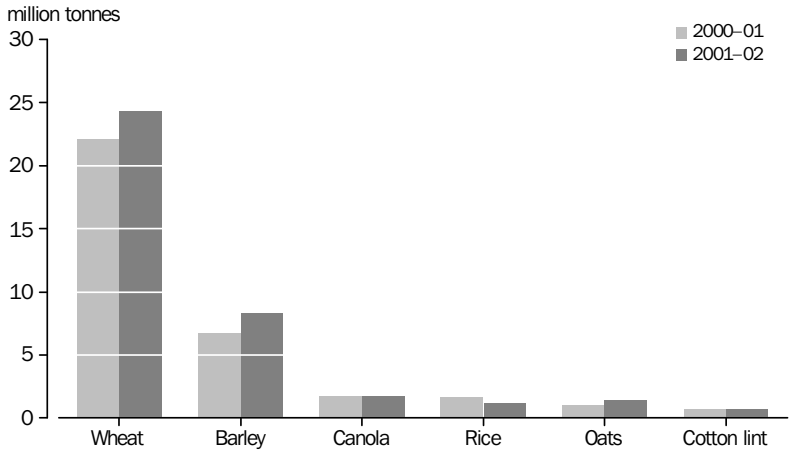
On an industry basis, the cotton, poultry for meat, poultry for eggs and pig farming industries were dominated by farms with large EVAOs, with around 81%, 51%, 33% and 33% respectively, having an EVAO greater than $500,000.

Area of operations

Most farm holdings in 2001–02 were between 100 and 499 hectares in size, and accounted for 44,700 farms (or 33%). These farms were mainly engaged in beef cattle grazing, dairying, sheep grazing or grain growing. Small farm holdings of 49 hectares or less accounted for 27,600 farms (or 20%) and were the second main size group. These small farms were mainly engaged in grape growing, beef cattle grazing, fruit growing, vegetable growing or plant nursery operations. Large farm holdings of over 2,500 hectares accounted for 11% (14,300) of all farms and were mainly engaged in grazing or cropping operations.

Most major broadacre crops recorded increases in production in 2001–02, after falls in the previous year. Improved conditions were reported in the main growing states of New South Wales, Queensland, South Australia and Western Australia and saw some crops produce the biggest, or near biggest crops of the previous 10 years. Delayed rains resulted in farmers in some areas missing the early planting window for wheat and canola and instead sowing barley and oats later in the season.

S1 PRODUCTION OF MAJOR CROPS, AUSTRALIA: 2000–01 AND 2001–02



WHEAT

The total area of wheat planted fell by 5% to 11.5 million hectares, with plantings down in all states except South Australia. Improved conditions saw production increase by 10% to 24.3 million tonnes, after a fall in the previous year. The main increase in production was recorded in Western Australia (up 33% to 7.8 million tonnes), which had recorded more favourable conditions after drought in the previous season. Increases were also recorded in the other main growing states of New South Wales and South Australia (where production exceeded that state's previous year's record crop).

BARLEY

The area of barley planted increased by 7% to 3.7 million hectares as farmers responded to the late break in the season and higher barley prices. Plantings were up in all areas except for Queensland and Tasmania, with the largest increases being recorded in South Australia (up 11% to 1.2 million hectares) and Western Australia (up 11% to 1.1 million hectares). Increased plantings and improved conditions saw Australian production increase by 23% to 8.3 million tonnes. The main increases were in Western Australia and South Australia, which had recorded very dry conditions in the previous year.

OATS

The area of oats planted increased by 21% to 784,000 hectares and was the first substantial increase in plantings for several years. Plantings were up in all states except for Queensland and Tasmania, which were both small growers. Australian production was up by 37% to 1.4 million tonnes. This was mainly due to increased production in Western Australia, which had increased plantings and improved average yields, as it recovered from the previous year's drought.

RICE

The area of rice planted fell by 18% to 144,000 hectares. This offset the increase seen in the previous year, with reduced water availability and lower price expectations for rice identified as reasons for the fall. Total production was down by 27% to 1.2 million tonnes as a result of reduced plantings and lower average yields, which occurred after a cold start to the growing season.

CANOLA

The area planted to canola decreased by 9% to 1.3 million hectares, with decreases recorded in Western Australia and Victoria. This was the second successive drop after 10 years of ongoing expansion following the establishment of the crop as a major commodity. The previous year's fall was largely due to drought conditions in Western Australia and a response to falling prices for canola. Canola production for 2001–02 was down by 1% to 1.8 million tonnes. This was a result of reduced plantings in Western Australia, due to dry conditions at the start of the season, and lower yields in New South Wales, due to the onset of dry conditions in some of the main growing areas.

SUGAR

The area of sugar cane cut for crushing increased by 6% to 426,000 hectares, after falling the previous year. Production of sugar cane increased by 12% to 31.4 million tonnes as growers again faced difficult growing conditions, with dry rather than wet conditions (as in the previous season) returning lower than average yields.

COTTON LINT

The total area planted to cotton decreased by 15%, to 458,000 hectares, with the main fall being in the area of non-irrigated cotton planted. This offset the increase recorded in the previous year, with lower prices and concerns about availability of water identified as reasons for the fall. However, improved average yields from irrigated crops saw total cotton lint production increase by 1% to 675,000 tonnes.

FRUIT

Citrus fruit

Total citrus fruit production was down, although tree numbers were up slightly. This was a result of orange production falling by 18% to 451,000 tonnes, with poor conditions reported in the main growing states of New South Wales and South Australia. Mandarin production was little changed, with an increase in Queensland (after a fall in the previous year) being offset by decreases in the other growing states. Production of lemons and limes was up slightly with increases in Queensland and Victoria being mostly offset by a fall in South Australia.

Pome fruit

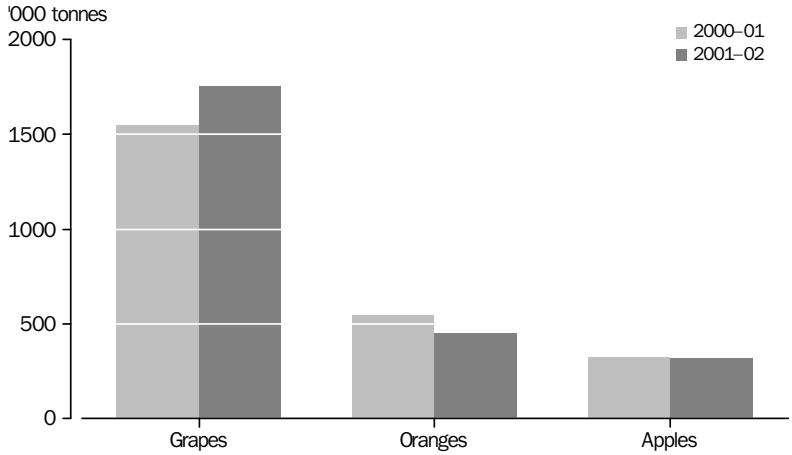
Pome fruit production fell slightly, with apple production down by 1% to 321,000 tonnes and pear production down by 14% to 145,000 tonnes. A change in definition of bearing apple trees from those six years and over to those four years and over was responsible for an increase in apple tree numbers. The number of pear trees fell by 14% as a result of a drop in Victoria, the main growing state.

Grapes

The grape industry continued the strong growth of recent years, once again setting new records for areas planted and grapes harvested.

The total area of vines increased by 7% to a record 159,000 hectares at 30 June 2002, with increases in all states except Queensland. The biggest increases were reported in South Australia (up 8% to 67,000 hectares), New South Wales (up 8% to 37,400 hectares) and Victoria (up 5% to 38,700 hectares). The total production of grapes increased by 13% to 1.8 million tonnes. The main increases were in New South Wales (up 30% to 452,000 tonnes), Victoria (up 17% to 514,000 tonnes) and South Australia (up 3% to 698,000 tonnes). Improved yields were reported for New South Wales, Victoria and Queensland.

S2 PRODUCTION OF MAJOR FRUIT CROPS, AUSTRALIA: 2000–01 AND 2001–02



VEGETABLES

Potatoes

The total area planted to potatoes fell by 4% (or 1,700 hectares) to 37,900 hectares in 2001–02. Reduced plantings were recorded for all states except New South Wales. The largest falls were recorded in Victoria (down 9% to 8,700 hectares) and South Australia (down 6% to 8,600 hectares). Total potato production for the year increased by 2% to 1.3 million tonnes, with all potato producing states, other than New South Wales, achieving improved yields over the previous year. The largest increases in production were recorded in Tasmania (up 6% to 350,000 tonnes) and South Australia (up 4% to 335,000 tonnes), the two main potato producing states.

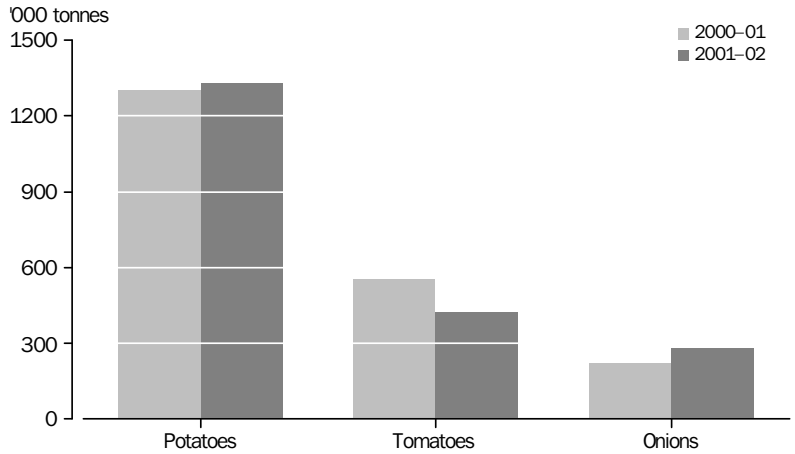
Onions

The area planted to onions increased by 10% to 5,500 hectares in 2001–02, reversing the trend of recent years. While area planted fell slightly in the main growing state of South Australia (down 1% to 1,700 hectares) and in New South Wales (down 1% to 960 hectares), this was more than offset by increased plantings in Queensland (up 59% to 910 hectares), Tasmania (up 13% to 1,100 hectares) and Victoria (up 16% to 540 hectares). Marked improvements in yield saw total production increase by 27% to 283,000 tonnes. The largest increases were recorded in South Australia (up 27% to 106,000 tonnes), Tasmania (up 49% to 63,000 tonnes) and Queensland (up 62% to 31,700 tonnes). New South Wales was the only state to record a decrease in production, down by 1% to 39,300 tonnes.

Tomatoes

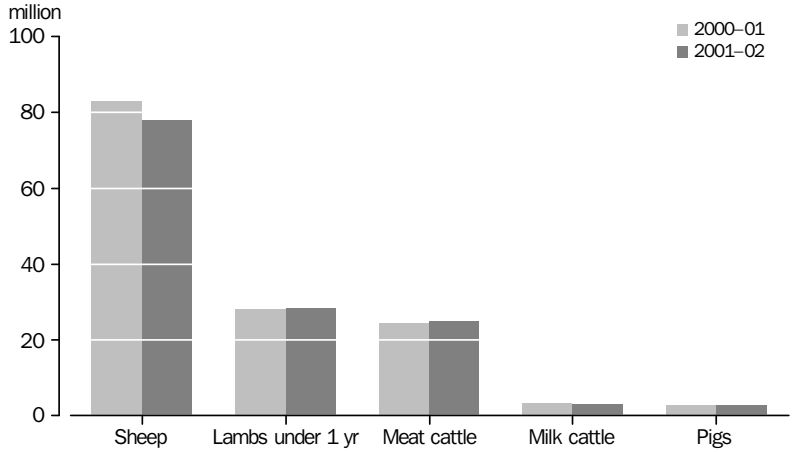
The total area planted to tomatoes fell by 12% to 8,500 hectares in 2001–02, after an increase in the previous season. Plantings fell in the three main tomato growing states, Victoria (down 10% to 4,100 hectares), Queensland (down 5% to 2,700 hectares) and New South Wales (down 33% to 1,100 hectares). Total production for the season fell by 24% to 425,000 tonnes. Significant falls in production in New South Wales (down 66% to 34,800 tonnes) and Victoria (down 20% to 262,000 tonnes) were only slightly offset by an increase in production in Queensland (up 2% to 109,000 tonnes).

S3 PRODUCTION OF MAJOR VEGETABLE CROPS, AUSTRALIA: 2000–01 AND 2001–02



Increases in meat cattle and pig numbers were offset by falls in numbers of milk cattle, sheep and lambs (which reached a 54 year low) and chickens.

S4 NUMBERS OF LIVESTOCK, AUSTRALIA: 2000–01 AND 2001–02



MILK CATTLE

Milk cattle numbers fell by 3% to 3.1 million at 30 June 2002, reversing the 2% increase of the previous year. All states recorded decreases in milk cattle numbers. The most significant fall in herd size was recorded in Queensland, where the estimate fell by 10% (or 28,100 head) to 260,000. In Victoria, the dominant milk-producing state, the dairy herd fell by 1% (21,300 head) to 1.9 million. The decrease in Victorian numbers was mainly due to a fall in the number of 'cows in milk and dry', down by 20,000 head to 1.4 million.

The number of establishments reporting milk cattle continued to fall, down by 14% to 11,900 farms at 30 June 2002. The impact of dry conditions in some areas, combined with the decline in dairy farm numbers following deregulation of the industry in 2000, saw numbers fall across all states. The largest falls were in Victoria (down 11% to 7,000 farms), New South Wales (down 19% to 1,800 farms) and Queensland (down 20% to 1,400 farms).

MEAT CATTLE

The number of meat cattle and calves increased slightly to 24.7 million head at 30 June 2002. Increases in Queensland (up 2% to 11.3 million), South Australia (up 14% to 1.2 million), Victoria (up 1% to 2.5 million) and the Northern Territory (up 4% to 1.8 million) were partly offset by falls in New South Wales and Western Australia which experienced dry conditions in some areas. The number of establishments reporting meat cattle fell by 3% to 69,700 (the lowest level since 1993), with decreases reported in all states.

SHEEP AND LAMBS

Sheep and lamb numbers fell by 4% (or 4.8 million head) to 106 million head at 30 June 2002. This was the lowest national flock size since 1948, with decreases recorded in all states except South Australia and Tasmania. New South Wales and Queensland recorded the biggest decreases, with their flocks down by 2.4 million head and 1.9 million head respectively. Numbers were affected by dry conditions in some areas and continuing low returns for wool. The number of establishments reporting sheep and lambs fell by 3% to 48,100 at 30 June 2002, with decreases recorded in all states.

PIGS

Australian pig numbers increased by 7% to 2.9 million at 30 June 2002. Increases recorded in Victoria (up 21% to 673,000 head), Queensland (up 8% to 643,000 head) and Western Australia (up 26% to 361,000 head), were only slightly offset by decreases in New South Wales (down 1% to 833,000 head) and South Australia (down 6% to 410,000 head). The number of establishments reporting pigs fell by 7% to 3,200 at 30 June 2002, with a decline in numbers in all states except Victoria.

CHICKENS

The number of chickens for meat production fell by 6% to 72.1 million birds at 30 June 2002. Decreases in South Australia, Victoria and New South Wales were only partly offset by increases in Queensland and Western Australia. The number of chickens for egg production also decreased, down by 10% to 12.9 million birds. The largest changes were recorded in Victoria (down 25% to 3.0 million) and New South Wales (down 6% to 3.6 million). Egg production was estimated to have decreased by 8% to 187 million dozen in 2001–02.

1 ESTABLISHMENTS WITH AGRICULTURAL ACTIVITY, By state—As at 30 June 2002

ANZSIC code	Description	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
0111	Plant nurseries	858	340	625	130	189	52	21	5	2 220
0112	Cut flower and flower seed growing	263	224	^185	87	^140	^38	9	—	945
0113	Vegetable growing	831	1 011	1 379	513	517	545	9	—	4 805
0114	Grape growing	1 220	2 243	^167	2 448	628	^119	4	4	6 833
0115	Apple and pear growing	^176	^307	^37	^108	^154	137	—	1	919
0116	Stone fruit growing	435	294	^114	195	^178	^41	—	1	1 258
0117	Kiwi fruit growing	*24	4	*3	—	*4	—	—	—	^34
0119	Fruit growing n.e.c.	1 881	510	2 018	560	318	^43	116	—	5 446
0121	Grain growing	4 193	2 996	1 715	4 120	2 851	^33	2	—	15 911
0122	Grain-sheep/beef cattle farming	6 669	2 824	1 289	1 915	2 860	^52	—	1	15 610
0123	Sheep-beef cattle farming	3 726	2 288	867	795	453	269	—	26	8 424
0124	Sheep farming	5 588	4 218	444	1 515	1 436	679	—	30	13 911
0125	Beef cattle farming	10 722	7 698	11 285	1 234	1 893	1 048	211	19	34 110
0130	Dairy cattle farming	1 615	6 696	1 292	590	358	580	3	1	11 135
0141	Poultry farming (meat)	339	186	126	67	58	^14	1	—	790
0142	Poultry farming (eggs)	^130	*152	^84	^30	61	^18	5	1	^481
0151	Pig farming	^399	192	328	^124	87	^27	1	—	1 159
0152	Horse farming	^631	^389	^516	^57	^129	^53	—	3	1 777
0153	Deer farming	*28	*38	**	*21	**	*11	—	—	^125
0159	Livestock farming n.e.c.	*311	^133	*194	*14	*66	*6	2	—	^725
0161	Sugar cane growing	521	**	4 219	—	5	—	—	—	4 747
0162	Cotton growing	321	—	375	—	—	—	—	—	697
0169	Crop and plant growing n.e.c.	^214	^536	616	^130	*108	^190	11	1	1 806
Agriculture		*41 092*	*33 282*	*27 900*	*14 654*	*12 499*	*3 953*	*395*	*93*	*133 868*
All other industries		*^559*	*^299*	*^204*	*^169*	*^188*	*^74*	*11*	*3*	*1 509*
Total all industries		**41 651**	**33 581**	**28 104**	**14 824**	**12 688**	**4 027**	**406**	**96**	**135 377**

2 ESTABLISHMENTS WITH AGRICULTURAL ACTIVITY, By EVAO—As at 30 June 2002

ESTIMATED VALUE OF AGRICULTURAL OPERATIONS ($'000)

ANZSIC Code	Description	Less than 22.5(a)	22.5–49.9	50.0–99.9	100.0–149.9	150.0–199.9	200.0–349.9	350.0–499.9	500.0–999.9	1 000.0–1 999.9	2 000.0 or more	Total establishments
0111	Plant nurseries	^262	^382	480	^234	266	214	144	^138	71	27	2 220
0112	Cut flower and flower seed growing	^155	^227	^230	^116	^43	^91	^24	34	13	^13	945
0113	Vegetable growing	502	676	678	441	369	710	398	538	275	216	4 805
0114	Grape growing	^752	^1 133	1 778	1 080	^576	556	^445	371	^89	^54	6 833
0115	Apple and pear growing	*59	*55	^134	*79	*60	^199	^81	^150	^76	24	919
0116	Stone fruit growing	^274	^231	^212	^158	^101	^140	^60	^49	*21	11	1 258
0117	Kiwi fruit growing	*13	*12	**	*5	—	1	—	1	—	1	^34
0119	Fruit growing n.e.c.	1 123	852	974	644	^377	595	253	373	140	115	5 446
0121	Grain growing	^614	913	1 518	1 314	1 528	3 235	2 283	3 343	1 029	135	15 911
0122	Grain-sheep/beef cattle farming	^413	1 362	2 219	2 648	2 129	3 647	1 529	1 358	268	36	15 610
0123	Sheep-beef cattle farming	^1 003	^1 666	2 071	^1 105	^712	1 087	^428	^308	39	5	8 424
0124	Sheep farming	3 144	2 793	3 008	1 636	1 050	1 398	471	368	^34	9	13 911
0125	Beef cattle farming	14 865	8 237	4 907	1 822	^1 107	1 321	712	659	^284	^196	34 110
0130	Dairy cattle farming	*136	^338	^816	^1 352	^1 521	3 725	1 737	1 257	^217	*35	11 135
0141	Poultry farming (meat)	*17	^20	*34	*26	*23	^131	^139	266	^95	^40	790
0142	Poultry farming (eggs)	**	*52	^39	^26	^28	^56	^35	85	33	39	^481
0151	Pig farming	*98	*57	^156	^90	^84	^181	^113	^193	^109	78	1 159
0152	Horse farming	^807	^488	^236	*142	*43	*45	**	**	1	—	1 777
0153	Deer farming	*76	*24	**	**	**	1	1	—	—	—	^125
0159	Livestock farming n.e.c.	^472	*156	*29	*27	**	**	**	**	1	1	^725
0161	Sugar cane growing	**	^324	1 164	^903	^639	1 046	^300	^278	^36	*16	4 747
0162	Cotton growing	—	—	—	—	**	^73	*53	^206	^149	^212	697
0169	Crop and plant growing n.e.c.	^464	^278	^365	^128	^127	^173	^91	^95	*62	*23	1 806
Agriculture		*25 381*	*20 275*	*21 061*	*13 979*	*10 812*	*18 642*	*9 302*	*10 090*	*3 041*	*1 285*	*133 868*
All other industries		*^451*	*^304*	*^275*	*^124*	*^94*	*^137*	*^55*	**45*	*^12*	*^12*	*1 509*
Total all industries		**25 832**	**20 579**	**21 336**	**14 103**	**10 906**	**18 779**	**9 357**	**10 134**	**3 054**	**1 297**	**135 377**

(a) Establishments with EVAO of less than $5,000 on the population frame are not in the scope of the survey, however some respondents may report activity below this level in the survey.

3 ESTABLISHMENTS WITH AGRICULTURAL ACTIVITY, By area—As at 30 June 2002

ANZSIC Code	Description	AREA OF HOLDING (ha) 0–49	50–99	100–499	500–999	1 000–2 499	2 500–24 999	25 000–99 999	100 000–199 999	200 000–499 999	500 000 or more	Total establishments
0111	Plant nurseries	1 884	^107	^189	*10	**	**	—	—	—	—	2 220
0112	Cut flower and flower seed growing	739	^87	^89	*14	^12	*4	—	—	—	—	945
0113	Vegetable growing	2 567	745	1 157	166	^116	^46	2	**	—	—	4 805
0114	Grape growing	5 257	^682	766	^47	*60	*21	—	—	—	—	6 833
0115	Apple and pear growing	^593	^114	^186	*22	4	—	—	—	—	—	919
0116	Stone fruit growing	975	^148	^123	6	*7	—	—	—	—	—	1 258
0117	Kiwi fruit growing	^26	**	*6	—	—	—	—	—	—	—	^34
0119	Fruit growing n.e.c.	3 996	676	637	^67	^46	17	**	—	—	—	5 446
0121	Grain growing	^476	^333	3 725	3 503	4 485	3 337	^50	1	1	—	15 911
0122	Grain-sheep/beef cattle farming	*116	^236	3 863	4 165	4 816	2 336	^74	2	2	—	15 610
0123	Sheep-beef cattle farming	*297	^547	2 809	1 822	1 487	1 127	^270	*32	^29	4	8 424
0124	Sheep farming	^776	^943	5 987	2 488	1 850	1 362	^343	^105	^51	^7	13 911
0125	Beef cattle farming	4 627	5 351	13 480	3 609	2 629	3 221	^674	^160	252	107	34 110
0130	Dairy cattle farming	^782	^2 082	7 271	809	^150	^37	1	1	1	—	11 135
0141	Poultry farming (meat)	611	^73	^94	*5	5	1	—	—	—	1	790
0142	Poultry farming (eggs)	^362	^37	^64	8	8	2	—	—	—	—	^481
0151	Pig farming	300	^215	416	^108	^90	^29	1	—	—	—	1 159
0152	Horse farming	^780	^485	^373	**	*11	2	—	—	—	—	1 777
0153	Deer farming	*69	*19	*28	*4	2	3	—	—	—	—	^125
0159	Livestock farming n.e.c.	^254	*110	**	**	*47	**	**	*5	1	—	^725
0161	Sugar cane growing	^940	1 429	2 128	^157	*62	*27	**	—	—	—	4 747
0162	Cotton growing	**	—	^115	^153	^174	^235	*15	—	—	—	697
0169	Crop and plant growing n.e.c.	^502	^311	^698	^115	^94	*85	1	—	—	—	1 806
Agriculture		*26 936*	*14 732*	*44 361*	*17 458*	*16 177*	*11 975*	*1 461*	*^313*	*336*	*119*	*133 868*
All other industries		*^694*	*^170*	*^359*	*139*	*82*	*44*	**	—	*1*	—	*1 509*
Total all industries		**27 630**	**14 902**	**44 720**	**17 597**	**16 259**	**12 019**	**1 481**	**^313**	**337**	**119**	**135 377**

4 PRINCIPAL CROPS, Production—Year ended 30 June

	AUST.	2002							
	2001	*2002*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*
Cereal for grain										
Barley										
Production ('000 t)	6 743	8 280	1 382	1 656	171	2 782	2 263	26	(a)	—
Area ('000 ha)	3 454	3 707	665	700	96	1 151	1 088	7	(a)	—
Yield (t/ha)	2.0	2.2	2.1	2.4	1.8	2.4	2.1	3.6	. .	—
Grain sorghum										
Production ('000 t)	1 935	2 021	767	*4	1 247	(a)	**	(a)	1	—
Area ('000 ha)	758	823	258	**	562	(a)	**	(a)	—	—
Yield (t/ha)	2.6	2.5	3.0	**	2.2	. .	2.0	. .	2.6	—
Maize										
Production ('000 t)	345	454	246	*9	198	(a)	*—	(a)	1	—
Area ('000 ha)	74	83	28	*1	53	(a)	**	(a)	—	—
Yield (t/ha)	4.7	5.5	8.7	^9.7	3.7	. .	**	. .	10.0	—
Oats										
Production ('000 t)	1 050	1 434	320	334	^7	^203	557	12	(a)	—
Area ('000 ha)	650	784	231	142	^11	^108	287	6	(a)	—
Yield (t/ha)	1.6	1.8	1.4	2.4	^0.7	1.9	1.9	2.1	. .	1.4
Rice										
Production ('000 t)	1 643	1 192	1 179	*14	(a)	(a)	—	(a)	—	—
Area ('000 ha)	177	144	143	^2	(a)	(a)	—	(a)	—	—
Yield (t/ha)	9.3	8.3	8.3	8.7	. .	. .	—	. .	—	—
Triticale										
Production ('000 t)	841	860	334	297	—	179	^40	10	(a)	—
Area ('000 ha)	389	409	138	131	**	109	^29	2	(a)	—
Yield (t/ha)	2.2	2.1	2.4	2.3	—	1.7	1.4	4.0	. .	—
Wheat										
Production ('000 t)	22 108	24 299	8 043	2 791	901	4 778	7 760	25	(a)	—
Area ('000 ha)	12 141	11 529	3 446	1 136	604	1 987	4 350	6	(a)	—
Yield (t/ha)	1.8	2.1	2.3	2.5	1.5	2.4	1.8	4.3	. .	1.7
Legumes										
Field peas for grain										
Production ('000 t)	455	513	^17	153	**	259	82	^1	(a)	—
Area ('000 ha)	395	336	^15	125	**	126	70	^—	(a)	—
Yield (t/ha)	1.2	1.5	1.1	1.2	^0.5	2.1	1.2	3.1	. .	—
Lupins for grain										
Production ('000 t)	1 055	1 215	123	41	—	147	904	^1	(a)	—
Area ('000 ha)	1 180	1 139	106	33	—	80	920	^—	(a)	—
Yield (t/ha)	0.9	1.1	1.2	1.2	—	1.8	1.0	2.4	. .	—
Crops cut for hay										
Cereal crops for hay										
Production ('000 t)	1 657	1 716	190	185	^132	489	714	^5	1	—
Area ('000 ha)	419	434	65	46	49	103	169	^1	—	—
Yield (t/ha)	4.0	4.0	3.0	4.0	2.7	4.7	4.2	4.3	7.6	—
Non-cereal crops for hay										
Production ('000 t)	115	124	^23	^35	^21	*24	*16	*4	1	—
Area ('000 ha)	42	^41	*8	^14	^9	^5	^4	*1	—	—
Yield (t/ha)	2.8	3.0	^2.9	2.6	2.3	4.8	^3.7	^3.4	3.9	—
Oilseeds										
Canola										
Production ('000 t)	1 775	1 756	715	347	^1	272	419	^1	(a)	—
Area ('000 ha)	1 459	1 332	534	238	^1	164	394	^1	(a)	—
Yield (t/ha)	1.2	1.3	1.3	1.5	1.2	1.7	1.1	1.8	. .	—
Total oilseeds										
Production ('000 t)	*1 910*	*1 890*	*796*	*349*	*^52*	*273*	*419*	*^1*	—	—
Area ('000 ha)	*1 589*	*1 447*	*585*	*241*	*^60*	*165*	*394*	*^1*	—	—
Yield (t/ha)	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .

(a) Data not collected.

	AUST.	2002							
	2001	*2002*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*
Other crops										
Cotton lint										
Production ('000 t)	666	675	^477	(a)	197	(a)	—	(a)	(a)	(a)
Area ('000 ha)	536	458	^304	(a)	153	(a)	1	(a)	(a)	(a)
Yield (t/ha)	1.2	1.5	1.6	. .	1.3	. .	0.4	. .	. .	. .
Peanuts (in shell)										
Production ('000 t)	39	^29	**	(a)	^27	(a)	(a)	(a)	1	(a)
Area ('000 ha)	17	^15	**	(a)	^14	(a)	(a)	(a)	—	(a)
Yield (t/ha)	2.2	2.0	4.3	. .	1.9	. .	. .	. .	3.3	. .
Sugar cane cut for crushing										
Production ('000 t)	28 117	31 424	^2 886	(a)	28 250	(a)	288	(a)	(a)	(a)
Area ('000 ha)	403	426	^25	(a)	398	(a)	3	(a)	(a)	(a)
Yield (t/ha)	69.7	73.7	114.4	. .	70.9	. .	105.9	. .	. .	. .
Tobacco										
Production ('000 t)	6	6	(a)	^4	^2	(a)	(a)	(a)	(a)	(a)
Area ('000 ha)	2	^2	(a)	^1	^1	(a)	(a)	(a)	(a)	(a)
Yield (t/ha)	2.6	2.4	. .	2.7	2.0	. .	. .	. .	. .	. .
Pastures and grasses cut for hay										
Lucerne										
Production ('000 t)	1 096	978	389	^216	194	102	*24	^16	36	1
Area ('000 ha)	203	206	94	^39	25	31	*6	^3	8	—
Yield (t/ha)	5.4	4.7	4.1	5.5	7.7	3.3	*4.3	5.4	4.5	3.6
Other										
Production ('000 t)	3 565	3 046	^370	1 692	^93	279	354	242	16	—
Area ('000 ha)	857	735	^101	379	^30	75	95	48	6	—
Yield (t/ha)	4.2	4.1	3.7	4.5	^3.1	3.7	3.7	5.1	2.5	4.1
Total cut for hay										
Production ('000 t)	*4 661*	*4 024*	*759*	*1 907*	*287*	*381*	*379*	*259*	*52*	*1*
Area ('000 ha)	*1 060*	*941*	*195*	*418*	*^56*	*106*	*101*	*51*	*14*	—
Yield (t/ha)	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Pasture seed										
Production ('000 t)	19	31	^2	^9	*2	11	^3	^2	—	—
Area ('000 ha)	140	105	^13	^15	^22	35	^17	^3	—	—
Yield (t/ha)	0.1	0.3	^0.2	0.6	^0.1	0.3	^0.2	0.8	0.2	—

(a) Data not collected.

5 FRUIT AND NUTS, Production(a)—Year ended 30 June

	AUST.	2002							
	2001	*2002*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*
Citrus										
Lemons and limes										
Production (t)	36 197	40 116	^6 631	^8 680	^14 484	9 417	*864	(b)	40	—
Trees ('000)	404	431	^113	^93	^133	81	^10	(b)	1	—
Yield (kg/tree)	89.7	93.1	^58.6	^92.9	^109.3	^116.3	*88.4	. .	42.3	—
Mandarins										
Production (t)	78 913	78 079	^2 650	4 862	57 277	12 333	^957	(b)	—	—
Trees ('000)	1 356	1 383	^117	106	934	189	^37	(b)	—	—
Yield (kg/tree)	58.2	56.5	^22.7	45.7	61.3	65.3	^25.7	. .	5.8	—
Oranges										
Production (t)	550 200	450 559	195 579	80 116	^14 015	155 790	^5 059	(b)	—	—
Trees ('000)	6 669	6 767	3 633	1 102	^159	1 758	114	(b)	—	—
Yield (kg/tree)	82.5	66.6	53.8	72.7	88.4	88.6	44.2	. .	—	—
Pome										
Apples										
Production (t)	324 599	320 526	71 635	99 550	28 995	23 853	44 786	51 617	(b)	89
Trees ('000)	6 455	8 070	1 810	2 530	742	854	898	1 233	(b)	3
Yield (kg/tree)	50.3	39.7	39.6	39.3	39.1	28.0	49.9	41.9	. .	35.0
Pears (excl. Nashi)										
Production (t)	168 896	144 885	1 192	126 438	954	5 969	9 650	681	(b)	3
Trees ('000)	1 373	1 312	27	1 057	14	66	131	17	(b)	—
Yield (kg/tree)	123.0	110.5	44.2	119.7	67.0	90.5	73.6	40.3	. .	47.4
Stone										
Apricots										
Production (t)	20 639	^12 355	*686	^5 843	*117	5 198	^422	*88	(b)	—
Trees ('000)	498	^411	*22	^187	*9	169	^14	*12	(b)	—
Yield (kg/tree)	41.5	30.0	^31.4	^31.3	*13.5	30.8	^30.5	*7.6	. .	—
Cherries										
Production (t)	8 485	^6 702	^3 849	^1 334	**	^843	^110	^542	(b)	—
Trees ('000)	861	853	^400	^145	**	^122	*20	*149	(b)	—
Yield (kg/tree)	9.9	7.9	^9.6	^9.2	**	6.9	^5.4	*3.6	. .	—
Nectarines										
Production (t)	33 661	28 823	^6 472	^13 442	*3 413	^2 644	^2 850	2	(b)	—
Trees ('000)	1 072	904	^189	^319	^208	^50	^137	^—	(b)	—
Yield (kg/tree)	31.4	31.9	^34.2	42.1	^16.4	^53.2	20.8	8.7	. .	—
Peaches										
Production (t)	74 142	88 651	12 723	^67 334	^3 358	^3 357	^1 877	^2	(b)	—
Trees ('000)	1 674	1 587	^390	^841	*206	^72	^79	^—	(b)	—
Yield (kg/tree)	44.3	55.9	32.7	80.1	^16.3	46.7	^23.7	5.6	. .	10.0
Plums and prunes										
Production (t)	31 298	25 485	^8 883	^7 565	*2 095	2 735	^4 194	**	—	—
Trees ('000)	1 328	1 325	^504	^299	^110	^92	^319	**	—	—
Yield (kg/tree)	23.6	19.2	^17.6	^25.3	^19.1	29.7	^13.2	**	—	20.8
Other orchard fruit										
Avocados										
Production (t)	29 834	28 485	*3 363	*720	21 147	*673	^2 582	(b)	—	—
Trees ('000)	504	572	^94	^46	337	*49	^46	(b)	—	—
Yield (kg/tree)	59.1	49.8	^35.8	^15.7	62.7	*13.7	56.0	. .	—	—
Mangoes										
Production (t)	37 398	40 973	^259	(b)	32 361	(b)	^2 281	(b)	6 071	—
Trees ('000)	1 017	1 006	^16	(b)	813	(b)	^52	(b)	125	—
Yield (kg/tree)	36.8	40.7	*15.9	. .	39.8	. .	43.9	. .	48.6	—

(a) Number of trees refers to trees of bearing age (i.e. for apples, it is trees four years and over, for other fruit it is trees six years and over). Information on the total number of trees is available on request. Yield is based on the number of bearing trees or the bearing area.

(b) Data not collected.

5 FRUIT AND NUTS, Production(a)—Year ended 30 June *continued*

	AUST.	2002							
	2001	*2002*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*
Nuts										
Almond (kernel)										
Production (t)	9 475	10 040	**	5 437	—	^4 400	(b)	(b)	(b)	—
Trees ('000)	955	1 575	*20	740	—	^815	(b)	(b)	(b)	—
Yield (kg/tree)	9.9	6.4	^10.2	7.4	—	^5.4	. .	. .	. .	—
Macadamia										
Production (t)	22 691	25 446	16 846	(b)	^8 600	(b)	(b)	(b)	(b)	—
Trees ('000)	2 406	2 452	1 451	(b)	^1 001	(b)	(b)	(b)	(b)	—
Yield (kg/tree)	9.4	10.4	11.6	. .	8.6	. .	. .	. .	. .	—
Berry fruit										
Blueberries										
Production (t)	^2 060	1 512	1 342	*102	(b)	(b)	(b)	**	(b)	—
Area (ha)	424	348	274	*55	(b)	(b)	(b)	*18	(b)	—
Yield (t/ha)	4.9	4.4	4.9	*1.8	. .	. .	. .	*3.7	. .	—
Strawberries										
Production (t)	15 566	20 088	*81	^8 488	5 795	1 693	^3 635	397	—	—
Area (ha)	919	986	*32	^400	324	56	^132	^41	—	—
Yield (t/ha)	16.9	20.4	**	^21.2	17.9	30.2	27.6	^9.7	—	—
Tropical										
Bananas										
Production (t)	358 388	313 314	^31 617	(b)	265 828	(b)	10 129	(b)	5 740	—
Area (ha)	11 737	12 583	^2 589	(b)	9 543	(b)	^252	(b)	198	—
Yield (t/ha)	30.5	24.9	^12.2	. .	27.9	. .	40.1	. .	29.0	—
Pawpaws										
Production (t)	9 622	*11 314	**	(b)	*11 118	(b)	**	(b)	34	—
Area (ha)	537	^457	**	(b)	^438	(b)	**	(b)	3	—
Yield (t/ha)	17.9	^24.7	1.0	. .	^25.4	. .	**	. .	10.0	—
Pineapples										
Production (t)	119 618	119 328	—	(b)	119 322	(b)	(b)	(b)	6	—
Area (ha)	2 733	2 963	—	(b)	2 962	(b)	(b)	(b)	1	—
Yield (t/ha)	43.8	40.3	—	. .	40.3	. .	. .	. .	6.0	—

(a) Number of trees refers to trees of bearing age (i.e. for apples, it is trees four years and over, for other fruit it is trees six years and over). Information on the total number of trees is available on request. Yield is based on the number of bearing trees or the bearing area.

(b) Data not collected.

6 VEGETABLES, Production—Year ended 30 June

	AUST.	2002							
	2001	*2002*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*
Asparagus										
Production (t)	12 508	13 950	^1 320	11 572	^968	—	*61	**	—	—
Area (ha)	2 407	2 363	^264	1 518	^530	—	*22	**	—	—
Yield (t/ha)	5.2	5.9	5.0	7.6	1.8	—	2.7	**	—	—
Beans, french and runner										
Production (t)	32 792	33 686	*1 296	^2 883	15 930	*53	^796	12 721	8	—
Area (ha)	6 632	6 569	*351	^791	3 705	*18	219	1 483	2	—
Yield (t/ha)	4.9	5.1	^3.7	^3.7	4.3	*3.0	3.6	8.6	3.8	—
Beetroot										
Production (t)	39 615	^39 013	**	^588	^36 708	*82	*174	**	—	—
Area (ha)	1 172	^1 228	*40	^49	^1 108	*12	*18	**	—	—
Yield (t/ha)	33.8	31.8	*36.5	11.9	33.1	^6.9	^9.5	**	—	—
Broccoli										
Production (t)	46 024	45 901	^2 466	19 027	^11 569	^1 079	^3 166	8 594	—	—
Area (ha)	7 059	6 625	^810	2 507	^1 758	^214	^380	956	—	—
Yield (t/ha)	6.5	6.9	^3.0	7.6	6.6	^5.0	8.3	9.0	—	—
Cabbages										
Production (t)	80 775	76 092	*18 993	30 391	^13 148	^7 216	5 142	1 203	—	—
Area (ha)	1 983	2 016	^445	^833	^366	^194	130	47	—	—
Yield (t/ha)	40.7	37.8	^42.7	36.5	35.9	^37.1	39.5	25.8	—	—
Capsicums, chillies and peppers										
Production (t)	41 753	^43 083	*285	*1 360	^40 043	*446	*948	*1	—	—
Area (ha)	2 502	2 419	*74	^177	^1 988	*50	*130	*—	—	—
Yield (t/ha)	16.7	17.8	*3.9	*7.7	20.1	^9.0	*7.3	6.0	—	—
Carrots										
Production (t)	320 908	331 129	20 820	113 309	^25 918	47 126	88 211	35 745	—	—
Area (ha)	7 992	7 672	763	2 854	^793	957	1 660	646	—	—
Yield (t/ha)	40.2	43.2	27.3	39.7	32.7	49.3	53.2	55.4	—	—
Cauliflowers										
Production (t)	75 737	87 586	*13 449	^24 090	^15 058	^8 052	20 312	6 625	—	—
Area (ha)	4 255	4 041	^521	^1 089	693	^286	1 125	328	—	—
Yield (t/ha)	17.8	21.7	^25.8	22.1	21.7	28.2	18.1	20.2	—	—
Celery										
Production (t)	45 125	48 493	**	29 532	^10 502	2 960	^5 096	^222	—	—
Area (ha)	1 043	911	**	527	^221	30	114	^13	—	—
Yield (t/ha)	43.3	53.2	**	56.1	^47.5	99.3	44.6	17.2	—	—
Cucumbers										
Production (t)	9 736	14 390	5 262	**	^5 669	*933	*1 955	*25	28	—
Area (ha)	1 205	1 231	478	**	^562	*37	*91	*6	3	—
Yield (t/ha)	8.1	11.7	11.0	9.8	^10.1	^25.2	**	*3.8	8.3	—
Green peas										
For processing										
Production (t)	25 864	28 072	^94	**	*1 754	—	**	25 793	—	—
Area (ha)	5 286	5 528	^38	**	^328	—	**	4 707	—	—
Yield (t/ha)	4.9	5.1	2.5	**	^5.4	—	**	5.5	—	—
Sold in pod										
Production (t)	758	680	^268	^305	*92	—	**	*12	—	—
Area (ha)	542	^451	*166	^207	*52	—	**	*6	—	—
Yield (t/ha)	1.4	^1.5	*1.6	1.5	^1.8	—	**	**	—	—

6 VEGETABLES, Production—Year ended 30 June *continued*

	AUST.	2002							
	2001	*2002*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*
Lettuces										
Production (t)	152 742	135 015	^27 188	32 970	52 552	^6 234	^14 136	*1 923	12	—
Area (ha)	5 758	5 970	^1 011	2 188	1 805	^277	^538	*151	1	—
Yield (t/ha)	26.5	22.6	^26.9	15.1	29.1	*22.5	26.3	*12.8	12.0	—
Marrows, squashes and zucchini										
Production (t)	18 065	17 677	*2 359	*1 504	11 913	**	*1 096	^447	37	—
Area (ha)	2 561	2 284	*301	*170	1 442	*31	*289	^46	5	—
Yield (t/ha)	7.1	7.7	^7.8	^8.9	8.3	*10.4	*3.8	^9.8	8.0	—
Melons										
Rock and canteloupe										
Production (t)	91 952	74 101	^21 480	*5 159	36 163	*773	^9 656	—	870	—
Area (ha)	3 941	3 049	^812	*199	1 344	*37	574	—	83	—
Yield (t/ha)	23.3	24.3	26.4	^26.0	26.9	*21.0	16.8	—	10.5	—
Water										
Production (t)	105 842	99 686	*11 117	*816	^63 132	**	21 867	—	2 733	—
Area (ha)	4 950	4 470	*524	^38	^2 909	**	816	—	171	—
Yield (t/ha)	21.4	22.3	^21.2	^21.2	21.7	**	26.8	—	16.0	—
Mushrooms(a)										
Production (t)	35 928	39 541	^12 438	15 591	7 242	3 179	n.p.	1 090	—	—
Area (ha)	86	119	^52	35	^18	12	n.p.	2	—	—
Yield (t/ha)	415.7	323.3	^237.0	442.8	410.9	270.0	255.7	527.8	—	—
Onions, white and brown										
Production (t)	221 921	282 516	^39 253	*25 925	^31 720	105 622	17 021	62 975	—	—
Area (ha)	4 991	5 513	^956	^539	^910	1 714	296	1 099	—	—
Yield (t/ha)	44.5	51.2	41.1	*48.1	^34.9	61.6	57.4	57.3	—	—
Parsnips										
Production (t)	10 360	11 586	**	9 156	—	**	*672	*195	—	—
Area (ha)	415	410	*32	301	—	*23	^39	*16	—	—
Yield (t/ha)	24.9	28.3	^26.8	30.5	—	**	*17.3	*12.2	—	—
Potatoes										
Production (t)	1 302 110	1 333 158	158 526	294 544	117 920	334 697	77 338	350 134	—	—
Area (ha)	39 622	37 943	6 912	8 734	4 573	8 560	1 724	7 441	—	—
Yield (t/ha)	32.9	35.1	22.9	33.7	25.8	39.1	44.9	47.1	—	—
Pumpkins										
Production (t)	109 380	96 331	^20 036	^7 838	47 183	^6 583	11 741	^1 963	987	—
Area (ha)	8 251	6 477	^1 185	^476	3 720	^297	591	^96	112	—
Yield (t/ha)	13.3	14.9	^16.9	16.5	12.7	^22.2	19.9	20.4	8.8	—
Sweet corn										
Production (t)	89 877	80 467	^41 377	6 905	^30 226	*656	^1 197	106	—	—
Area (ha)	6 684	6 956	3 473	^536	2 719	*51	*161	16	—	—
Yield (t/ha)	13.5	11.6	11.9	12.9	11.1	12.8	*7.4	6.6	—	—
Tomatoes										
Production (t)	556 240	424 950	^34 789	^262 435	^109 484	^2 957	^14 190	*944	150	—
Area (ha)	9 582	8 477	^1 096	4 122	^2 700	^171	^375	^13	1	—
Yield (t/ha)	58.1	50.1	^31.8	63.7	40.6	^17.3	*37.9	^70.8	150.0	—
Total area of vegetables (ha)	**137 137**	**131 678**	**22 235**	**30 525**	**37 292**	**13 280**	**10 500**	**17 457**	**389**	**—**

(a) Australian total excludes establishments in Western Australia.

7 GRAPES, Production(a)—Year ended 30 June

	AUST.	2002							
	2001	*2002*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*
AREA OF VINES AT HARVEST (ha)										
Bearing	130 591	143 373	34 005	35 035	2 092	60 526	10 260	909	455	90
Not yet bearing: planted or grafted prior to collection year	11 081	8 264	2 050	2 087	161	3 090	682	187	—	7
Not yet bearing: planted or grafted during collection year	6 586	6 958	1 326	1 531	60	3 423	439	71	24	85
Total area of vines	**148 258**	**158 594**	**37 381**	**38 653**	**2 312**	**67 039**	**11 381**	**1 167**	**479**	**182**
GRAPE PRODUCTION (fresh weight)(t)										
Winemaking	1 391 074	1 514 501	415 026	338 536	4 364	689 643	63 560	3 147	7	219
Drying	90 241	152 863	26 194	119 156	147	5 428	1 800	—	138	—
Table and other	64 686	86 524	11 078	56 428	7 864	2 679	4 621	1	3 853	—
Total production	**1 546 002**	**1 753 888**	**452 297**	**514 119**	**12 375**	**697 750**	**69 981**	**3 148**	**3 998**	**219**
Yield (t/ha)(b)	11.8	12.2	13.3	14.7	5.9	11.5	6.8	3.5	8.8	2.4

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

(b) Yield represents the quantity of grapes produced per hectare of bearing vines.

8 LIVESTOCK SLAUGHTERINGS AND PRODUCTS—Year ended 30 June

	AUST.	2002							
	2001	*2002*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*
Livestock slaughterings(a)(b)										
Cattle ('000)	7 941	7 624	1 813	1 431	3 514	333	368	160	5	—
Calves ('000)	1 038	963	206	597	100	10	6	45	1	—
Sheep ('000)	16 628	14 441	5 713	3 820	1 334	1 338	1 961	276	—	—
Lambs ('000)	18 629	17 400	4 559	6 997	628	2 933	1 857	426	—	—
Pigs ('000)	5 016	5 402	1 885	1 042	1 134	690	591	53	7	—
Chickens ('000)(c)(d)	398 869	415 556	156 682	109 311	70 941	n.p.	n.p.	n.p.	n.p.	n.p.
Livestock products										
Meat(a)(e)										
Beef ('000 t)	2 086	1 996	461	343	973	86	89	44	1	—
Veal ('000 t)	33	31	13	12	5	—	—	1	—	—
Mutton ('000 t)	348	296	122	74	25	30	39	5	—	—
Lamb ('000 t)	367	348	91	136	12	64	36	8	—	—
Pig meat ('000 t)	365	396	144	74	86	48	40	3	—	—
Chicken meat ('000 t)(d)(f)	619	667	273	181	99	n.p.	n.p.	n.p.	n.p.	n.p.
Wool(g)										
Shorn wool (incl. crutchings) (t)	589 859	536 870	193 000	112 498	35 801	71 450	108 393	15 728	—	—
Other wool (t)(h)	55 256	50 374	15 367	16 745	2 943	6 976	7 202	1 101	—	40
Total wool produced (t)	*645 115*	*587 244*	*208 367*	*129 243*	*38 743*	*78 426*	*115 596*	*16 829*	—	*40*
Whole milk (ML)(i)(j)	10 545	11 271	1 343	7 405	744	715	393	672	n.p.	n.p.
Eggs ('000 dozen)	203 163	187 027	62 604	47 068	33 651	^14 483	19 318	4 408	1 475	4 020

(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) Australian total 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) Data collected on basis of state of production.

(h) Comprises dead wool and wool on skins.

(i) Source: Australian Dairy Corporation.

(j) Australian total includes the Northern Territory and the Australian Capital Territory. New South Wales total includes the Australian Capital Territory.

9 CATTLE—Year ended 30 June

	AUST.	2002							
	2001	*2002*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*
				CATTLE						
Milk cattle(a)										
Cows in milk and dry ('000)	2 176	2 123	273	1 357	174	114	74	128	n.p.	n.p.
Other milk cattle ('000)	1 041	1 008	156	592	86	65	50	59	n.p.	n.p.
Total milk cattle and calves ('000)	*3 217*	*3 131*	*428*	*1 949*	*260*	*180*	*124*	*187*	*n.p.*	*n.p.*
Meat cattle										
Bulls and bull calves used or intended for service ('000)	591	620	147	52	273	34	52	11	50	—
Other calves under one year ('000)	6 083	5 679	1 350	715	2 290	345	520	114	343	3
Cows and heifers one year and over ('000)	12 007	12 652	2 852	1 158	5 762	594	1 013	199	1 069	6
Other cattle one year and over ('000)	5 823	5 788	1 244	538	2 959	229	395	108	315	1
Total meat cattle and calves ('000)	*24 504*	*24 739*	*5 593*	*2 463*	*11 284*	*1 201*	*1 980*	*432*	*1 777*	*10*
Total cattle and calves ('000)	**27 722**	**27 870**	**6 021**	**4 412**	**11 544**	**1 381**	**2 104**	**619**	**n.p.**	**n.p.**
Proportion of total herd										
Milk cattle (%)	11.6	11.2	7.1	44.2	2.3	13.0	5.9	30.2	n.p.	n.p.
Meat cattle (%)	88.4	88.8	92.9	55.8	97.8	87.0	94.1	69.8	n.p.	n.p.
				NUMBER OF ESTABLISHMENTS WITH CATTLE						
Milk cattle(a)										
Cows in milk and dry	12 493	10 494	1 552	6 243	1 224	541	361	568	3	1
Other milk cattle	12 603	11 207	1 744	6 493	1 333	657	395	579	5	1
Total milk cattle and calves	*13 829*	*11 890*	*1 801*	*6 956*	*1 411*	*667*	*401*	*646*	*6*	*1*
Meat cattle										
Bulls and bull calves used or intended for service	54 867	52 494	18 991	11 184	13 456	3 471	3 503	1 635	204	50
Other calves under one year	57 488	52 069	18 077	11 535	13 321	3 759	3 498	1 643	184	51
Cows and heifers one year and over	61 516	60 342	22 343	12 778	15 236	3 949	3 883	1 883	210	60
Other cattle one year and over	43 461	44 238	14 415	9 696	12 652	2 864	2 793	1 598	193	27
Total meat cattle and calves	*72 006*	*69 671*	*25 096*	*15 708*	*17 040*	*4 691*	*4 446*	*2 410*	*219*	*63*
Total establishments	**78 943**	**76 751**	**26 040**	**20 266**	**17 839**	**5 007**	**4 556**	**2 758**	**222**	**63**

(a) Excluding house cows.

10 SHEEP—Year ended 30 June

	AUST.	2002							
	2001	*2002*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*
					SHEEP					
Sheep and lambs										
Sheep ('000)	82 958	77 770	28 285	15 759	5 715	9 023	16 334	2 585	(a)	69
Lambs under one year ('000)	27 969	28 395	10 206	5 591	^1 037	4 020	6 728	795	(a)	19
Total sheep and lambs ('000)	**110 928**	**106 166**	**38 491**	**21 350**	**6 752**	**13 043**	**23 063**	**3 380**	**—**	**88**
					LAMBING					
Ewes actually mated ('000)(b)	47 012	45 813	17 117	9 098	2 168	5 810	10 241	1 349	(a)	29
Lambs marked ('000)	38 227	37 694	14 188	7 863	1 106	5 095	8 236	1 184	(a)	23
Proportion of lambs marked to ewes mated (%)	81.3	82.3	82.9	86.4	51.0	87.7	80.4	87.8	. .	79.1
Ewes intended to be mated ('000)(c)	48 479	46 457	16 796	9 016	2 488	5 867	10 819	1 439	(a)	32
					NUMBER OF ESTABLISHMENTS WITH SHEEP					
Sheep and lambs										
Sheep	48 742	47 088	17 310	11 967	1 869	7 305	7 023	1 560	(a)	54
Lambs under one year	40 267	39 101	14 222	9 823	1 296	6 299	6 148	1 267	(a)	47
Total establishments	**49 817**	**48 092**	**17 715**	**12 292**	**1 895**	**7 474**	**7 048**	**1 612**	**2**	**55**

(a) Data not collected.

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

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

11 PIGS—Year ended 30 June

	AUST.	2002							
	2001	*2002*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*
					PIGS					
Pigs										
Boars ('000)	17	17	5	^4	4	2	2	^—	—	(a)
Breeding sows and gilts ('000)	332	356	98	82	75	56	42	3	—	(a)
Other pigs ('000)	2 399	2 568	729	588	565	352	317	15	2	(a)
Total pigs ('000)	**2 748**	**2 940**	**833**	**673**	**643**	**410**	**361**	**18**	**3**	**(a)**
					NUMBER OF ESTABLISHMENTS WITH PIGS					
Pigs										
Boars	2 679	2 471	^833	^389	^406	^462	^318	^59	3	(a)
Breeding sows and gilts	2 831	2 642	^832	^483	^439	^507	^318	^60	3	(a)
Other pigs	3 133	2 941	^879	^468	^647	^567	^314	*61	5	(a)
Total establishments	**3 480**	**3 242**	**^960**	**^578**	**^680**	**587**	**^357**	**^75**	**5**	**(a)**

(a) Data not collected.

12 CHICKENS—Year ended 30 June

	AUST.		2002							
	2001	*2002*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*
Chickens										
For meat production ('000)(a)	76 697	72 144	29 832	19 065	11 037	5 498	6 712	n.p.	—	—
For egg production ('000)	14 276	12 858	3 617	3 032	3 125	^987	1 459	305	113	220

(a) Tasmanian data are excluded from the Australian total.

13 LAND USE, Area—Year ended 30 June

	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)									
2001	6 723	3 044	2 955	3 982	7 731	79	6	1	24 520
2002	6 635	2 958	2 683	4 175	7 525	78	6	—	24 060
PASTURES AND GRASSES									
2001	6 702	4 909	5 691	2 460	4 967	795	69	14	25 607
2002	6 356	4 377	^5 046	2 565	4 873	731	99	16	24 064
AGRICULTURAL LAND(b)									
2001	61 007	13 248	145 955	57 264	109 215	1 907	67 072	54	455 723
2002	63 386	12 780	141 388	53 505	108 955	1 775	65 166	52	447 007
NON-AGRICULTURAL LAND(c)(d)									
2001	19 057	9 464	27 110	41 084	143 773	4 933	67 841	182	313 480
2002	16 678	9 962	31 677	44 843	144 033	5 065	69 747	184	322 196
TOTAL LAND(d)									
2002	**80 064**	**22 742**	**173 065**	**98 348**	**252 988**	**6 840**	**134 913**	**236**	**769 203**

(a) Excludes crops harvested for hay and seed.

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

(c) Non-agricultural land is the difference between agricultural land as reported in the Agricultural Survey and total area of the state or territory. It 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 and mangrove swamps, as well as establishments not included in the scope of the Agricultural Survey.

(d) Total area for Australia includes Jervis Bay.

Note: Agricultural land is generally divided into cropped land, land sown to pasture and grasses and a broad balance comprising grazing land, land lying idle or under fallow, etc.

14 AREA OF CROPS AND PASTURES IRRIGATED—Year ended 30 June

	AUST.	2002							
	2001	*2002*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*
	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha
Pastures (native or sown)	1 026	976	330	478	63	61	^11	29	4	—
Cereals										
Rice	179	145	143	^2	**	(a)	—	(a)	—	—
Other cereals	284	376	290	^33	^52	(a)	^—	(a)	—	—
Total cereals	*469*	*528*	*434*	*^35*	*^53*	*^5*	—	*^2*	—	—
Vegetables for human consumption	116	110	17	26	29	12	9	17	—	—
Fruit (including nuts)	116	116	28	24	32	19	6	^4	3	—
Grapevines	133	137	29	35	^2	61	^7	*1	—	—
Sugar cane	211	237	**	(b)	233	(b)	4	(b)	—	—
Cotton	437	418	^290	(b)	127	(b)	—	(b)	—	—
All other crops	94	81	^26	8	^20	^10	3	14	—	—
Total area irrigated	**2 506**	**2 545**	**1 126**	**588**	**541**	**174**	**39**	**68**	**8**	**—**

(a) Data not collected separately in South Australia and Tasmania, but are included in 'Total cereals'.

(b) Data not collected.

15 FENCING BUILT TO PROTECT AREAS FROM GRAZING—Year ended 30 June

	AUST.	2002							
	2001	*2002*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*
	km	km	km	km	km	km	km	km	km	km
Fencing to protect										
Remnant native vegetation	8 906	8 673	^2 804	^1 119	*324	^1 273	^2 217	^802	126	9
Planted trees and shrubs	14 779	14 169	^4 992	^3 582	*514	*1 895	^2 951	^216	2	17
Creeks and rivers	11 742	9 816	^2 387	^2 130	^1 587	^703	^2 144	^640	164	61
Saline areas	4 696	^4 590	^315	*1 211	*32	^382	2 623	*28	—	—
Other degraded areas	2 036	^2 487	^436	^337	*785	*112	^704	*97	16	1
All other areas	10 782	^8 734	^2 225	^1 261	^2 373	^364	**	*278	187	9
Total fencing length	**52 941**	**48 470**	**13 158**	**9 641**	**^5 614**	**^4 729**	**12 676**	**2 060**	**495**	**97**

16 GROUND PREPARATION METHODS—Year ended 30 June

	AUST.	2002							
	2001	*2002*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*
	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha
CULTIVATION FOR BROADACRE CROPS(a)										
No cultivation (apart from actual sowing operation)	7 542	8 598	1 531	602	625	1 046	4 787	^7	—	—
One or two cultivations only (immediately prior to sowing)	8 673	8 774	2 570	1 146	838	2 471	1 727	22	—	—
Other cultivation	3 761	3 309	1 441	737	665	281	^165	20	—	—
Total area prepared for sowing of crops	**19 976**	**20 681**	**5 541**	**2 485**	**2 128**	**3 798**	**6 679**	**49**	**1**	**—**
TREATMENT OF CROP STUBBLE										
Removed by hot burn	2 053	1 904	627	445	^18	419	389	5	—	—
Removed by cool burn	1 636	1 681	677	209	^46	311	432	6	—	—
Removed by baling or heavy grazing	1 787	2 080	476	190	245	372	791	6	—	—
Ploughed into the soil	3 499	3 208	1 339	437	649	518	^253	12	—	—
Mulched	1 448	1 559	384	297	^278	495	^101	^4	—	—
Left intact	4 847	5 618	1 197	307	596	667	2 850	^2	—	—
All other methods	644	779	160	^87	^132	^145	^254	^1	—	—
Total area treated	**15 914**	**16 829**	**4 861**	**1 972**	**1 963**	**2 925**	**5 069**	**37**	**—**	**—**
CROPPING LAND LEFT FALLOW										
Area of cropping land left fallow	5 269	5 146	2 139	866	1 139	463	^518	20	1	—

(a) Cultivation includes discing, ploughing, scarifying and harrowing, etc.

17 USE OF FERTILISERS AND SOIL CONDITIONERS—Year ended 30 June

	AUST.	2002							
	2001	*2002*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*
MANUFACTURED FERTILISERS										
Mainly nitrogenous fertilisers										
Area treated ('000 ha)	11 491	11 866	2 914	1 247	^1 387	1 377	4 870	69	2	—
Quantity used ('000 tonnes)	1 289	1 560	463	144	*394	141	399	18	—	—
Mainly phosphatic fertilisers										
Area treated ('000 ha)	10 815	12 839	3 705	3 108	286	1 697	3 733	293	4	13
Quantity used ('000 tonnes)	1 450	1 782	^546	513	36	186	428	71	1	1
Mainly potassium fertilisers										
Area treated ('000 ha)	1 632	2 140	^94	^344	163	^71	1 413	^54	2	—
Quantity used ('000 tonnes)	165	^345	**	^64	^75	^11	110	13	—	—
Mainly compound and blended fertilisers(a)										
Area treated ('000 ha)	18 997	15 889	3 856	2 398	884	3 170	5 473	103	5	—
Quantity used ('000 tonnes)	2 146	1 783	425	282	208	333	495	38	1	—
Total area treated ('000 ha)	**42 936**	**42 734**	**10 569**	**7 097**	**^2 721**	**6 315**	**15 489**	**519**	**12**	**13**
Total quantity used ('000 tonnes)	**5 049**	**5 470**	**1 505**	**1 003**	**^713**	**671**	**1 432**	**140**	**2**	**2**
SOIL CONDITIONERS TO CORRECT PHYSICAL PROBLEMS OR STABILISE ACIDITY										
To correct or stabilise soil acidity										
Lime(b)										
Area treated ('000 ha)	1 141	1 601	401	300	^50	^73	725	^50	1	—
Quantity used ('000 tonnes)	1 745	2 353	648	528	^113	^130	785	^149	—	—
Dolomite										
Area treated ('000 ha)	87	^114	^10	^15	7	*10	^57	^14	—	—
Quantity used ('000 tonnes)	111	139	*18	^23	13	*9	^40	36	—	—
To correct physical soil problems										
Dolomite										
Area treated ('000 ha)	49	^76	*3	*2	3	**	^54	^2	—	—
Quantity used ('000 tonnes)	44	^58	*4	*3	^5	*3	^38	^5	—	—
Gypsum										
Area treated ('000 ha)	978	1 265	391	367	^37	189	276	**	1	—
Quantity used ('000 tonnes)	1 376	1 715	390	692	65	^337	228	*2	—	—
Total area treated ('000 ha)	**2 255**	**3 056**	**806**	**684**	**97**	**284**	**1 113**	**70**	**2**	**—**
Total quantity used ('000 tonnes)	**3 277**	**4 266**	**1 061**	**1 246**	**196**	**479**	**1 091**	**^192**	**1**	**—**

(a) Includes all other manufactured fertilisers, not elsewhere included.

(b) Including crushed limestone and limesand products.

18 TREES AND SHRUBS PLANTED AS SEEDLINGS—Year ended 30 June

	AUST.	2002							
	2001	*2002*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*
Seedlings planted for										
Timber or pulp production										
no. ('000)	18 383	^6 238	*1 297	*493	*376	^308	^2 662	^300	801	—
area (ha)	14 020	^9 126	*1 590	*1 970	*832	^310	^3 158	^523	743	—
Other purposes										
Nature conservation										
no. ('000)	3 513	^4 984	^795	^1 318	*239	^267	^2 263	*87	—	14
area (ha)	25 966	14 967	^4 052	^3 303	*660	^1 540	^5 085	*252	1	75
Enhanced production (e.g. shade, windbreakers, etc.)										
no. ('000)	5 474	4 846	^1 593	^1 363	^79	^676	^981	^140	1	14
area (ha)	47 637	27 767	10 435	4 986	^722	^4 175	*7 112	^313	3	21
Fodder and plant products (e.g. bush food, oils, etc.)										
no. ('000)	4 386	^2 182	**	**	**	*243	^1 109	**	—	—
area (ha)	4 834	^3 233	*311	*88	*411	*635	^1 719	**	—	—
Protection of land and water										
no. ('000)	11 615	9 559	^1 021	^1 187	*195	^635	6 340	*181	—	—
area (ha)	38 919	^37 417	^7 905	^3 845	^681	^2 110	^22 482	*391	1	2
Other plantings										
no. ('000)	1 176	*1 459	*244	*44	**	**	**	*1	—	—
area (ha)	^4 474	^4 188	*958	*286	*458	**	*1 375	^11	—	1
Total other purposes										
no. ('000)	*26 165*	*23 029*	*3 882*	*4 064*	*1 203*	*2 069*	*11 373*	*409*	*1*	*28*
area (ha)	*121 829*	*87 573*	*23 662*	*12 508*	*2 931*	*9 558*	*37 773*	*1 037*	*5*	*99*
Total seedlings planted										
no. ('000)	**44 548**	**29 267**	**5 179**	**4 557**	**1 580**	**2 377**	**14 035**	**710**	**802**	**28**
area (ha)	**135 848**	**96 699**	**25 252**	**14 478**	**3 763**	**9 869**	**40 931**	**1 559**	**748**	**99**

This is a reprint of an article which originally appeared in *Australian Social Trends 2003* (cat. no. 4102.0). Explanatory Notes for terms used within this article are included at the end of the article.

INTRODUCTION

Farms in Australia have traditionally been family businesses, passed on to successive generations.[1] However, since the 1950s, the introduction of new technologies, the globalisation of commodity markets, and the removal of protective tariffs, have contributed to the restructuring of the agricultural industry.[2] Due to efficiencies associated with economies of scale, for most commodities increasing farm size is linked to higher rates of return, making larger farms more economically viable than small farms.[3] The amalgamation of properties as some farming families leave the industry has resulted in an increase in average farm sizes.[3] The reduction in the number of farms and farming families has been one contributor to the population declines in the small towns that have traditionally serviced the farm sector.

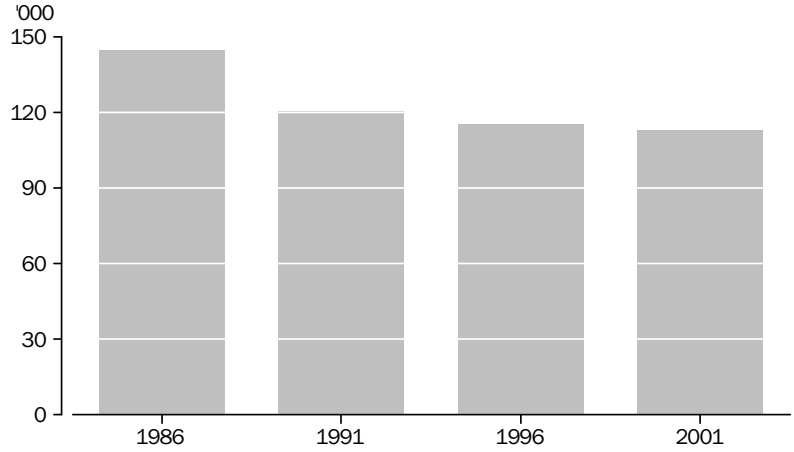
For some farming families, farm income has reduced due to declining profit margins, and can be highly variable, requiring some farmers and family members to obtain off-farm employment to supplement and stabilise the family income.[2] Stress, overwork and reduced time for family and community activities can affect the wellbeing of farmers and their families.[4] The 1990s saw a renewed focus by policy makers and government service providers on the economic, social and personal circumstances of people living in rural Australia, and in particular those living on farms.

FAMILIES ON FARMS

In 2001, 91% of farmers in Australia were members of a family household. The majority of farms were owned by family-operated businesses, with around 99% of broadacre and dairy farms operated by owner-managers in 2001.[5] Over the 15 years to 2001, the number of farming families (that is those families where the reference person and/or spouse or partner reported that their main job was a farmer) declined by 31,800 (22%). The departure of some of these families from farming provided greater opportunity for farm amalgamations.

FAMILIES ON FARMS *continued*

F1 NUMBER OF FARMING FAMILIES



Source: ABS 1986–2001 Censuses of Population and Housing.

Farming families may leave agriculture for a variety of reasons, including personal (e.g. retirement), economic (e.g. industry restructuring) or environmental (e.g. drought). That said, between 1986 and 2001, the number of farmers leaving agriculture was greatest during periods of high commodity prices, as land values were high and neighbouring farms had the financial capacity to expand.[6] The decline in the number of farming families from 145,000 in 1986 to 120,000 in 1991, was partly influenced by favourable economic conditions. The lower commodity prices in broadacre industries throughout the 1990s resulted in some farmers delaying their decision to retire, leave farming, or hand the farm over to their children.[7] As a result, the number of farming families declined by smaller amounts between 1991 and 1996 (5,300), and between 1996 and 2001 (2,400).

Consistent with the notion of farming families living in the country, the greatest proportion of farming families in 2001 lived in Outer Regional areas (46%). That said, more farming families were living in Major Cities (6%) than in Very Remote areas (3%). However, farming families account for a larger proportion of families in Very Remote areas (10%) than Major Cities (0.2%), due to the differing population sizes of these areas. In addition to the level of remoteness, farming families can live on-farm in a rural setting or off-farm within an urban environment, travelling to the farm for work. In 2001, of the 113,000 farming families in Australia, 13% lived in urban areas, with the remainder living in rural areas.

FAMILIES ON FARMS *continued*

F2 FARMING FAMILIES BY REMOTENESS AREA(a)—2001

Remoteness Area	*no.*	*%*
Major Cities	6 656	5.9
Inner Regional	38 148	33.8
Outer Regional	52 249	46.3
Remote	12 118	10.7
Very Remote	3 582	3.2
Australia	**112 753**	**100.0**

(a) No farming families were counted in Migratory areas.

The distribution of farming families across Australia was highly dependent on the type of farming. In 2001, flower growers and vegetable growers were more likely to be living in Major Cities (35%) and Inner Regional areas (41%). This partly reflects the historical need for farmers of fresh produce to have close access to consumers, and that these farms are usually smaller and intensively farmed. Two-thirds of dairy farming families lived in Inner Regional areas, while over half of sheep farming families (53%), and mixed crop and livestock farming families (56%), were living in Outer Regional areas.

FAMILY TYPES

In 2001, over half (54%) of farming families consisted of a couple with children living with them, a greater proportion than for all families (47%). A further 42% of farming families were couple families without children (compared with 36% of all families). Almost two-thirds of these couple-only families were older couples (where the male partner was aged 55 years or over). Young couples without children (where the male partner was aged less than 35 years) accounted for just 4% of farming families compared with 7% of all Australian families. Couples without children may include couples who have children that live away from home, for example to attend boarding school.

The lower proportion of young couples without children among farming families is likely to be due to fewer young people entering agriculture as a vocation,[6] and the loss of young people out of country areas reducing the number of children taking over the family farm (see *Australian Social Trends 2003*, cat. no. 4102.0, Youth migration within Australia, pp. 22–25). In addition, the capital required to enter farming may be a barrier to young couples wanting to take up farming.

In 2001, the proportion of one-parent families among farming families (3%) was lower than that of all families (15%), suggesting fewer separations and divorces among farming families. However, the lower proportion of one-parent families may also reflect a tendency for lone parents (who are predominantly women) to leave the farm after separating. The other parent (usually the father) becomes a lone person, no longer classified as a farming family.

FAMILY TYPES *continued*

Those farming families with children tended to have more children than all families with children. In 2001, there was an average of 2.1 children aged less than 15 years living in farming families with children, compared with 1.8 in all families with children. The majority of farming families live in Inner Regional, Outer Regional and Remote areas, where fertility is higher than total Australian fertility. In addition, women tend to have children at a younger age in these areas,[8] and when combined with the older age profile of female parents in farming families, this may result in farming families generally being closer to completing their total childbearing than all families.

In 2001, farming families were less likely than all families to be living in a multi-family household (1% and 3% respectively). However, it is possible for successive generations of families to operate the same farm and live in separate households on the property.

F3 SELECTED FAMILY TYPES—2001

	Farming families	*All families*
	%	%
Couple family with children	54.3	47.0
Eldest child aged under 15 years	29.6	27.0
Eldest child aged 15 years or over	24.7	20.0
Couple family without children(a)	42.0	35.7
Male partner aged under 35 years	3.9	7.0
Male partner aged 55 years or over	27.3	19.8
One-parent family	2.9	15.4
Eldest child aged under 15 years	0.8	7.7
Eldest child aged 15 years or over	2.1	7.8
Total(b)	**100.0**	**100.0**

(a) Includes couple families without children not specified.

(b) Includes other family types not specified.

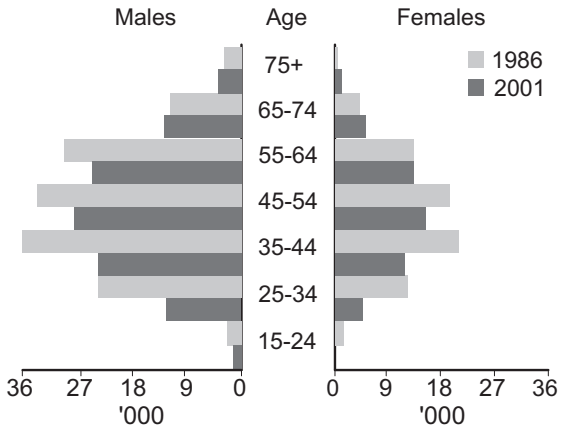
Source: ABS 2001 Census of Population and Housing.

AGEING FARMERS

Farmers often work well beyond the traditional retirement age, with 15% of farmers in farming families being aged 65 years and over in 2001. The proportion of farmers aged 65 years and over in farming families was greater than the proportion aged less than 35 years (12%). In contrast, in 1986, 9% of farmers in farming families were aged 65 years and over, compared with 19% who were aged less than 35 years. Reflecting this shift, the median age of farmers in farming families increased from 47 years in 1986 to 51 years in 2001. This is consistent with the overall trend among young people to delay marriage and parenting, and an increasing propensity to participate in higher education, which have contributed to general population ageing in Australia (see *Australian Social Trends 2002*, cat. no. 4102.0, Fertility futures, pp. 12–16). In addition to farmers partnering at a later age, fewer young people are becoming farmers.

AGEING FARMERS *continued*

F4 AGE PROFILE OF FARMERS IN FARMING FAMILIES



Source: ABS 1986 and 2001 Censuses of Population and Housing.

WOMEN IN FARMING

Since European settlement of Australia, the involvement of women in farming has been relatively unacknowledged.[10] The role of women in farming has ranged from livestock care to business management. Women tend to spend less hours on farm work than men, although they may cook for farm workers or undertake farm-related book keeping and not report this in the Census. Women also complete most of the household work and child care in farming families.[11] Further, women may support farming families through gaining off-farm employment to supplement and stabilise family income.

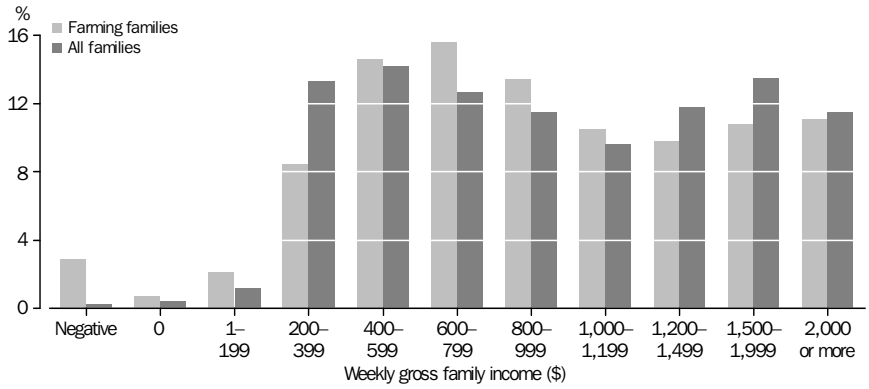
In 2001, one-third (52,500) of farmers in farming families were women. The number of female farmers in farming families decreased by 20,800 between 1986 and 2001. As the total farming population also declined over this period, the proportion of female farmers in farming families remained relatively stable. The majority of female farmers in farming families had male partners who also farmed (87%). Few women were farmers when their male spouse or partner was not (10%), and even fewer female farmers were lone parents (3%).

FAMILY INCOME AND HOURS WORKED

Overall, the distribution of income (from all sources) for farming families is similar to that for all families. A little over half of farming families (54%) had a weekly gross family income between $400 and $1,199, compared with 48% of all families. In the higher family income categories ($1,200 per week and over), 32% of farming families received this amount compared with 37% of all families. A greater proportion of farming families reported a negative income (3%) compared with all families (0.2%).

FAMILY INCOME AND HOURS WORKED *continued*

F5 INCOME(a) DISTRIBUTION FOR FARMING FAMILIES AND ALL FAMILIES(b)—2001

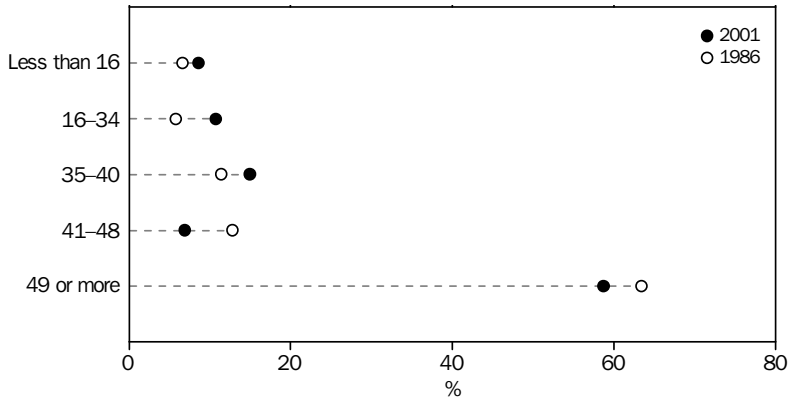


(a) Income from all sources.
(b) Families where one or more persons did not state their income were excluded prior to the calculation of percentages.

Source: ABS 2001 Census of Population and Housing.

In 2001, 59% of farmers in farming families worked 49 hours or more per week. This compares with 19% of all employed people who spent this amount of time working per week. Just over 85% of farmers in farming families are self-employed (i.e. employers, own account workers and contributing family workers). The remainder are employees on farms, many of whom are likely to be employees of their own small, incorporated companies. In general, self-employed people are more likely to work very long hours than those who are employed (see *Australian Social Trends 2003*, cat. no. 4102.0, Longer working hours, pp. 119–123). In 2001, farmers in farming families worked a median of 51 hours per week (including time spent on off-farm work), compared with 41 hours for all self-employed people (in all jobs).

S6 HOURS WORKED PER WEEK: FARMERS IN FARMING FAMILIES(a)



(a) Persons who did not state hours worked were excluded prior to the calculation of percentages.

Source: ABS 1986 and 2001 Censuses of Population and Housing.

FAMILY INCOME AND HOURS WORKED *continued*

Although in 2001 the majority of farmers in farming families continued to work in excess of 49 hours per week (59%), the proportion doing so had declined since 1986 (63%). The proportion of farmers in farming families working 41 to 48 hours per week also decreased from 13% to 7%.

OFF-FARM INCOME

Over the last two decades Australian farming families have become increasingly dependent on off-farm income to maintain their standard of living.[6] During times of financial hardship, off-farm income can moderate the effect of a reduction or variability in farm income.

In 2000–01 average off-farm income from all sources was valued at $29,300 for broadacre farms and $35,700 for dairy farms (just under half of the average total family income). Small farms with lower incomes, rather than medium or larger farms, are more likely to be dependent on off-farm income.[7] Over the past two decades broadacre farmers experienced a greater rise in average off-farm income than dairy farmers.[7]

Consistent with the shift towards two-income families, and the trend towards part-time farming in other developed countries, a major part of off-farm income comes from off-farm employment.[7] In 2000–01, spouses (mostly women) on broadacre and dairy farms were more likely than owner-managers to participate in off-farm employment (29% and 17% respectively).[9] However, these participation rates do not include those who are self-employed away from the farm.

F7 FARMING FAMILY INCOME(a)—2000–01

	Broadacre farms	*Dairy farms*
Average annual net income per farm	$	$
Farm income	30 763	44 472
Off-farm income(b)	29 259	35 672
Total family income	**60 022**	**80 144**

(a) For broadacre and dairy farms with an estimated value of agricultural operations of $22,500 or more per year (representing 73% of farms of this size).

(b) Includes income earned off-farm from wages and salaries, investments and social security payments.

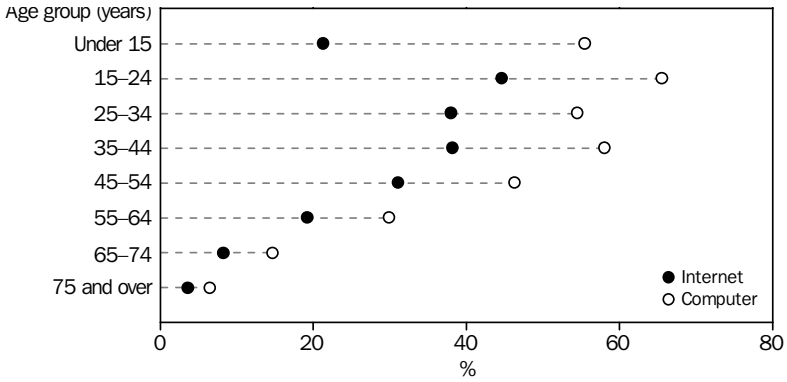
Source: ABARE 2003, *Australian Farm Surveys Report 2002.*

INFORMATION TECHNOLOGY USE

Computers and the Internet are increasingly useful to all businesses, including farms, for record-keeping, organising business activities, and receiving and sending information. In farming families, computers and the Internet can also provide social contact and be used as an educational resource for children. In 2000, a study found that farming families connected to the Internet used it primarily for weather reports, market analysis, and educational and banking services.[12]

At June 2000, among Australian farms with an estimated value of agricultural operations of $5,000 or more, 58% used a computer, and 34% used the Internet, an increase on the previous year.[13] As farm size (measured by the estimated value of agricultural operations) increased, the proportion using computers and the Internet also increased. The proportion of farms using computers and the Internet was not uniform across all states and territories. The Northern Territory reported both the highest proportion of farms using a computer (71%) and the highest proportion of farms using the Internet (49%). Farms in New South Wales reported the lowest use for both computers and the Internet (53% and 31% respectively).[13]

F7 USE OF COMPUTERS AND THE INTERNET AT HOME BY PEOPLE IN FARMING FAMILIES(a)—2001



(a) Persons who did not state their use of computers or the Internet were excluded prior to the calculation of percentages.

Source: ABS 2001 Census of Population and Housing.

Within farming families in 2001, people aged 15–24 years were the most likely to use both a computer (66%) and the Internet (45%) at home. The overall pattern of technology use among members of farming families was similar to that for the total population — those aged between 15 and 24 years were the most likely to use a computer (61%) or the Internet (44%) at home (see *Australian Social Trends 2003*, cat. no. 4102.0, Household use of computers and the Internet, pp. 194–197). From the age of 45 years, use of computers and the Internet in farming families (and for the total population) generally declined.

EXPLANATORY NOTES

This article draws on data from the ABS 1986, 1991, 1996 and 2001 Censuses of Population and Housing.

A *family* is two or more persons, one of whom is at least 15 years of age, who are related by blood, marriage (registered or de facto), adoption, step or fostering, and who are usually resident in the same household.

In this article, *farming families* are those families where the family reference person, and/or their spouse or partner, reported that their main occupation was a farmer or farm manager.

Farmers in farming families refers to the reference person and/or spouse/partner in a family whose main occupation was a farmer or farm manager. It does not include any other members of the family who were farming.

Farmers and farm managers plan, direct, coordinate and perform farming activities in agricultural establishments. Tasks performed typically include managing and participating in farming operations to breed and raise livestock, produce fish and other aquatic stock, and cultivate crops; managing physical and natural resources; managing business capital, maintaining and evaluating records of farming activities; monitoring market activity and planning production to meet contract requirements or market demand. They include farmers and farm managers who own their farming properties, and those who are employees undertaking these farming activities. Farmers and farm managers are referred to as *farmers* in this article.

Broadacre farms include sheep, beef, mixed livestock, wheat and other crop farms (such as grains and pulses), and mixed livestock-crop farms.

This article uses the *ABS Remoteness classification* to examine the characteristics of farmers and their families in the six Remoteness Areas. Remoteness is calculated using the road distance to different sized urban centres, where the population size is considered to govern the range and type of services available. The six Remoteness Areas are: Major Cities of Australia; Inner Regional Australia; Outer Regional Australia; Remote Australia; Very Remote Australia and Migratory. The Remoteness Area names used in this article are abbreviated versions of these official names with 'Australia' omitted. For further information see *Statistical Geography: Volume 1 — Australian Standard Geographical Classification (ASGC), 2001* (ABS cat. no. 1216.0).

Estimated value of agricultural operations is an estimation of agricultural activity undertaken by an agricultural establishment measured by three-year average weighted prices applied to livestock turnoff and livestock numbers on the farm, and to area and production data for crops.

ENDNOTES

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2. Garnaut, J and Lim-Applegate, H, 1998, *People in Farming*, Australian Bureau of Agricultural and Resource Economics (ABARE) Research Report 98.6, ABARE, Canberra.

3. Australian Bureau of Agricultural and Resource Economics 2003, Media Release: *Trend towards larger farms likely to continue*, 11 July 2002 <www.abareconomics.com/outsidetest/pages/media/2002/11July1%20.htm>, accessed 16 January 2003.

4. Humphreys, J 2000, 'Rural Families and Rural Health' in *Journal of Family Studies*, Vol. 6, No.2, October 2000, pp. 167–181.

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7. Barr, N 2000, *Structural Change in Australian Agriculture: Implications for Natural Resource Management*, Department of Natural Resources and Environment, Victoria.

8. Australian Bureau of Statistics 2002, *Births, Australia, 2001*, cat. no. 3301.0, ABS, Canberra.

9. Australian Bureau of Agricultural and Resource Economics, 2001 Australian Farm Surveys.

10. Australian Bureau of Agricultural and Resource Economics 1999, *Farmers at work: the gender division*, ABARE, Canberra.

11. Alston, M 1995, *Women on the Land — the hidden heart of rural Australia*, UNSW Press, Kensington, NSW.

12. Farm Management 500 Project '*On-line services considered most useful by FM500 members*', <www.rirdc.gov.au/pub/newsletters/ ITdec00.html#Toc505595898>, accessed 5 March 2003.

13. Australian Bureau of Statistics 2001, *Use of Information Technology on Farms, Australia, June 2000*, cat. no. 8150.0, ABS, Canberra.

EXPLANATORY NOTES

INTRODUCTION

1 This publication contains final estimates for the main commodities collected in the 2001–02 Agricultural Survey and related Supplementary Collections (i.e. Apples and Pears Collection and Vineyards Collection). It contains detailed statistics on crops, livestock and livestock products, land management and characteristics of farms.

SCOPE AND COVERAGE

2 Estimates of farm production are based on information obtained from the Agricultural Survey conducted at 30 June 2002. Prior to 2000 information was obtained for the period ending 31 March. The ABS has changed the collection period to 30 June to better align with other ABS surveys. A study of respondent data indicated that there should be no significant difference in estimates collected between the reference periods.

3 The scope of the 2001–02 Agricultural Survey is establishments undertaking agricultural activity with an estimated value of agricultural operations (EVAO) of $5,000 or more. This is the same as the scope for Agricultural Censuses from 1993–94 to 1996–97 and for 2000–01 and the 1997–98, 1998–99 and 1999–2000 Agricultural Surveys. Prior to 1993–94 scope has varied and these details are available on request.

AGRICULTURAL ESTABLISHMENTS

4 For the Agricultural Survey, the concept of an establishment is the same as that used by the 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 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 CLASSIFICATION

5 Since 1991–92, units in the Agricultural Census and the Agricultural Survey 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.

SAMPLE ERROR

6 The estimates in this publication are based on information obtained from a sample drawn from the total farm population in scope of the collection, and are subject to sampling variability; that is, they may differ from the figures that would have been produced if all farms had been included in the Agricultural Survey. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might vary by chance because only a sample was taken. There are about two chances in three that a 'sample' estimate will differ by less than one SE from the figure that would have been obtained if all farms had responded, and about nineteen chances in twenty that the difference will be less than two SEs.

7 In this publication, 'sampling' variability of the estimates is measured by the relative standard error (RSE) which is obtained by expressing the SE as a percentage of the estimate to which it refers.

8 Most published estimates have RSEs less than 5%. For some states with limited production of certain commodities, RSEs are greater than 10%. Estimates that have an estimated relative standard error between 10% and 25% are annotated with the symbol '^' . These estimates should be used with caution as they are subject to sampling variability too high for some purposes. Estimates with an RSE between 25% and 50% are annotated with the symbol '*', indicating that the estimate should be used with caution as it is subject to sampling variability too high for most practical purposes. Estimates with an RSE greater than 50% are annotated with the symbol '**' indicating that the sampling variability causes the estimates to be considered too unreliable for general use. Separate indication of the RSEs of all estimates is available on request.

RELATIVE STANDARD ERROR OF SELECTED COMMODITIES—As at 30 June 2002

Commodity	*NSW* %	*Vic.* %	*Qld* %	*SA* %	*WA* %	*Tas.* %	*NT* %	*ACT* %	*Aust.* %
Barley for grain production	3.8	2.7	7.6	2.6	2.7	5.2	. .	—	1.4
Canola production	3.9	4.9	21.7	4.6	4.5	17.3	. .	—	2.3
Lupins for grain production	6.0	8.2	—	7.9	4.0	23.2	. .	—	3.2
Oats for grain production	4.6	5.8	23.5	14.5	4.5	6.1	. .	—	3.2
Wheat for grain production	2.1	2.3	6.2	2.1	1.8	5.6	. .	—	1.0
Oranges production	4.4	4.6	13.4	5.1	12.2	. .	—	—	2.8
Carrots production	8.2	2.8	12.0	7.7	2.7	4.2	—	—	2.0
Potatoes production	6.4	3.1	9.6	4.8	4.4	4.2	—	—	2.1
Tomatoes production	17.4	12.1	16.5	24.7	19.0	30.1	—	—	8.8
Total milk cattle	4.2	3.4	6.4	6.1	5.2	4.2	—	—	2.3
Total meat cattle	1.5	2.2	1.6	2.7	2.4	2.0	—	—	0.9
Total sheep and lambs	1.5	2.0	6.1	1.9	1.6	2.6	—	—	0.9
Total pigs	10.3	15.2	11.6	10.0	10.4	20.8	—	. .	5.2

REVISIONS

9 This publication contains estimates for 2000–01 and 2001–02 only. Data for 1998–99 and 1999–2000 are being revised and are scheduled for re-release later in 2003.

CROPS, PASTURES AND HORTICULTURE

10 Statistics on area and production of crops relate in the main, to crops sown during the year ended 30 June. Statistics of perennial crops relate to the position as at 30 June and the production during the year ended on that date, or of fruit set by that date. Statistics for apples and pears and grapes, which in some states are harvested after 30 June, are collected by supplementary collection forms and are included in this publication.

LIVESTOCK SLAUGHTERING AND LIVESTOCK PRODUCTS

11 The statistics on livestock slaughtering and meat production are based on data collected 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

12 Wool production statistics contained in this publication are derived from the quarterly ABS Wool Brokers and Dealers Receivals Collection and are published on the basis of state of production.

13 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.

MILK

14 Milk statistics have been collected and provided to the ABS by the Australian Dairy Corporation. Data for the Australian Capital Territory are included with New South Wales; data for the Northern Territory are included with South Australia.

POULTRY

15 Poultry slaughtering statistics have been compiled from quarterly 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 Poultry and Game Birds Slaughtered collection. However, the statistics represent a high level of coverage.

ABS DATA AVAILABLE ON REQUEST

16 As well as the statistics included in this and related publications, the ABS may have other relevant data available on request. Inquiries should be made to either Jackie Wynwood 03 6222 5948 or Gordon Cameron 03 6222 5939 or the National Information and Referral Service on 1300 135 070.

GENERAL ACKNOWLEDGMENT

17 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

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

Livestock and Meat, Australia, cat. no. 7218.0.55.001

Livestock Products, Australia, cat. no. 7215.0

Principal Agricultural Commodities, Australia, Preliminary, cat. no. 7111.0

Value of Agricultural Commodities Produced, Australia, cat. no. 7503.0

Value of Principal Agricultural Commodities Produced, Australia, Preliminary, cat. no. 7501.0

19 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

Australian National Accounts: State Accounts, cat. no. 5220.0

Business Operations and Industry Performance, Australia, cat. no. 8140.0

20 Current publications and other products released by the ABS are listed in the *Catalogue of Publications and Products* (cat. no. 1101.0). The Catalogue is available from any ABS office or the ABS web site <http://www.abs.gov.au>. The ABS also issues a daily Release Advice on the web site which details products to be released in the week ahead.

ABBREVIATIONS AND SYMBOLS

21 The following abbreviations and symbols have been used in this publication:

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
ANZSIC	Australian and New Zealand Standard Industrial Classification
ASIC	Australian Standard Industrial Classification
Aust.	Australia
EVAO	estimated value of agricultural operations
ha	hectares
kg	kilograms
km	kilometres
ML	million litres
n.e.c.	not elsewhere classified
n.p.	not available for publication but included in totals where applicable
NSW	New South Wales
NT	Northern Territory
Qld	Queensland
RSE	relative standard error
SA	South Australia
SE	standard error
t	tonnes
Tas.	Tasmania
t/ha	tonnes per hectare
Vic.	Victoria
WA	Western Australia
—	nil or rounded to zero (including null cells)
^	data subject to sampling variability equal to or greater than 10%, but less than 25%
*	data subject to sampling variability equal to or greater than 25%, but less than or equal to 50%
**	data subject to sampling variability greater than 50%, estimate is not published
. .	not applicable
'000	thousands

22 Where figures have been rounded, discrepancies may occur between sums of the component items and totals.

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