

# *Cost of Production*

## **1. Murray Valley Winegrape Cost of Production 2010/11**

*Prepared for: Murray Valley Winegrowers' Inc.*

*By: Mary Retallack, Retallack Viticulture*

## **2. Murray Valley Winegrape Cost of Production 2008/09**

*Prepared for: Murray Valley Winegrowers' Inc.*

*By: Mary Retallack, Retallack Viticulture*

June 2012



**Murray Valley**  
Winegrowers' Inc



## Economic benchmarking for the Murray Valley wine region

*Season 2010/11*

**Prepared for** : Murray Valley Winegrowers' Inc

**By** : Mary Retallack

**Date** : 6<sup>th</sup> July 2012



**Murray Valley**  
Winegrowers' Inc

**gwrdc regional**  
*grassroots solutions*





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## EXECUTIVE SUMMARY

Unseasonally high rainfall resulted in extremely high disease pressure during the 2010/11 growing season, with some vineyards under water for weeks at a time. In addition, chemical availability was low and a greater number of passes were required to manage the disease pressure. These factors led to the partial or complete loss of many wine grape crops. Lower yields and grape prices (compounded by penalties incurred for damaged grapes), had a devastating impact on vineyard income and ultimately on business return.

### Enterprises surveyed

A total of 61 wine growing enterprises out of a total of 549 (or 11.1%) were surveyed, with financial data collated from the 2010/11 growing season. A summary of the number and sizes of wine grape businesses that submitted a complete set of data for analysis is presented below.

**Executive Summary Table 1** : A summary of wine grape enterprises that submitted data for analysis

Financial data was received from the following wine growing enterprises (by category)						
Average vineyard size (area in production)	30 ha	Number of vineyards by location		Number of vineyards by size (area in production)		
		Mildura	52	1 - 10 ha	23	38%
Range of vineyard sizes (area in production)	4 ha to 189 ha	Robinvale	7	11 - 20 ha	18	30%
		Swan Hill	2	21 - 50 ha	10	16%
				51 - 100 ha	5	8%
				> 101 ha	5	8%
Data from a total of 61 vineyards was analysed						

### Key findings

#### *Mildura, Robinvale and Swan Hill*

Key findings for Mildura, Robinvale and Swan Hill include:

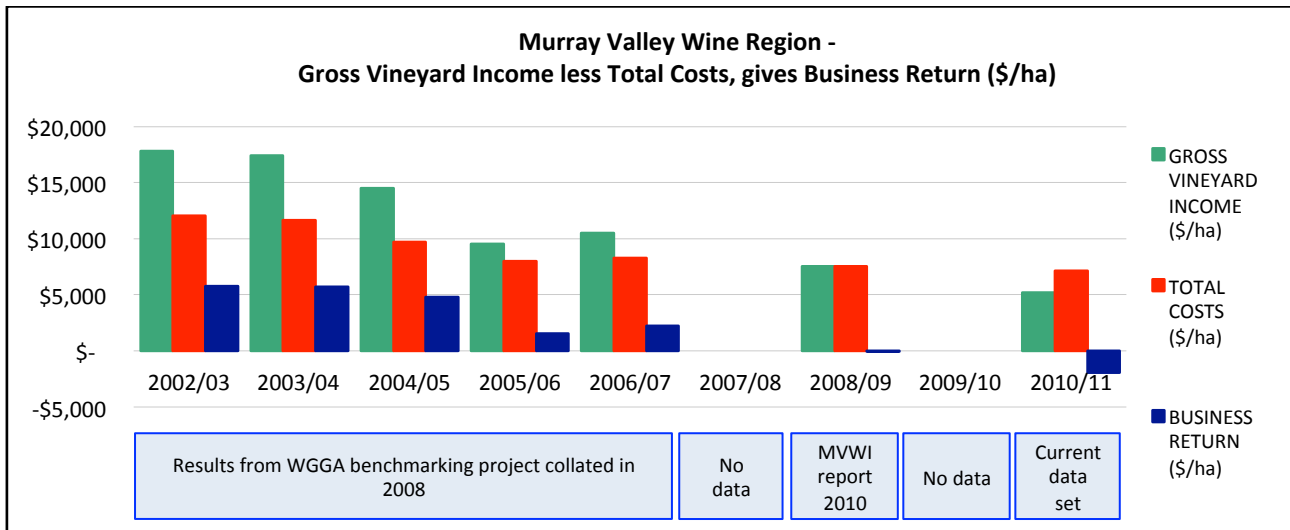
- **Mildura:** A total of 18 varieties were grown on the 52 enterprises surveyed in Mildura, comprising a total of 1,496 ha. 5,806 tonnes of wine grapes were not harvested due to disease damage in 2010/11.
- **Robinvale:** A total of 16 varieties were grown on the seven enterprises surveyed, comprising a total of 196 ha. 2,060 tonnes of wine grapes were not harvested due to disease damage in 2010/11.
- **Swan Hill:** A total of 10 varieties were grown on two enterprises in Swan Hill, comprising a total of 38 ha. Of the respondents surveyed in Swan Hill, no fruit was left unharvested due to disease damage.

#### *Income and cost of production for Murray Valley wine growers (combined data)*

Data for the 2002/03 to 2006/07 seasons was collected as a part of the WGGA's wine grower survey, carried out in 2008. Data representing 64 Murray Valley wine growing enterprises for season 2008/09, and the latest data comprising 61 wine growing enterprises for season 2010/11 is presented below.

- Average gross vineyard income (\$/ha) steadily declined from seasons 2002/03 to 2006/07, due to reduced grape prices and vine yields (capped tonnages). This trend continued for season 2008/09, with the average gross vineyard income dropping a further 29% (to \$7,526/ha) since 2006/07, and an additional 31% (to \$5,203) from season 2008/09 to 2010/11.
- The average gross vineyard income of \$5,203/ha achieved in 2010/11 is less than one third (29%) of the average gross vineyard income of nearly \$18K/ha generated in season 2002/03.
- The overall cost of production has declined by 41% from \$12K/ha in 2002/03 to \$7,148/ha in 2010/11, even though some individual production inputs have increased in cost.
- If the average cost of production (\$7,148/ha) were divided by an average production of 20t/ha, a minimum grape price of \$357/tonne would be required, just to cover the cost of production.

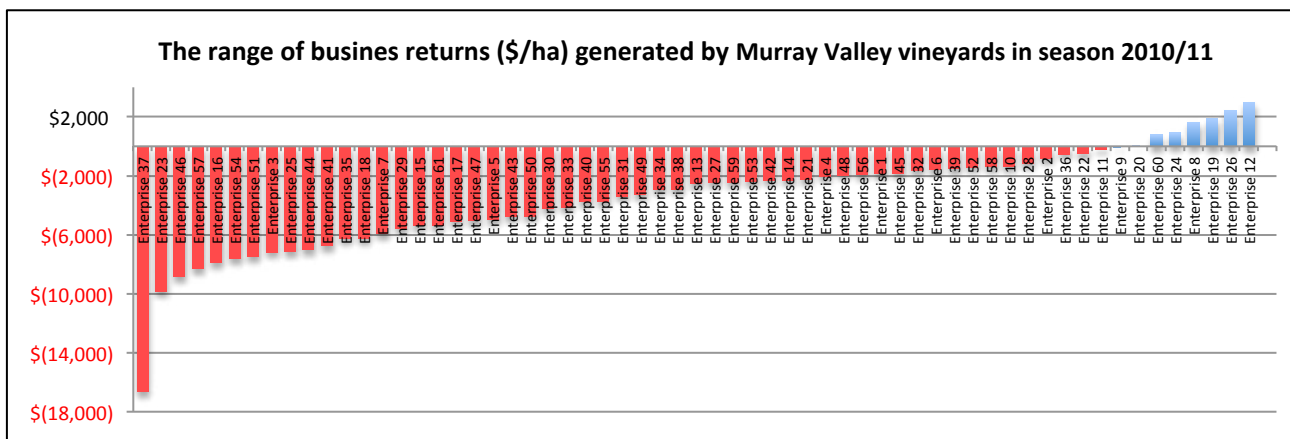
On average, the business return in 2010/11 has been reduced to a point where gross vineyard income is in many cases unable to cover total costs, with no buffer or capacity to cover any capital repayments, or renewal of plant and equipment.



**Executive Summary Figure 1 :** Average business returns (\$/ha) for 2002/03 to 2010/11

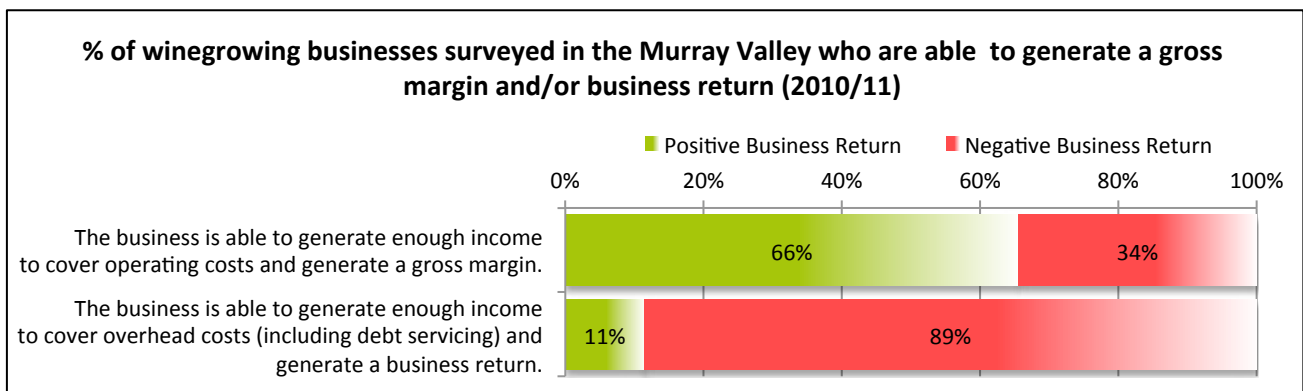
**Business returns for Murray Valley wine growers (combined data)**

Business return is calculated by subtracting operating and overhead costs from gross vineyard income. The lowest business return was -\$16,629/ha and the highest business return was \$2,987/ha in 2010/11.



**Executive Summary Figure 2 :** Business returns generated by Murray Valley wine growers in 2010/11

66% of wine growing enterprises had sufficient income to generate a positive gross margin in 2010/11. However, only 7 of the 61 (or 11%) wine growing enterprises had a sufficient gross margin to cover their operating and overhead costs and generated a positive business return in season 2010/11. 89% of Murray Valley wine growing businesses were **not able** to generate a positive business return in season 2010/11.



**Executive Summary Figure 3 :** Enterprises that generated a positive return in 2010/11



## INTRODUCTION

Retallack Viticulture Pty Ltd (Retallack Viticulture) was engaged by Murray Valley Wine growers' Inc (MVWI) to analyse vineyard 'cost of production' (COP) data for the 2010/11 growing season.

This follows on from a similar exercise that was carried out in 2010 where vineyard 'cost of production' data for the Murray Valley wine region was collected and reviewed for the 2008/09 growing season, and a Wine Grape Growers' Australia (WGGA) project titled 'Regional Vineyard Benchmarking Report', where economic benchmarking data for the previous five growing seasons was collected for analysis in 2008<sup>1</sup>.

Funding for this project was provided by the Grape and Wine Research and Development Corporation (GWRDC) Regional Grassroots Solutions program and Murray Valley Winegrowers' Inc.

### Seasonal conditions

The weather conditions during the 2010/11 growing season were some of the most challenging experienced over the last three decades and worse than the 'wet' seasons experienced in 1983/84 and 1992/93.

Unseasonably high rainfall resulted in extremely high disease pressure, with some vineyards under water for weeks at a time. This prevented machinery access that was required for disease control. Availability of key chemicals was low and the number of sprays required to manage disease pressure increased. This along with localised hail events resulted in higher production costs to manage disease pressure, in particular Downy Mildew, Powdery Mildew, Botrytis and other bunch rots.

Regardless of the vineyard management strategy employed, many wine growers in the region experienced partial or complete crop loss, due to the severity of the seasonal conditions. Reduced wine grape production along with low wine grape prices (compounded by penalties incurred for damaged grapes), had a devastating effect on the income generated by many wine growers and their capacity to cover the costs of production.

## PROJECT METHODOLOGY

The methodology for collecting and analysing the economic benchmarking data was reported in the 'Updating vineyard cost of production data for the Murray Valley Wine Region'<sup>2</sup> report, and the same methodology has been adopted here.

### Data collection

A Microsoft Excel template was developed for Murray Valley wine growers, so they could enter their income and 'cost of production' data, either from tax returns, or from vineyard records kept each season.

The cost categories in the template are divided into operating (variable) costs and overhead (fixed) costs. A simple calculation was provided to allow wine growers to estimate the owner's salary for the wine growing enterprise, thus capturing all the 'cash' costs of growing wine grapes.

A list of additional questions were developed for inclusion in the survey, including:

- List the wine grape varieties and the hectares grown on your property.
- Did any fruit go unharvested due to disease in the 2010/11 financial year?
- Do you grow crops other than wine grapes?

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<sup>1</sup> WGGA (2008) 'Regional Vineyard Benchmarking Report' prepared as a part of the 'Capacity Building for Australian Wine Grape Growers' Project, Wine Grape Growers' Australia by Scholefield Robinson Horticultural Services, Adelaide.

<sup>2</sup> Retallack, M. (2010) Updating vineyard cost of production data for the Murray Valley Wine Region, Murray Valley Wine growers' Inc, Mildura.



## Confidentiality

A data coding system was used to maintain confidentiality. Wine growing enterprises were coded for:

- The area where the grapes were grown,
- The management structure of the wine growing enterprise, and
- The source of water for irrigation purposes.

## Terminology Used

Business returns were calculated using the methodology presented in **Table 2**.

**Table 2** : A 'step by step' approach to assessing the financial health of wine growing businesses<sup>3</sup>

Calculation	Description
<b>GROSS VINEYARD INCOME</b>	Grape payments (less levies) that are paid into growers' bank accounts typically three times per year, plus other vineyard income such as leasing machinery or selling surplus water.
<i>less</i> <b>VINEYARD OPERATING COSTS</b>	Costs that directly contribute to the growing of grapes, and vary with the level of production.
<i>gives</i> <b>VINEYARD GROSS MARGIN</b>	Gross margin is calculated by subtracting operating costs from the gross vineyard income. This provides an initial indication of the level of profitability of the vineyard. There needs to be sufficient margin to pay for overhead costs, so the business can break even and/or generate a profit.
<i>less</i> <b>VINEYARD OVERHEAD COSTS</b>	These costs are required to maintain the running of the business regardless of the area in production.
<i>gives</i> <b>VINEYARD RETURN</b>	The vineyard return is calculated by subtracting operating and overhead costs (not including debt servicing) from the gross income.
<i>less</i> Debt Servicing	Debt servicing includes the costs of servicing all loans (interest and finance costs) in a particular year, but does not include principal (capital) repayments.
<i>gives</i> <b>BUSINESS RETURN</b>	Business return gives an indication of short-term business profitability. In addition, a sufficient return needs to be generated to service 'long run' costs such as principal repayments on loans, capital purchases to allow for the replacement of machinery, and equipment necessary for efficient vineyard operation.

Liz Singh from MVWI sent the data collection templates to a representative number of wine growers. The aim was to collect data from 10% of wine growers in the region (by property size). The total number of wine growers in the Murray Valley wine region as at June 2012 was 549, with 61 wine growers (or 11%) submitting their data for analysis. Therefore the target of 10% representation was achieved.

The number of wine growers in the Murray Valley wine region decreased by 128 (or 19%), from 677 in 2010 to 549 in 2010.

A break down of the number of growers within each property size category, the number of returns required, and the number of returns received is presented in **Table 3**.

<sup>3</sup> Modified from WGG (2008) 'Regional Vineyard Benchmarking Report' prepared as a part of the 'Capacity Building for Australian Wine Grape Growers' Project, Wine Grape Growers' Australia by Scholefield Robinson Horticultural Services, Adelaide.





**Table 3 :** Sample size based on overall property size for Mildura, Robinvale and Swan Hill

Overall Property Size	Total growers within each category	Number of returns required to achieve 10% representation	Number of returns received	Difference
1 - 10 ha	293	29.3	23	-6.3
11 - 20 ha	103	10.3	18	+7.7
21 - 50 ha	90	9	10	+1
51 - 100 ha	39	3.9	5	+1.1
> 101 ha	24	2.4	5	+2.6
<b>TOTAL</b>	<b>549</b>	<b>54.9</b>	<b>61</b>	<b>+6.1</b>

A total of 61 data sets were forwarded to Retallack Viticulture for analysis. A break down of the data analysed is presented in **Table 4**.

**Table 4 :** A summary of wine growing enterprises that submitted data for analysis

Financial data was received from the following wine growing enterprises (by category)						
Average vineyard size (area in production)	30 ha	Number of vineyards by location		Number of vineyards by size (area in production)		
		Mildura	52			
				1 - 10 ha	23	38%
Range of vineyard sizes (area in production)	4 ha to 189 ha	Robinvale	7	11 - 20 ha	18	30%
				21 - 50 ha	10	16%
		Swan Hill	2	51 - 100 ha	5	8%
				> 101 ha	5	8%
Data from a total of 61 vineyards was analysed						

### Data analysis

Retallack Viticulture consolidated the data supplied by MVWI for analysis at a regional level. This provides an indication of the average values for each input cost from the individual enterprise data.

The average figures for all respondents were then graphed to provide a visual summary of the income and costs of growing wine grapes, and the average business return.

This data was compared to the results collected for seasons 2002/03 to 2006/07 and 2008/09. No data was collected for the 2007/08 or 2009/10 seasons.



## RESULTS AND DISCUSSION – SURVEY

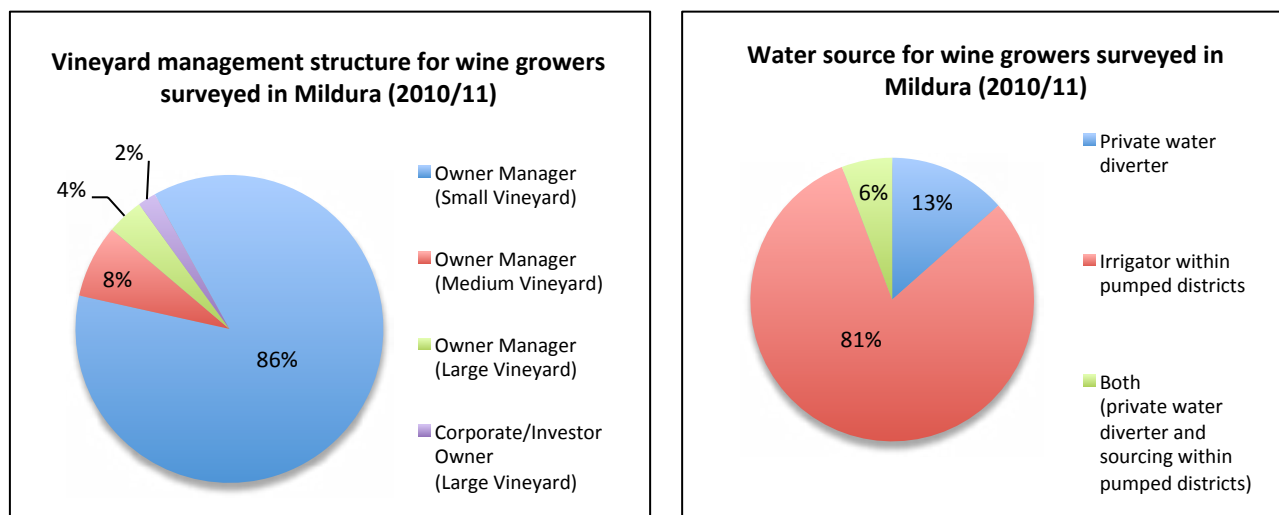
### Mildura

#### Survey question results (52 responses)

##### Management structure and sources of irrigation water

The management structure of the 52 wine growing enterprises located in Mildura (and surrounding areas), was predominantly 'an owner manager of a small vineyard' (45 or 86% of respondents); with 4 (or 8%) identified as 'an owner manager of a medium vineyard'; with 2 (or 4%) identified as 'an owner manager of a large vineyard'. One (or 2%) of the wine growing enterprises were managed as 'a corporate/investor owner of a large vineyard'.

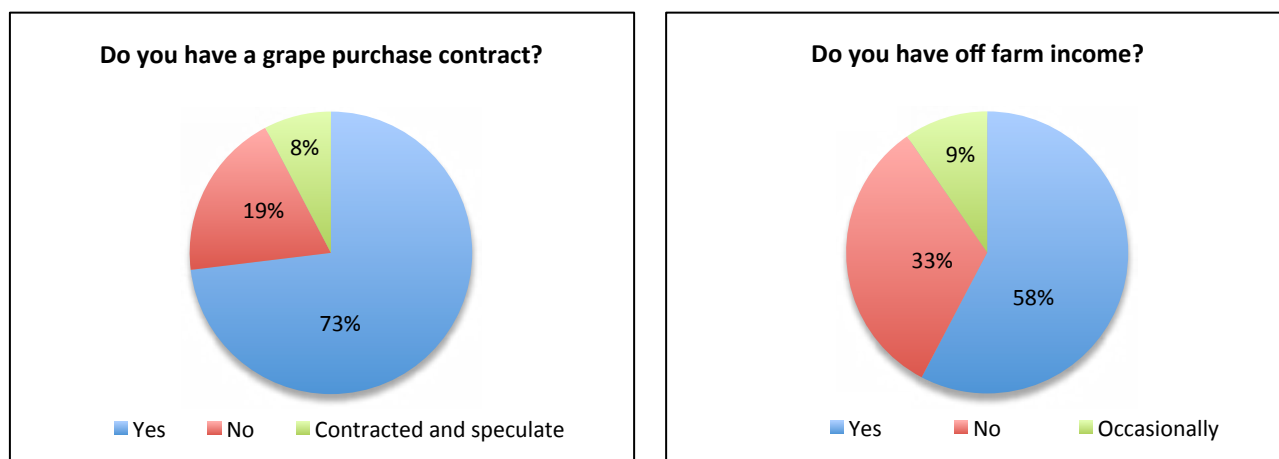
Water was sourced predominantly from within pumped districts (42 or 81%). Seven (or 13%) of wine growers were private water diverters and three (or 6%) of wine growers utilised irrigation water from both sources, see **Figure 4**.



**Figure 4:** Management structure and water source for wine growers surveyed in Mildura in 2010/11

##### Grape purchase contract and off farm income

73% of wine growers had a grape purchase contract in the 2010/11 growing season. 19% did not have a contract, and 8% had some of their fruit contracted as well as speculating 'on the spot' market. 58% of wine growers had off farm income, with 33% relying solely on the wine growing enterprise for income, and 9% occasionally having off farm income to supplement their business and/or living expenses, see **Figure 5**.

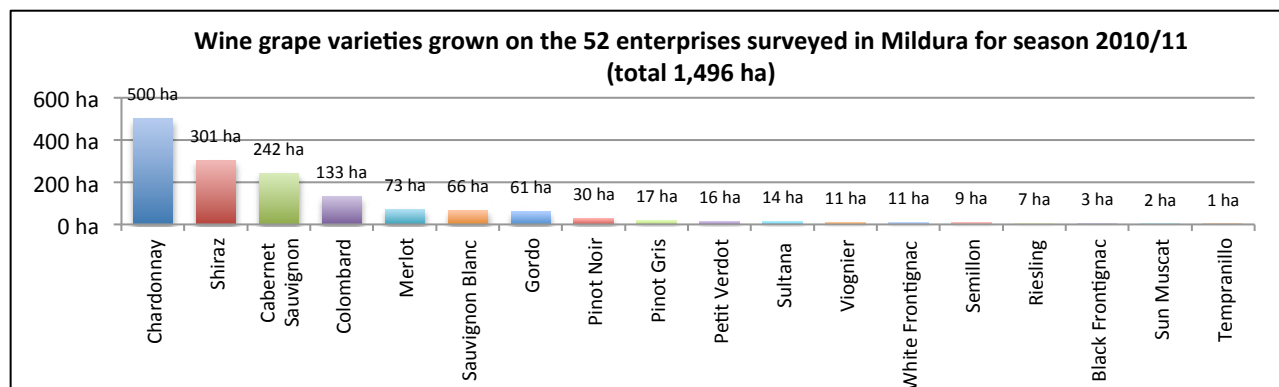


**Figure 5 :** % of wine growers who had a grape purchase contract and/or off farm income in 2010/11



### Details of wine grapes grown in 2010/11

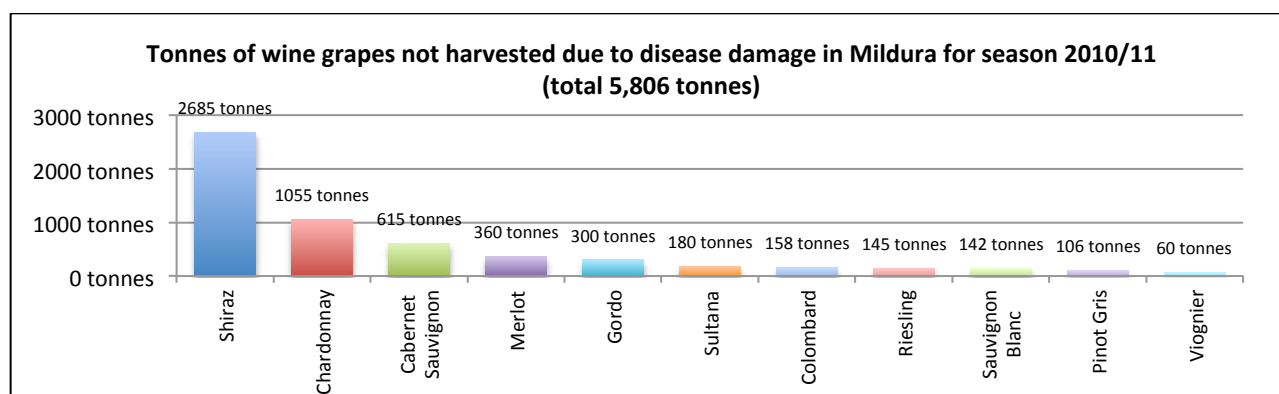
A total of 18 wine grape varieties were grown on the 52 enterprises surveyed in Mildura, comprising a total of 1,496 ha. Chardonnay was planted over the largest area (33% of all plantings), followed by Shiraz (20%), Cabernet Sauvignon (16%), and Colombard (6%), see **Figure 6**.



**Figure 6** : Varieties and area of grapes (ha) grown by wine growers surveyed in Mildura in 2010/11

### Tonnes of wine grapes not harvested due to disease damage in Mildura in season 2010/11

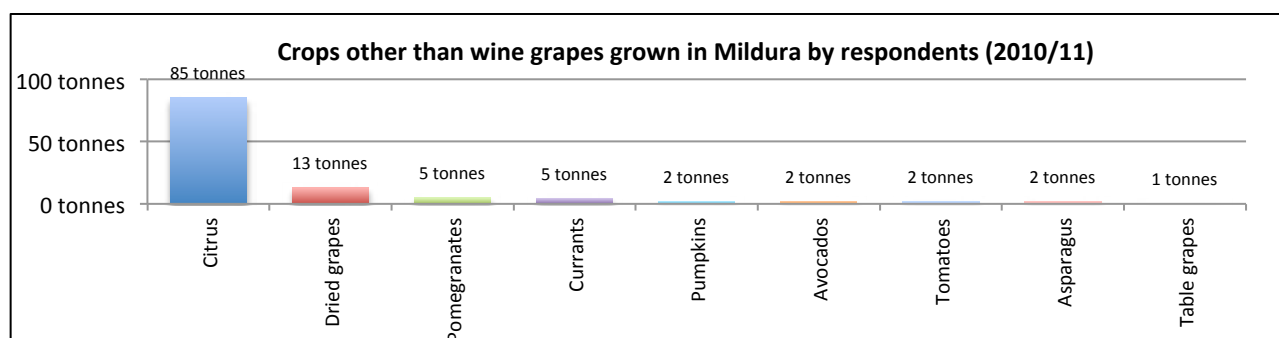
A total of 5,806 tonnes of wine grapes were not harvested by Mildura respondents due to disease damage in 2010/11. The key varieties affected included Shiraz (2,685 tonnes), Chardonnay (1,055 tonnes), Cabernet Sauvignon (615 tonnes) and Merlot (360 tonnes), see **Figure 7**.



**Figure 7** : Tonnes of wine grapes unharvested by Mildura respondents due to disease in 2010/11

### Crops other than wine grapes grown in 2010/11

A total of nine crops other than wine grapes were grown on the 52 enterprises surveyed, comprising a total of 115 tonnes. They included citrus (85 tonnes), dried grapes (13 tonnes), pomegranates and currants (5 tonnes each), pumpkins, avocados, tomatoes, and asparagus (2 tonnes each) and table grapes (1 tonne).



**Figure 8** : Crops other than wine grapes grown in Mildura by survey respondents in 2010/11



## Robinvale

### Survey question results (seven responses)

#### Management structure and water sources

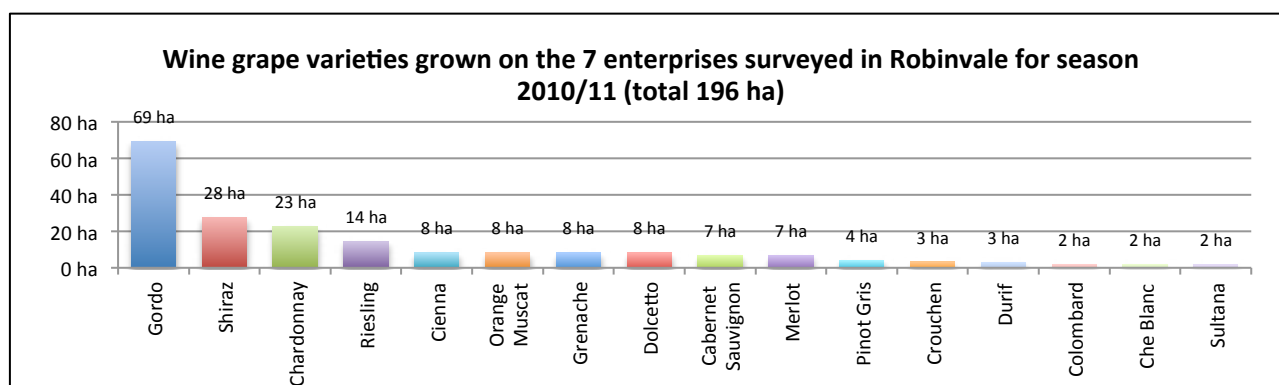
The management structure of the seven wine growing enterprises surveyed in Robinvale included, 'an owner manager of a small vineyard' (6 or 86% of respondents), with the remaining enterprise identifying as 'an owner manager of a medium vineyard' (14%). Two out of the seven (or 28%) wine growers were private water diverters. Three wine growers (or 43%) were irrigators within pumped districts and the remaining two irrigators (29%) accessed irrigation water from both sources.

#### Grape purchase contract and off farm income

Five out of the seven wine growers had a fruit purchase contract in season 2010/11. Four out of the seven wine growers had off farm income. One wine grower relied solely on the income from the enterprise, and one wine grower had off farm income on an occasional basis.

#### Details of wine grapes grown in 2010/11

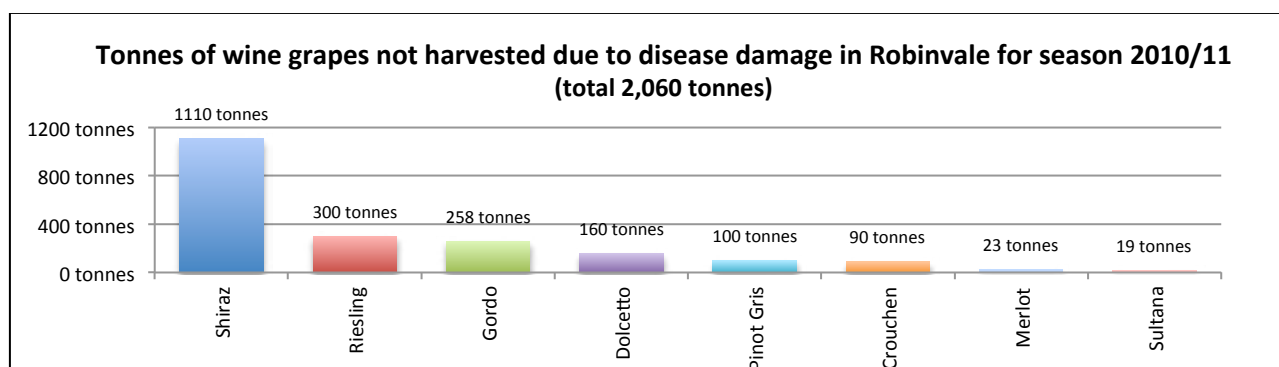
A total of 16 wine grape varieties were grown on the seven enterprises surveyed in Robinvale, comprising a total of 196 ha. Gordo was planted over the largest area (69 ha or 35% of all plantings), followed by Shiraz (28 ha or 14%), Chardonnay (23 ha or 12%) and Riesling (14 ha or 7%), see **Figure 9**.



**Figure 9 :** Varieties and area (ha) of grapes grown by wine growers surveyed in Robinvale in 2010/11

#### Tonnes of wine grapes not harvested due to disease damage in Robinvale in season 2010/11

A total of 2,060 tonnes of wine grapes were not harvested by Robinvale respondents due to disease damage in 2010/11. The key varieties affected included Shiraz (1,100 tonnes), Riesling (300 tonnes), Gordo (258 tonnes), Dolcetto (160 tonnes) and Pinot Gris (100 tonnes), see **Figure 10**.



**Figure 10 :** Tonnes of wine grapes unharvested by Robinvale respondents due to disease in 2010/11

#### Crops other than wine grapes grown in 2010/11

Robinvale respondents also grew table grapes, passionfruit and dried grapes (11 tonnes total) in 2010/11.



## Swan Hill

### Survey question results (two responses)

#### Management structure and water sources

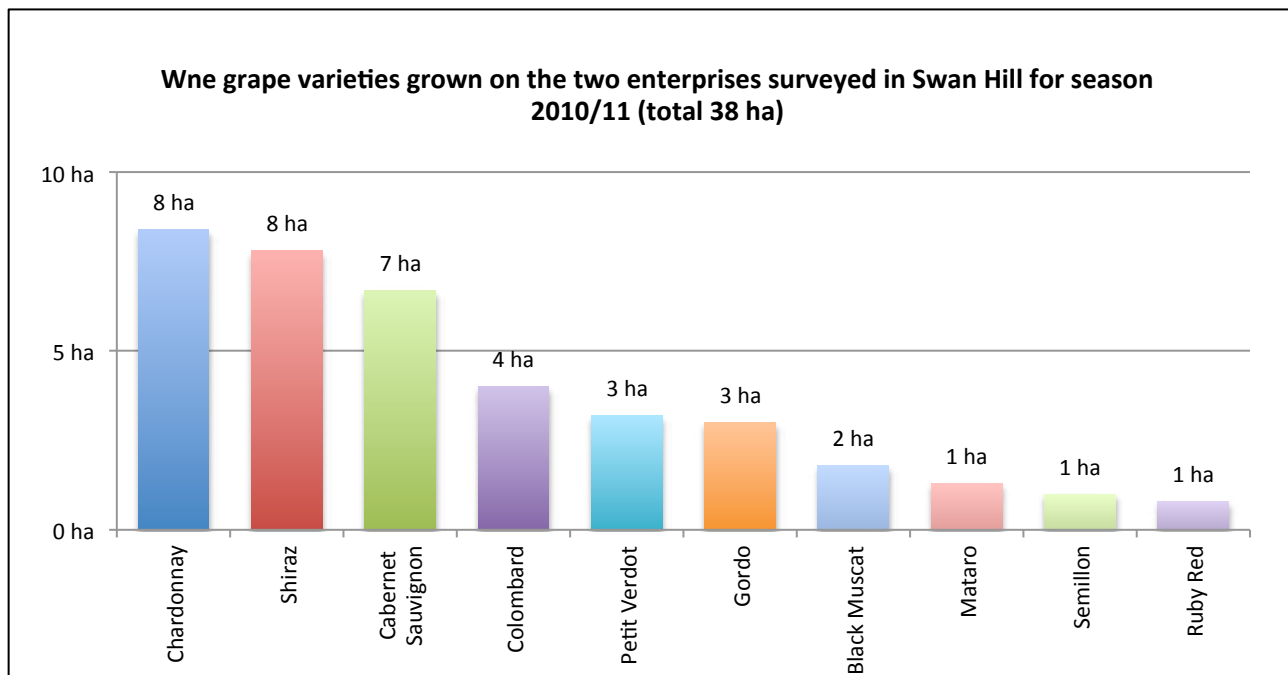
The management structure of the two wine growing enterprises surveyed in Swan Hill was 'an owner manager of a small vineyard'. Both respondents were irrigators within a pumped district.

#### Grape purchase contract and off farm income

One wine grower had a fruit purchase contract in season 2010/11 while the other wine grower speculated 'on the spot' market. Both wine growers relied solely on the income from the enterprise, with no off farm income generated.

#### Details of wine grapes grown in 2010/11

A total of 10 wine grape varieties were grown on two enterprises in Swan Hill, comprising a total of 38 ha. Chardonnay and Shiraz was planted over the largest area (8 ha each), followed by Cabernet Sauvignon (7 ha), Colombard (4 ha), and other varieties <4 ha, see **Figure 11**.



**Figure 11** : Varieties and area (ha) of grapes grown by wine growers surveyed in Swan Hill in 2010/11

#### Tonnes of wine grapes not harvested due to disease damage in Swan Hill in season 2010/11

Of the respondents surveyed in Swan Hill no fruit was left unharvested due to disease damage.

#### Crops other than wine grapes grown in 2010/11

Apricots were the only crop grown other than wine grapes by Swan Hill respondents, with approximately 1 tonne of fruit produced.



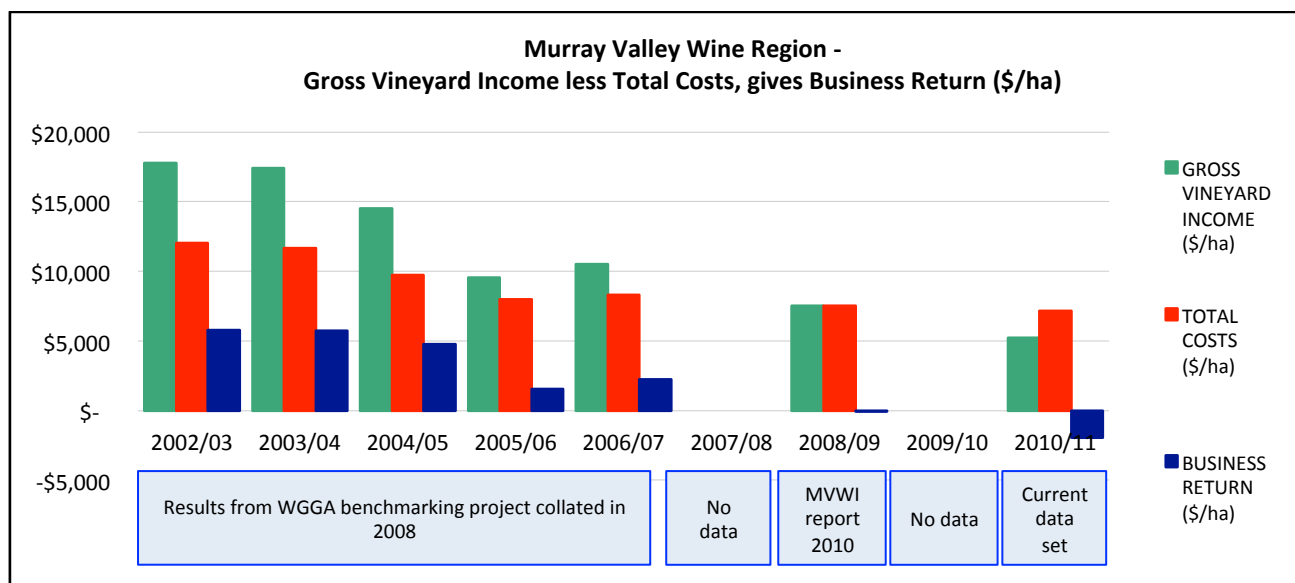


## RESULTS AND DISCUSSION – FINANCIAL ANALYSIS

### Murray Valley wine region

The performance of wine growing enterprises within the Murray Valley wine region for seasons 2002/03 to 2010/11 is presented in **Figure 12**.

Data for the 2002/03 to 2006/07 seasons was collected as a part of the WGGA's wine grower survey, carried out in 2008. Data representing 64 Murray Valley wine growing enterprises for season 2008/09, and the latest data comprising 61 wine growing enterprises for season 2010/11 is presented below.



**Note:** The total cost figures for 2002/03 to 2006/07 include debt servicing (interest), but **DO NOT** include owner's salary, depreciation or any allowance for return on vineyard assets. The 2008/09 and 2010/11 figures **DO** include owner's salary.

**Figure 12 :** Average business returns (\$/ha) for Murray Valley wine growers for 2002/03 to 2010/11

The data in **Figure 12** highlights that:

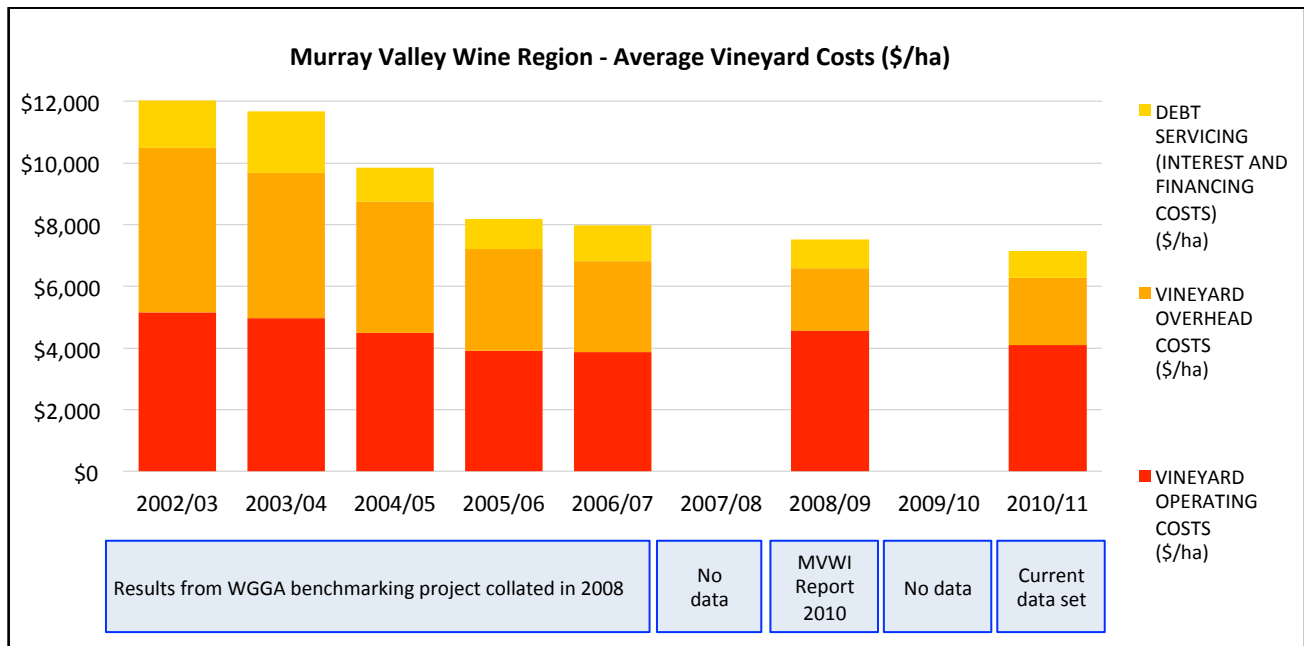
- Average gross vineyard income (\$/ha) steadily declined from seasons 2002/03 to 2006/07, due to reduced grape prices and vine yields (capped tonnages).
- This trend continued for season 2008/09, with the average gross vineyard income dropping a further 29% (to \$7,526/ha) since 2006/07, and an additional 31% (to \$5,203) from season 2008/09 to 2010/11.
- The average gross vineyard income of \$5,203/ha achieved in 2010/11 is less than one third (29%) of the average gross vineyard income of nearly \$18K/ha generated in season 2002/03.
- The income generated in 2010/11 was down due to a combination of lower yields, caused by adverse weather conditions that resulted in disease damage and low grape prices, which were further compounded by penalties incurred for damaged grapes.
- The overall cost of production has declined by 41%, from \$12K/ha in 2002/03 to \$7,148/ha in 2010/11, even though some individual production inputs have increased in cost.
- On average, the business return in 2010/11 has been reduced to a point where gross vineyard income is in many cases unable to cover total costs, with no buffer or capacity to cover any capital repayments, or renewal of plant and equipment.
- Only seven out of the 61 enterprises (11%) who contributed data in 2010/11 were able to generate a positive business return.

In summary, the cost of production (overhead and operating costs) declined by \$382/ha, from \$7,530/ha in 2008/09 to \$7,148/ha in 2010/11, a decrease of 5%. The cost of production may have only declined by 5% because growers have already implemented as many cost cutting measures as are possible. The gross vineyard income fell by 31% for the same period.



## Total cost of production

A breakdown of the average operating and overhead costs (debt servicing costs are presented separately) per hectare since the 2002/03 season is presented in **Figure 13**.



**Figure 13** : Total costs for Murray Valley wine grape enterprises for 2002/03 to 2010/11

The data in **Figure 13** highlights that:

- Vineyard operating costs have remained reasonably stable throughout the last nine growing seasons, from an average of \$5,053/ha in 2002/03 to \$4,095/ha in 2010/11, a decline of \$1,067/ha (or 21%) even though the cost of fuel, chemicals, water and drainage costs etc have increased during this period. This may indicate that other input costs have been reduced in order to pay for items with increased costs.
- Vineyard overhead costs (not including debt servicing) have steadily declined, from an average of \$5,333/ha in 2002/03 to \$2,182/ha in 2010/11, a decline of \$3,152/ha or 59%. This may indicate that owner operators are not paying themselves a wage and other 'non essential' overhead costs have been reduced in line with a reduction in income.
- Debt servicing has decreased from an average of \$1,525/ha in 2002/03 to \$871/ha in 2010/11. While times were good some wine growers may have reinvested their profits by purchasing additional vineyards to improve their economy of scale, and this may explain the higher debt servicing in 2002/03 compared to 2010/11.
- Even though the average consolidated debt in recent seasons is reported as being very high, the lower debt servicing of \$871/ha may be due to 'interest only' payments being made by wine growers and/or these payments being offset by exceptional circumstances payments during this period.

A detailed breakdown of the average operating and overhead costs for the 61 Murray Valley wine growing enterprises is presented in **Tables 5 and 6**, along with the lowest and highest \$/ha in each category (columns 2 to 4). The number of Murray Valley wine growers who provided data for each category is displayed in column 5. The higher the number of data sets (closer to 61), the more reliable the average figures are, as a true indication of the typical expenditure in the region.

The average costs of production in 2010/11 are compared with the 2008/09 figures, with the differences between the seasons highlighted in columns 8 and 9. The average \$/ha for each category is presented in **Figure 14 and 15**.



## Operating costs

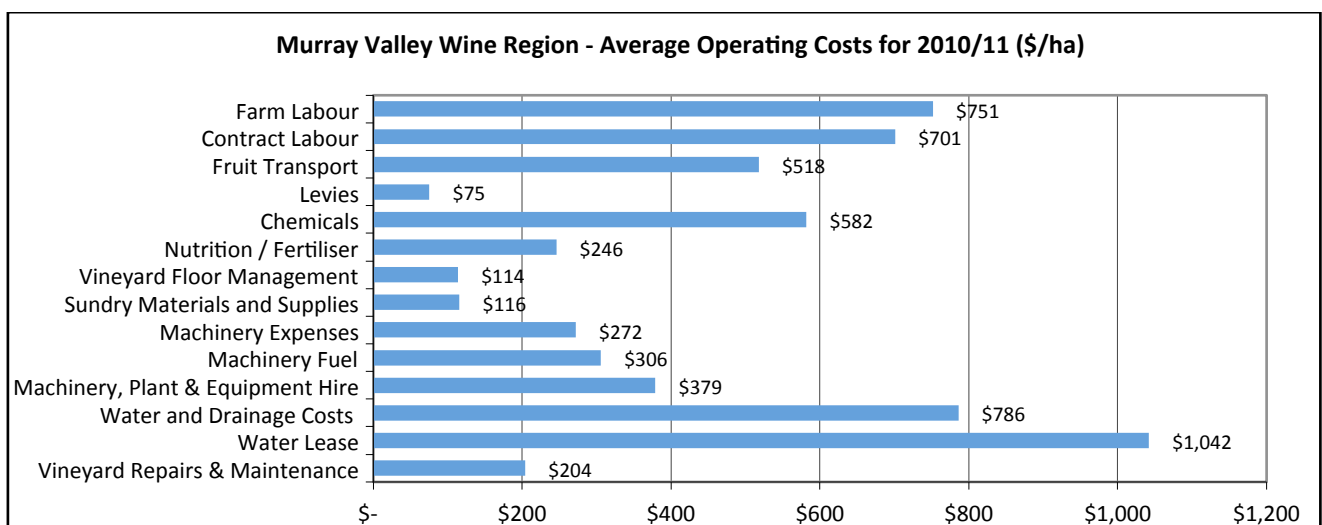
The data in Table 5 highlights that:

- ✦ The average operating costs for Murray Valley wine growing enterprises in 2010/11 was \$4,095/ha, compared to \$4,543/ha in 2008/09. This is a decrease of \$448/ha or 10%.
- ✦ The cost of farm labour, chemicals, water and drainage costs all increased in 2010/11 compared to 2008/09. On average, twice as much (\$582/ha compared to \$290/ha) was spent on chemicals in 2010/11 than in 2008/09. This is expected given the high disease pressures experienced, additional chemical applications and the labour required to make additional passes in the vineyard. This is in stark contrast to the cost savings that were made in the 2008/09 season, which included a reduction in labour and chemical inputs in what was a 'dry' season. The costs for all other operating inputs in 2010/11 decreased. This may have been to make allowances for the costs involved in keeping fruit 'clean'.
- ✦ Ironically the highest operating costs were for water lease (\$1,042/ha) and water and drainage costs (\$786/ha) in the wet 2010/11 season. This is followed by farm labour (\$751/ha), contract labour (\$701/ha), chemicals (\$582/ha) and fruit transport (\$518/ha), with all other individual costs <\$500/ha.

**Table 5 : Average operating costs (\$/ha) for the Murray Valley between 2008/09 and 2010/11**

VINEYARD OPERATING COSTS (\$/ha)	Season 2010/11				Average		Difference	
	Low	Average	High	Number of data sets	2008/09	2010/11	\$/ha	%
Sub Unit	\$/ha				\$/ha			
Farm Labour	\$32	\$751	\$4,155	32	\$588	\$751	\$164	28%
Contract Labour	\$61	\$701	\$5,093	48	\$826	\$701	-\$125	-15%
Fruit Transport	\$42	\$518	\$2,285	50	\$653	\$518	-\$136	-21%
Levies	\$8	\$75	\$466	44	\$93	\$75	-\$17	-19%
Chemicals	\$69	\$582	\$1,163	60	\$290	\$582	\$292	101%
Nutrition / Fertiliser	\$7	\$246	\$760	53	\$263	\$246	-\$17	-6%
Vineyard Floor Management	\$18	\$114	\$404	23	\$154	\$114	-\$40	-26%
Sundry Materials and Supplies	\$9	\$116	\$566	47	\$144	\$116	-\$28	-20%
Machinery Expenses	\$25	\$272	\$1,659	56	\$341	\$272	-\$69	-20%
Machinery Fuel	\$51	\$306	\$1,105	60	\$316	\$306	-\$11	-3%
Machinery, Plant & Equipment Hire	\$4	\$379	\$2,023	27	\$784	\$379	-\$405	-52%
Water and Drainage Costs	\$18	\$786	\$2,085	59	\$761	\$786	\$25	3%
Water Lease	\$94	\$1,042	\$3,139	6	\$1,097	\$1,042	-\$55	-5%
Vineyard Repairs & Maintenance	\$11	\$204	\$3,144	53	\$339	\$204	-\$135	-40%
<b>TOTAL OPERATING COSTS/ha (average)</b>					<b>\$4,543</b>	<b>\$4,095</b>	<b>-\$448</b>	<b>-10%</b>
<i>This figure will differ from the sum of averages</i>								

*Individual costs may differ between categories depending on how the wine growing enterprise chooses to allocate costs*



**Figure 14 : Average operating costs (\$/ha) for Murray Valley wine growers in 2010/11**



## Overhead costs

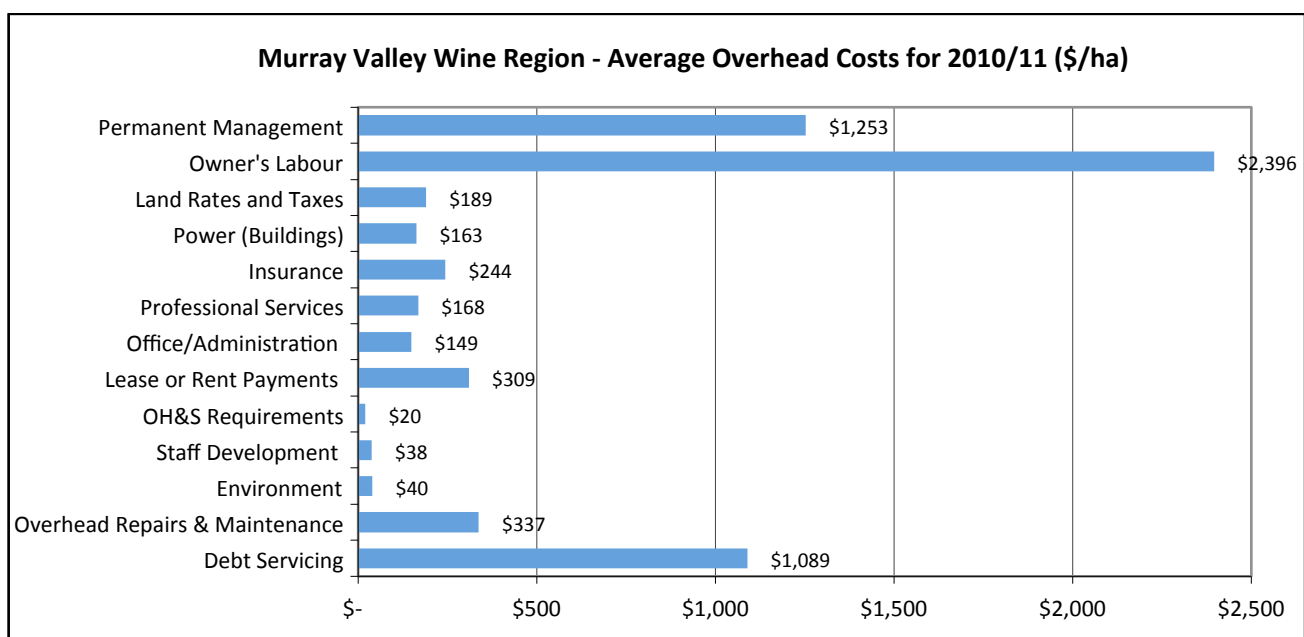
The data in Table 6 highlights that:

- ▶ The average total overhead cost for Murray Valley wine growing enterprises in 2010/11 was \$3,053/ha compared to \$2,987/ha in 2008/09. This is an increase of \$66/ha or 2%.
- ▶ There was a reduction in land rates and taxes, insurance, professional services, lease or rent payments, OH&S requirements, staff development, environment and debt servicing costs. All other costs have increased, with overhead repairs and maintenance costs more than doubling.
- ▶ The highest overhead costs are owner's labour (\$2,396/ha), followed by permanent management (\$1,253/ha) and debt servicing (\$1,089/ha), with all other individual category costs <\$400/ha.
- ▶ It appears that average debt servicing costs have decreased since the 2010/09 season. It is not clear whether this reflects an offset in payments due to exceptional circumstances interest rate subsidies, reduced payments (paying interest only), or changes to loan arrangements.

**Table 6 : Average overhead costs (\$/ha) for the Murray Valley between 2008/09 and 2010/11**

VINEYARD OVERHEAD COSTS (\$/ha)	Season 2010/11				Average		Difference	
Sub Unit	Low	Average	High	Number of data sets	2008/09	2010/11	\$/ha	%
	\$/ha				\$/ha			
Permanent Management	\$151	\$1,253	\$3,529	9	\$1,163	\$1,253	\$89	8%
Owner's Labour	\$144	\$2,396	\$7,888	51	\$2,079	\$2,396	\$317	15%
Land Rates and Taxes	\$11	\$189	\$1,023	60	\$197	\$189	-\$7	-4%
Power (Buildings)	\$8	\$163	\$533	54	\$140	\$163	\$23	16%
Insurance	\$30	\$244	\$862	60	\$249	\$244	-\$6	-2%
Professional Services	\$3	\$168	\$752	57	\$175	\$168	-\$7	-4%
Office/Administration	\$5	\$149	\$834	55	\$122	\$149	\$27	22%
Lease or Rent Payments	\$6	\$309	\$1,049	20	\$547	\$309	-\$238	-43%
OH&S Requirements	\$1	\$20	\$43	32	\$43	\$20	-\$23	-54%
Staff Development	\$3	\$38	\$246	26	\$39	\$38	-\$1	-2%
Environment	\$3	\$40	\$123	6	\$50	\$40	-\$10	-20%
Overhead Repairs & Maintenance	\$11	\$337	\$7,360	40	\$125	\$337	\$213	171%
Debt Servicing	\$10	\$1,089	\$3,156	46	\$1,264	\$1,089	-\$175	-14%
TOTAL OPERATING COSTS/ha (average)								
This figure will differ from the sum of averages								
					\$2,987	\$3,053	\$66	2%

*Individual costs may differ between categories depending on how the wine growing enterprise chooses to allocate costs*



**Figure 15 : Average overhead costs (\$/ha) for Murray Valley wine growers in 2010/11**

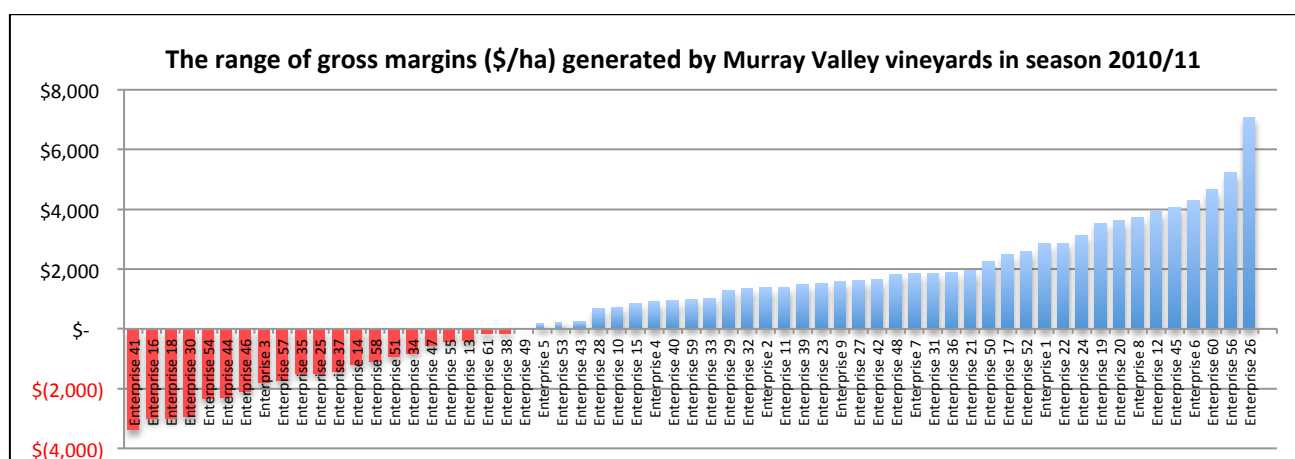


## Analysis of gross margins

Gross margin is calculated by subtracting operating costs from gross vineyard income. There is a broad spread of gross margins generated between the 61 wine grape enterprises surveyed in 2010/11.

The vineyard with the lowest gross margin was Enterprise 41 with -\$3,370/ha (51 to 100 ha in size) and the vineyard with the highest gross margin was Enterprise 26, with \$7,077/ha (<20 ha in size).

Gross margin is one of the first measures of business health. Wine growing enterprises need to generate enough income to cover the 'operating' costs of production as a minimum. These are the direct inputs required to produce a crop. If wine growing enterprises are not able to break even at the gross margin stage, they are likely to be in serious financial difficulty, unless they can access savings in the short term. A total of 21 out of the 61 (or 34%) wine growing enterprises surveyed in 2010/11, did not generate sufficient income to cover their operating costs. The spread of gross margins is presented in **Figure 16**.



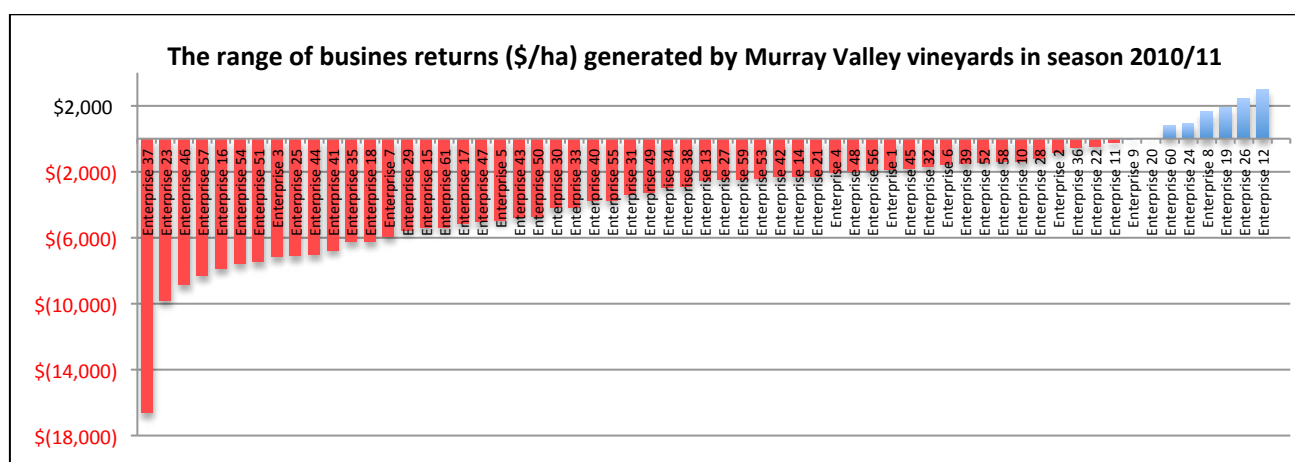
**Figure 16** : Gross margins (\$/ha) generated by Murray Valley wine growers in season 2010/11

## Analysis of business returns

Business return is calculated by subtracting operating and overhead costs from gross vineyard income. Many of the wine growing enterprises that didn't break even at the gross margin stage would have increased their losses at the business return stage, as they had no provision to service overhead costs.

The vineyard with the lowest business return was Enterprise 37 with -\$16,629/ha (<20 ha in size) and the vineyard with the highest business return was Enterprise 12 with a profit of \$2,987/ha (>101 ha in size).

As mentioned earlier, only seven out of the 61 enterprises (or 11%) that contributed data in 2010/11 were able to generate a positive business return. These enterprises stand out clearly in **Figure 17**.



**Figure 17** : Business returns (\$/ha) generated by Murray Valley wine growers in season 2010/11





## What are the attributes of enterprises that generated a positive business return?

Of the 61 enterprises surveyed only seven generated a positive business return. The attributes of these enterprises are presented in **Table 7**. Of the four enterprises that were able to generate a positive business return greater than \$1,500/ha there does not seem to be any obvious similarities, apart from the fact that they were profitable in 2010/11 despite the difficult seasonal conditions.

The top four vineyards had higher income than average and lower cost of production than average, with the exception of one vineyard (which had operating costs 31% above the average). The deciding factor may be the skill of the individual vineyard manager and the specific conditions at each location.

For example, three out of the four enterprises spent more than the average (\$582/ha) on chemical inputs. Two enterprises lost fruit due to disease damage and two were able to harvest all of their fruit. Two enterprises had off farm income and two did not. Two had grape purchase contracts, one did not have a fruit purchase contract and one had some of their grapes contracted with the remainder sold 'on the spot' market. Three out of the four enterprises had debt servicing requirements while one did not have a loan to service. Two vineyards were less than 20 hectares in size, one vineyard was 21 to 50 hectares in size and the remaining vineyard was > 101 hectares in size. All vineyards were located in Mildura with the exception of one vineyard that was located in Swan Hill.

**Table 7 : Attributes of enterprises that were able to generate a positive business return in 2010/11**

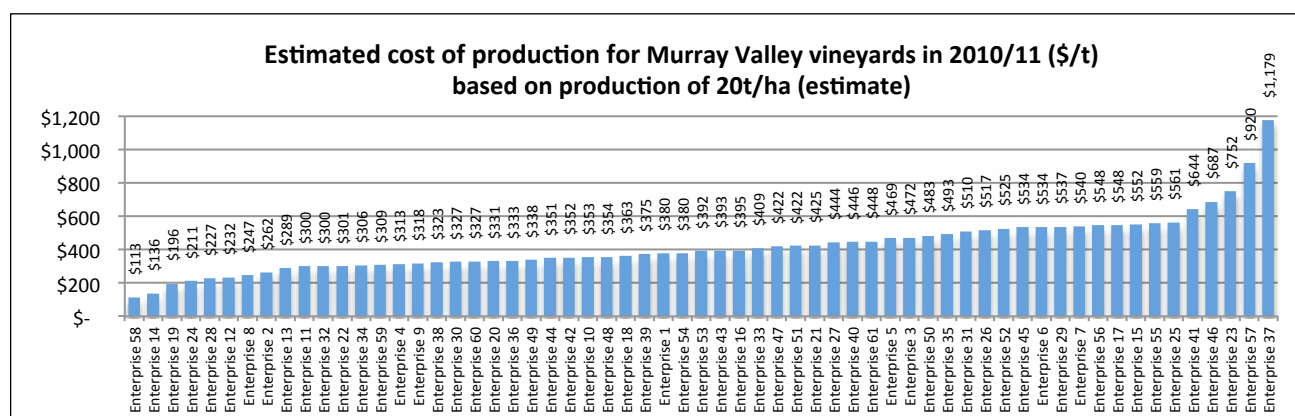
No	Enterprise income versus average (\$5,203/ha)	Enterprise COP versus average (\$7,148/ha)	Enterprise chemical costs versus average (\$582/ha)	Did some of your fruit go unharvested in 2010/11?	Off farm income?	Grape purchase contract?	Debt servicing required?	Vineyard size (ha)	Business return (\$/ha)
1	22%	-8%	17%	Yes	No	Yes	No	21 to 50	\$1 to \$1,000/ha
2	29%	-29%	16%	No	No	Yes	Yes	21 to 50	\$1 to \$1,000/ha
3	-1%	-69%	-81%	No	No	Yes	Yes	21 to 50	\$1 to \$1,000/ha
4	21%	-45%	1%	Yes	No	Yes	No	21 to 50	> \$1,500/ha
5	10%	-83%	7%	Yes	Yes	No	Yes	< 20	> \$1,500/ha
6	59%	31%	-33%	No	No	Yes	Yes	< 20	> \$1,500/ha
7	32%	-54%	2%	No	Yes	Partially	Yes	> 101	> \$1,500/ha

## What does the average 'cost of production' mean when related to grape prices?

The average COP in season 2010/11 was \$7,148/ha, comprising \$4,095/ha for vineyard operating costs, \$2,182/ha for overhead costs and an additional \$871/ha for debt servicing (interest and financing costs).

***If the cost of production of \$7,148/ha were divided by 20 (assuming an average production of 20t/ha) then \$357/tonne would be required to cover the cost of production***

Approximately \$205/tonne would be required to cover operating costs, \$109/tonne to cover overhead costs and an additional \$44/tonne would be required to cover debt servicing. An estimation of the cost of production (\$/t) for each enterprise, based on actual \$/ha figures divided by 20t/ha is presented below.

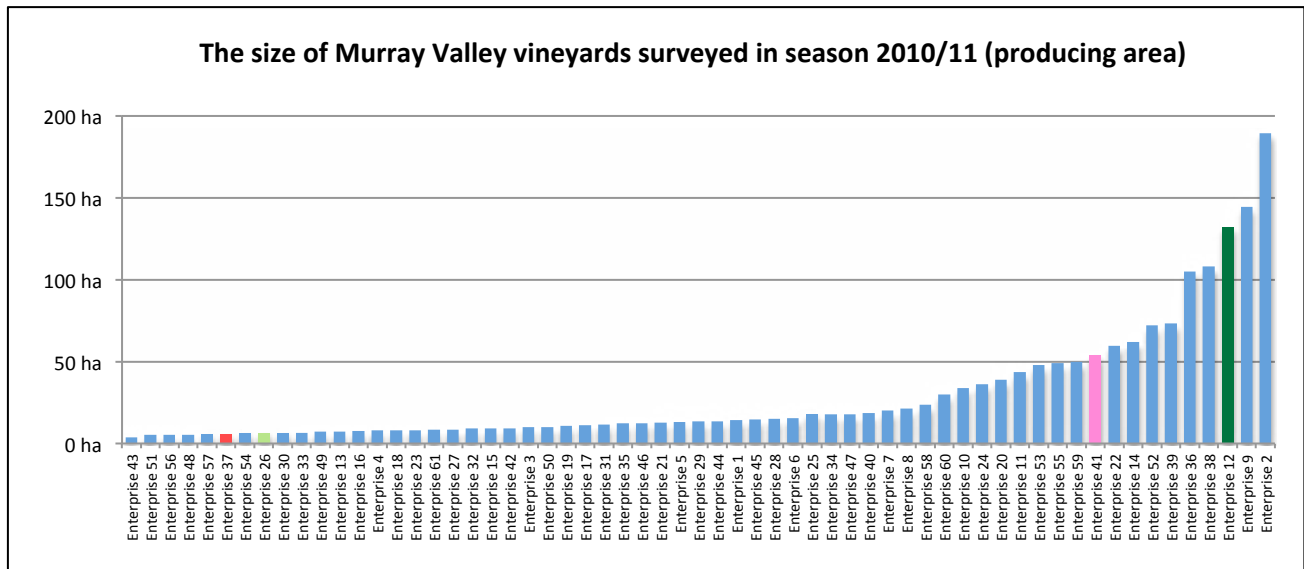


**Figure 18 : An estimated cost of production (\$/t) based on production of 20t/ha in 2010/11**



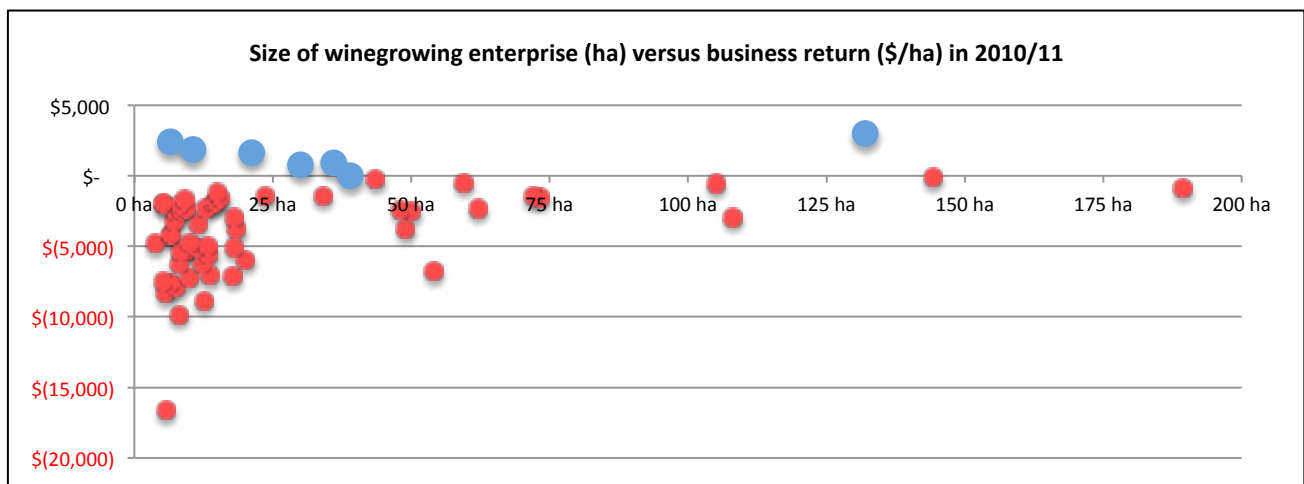
## Economy of scale

The size of the vineyards surveyed ranged from 4 ha to 189 ha, see **Figure 19**. The lowest gross margin is highlighted in pink (Enterprise 41). The lowest business return is highlighted in red (Enterprise 37). The highest gross margin is presented in light green (Enterprise 26) and the highest business return is highlighted in dark green (Enterprise 12). Vineyard profitability does not appear to be correlated with vineyard size in 2010/11.



**Figure 19 :** The size (ha) and profitability of Murray Valley vineyards surveyed in season 2010/11

The size of each wine growing enterprise compared to their capacity to generate a positive business return is presented in **Figure 20**.



**Figure 20 :** The size of wine growing enterprises (ha) versus business return (\$/ha) in 2010/11

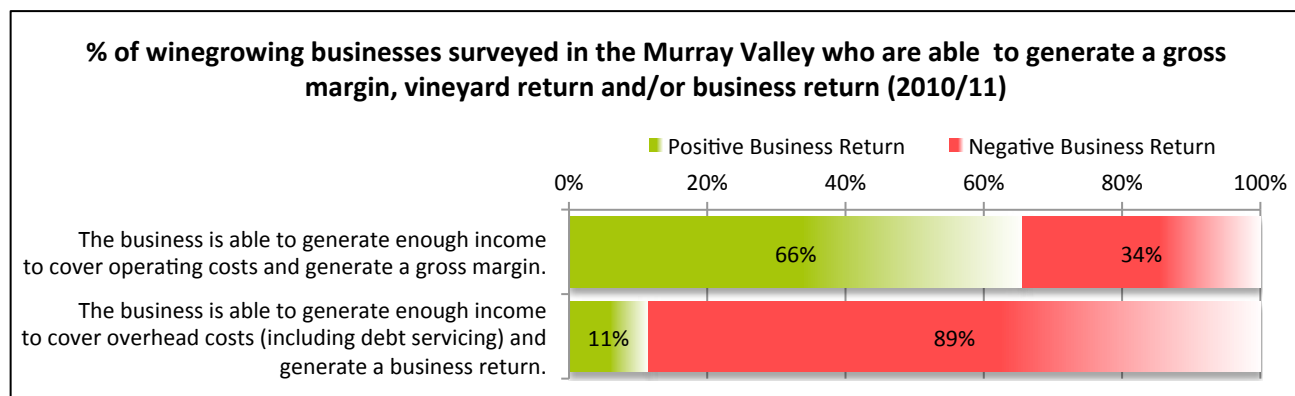
The enterprises that were able to generate a positive business return were concentrated in the 21 - 50 ha vineyard size bracket. 40% of vineyards within this size bracket were profitable. One example of a positive business return was generated for all of the other categories (1 to 10 ha, 11 to 20 ha, > 101 ha) with the exception of 51 to 100 ha where no positive business returns were generated for any of the enterprises surveyed.

As with previous seasons regardless of the vineyard size, there were examples of both poor and well performing enterprises in each category (with the exception of 51 to 100 ha).



## Vineyard profitability

66% of wine growing enterprises had sufficient income to generate a positive gross margin in 2010/11, compared to 81% in 2008/09. However, only 7 of the 61 (11%) wine growing enterprises had a sufficient gross margin to cover their operating and overhead costs, and generated a positive business return in season 2010/11, compared to 42% in 2008/09. 89% of Murray Valley wine growing businesses **did not** generate a positive business return in season 2010/11, **Figure 21**.



**Figure 21** : Enterprises that generated a positive gross margin and/or business return in 2010/11

## CONCLUDING REMARKS

The benchmarking figures presented in this report demonstrate the drastic reduction in the average vineyard income generated in recent years. This, coupled with the additional costs associated with managing disease and the significant crop losses sustained, has resulted in the majority of wine growing enterprises in the Murray Valley running at a loss in the 2010/11 season. This is highlighted by the fact that 54 out of the 61 (or 89%) of wine growing enterprises surveyed **did not** generate a positive business return.

Many of these businesses ran at a significant loss, further compounding losses experienced from recent seasons affected by drought. Many wine growers will continue to struggle to break even without the benefit of exceptional circumstances interest rate subsidies or improved market conditions in the future.

The 2011/12 growing season has resulted in cautious optimism following a vintage that produced good fruit quality and yields. With new players in the local market this has helped to 'firm' grape prices, with the majority of growers able to find a home for their fruit. This change has occurred in a reasonably short period of time, and while growers still have the unenviable task of working their way through the backlog of a number of unprofitable seasons, there appears to be some hope on the horizon in the Murray Valley wine region.

It is anticipated that 'kinder' seasons with optimal fruit growing conditions will lead to better returns in the Murray Valley wine region in the future. The historical benchmarks demonstrate that wine growers are now growing wine grapes, as efficiently as at any time in the past. This provides a good basis to capitalise on margin, if yield and fruit prices can be realised that reflect the growing of fruit that is 'fit for purpose' with a matching cost of production.

Thank you to the 61 wine growers who contributed their financial data for the 2010/11 season. Without your support it would not be possible to provide these regional economic benchmarking results.

**RETALLACK VITICULTURE PTY LTD**

*Metallack*

MARY RETALLACK

Managing Director / Viticulturist

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## Updating Vineyard Cost of Production Data for the Murray Valley Wine Region

*Season 2008/09*

**Prepared for** : Murray Valley Winegrowers Inc  
**By** : Mary Retallack  
**Date** : 5<sup>th</sup> June 2010



**Murray Valley**  
Winegrowers' Inc

**gwrdc regional**  
*grassroots solutions*







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## APPENDICES

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<b>Appendix 3</b>	Vineyard coding form.



## EXECUTIVE SUMMARY

Retallack Viticulture Pty Ltd (Retallack Viticulture) was engaged by Murray Valley Winegrowers' Inc (MVWI) to assist them in analysing cost of production data, for a project called '**Updating Vineyard Cost of Production Data for the Murray Valley Wine Region**'. This project updates data that was collected as a part of the Wine Grape Growers' Australia (WGGA) 'Regional Vineyard Benchmarking Report' in 2008<sup>1</sup>.

### Enterprises surveyed

A total of 64 winegrowing enterprises were surveyed, with financial data collated from the 2008/09 growing season. A summary of the number and sizes of winegrape businesses that submitted a complete set of data for analysis is presented below.

**Executive Summary Table 1** : A summary of winegrape enterprises that submitted data for analysis.

Financial data was received from the following winegrowing enterprises (by category).						
Average vineyard size (area in production)	31 ha	Number of vineyards by location		Number of vineyards by size (area in production) – note this differs from the breakdown of overall property size.		
		Mildura	53	1 - 10 ha	29	45%
Range of vineyard sizes (area in production)	2 ha to 220 ha	Robinvale	7	11 - 20 ha	14	22%
		Swan Hill	4	21 - 50 ha	11	17%
				51 - 100 ha	4	6%
				> 101 ha	6	9%
Data from a total of 64 vineyards was analysed.						

### Key findings

#### *Mildura, Robinvale and Swan Hill*

Key findings for Mildura, Robinvale and Swan Hill include:

- **Mildura:** A total of 16 varieties were grown on the 53 enterprises surveyed in Mildura, comprising a total of 1,381 ha. A total of 1,511 tonnes of winegrapes were harvested to the ground in the 2008/09 season. A combined total of 32 ha of Chardonnay and dried fruit producing area were mothballed.
- **Robinvale:** A total of 13 varieties were grown on the seven enterprises surveyed in Robinvale, comprising a total of 164 ha. A total of 560 tonnes of winegrapes were harvested to the ground in the 2008/09 season. No varieties were mothballed.
- **Swan Hill:** A total of 13 varieties were grown on four enterprises in Swan Hill, comprising a total of 118 ha. A total of 280 tonnes of winegrapes were harvested to the ground in the 2008/09 season. No varieties were mothballed.

#### *Income and costs for Murray Valley winegrowers (combined data)*

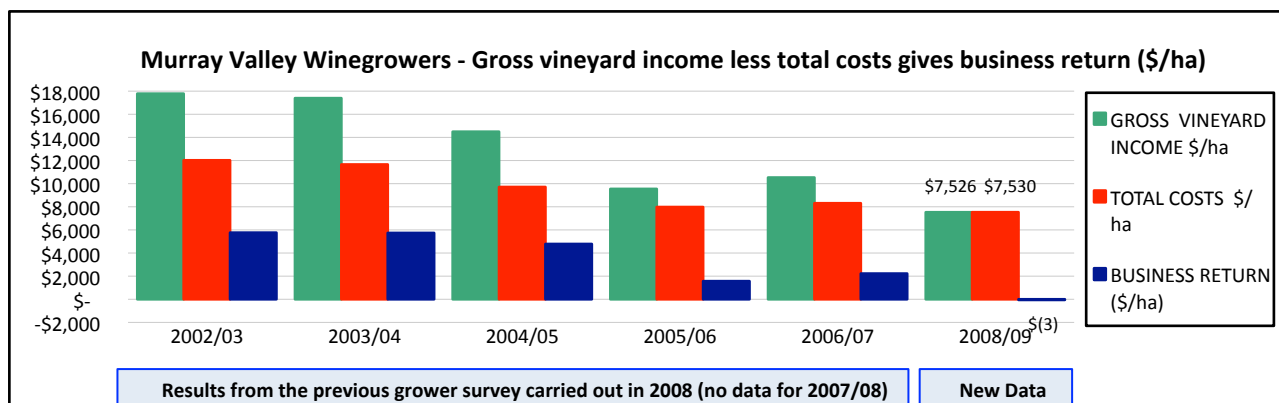
The average income and costs for Murray Valley winegrowing enterprises surveyed, for seasons 2002/03 to 2008/09, are presented below. Data for seasons 2002/03 to 2006/07 was published in 2008 by WGGA<sup>1</sup>. Data was not collected for the 2007/08 season.

- Average gross vineyard income (\$/ha) has steadily declined from seasons 2002/03 to 2006/07, due to reduced grape prices and vine yields. This trend has continued for season 2008/09, with the average gross vineyard income dropping to \$7,526/ha. This is less than half (42%) of the average gross income (of nearly \$18K/ha) generated in season 2002/03.
- Total expenditure has declined, even though some individual production inputs have increased in cost.
- On average, the business return has been reduced to a point where gross vineyard income is just able (or in many cases unable), to cover total costs; with no buffer, or capacity to cover any capital repayments, renewal of plant and equipment, or other long run costs.

<sup>1</sup> WGGA (2008) 'Regional Vineyard Benchmarking Report' prepared as a part of the 'Capacity Building for Australian Wine Grape Growers' Project, on behalf of Wine Grape Growers' Australia by Scholefield Robinson Horticultural Services, Adelaide.



- The cost of production (overhead and operating costs) has risen by \$428/ha, from \$7,102/ha in 2006/07 to \$7,530/ha in 2008/09; this is an increase of 6%. The gross vineyard income has fallen by 30% in the same period.



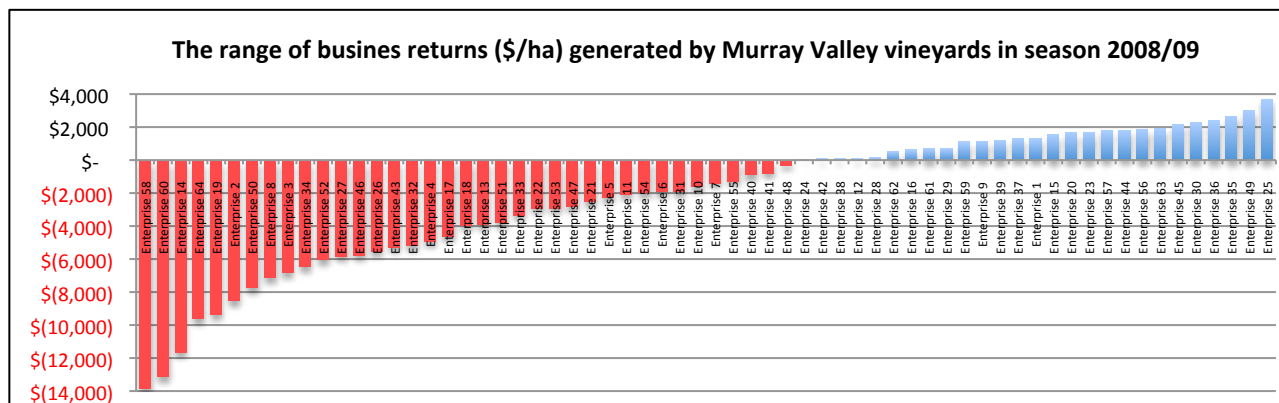
**Note:** The total cost figures for 2002/03 to 2006/07 include debt servicing (interest), but **DO NOT** include owner's salary, depreciation or any allowance for return on vineyard assets. The 2008/09 figures **DO** include owner's salary.

**Executive Summary Figure 1 :** Gross vineyard income less total costs gives average business return (\$/ha) generated by Murray Valley winegrowers for 2002/03 to 2008/09.

### Business returns for Murray Valley winegrowers (combined data)

Business return is calculated by subtracting operating and overhead costs (including debt servicing) from gross vineyard income. There is a large difference in the business returns generated from the 64 winegrowing enterprises surveyed in season 2008/09. The lowest business return was \$-13,847/ha and the highest business return was \$3,675/ha (presented below).

81% of the winegrowing enterprises surveyed made sufficient income to generate a positive gross margin. However only 42% of winegrowing enterprises generated a positive business return in season 2008/09.



**Executive Summary Figure 2 :** Business returns (\$/ha) generated by Murray Valley winegrowers in season 2008/09.

### Economy of scale for Murray Valley winegrowers

There is a positive correlation between the capacity of a winegrowing enterprise to generate a positive business return, with an increase in vineyard size up to 50 ha. A small improvement is observed from 51 to 100 ha, with 75% of these vineyards able to generate a positive business return. This trend does not continue for vineyards greater than 101 ha.

This may be due to the small sample size (6 enterprises), and/or greater overhead costs for the management structure of larger vineyards. Regardless of the vineyard size, there were examples of both poor, and well performing enterprises in each category.



## INTRODUCTION

Retallack Viticulture Pty Ltd (Retallack Viticulture) was engaged by Murray Valley Winegrowers' Inc (MVWI) to assist them in analysing cost of production data, for a project called '**Updating Vineyard Cost of Production Data for the Murray Valley Wine Region**'.

This follows on from, and updates data collected as a part of the Wine Grape Growers' Australia (WGGA) 'Regional Vineyard Benchmarking Report', where data was analysed for 19 Murray Valley winegrowing enterprises in 2008<sup>2</sup>. The current project focuses on the collection and analysis of data from the 2008/09 growing season.

Funding for this project was provided by the Grape and Wine Research and Development Corporation (GWRDC) Regional Grassroots Solutions program.

## Aims

The aims of the project include:

- Updating the vineyard cost of production data for the 2008/09 growing season, and
- To provide an accurate snapshot of these costs, and the margin (or lack thereof) currently being received by winegrowers.

This will provide a measure of vineyard financial health for a range of grape growing enterprises in the Murray Valley wine region.

## PROJECT METHODOLOGY

The following methodology was used to capture cost of production data for the 2008/09 financial year.

### Background information for winegrowers

Information flyers were developed to inform winegrowers about this project. This information included:

- A background information flyer,
- A one page summary flyer and checklist to be returned with each set of winegrowing enterprise data.

*Copies of these flyers are presented in **Appendix 1**.*

### Data collection template

A Microsoft Excel template was previously developed as a part of the WGGA's benchmarking project. This template was tailored for the use of the Murray Valley winegrowers, so they could enter their income and cost data, either from tax returns, or from vineyard records for each season. The cost categories in the template are divided into operating (variable) costs and overhead (fixed) costs.

Simple terminology is used to describe each cost category; for example, chemicals, nutrition/fertiliser, water and drainage costs, repairs and maintenance, insurance and debt servicing. Growers were asked to allocate their vineyard costs to these cost categories, using the guidelines provided in the template.

A simple calculator tool was provided to allow winegrowers to estimate the owner's salary for the winegrowing enterprise, thus capturing all the cash costs of growing grapes. Without specific prompting, this is often left out the costs provided.

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<sup>1</sup> WGGA (2008) 'Regional Vineyard Benchmarking Report' prepared as a part of the 'Capacity Building for Australian Wine Grape Growers' Project, on behalf of Wine Grape Growers' Australia by Scholefield Robinson Horticultural Services, Adelaide.



## Development of questions to be included in the cost of production survey

Additional questions were developed for inclusion in the survey, including:

- List the winegrape varieties and the hectares grown on your property,
- Did you mothball any varieties for the 2008/09 financial year?
- Did you harvest any fruit onto the ground in the 2008/09 financial year?
- Do you grow crops other than winegrapes?

*A copy of the data collection template, along with a full list of the questions is presented in **Appendix 2**.*

## Confidentiality

A data coding system was used to maintain confidentiality. Winegrowing enterprises were coded for:

- The area where the grapes were grown,
- The management structure of the winegrowing enterprise, and
- The source of water for irrigation purposes.

*A copy of the vineyard coding form is attached in **Appendix 3**.*

## Terminology Used

Business returns were calculated using the same methodology used in the WGGA project (see Table 2).

**Table 2** : A 'step by step' approach to assessing the financial health of winegrowing businesses.

Calculation	Description
<b>GROSS VINEYARD INCOME</b>	Grape payments (less levies) that are paid into growers' bank accounts, three times per year. Plus other vineyard income such as leasing machinery or surplus water.
<i>less</i> <b>VINEYARD OPERATING COSTS</b>	<b>Costs that directly contribute to the growing of grapes, and vary with the level of production.</b>
<i>gives</i> <b>VINEYARD GROSS MARGIN</b>	Gross margin is calculated by subtracting operating costs from the gross vineyard income. This provides an initial indication of the level of profitability of the vineyard. Their needs to be sufficient margin to pay for overhead costs, so the business can break even or generate a profit.
<i>less</i> <b>VINEYARD OVERHEAD COSTS</b>	<b>These costs are required to maintain the running of the business regardless of the area in production.</b>
<i>gives</i> <b>VINEYARD RETURN</b>	The vineyard return is calculated by subtracting operating and overhead costs (not including debt servicing) from the gross income.
<i>less</i> Debt Servicing	<b>Debt servicing includes the costs of servicing all loans (interest and finance costs) in a particular year, but does not include principal (capital) repayments.</b>
<i>gives</i> <b>BUSINESS RETURN</b>	Business return gives an indication of short-term business profitability. A sufficient return needs to be generated to service long run costs such as principal repayments on loans, capital purchases to allow for the replacement of machinery, and equipment necessary for efficient vineyard operation.





## Collection of data

Liz Singh from MVWI sent the data collection templates to a representative number of winegrowers. The aim was to collect data from 10% of winegrowers in the region (by property size). The total number of winegrowers in the Murray Valley as of the 15/03/2010 was 677.

A break down of the number of growers within each property size category, the number of returns required, and the number of returns received is presented below in Table 3.

**Table 3 :** Sample size based on overall property size for Mildura, Robinvale and Swan Hill.

Overall Property Size	Total growers within each category	Number of returns required	Number of returns received	Difference
1 - 10 ha	362	36.2	24	- 12.2
11 - 20 ha	152	15.2	19	+ 3.8
21 - 50 ha	103	10.3	9	- 1.3
51 - 100 ha	37	3.7	6	+ 2.3
> 101 ha	23	2.3	6	+ 3.7
<b>TOTAL</b>	<b>677</b>	<b>67.7</b>	<b>64</b>	<b>- 3.7</b>

**Footnote:** There are a number of growers whose hectare data is incomplete and will not be represented in the table.

A total of 64 data sets were forwarded to Retallack Viticulture for analysis and reporting. A break down of the data analysed is presented in Table 4.

**Table 4 :** A summary of winegrowing enterprises that submitted data for analysis.

Financial data was received from the following winegrowing enterprises (by category).						
Average vineyard size (area in production)	31 ha	Number of vineyards by location		Number of vineyards by size (area in production) – note this differs from the breakdown of overall property size.		
		Mildura	53			
				1 - 10 ha	29	45%
Range of vineyard sizes (area in production)	2 ha to 220 ha	Robinvale	7	11 - 20 ha	14	22%
				21 - 50 ha	11	17%
		Swan Hill	4	51 - 100 ha	4	6%
				> 101 ha	6	9%
Data from a total of 64 vineyards was analysed.						

## Data analysis

On receiving the data from winegrowers (via MVWI), Retallack Viticulture consolidated the data for analysis at a regional level, providing an indication of the average values for each cost input from the individual enterprise data.

The average figures were then graphed to provide a visual summary of the income and costs for growing wine grapes. This was compared to the results collected for seasons 2002/03 to 2006/07. Data was not collected for the 2007/08 season.



## RESULTS AND DISCUSSION – SURVEY

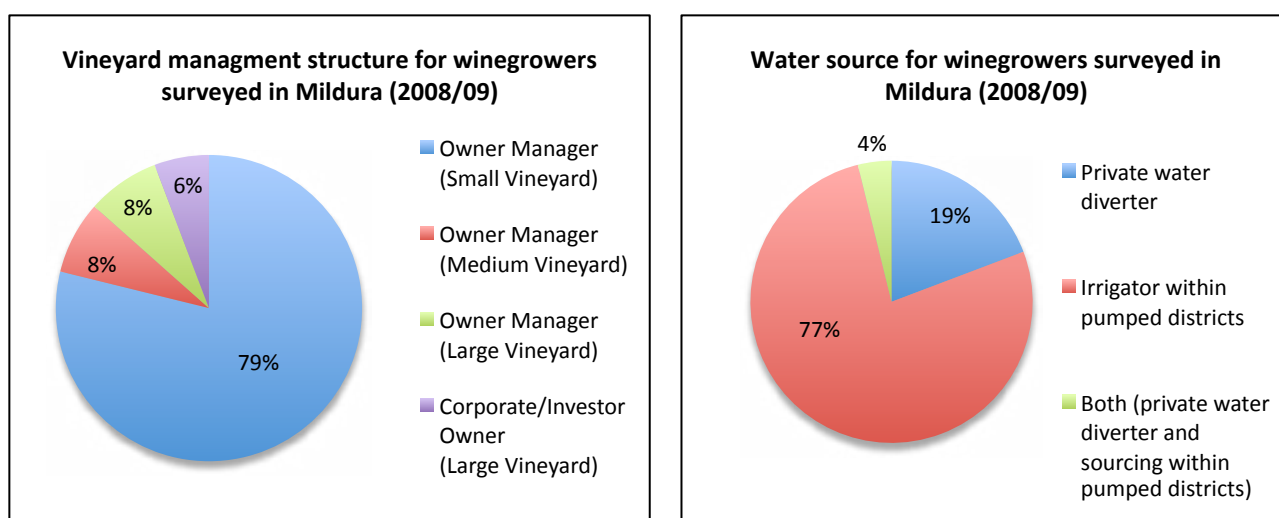
### Mildura

#### Survey question results (53 responses)

##### Management structure and sources of irrigation water

The management structure of the 53 winegrowing enterprises located in Mildura (and surrounding areas), was predominantly an owner manager of a small vineyard (41 or 79% of respondents); with 4 (or 8%) each for winegrowing enterprises identified as owner manager of a medium vineyard, and large vineyard. Three (or 6%) of the winegrowing enterprises were managed as a corporate/investor owner of a large vineyard.

Water was sourced predominantly from within pumped districts (40 or 77%). Ten (or 19%) of winegrowers were private water diverters, and two (or 4%) winegrowers utilised irrigation water from both sources (see Figure 3).



**Figure 3 :** Management structure and water source for winegrowers surveyed in Mildura in 2008/09.

##### Grape purchase contract and off farm income

69% of winegrowers had a grape purchase contract in the 2008/09 growing season. 29% did not have a contract, and 2% had some of their fruit contracted. 54% of winegrowers had off farm income, with 33% relying solely on the winegrowing enterprise for income, and 13% occasionally having off farm income to supplement their business, and/or living expenses (see Figure 4).

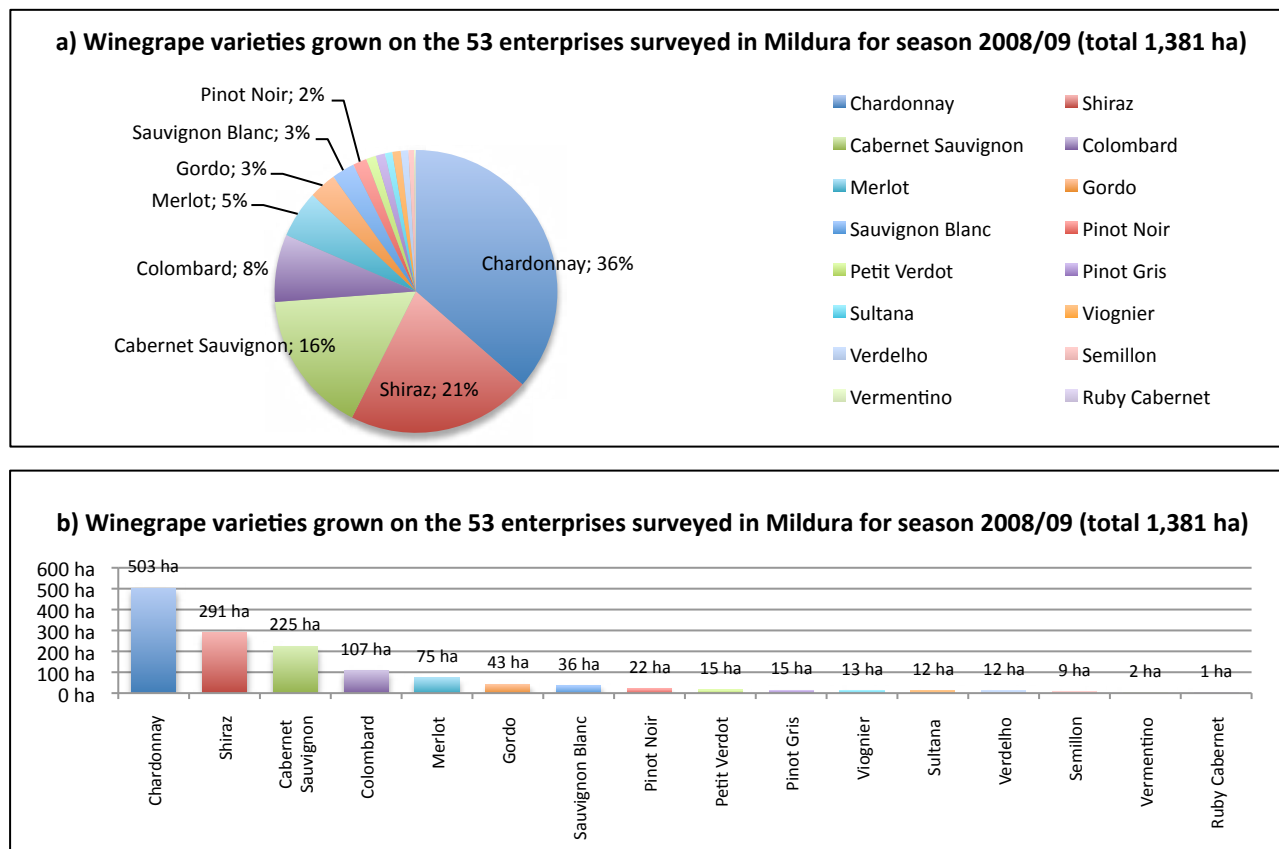


**Figure 4 :** % of winegrowers who had a grape purchase contract and/or off farm income for 2008/09.



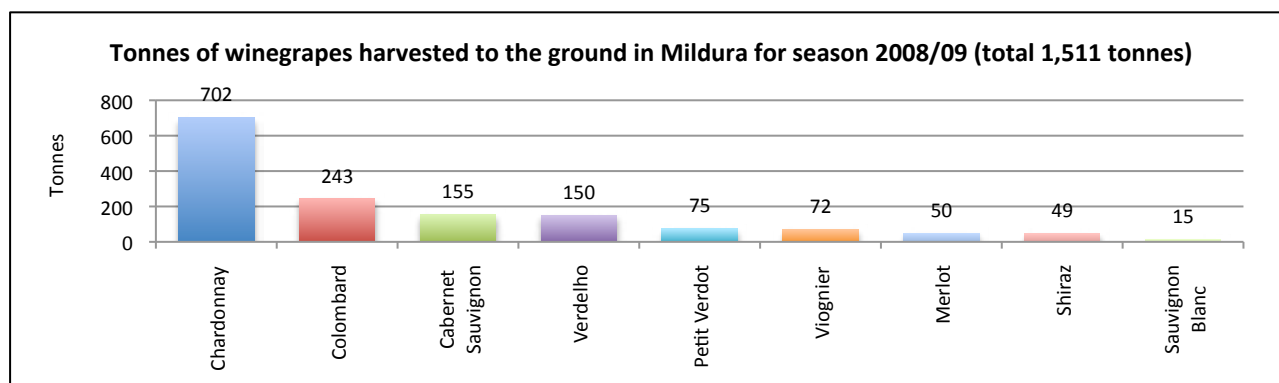
### Details of winegrapes grown in 2008/09

A total of 16 winegrape varieties were grown on the 53 enterprises surveyed in Mildura, comprising a total of 1,381 ha. Chardonnay was planted over the largest area (36% of all plantings), followed by Shiraz (21%), Cabernet Sauvignon (16%), and Colombard (8%), see Figure 5 a) and b).



**Figure 5 :** Varieties and area of grapes (ha) grown by winegrowers surveyed in Mildura in 2008/09.

A total of 1,511 tonnes of winegrapes grown by respondents in Mildura were harvested to the ground in season 2008/09. The main varieties harvested to the ground were Chardonnay, Colombard, Cabernet Sauvignon and Verdelho (see Figure 6). A combined total of 32 ha of Chardonnay and dried fruit producing area, were mothballed in 2008/09



**Figure 6 :** Grapes (tonnes) harvested to the ground by winegrowers surveyed in Mildura in 2008/09.

### Crops other than winegrapes grown in 2008/09

A total of nine crops other than winegrapes were grown on the 53 enterprises surveyed, comprising a total of 395 ha. They included citrus (348 ha), dried grapes (21 ha), avocados (8 ha), asparagus (6 ha), pumpkins (4 ha), watermelons (4 ha), dried fruit (2 ha), table olives, and currants (1 ha each).



## Robinvale

### Survey question results (seven responses)

#### Management structure and water sources

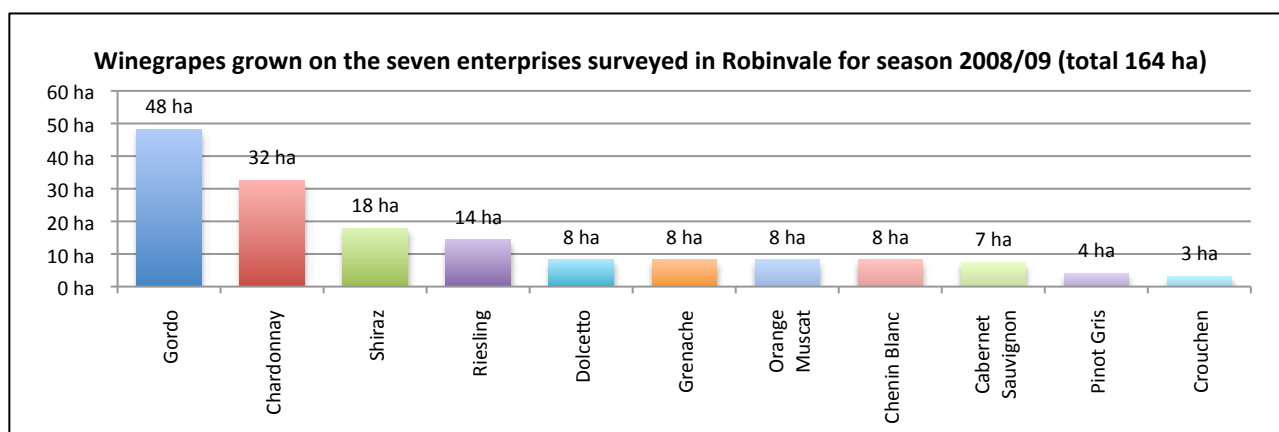
The management structure of the seven winegrowing enterprises surveyed in Robinvale included; an owner manager of a small vineyard (4 or 57% of respondents), with the remaining three (43%) enterprises having an owner manager of a medium vineyard. Four out of seven winegrowers were private water diverters (or 57%); the remaining three winegrowers were irrigators within pumped districts (or 43%).

#### Grape purchase contract and off farm income

Six out of the seven winegrowers had a fruit purchase contract in season 2008/09. Five out of the seven winegrowers had off farm income. One winegrower relied solely on the income from the enterprise, and one winegrower had off farm income on an occasional basis.

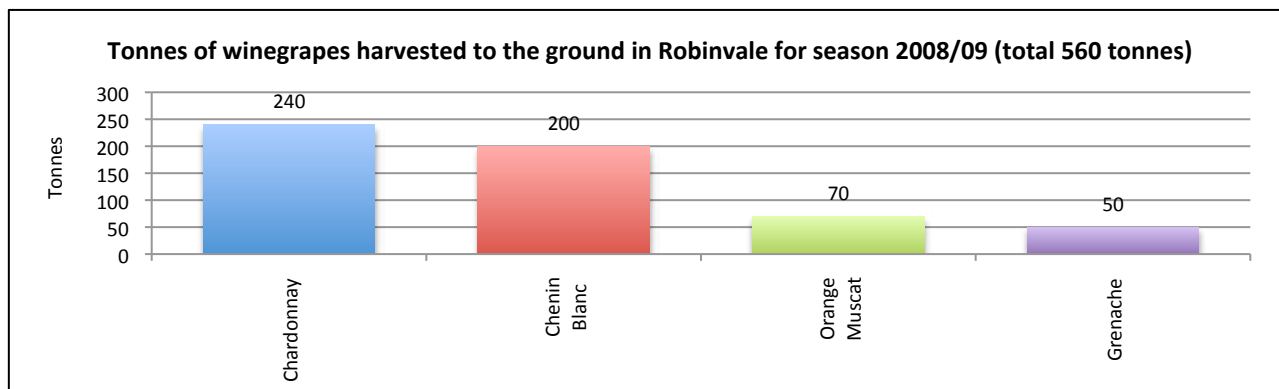
#### Details of winegrapes grown in 2008/09

A total of 13 winegrape varieties were grown on the seven enterprises surveyed in Robinvale, comprising a total of 164 ha. Gordo was planted over the largest area (48 ha or 29% of all plantings), followed by Chardonnay (32 ha or 20%), Shiraz (18 ha or 11%), and Riesling (14 ha or 9%), see Figure 7.



**Figure 7 :** Varieties and area (ha) of grapes grown by winegrowers surveyed in Robinvale in 2008/09.

A total of 560 tonnes of winegrapes grown by respondents in Robinvale, were harvested to the ground in the 2008/09 season. The main varieties harvested to the ground included Chardonnay, Chenin Blanc, Orange Muscat and Grenache (see Figure 8). No varieties were mothballed.



**Figure 8 :** Grapes (tonnes) harvested to the ground by winegrowers surveyed in Robinvale in 2008/09.

#### Crops other than winegrapes grown in 2008/09

Table grapes were the only crop grown other than winegrapes with approximately 3 ha represented.



## Swan Hill

### Survey question results (four responses)

#### Management structure and water sources

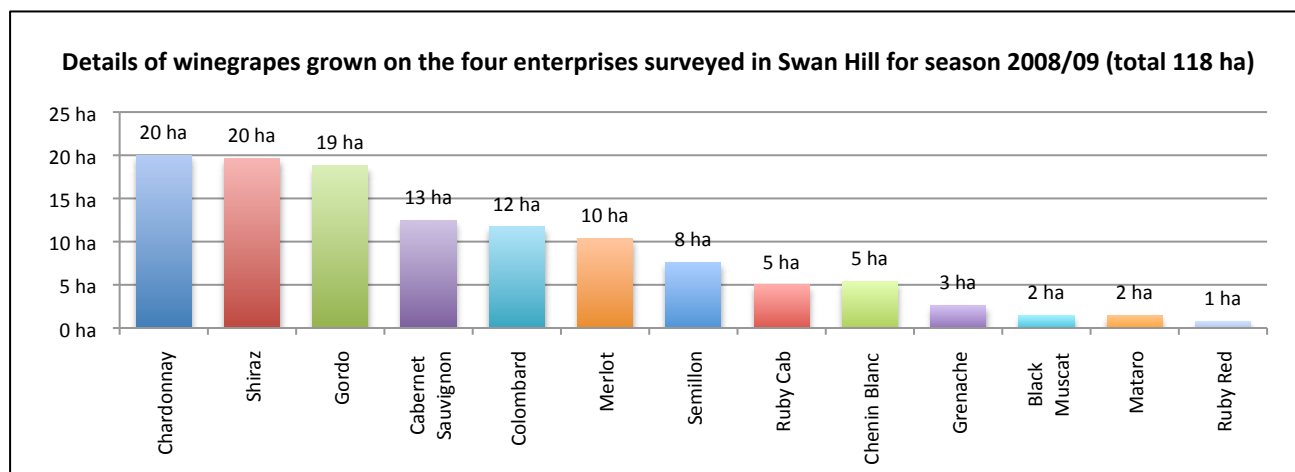
The management structure of the four winegrowing enterprises surveyed in Swan Hill included; an owner manager of a small vineyard (2 or 50% of respondents), and the remaining two enterprises had owner managers of a medium vineyard. All respondents (100%) were irrigators within a pumped district.

#### Grape purchase contract and off farm income

Three out of the four winegrowers had a fruit purchase contract in season 2008/09. One winegrower had off farm income, one winegrower relied solely on the income from the enterprise, and two winegrowers had off farm income on an occasional basis.

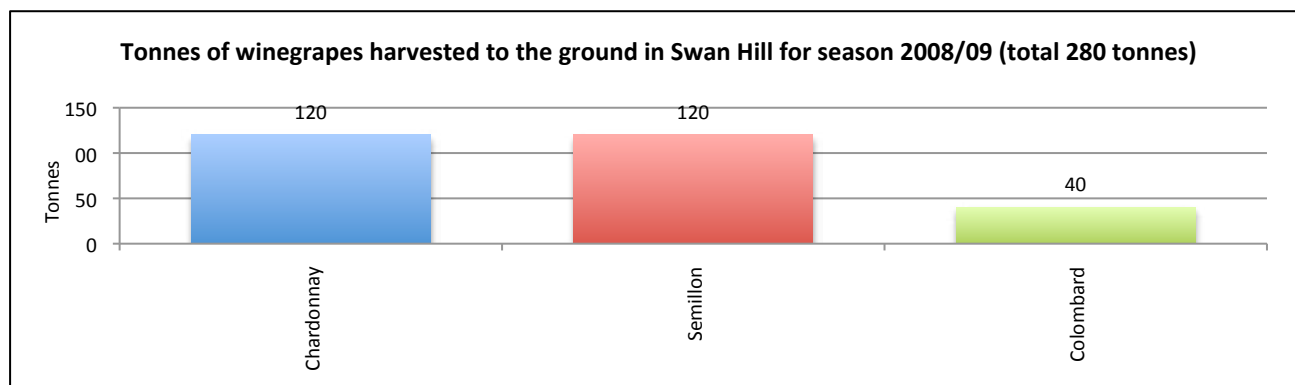
#### Details of winegrapes grown in 2008/09

A total of 13 winegrape varieties were grown on four enterprises in Swan Hill, comprising a total of 118 ha. Chardonnay and Shiraz was planted over the largest area (20 ha each), followed by Gordo (19 ha), Cabernet Sauvignon (13 ha), Colombard (12 ha), Merlot (10 ha), Semillon (8 ha), Ruby Cab (5 ha), Chenin Blanc (5 ha), Grenache (3 ha), Black Muscat (2 ha), Mataro (2 ha), and Ruby Red (1 ha) (see Figure 9).



**Figure 9 :** Varieties and area (ha) of grapes grown by winegrowers surveyed in Swan Hill in 2008/09.

A total of 280 tonnes of winegrapes grown by respondents in Swan Hill were harvested to the ground in the 2008/09 season. The main varieties harvested to the ground included Chardonnay, Semillon, and Colombard (see Figure 10). No varieties were mothballed.



**Figure 10 :** Grapes (tonnes) harvested to the ground by winegrowers surveyed in Swan Hill in 2008/09.

#### Crops other than winegrapes grown in 2008/09

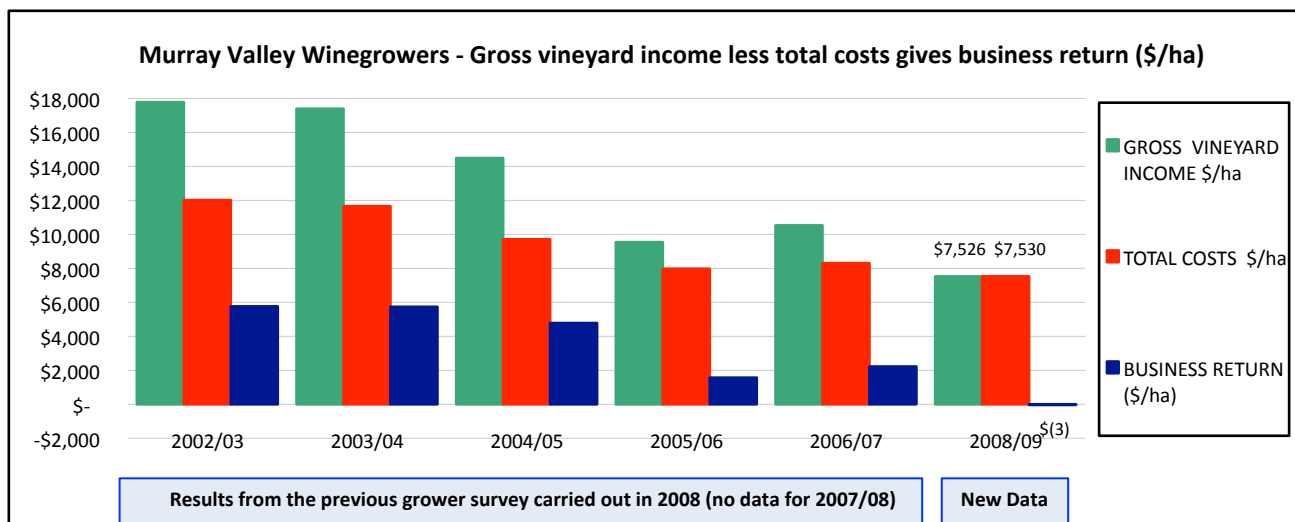
Apricots were the only crop grown other than winegrapes with approximately 0.4 ha represented.



## RESULTS AND DISCUSSION – FINANCIAL ANALYSIS

### Murray Valley wine region

Figure 11 presents the performance of winegrowing enterprises for seasons 2002/03 to 2006/07. This data was collected in the WGGA's winegrower survey carried out in 2008. The new data representing 64 Murray Valley winegrowing enterprises for season 2008/09, is presented below also.



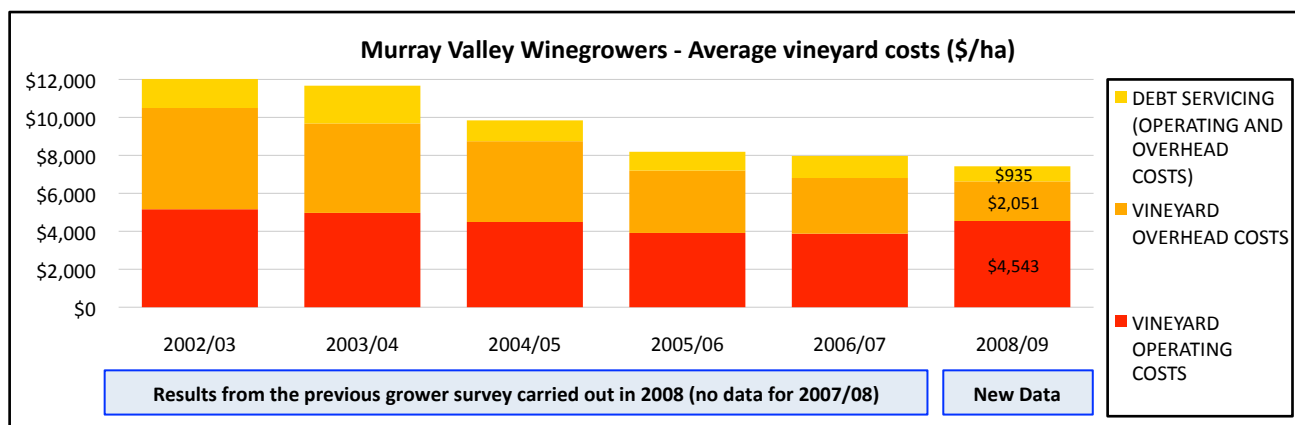
**Note:** The total cost figures for 2002/03 to 2006/07 include debt servicing (interest), but **DO NOT** include owner's salary, depreciation or any allowance for return on vineyard assets. The 2008/09 figures **DO** include owner's salary.

**Figure 11 :** Average business returns (\$/ha) for Murray Valley winegrowers for 2002/03 to 2008/09.

The data in Figure 11 highlights that:

- Average gross vineyard income (\$/ha) has steadily declined from seasons 2002/03 to 2006/07, due to reduced grape prices, and vine yields. This trend has continued for season 2008/09, with the average gross vineyard income dropping a further 30% since 2006/07 (to \$7,526/ha). This is less than half (42%) of the average gross income (of nearly \$18K/ha) generated in season 2002/03.
- Total expenditure has declined, even though some individual production inputs have increased in cost.
- On average, the business return has been reduced to a point where gross vineyard income is just able (or in many cases unable), to cover total costs; with no buffer, or capacity to cover any capital repayments, or renewal of plant and equipment. This detail is explored further below.

A breakdown of the average operating and overhead (debt servicing costs separate) costs (\$/ha) since the 2002/03 season is presented in Figure 12.



**Figure 12 :** Total costs for Murray Valley winegrape enterprises for 2002/03 to 2008/09.





A detailed breakdown of the average operating and overhead costs for the 64 Murray Valley winegrowing enterprises is presented in Tables 5 and 6, along with the lowest and highest \$/ha in each category (columns 2 to 4). The number of Murray Valley winegrowers who provided data for each category is displayed in column 5. The higher the number of data sets (closer to 64), the more reliable the average figures are, as a true indication of the typical expenditure in the region. The average costs in 2008/09 are compared with the 2006/07 figures, with the differences between the seasons are highlighted in columns 8 and 9. The average \$/ha for each category is presented graphically in Figure 13 and 14.

## Operating costs

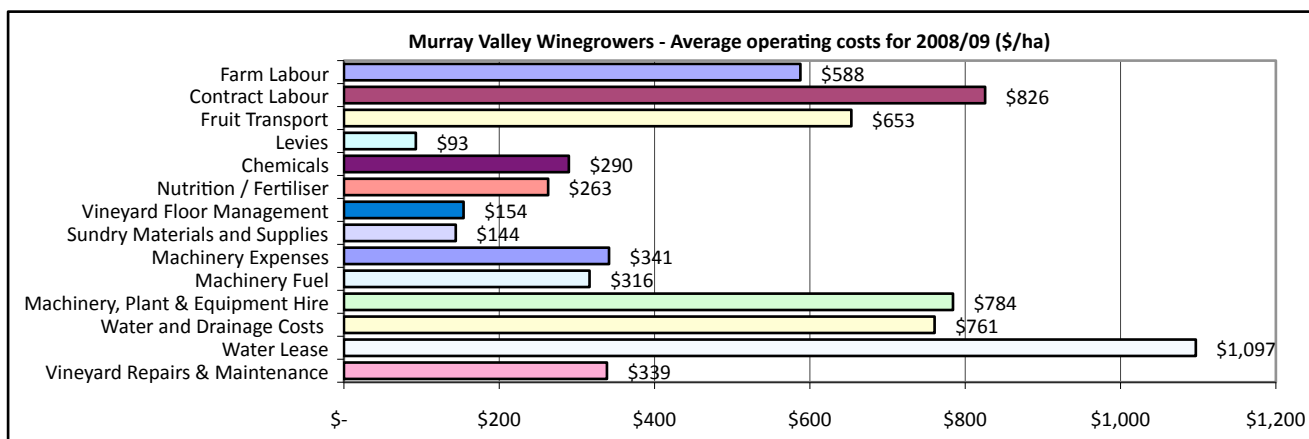
The data in Table 5 highlights that:

- The average total operating costs for Murray Valley winegrowing enterprises in 2008/09 is \$4,543/ha, compared to \$3,862/ha in 2006/07. This is an increase of \$681/ha.
- The combined cost of farm and contract labour has decreased compared to 2006/07, along with cash spent on chemicals, and vineyard repairs and maintenance. The costs for all other operating inputs (where there are available figures for both years) have increased. While cost cutting measures achieved by reducing labour, chemical, vineyard repairs and maintenance costs, have provided an overall reduction in operating costs; this has been superseded by the increase in costs such as machinery plant and equipment hire, water lease etc.
- The highest operating costs are: water lease (\$1,097/ha), followed by contract labour (\$826/ha), machinery, plant and equipment hire (\$784/ha), water and drainages costs (\$761/ha), fruit transport (\$653/ha), and farm labour (\$588/ha); with all other individual costs <\$500/ha.

*Individual costs may differ between categories depending on how the winegrowing enterprise chooses to allocate costs.*

**Table 5 : Average operating costs (\$/ha) for the Murray Valley between 2006/07 and 2008/09.**

VINEYARD OPERATING COSTS (\$/ha)	Season 2008/09				Average		Difference	
Sub Unit	Low	Average	High	Number of data sets	2006/07	2008/09	\$/ha	%
	\$/ha				\$/ha			
Farm Labour	\$23	\$588	\$2,396	39	N/A	\$588	-\$1,025	-42%
Contract Labour	\$28	\$826	\$5,500	57	\$2,439	\$826		
Fruit Transport	\$46	\$653	\$2,169	62	N/A	\$653	N/A	N/A
Levies	\$14	\$93	\$703	53	\$65	\$93	\$28	42%
Chemicals	\$48	\$290	\$1,200	64	\$342	\$290	-\$52	-15%
Nutrition / Fertiliser	\$5	\$263	\$847	60	\$260	\$263	\$3	1%
Vineyard Floor Management	\$18	\$154	\$1,242	23	\$44	\$154	\$110	250%
Sundry Materials and Supplies	\$3	\$144	\$1,175	48	\$110	\$144	\$34	31%
Machinery Expenses	\$21	\$341	\$2,558	60	N/A	\$341	N/A	N/A
Machinery Fuel	\$39	\$316	\$1,309	62	\$292	\$316	\$24	8%
Machinery, Plant & Equipment Hire	\$6	\$784	\$8,730	26	\$115	\$784	\$669	582%
Water and Drainage Costs	\$114	\$761	\$2,520	64	\$631	\$761	\$130	21%
Water Lease	\$4	\$1,097	\$2,735	32	\$570	\$1,097	\$527	92%
Vineyard Repairs & Maintenance	\$11	\$339	\$6,387	58	\$366	\$339	-\$27	-7%
TOTAL OPERATING COSTS/ha (average). This figure will differ from the sum of averages.					\$3,862	\$4,543	\$681	18%



**Figure 13 : Average operating costs (\$/ha) for Murray Valley winegrowers in 2008/09.**



## Overhead costs

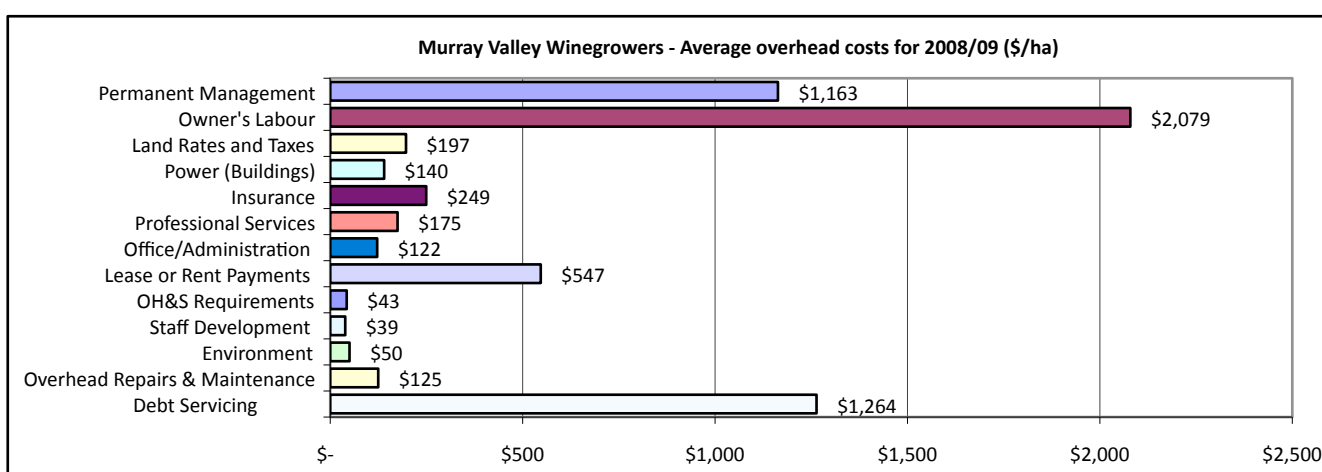
The data in Table 6 highlights that:

- The average total overhead cost for Murray Valley winegrowing enterprises in 2008/09 is \$2,987/ha compared to \$3,240/ha in 2006/07. This is a decrease of \$253/ha.
- There has been a reduction in permanent management, professional services, office/administration, staff development, environment, overhead repairs and maintenance and debt servicing costs.
- A cost for owner's labour has been included in the 2008/09 figures, with an additional \$2,079/ha allocated. It appears costs savings have been made in other areas, given the average overhead cost has decreased from the 2006/07 season. The highest overhead costs are: owner's labour (\$2,079/ha) followed by debt servicing (\$1,264/ha), permanent management (\$1,163/ha), and lease or rent payments (\$547/ha); with all other individual category costs <\$500/ha.
- It appears debt servicing has decreased since the 2006/07 season, although it is not clear whether this reflects reduced payments or changes to loan arrangements. It is hard to compare these figures accurately unless the same enterprises are surveyed each season.

*Individual costs may differ between categories depending on how the winegrowing enterprise chooses to allocate costs.*

**Table 6 : Average overhead costs (\$/ha) for the Murray Valley between 2006/07 and 2008/09.**

VINEYARD OVERHEAD COSTS (\$/ha)	Season 2008/09				Average		Difference	
Sub Unit	Low	Average	High	Number of data sets	2006/07	2008/09	\$/ha	%
	\$/ha				\$/ha			
Permanent Management	\$43	\$1,163	\$3,529	11	\$1,493	\$1,163	-\$330	-22%
Owner's Labour	\$180	\$2,079	\$8,677	49	N/A	\$2,079	N/A	N/A
Land Rates and Taxes	\$25	\$197	\$1,117	64	\$175	\$197	\$22	12%
Power (Buildings)	\$6	\$140	\$592	59	\$32	\$140	\$108	342%
Insurance	\$15	\$249	\$695	62	\$235	\$249	\$14	6%
Professional Services	\$20	\$175	\$800	61	\$399	\$175	-\$224	-56%
Office/Administration	\$2	\$122	\$768	64	\$152	\$122	-\$31	-20%
Lease or Rent Payments	\$1	\$547	\$2,627	31	\$541	\$547	\$6	1%
OH&S Requirements	\$1	\$43	\$675	39	\$16	\$43	\$27	170%
Staff Development	\$2	\$39	\$132	21	\$46	\$39	-\$7	-15%
Environment	\$8	\$50	\$152	7	\$939	\$50	-\$889	-95%
Overhead Repairs & Maintenance	\$13	\$125	\$750	37	\$616	\$125	-\$491	-80%
Debt Servicing (Interest & Finance Costs)	\$9	\$1,264	\$6,788	53	\$1,382	\$1,264	-\$118	-9%
TOTAL OPERATING COSTS/ha (average). This figure will differ from the sum of averages.					\$3,240	\$2,987	- \$253	-8%



**Figure 14 : Average overhead costs (\$/ha) for Murray Valley winegrowers in 2008/09.**

The data in Table 5 and 6 highlights that:

- The cost of production (overhead and operating costs) rose by \$428/ha, from \$7,102/ha in 2006/07 to \$7,530/ha in 2008/09; this is an increase of 6%. As mentioned earlier, the gross vineyard income has fallen by 30% in the same period.



## Analysis of gross margin

Gross margin is calculated by subtracting operating costs from gross vineyard income. There is a large spread of gross margins that were generated between the 64 winegrape enterprises surveyed in 2008/09.

The vineyard with the lowest gross margin was Enterprise 19, with \$-6,838/ha (<10 ha in size) and the vineyard with the highest gross margin was Enterprise 30, with \$6,817/ha (21 to 50 ha in size). Gross margin is one of the first measures of business health. The winegrowing enterprise needs to generate enough income to cover the operating costs of production, as a minimum. These are the direct inputs required to produce a crop. If winegrowing enterprises are not able to break even at the gross margin stage, they are likely to be in serious financial difficulty (unless they can access savings in the short term). A total of 12 out of the 64 winegrowing enterprises surveyed in 2008/09, did not generate sufficient income to cover their operating costs. The spread of gross margins is presented graphically in Figure 15.

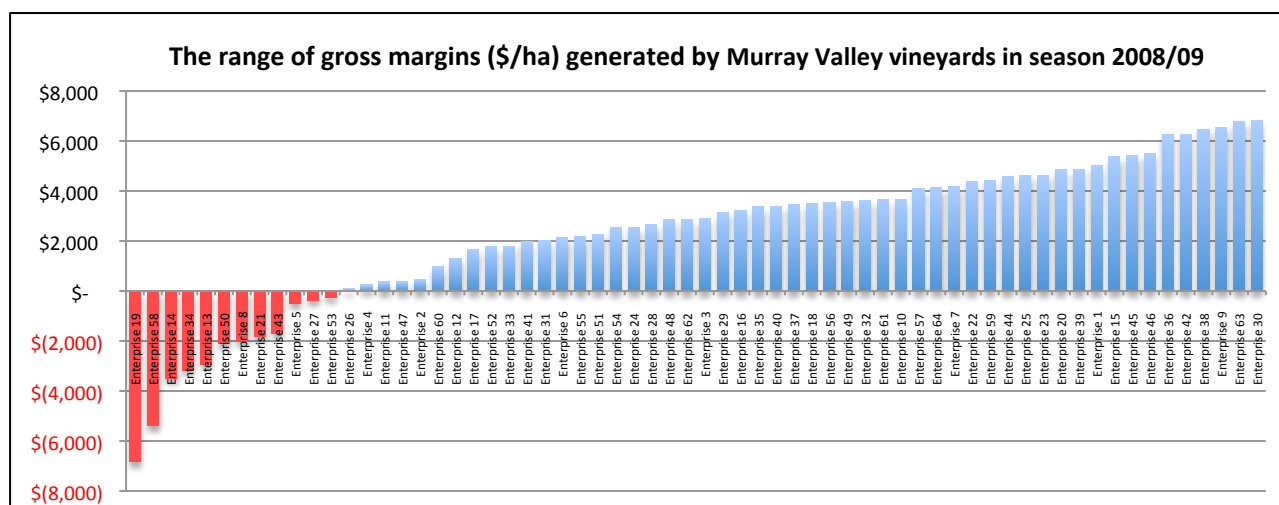


Figure 15 : Gross margins (\$/ha) generated by Murray Valley winegrowers in season 2008/09.

## Analysis of business returns

Business return is calculated by subtracting operating and overhead costs, from gross vineyard income. There is an even larger spread of business returns than the gross margins generated, between the 64 winegrape enterprises surveyed in 2008/09. Many of the winegrowing enterprises that didn't break even at the gross margin stage would have increased their losses at the business return stage, as they had no provision for overhead costs. The vineyard with the lowest business return was Enterprise 58, with \$-13,847/ha (<10 ha), and the vineyard with the highest business return was Enterprise 25, with a profit of \$3,675/ha (>101 ha). The spread of business returns is presented graphically in Figure 16.

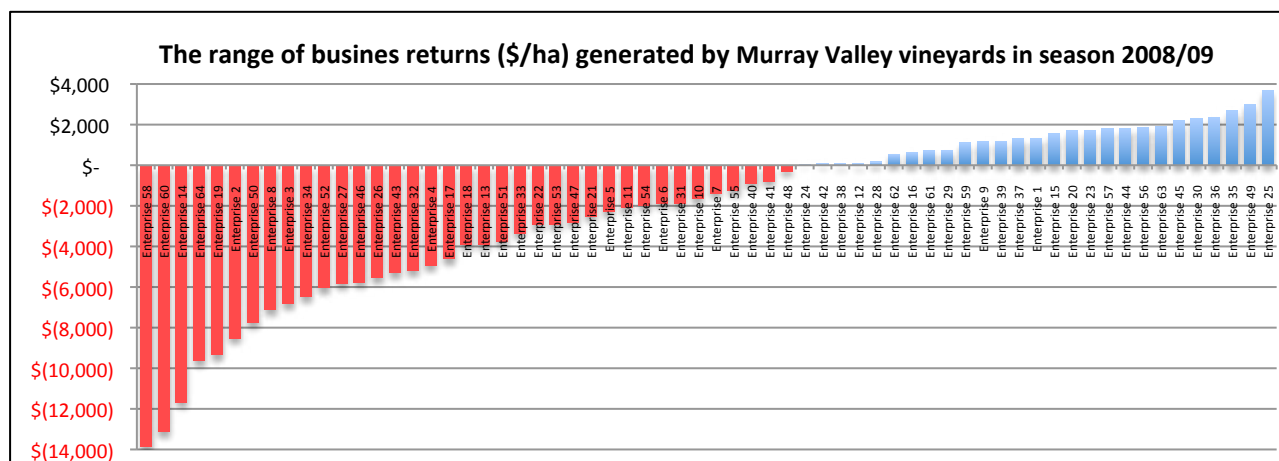
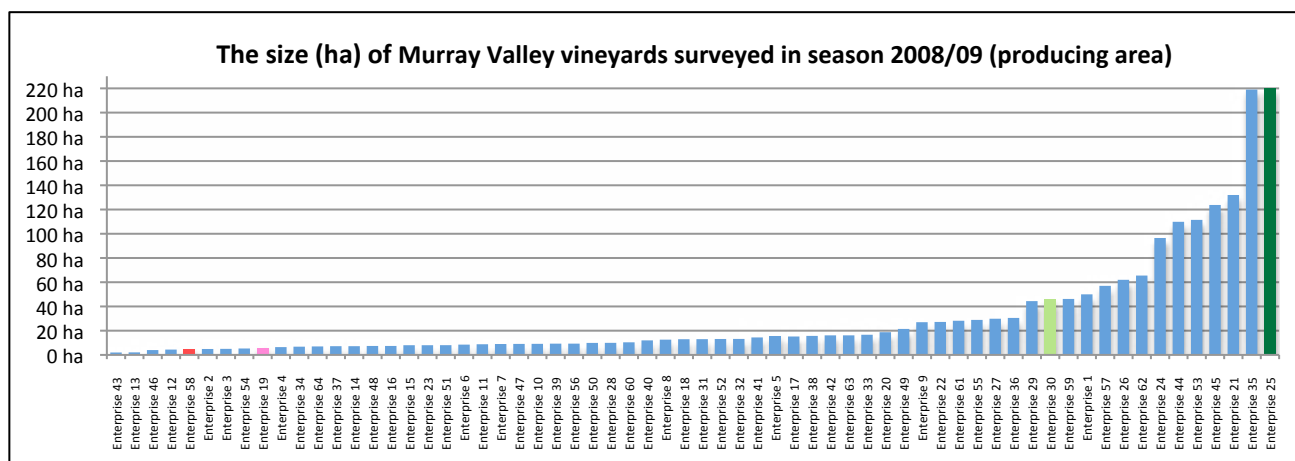


Figure 16 : Business returns (\$/ha) generated by Murray Valley winegrowers in season 2008/09.



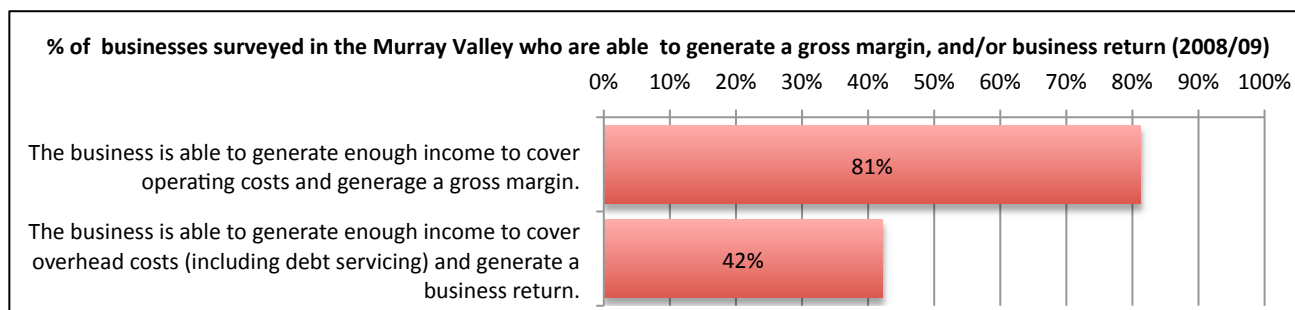
## Economy of scale

Of the 64 winegrowing enterprises surveyed, the size of the vineyards with area in production ranged from 2 ha to 220 ha in size. Figure 17 shows the range of vineyard sizes. The lowest gross margin is highlighted in pink (Enterprise 19); the lowest business return is highlighted in red (Enterprise 58); the highest gross margin is presented in light green (Enterprise 30), and the highest business return is highlighted in dark green (Enterprise 25).



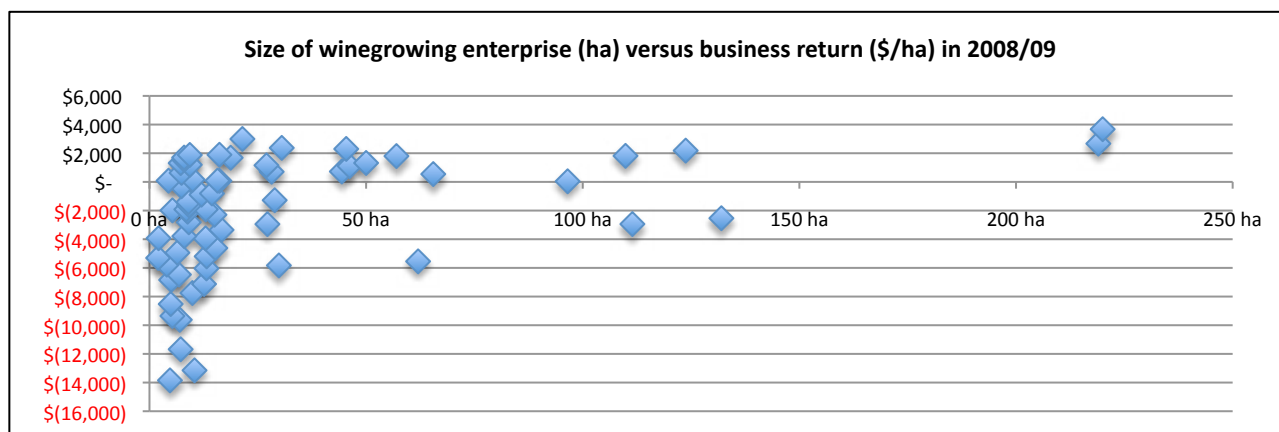
**Figure 17 :** The size (ha) of Murray Valley vineyards surveyed in season 2008/09 (producing area).

81% of winegrowing enterprises had sufficient income to generate a gross margin. However, only 27 of the 64 (42%) winegrowing enterprises surveyed, had a sufficient gross margin to cover their operating and overhead costs, and generated a positive business return in season 2008/09 (see Figure 18).



**Figure 18 :** Winegrowers (%) who generated a positive gross margin and/or business return in 2008/09.

The size of each winegrowing enterprise compared to their capacity to generate a positive business return is presented in Figure 19.



**Figure 19 :** The size of winegrowing enterprises (ha) versus business return (\$/ha) in 2008/09.



There is a weak but positive correlation between the capacity of a winegrowing enterprise to generate a positive business return, with an increase in vineyard size, up to 50 ha. A small improvement is observed from, 51 to 100 ha, with 75% of these vineyards able to generate a positive business return. This trend does not continue for vineyards greater than 101 ha. This may be due to the small sample size (6 enterprises), and/or greater overhead costs required for the management structure of larger vineyards.

Regardless of the vineyard size, there were examples of both poor, and well performing enterprises in each category.

## CONCLUDING REMARKS

The figures presented in this report demonstrate the drastic reduction in gross vineyard income generated in recent years. This coupled with increases in the operating costs involved in running a vineyard, has resulted in a large number of winegrowing enterprises running at a loss in the 2008/09 season. This is highlighted by the fact that 37 out of the 64 (or 58%), winegrowing enterprises surveyed, **did not** generate a positive business return. Not only did these businesses not break even in 2008/09, many of these businesses ran at a significant loss. It is unlikely this situation has improved in the 2009/10 growing season.

A point of relevance is the correlation of businesses that are able to generate a business return, in relation to larger vineyard size. This is important for growers who are able to capitalise on an economy of scale. In many cases, an increased vineyard size can result in a reduction of the total costs of production, on a per hectare basis. Consequently, this may help to improve business returns, as long as potential revenue can be maximised, and these businesses are run in an efficient manner. Regardless of the vineyard size, there are examples of both poor, and well performing enterprises in each category. This highlights the complexities involved in running individual winegrowing enterprises, and the differences in running like sized vineyards.

Winegrowing enterprises that are not currently able to cover their cost of production (gross margin) are unable to generate a business return. Businesses that are able to generate a business return may only be able to cover 'short run' costs, with little funds left over to make provision for 'long run' costs such as principal loan repayments, replacement of machinery etc.

Winegrowing enterprises that are unable to cover 'long run' costs, have exhausted existing lines of credit, and have little prospect of improvement in the future, may need to consider exiting the industry. This observation is not new, and it has been well documented that there are a range of factors that may prevent winegrowers from doing this.

It is important for every winegrowing enterprise to carefully assess their current status, and prospects for the future on an individual basis. Expert assistance should be sought when making these decisions. The figures contained in this report will give individual winegrowers some benchmarks, which can be used to compare their performance with other growers within the Murray Valley winegrowing region.

The costs of production figures presented in this report are only as good as those that are available for analysis. It has been encouraging to receive 64 responses this season, which represents nearly 10% of vineyard enterprises in the Murray Valley winegrowing region. An increase in the number of winegrowers participating in similar surveys, will improve the robustness of results in the future.

**RETALLACK VITICULTURE PTY LTD**

MARY RETALLACK

Managing Director / Viticulturist

Macintosh HD:Users:RetallackViti:Documents:Retallack Viticulture:RV Clients:MWVI:Benchmarking:FINAL:RmjrMWVIBenchmarkingProject050610.docx

## Appendix 1

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### **Background information flyers for winegrowers**







# Capacity Building for Australian Wine Grape Growers

## Cost of Production Project - Flier

Murray Valley Winegrowers' Inc is carrying out a Cost of Production Project using the WGGA data collection template. This follows on from a similar project in 2008 and has been made possible via funding from the Grape and Wine Research and Development Corporation.

### What will it achieve?

- Accurate, up-to-date information on the real costs of growing wine grapes in the Murray Valley.
- A clearer picture of how income and costs have changed over recent years and how the profitability of wine grapes has been affected.
- A greater insight into the gross margin for wine grapes from vineyards of different sizes and management structures.
- More informed discussions with wineries on grape prices, the sustainability of wine grape producers and the industry in general.

### How do we intend to collect this information?

- We are seeking help from interested growers to provide their vineyard income and cost figures for the project.
- Growers will be sent a template for data entry to enter their financial data (either electronically or manually), or you can provide raw data for us to enter.
- All data will be combined and arranged so you will not be identified.

**THE SHEETS WILL BE CODED TO ENSURE DATA IS KEPT ANONYMOUS AND CONFIDENTIAL**

### What do you get out of it?

- A copy of the regional comparative analysis summary.
- The satisfaction that you are helping your grower organization achieve a more transparent, equitable and sustainable wine grape industry.
- Workshops are scheduled to be held by **Retallack Viticulture** in Swan Hill, Robinvale and Mildura in December to present an analysis of the data we have collected.

### What do interested growers do now?

Background information and a data entry template are attached. Please contact Liz Singh if you have any questions.

**Please forward your financial data to the MVWI office by Friday 23<sup>rd</sup> October, 2009.**

Liz Singh - Industry Development Officer  
PO Box 2745, Mildura, Vic, 3502  
Ph: (03) 5021 3911 Fax: (03) 5023 2335  
[liz.singh@murrayvalleywinegrapes.com.au](mailto:liz.singh@murrayvalleywinegrapes.com.au)



# Capacity Building for Australian Wine Grape Growers

## Cost of Production Project – Background Information

### Step 1 - Data Collection Template

Growers are asked to enter their enterprise income and cost data into a simple Excel template, from either tax return 'Profit and Loss (Income)' statements or farm records (most recent 2008/09) and prior seasons (if available).

The template categories are broadly divided into **Operating** (variable) costs and **Overhead** (fixed) costs (descriptors are included in the template). If you wish to supply your 'raw' data we can collate this on your behalf (further info below).

#### Confidentiality

Financial data supplied is coded so it cannot be traced back to an individual grape grower when this data is published. Growers are asked to provide their enterprise data (income and costs) along with the area in production for growing wine grapes. This data can then be reported on a \$/hectare basis providing a standardised unit for reporting while maintaining confidentiality.

Growers are asked to answer two simple background questions. This allows the data to be coded and assessed on a regional basis by:

- The management structure of the business;
- The source of water for irrigation purposes.

### Step 2 –Data Management and Reporting

Once data is received it will be consolidated into a comprehensive regional data set. Average values for each input cost can then be presented as feedback.

Average \$/ha costs are graphed to provide a visual summary of the income and costs for growing wine grapes, over recent seasons (or for individual seasons).

A summary page for each grower who contributes data to this project can be provided on request, detailing their own income and production costs alongside the regional cost of production data.

Part of this project is to assess regional vineyard income and production costs and to calculate gross margins (\$/ha) for a range of vineyard sizes and models. Working closely with growers ensures the financial information collected is both current and reflective of a range of vineyard enterprise models.

### Are you interested in participating?

We acknowledge there are a number of issues involved in collecting financial data and can offer the following comments:

- **Confidentiality.** We understand the importance of keeping grower's data anonymous. Vineyard data supplied will be handled confidentially and will not be able to be traced back to individuals when used in this project. Each data set is coded prior to analysis to ensure confidentiality.
- **Scope of data.** Enterprise data is sought for the 2007/08 and 2008/09 seasons (where available).
- **Format.** A standardised template is provided for the collation of data or you may wish to forward a copy of your 'Profit and Loss (Income)' statement to MVWI so they can allocate these costs.

### The next step

If you would like to participate in this project this can be done in a number of ways (choose the method which best suits you).

#### 1. Send a copy of your enterprise production income and expenses data entered into the supplied template.

- Enter your data into the supplied template. This process takes about 30 minutes (to allocate costs to the specified headings).

#### 2. If you wish to supply your 'raw' data we can collate this on your behalf.

- Send a copy of your enterprise 'Profit and Loss (Income)' statement from you tax records.
- If you currently use record keeping software, please send a print a copy of your financial summary.

**If you send raw data (not using the supplied template) please provide the following details with your financial information.**

- Answers to enterprise 'background information' questions
- Clearly date the financial year of the data supplied ie 2008/09
- The size of your property (area planted to vines and any other crops)

**This information will be handled confidentially.**

- **If you have any concerns you may wish to remove your company name from the header of any information supplied.**

On a separate sheet of paper you will be asked to supply your name and contact details. This will be used to send collated regional cost of production results to you and invite you to the presentation of the final report and findings in your local area.

**Please forward your financial data to the MVWI office by Friday 23<sup>rd</sup> October, 2009.**

## Step 3 – Feedback

### Presentation of Project Results

You will be invited to a presentation in December which will outline the results of this regional cost of production project.

### Comments

Recent circumstances including changing seasonal conditions, drought, market (supply and demand) etc have had an overriding effect on a growers capacity to generate income (price and tonnage) and manage their production costs (water etc). The result of this shift is that past cost of production data will be of interest but perhaps of limited use for future projections.

Our sense is that production costs are as 'lean' as growers can achieve to grow their fruit to specification (water being the exception). The real variable in this equation is the potential for growers to generate income to cover these costs (and any ceiling on the capacity to do so). Given the extent of these variables, it is important for smaller growers to have a mechanism to assess their capacity to generate a suitable margin to cover all enterprise costs (operational, overhead and debt servicing).

### WGGA's VineBiz Program

If you are interested in finding out more about you financials, Wine Grape Growers Australia (WGGA) have developed the VineBiz Financial 'Ready Reckoner' that captures both enterprise and management unit costs. The 'Ready Reckoner' is a powerful tool which can be used to measure a grower's financials data in a standardised way and help with decision making in the future.

VineBiz Workshops will be run in the Murray Valley in early October 2009.



## Capacity Building for Australian Wine Grape Growers

### Cost of Production – Check List and Contact Info

Check List	Tick
1. I have answered the two <b>Vineyard Enterprise Background Information</b> questions ( <b>Sheet 1</b> )	
2a. I have attached my enterprise financial data for 2007/08 (and 2008/09 if available). Data has been entered into the supplied template (one template per financial year) ( <b>Sheet 2</b> ), OR	
2b. I have attached photocopies of my 'Profit and Loss (Income)' Statements I have clearly stated the <b>financial year</b> and <b>area of wine grapes in production (ha)</b> .	
3. <b>Please fill in your contact details</b> (below) so we can provide feedback to you at the end of the project and invite you to a presentation of the regional results in December 2009.	

*Your enterprise and contact information remains confidential*

<b>Name</b>	
<b>Address</b>	

**Please return this sheet** (with attachments listed in the checklist) **by Friday 23<sup>rd</sup> October** to:

**Murray Valley Winegrowers' Inc Cost of Production Project**  
**Liz Singh - Industry Development Officer**  
 PO Box 2745, Mildura, Vic, 3502  
 Ph: (03) 5021 3911 Fax: (03) 5023 2335  
[liz.singh@murrayvalleywinegrapes.com.au](mailto:liz.singh@murrayvalleywinegrapes.com.au)

## Appendix 2

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### **Data collection template used to capture the cost of production**





# Capacity Building for Australian Wine Grape Growers

## Cost of Production

### Template for Data Collection



**Liz Singh**

Industry Development Officer  
Murray Valley Winegrowers' Inc.  
PO Box 2745, Mildura, Vic, 3502  
Ph: (03) 5021 3911  
Fax: (03) 5023 2335  
[liz.singh@murrayvalleywinegrapes.com.au](mailto:liz.singh@murrayvalleywinegrapes.com.au)

*Please return completed templates by email, fax or post to :*



**Murray Valley**  
Winegrowers' Inc



# Sheet 1: Murray Valley Winegrowers' Cost of Production - Vineyard Enterprise Background Information

Q1	Location of Vineyard (Circle Region)	Mildura Region	Robinvale Region	Swan Hill Region
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Q2	Management Strucutre (please circle)	Owner Manager Small Vineyard	→	Owner/operator who does not employ any outside permanent labour but does use contractors/casuals for some tasks ie harvesting, pruning.
		Owner Manager Medium Vineyard	→	Owner/operator who has one or two permanent workers (for example vineyard hand or tractor driver) and uses casuals and contractors.
		Owner Manager Large Vineyard	→	The owner manages the business but employs a full time vineyard manager for operational work, monitoring, planning etc. Contractors and casuals are also used.
		Corporate/Investor Owner Large Vineyard	→	A full-time vineyard manager is employed plus permanent employees, casuals and contractors (similar to No. 3 but Corporate or Investor owned, which will (may) have different overhead costs)

Q3	Water Source (please circle)	Private Water Diverter	→	Water is sourced directly from a river or bore, annual water access fees are usually low but pumping costs (power) are high.
		Irrigator within Pumped Districts	→	Water is sourced from an irrigation water provider who supplies water to the farm gate. Annual water fees are usually high but pumping costs (for the grower) are low.

Q4	Do you have a grape purchase contract for the upcoming season? (Circle)	Yes	No	I will speculate on the spot market
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Q5	I have off farm income (Circle)	Yes	No	Occasionally
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Q6	List the winegrape varieties grown on your property.	Variety	Ha

Q7	Did you mothball any varieties for the financial year listed?  If so, please list varieties and area (ha).	Variety	Ha

Q8	Did you harvest any fruit onto the ground in the financial year listed?  If so, please list varieties and estimated volume (tonnes).	Variety	Tonnes

Q9	Do you grow crops other than winegrapes?  If so, please list the crops grown and the area (ha)	Crop	Ha

Q10	Comments	
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Sheet 2: Murray Valley Winegrowers' Cost of Production Project - Data Collection Template

Year:	2008/09	Enter the financial year ie 2008/09 (ie 1st July, 2008 to 30th June, 2009). This also includes vintage 2009.
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Vineyard Area (ha)	
Sub Unit	
Total Property Area (ha)	
Wine grapes (ha in production)	
Wine grapes (ha not in production)	

To convert acres to hectares divide by 2.47 ie if you have 10 acres divide by 2.47 = 4.05 ha.

INCOME	
Sub Unit	
Wine Grape Sales	
Wine Sales	

Enter the income from **Wine Grape Sales** (this will be used to calculate the gross margin) and **Wine Sales** separately.

Wine Sales are sales made from winegrapes converted to wine in the listed financial year

Description for each category	
Employee labour costs	
Contractor labour costs	
Freight or cartage costs from vineyard to fruit processor.	
Research and development (GWRDC \$2/tonne), grower organisation levies (MWVI \$1.95/tonne). Often levies are deducted automatically from grape payments as a \$/tonne amount. If you are converting winegrapes into wine add the relevant levies.	
Fungicide, insecticide, weedicide, bait, pest control.	
Fertiliser application, foliar nutrient, petiole testing. These tasks are often carried out an on annual basis.	
Soil testing, soil ameloration (lime/gypsum), broadcast fertiliser, cover crop/seed, mulch. These are normally longer term tasks ie not carried out an on annual basis.	
Sundry hand tools, miscellaneous items, repairs <\$100 ea.	
Oil, gas and grease, basic servicing and maintenance of vineyard machinery (tractors, utes, ATV, pumps).	
Fuel (diesel or petrol) for vineyard machinery (tractors, utes, ATV, pumps). This is separated to allow for environmental accounting.	
Water delivery costs and electricity to power pumps (include water rates or standing fees). Separate from Power (buildings) which is an overhead cost.	
Annual water lease (permanent water purchases should be recorded separately as a capital expense). Separate from Land Rates and Taxes which is an overhead cost.	
Vineyard repairs and maintenance including re-planting dead vines, trellis repairs (do not include major capital expenses).	

Description for each category	
Permanent management (including owner or manager who predominantly manages rather than carrying out 'hands on' tasks).	
Estimation or actual. Don't duplicate this amount if it has already been captured in 'Permanent Management'. <b>See calculation over the page.</b>	
Don't include water rates (or standing fees) insert these costs into water and drainage costs (operating).	
Electricity (other than power used for pumps/irrigation system).	
Public liability, property, contents or crop insurance.	
Consultant, research, accountant, legal, secretarial, auditor fees.	
Phone, software, stationary, postage, registration.	
Land or machinery.	
Personal Protective Equipment (PPE), fire extinguishers, safety signage.	
Human resource costs, staff training, subscriptions, memberships, course fees, travel and accommodation.	
Revegetation, water treatment, catchment management.	
Fences, roads, firebreaks, sheds, ground maintenance.	
Interest paid on loans, bank fees & charges. Do not include capital or principal repayments.	

Calculating Owner's Labour						
<i>Estimation of Owner's Labour</i>	Estimated % of time spent running vineyard?	Base Salary	Superannuation + Workcover Check the current % requirements.	Superannuation and Workcover Calculation	Full Time Salary (Including 'on costs')	% Salary (including 'on costs')
<b>Comments</b>	Estimate % up to a total of 100% (full time)	<b>Select a base salary</b> (use \$40K as a minimum starting point)	<b>Grape growing example:</b> (9% Superannuation, 3.2% Workcover + 0.6% OHS&W registration fee).	<b>B X C</b>	<b>B + D</b>	<b>E X A</b>
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	Insert this figure into the worksheet
<b>Owner's Labour Example</b>	50%	\$ 40,000	12.8%	\$ 5,120	\$ 45,120	\$ 22,560
Owner's Labour (your calculation)				\$ -	\$ -	\$ -

Description
<p>It is important to allocate a value to owner's labour (if this has not already been done in Permanent Management).</p> <p>To use the calculator, estimate the percentage of time spent running the vineyard over the year, select a base salary (this starts at \$40K) and calculate the total salary (including 'on costs') using the formula provided.</p>

## Appendix 3

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### Vineyard coding form



## REGIONAL VINEYARD COST INDICATORS

### - BLOCK CODES -

Each data set collected from data suppliers/growers will be coded in such a way as to identify the following attributes:

#### 1. LABOUR STRUCTURE

The following categories will be used to define what labour structure is in place in the vineyard business. This is often related to vineyard size but not always. It has an important impact on how the labour costs are dealt with in this analysis. The number associated with the closest description of the enterprise is used in the code.

CODE	LABEL	DESCRIPTION
1	<b>Owner Manager Small Vineyard</b>	Owner-operator who does not employ any outside permanent labour but does employ the services of contractors/casuals for certain tasks such as harvesting.
2	<b>Owner Manager Medium Vineyard</b>	Owner-operator who has one or two permanent workers (for example vineyard hand or tractor driver) and uses casuals and contractors.
3	<b>Owner Manager Large Vineyard</b>	The owner manages the business but employs a full time vineyard manager for operational work, monitoring, planning etc. Contractors and casuals are also used.
4	<b>Corporate/Investor Owner Large Vineyard</b>	Full-time vineyard manager plus permanent employees, casuals and contractors (similar to No. 3 but Corporate or Investor owned, which will (may) have different overhead costs)

#### 2. IRRIGATION WATER SOURCE

It is of some interest to know how a vineyard operator sources water for irrigation purposes. Two broad categories are proposed for the code.

CODE	LABEL	DESCRIPTION
1	<b>Private Water Diverter</b>	Water is sourced directly from the rivers or bores, annual water access fees are usually low but pumping costs (power) are high.
2	<b>Irrigator within pumped districts</b>	Water is sourced from irrigation water providers who supply water to farm gate at various pressures. Annual water fees are usually high but pumping costs (for the grower) are low.

#### 3. VINEYARD BLOCK NUMBER

This is a sequential number attached on to the end of the code to differentiate blocks of similar description.



**Murray Valley**  
Winegrowers' Inc