



USE OF INFORMATION TECHNOLOGY ON FARMS

AUSTRALIA

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- For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Robynne Knowler on Canberra 02 6252 5609.

NOTES

ABOUT THIS PUBLICATION

This publication presents statistics on the use of Information Technology (IT) by farms in Australia. The data were obtained from questions included in the 1999–2000 Agricultural Commodity Survey conducted by the Australian Bureau of Statistics (ABS). Information obtained was in respect of 30 June 2000. Some comparisons with data collected in the 1997–98 and 1998–99 Agricultural Commodity Surveys have been included. Information obtained from both the 1997–98 and 1998–99 Agricultural Commodity Surveys was in respect of 31 March of the reference year.

ABOUT THE SURVEY

The statistics in this publication relate to farms in scope of the 1999–2000 Agricultural Commodity Survey, i.e. farms with an estimated value of agricultural operations (EVAO) of \$5,000 or more. The 1999–2000 Agricultural Commodity Survey sampled 24% of the farming establishments operating in Australia at 30 June 2000, and included information technology questions on farm use of a computer and the Internet as at 30 June 2000.

OTHER ABS INFORMATION TECHNOLOGY STATISTICS

Details of other ABS activities in the field of information technology statistics are available from the Information Technology Statistics theme page on the ABS web site (www.abs.gov.au). To access the theme page, select Themes from the menu on the home page. Details of other ABS publications relating to the production and use of information technologies in Australia can be found in paragraph 14 of the Explanatory Notes.

COMMENTS ON THIS PUBLICATION

The ABS welcomes comments and suggestions on data items for inclusion in future surveys. Please contact the Director, Information Technology Statistics, Australian Bureau of Statistics, PO Box 10, Belconnen ACT 2616, or phone 02 6252 5019.

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ABBREVIATIONS

ABS Australian Bureau of Statistics
EVAO estimated value of agricultural operations
n.e.c. not elsewhere classified
RSE Relative standard error

R.W. Edwards
Acting Australian Statistician

CHAPTER 1

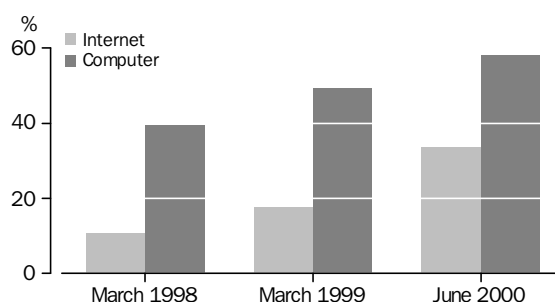
SUMMARY OF FINDINGS

AUSTRALIA

At June 2000, 58% of the 146,371 Australian farms with an estimated value of agricultural operations (EVAO) of \$5,000 or more, used a computer. This represented a 17% increase in the number of such farms using a computer since March 1999 when the survey was last conducted.

At June 2000, an estimated 34% (or 49,499) of the 146,371 farms in Australia used the Internet. Although fewer farms used the Internet than used a computer at June 2000, a 91% increase in the number of farms using the Internet over the 15 months to June 2000 far exceeded the growth in the use of computers for the same period.

FARMS USING A COMPUTER AND THE INTERNET



REGIONAL DATA

The Northern Territory reported both the highest proportion of farms using a computer (71%) and the highest proportion of farms using the Internet (49%). New South Wales reported both the lowest proportion of farms using a computer (53%) and the lowest proportion of farms using the Internet (31%).

Across non-capital city Statistical Divisions throughout Australia the proportion of farms using a computer ranged from 43% to 78%. The proportions of farms using the Internet ranged from 25% to 45%.

FARM INDUSTRY

The Poultry farming industry reported both the highest proportion of farms using a computer (72%) and the highest proportion of Internet use (45%). The Grain, sheep and beef cattle farming industry reported both the lowest proportion of farms using a computer (55%) and the lowest proportion of farms using the Internet (31%).

FARM SIZE

There was a strong relationship between farm size, as measured by the estimated value of agricultural operations (EVAO), and the use of a computer and the Internet. As farm size increased so did the proportion of farms using a computer and the Internet.

CHAPTER 2

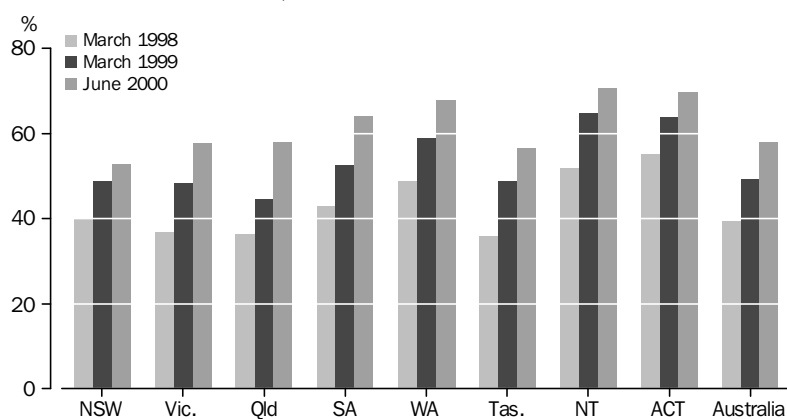
COMPARISONS OVER TIME

USE OF COMPUTERS

During the 15 months to June 2000, there was a 17% increase in the number of Australian farms using a computer. At June 2000, an estimated 58% (or 84,898) of the 146,371 farms in Australia used a computer.

At June 2000, the Northern Territory at 71%, and the ACT at 70%, had the highest proportion of computer use for all State and Territory farms. New South Wales at 53%, recorded the lowest farm use of computers. Queensland showed the most significant growth in the 15 months to June 2000 with use of a computer increasing from 45% at March 1999 to 58% at June 2000.

FARMS USING A COMPUTER, BY STATE/TERRITORY



2.1 FARMS USING A COMPUTER, By State/Territory(a)

	March 1998 . .		March 1999 . .		June 2000 . .	
	No.	%	No.	%	No.	%
New South Wales	16 934	40	21 545	49	23 028	53
Victoria	13 538	37	18 075	49	21 549	58
Queensland	11 311	37	13 870	45	17 841	58
South Australia	6 795	43	8 361	53	10 180	64
Western Australia	6 850	49	8 270	59	9 466	68
Tasmania	1 608	36	2 186	49	2 507	57
Northern Territory	196	52	241	65	260	71
Australian Capital Territory	58	55	66	64	67	70
Australia	57 290	40	72 615	49	84 898	58

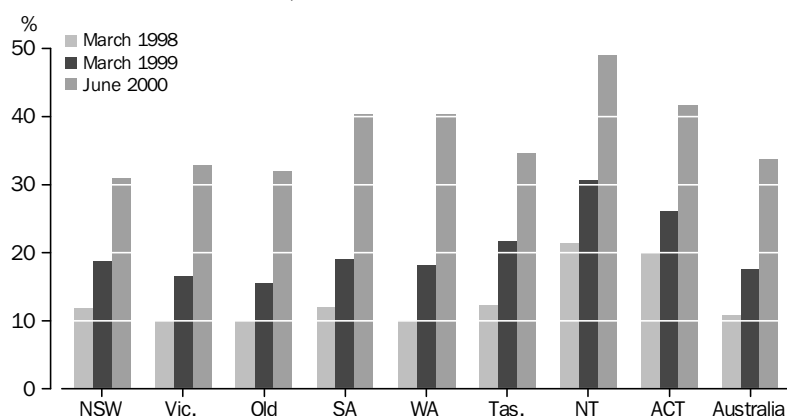
(a) Percentages are of all farms.

USE OF THE INTERNET

During the 15 months to June 2000, there was a 91% increase in the number of Australian farms using the Internet. This compared with a 65% increase between March 1998 and March 1999. At the end of June 2000, an estimated 34% (or 49,499) of the 146,371 farms in Australia used the Internet.

At June 2000, the Northern Territory and the Australian Capital Territory reported the highest proportions of Internet use (49% and 42% respectively). New South Wales, in line with reporting the lowest proportion of farms using a computer, reported the lowest proportion using the Internet (31%). Western Australia, followed closely by South Australia, showed the most significant growth in the 15 months to June 2000. Use of the Internet by Western Australian farms increased from 18% at March 1999 to 40% at June 2000, while South Australian farms increased from 19% to 40% over the same period.

FARMS USING THE INTERNET, BY STATE/TERRITORY

**2.2** FARMS USING THE INTERNET, By State/Territory(a)

	March 1998		March 1999		June 2000	
	No.	%	No.	%	No.	%
New South Wales	5 006	12	8 231	19	13 596	31
Victoria	3 621	10	6 174	17	12 270	33
Queensland	3 075	10	4 830	16	9 811	32
South Australia	1 896	12	3 030	19	6 442	40
Western Australia	1 428	10	2 548	18	5 621	40
Tasmania	552	12	973	22	1 539	35
Northern Territory	81	22	114	31	180	49
Australian Capital Territory	21	20	27	26	40	42
Australia	15 680	11	25 927	18	49 499	34

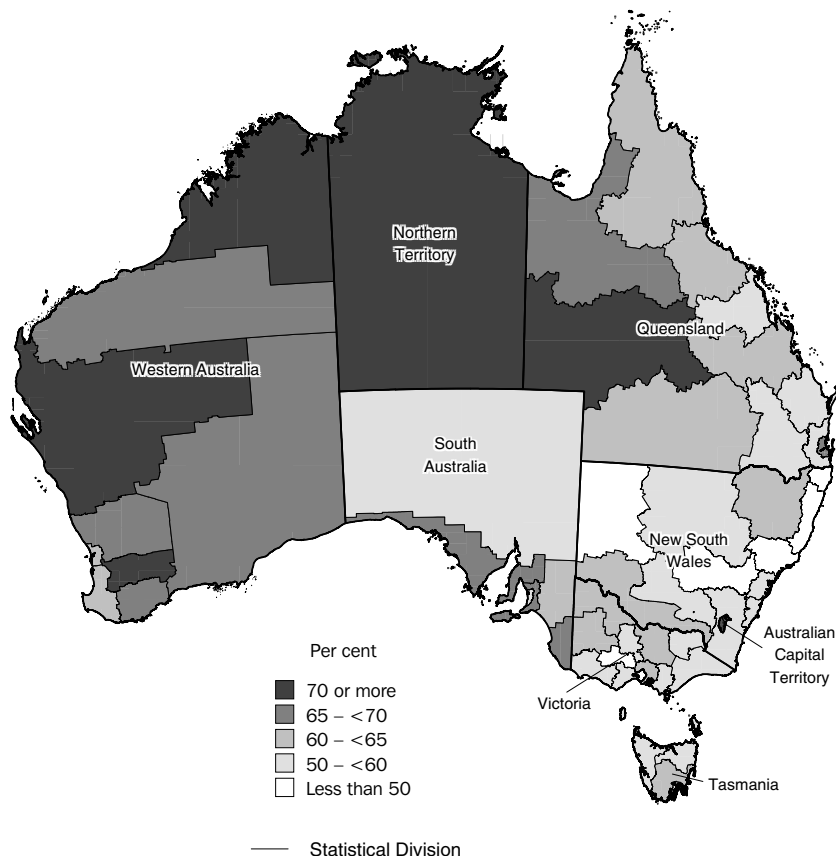
(a) Percentages are of all farms.

USE OF COMPUTERS

At the Statistical Division level, there was some variation between the proportion of farms using a computer. Outside the capital city Statistical Divisions, the proportion of farms using a computer ranged from:

- Murray (62%) and Northern (60%), to Richmond-Tweed (46%) and Mid-North Coast (43%) in New South Wales;
- Goulburn (63%) and Mallee (61%), to East Gippsland (52%) and Central Highlands (47%) in Victoria;
- Central West (72%) and North West (69%), to Moreton (55%) and Wide Bay-Burnett (52%) in Queensland;
- South East, Yorke and Lower North (both 67%) and Outer Adelaide (66%), to Murray Lands (63%) and Northern (57%) in South Australia;
- Upper Great Southern (78%) and Central (72%), to South Eastern (67%) and South West (64%) in Western Australia; and
- Southern (63%), to Northern and Mersey Lyall (both 55%) in Tasmania.

PROPORTION OF FARMS USING A COMPUTER, By Statistical Division—June 2000

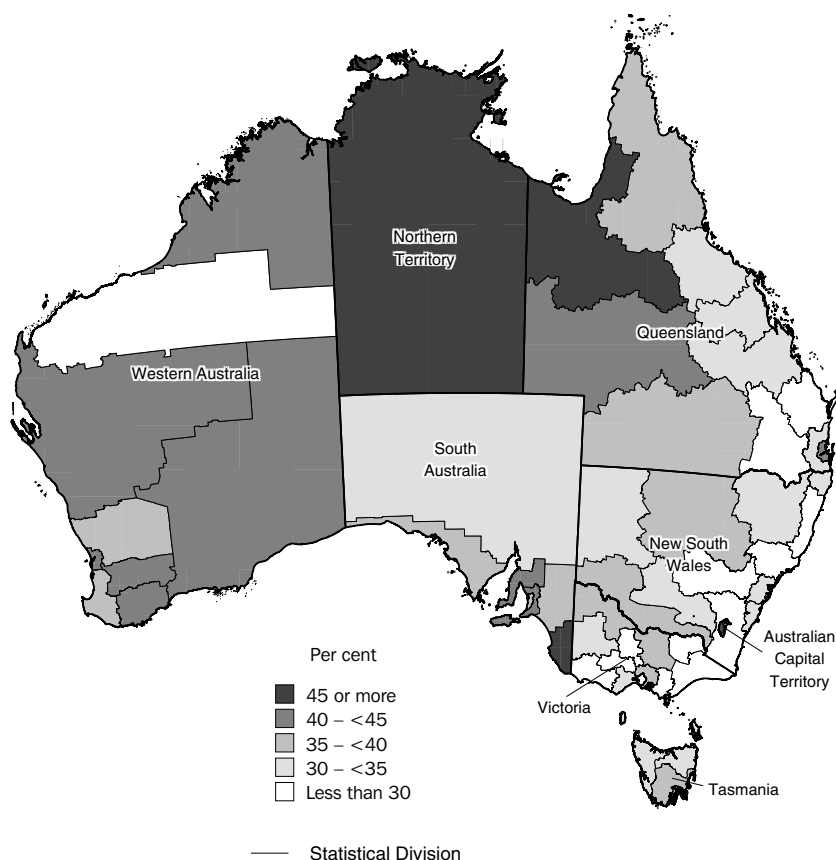


USE OF THE INTERNET

The proportion of farms using the Internet at Statistical Division level in each State (outside the capital city Statistical Divisions), ranged from:

- Murray (37%) and Murrumbidgee (34%), to Central West and South Eastern (both 26%) and Mid-North Coast (25%) in New South Wales;
- Mallee (39%) and Goulburn (36%), to Loddon, Ovens Murray and Gippsland (all 29%) and East Gippsland (27%) in Victoria;
- North West (45%) and Central West (42%), to Darling Downs (28%) and Wide Bay-Burnett (26%) in Queensland;
- South East (45%) and Yorke and Lower North (43%), to Eyre (36%) and Northern (35%) in South Australia;
- Lower Great Southern, South Eastern, Central and Kimberley (all 44%), to South West (36%) and Pilbara (29%) in Western Australia; and
- Southern (38%) to Mersey-Lyall (33%) in Tasmania.

PROPORTION OF FARMS USING THE INTERNET, By Statistical Division—June 2000



REFERENCE MAP

For identification of individual Statistical Divisions, please see the Reference Map on Page 19 of this publication.

3.1**FARMS USING A COMPUTER AND THE INTERNET, By Statistical Division**

	<i>All farms</i>	<i>Farms using a computer</i>	<i>. . .</i>	<i>Farms using the Internet</i>	<i>. . .</i>
	No.	No.	%	No.	%
New South Wales					
Sydney	2 103	1 093	52	669	32
Hunter	3 093	1 530	49	918	30
Illawarra	983	494	50	297	30
Richmond-Tweed	3 294	1 512	46	1 007	31
Mid-North Coast	3 338	1 434	43	839	25
Northern	6 783	4 090	60	2 344	35
North Western	4 352	2 297	53	1 540	35
Central West	5 819	2 738	47	1 502	26
South Eastern	4 543	2 271	50	1 178	26
Murrumbidgee	4 953	2 863	58	1 697	34
Murray	4 089	2 555	62	1 505	37
Far West	304	150	49	99	32
<i>Total</i>	<i>43 654</i>	<i>23 028</i>	<i>53</i>	<i>13 596</i>	<i>31</i>
Victoria					
Melbourne	2 885	1 743	60	1 103	38
Barwon	2 000	1 169	58	629	31
Western District	5 123	2 896	57	1 515	30
Central Highlands	2 019	953	47	600	30
Wimmera	3 214	1 932	60	1 089	34
Mallee	4 783	2 915	61	1 882	39
Loddon	2 324	1 237	53	677	29
Goulburn	6 537	4 087	63	2 361	36
Ovens-Murray	2 345	1 385	59	684	29
East Gippsland	2 535	1 321	52	695	27
Gippsland	3 538	1 911	54	1 035	29
<i>Total</i>	<i>37 304</i>	<i>21 549</i>	<i>58</i>	<i>12 270</i>	<i>33</i>
Queensland					
Brisbane	1 117	734	66	491	44
Moreton	4 208	2 320	55	1 327	32
Wide Bay-Burnett	5 253	2 727	52	1 363	26
Darling Downs	6 824	3 854	56	1 937	28
South West	1 703	1 075	63	616	36
Fitzroy	3 067	1 855	60	1 057	34
Central West	699	503	72	291	42
Mackay	2 111	1 242	59	681	32
Northern	2 140	1 296	61	716	33
Far North	3 060	1 880	61	1 100	36
North West	515	354	69	233	45
<i>Total</i>	<i>30 698</i>	<i>17 841</i>	<i>58</i>	<i>9 811</i>	<i>32</i>
South Australia					
Adelaide	1 116	635	57	402	36
Outer Adelaide	3 107	2 036	66	1 312	42
Yorke and Lower North	2 261	1 509	67	974	43
Murray Lands	3 794	2 387	63	1 493	39
South East	2 670	1 793	67	1 214	45
Eyre	1 600	1 040	65	572	36
Northern	1 358	778	57	474	35
<i>Total</i>	<i>15 905</i>	<i>10 180</i>	<i>64</i>	<i>6 442</i>	<i>40</i>

3.1**FARMS USING A COMPUTER AND THE INTERNET, By Statistical Division** *continued* . . .

	<i>All farms</i>	<i>Farms using a computer</i>	<i>. . .</i>	<i>Farms using the Internet</i>	<i>. . .</i>
	No.	No.	%	No.	%
Western Australia					
Perth	1 290	777	60	520	40
South West	2 852	1 815	64	1 014	36
Lower Great Southern	2 344	1 607	69	1 035	44
Upper Great Southern	1 827	1 418	78	742	41
Midlands	3 146	2 127	68	1 233	39
South Eastern	819	550	67	364	44
Central	1 394	1 001	72	613	44
Pilbara	59	40	68	17	29
Kimberley	187	132	70	82	44
<i>Total</i>	<i>13 917</i>	<i>9 466</i>	<i>68</i>	<i>5 621</i>	<i>40</i>
Tasmania					
Greater Hobart	291	152	52	104	36
Southern	832	523	63	315	38
Northern	1 597	885	55	556	35
Mersey-Lyall	1 710	947	55	563	33
<i>Total</i>	<i>4 430</i>	<i>2 507</i>	<i>57</i>	<i>1 539</i>	<i>35</i>
Northern Territory					
<i>Total</i>	<i>367</i>	<i>260</i>	<i>71</i>	<i>180</i>	<i>49</i>
Australian Capital Territory					
<i>Total</i>	<i>96</i>	<i>67</i>	<i>70</i>	<i>40</i>	<i>42</i>
Australia	146 371	84 898	58	49 499	34

CHAPTER 4

USE OF INFORMATION TECHNOLOGY BY INDUSTRY

BROAD INDUSTRY COMPARISON

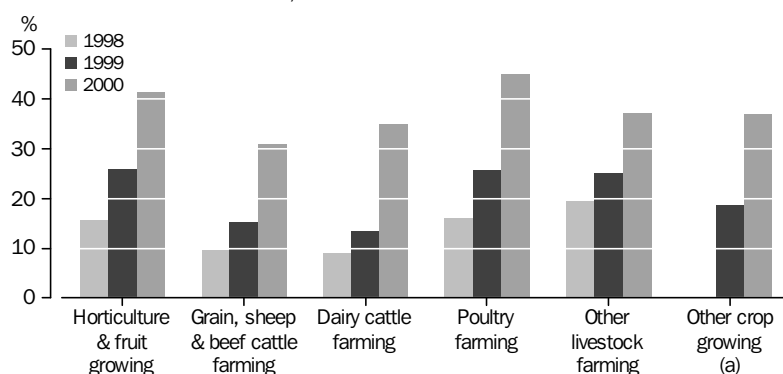
At June 2000, the Poultry farming industry was the highest computer user, with 72% of farms using a computer. The Horticulture and fruit growing industry, at 65%, was the second highest computer user, followed closely by Other livestock (64%) and Other crop growing (63%). The industry with the lowest proportion of farms using a computer was Grain, sheep and beef cattle farming (55%).

Other crop growing showed the most significant industry growth in the 15 months to June 2000, with use of computers increasing from 49% at March 1999 to 63% at June 2000. Within this category, Sugar cane growing showed the most significant increase, with use of computers increasing from 42% at March 1999 to 59% at June 2000.

Use of the Internet was highest for those industries with highest computer use, namely Poultry farming (45%) and Horticulture and fruit growing (41%). Similarly the lowest proportion of Internet use by all Australian farm industries was reported by the farming industry with the lowest proportion of computer use at June 2000, namely Grain, sheep, beef and cattle farming (31%).

Dairy cattle farming showed the most significant industry growth, with use of the Internet increasing from 14% at March 1999 to 35% at June 2000, an overall growth of 159%. Within the States and Territories, Tasmanian Dairy cattle farms reported the lowest growth for Internet use at 60% while Victorian Dairy cattle farms reported the highest growth for Internet use at 186%.

FARMS USING THE INTERNET, BY INDUSTRY



(a) Data not available for 1998

4.1**FARMS USING A COMPUTER AND THE INTERNET, By Industry**

	<i>Farms using a computer</i>			<i>Farms using the Internet</i>	
	<i>All farms</i>				
	No.	No.	%	No.	%
Horticulture and fruit growing					
Plant nurseries	2 496	1 807	72	1 305	52
Cut flower and flower seed growing	1 134	810	71	556	49
Vegetable growing	5 313	3 111	59	1 735	33
Grape growing	6 522	4 337	67	2 909	45
Apple and pear growing	1 229	831	68	485	39
Stone fruit growing	1 257	791	63	472	38
Fruit growing n.e.c.	5 813	3 717	64	2 387	41
<i>Total</i>	23 764	15 404	65	9 848	41
Grain, sheep and beef cattle farming					
Grain growing	16 463	11 225	68	7 116	43
Grain-sheep and grain-beef cattle farming	18 232	11 380	62	6 422	35
Sheep-beef cattle farming	9 253	4 941	53	2 793	30
Sheep farming	14 302	7 120	50	3 636	25
Beef cattle farming	35 236	16 534	47	8 938	25
<i>Total</i>	93 486	51 200	55	28 905	31
Dairy cattle farming					
<i>Total</i>	13 820	8 516	62	4 825	35
Poultry farming					
Poultry farming (meat)	845	626	74	383	45
Poultry farming (eggs)	508	348	68	227	45
<i>Total</i>	1 354	974	72	610	45
Other livestock farming					
Pig farming	1 145	729	64	426	37
Horse farming	2 021	1 195	59	703	35
Deer farming	196	143	73	112	57
Livestock farming n.e.c.	1 158	813	70	442	38
<i>Total</i>	4 520	2 879	64	1 683	37
Other crop growing					
Sugar cane farming	5 029	2 968	59	1 592	32
Cotton growing	974	840	86	658	68
Crop and plant growing n.e.c.	1 614	952	59	568	35
<i>Total</i>	7 617	4 761	63	2 818	37
Other(a)					
<i>Total</i>	1 811	1 165	64	809	45
Australia	146 371	84 898	58	49 499	34

(a) Relates to establishments with an EVAO of \$5,000 or more but which are classified to a non-Agriculture ANZSIC class.

4.2

FARMS USING A COMPUTER AND THE INTERNET, By Broad Industry and

State/Territory

	<i>All farms</i>	<i>Farms using a computer</i>	<i>..</i>	<i>Farms using the Internet</i>	<i>...</i>
	No.	No.	%	No.	%
Horticulture and fruit growing					
New South Wales	6 131	3 567	58	2 208	36
Victoria	5 118	3 457	68	2 234	44
Queensland	5 048	3 413	68	2 107	42
South Australia	4 181	2 764	66	1 904	46
Western Australia	2 126	1 429	67	917	43
Tasmania	1 019	678	67	417	41
Northern Territory	128	87	68	56	44
Australian Capital Territory	12	9	75	6	50
Grain, sheep and beef cattle farming					
New South Wales	31 711	15 942	50	9 234	29
Victoria	22 081	11 530	52	6 293	28
Queensland	16 679	8 951	54	4 618	28
South Australia	9 907	6 237	63	3 790	38
Western Australia	10 582	7 185	68	4 113	39
Tasmania	2 240	1 154	52	718	32
Northern Territory	214	153	71	113	53
Australian Capital Territory	72	48	67	26	36
Dairy cattle farming					
New South Wales	1 943	1 175	60	684	35
Victoria	8 133	5 174	64	2 862	35
Queensland	1 842	975	53	566	31
South Australia	770	494	64	294	38
Western Australia	386	265	69	174	45
Tasmania	743	430	58	243	33
Northern Territory	np	np	np	np	np
Australian Capital Territory	np	np	np	np	np
Poultry farming					
New South Wales	482	307	64	180	37
Victoria	304	250	82	163	54
Queensland	273	194	71	126	46
South Australia	126	89	70	51	40
Western Australia	137	109	79	73	53
Tasmania	23	18	78	12	53
Northern Territory	np	np	np	np	np
Australian Capital Territory	np	np	np	np	np
Other livestock farming					
New South Wales	1 570	893	57	507	32
Victoria	982	690	70	421	43
Queensland	1 052	694	66	379	36
South Australia	403	275	68	176	44
Western Australia	354	247	70	151	43
Tasmania	152	73	48	45	30
Northern Territory	4	3	75	np	np
Australian Capital Territory	4	4	100	np	np
Other crop growing					
New South Wales	1 227	820	67	570	46
Victoria	369	228	62	151	41
Queensland	5 473	3 390	62	1 874	34
South Australia	326	188	58	152	47
Western Australia	67	46	69	22	33
Tasmania	146	82	56	46	31
Northern Territory	np	np	np	np	np
Australian Capital Territory	np	np	np	np	np

np not available for publication but included in totals where applicable, unless otherwise indicated

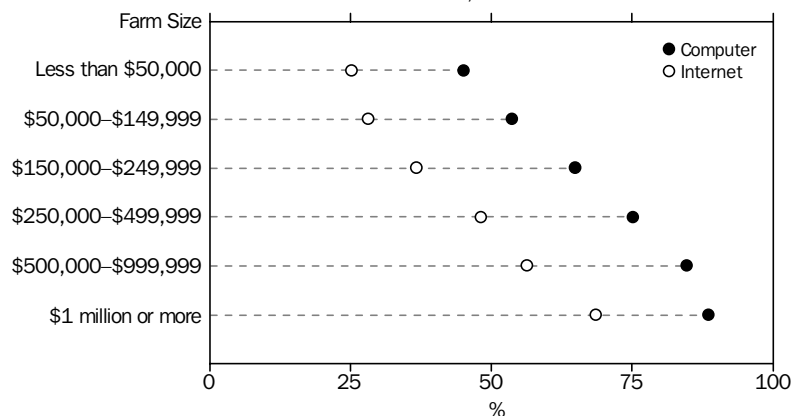
CHAPTER 5

FARM SIZE AND USE OF INFORMATION TECHNOLOGY

INTRODUCTION

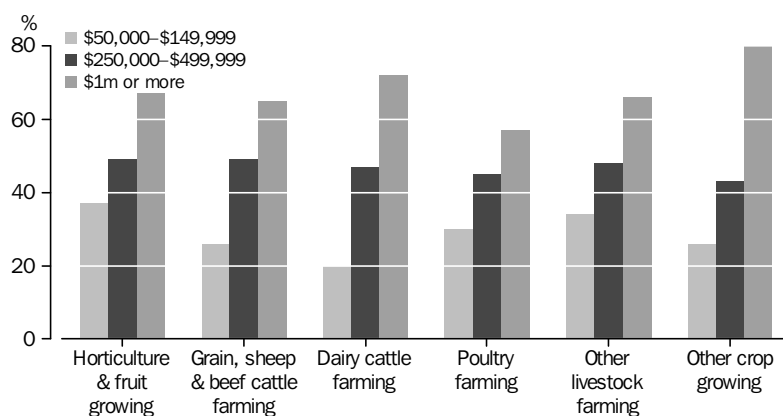
At June 2000, there was a strong relationship between the proportion of farms using computers and the Internet and the estimated value of agricultural operations (EVAO). As the graph below shows, the proportion of farms using computers and the Internet increased with farm size.

FARMS USING A COMPUTER AND THE INTERNET, BY EVAO



Within industries a similar size pattern was revealed, however the increase across size differed for each industry. For example, across sizes Internet use ranged from 35% to 67% in the Horticulture and fruit growing industry compared with a range of 25% to 80% in Other crop growing.

USE OF THE INTERNET BY INDUSTRY, SELECTED EVAO RANGES



5.1**FARMS USING A COMPUTER AND THE INTERNET, By Broad Industry and EVAO**

	<i>All farms</i>	<i>Farms using a computer . . .</i>	<i>Farms using the Internet . . .</i>		
	No.	No.	%	No.	%
Horticulture and fruit growing					
Less than \$50,000	7 603	4 271	56	2 644	35
\$50,000–\$149,999	7 873	4 851	62	2 878	37
\$150,000–\$249,999	2 963	2 101	71	1 407	47
\$250,000–\$499,999	2 789	2 048	73	1 365	49
\$500,000–\$999,999	1 514	1 221	81	871	58
\$1m or more	1 021	913	89	684	67
<i>Total</i>	<i>23 764</i>	<i>15 404</i>	<i>65</i>	<i>9 848</i>	<i>41</i>
Grain, sheep and beef cattle farming					
Less than \$50,000	37 517	15 542	41	8 315	22
\$50,000–\$149,999	26 266	13 634	52	6 951	26
\$150,000–\$249,999	11 780	7 644	65	4 174	35
\$250,000–\$499,999	11 172	8 527	76	5 454	49
\$500,000–\$999,999	5 131	4 447	87	2 951	58
\$1m or more	1 620	1 406	87	1 060	65
<i>Total</i>	<i>93 486</i>	<i>51 200</i>	<i>55</i>	<i>28 905</i>	<i>31</i>
Dairy cattle farming					
Less than \$50,000	1 225	592	48	422	34
\$50,000–\$149,999	3 864	1 810	47	778	20
\$150,000–\$249,999	4 177	2 589	62	1 380	33
\$250,000–\$499,999	3 542	2 651	75	1 664	47
\$500,000–\$999,999	900	772	86	501	56
\$1m or more	112	102	91	80	72
<i>Total</i>	<i>13 820</i>	<i>8 516</i>	<i>62</i>	<i>4 825</i>	<i>35</i>
Poultry farming					
Less than \$50,000	157	*99	*63	*65	*42
\$50,000–\$149,999	172	102	59	52	30
\$150,000–\$249,999	161	106	66	63	39
\$250,000–\$499,999	335	246	74	151	45
\$500,000–\$999,999	378	289	76	192	51
\$1m or more	151	132	87	87	57
<i>Total</i>	<i>1 354</i>	<i>974</i>	<i>72</i>	<i>610</i>	<i>45</i>
Other livestock farming					
Less than \$50,000	2 318	1 325	57	718	31
\$50,000–\$149,999	1 036	670	65	349	34
\$150,000–\$249,999	268	181	67	107	40
\$250,000–\$499,999	484	343	71	231	48
\$500,000–\$999,999	202	184	91	137	68
\$1m or more	212	176	83	139	66
<i>Total</i>	<i>4 520</i>	<i>2 879</i>	<i>64</i>	<i>1 683</i>	<i>37</i>
Other crop growing					
Less than \$50,000	967	483	50	246	25
\$50,000–\$149,999	2 541	1 311	52	663	26
\$150,000–\$249,999	1 515	893	59	507	33
\$250,000–\$499,999	1 217	867	71	523	43
\$500,000–\$999,999	705	581	82	342	48
\$1m or more	671	625	93	538	80
<i>Total</i>	<i>7 617</i>	<i>4 761</i>	<i>63</i>	<i>2 818</i>	<i>37</i>
Total Industry(a)					
Less than \$50,000	50 827	22 922	45	12 809	25
\$50,000–\$149,999	42 152	22 639	54	11 852	28
\$150,000–\$249,999	20 960	13 598	65	7 698	37
\$250,000–\$499,999	19 720	14 832	75	9 508	48
\$500,000–\$999,999	8 896	7 528	85	5 021	56
\$1m or more	3 816	3 380	89	2 612	68
<i>Total</i>	<i>146 371</i>	<i>84 898</i>	<i>58</i>	<i>49 499</i>	<i>34</i>

* estimate has a relative standard error of between 25% and 50% and should be used with caution

(a) Other industries is included in Total Industry, but excluded from the table.

5.2**FARMS USING A COMPUTER AND THE INTERNET, By EVAO and State/Territory**

	<i>All farms</i>	<i>Farms using a computer</i>		<i>Farms using the Internet</i>	
	No.	No.	%	No.	%
Less than \$50,000					
New South Wales	17 380	6 713	39	3 768	22
Victoria	12 773	5 893	46	3 471	27
Queensland	10 893	5 283	48	2 759	25
South Australia	4 244	2 241	53	1 302	31
Western Australia	3 395	1 702	50	882	26
Tasmania	2 008	1 005	50	580	29
Northern Territory	69	44	64	24	35
Australian Capital Territory	65	42	65	24	37
\$50,000–\$149,999					
New South Wales	12 781	6 712	53	3 561	28
Victoria	12 117	6 430	53	3 129	26
Queensland	8 211	4 372	53	2 223	27
South Australia	5 046	2 899	57	1 669	33
Western Australia	2 802	1 596	57	890	32
Tasmania	1 100	567	52	342	31
Northern Territory	76	47	62	30	39
Australian Capital Territory	19	15	79	7	37
\$150,000–\$249,999					
New South Wales	5 392	3 483	65	2 099	39
Victoria	5 801	3 851	66	2 019	35
Queensland	4 518	2 825	63	1 481	33
South Australia	2 744	1 813	66	1 223	45
Western Australia	1 886	1 215	64	602	32
Tasmania	568	372	65	246	43
Northern Territory	46	35	76	23	50
Australian Capital Territory	6	5	83	5	83
\$250,000–\$499,999					
New South Wales	4 919	3 553	72	2 379	48
Victoria	4 581	3 601	79	2 354	51
Queensland	4 232	2 936	69	1 751	41
South Australia	2 616	2 130	81	1 439	55
Western Australia	2 802	2 225	79	1 340	48
Tasmania	505	347	69	214	42
Northern Territory	np	np	np	np	np
Australian Capital Territory	np	np	np	np	np
\$500,000–\$999,999					
New South Wales	2 252	1 778	79	1 182	52
Victoria	1 551	1 330	86	963	62
Queensland	1 814	1 494	82	870	48
South Australia	869	750	86	520	60
Western Australia	2 190	1 986	91	1 348	62
Tasmania	166	140	84	100	60
Northern Territory	np	np	np	np	np
Australian Capital Territory	np	np	np	np	np
\$1m or more					
New South Wales	931	789	85	608	65
Victoria	480	445	93	334	69
Queensland	1 030	931	90	726	71
South Australia	387	348	90	288	74
Western Australia	843	742	88	560	66
Tasmania	84	76	90	57	68
Northern Territory	np	np	np	np	np
Australian Capital Territory	np	np	np	np	np

np not available for publication but included in totals where applicable, unless otherwise indicated

EXPLANATORY NOTES

INTRODUCTION

1 This publication presents information on farm use of computers and the Internet at June 2000. The data were obtained from the 1999–2000 Agricultural Commodity Survey. Some comparable data from the 1997–98 and 1998–99 Agricultural Commodity Surveys have been included.

AGRICULTURAL COMMODITY SURVEY

2 The scope of the 1999–2000 Agricultural Commodity Survey is establishments undertaking agricultural activity which have an estimated value of agricultural operations (EVAO) of \$5,000 or more. The concept of an establishment is the same as that used by the ABS for industry statistics collections. The establishment is the smallest accounting unit of a 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.

3 The 1999–2000 survey consisted of a sample of 24% of the farming establishments operating in Australia at the end of June 2000. The information technology questions included in the 1999–2000 Agricultural Commodity Survey covered the use of a computer and the Internet at the end of June 2000.

GEOGRAPHICAL, INDUSTRY AND SIZE CLASSIFICATIONS

4 The data contained in tables in this publication have, where appropriate, been classified on a geographical, industry and farm size basis by classifying farm establishments:

- to Statistical Divisions (SD) within States and Territories, as set out in the *Australian Standard Geographical Classification (ASGC)* (Cat. no. 1216.0);
- to industry according to the methodology described in *Australia and New Zealand Standard Industrial Classification (ANZSIC)* (Cat. no. 1292.0); and
- to EVAO ranges according to the estimated value of agricultural operations (or activity) undertaken by an establishment.

5 Because the survey covers establishments with an EVAO of \$5,000 or more, it includes establishments whose primary activity is not farming activity. These establishments are classified to a non-agricultural ANZSIC class and details for these are shown separately in the farm industry tables as 'Other'.

ACCURACY OF DATA

6 The estimates in this publication are subject to sampling and non-sampling error. They are based on information obtained from a sample of establishments in the surveyed population. Consequently, the estimates are subject to sampling variability, that is, they may differ from the figures that would have been obtained if all units had been included in the survey. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample of units was included.

7 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 a census had been conducted, and approximately 19 chances in 20 that the difference will be less than two SEs.

ACCURACY OF DATA *continued*

8 Sampling variability can be measured by the relative standard error (RSE) which is obtained by expressing the SE as a percentage of the estimate to which it refers. The RSE is a useful measure in that it provides an immediate indication of the percentage standard errors likely to have occurred due to sampling, and this avoids the need to refer also to the size of the estimate.

9 The following table provides RSEs for a selection of the Australian estimates presented in this publication.

RELATIVE STANDARD ERRORS FOR SELECTED INDICATORS

	<i>Farms using a computer</i>	<i>Farms using the Internet</i>
	%	%
State		
New South Wales	2	3
Victoria	2	3
Queensland	2	3
South Australia	2	2
Western Australia	2	3
Tasmania	3	4
Northern Territory	—	—
Australian Capital Territory	—	—
Australia	1	1
Industry		
Horticulture and fruit growing	1	2
Grain, sheep and beef cattle farming	1	2
Dairy cattle farming	3	5
Poultry farming	4	5
Other livestock farming	5	6
Other crop growing	4	5
Other	9	10
Farm size		
Less than \$50,000	2	3
\$50,000–\$149,999	2	3
\$150,000–\$249,999	2	3
\$250,000–\$499,999	2	2
\$500,000–\$999,999	2	2
\$1m or more	2	3

— nil or rounded to zero (including null cells)

10 As an example of the above, the estimate of the proportion of farms in New South Wales with Internet access at June 2000 is 31% (or 13,596 farms) and the RSE on this estimate is 3%, giving a SE of 1% (or 408 farms). Therefore, there would be two chances in three that, if all units had been included in the survey, a proportion in the range of 30% to 32% (13,188 to 14,004 farms) would have been obtained, and 19 chances in 20 (i.e. a confidence interval of 95%) that the proportion would have been within the range of 29% to 33% (12,780 to 14,412 farms).

11 Errors other than those due to sampling may occur because of deficiencies in the register of units from which the sample was selected, non-response, and imperfections in reporting by respondents. Inaccuracies of this kind are referred to as non-sampling errors and they may occur in any collection, whether it be a census or a sample. Every effort has been made to reduce non-sampling error to a minimum by careful design and testing of questionnaires, efficient operating procedures and systems, and appropriate methodology.

ACCURACY OF DATA *continued*

12 Where figures have been rounded, discrepancies may occur between the sum of the components and the total. In addition, percentages have been calculated using the unrounded figures.

ACKNOWLEDGMENT

13 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

14 The most recent issue of other ABS publications on the use and production of information technology and telecommunication goods and services in Australia are listed below:

Business Use of Information Technology, Australia, 1999–2000

(Cat. no. 8129.0)

Government Use of Information Technology, 1999–2000 (Cat. no. 8119.0)

Household Use of Information Technology, Australia, 2000

(Cat. no. 8146.0)

Information Technology, Australia, 1998–99 (Cat. no. 8126.0)

Internet Activity, Australia, June 2001 (Cat. no. 8153.0)

Use of Information Technology on Farms, Australia, 1998–99

(Cat. no. 8150.0)

Use of the Internet by Householders, Australia, November 2000

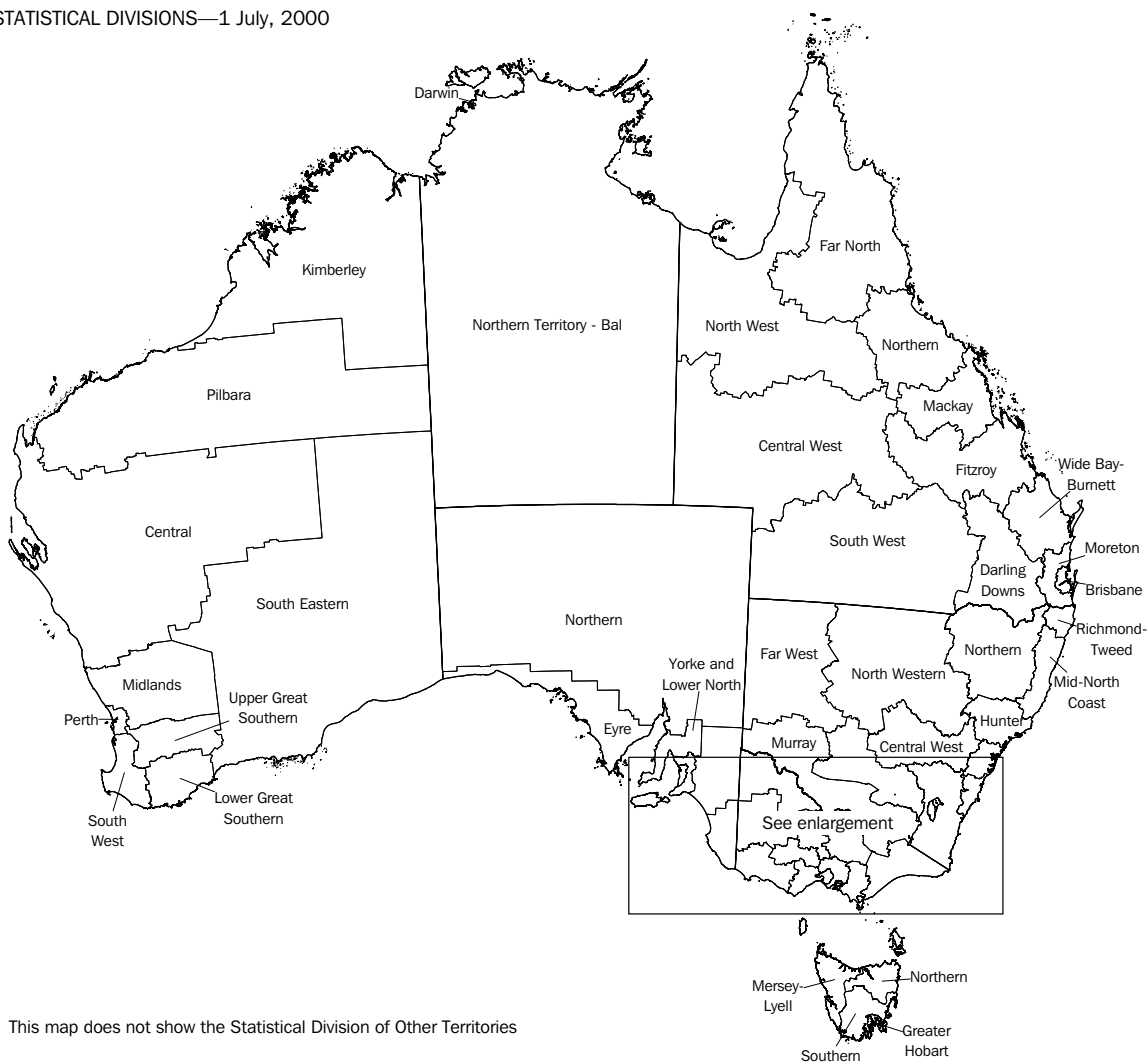
(Cat. no. 8147.0)

AVAILABILITY OF
UNPUBLISHED STATISTICS

15 As well as statistics included in this publication, the ABS has a range of data on the use of selected information technologies by households in regional areas. Inquiries about these statistics should be made by telephoning Robynne Knowler in Canberra 02 6252 5609 or email robynne.knowler@abs.gov.au.

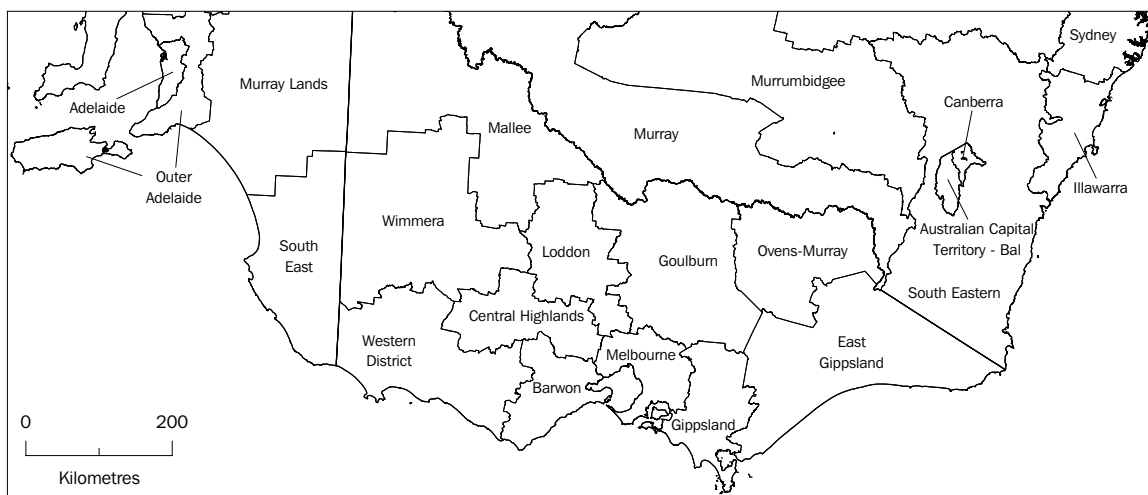
APPENDIX **REFERENCE MAP**APPENDIX **REFERENCE MAP**

STATISTICAL DIVISIONS—1 July, 2000



This map does not show the Statistical Division of Other Territories

Enlargement



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