

A survey of wine grape growing farms in the Murray Valley and Barossa regions, 2006-07

from ABARE research report 08.11

The report, A survey of wine grape growing farms in the Murray Valley and Barossa regions, 2006-07 was prepared following face-to-face interviews of wine grape growers conducted in the two regions between October 2007 and March 2008. It provides detailed information describing the physical, financial, socioeconomic and environmental characteristics of wine grape growing farms in the Murray Valley and Barossa regions in 2006-07.

Drought conditions impacted negatively on yields broadly across the industry in 2006-07. Yields were also affected by severe frosts in parts of South Australia and much of Victoria. Total national wine grape production in 2006-07 is estimated to have been 1.40 million tonnes, which is around 25 per cent lower than the 1.87 million tonnes that was crushed in 2005-06. Reductions in yield tended to be most acute in cool climate wine grape producing regions.

Murray Valley

The Murray Valley is a warm climate wine grape growing region located in far north-west Victoria and far south-west New South Wales. The region includes the major regional centres of Mildura and Swan Hill. Around 1300 wine grape growers in the Murray Valley produce approximately 25 per cent of all wine grapes crushed in Australia annually. The wine grape growing industry in the Murray Valley is totally reliant on irrigation.

The average size of wine grape growing farms in the Murray Valley is estimated to have been around 40 hectares in 2006-07, of which around 17 hectares was planted to wine grapes. Around 80 per cent of growers in the Murray Valley could be classified as being small to medium sized wine grape producers having up to 20 hectares planted to wine grapes (table 1).

Chardonnay is the principal variety grown in the region accounting for around one-third of total wine grape production. Shiraz and cabernet sauvignon are also important regional varieties. Many wine grape growers in the Murray Valley produced horticulture crops in addition to wine grapes. The most common of these were table grapes, grapes grown for drying and various citrus crops.

In 2006-07, yields are estimated to have been around 13.5 tonnes per hectare for red wine grapes and 19.4 tonnes per hectare for white wine grapes. Total regional wine grape production in 2006-07 was around 13 per cent lower than in 2005-06.

Growers are estimated to have received around \$390 per tonne for both red and white varieties on average in 2006-07. Prices received for red wine grapes and white wine grapes in the area are estimated to have declined by 52 per cent and 30 per cent respectively in real terms between 2000-01 and 2006-07.

1 Key physical farm characteristics, by size of operation, 2006-07 Murray Valley region average per farm

		all farms		small – medium ^a		large ^a	
Total area operated	ha	39.3	(29)	31.0	(45)	75.3	(68)
Wine grape areas							
Red grapes bearing	ha	6.7	(13)	3.8	(18)	19.0	(32)
White grapes bearing	ha	9.9	(11)	6.1	(13)	25.7	(21)
Total tree and vine areas							
Bearing	ha	21.3	(9)	13.1	(6)	50.8	(22)
Production							
Red wine grapes	t	91	(15)	48	(18)	273	(41)
White wine grapes	t	192	(14)	107	(17)	555	(24)
Irrigation application rate							
Red wine grapes	ML/ha	6.9	(8)	7.3	(14)	6.6	(18)
White wine grapes	ML/ha	6.5	(6)	6.8	(7)	6.2	(20)

^a small - medium farms defined as having up to 20 hectares planted to wine grapes, large farms defined as having more than 20 hectares planted to wine grapes.

Note: Figures included in parentheses are standard errors, expressed as percentages of the estimates. A guide to interpreting this measure of sample variation is included in Appendix C of the report. The survey included only wine grape growing farms with an estimated value of agricultural operations of more than \$40 000.

Total cash receipts are estimated to have been around \$189 000 per farm, on average, in 2006-07. Wine grape receipts accounted for an estimated 65 per cent of total cash receipts. Total cash costs are estimated to have been \$134 000, on average, in 2006-07. After deductions for depreciation and accounting for the value of family labour, the average farm business profit for Murray Valley wine grape growing farms is estimated to have been around \$9000 (table 2).

Small to medium sized farms are estimated to have realised business losses, on average, of around \$10 000 in 2006-07 with an estimated rate of return of 0.4 per cent, excluding capital appreciation. Large farms realised farm business profits of around \$91 000, on average, with an estimated rate of return of 6.3 per cent, excluding capital appreciation.

2 Financial performance of wine grape growing farms, by size of operation, 2006-07 Murray Valley region average per farm

		all farms		small – medium ^a		large ^a	
Total wine grapes	\$	123 015	(16)	72 138	(12)	341 515	(28)
Other tree and vine crops	\$	51 995	(46)	34 719	(23)	126 190	(44)
Total cash receipts	\$	189 489	(15)	117 561	(9)	498 388	(11)
Total cash costs	\$	133 696	(13)	82 856	(9)	352 033	(8)
Farm cash income	\$	55 793	(29)	34 705	(29)	146 355	(36)
Farm business profit	\$	8 774	(200)	-10 396	(130)	91 099	(55)
Total capital value at 30 June	\$	1 282 986	(10)	952 352	(14)	2 702 925	(27)
Rate of return							
- excl. capital appreciation	%	2.7	(59)	0.4	(424)	6.3	(32)
- incl. capital appreciation ^b	%	20.4	(50)	22.9	(64)	16.1	(71)
Total farm debt ^c	\$	239 165	(17)	141 706	(17)	657 712	(19)
Equity ratio ^c	%	79	(5)	80	(5)	71	(10)
Total liquid assets	\$	35 140	(32)	21 030	(38)	96 007	(52)
Off farm income	\$	46 991	(11)	54 820	(11)	11 325	(54)

^a small - medium farms defined as up to 20 hectares planted to wine grapes, large farms defined as having more than 20 hectares planted to wine grapes. ^b Excludes farms that purchased or sold permanent irrigation entitlements. ^c Only includes farms that provided debt information.

Note: Figures included in parentheses are standard errors, expressed as percentages of the estimates. A guide to interpreting this measure of sample variation is included in Appendix C of the report. The survey included only wine grape growing farms with an estimated value of agricultural operations of more than \$40 000.

The wine grape growing industry in the Murray Valley is being forced to adjust to increased uncertainty with respect to the availability of irrigation water at a time of relatively low wine grape prices. An estimated 38 per cent of growers planned to make changes to their methods of irrigation application within the next three years, whilst an estimated 87 per cent of producers agreed that uncertainty of irrigation allocations constrained increases in their irrigated area.

It is estimated that at the time of the survey around 30 per cent of growers had intentions to leave agriculture within five years. In addition, an estimated 10 per cent of growers were intending to diversify or change their agricultural operation and around 5 per cent planned to retire. All survey respondents indicating an intention to leave agriculture were of the small to medium sized category.

Barossa Region

The Barossa region is a cool climate wine grape growing region located approximately 80 kilometres north east of Adelaide. The survey covered the Barossa Valley wine grape growing region as well as most of the Eden Valley region. Around 540 wine grape growers in the Barossa region produce about 5 per cent of all wine grapes crushed in Australia each year.

The average size of wine grape growing farms in the Barossa region is estimated to have been around 70 hectares in 2006-07, with around 19 hectares planted to wine grapes. Around 65 per cent of growers in the region could be classified as being small to medium sized wine grape producers, having up to 20 hectares planted to wine grapes (table 3).

3 Key physical farm characteristics, by size of operation, 2006-07 Barossa region average per farm

		all farms		small – medium a		large a	
Total area operated	ha	73.3	(28)	54.8	(39)	108.1	(40)
Wine grape areas							
Red grapes bearing	ha	13.6	(13)	7.0	(27)	26.8	(13)
White grapes bearing	ha	5.8	(19)	1.8	(36)	13.6	(20)
Production							
Red wine grapes	t	63.2	(15)	35.4	(28)	118.3	(17)
White wine grapes	t	37.4	(28)	9.9	(28)	92.1	(33)
Yield							
Red wine grapes	t/ha	4.6	(7)	5.1	(7)	4.4	(10)
White wine grapes	t/ha	6.5	(13)	5.6	(20)	6.8	(14)
Irrigation application rate							
Red wine grapes	ML/ha	0.7	(15)	0.4	(29)	0.8	(14)
White wine grapes	ML/ha	0.9	(18)	0.4	(29)	1.0	(17)

a small - medium farms defined as having up to 20 hectares planted to wine grapes, large farms defined as having more than 20 hectares planted to wine grapes.

Note: Figures included in parentheses are standard errors, expressed as percentages of the estimates. A guide to interpreting this measure of sample variation is included in Appendix C of the report. The survey included only wine grape growing farms with an estimated value of agricultural operations of more than \$40 000.

Shiraz is the principal variety grown in the region accounting for around one-third of total wine grape production. Cabernet sauvignon and semillon are also commonly grown. The cooler and wetter Eden Valley region is well suited to the production of premium riesling grapes which typically receive high prices relative to other regions.

Drought conditions and high temperatures during the growing season led to a harvest some three weeks earlier than normal in 2006-07. Total regional production was down by around 48 per cent compared with the 2005-06 harvest. Growers achieved wine grape yields of around 5 tonnes per hectare on average in 2006-07.

Growers in the Barossa region are estimated to have received \$824 per tonne for white wine grapes and \$1353 per tonne for red wine grapes. Prices received by growers in the region are estimated to have decreased in real terms by around 36 per cent for red wine grapes and around 23 per cent for white wine grapes between 2000-01 and 2006-07.

Lower prices coupled with yields affected by drought resulted in generally poor financial returns in 2006-07. Total cash receipts were around \$156 000, on average, with wine grape receipts accounting for around 80 per cent of total cash receipts. Average farm cash costs were around \$125 000 per farm in 2006-07. After deductions for depreciation and accounting for the value of family labour, it is estimated wine grape growing farms in the Barossa region made business losses, of around \$29 000, on average (table 4).

4 Financial performance of wine grape growing farms, by size of operation, 2006-07 Barossa region average per farm

		all farms		small – medium ^a		large ^a	
Total wine grapes	\$	129 516	(15)	73 355	(25)	240 875	(19)
Total cash receipts	\$	155 968	(15)	94 693	(25)	277 468	(19)
Total cash costs	\$	125 083	(21)	58 734	(22)	256 644	(29)
Farm cash income	\$	30 885	(70)	35 959	(62)	20 824	(227)
Farm business profit	\$	-29 290	(72)	-13 189	(164)	-61 215	(76)
Total capital value at 30 June	\$	2 114 156	(12)	1 495 108	(21)	3 341 637	(13)
Rate of return							
- excl. capital appreciation	%	-0.8	(123)	-0.6	(250)	-1.0	(134)
- incl. capital appreciation	%	-0.3	(365)	0.5	(325)	-1.0	(162)
Total farm debt ^b	\$	174 468	(34)	70 814	(48)	364 101	(43)
Total liquid assets	\$	89 393	(25)	74 107	(34)	119 702	(37)
Off farm income	\$	36 077	(33)	43 996	(40)	20 375	(46)

^a small - medium farms defined as having up to 20 hectares planted to wine grapes, large farms defined as having more than 20 hectares planted to wine grapes. ^b Only includes farms that provided debt information.

Note: Figures included in parentheses are standard errors, expressed as percentages of the estimates. A guide to interpreting this measure of sample variation is included in Appendix C of the report. The survey included only wine grape growing farms with an estimated value of agricultural operations of more than \$40 000.

Farms with up to 20 hectares planted to wine grapes, on average, are estimated to have realised business losses of \$13 000 in 2006-07, with an estimated rate of return of -0.6 per cent excluding capital appreciation. Farms with more than 20 hectares planted to wine grapes, on average, are estimated to have realised business losses of \$61 000 in 2006-07, with an estimated rate of return of -1.0 per cent excluding capital appreciation.

Many wine grape growers receive a proportion of receipts from wine grape sales in the financial year after the grapes are sold. The 2007-08 incomes of these growers will also have been affected by relatively low carry over payments from 2006-07 sales.

At the time of the survey around three-quarters of growers in the Barossa region expected to be involved in the industry to a similar extent in the next five years. The price of land in the area, the cost of irrigation infrastructure and lack of irrigation water were regarded by wine grape growers as impediments to farm expansion in the region.