Winegrape Grower Information Needs Survey, 2003

A research report from the conduct of qualitative and survey research with grape growers in the Riverland, Sunraysia and Riverina to determine their needs for information and training, conducted during July to September, 2003

Prepared for:

COOPERATIVE RESEARCH CENTRE *for* VITICULTURE

PO Box 154
GLEN OSMOND SA 5064

Client Contact: **Mr Ian Atkinson**
Technical Applications Manager

MD & Associates Contact: **Mark Dignam**

Ref: CMD.309

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1. Executive Summary

This report summarises the findings from qualitative and survey research among winegrape growers in the Riverland, Sunraysia and Riverina, and qualitative research with input suppliers in the same areas. It was conducted for the CRCV during July to September, 2003.

The project was undertaken to understand the information needs of the industry and how information should best be provided. The following is a summary of the main findings from the project:

A. Information has worked to bring about change, and there is an acceptance of the need for it

- Most growers (84%) had implemented changes as a direct result of information they had received over the last 5 years
- Main areas included water usage, plant nutrition, pruning and canopy management, and chemical usage
- The mood of growers indicated that with lower prices in the last few years, they needed to make changes to survive and achieve profitability in the future.

B. Grape quality, water management, quality, efficiency, varieties and industry co-operation were seen as the main changes needed

- Many growers expected the future to be tougher than it has been over the last decade or so, noting recent lower prices and more difficulty getting contracts with wine companies, water restrictions and industry competition
- To respond to that pressure, key changes said to be needed were as follows:
  - Improved quality
  - Better water management to cope with lower water allocations
  - Improved operational and production efficiency
  - Changing the varietal mix, and to an extent, clones and rootstock.

As an **industry**, as opposed to individual growers, four main changes were seen as necessary, being:

- Overseas marketing to deal with competition and potential local over-supply

- Better communication and co-operation to get agreement on the changes needed, and work together to achieve them
- Agreement on quality parameters and how to achieve them, with the wine companies being critical in this regard
- Better water management.

C. Whilst there is considerable information available, there is demand for much more

- With a few exceptions like computing and labour management, growers thought that they were reasonably well informed about most issues affecting them
- Despite the above, there was strong demand for more, particularly in relation to water management, environmental management including chemical usage, production management, operations management and R&D initiatives
- In terms of learning new skills, they later identified chemical usage, computerisation, water management, plant nutrition and technology as priorities
- Whilst some suggested the need for business, finance and labour management skills, there was a strong tendency to opt for viticultural rather than business related information
- The above does not imply that business related information is unimportant. Rather, it suggests that they are less interested in it. This also suggests a difference between what they want and what they need.

D. Research and development was a high priority

- Most growers felt that further research and development was very important or critical (83%) for the future of the industry
- This suggests a readiness for change, which includes the desire for better industry integration
- It was also evident that many growers do put R&D outcomes into effect.

E. Many sources of information are relied on, sometimes being contradictory

- No one main source of information arose. Rather, local associations and their publications, the wine companies, industry magazines, suppliers, research institutes, government departments, consultants and other growers all played a role
- Local associations were central in information dissemination, but a lot of information is through third parties
- Most accepted that there is enough information available, but:
    - Some (28%) felt that much of it is too detailed for them
    - Half said they don't get time to read much of it
    - Half agreed that different sources provide contradictory or inconsistent information
    - There was strong demand (76%) for local information
    - More emphasis was wanted on the implementation of information.

Overall, the amount and quality was said to be satisfactory by three in four growers, but there are a lot of sources used and much is not effectively being used.

F. Direct information including seminars were often preferred

- The research indicated that growers like to learn and gain information through personal contact. Information they read is often bounced off others like suppliers, other growers, wine company personnel or associations before being acted upon
- Preferred types of information included direct mail or newsletters, conferences, seminars, presentations, one-on-one information and journals or magazines
- Six in ten attended seminars or conferences last year, with attitudes generally being positive. Water management and irrigation, grape quality, R&D initiatives, disease management, vineyard management and marketing were popular topics
- Grape and viticulture magazines, technical journals and wine industry magazines were frequently read. Further the general media, particularly the ABC, was often relied on.

G. Most now use computers but most prefer hard copy information

- Most (82%) of growers already use a computer for work, of which 91% also had Internet connections
- Of those without a computer, 28% expected to get one in the next year or so
- Despite that, some wanted more information on how to effectively use their computer for work purposes such as production management
- Despite the above, most computer users (60%) still preferred to receive hard copy information, only 16% wanted electronic information
- Part of this barrier is habit, and they would need to be encouraged to change to electronic information.

H. Input Suppliers had similar views to growers, and saw co-operation as critical

- For the most part, suppliers had similar views to their clients and recognised the changes that had been made in recent years
- One contrast was that they felt that many growers are not adopting improvements in technology and processes, and that some growers will soon be left behind
- Suppliers were keen to get a clearer picture of what the wine companies want – a theme arising from the grower research as well – including better information on aspects such as chemical usage, rootstocks, viticultural practices and overseas trends
- Suppliers felt that much of the information available is too complex and argued that more information needs to be fed through to growers from wine companies, associations and independent parties (government, consultants, etc)
- They also encouraged more outreach work from the associations and networking among growers to learn from each other
- They saw the building of trust among the parties in the industry as a critical issue, and a potential threat to industry survival. This was said to start with better co-operation and communication from the wine companies, but also more openness to change on the part of growers.

2. Conclusions and Recommendations

Overall, the industry receives a lot of information from numerous sources, though that information:

- Is not always read nor being effectively used
- Appears to be overloading the industry by sheer volume
- Is too complex for some and seen as contradictory by many.

What is encouraging is that there was recognition of:

- The need for more research and development
- The value of information and changes made as a result of it
- The importance of more information covering several aspects.

At the same time, the industry did not appear to be working together, with negative attitudes to wine companies and a lack of business skills (and interest in business information) on the part of many growers.

Growers have received lower returns over the last few years, and this has led to recognition of the need for change. However, there is some resistance to change and in some cases, blaming of other parties for their problems (overseas markets, wine companies, government, etc) without recognition of the need to review their own skills, knowledge and practices.

We make the following suggestions:

A. Develop a Data Base including Links

There is a lot of information that is not always used or even known about. This implies the need for an industry database, including links to organisations with suitable data.

With the industry now being largely computerised, and often used to computer searches, the infrastructure is there for rapid adoption. As such, we suggest the establishment of an electronic database, which would include:

- All association information
- CRCV and other research data
- Data from national associations
- Links to other industry publications (and hopefully, a historic data base or articles by topic)
- Links to Australian organisations which can assist in information provision and other assistance, like federal, state and local departments
- Links to suppliers (which could assist in funding the data base)
- A key word and topic search facility.

We recognise that it will take some time for growers to effectively use electronic information, but this is largely a historical artefact and those most interested in changing are already used to using computers and the Internet.

Our rationale is that there is a need for a central repository of information, and one that they believe can be relied on.

B. Seek to improve recognition of the importance of business knowledge and skills

We found that business skills and knowledge (labour management, OH&S, tax, finance, systems, technology, costing, etc) were seen as less important than viticultural management.

Without downplaying the salience of viticulture, growers are running a commercial enterprise yet often think of themselves as farmers, not businesspeople. They do not seek out a lot of business information unless it is essential (e.g., legislation). We suggest that associations seek to lift their business skills by providing seminars and manuals. Manuals and seminars could address issues such as:

- All legal responsibilities, regulatory bodies, etc, and how to deal with them
- Industrial information and labour management
- Environmental requirements and standards, including chemical usage and handling
- Basic financial issues like tax, GST, industry schemes, etc.

C. Seek the involvement of wine companies at all levels

Industry co-operation and communication was consistently raised as a key issue for the industry. It largely starts with the wine companies as they are both the determinant of quality and the effective customer. A few suggestions include:

- Associations developing strong links with company field and executive staff
- Getting their involvement in grower nights and seminars
- Keeping them up to date with R&D material
- Seeking their involvement in quality standards, varietal changes, viticultural practices and environmental management. Ideally, the wine companies could agree on standards and issues and set clearer parameters (noting that they are not simple issues)
- Getting wine company marketing staff to explain to growers the real economic and marketing issues they face, and what is needed now and in the future in international and domestic markets.

D. Get to know and target the opinion leaders

Targeting of opinion leaders (who are typically innovators or early adopters of new ideas, technology, etc) is worthwhile to accelerate information dissemination and adoption of practices. It is even more important for complex, time consuming and controversial changes.

One suggestion is to target industry opinion leaders when change is needed, or when new or better methods are identified. They can spread the word effectively.

E. Develop more seminars and workshops

While written information was in demand, there is still a need for detailed, hands-on information, which suggests conference, seminars and workshops.

Conferences for example were liked due to networking and learning from each other. It also offers the ability to disseminate information in a practical, hands-on manner.

F. Increase contact with and build relationships with the media

The wine, viticulture and general media are regularly relied on by growers, and this presents an opportunity for information dissemination. Seek their involvement in covering important issues and in suggesting appropriate changes.

3. Introduction and Objectives

3.1 Introduction

Mark Dignam & Associates Pty Ltd was commissioned by the CRCV to undertake a comprehensive research project to assist the industry to help it develop information and training plans for commercial winegrape growers.

The CRCV in conjunction with GWRDC has identified a need to focus communications and extension efforts toward the needs of growers and others in the industry such as consultants and other intermediaries.

The targets for the research were as follows:

- The Riverina area in NSW, of which there are around 500 growers
- Riverland in South Australia (N=1200)
- Sunraysia/Swan Hill area surrounding the Murray River in north eastern Victoria and south Western NSW (N=1300)

Additionally, we conducted qualitative research among input suppliers in the three areas, being distributors of farm supplies like fencing and training equipment, vine nurseries, irrigation and mechanical equipment dealers.

Qualitative and survey research was undertaken with the grape growers, being three group discussions and 200 telephone interviews.

3.2 Objectives

The project sought to cover the following issues:

A. Current Information Usage and Sourcing

- Existing information sources for all aspects of vineyard management, from R&D to business, production, environment, trends, etc
- How information is sourced
- How it is being used
- Views of the utility of these sources.

B. Attitudes to Existing Communications

- Awareness of existing communications from all sources
- Readership and usage
- Perceptions of the purpose of publications
- Attitudes to the value, relevance and credibility of each
- Views of the media used (if any)
- Extent to which they meet their needs and identification of gaps
- Suggestions for change to the industry communications
- How up to date they feel they are in terms of industry developments, and where they believe they need to go
- What are perceived to be the best methods of communicating this information.

C. Technology and Industry Change

- What they think has changed in the industry in the last 5 years
- Changes made to operations over the last 5 years with particular emphasis on industry developments and technology transfer
- Perceptions of challenges and opportunities (which will help define how they see the operating environment changing)
- What is changing and drivers of change
- How the above impacts on their needs for information, knowledge and change management including technology transfer
- Changes directly or indirectly brought about by communications
- Future changes likely.

D. Change Management

- Recognition of industry wide problems and their nature
- Perception of the current need for change in terms of R&D, TT, management changes, production practices, etc
- Priorities for the ongoing survival of the industry
- Barriers to change
- Views of the best ways to engender change in the industry
- Perceptions of the future; what the industry needs to become and how to get there.

4. Research Methodology

The project was undertaken in two phases, viz:

- Group discussions with the both grape growers and input suppliers in each of Berri, Mildura and Griffith
- Interviews with grape growers in each of the three areas, being 80 in each of the Riverland and Sunraysia, and 40 in Griffith.

4.1 Grape Growers

A. Group Discussions

The three groups were held with grape growers who were members of their regional associations. These associations assisted with group recruiting and the groups were held at their offices in Berri, Mildura and Griffith.

The groups lasted around two hours each, and moved from recent changes, current issues and then information and communication.

The findings from these groups were separately reported to CRCV, and in this report, we have combined the results from the groups and the survey.

B. Survey Phase

The sample frame was generated from public records, being white and yellow pages directories in each area. These samples included farmers and fruit growers who were not grape growers, thus requiring some screening to find them.

The sample sizes at regional level were based on their incidence, with more in the larger regions of Riverland and Sunraysia being interviewed.

The interviews were undertaken by phone. Processes were as follows:

- The interviews were conducted on a CATI system (computer assisted)
- The questionnaire averaged over 30 minutes. Interview time did vary based on how much respondents had to say, though it is worth noting that many respondents did go into some detail
- Interviews were made both during the daytime and the evening. When the respondent was not available or busy, we sought to set appointment times to call them back

- The survey was undertaken entirely from Sydney
- All coding was undertaken by our project manager
- Cross-tabulated data was prepared from the survey, which was separately presented.

Readers should note that all data presented in this report from the industry survey is subject to error. This is random error, which is the due to the fact that a number of samples could be drawn using the same sampling method, with each giving a slightly different result.

The maximum error (standard error of the proportion) based on a sample size of 200 is 6.9%. That assumes a survey result of 50% (for example, 50% agree with a particular statement). As the survey result approaches 0% or 100%, the error is lower, as it is less free to vary. Given that the universe is small, the real standard error is likely to be less than that theoretic limit.

We have compared whenever possible the three regions and other sub-groups, such as members and non-members of associations or size categories. However, small sub-group sample sizes limit the achievement of statistically significant results. By "significant", it means that the variation between one result and another is a true difference between the groups, with at least 95% probability.

C. Descriptive Characteristics of the Sample

In relation to the characteristics of the sample, we found the following:

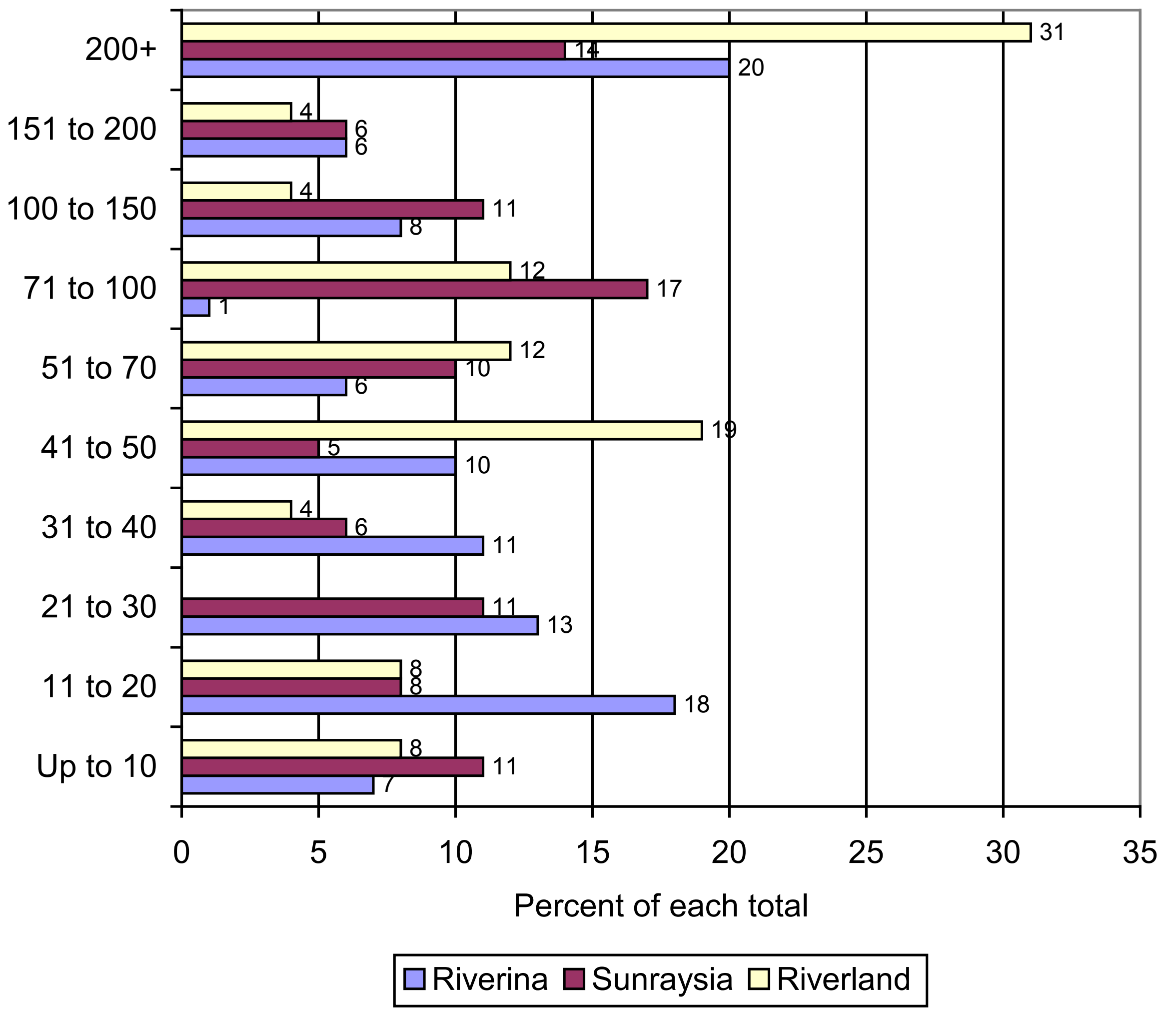
- Six in ten **only grew wine grapes**, which was more common in the Riverina (81%) and the Riverland (70%) compared to Sunraysia (38%)
- As size increased, the more likely it was for the grower to produce only wine grapes. Three quarters of those over 100 acres (about 40 hectares) were wine grape growers only, compared to 47% of those under 30 acres and 56% of those in the 30 to 100 acre category
- 17% operated a **commercial winery**, more often in the Riverina (35%), though it needs to be noted that many of these wineries are small, with most of the grapes being sold off. Not surprisingly, most of the growers that operated a winery had over 100 acres of vines, a handful had 30 to 100 acres.

In terms of size groups, figure 1 overleaf depicts the acres planted, and this indicates that the sizes are well spread out. The "average" number of acres was as follows:

- **Riverland: 80 acres**
- **Sunraysia: 84 acres**
- **Riverina: 102 acres.**

Whilst the average was quite large, it is worth noting that one third had no more than 30 acres.

Figure 1 - Number of acres by region



In terms of the mix of red and white grapes, we found the following:

Region	*White grapes – average %*	*Red grapes – average %*
Riverland	43	57
Sunraysia	47	53
Riverina	49	51

Overall, there were marginally more red than white varieties overall, the ratio being equivalent in the Riverina. The ratios were consistent across size categories.

In terms of contracts for next season (2004 harvest), we found the following:

Region	*For all %*	*Some %*	*None %*
Riverland	75	6	19
Sunraysia	70	13	17
Riverina	54	19	27

The Riverina appears to be in the worst position, and note that this is the area where growers receive the lowest tonnage rates for the fruit. It was also evident that the smaller growers were in the worst position, with 29% of those with less than 30 acres having no contracts.

Many of these growers had been in the industry for over 20 years. The following table summarises the data:

Region	*2-5 years %*	*6-10 years %*	*11 to 20 years %*	*Over 20 years %*
Riverland	4	14	25	56
Sunraysia	14	19	19	48
Riverina	8	15	19	58

In short, 53% had been in the game for at least 20 years, and only 9% were relatively new arrivals (up to five years). Of those entering the industry in the last 5 years, half had no more than 30 acres.

- Also note that of the total sample, 90% **actually drink wine**
- 61% were regular drinkers of wine (at least a few times a week) with 41% drinking it on most or all days.

In relation to association membership, 84% were a member of one or more association. This included:

- The Riverland Winegrowers Association – 63% in the Riverland were members
- Victoria-Murray Valley Winegrape Growers Association – 57% in the Sunraysia area
- Wine Grapes Marketing Board – 54% in the Riverina

Other organisations that they were members of were:

- Farmers Federation (10% of the total and 17% in Riverland)
- Australian Dried Fruits Association (6% overall, 13% in Sunraysia)
- Winemakers Federation (3%)
- Table Grapes Associations (5% in Sunraysia)

4.2 Input Suppliers

This phase was undertaken qualitatively only, with groups in each of the three towns, Berri, Mildura and Griffith.

We relied both on public records (whit and yellow pages) as well as local associations to assist with the recruiting. The groups were held at the same place as grower groups, being the local associations.

The input supplier groups followed a very similar pattern as the grower groups, though they focused on how the input suppliers learn and what they want, as well as addressing industry and grower needs. The groups also took around two hours to complete. The results from the grower groups have been separately reported.

5. Grower Views - Main Challenges Facing the Industry

This section considers the issues facing the industry that were seen as problems or challenges. We have presented issues from both the survey and qualitative phases, with input supplier views being separately summarised.

5.1 Introduction

Before discussing the specific findings, it is worth touching on the mood of the growers we talked to in the group discussions, and also some of the learning experiences that have occurred over the years.

During the groups, It was apparent from the outset that the industry, after a period of good returns and rapid expansion, is now **consolidating**, with falling prices for grapes, more pressure from wine companies for quality, water access restrictions and other environmental controls. Whilst new plantings were evident in all three areas, the enthusiasm for expansion was not as apparent.

To some extent, they exhibited signs of **conditioned helplessness**. That is, they believe that they have no real control over our activities and particularly in relation to their income.

There were signs of a love-hate relationship with the wine companies, and few really understood the economics and marketing of wine as a product. For example, when a vintage is “good” they expect higher prices per tonne, even when it is a high volume vintage. Normal supply and demand issues are ignored or easily dismissed by most.

At the same time, it was apparent that information from wine companies is inconsistent and that there are **few tangible quality benchmarks** they can follow, apparently as the wine companies were said to not want to take responsibility for them.

We gained the impression that the Riverina companies offered lesser rates per tonne compared to the other regions. Whilst $600 a tonne was a benchmark mentioned in Berri and Mildura (which of course varies based on the variety), it was evident that rates in Griffith were much lower, typically around $350.

The constant changes to the demands or the wine companies (and hence the market) were hard for growers to understand. One year, shiraz was in demand, now white varieties like chardonnay are in demand. Few understood that ultimately the consumer decides and that the wine companies want to buy grapes as inputs for their brands based on demand levels at price points.

Also note that growers are reluctant to ever admit that they are doing well. Whilst some accept that there are always good and bad times, they tend to always see the bad times as more of an issue.

Clearly, a central theme was **poor communication between the growers and the wine companies**, and that includes:

- The basic issues of economics – supply and demand, how it changes, consumer trends, etc
- Forecasts whenever possible of the above
- Marketing issues – brand positioning, price points, market segmentation
- Quality issues (see later).

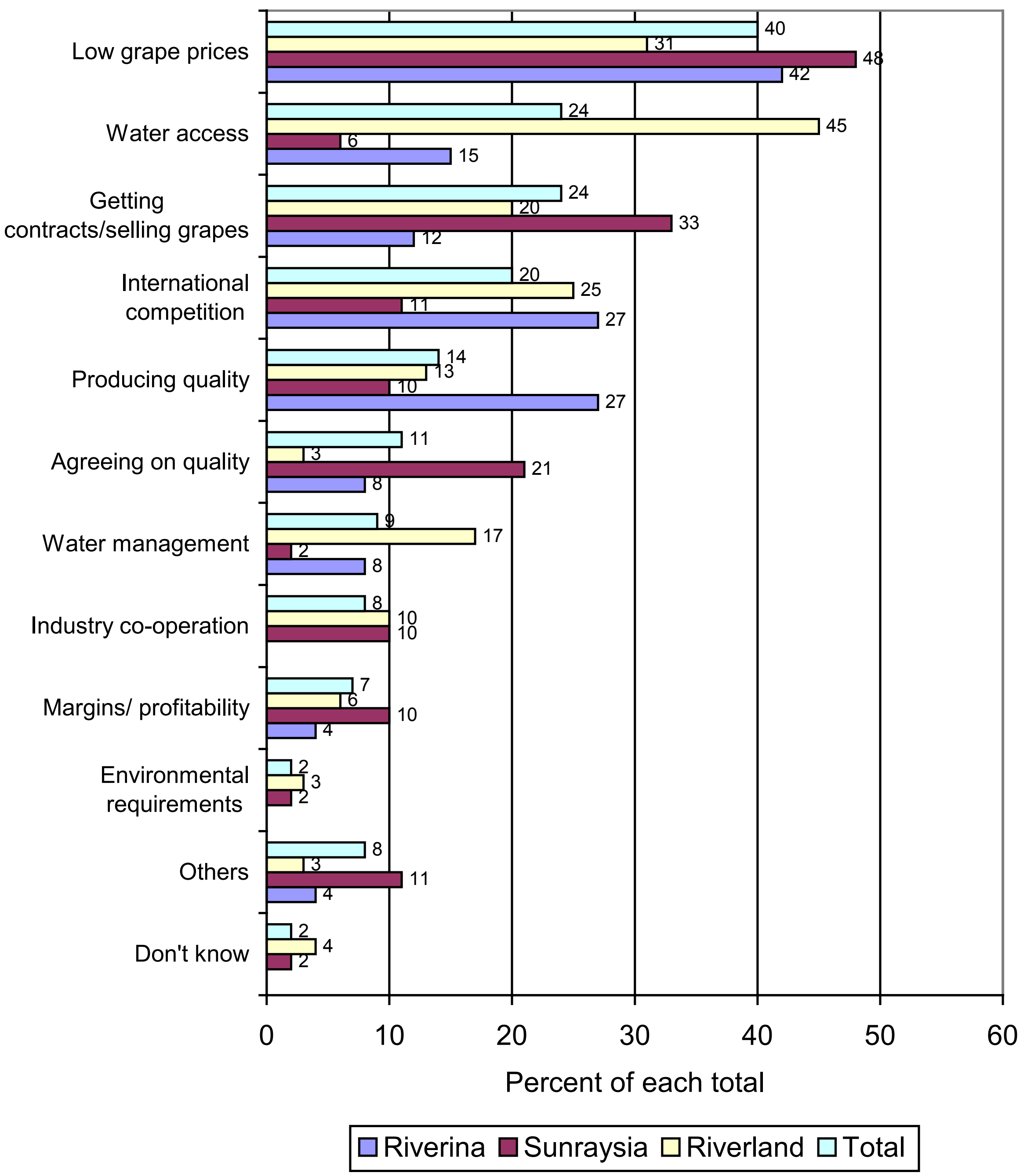
Overall, many growers are myopic about the business aspects of the wine industry and tended to see themselves as the butt end of it. They often just react to change rather than cope with it effectively.

A number of issues arose from the survey, which we have segmented by region in figure 2. Note that their responses were very similar to those mentioned in the survey. We found that there are three central themes:

1. **Access to and management of water**, which was more often cited as an issue in the Riverland
2. **Prices, returns, margins and contracts**, more often raised in Sunraysia, despite lower returns and fewer contracts in the Riverina. Note that international competition falls into this category as well
3. **Quality** – both in terms of what is means, getting agreement on it, and being able to produce it. We also found that in groups, industry co-operation was often centred on quality issues. This was more an issue in the Riverina and Sunraysia. Quality issues were also more important to larger growers.

In short, there are three central themes, and they arise with some regularity throughout the report.

Figure 2 - Main challenges facing the industry



5.2 What is Changing and Why?

We summarise the changes and their impact, which is based on the views expressed in group discussions.

A. Water restrictions and its management

Water restrictions were an issue, but only one of several major changes. In most areas, water has been becoming a problem for several years (starting in 1998) though particularly a problem in the last few years.

It was the first issue mentioned in the Riverland, though in the other regions, some growers noted that their region (Sunraysia or Riverina) is not as badly affected as the Riverland. That was borne out in the survey.

One of the positive impacts of the water shortage was the recognition that water is a **scarce commodity** and that it needs to be treated as valuable. At present, flood irrigation is still common, but there has been a move among growers to reduce its incidence, replacing it with drip irrigation.

There was some acceptance that **water problems are here to stay** mainly due to the demands on water these days, such as new land being opened up for irrigation, and awareness of the difficulties faced by the rice industry as well as horticulture and viticulture.

A further water usage issue is that the companies have taken an interest in reducing irrigation to lower yields and improving quality. Now, this is another issue – what is the (real) **impact of yields on quality**? Various opinions were raised, yet few answers were offered.

B. Technology

Most agreed that the industry is now adopting new and improved technology, including drip irrigation as noted above. Improved machinery was also seen as a key to survival – if you can't do it all yourself with a tractor, you can't survive.

Other technologies include water filtration and quality, soil moisture monitoring and nutrient monitoring.

C. Greater focus on quality and changed viticultural practices

Quality to growers is somewhat ill-defined, though they keep hearing about it. Some said that they:

> *"Used to be able to sell just about anything".*

The wine companies are now seen as being more demanding and this is forcing the growers to look at their processes and yields. Changes include aspects such as:

- Canopy structures
- Trellising
- Pruning
- Fertilising
- Rootstocks
- Ideal baume levels
- RDI
- Bunch and berry size
- Colour.

The important issue here was that they had few answers to the many questions about quality. They raised these issues in the light that they are trying to improve quality, but apparently more by trial and error.

D. Pricing

Tonnage rates were believed to be lower compared to a few years ago, and this is evidenced in the mentions of prices, returns and contracts form the survey.

The main area where tonnage rates were the lowest was the Riverina. Whilst that appeared to be a historical artefact, some felt that the industry pricing structure has changed, as the local marketing board no longer controlled prices. Now the companies set an indicator price, but this was said to be meaningless.

In most cases, quoted prices a few years ago were considerably higher, though the wine companies are now seeking to pay growers based on quality. In some cases, that would include yields, sugar levels and the taste of the grapes.

The main complaint is that the **quality benchmarks are not tangible**, and that taste is seen as important yet is purely based on the view of the company staff. The grapes were often graded by companies and this affected prices, which was really a sore point, viz:

> *"There are different interpretations of quality…they need to be mechanical..."*
>
> *"With supply and demand, all the parameters change. They set quotas for a grade and you are paid more if you are first in [with fruit they class as A grade]…"*
>
> *"We keep increasing the quality but the bar is always raised…"*
>
> *"It's harder to get a contract now…quality standards are increasing..."*

What they wanted were clear, unambiguous and tangible quality standards. However, they accepted (to a point) that “quality” is not a simple construct.

E. Varieties

Many noted there are constant changes to the varieties in demand.

At the time, chardonnay was in demand and shiraz less so (called “black shiraz” in Griffith). Even some older, less quality varieties like gordo were in demand to “sweeten up” blends.

What they would like is some idea of trends and forecasts. They get stuck with unwanted fruit that was in big demand a few years ago.

Better feedback and co-operation with wine companies would help, accepting that the answers to their demands are not as simple as they would like.

F. Competition

The good news is that irrigation area wines were said to have moved from being solely suppliers to the bulk (cask) market to producing a lot more bottled wine. There was recognition that over the last decade, the demand for Australian wine (particularly in overseas markets) has led to increased prices for their fruit.

The bad news was that more international competition (South Africa and South America in particular) was seen as a big threat, and something the industry needs to take seriously in future.

Again, information on international markets would help including price levels.

6. Changes Needed over the Next Five Years

6.1 Future Projections and Expectations

Overall, growers in the group discussions expected that the present trends will continue, and that the industry will not really be much different. A few expectations:

A. Quality Issues

- Pressure by wine companies to improve handling of grapes such as faster delivery to the winery, picking into bins and covering the grapes
- (Hopefully) development of more objective quality measures
- Fine tuning of factors (e.g., yields, etc) that are associated with quality

B. Prices and Returns

- More demand for quality and variable payments according to it
- Lesser plantings to avoid over-supply
- Not doom and gloom – increased exports suggest some future success
- (Hopefully) better industry co-ordination in relation to supply and demand

C. Technology

- Less flood irrigation, more drip
- More assessments including moisture, soil fertility, etc
- Better water management
- Better spraying.

D. Industry Structure and Management

- Some consolidation – larger growers
- Smaller growers being taken over
- More mechanised and more skills required
- Employee management to be more important (OH&S, etc) including more paperwork
- More regulation (environmental, chemicals, etc).

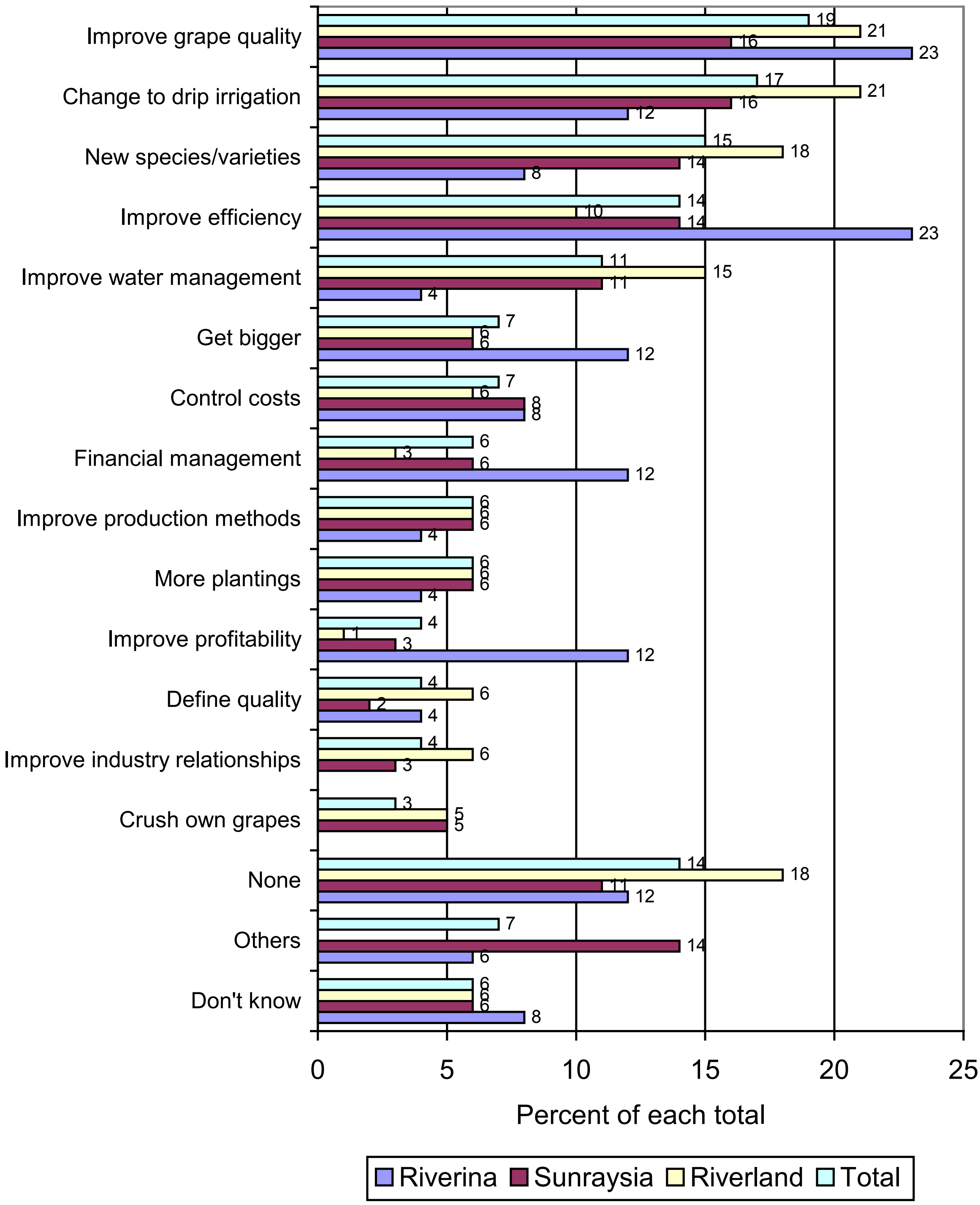
There were differing views of whether the future would be better or worse. Overall, most saw the industry as cyclical, though there was some anxiety about the future, partly due to a lack of understanding of what they need to do (quality in particular) to improve their future position.

Many had updated technologies and there was a perception that improved technology will be important moving into the future.

6.2 What Does the Industry Need to Do?

The survey identified the following as the changes needed over the next 5 years for survival in the industry:

Figure 3 - Changes needed over the next 5 years



Overall, a handful of issues were mentioned, viz:

- Improve water management including getting rid of flood irrigation
- Improving efficiency and cost control, and that may mean expanding or changing production methods for some growers
- Improving quality
- New varieties.

It is also worth noting that some said "none" and a few others said there was little or nothing more they can do.

In the group discussions, one frequent suggestion was for **better co-ordination of the industry**. The growers felt a bit left out in the cold, and that the wine companies need to have a closer relationship with them. Whilst this did not arise as often in the survey, a number of changes noted above would require industry agreement to achieve, like quality, varieties, plantings and to some extent, work practices.

A few tangible suggestions from the groups were as follows:

- Industry to develop more agreed quality parameters (pH, baume, colour, tannins, etc) for varieties
- Understanding of the viticultural practices that lead to quality (yields, pruning, canopies, etc)
- Prices based on tangible quality parameters
- More management over water resources.

7. General Attitudes to Information

This section considers responses to a series of attitude statements from the survey, and highlights some of their difficulties in sourcing and applying it. We have also included a series of comments from the groups when applicable.

The following table summarises the responses. All data is percentaged.

Figure 4 – Attitudes to information

Attitude	*Strong Agree*	*Agree S/what*	*Neut-ral %*	*Disag. S/what*	*Strong Disag.*	*D.K. %*
There is **not** enough information available to help me run the business	5	10	6	35	43	1
I don't get the **right type** of information I need	7	18	15	45	15	-
Information provided from the nursery industry is **too detailed** for my needs	7	21	11	40	20	1
Many sources of information present the **same type** of information	30	44	11	9	1	4
Different sources provide contradictory or inconsistent information	18	34	13	23	8	4
I don't get the **time** to read much of the information I receive	21	29	14	25	12	0
Things aren't bad enough yet for me to read all the information I get	7	20	13	30	26	3
The information needs to be more relevant to my **local area and climate**	40	26	8	20	5	1
There is plenty of information available, but its not provided the **right way**	19	19	16	34	12	1
Technical information like production, nutrition, irrigation, is **more** important than business information like marketing, finance, personnel, etc	31	21	11	26	12	1
More emphasis is needed by the industry to **implement change** rather than provide information about it	20	28	22	19	4	6
Information provided needs to move from paper based to electronic media	6	14	12	32	36	1
I am happy with the **amount and quality** of information I receive	30	46	9	10	4	0

Figure 3 depicts the median result for each of the above statements.

We make the following points:

A. There is Not Enough Information

The level of disagreement with this statement suggests that there is no real lack of information. However, note that this does not mean that they are receiving enough on all topics or areas. It was also evident that there was a lack of knowledge of all the types of information available to them.

In discussing this issue in group discussions, our main observation is that many growers are unaware of available data, where to go to get it, or how to access it. One suggestion was that they need a simple way of accessing it (say, a data warehouse). Variations across the regions were relatively minor.

B. Getting the Type of Information They Need

Views were mixed though generally quite positive with 25% agreeing that they don't get the right type of information they need, and 60% disagreeing. However, only 15% strongly disagreed.

Some clearly do not think that they are getting the information they feel they need, though the overall industry position is not too bad.

C. Amount of Detail

More disagreed that there is too much detail, being 60%, with 28% saying that there is too much of it. Some want less detail, and that was brought out in groups, where the sheer volume of information is a problem when a lot of detail is provided. Agreement was significantly lower (20%) in Sunraysia.

In groups, some pointed out that long, detailed information needs to include:

- A synopsis of the article or report
- Important information to be highlighted.

D. Many Sources Present the Same Type of Information

Most agreed with this statement (74%), which is a concern for the industry. It implies that there is overlap in the range of information available from different sources, thus the reader needs to sift through it and make decisions about what information to accept.

E. Different Sources Provide Contradictory or Inconsistent Information

Just over half agreed (52%), with 31% disagreeing, again suggesting that many are uncertain about the value or utility of information provided. In groups, some expressed frustration in relation to issues such as quality on the basis that they don't know which is right or wrong. A long run response to this is scepticism about all information.

F. I Don't Get Time to Read Much of the Information I Receive

Half agreed with this statement, with 37% disagreeing. This does suggest that the industry is not getting the most out of the information available. We found in groups that some rarely got around to reading it, others would read everything.

G. Things Aren't Bad Enough for me to Read all the Information I Get

This statement was agreed to by 27%, and disagreed with by twice that many. Even though a minority agreed, it does suggest that for many, information is a relatively low priority. That is, they see it as a way of fixing problems, not identifying opportunities and seeking improvement. Reading information is at least to some a "grudge" activity.

Agreement was stronger in the Riverland (32%), and among those with medium to large vineyards.

H. Information Needs to be More Relevant to My Local Area and Climate

Overall, two thirds (66%) agreed with this statement, and one quarter disagreed. Those in the Riverina (81%) more strongly agreed, and also those with medium sized vineyards (79%).

In groups, some complained that too much research is conducted in cool climates, though their (hotter) areas produce most of the volume, and they are not getting enough value from it.

I. There is Plenty of Information Available, but its Not Provided the Right Way

Views were mixed, with 38% agreeing, and 46% disagreeing. The rest were neutral or undecided. The medium sized operators (53%) were more likely to agree. This question appeared to be related to the view that it needs to come from the industry such as wineries.

J. Technical Information is More Important than Business Information

More (52%) agreed compared to 38% who disagreed. Agreement was higher in the Riverland (57%).

The above is consistent with their vision of the future, in that technical issues like quality, water management and vineyard operations were seen as more important that aspects like finance, labour management, etc. In fact, the rest of the data suggests that 38% disagreement is surprisingly high.

K. More Emphasis Needed on Change Implementation than Information

Twice as many agreed, being 48% vs. 23%, though in this case, many gave neutral responses. There does appear to be a need for implementation. Agreement was stronger among larger and medium sized vineyard owners.

L. Information provided needs to move from paper based to electronic media

Most disagreed, being 68%, compared to only 20% who agreed. Note that even those using a computer were only marginally more likely to agree (22%). This is a behavioural paradigm and it may take some time to change. Yet most DO use computers at work, and for most, this is preferential rather than essential.

M. I am happy with the amount and quality of information I receive

Most (76%) were happy with the volume and quality they receive, and only 14% disagreed. Agreement was strong across the areas and segments.

The above suggests that for most, there are few urgent needs to change the volume or type of information they receive, though some fine tuning (as per some of the issues raised above) would certainly help.

Overall, we make following comments:

- There does not appear to be a shortage of information per se, and most are reasonably satisfied with quality and volume
- Some clearly want less detail, and a compromise would be to include highlights and summaries in documents
- There is some reluctance to use available information, and it is positioned by many as a problem solving tool, not an opportunistic issue. Further, half admitted that they don't read much of the information they receive. This suggests that needs may be narrowly defined by the industry, which is sometimes reluctant to read information
- There seems to be limited importance placed on non-technical information, suggesting that many see themselves as farmers rather than businesspeople
- Information was preferred if it was more locally relevant, and more emphasis appears to be needed to implement change rather than provide information about it. However, both did arise as relevant
- Views were mixed regarding how information is provided, and many respondents felt that there is both duplication between sources and inconsistent information provided.

8. Current Level of Information and its Importance

This section considers how well informed the industry considers itself to be. This highlights areas where gaps arise.

8.1 Main Information Needs

In group discussions, information was seen as important, though responses were often qualified, in that if it is to be of any usage, it needs to be accurate and agreed upon by the industry. Some expressed frustration that they are trying to improve quality, though the wine companies provide disparate and patchy information.

In simple terms, they want concrete advice on how to improve quality, irrespective of what "quality" means. That would of course require agreement on the part of the industry.

Many aspects of viticulture, such as pest and disease management, were seen as relatively low priorities on the basis that they already know how to do this.

In short, the **main needs** discussed in groups were as follows:

- What "quality" means in terms of all viticultural aspects
- Specific practices that lead to quality, including their impact on quality parameters. That could include everything from canopies and bunch exposure, to fertilizer usage, nutrients, yields, colour, pH, etc
- Ideally, what adds value in terms of improving the bottom line (i.e., what practices will pay)
- Communication from the wine companies on what they want. Ideally the growers want a specification
- The best varieties to grow in specific sites
- Changing demand for varieties and implications to growers
- Ongoing environmental management information including regulations
- Clonal selection and their suitability to soil and climates
- How to deal with salination and water quality, including sustainable usage
- How to reduce costs in terms of processes
- Row spacing and its impact on quality and profitability.

Note that without prompting few mentioned non-technical areas. They were sometimes surprised when I asked them about aspects like tax, finance, etc.

There was recognition of the need for OH&S and to understand the regulatory framework surrounding employment, but it was hardly met with enthusiasm.

When tax and accounting was raised, some wanted to better understand GST and BAS requirements, but the main issue raised was how to improve profitability, not processes.

8.2 Existing Level and Needs for More Information

The following figure summarises the:

- **Current level** of information
- Their perceptions of the importance of **more** information, in order to remain viable.

The scores below are out of 10, where 10 is the highest and 5 is moderate. We have highlighted those receiving higher average scores.

Figure 5 – Level of and Importance of Information

Issue/ Topic	*Current Level of Inform.*	*Importance of More Info.*
1. Financial management including tax	6.9	7.5
2. Water management	**8.2**	**8.5**
3. Labour management	7.0	6.6
4. Learning and skills development	6.9	7.2
5. Environmental management, chemical usage and runoff etc	**8.1**	**7.8**
6. Production management, nutrition, irrigation, pest and disease control etc	**8.1**	**8.2**
7. Computing, Internet and communication tech'gy	5.3	6.5
8. Workplace and public health and safety	7.3	7.3
9. Operations management and systems, e.g., work methods, equipment usage, etc	**7.7**	7.2
10. Grape quality and factors affecting quality	**7.9**	**8.7**
11. Industry communication and co-operation	6.4	**7.8**
12. Research and development initiatives	6.5	**7.8**

We have placed each into a series of quadrants, viz:

	Low Importance	***Medium Importance***	***High Importance.***
High current level			*Water management* *Environmental mgmt* *Production management* *Quality*
Moderate current level	*Labour management*	*Financial management* *Learning & skills develop.* *Workplace health & safety*	*Operations management*
Low current level	*Computing, Internet etc*		*Industry communication and co-operation* *Research & development*

The highest priority are aspects where the current level of information is low, and where they are perceived to be of high importance. This implies the following:

- The biggest gaps are industry co-operation and communication, and research and development initiatives
- Operations management was also quite important.

Also note that the most important aspects in terms of their needs for survival, were **quality and factors affecting it, and water management.**

We found the following regional and other variations:

- **Water** management was more important in the Riverland and particularly to smaller growers
- **Labour** management was considered to be more important among larger growers
- **Production** management and also **environmental** management was more important in the Riverland, and to larger growers
- **Workplace health and safety** was more important to larger growers
- **Operations management** was more important to larger growers and in the Riverland, as was the case with **quality factors and research and development.**

Note that the starting place for more information appears to be the Riverland. They were consistently more interested in information across numerous factors.

The following sections discuss more specific information needs.

8.3 Financial Management Issues

The survey results indicated that the main needs were as follows, with all aspects mentioned by 2% or more of the total being included. The base for each issue is all respondents rating that aspect within the range of 6-10 in terms of importance.

Financial Issues – Main Priorities	Percentage of total (%)
Keeping up to date with changes	37
Tax laws	5
Managing cash flow, budgeting	2
GST	2

There are few specific needs here. Rather, the main priority is simply to keep them updated on any new issues including GST, legal obligations, industry requirements, etc.

8.4 Water Management

This was a high priority in terms of needs for more information. At a micro level, the following were requested:

Water Management - Main Priorities	Percentage of total (%)
General updates/ keep up to date with changes	33
How to use less water	10
Water conservation	8
Better irrigation	6
Soil analysis/monitoring	6

The level of interest in water was high, and with the movement from flood to drip irrigation, expected continuation of water shortages and the need for better quality, any help with water management would be appreciated.

8.5 Labour Management

While labour management and training did not arise as a high priority in the survey, it was quite important to the larger growers who obviously have more needs in that regard.

The survey led to the following suggestions:

Labour Management and Training - Main Priorities	Percentage of total (%)
General updates/ keeping up to date with changes	31
Better work practices/ methods	6
Tax/ legislation	4

For operators that actually employ staff, simple manuals including information on staff management, including recruiting, rewarding, retaining and motivating staff. For the more interested, performance management systems would be helpful (though arguably more suitable for the much larger operators).

For all operators employing anyone, data on the basic legal and industrial structures involved, such as awards, employment conditions and termination processes. Such information could be couched in terms like "how to avoid pitfalls", noting that problems were evident in the group discussions due to a lack of knowledge.

8.6 Learning and Skills Development

Learning and Skills Development - Main Priorities	Percentage of total (%)
General updates/ keeping up to date with changes	30
Water management and irrigation	6
Computerisation, Internet etc	6
Fruit/grape quality	4
Marketing	2
Business management	2

It was interesting to note that some said computing, given its low level of perceived importance. However, there was also acceptance that they are often poorly informed now. Water and quality are clearly important given other mentions of these factors.

8.7 Environmental Management, Chemicals, Run-off

A fairly high priority in the survey, though it arose as a future issue to some extent, possibly due to water shortages.

The survey revealed the following priorities:

Environmental Management – Main Priorities	Percentage of total (%)
General updates/ keeping up to date with changes	47
Pollution runoff, environmental effects	11
Which chemicals are safer	4
Legal requirements/ legislation	4
How to reduce chemical usage	3

A few ideas:

- There appears to growing concern about the environment, and this issue is now being recognised as very important. Whilst they felt that they are quite well informed, the group discussions suggested that many only half knew what to do. The water problems they face appear to have manifest this issue
- It would help if they were informed of their environmental responsibilities including the departments and authorities involved, their rights and responsibilities, and the legislation that affects viticulture. This would need to spell out their legal position simply
- The above would need to address each aspect of operations, like use of chemicals, run-off, noise, etc, including winery requirements
- Ideally, simple updates could be made available as legislation and operating methods change.

8.8 Production Management, Nutrition, Irrigation, Pest & Disease Control

This was another high priority in the survey, though it was evident that in group discussions, the main need was to find better ways of doing it. The suggestions arising from the survey were as follows:

Production Management – Main Priorities	Percentage of total (%)
General updates/ keeping up with changes/ improvements	46
Effects of nutrition, fertilisers on grape quality	9
Disease and resistance control	6
General nutrition/ fertilisers	6
Soil testing	2

Overall, growers seem to need to know the impact of aspects like fertilisers and chemicals. They are also keen on finding out any new ideas or improvements.

8.9 Computing, Internet and Communications Technology

The survey indicated that few are well informed in this regard, and whilst it was not seen as a high priority, there was some recognition that its importance exceeds their present level of information. In groups, it was seen as something that will become important, but realistically, many growers did not relate it to production, business management, etc. That connection would need to be demonstrated to them.

The following issues arose:

Computing and Communications – Main Priorities	Percentage of total (%)
General updates/ what changes are happening	21
How to use a computer/ how it can help business	14
Everything	9
Using a computer for production, soil testing, disease management, etc	9
Internet usage or marketing	7

The base level of knowledge appeared to be limited, thus relatively simple information (like Computing, Internet or E-commerce for Dummies) was the appropriate level.

More generally, basic introductory information is needed, though based on the qualitative results, it would need to be hands-on information such as workshops, to break down some of the evident technology barriers, and focus on applications that are believed to be specifically relevant.

8.10 Workplace and Public Health and Safety

Respondents generally rated this as being of moderate importance, yet it was quite a high priority to larger operators. Specific issues mentioned in the survey were as follows:

Workplace Health and Safety – Main Priorities	Percentage of total (%)
General updates/ keep up with changes	48
Legislation/ government requirements	8
OH&S	6
Usage of chemicals/ sprays	3
Accreditation	3

Our suggestions for health and safety are as follows, with larger operators being a target:

- Provide guidelines on legislation, requirements and obligations
- Update the above as new legislation or practices arise
- Provide more positive information on how to plan and design operations (e.g., ergonomics, handling, surfaces, etc) which avoid public and staff health and safety, such as how to develop effective OH&S policies and procedures, and how to design the nursery to suit
- As above regarding the handling and usage of chemicals.

8.11 Operations Management and Systems

This aspect appears to overlap with production management to some extent. The main needs for information were just to remain up to date, as follows:

Operation Management – Main Priorities	Percentage of total (%)
General updates/ changes	35
Equipment usage/ updates	5
Everything	3
Irrigation/ water management	2
Environmental sustainability	2
Computing	2

8.12 Grape Quality and Factors Affecting It

The following issues arose in the survey, noting that this aspect was a high priority:

Grape Quality – Main Priorities	Percentage of total (%)
General updates/ keeping up with changes/ improvements	40
Defining quality, what it means	11
Wine company needs/ demands	10
Water usage/irrigation	9
What is needed to grow quality	6
How to improve colour	5
Impact of yields on quality	5
Plant nutrition and fertilisers	5
Chemical usage and its effects	3

Clearly, there are many needs at this point in time. Most of the above issues would involve communication within the industry and agreement of quality and how to achieve it.

An "ideal" outcome would be a manual that defines the meaning of quality in terms of grapes (flavinoids, tannins, acidity, colour, yields, berry size, etc) and then provides practical guidance on how best to achieve quality, including the commercial realities involved.

8.13 Industry Communication and Co-operation

This area was rated a high priority for more information, and one that is not a strength of the industry at present.

The areas identified in the survey were as follows:

Communication & Co-operation – Main Priorities	Percentage of total (%)
General updates/ keeping up with changes/ improvements	42
What the wineries want	5
Agreed standards/ measures	4
Work together more/ personal contact	4
What varieties to plant	3
Pricing issues	3
Simple communication	3

We suggest that the local associations and wineries need to liaise with growers, and provide a basic outline of commercial issues in the industry. Some growers believe that they are left in the dark, and issues like supply and demand, economics, international and local markets, changing market preferences, market price points etc were often not clearly understood.

Part of the exercise is getting the players to see each other as mutually dependent, not adversaries, and personal contact is important in that respect.

8.14 Research and Development Issues

This was seen as a high priority, with low levels of existing information. The main suggested issues were as follows:

Research and Development – Main Priorities	Percentage of total (%)
General updates/ keeping up with changes/ improvements	42
Water management and irrigation	9
Chemical usage and disease management	8
Root stocks, varieties, clones, etc	7
Grape quality	6
Nutrition, fertilisers	5
Vine canopies or trellising	2

Quite a number of issues were raised, and both in the groups and the survey, main issues were quality, water, nutrition, chemicals etc, with rootstocks and clonal selection also emerging at this point as an issue.

One issue raised in the groups is that they don't really know which rootstocks and clones for each variety produce the best quality, disease resistance and also yields, including the relationship between these factors.

Overall, there are numerous priorities for action, and we suggest that a salient issue is industry communication and co-operation, and seeking what all parties need and want.

9. Information Sources and Preferences

This section considers how information should be provided, including existing sources.

9.1 Preferred Sources of Information

We asked preferred sources for a series of types of information. The results are summarised as follows. Note that we have included the CRCV in with research institutes (see later):

Figure 6 - Preferred Sources for each Type of Information

	Main Preferred Source for Information						
Issue/ Topic	*Wine co's %*	*Grape growers Council %*	*Local Assocn %*	*Cons-ultants %*	*Govt. Depts %*	*Res'ch Inst. %*	*Supp-liers %*
1. Financial management including tax	5	5	9	6	4	4	4
2. Water management	19	4	19	21	33	22	27
3. Labour management	3	4	18	5	13	8	12
4. Learning and skills development	16	4	21	16	21	33	9
5. Environmental management, chemical usage, runoff etc	16	8	22	32	34	27	32
6. Production management, nutrition, irrigation, pest and disease control etc	27	6	23	27	29	27	28
7. Computing, Internet and communication technology	8	4	10	8	7	17	34
8. Workplace and public health and safety	15	4	17	5	21	6	10
9. Operations management and systems (methods, systems)	13	6	16	11	20	12	25
10.Grape quality and factors affecting it	57	6	22	21	20	26	8
11. Industry co-operation and communication	37	14	40	9	19	17	10
12. Research and development initiatives	26	7	35	12	31	36	11

We make the following comments:

- **No one source** was that prominent. Rather, a range were mentioned, and any one grower would typically mention multiples for one source
- There was a lot of reliance on **suppliers** for several types of information – and that is more prominent than we have found in other horticulture markets
- **CRCV** accounted for around one quarter to one half the number of research institute numbers
- Whilst **local associations** were often mentioned, they were less often mentioned than research institutes for most issues (co-operation within the industry being an exception)
- The **Winegrape Growers Council** was seen as a relatively minor source
- There was some preference for consultants in relation to technical issues. By consultants, we were referring to **viticulture**, not business
- In relation to accountants and business **consultants,** they were the preferred sources for financial information (70%) and the Tax Office to some extent (27%)
- **Other growers** were also a source to some, those not mentioned by more than 14% for any issue (learning new skills, and 12% for each of water and production management)
- A few other sources were sometimes mentioned, like Worksafe for OH&S information, and the Farmer's Federation in relation to labour management. However, the sources in the above table were by far the main sources
- The reliance on the **wine companies** was clearly strong in relation to grape quality and the factors that affect it, as well as production management and R&D issues (the later being quite a surprise).

It is worth noting that **viticulture and also business magazines** and other business related sources were only occasionally mentioned. Whilst they came up as useful sources in the groups, growers did not mention them much in the survey.

There was also demand for local information on the basis that they don't know if information from other regions (especially cooler regions) is applicable to them. Thus local associations, consultants and local government agencies tend to be relied on more than others, as well as third parties like suppliers and sometimes other growers.

The groups also indicated that growers believe that they take notice of the information they receive, though it was evident that **few are early adopters**. If they hear about a new process or idea and are interested, most will want others (growers, the local association, chemical reps etc) to **verify it**. Preferably, they can see it working.

Putting the above in context, it is not ideal for the industry to have so many sources. That is particularly the case when viewed in relation to the number of mentions of contradictory and inconsistent information they get, the duplication of sources, which we outlined earlier.

The "ideal" situation would be for more predictable and fewer sources. Reliance on third parties like suppliers and other growers is also not ideal for many types of information, as much will be anecdotal.

Taking the above argument further, it would be helpful if the industry had:

- A **central data base** for all information which could easily be accessed by growers
- More local association involvement in relation to access of information and its dissemination to the industry
- Basic manuals on regulatory and operational issues to avoid mistakes.

9.2 How They Prefer to Receive Information

In terms of how they prefer to **receive information**, we found the following:

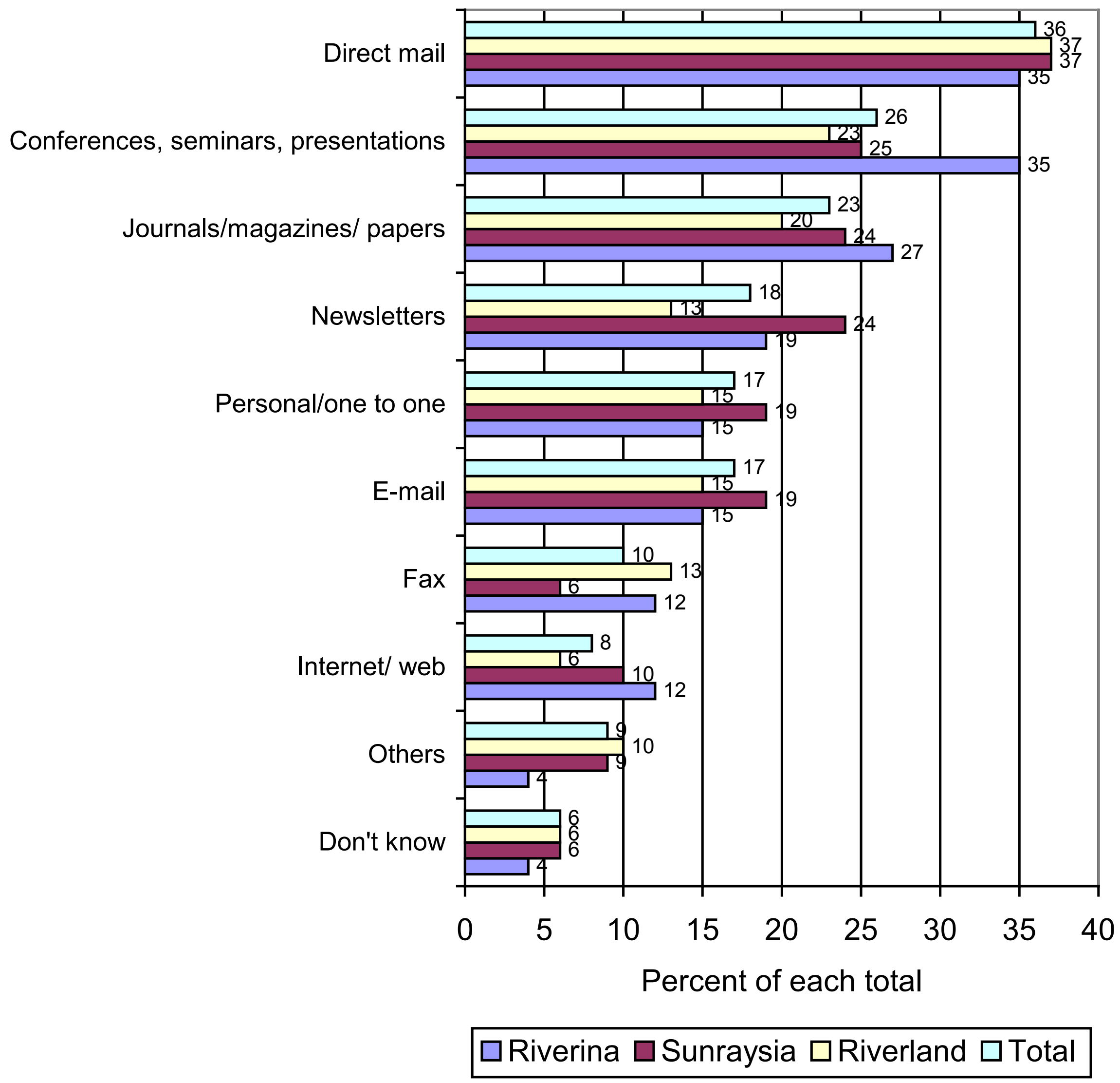
- **Seminars** were very popular – they wanted personal contact and simple, hands-on presentations
- Other forms of personal communication were also popular, e.g., **field days**
- Some (particularly in the Riverland) suggested that **electronic records** would help, such as an electronic library. It would however need to be referenced and centrally catalogued. Note that this idea was not that popular otherwise. Other growers expressed little interest
- Most preferred **hard copy** to electronic media, and also suggested that **faxes** are suitable for short, concrete articles
- **Regional conferences** were also mentioned though there was some scepticism expressed about them in that the same people always attend them and the information thus does not reach the masses.

A critical issue here is that many felt that there is plenty of information around. The problem more is that it does **not get disseminated in the industry nor applied** in any rational way. Whilst few growers are active information seekers, they have relied on others to advise them, meaning that they are typically not in the habit of researching anything.

Growers also found some information contradictory or not relevant for their conditions, and also found a lot of it too hard to understand. This is why personal information is heavily relied on. They want to hear it and discuss it, including seeing evidence of the research in the field.

9.3 Preferred Sources for Critical Industry Information

Figure 7 - Preferred sources



For critical industry information, the most popular mediums were more **direct sources** of information such as direct mail, conferences, stand-alone newsletters, personal visits, fax and e-mail. The only indirect source mentioned with any frequency was magazines, papers or journals.

We spent some time during the group discussions talking about how the industry learns, what it actually takes notice of, and what the barriers are to responding to such information. Overall, the following issues arose:

- In all groups, respondents felt that learning is largely **hands-on**. In that sense, written information is useful, yet may not be enough on its own to lead to actual behaviour change. Some suggested it leads more to asking questions (that is, they will check it with others, talk about it, etc)
- Direct mail was seen as suitable for simple aspects, like how to identify a pest, deal with a disease, using a fertiliser, etc, though better value for more broad reaching aspects comes from **industry meetings and seminars.** This also gives them the ability to learn from each other.
- Several simply said that to learn effectively, they ***"need to talk to people",*** and suggested workshops, and personal visits.

The impression gained is that written information is very useful for simple issues, tips, ideas, etc, but for more major changes, personal contact is needed, and preferably where operators can get together to share ideas.

9.4 Existing Sources of Information Used for Business and Technical Information

The following were the main sources presently relied on for general business and technical information:

Figure 8 – Existing Sources

Type of Information	Business Info %	Technical Info %
Accountants/business advisors	15	0
Viticultural consultants	1	16
Commercial grape and wine industry magazines	5	32
Other growers or neighbours	10	12
Business magazines (BRW etc)	11	0
Internet searches	10	5
Major newspapers including the Financial Review	41	0
Local and state associations	20	24
Newspapers or magazines from industry associations	22	25
Suppliers	2	15
Govt. departments (DPI etc)	5	19
Radio	8	0
Wine companies	9	32
TV news/ current affairs	18	2
Winegrape Growers Council	4	1
Local or rural newspapers	5	6
Universities, research institutes, CRCV	2	10
Banks	4	0
Tax Office	2	0

In terms of **general business information**, we make the following notes:

- Existing sources were mainly business press and information from local associations, followed by TV news, local accountants or advisors, other growers and the Internet
- The general media is relied on as much as the specialist media
- Local associations played a major role in this regard

In terms of **viticultural information**, we make the following points:

- The grape and wine press, wine companies, and associations were the main sources. Local associations were the main source when mentions of their newsletters are included
- Several other sources were also relied on including viticultural consultants, other growers, suppliers government departments and research institutes
- The above did not entirely concur with their preferred sources as per section 9.1 (figure 6) which suggested that the following should play a bigger role than they presently play:
    - Research institutes including the CRCV
    - The Grapegrowers Council, though to a limited extent
    - Suppliers
    - To an extent, government departments

Yet the **media**, which was often mentioned as a current source of information, was only occasionally mentioned as the ideal source, at least in part as it is not an integral part of the industry compared to associations, wine companies, suppliers and government would be.

We make the following suggestions from this section of the report:

- Firstly, local associations are well placed (in terms of industry views) to play a central role in information provision, and are seen as a natural source for many types of information. They are clearly playing a major role
- Research institutes including the CRCV can play an important role in technical information, as such information is seen as credible. Similarly, government plays a role for the same reason
- There is however reliance on numerous sources for both viticultural and business information, including third parties and this is one reason why growers perceive contradictory information and the same information from numerous sources
- There is a strong preference for personal information for critical information and growers do not always act immediately on written data – they appear to need to talk it over. Direct mail or articles by fax or e-mail are suitable for short, simple ideas or issues, though more complex issues appear to require hands-on action such as seminars, trials, workshops or other meetings
- The media was often used as a source of both technical and business related information, though for viticultural information, it was only occasionally the preferred source

10. Media Awareness, Usage and Attitudes

This section looks at the usage of and attitudes to magazines and other media, including both industry and consumer information.

10.1 Overall Usage and Attitudes

This section of the report deals with publications and is being kept confidential as it contains commercially sensitive information. Any enquiries should be directed to Ian Atkinson, CRCV Technical Applications Manager, ph 08 8303 9304 or ian.atkinson@crcv.com.au

10.2 What Makes a Publication Useful?

In the group discussions, several growers pointed out that they can't easily follow a lot of journal articles and government information because it is too technical and the information is often not specific to their region or conditions. They defined a "good" publication as follows:

- Short – no more than a few pages
- Dot points, not a lot of detailed text
- Important points clearly highlighted
- Hands-on writing style emphasising applications not theory
- Clear headings
- Make it clear what the problem is that is being addressed
- Use simple language.

It is reasonable to say that some had a short attention span and will not read anything that is more than a handful of pages. As such, we got the impression that they simply want **applied** information, with consultants or advisers telling them what to do at seminars or field days.

Some respondents suggested that technical information would be better targeted at the **chemical distributors or local associations**, directly implying that they need it passed on second hand and explained to them. That was consistent with the interest in third party information, discussed earlier. Whilst not an issue for everyone, some wanted information to be **drip filtered** down to them.

Without dissemination by associations and intermediaries, not a lot of technology adoption can be expected to quickly occur. Rather, they talked of "information overload" which effectively means that they can't cope with more.

The survey revealed the following useful characteristics desired in publications:

Relevant to my business

Provides new information/ ideas

Up to date, latest information

Factual, accurate information

Practical, hands-on

Shows what others are doing

Useful advertising/ product news

Range of issues/ diverse

Local information

Note that a few other useful characteristics were as follows:

- Short, brief, simple articles, though some others wanted comprehensive data instead
- Presentation was considered important – attractive and easy to follow layout and design

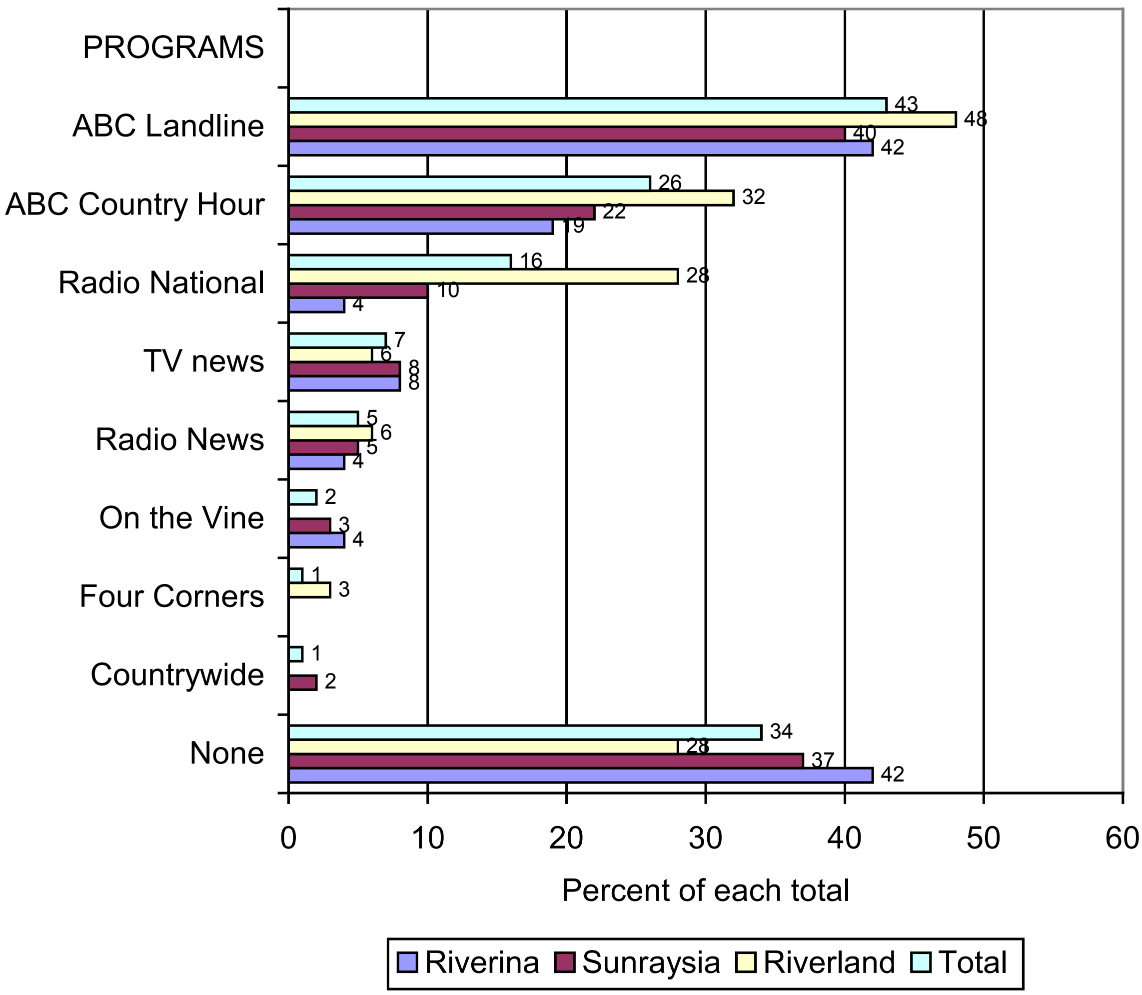
10.3 Overseas Magazines

Only a small number read overseas magazines, and they are clearly not a major source of influence. Only 6% mentioned any, with a handful each mentioning US Vineyard magazine, and US and British wine magazines such as Decanter and Wine Spectator. A few other US based magazines were each noted by one person.

10.4 TV and Radio Programs

The following general media was watched or listened to by growers, with regional variations being highlighted:

Figure 10 - TV and radio regularly used



The ABC and its programs, both radio and TV, get a good run here. There only regional variation was the listening patterns for Radio National in the Riverland.

11. Computer and Internet Usage

This section looks at computer, Internet and electronic information usage and attitudes.

11.1 Usage of Computers and Internet

There was a **high level** of existing computer usage, viz:

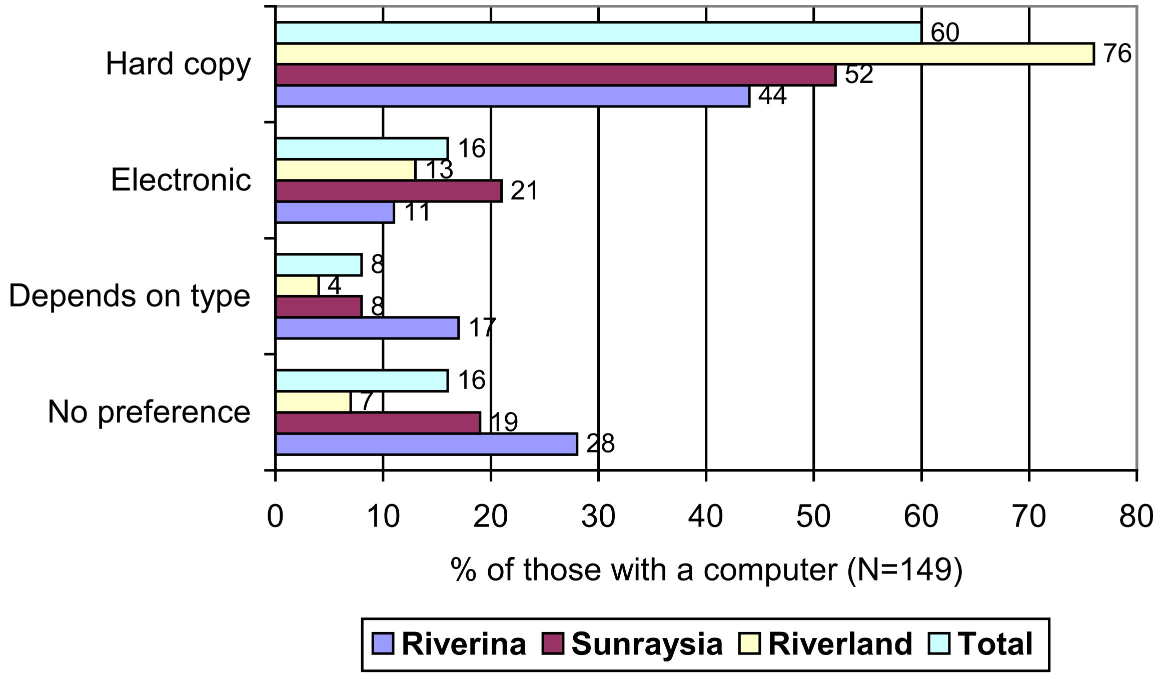
- Most (82%) use a computer in their business
- The larger growers (95%) were more likely to do so, three quarters of all others using a PC
- Of the remaining growers with no computer, 28% said they will acquire one in the next year or so
- Of those growers with a computer, by far the majority (91%) had an **Internet** connection, which equates to **75%** of the total sample
- Those using the Internet mainly did so for:
  - Sending and receiving e-mails (84%)
  - Accessing business related sites (75%)
  - Accessing viticulture related sites like local associations (74%)
  - Accessing non-business related sites (63%)
  - Buying supplies (26%)
  - Selling over the Internet (11%)

In short, most are using computers, and also the Internet, though only a minority used it for commerce. The infrastructure for on-line communication and trading is largely in place, though it was evident that many needed help with using technology, including "getting started" information (see section 8).

11.2 Preferences for Hard Copy or Electronic Information

We asked those respondents with a computer if they preferred hard copy or electronic information, and found the following:

Figure 11 - Preferred information type



If those without a computer were added back, the overall preference for hard copy would be 70%, not 60%.

The groups indicated that some struggled to understand how they would store, download and use large files if provided electronically. To some, it appeared to be easier to receive information, particularly detailed material, in a hard copy form.

Part of the barrier to electronic information is simply unfamiliarity with it, plus reluctance to file and store information, which was apparent with hard copy data as well. There are two conclusions that could be drawn from the above:

- Keep producing hard copy
- Encourage growers with computers to receive them electronically, and encourage the rest to get a computer.

We recommend the following course of action. Whilst there may be a few complaints in the first instance, the long term savings and improved efficiency justify the response.

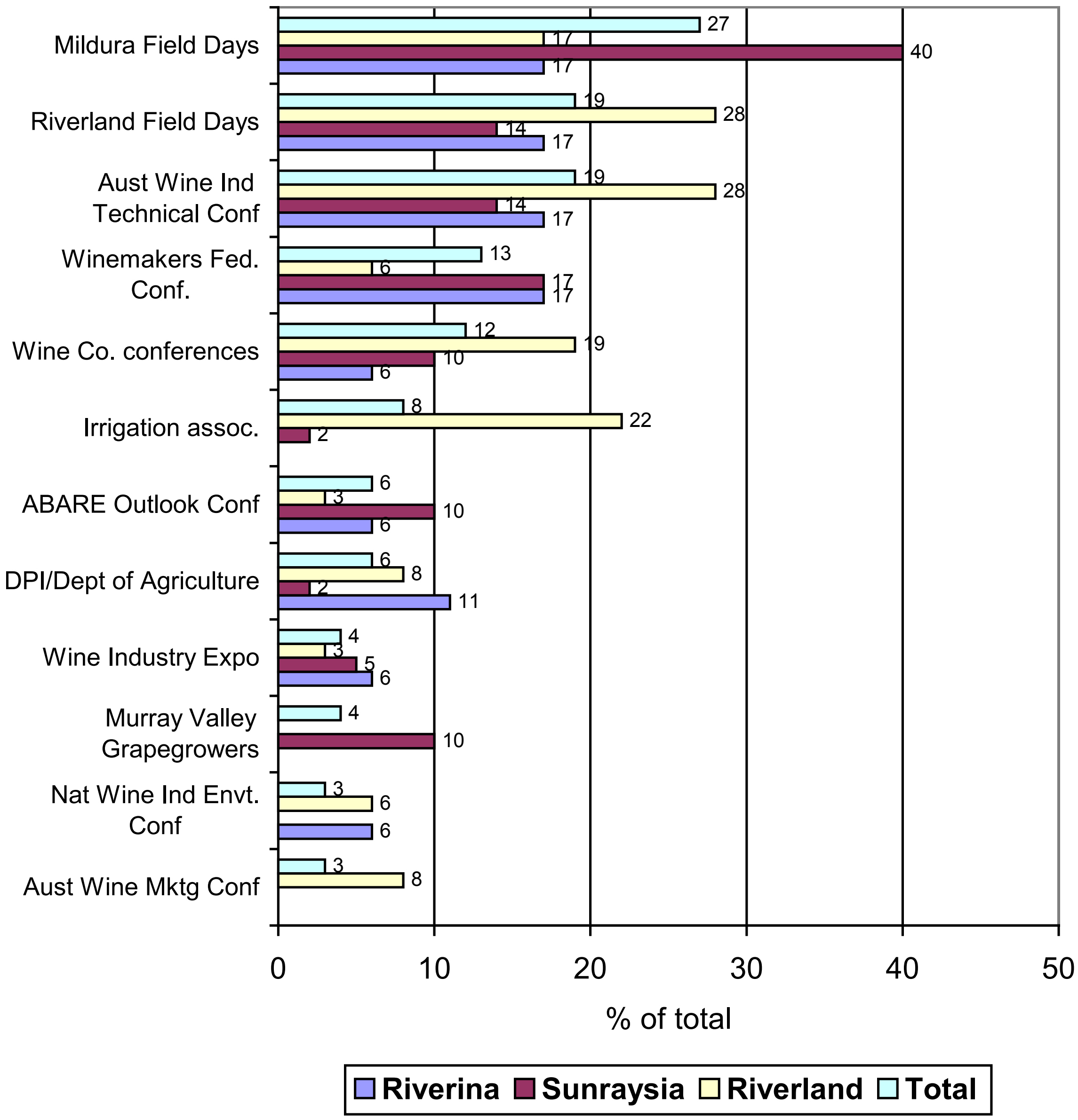
12. Seminar Attendance and Attitudes

This section discusses attendance at seminars and conferences, as well as attitudes to what is good and bad about them.

12.1 Attendance Patterns

Of the total, 61% had attended any national, state or local seminar during the last year or two. Attendance at main events was as follows:

Figure 12 - Seminars attended over last two years



The local events (Mildura, Riverland field days) were well attended and even by growers from other regions in some cases.

Attendance at other events was variable, covering associations, government and commercial events.

Larger growers tended to attend more, though particularly the Australian Wine Industry Technical Conference (28%).

A small number also attended other seminars or events such as:

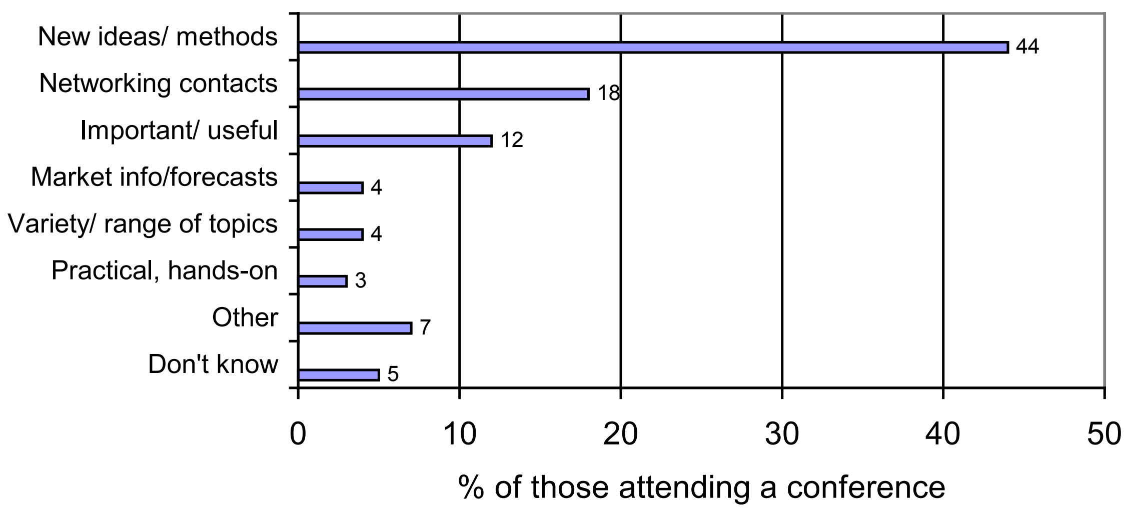
- CRCV
- Australian Wine research Institute technical roadshow
- Dried Fruit Association
- Farmers Federation

For the most part, view of the utility of seminars and conferences was generally positive. Of those attending them:

- 38% rated them as “very” useful
- 37% gave a “quite” useful
- 23% said they were of limited usage
- Only 1% said they were of no use.

The reasons why any seminar or conference was useful was as follows:

Figure 13 - Reasons why conference or seminar was useful

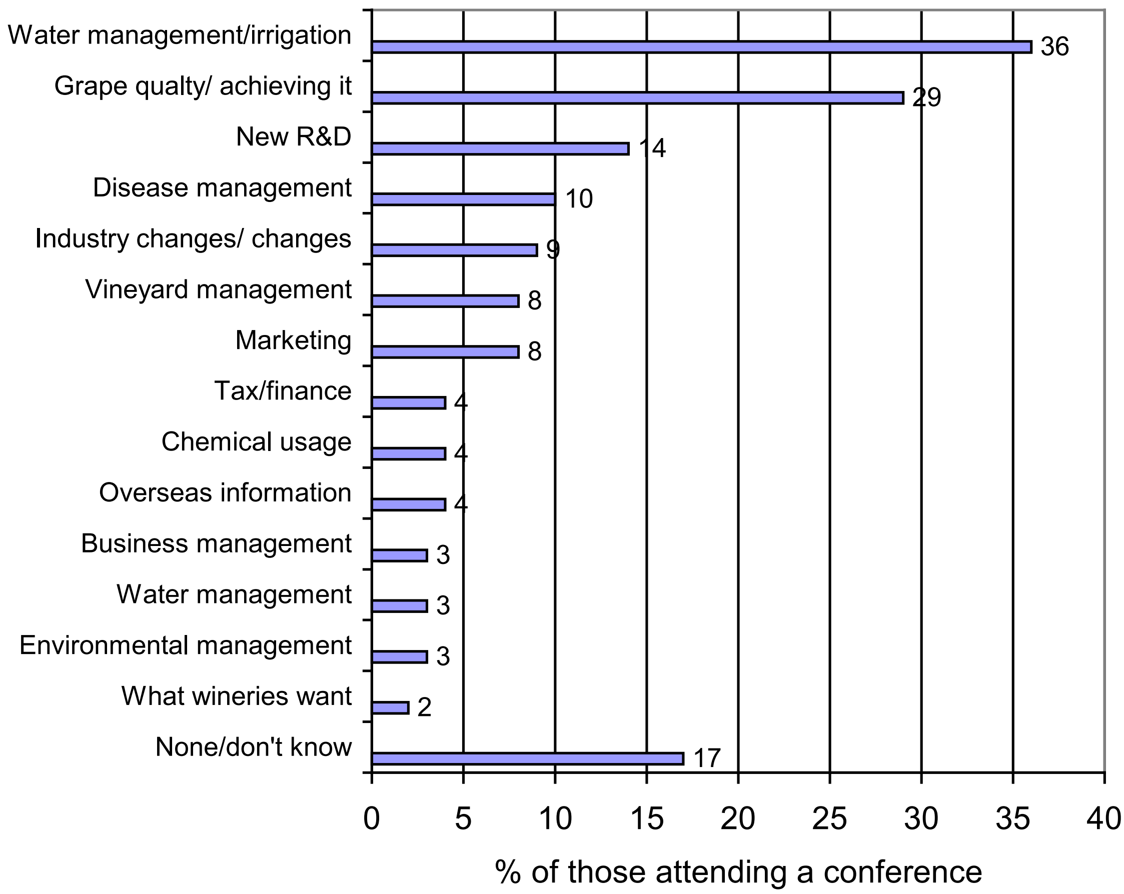


Overall, they are typically looking for new information and to some extent, making contacts.

The weaknesses noted by those rating them as being of limited value were that they are either too detailed or that the information was too broad, general or not local.

More specifically, the topics that were seen as useful were in fact similar to their information priorities discussed earlier, viz:

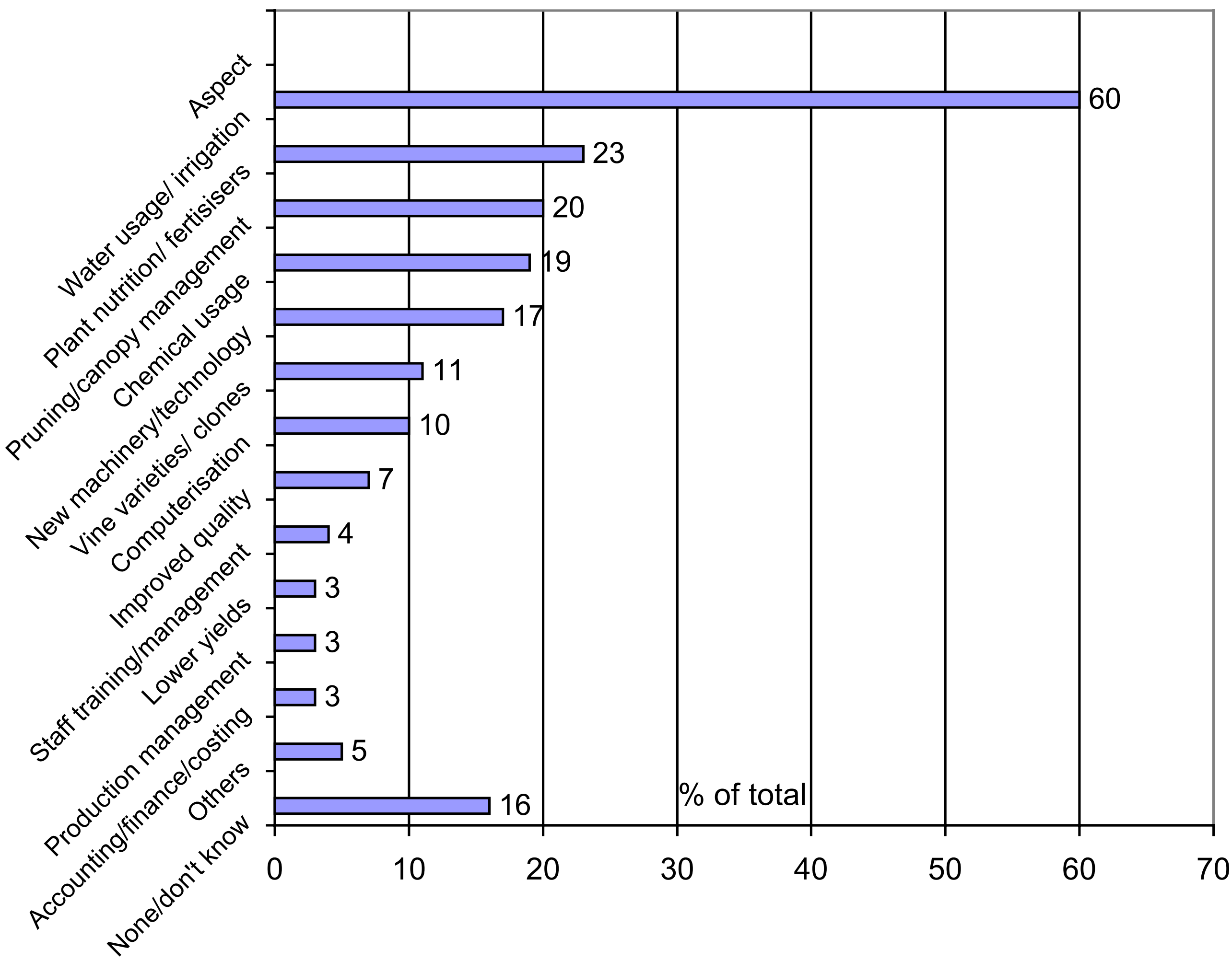
Figure 14 - Seminar topics of most use



12.2 Impact on Business from Information

Changes made as a result of attending seminars or from any other information sources were as follows:

Figure 15 - Changes made due to information over last 5 years



Most (84%) had made changes, with six in ten making changes relating to water usage, conservation and water usage. This is a very encouraging result.

Those more likely to make changes were:

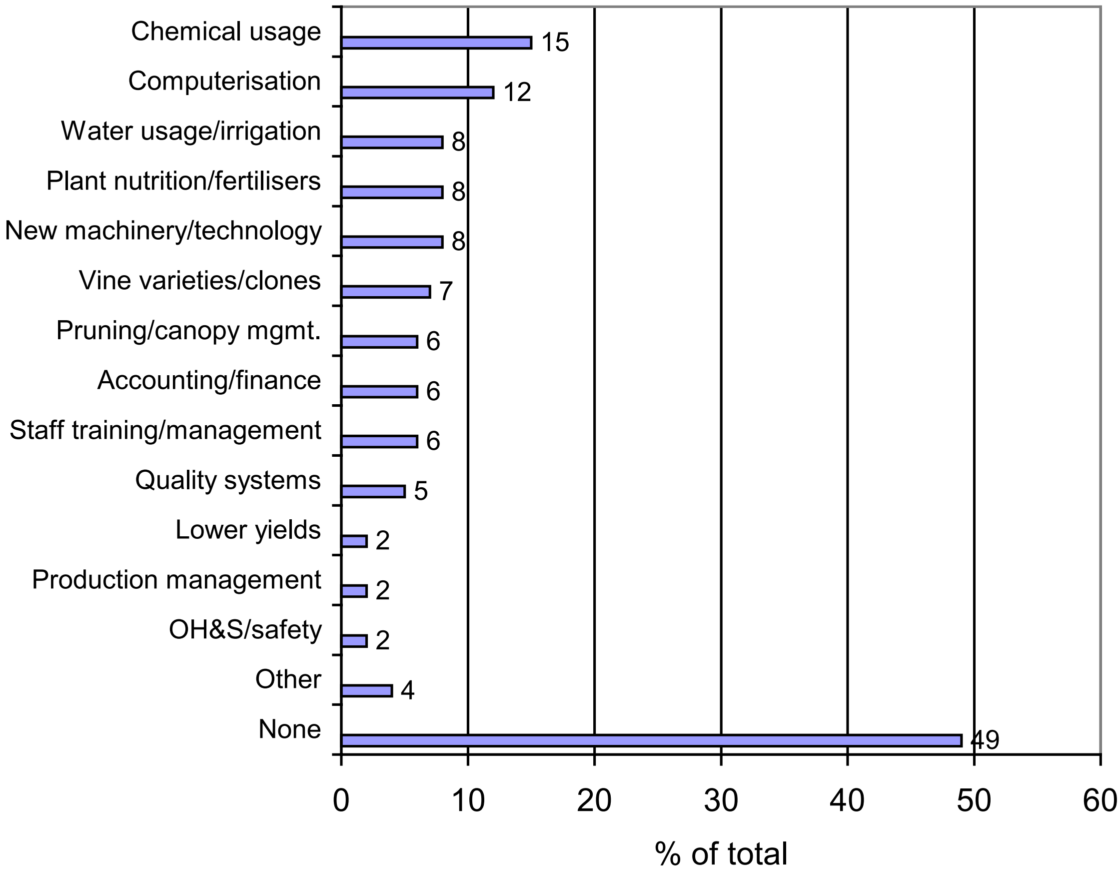
- Riverina based growers in relation to water, new machinery or equipment
- Sunraysia in relation to chemical usage and also accounting
- Larger growers in relation to staff issues, water usage, yields and computerisation.

13. Training and Extension Needs

13.1 Existing Needs for Learning New Skills

Overall, half the growers did not feel that they needed any new learning. Yet we noted above that they do respond to new information, and there was broad recognition of the need for more information on many issues. Figure 16 summarises the range of needs in relation to new skills.

Figure 16 - Needs in relation to learning new skills



What is interesting is that the two main issues, chemical usage and computerisation, did not arise as key issues earlier. Whilst environmental management was cited as an issue in section 8.2, chemical usage was only a part of it, and computerisation was a very low priority. The above suggests that environmental issues and computerisation are emerging issues.

At a regional level, those in Sunraysia (13%) more often mentioned plant nutrition, and larger growers mentioned several issues, such as chemical usage, machinery and technology, and staff training and management.

13.2 Importance of Research and Development

We asked all respondents how important R&D is to the future of the industry. We found that there was a high level of acceptance of its importance, viz:

- 43% said it was critical
- 40% said very important
- 13% said quite important
- Only 3% said “not very” or “not at all” important.

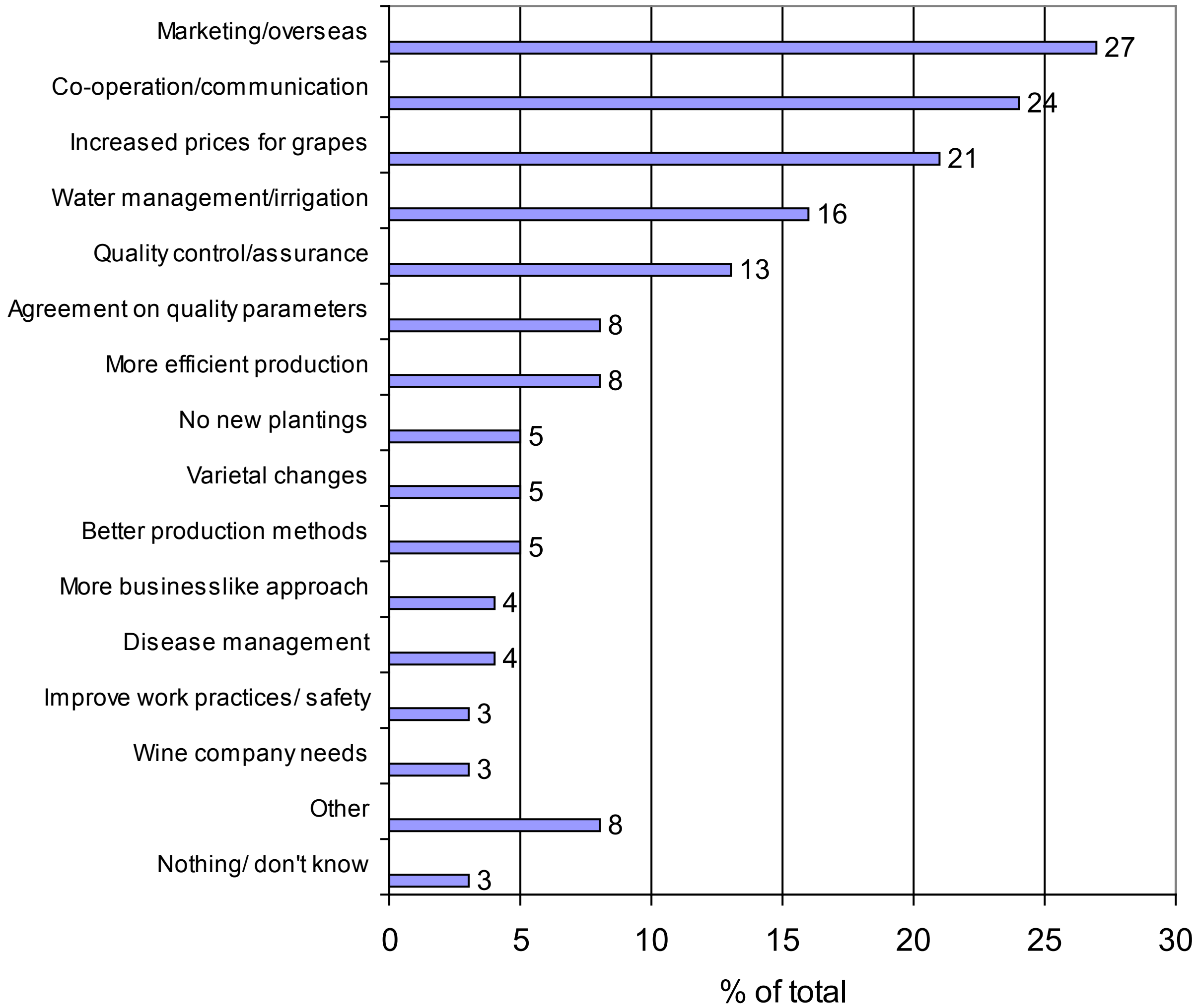
Clearly, with very few exceptions, there was broad acceptance that R&D is important to the industry. That was particularly evident among larger growers, though few variations otherwise arose.

The above responses are high in relation to findings in other horticulture industries, which suggests a **state of readiness for change**.

13.3 Needs for Survival and Profitability

At the end of the interview, we asked them to sum up what needs to be done for the industry to survive. Responses are summarised below:

Figure 17 - Industry needs for survival and profitability



Overall, the above suggests one priority that has not been mentioned to any extent, and that is overseas marketing. There was some emphasis placed on this in groups, but it was not a major issue at the time. Rather, there was concern that overseas competition would affect them if they did not keep up the momentum.

At a regional level, we found the following:

- In the Riverland, water was more often raised as an issue, yet fewer mentioned grape prices
- In Sunraysia, more mentioned quality parameters, efficient production and cost control, and better production methods.

14. Attitudes and Needs of Input Suppliers

This section covers the input suppliers. We have kept this section of the report relatively short, as there was a degree of agreement on main priorities for the industry.

14.1 What is Changing and Why?

The changes that have taken place in recent years were said to be:

- Water restrictions and thus lower yields
- Improving water management and irrigation as well as the commencement of water trading
- Lower prices
- Pricing based more on quality (a point that was not always accepted by the growers)
- Increased usage of mechanisation
- More areas being opened up for vineyards.

It is worth noting that even at the outset, input suppliers felt that only some of the growers were responding appropriately to these changes.

In relation to water, the input suppliers felt that growers are getting used to the idea that water is scarce and that future shortages can be expected.

The economics of change however was seen as a barrier. This is partly a double-edged sword:

- On the one side, their argument is that the cost of upgrading technology (drip irrigation, soil monitoring, new pumps etc) plus the expectation of lower yields holds back change. The growers were said to think of the value in tonnes – thus lower yields mean lower profits
- The other argument is that those not changing will be left behind. With better technology and vineyard management, those growers adopting change will increase their profits. Failure to change will potentially put others out of business as increased water costs, water restrictions, and increased quality demands by wine companies put pressure on the bottom line.

14.2 The Next 5-6 Years

Suggestions were as follows:

- Water will continue to be a problem – there will be more controls and more tracking of allocations
- Water trading will increase (and this is not necessarily seen as a positive move leading to “monopolisation” of water)
- Rationalisation with the “smaller guys” out
- Changing varietal mix to keep up with demand (chardonnay in particular)
- Labour being replaced with mechanisation
- More re-planting of better rootstocks, rather than more acreage
- Improved viticultural practices including less spraying
- More control over input costs.

There was a feeling that the good growers will thrive, the poor growers will leave the industry or struggle. If there was a difference with the growers themselves, these input suppliers felt that there are a lot of growers who are not keeping pace with change and that their weaknesses will become more apparent over time.

The input suppliers also recognised the paternalistic attitudes of the wine companies and noted that their inability to provide concrete quality parameters was confusing the growers. Yet this just exacerbates an existing problem. To some extent, they felt that the growers need to take more individual responsibility.

At the same time, the input suppliers would also like better information from the wine companies, and a closer relationship with them.

In terms of **technology**, they recognised that many have improved their practices, though they estimated that half the vines are still flood irrigated, which they regarded as being unsustainable. Soil moisture monitoring was also seen as slow to be adopted.

The input suppliers are (of course) actively marketing the need for better technology and management practices, including emphasising the need for quality not volume. Further, they did note that growers expect a lot from them in relation to agronomic advice and saw themselves as playing an important role in information dissemination (which concurs with some grower comments).

14.3 Main Information Needs

When asked about their own information needs, the input suppliers are keen to get a better handle on:

- The needs of the wine companies and what they want
- The needs and wants of the growers.

From the outset, they pointed to a need for the industry to "sit down and get together more" particularly in relation to quality. Their view is that all parties "need to help each other" and not to "take ownership" of information.

Their main need is better feedback from the wine companies, viz:

- Overseas trends and demand levels as well as local trends
- Chemicals to recommend
- Rootstocks (e.g., whether Ramsay is acceptable)
- Relationship of quality and returns, such as benchmarking
- Pruning
- Spray programs.

Note that there was more demand for the **economic information** (supply and demand, trends, quality and cost relationships, benchmarking, etc) than agronomic data.

14.4 Sources of Information

In discussing sources of information, input suppliers tended to move from their own sources to those of growers. In relation to their own sources, they mainly mentioned the following:

- Liaison officers from the wine companies
- The development officers and other staff from the local associations
- Government agencies such as the Department of Agriculture
- Internet (particularly for overseas data)
- Universities and the CSIRO
- The CRC for Viticulture (a few noted that the information it provides is very good but the organisation and its work "needs to be marketed more")
- Their own industry associations (irrigation, vine nursery, etc)
- Growers themselves

All agreed that information is important, but they were sometimes quick to point out that information needs to be applied, that that is where it breaks down. They felt that growers are often ill-informed and often set in their ways.

They also agued that the resellers are playing a greater role in information dissemination in the industry. The Departments and the chemical companies themselves (not resellers) have less presence and the void has been filled by resellers and some extension and consulting services.

For business related information, input suppliers are more reliant on their own associations, the companies they represent (e.g., chemical companies, equipment suppliers) and general media.

It was also noted that a lot of information is around that is “not readily available” or “not accessible”. This argument was also evident in relation to the growers. That is, much of the information out there is good, but is not reaching the growers.

14.5 Types of Communication

As was the case with growers, input suppliers pointed to personal communication as the way to go. Conferences and field days (in particular) were seen as popular, as well as direct talking between people in the industry.

Other sources used included:

- TV, such as the rural reports of the ABC
- Local radio
- Regional conferences
- Some magazines.

Yet it is personal information that was believed to make a difference. However, the “over the fence” learning can be problematic as it can mean adoption of incorrect or less than ideal methods.

14.6 What will Improve the Industry?

We asked what would help bring the industry (particularly growers and input suppliers) together. There was again a strong argument for the involvement of the wine companies, and closer involvement of all players:

- Firstly, get the data available into Journals that are suitable for the growers and the industry rather than for technical papers
- Get the wine companies and independent people (local consultants, Departmental staff, input suppliers) involved in field days

- More outreach work by the associations and the liaison officers of the associations to follow up the information presented and provide hands-on advice
- Development of personal networks by growers.

In relation to the quality standards, there was agreement that they do need to work more with the grower, including sitting down and talking to them. The input suppliers are often asked questions about what the wine companies want and they can't always help, viz:

> *"We need better feedback from the wine companies..what chemical to use, what rootstocks are okay…we need this to help the growers improve their business"*
>
> *"Information on nutrition, quality, disease control…needs to be winery driven...there is no simple specification or recipe...the grower liaison officers [from wine companies] need a joint venture approach..."*
>
> *"The industry is all driven by self-interest...it creates barriers to getting the job right...the companies are not respected"*

Part of their argument is that the growers *"need information sources that can be trusted".* That is fairly consistent with the growers themselves. They are bombarded with data yet need to run it past people they know and trust. As a result, personal contact is important in stimulating adoption.

They also agreed that only simple information is suitable for growers, and that many are not really interested in reading.

14.7 Training and Extension Services

Those in the chemical industry said that there is a lot more training these days in areas such as personal safety, product handling and the like. However, they felt that the growers are reluctant to learn about:

- OH&S
- Tax
- Finance – costing, financial management, etc
- The economics of the industry

Other key issues were said to be water conservation and quality (including what it means). Note that simple information was not seen as suitable in these cases. That is, “detailed stuff” is needed to make any sense of it, not a few anecdotes.

Yet their argument was consistently that they need help in disseminating information, including the involvement of all players in the industry. As a result, extension services arose as more important than training. In short, outreach work was seen as essential. Ideally linkages would involve the input suppliers as well as wine companies, growers and development officers locally.

14.8 Electronic Media

The input suppliers all use email and the Internet, and receive a lot of data from their own companies, manufacturers and associations.

They were happy to receive electronic information including from CRC for Viticulture.

At the same time, they did not think that many growers would use electronic media. Given that some argued that the “need their hands held”, the real issue is that more intensive forms of communication were typically seen as necessary.

In summary, some of the challenges for the industry are:

- Building trust and getting away from “knowledge is power”
- Networking to build skill levels – though networking with informed parties not just neighbours
- Involvement of all players in field days, conferences, seminars, etc
- Development of a central source of information to assist the industry
- More involvement of the wine companies in quality standards.

Grape Grower Information Study
Group Discussion Guide

1. Introduction

1.1 Group processes, taping etc
1.2 Personal introduction
1.3 Topic, issues

2. Perception of Needs

2.1 What has most changed in terms of being a grape grower in the last 5-6 years?
What are the reasons/drivers?
(Probe for information sourcing and usage)

2.2 What are the most pressing issues at the moment?
(Be specific)
- describe nature and causes
- what priorities are there
- what (realistically) can be done by the industry
- what information needs relate to them.

2.3 In 5-6 years, how "different" will the industry be?
- What is driving change?
- What issues are emerging for the industry?
- Will it be better or worse for growers? How?
- What will you have to do right to survive/grow?
- What will you need to know as a result?

2.4 What does the industry (and you) need to do to deal with this?
What needs to change?
Whose role is it?
Role of information in this regard?

2.5 How up to date (or otherwise) are you in relation to industry trends, new technologies, etc?

2.6 What are the main changes you have made in recent years (say, last 5-6) and how did that change come about? (e.g., advice, information, etc)

2.7 What are the main information needs now?
(Specifically)

2.8 FOR EACH TYPE:
Who should provide it? How specifically?

3. Prompted Issues

(Bounce off them the following issues – get information needs if not already raised)

3.1 Vine management
3.2 Pest management
3.3 Disease management
3.4 Grape quality
3.5 Water usage, irrigation
3.6 Environmental management
3.7 Gene technology
3.8 People management, industrial relations, etc
3.9 Sustainable vineyard systems
3.10 Finance, accounting, taxation etc
3.11 Marketing, sales, distribution etc
3.12 Customer service or needs

4. Sources of Information

4.1 Please tell me all the sources you rely on for information.
FOR EACH:
For what type of information?
How important are they?

4.2 What sources most affect your behaviour?
Which are really important in gaining new ideas and acting on them? Why?

4.3 Do you use any consultants, contractors or extension services for information and advice? What for?

- Role in information and learning
- What changes have you brought about as a result?

4.4 What associations play a role in information provision?
(Check the role, types of information, etc). Probes:

- Local or regional grower groups
- National Winegrape Grower's Council
- Winemaker's Federation
- Aust Dried Fruits Association
- Australian Wine Research Institute
- CRC for Viticulture
- Grape and Wine Research and Development Corporation
- Dried Fruits R&D Corporation
- State Departments
- University research institutes

4.5 What changes have you made as a result of that information?

4.6 How useful and important is the information they provide?
What changes or improvements need to be made?

4.7 What topics need **more** coverage in the industry media?
What need less?

4.8 How do you prefer to **receive** information from them? Probes:
- Personal (meetings, seminars, forums, etc)
- Direct mail articles
- Magazines
- Annual Conferences
- Internet/ email
- Faxes etc

4.9 Overall, what sources do you prefer for business related information? Why?

4.10 What do you prefer for agronomic and technical information? Why?

5. Magazines, Publications

5.1 What magazines, articles or newsletters do you read for technical or business ideas and information?
Probe for why they are used/liked

5.2 What makes a "good" or "useful" publication?
(Note – includes newsletters, articles, research data, magazines, etc)
Probes:
- Topics
- Focus
- Length
- Presentation
- Targets

6. Training, Extension, Behaviour Change

6.1 What are the training and learning needs of the grape growing industry?

6.2 How do grape growers best learn?
I mean, what is needed to get information to ground level?
Probe:
- Need for hands-on approach
- Visits
- Field days
- Presentations, workshops

6.3 How can the industry help with training?
In what ways?
What role should it play?

6.4 Does the industry use many extension services?
(E.g., industry development officers)
What role do they play?
Ideally, what role would they play?
(Probe for any barriers to them)

6.5 How best can the industry bring about change and implement all the findings from research and development?
Discuss.

7. Electronic Media, Conferences

7.1 How many use e-mail and Internet?
Probe for adoption

7.2 What info should be provided electronically, rather than hard copy?

7.3 What industry conferences or field days do you attend?
Probes:
- What do you learn from them?
- Which are useful/ not useful
- Suggested changes?

8. Conclusions

8.1 Overall, what do you see as the main information needs of the industry for the short to medium term?

8.2 What are the main priorities for R&D and industry change?

Input/Equipment Supplier Information Study
Group Discussion Guide

1. Introduction

1.1 Group processes, taping etc
1.2 Personal introduction
1.3 Topic, issues

2. Perception of Grower and Input Business Needs

2.1 What has most changed most in the viticulture industry in the last 5-6 years? What are the reasons/drivers?
(Probe for information sourcing and usage)

2.2 What are the most pressing issues at the moment for growers?
(Be specific)
- describe nature and causes
- what priorities are there
- what (realistically) can be done by the industry
- what information needs relate to them.

2.3 In 5-6 years, how “different” will the industry be?
- What is driving change?
- What issues are emerging for the industry?
- Will it be better or worse for growers? How?
- What will you have to do right to survive/grow?
- What will you need to know as a result?

2.4 What does your business need to do to deal with this?
- What needs to change?
- Whose role is it?
- Role of information in this regard?

2.5 How up to date (or otherwise) are you in relation to grape growing industry trends, new technologies, etc?
And how up to date do you think the growers are?

2.6 What are the main changes you have seen being made to the grape growing industry in recent years (say, last 5-6) and how did that change come about? (e.g., regulations, advice, information, etc)

2.7 What are your main information needs in order to better service the needs of growers?

2.8 FOR EACH TYPE:
Who should provide it? How specifically?

4. Sources of Information

4.1 Please tell me all the sources **you** rely on for information. FOR EACH:
For what type of information?
How important are they?

4.2 What sources most affect your business?
Which are really important in gaining new ideas and acting on them? Why?

4.3 Do you use any advisors or extension services for information and advice? What for?
- Role in information and learning
- What changes have you brought about as a result?

4.4 What associations play a role in information provision to you?
(Check the role, types of information, etc). Probes:

- Irrigation Association
- Own reseller group
- Other networks or industry associations (not grapes)
- Local or regional grower groups
- State Departments (eg, Department of Agriculture)
- University research institutes

4.5 How useful and important is the information they provide?
Probe:
- To the growers
- To you

4.6 What topics need **more** coverage in the industry media?
What need less?

4.7 How best can the grape growers and the input suppliers/industries work together more effectively?

4.8 What is the best type of communication?
Probes:
- Personal (meetings, seminars, forums, etc)
- Direct mail articles
- Magazines
- Annual Conferences
- Internet/ email
- Faxes etc

4.9 Overall, what sources do you prefer for business related information?
Why?

4.10 What do you prefer for agronomic and technical information?
Why?

5. Magazines, Publications

5.1 What industry specific (grape growing) magazines, articles or newsletters do you read for technical or business ideas and information?
Probe for why they are used/liked

5.2 What makes a “good” or “useful” publication?
(Note – includes newsletters, articles, research data, magazines, etc)
Probes:
- Topics
- Focus
- Length
- Presentation
- Targets

6. Training, Extension, Behaviour Change

6.1 What are the training and learning needs of the grape growing industry?

6.2 How do grape growers best learn?
I mean, what is needed to get information to ground level?
Probe:
- Need for hands-on approach
- Visits
- Field days
- Presentations, workshops

6.3 Do you think your business would benefit from having a closer link with research and information providers?
If so what sort of links?
Discuss

7. Electronic Media, Conferences

7.1 How many use e-mail and Internet?
Probe for adoption

7.2 What info should be provided electronically, rather than hard copy?

7.3 What grape industry conferences, field days and the like do you attend including trade shows?
Probes:
- What do you learn from them?
- Which are useful/ not useful
- Suggested changes?

8. Conclusions

8.1 Overall, what do you see as the main information needs of the industry for the short to medium term?

8.2 What are the main priorities for industry change?

MD&A, August, 2003 CMD.308

Grape Grower Information Needs Study

On Contact with Organisation:
IF NAME KNOWN:
Good (….) I'm (..name..) from Mark Dignam and Associates. May I speak to (..name from sample …)?
IF NAME IS NOT KNOWN, CHECK THEY GROW WINE GRAPES AND ASK FOR THE PERSON WHO IS MOST RESPONSIBLE FOR MANAGING THE VINEYARD

On Contact with Targeted Person: (Re-introduce of necessary)
We are presently conducting a research project for the Co-operative Research Centre (CRCV) for Viticulture on grape grower needs for and usage of information.

The interview will take around 20 minutes. The survey is confidential; the CRCV will be provided with aggregated results only. The results will be used both for research and development priorities and for improving communication within the industry.

MAKE TIME/DATE FOR CALL BACK IF NOT AVAILABLE OR BUSY

Q.1 Do you only grow wine grapes?…. *Read Out*

Yes	1	(go to Q.4)	No	2	(continue)

Q.2 What else do you grow? *Accept Multiples*

Grapes for drying/processing	1	Pome fruits (apples, pears)	4
Oranges/citrus	2	Other (specify)____________________	5
Stone fruits	3	Don't know	6

Q.3a Are you a member of a grower or other wine or grape association?
If yes: Ask which one

No/none	1
Riverland Winegrape Growers' Association	2
Wine Grapes Marketing Board (Griffith)	3
Victorian/Murray Valley Wine grape Growers Assoc	4
Aust Dried Fruits Association	5
Winemaker's Federation	6
Winegrape Grower's Council of Australia	7
Farmer's Federation	8
Other (specify)	9

Q3b Do you or does your company operate a commercial winery?

Yes	1
No	2

Q.4a How many acres or hectares do you have of vines?

Write in:	Hectares	____________
Write in:	Acres	____________

Q4b And what percentage would be:

A.	White grape varieties	_______%
B.	Red grape varieties	_______%

Q.5 Do you have contracts for your fruit for the next harvest?

Yes/all	1	No	3
Some only	2	Don't know	4

Q.6 For how many years have you been a wine grape grower? *Probe if Necessary*

Less than 2 years	1	11 to 20 years	4
2-5 years	2	Over 20 years	5
6-10 years	3	(Don't know/refused)	6

Q.7 What do you see as the **main challenges** facing the winegrape industry at the present time? *Accept Multiples* *Probe for Others* *Do Not Read Out*
Note: if "surviving" or "making money" given, ask why

Producing quality fruit/ ensuring/ maintaining quality	1
Defining/getting agreement on the meaning of quality	2
Getting contracts for grapes/ selling grapes to wine co's	3
Co-operation/ getting the industry to work together	4
Low grape prices/ falling returns	5
GST/ Goods and Services Tax	6
Other taxation issues inc. superannuation, fuel rebates	7
Computerisation/ Internet/ communications	8
Overseas/ international competition	9
Water shortages/ access to water	10
Water management/ using less/ conservation	11
Maintaining margins/ profitability	12
Rising costs/ costs of inputs	13
Environmental regulation and requirements	14
Labour/ Getting staff/ finding suitable staff	15
Interest rates/ finance costs	16
Safety/ OH&S issues	17

Technology/ upgrading machinery/ equipment	18
Diseases/ vine diseases	19
Pest management/control	20
Other (specify)________________________________	21
Don't know	22

Q.8 Overall, what changes are you going to need to make over the **next 5 years** to remain viable in the industry? *Probe for Others* *Do Not Read Out*

Improve grape quality	1
Understand quality/ what it means	2
Improve water management	3
Change to drip irrigation/upgrade irrigation	4
Cost control/ watch costs	5
Improve efficiency/ efficient work methods	6
Financial management	7
Get bigger/ expand	8
Improve production/ growing methods	9
New species/ varieties/ change them	10
Get a contract from wine companies	11
Better staff training/ skills etc	12
Improve profitability	13
Maintain/ improve environmental standards	14
Other (specify)__________________________	15
Don't know	16

Q.9 I'd like you to say how **well informed** you are about the following broad issues, and then to say how **important** it is to get more information about each area.

A. Firstly, as I read out a list of issues, please rate how well informed you think you are on each, using a scale from 1 to 10 where:

10 is very high
5 is fair, like a barely adequate level
1 is not informed at all.

B I will read out each issue again. Please tell me how important it is to get more information on each, to ensure the viability of your business over the next 5 years, where:

10 is critical 5 is moderately important 1 is not at all important.

Issue/ Topic	Q9A. Current Level of Info.	Q9B. Import. of More Info.
1. Financial management including tax		
2. Water management		
3. Labour management		
4. Learning and skills development		
5. Environmental management, chemical usage or runoff		
6. Production management, eg, nutrition, irrigation, pest and disease control, etc		
6. Computing, Internet and communication tech'gy		

8. Workplace and public health and safety		
9. Operations management and systems, e.g., work methods, equipment usage, etc		
10. Grape quality and factors affecting quality		
11. Industry co-operation and communication		
12. Research and development initiatives		

Q.10 FOR EACH AREA RATED 6-10 IN Q.9B, ASK THE FOLLOWING:
What specific information needs do you presently have in terms of (…issue..)?
Repeat for Each Area *Get Specific Answers* *Probe for Clarity*

Issue/ Topic	Specific Information Needs
1. Financial management including tax	
2. Water management	
3. Labour management	
4. Learning and skills development	
5. Environmental management, chemical usage or runoff	
6. Production management, eg, nutrition, irrigation, pest and disease control, etc	
6. Computing, Internet and communication tech'gy	
8. Workplace and public health and safety	
9. Operations management and systems, e.g., work methods, equipment usage, etc	
10. Grape quality and factors affecting quality	
11. Industry co-operation and communication	
12. Research and development initiatives	

Generic Codes for Q.10:
97 None/Nothing
98 Don't know
99 General updates/ keeping up to date with changes

Q.11 FOR EACH AREA RATED 6-10 IN Q.9B, ASK THE FOLLOWING
Assuming you needed each of these types of information, **which source** would you **prefer** to get it from? Please name your preferred **sources**, like local grower's association, magazines etc, not HOW it is provided.
Read Out Each – Accept Multiples if Stated – Do Not Probe
*Note: We mean the source, not **HOW** it is delivered*

Issue/ Topic	Source
1. Financial management including tax	
2. Water management	
3. Labour management	
4. Learning and skills development	
5. Environmental management, chemical usage or runoff	
6. Production management, eg, nutrition, irrigation, pest and disease control, etc	
6. Computing, Internet and communication tech'gy	
8. Workplace and public health and safety	

9. Operations management and systems, e.g., work methods, equipment usage, etc	
10. Grape quality and factors affecting quality	
11. Industry co-operation and communication	
12. Research and development initiatives	

List of Sources: (Do Not Read Out)

Local Winegrape Growers' Association or Marketing Board INCLUDING their industry development officers	1
Department of Agriculture or DPI	2
Wine companies (BRL Hardy, Southcorp, De Bortoli etc)	3
Viticultural consultants	4
Winemaker's Federation	5
Universities or research institutes	6
Co-operative Research Centre for Viticulture (CRCV)	7
Winegrape Grower's Council of Australia	8
Farmer's Federation	9
Other growers/ neighbours	10
Local accountants/ business advisors	11
Tax Office	12
Worksafe	
Suppliers (eg, computers, chemical companies, seedlings, etc)	13
None/ nowhere	14
Don't know	15

Q.12 Ideally, **how** do you prefer to receive critical industry information, like things you need to **learn in detail and then apply in your business**. For example, about R&D issues, wine company requirements, legislative changes, operational issues. *Accept Multiples* *Do Not Aid*
Don't accept organisations – we are after how the information is provided

Conferences, seminars, grower presentations	1
Personal visits/ presentations/ one on one training	2
Internet access/ web sites	3
E-mail	4
TV/ video	5
Radio	6
Newsletters/ stand alone articles	7
Features/ articles in magazines/ journals/ papers etc	8
Direct mail/ mail	9
Fax/ facsimile messages	10
Other (specify)	11
(No preference/ don't know)	12

I'd now like to ask you about your **current usage** of information.

Q.13 What sources do you presently use for **general business** information? I mean, keeping up with local and international economies, political issues affecting business, finance, general business trends and forecasts, personnel management, etc? *Note: Get specific names, not "papers" or "magazines" or "consultants"*
Accept Multiples Probe for Other Sources Probe for Clarity

Local Winegrape Growers' Association or Marketing Board INCLUDING their industry development officers	1
Department of Agriculture or DPI	2
Wine companies (BRL Hardy, Southcorp, De Bortoli etc)	3
Viticultural consultants	4
Winemaker's Federation	5
Universities or research institutes	6
Co-operative Research Centre for Viticulture (CRCV)	7
Winegrape Grower's Council of Australia	8
Farmer's Federation	9
Other growers/ neighbours	10
Local accountants/ business advisors or agents	11
Tax Office	12
Worksafe	13
Suppliers (eg, computers, chemical companies, seedlings, etc)	14
Banks	15
Business magazines (BRW, Aust Business, Economist, etc)	16
Newspapers/ Financial Review etc	17
Newsletters/ magazines from industry associations	18
Internet	19
None/ nowhere	20
Don't know	20

Q.14 What sources do you rely on for **viticultural** information?
If necessary, say: "I mean anything from technical data, R&D, through to variety trends, operational and marketing ideas"
Note: Be specific with sources like associations, government, conferences, consultants etc"

Local Winegrape Growers' Association or Marketing Board INCLUDING their industry development officers	1
Department of Agriculture or DPI	2
Wine companies (BRL Hardy, Southcorp, De Bortoli etc)	3
Viticultural consultants	4
Winemaker's Federation	5
Universities or research institutes	6
Co-operative Research Centre for Viticulture (CRCV)	7
Winegrape Grower's Council of Australia	8
Farmer's Federation	9
Other growers/ neighbours	10
Suppliers (eg, computers, chemical companies, seedlings, etc)	11

Wine industry magazines (eg, Grapegower etc)	12
Rural newspapers (eg, The Land)	13
Newsletters/ magazines from industry associations	14
Internet	15
None/ nowhere	16
Don't know	17

Q.15 I'll read out a list of **industry publications** that you may have heard of. As I read them out, please tell me if:

A. You have heard of them
B. You receive them (ONLY ASK FOR EACH HEARD OF)
C. You read them (ONLY ASK FOR EACH RECEIVED)
D. How useful they are to you, being very useful, quite useful, not very useful or not at all useful (ONLY ASK FOR THOSE READ)

Industry Publication	Heard of	Receive	Read	Useful Rating			
				Very	Quite	Not very	Not at all
National Grapegrowers	1	1	1	1	2	3	4
Australian Vignerons	2	2	2	1	2	3	4
Aust. & NZ Grapegrower & Winemaker	3	3	3	1	2	3	4
Wine Industry Journal	4	4	4	1	2	3	4
Australian Viticulture	5	5	5	1	2	3	4
Victorian Viticulture	6	6	6	1	2	3	4
Aust Journal of Grape and Wine Research	7	7	7	1	2	3	4
Wine Industry Journal	8	8	8	1	2	3	4
The Land (NSW)	9	9	9	1	2	3	4
Stock Journal (South Aust)	10	10	10	1	2	3	4
Weekly Times (VIC)	11	11	11	1	2	3	4
Vite Foro (Riverina Winegrape Growers)	12	12	12	1	2	3	4
Grapevine (Murray Valley Winegrape Growers)	13	13	13	1	2	3	4
(None of these)	14						

Q.16 FOR EACH MENTIONED AS BEING VERY USEFUL IN Q15D, ABOVE:
What **makes** (…article..) very useful to you?
Get specific answers Probe for other reasons Don't accept DK responses
Write in for each

Industry Publication	Reason for "Very Useful" Rating
National Grapegrowers	
Australian Vignerons	
Aust. & NZ Grapegrower & Winemaker	
Wine Industry Journal	
Australian Viticulture	
Victorian Viticulture	
Aust Journal of Grape and Wine Research	
Wine Industry Journal	

The Land (NSW)	
Stock Journal (South Aust)	
Weekly Times (VIC)	
Vite Foro (Riverina Winegrape Growers)	
Grapevine (Murray Valley Winegrape Growers)	

Generic Coding List for Q.16:
1 Nothing in particular
2 Provides new information/ new ideas
3 Shows what others are doing/ keep up with competition
4 Up to date/ latest information
5 Practical/ hands-on
6 Factual information/ accurate etc
7 Useful advertising/ sources of new products etc
8 Relevant/ specific to my business
9 Very well presented/ layout/ design etc
10 Short/ brief/ simple articles
11 Don't know

Q17a What **overseas** publications, journals or magazines (if any) do you receive for business or viticultural usage? *Accept Multiples* *Probe for Others*

None 1
Other (specify)______________ 2
Don't know 3

Q17b Are there any **radio and television** programs you regularly listen to that are relevant to your industry? *Accept Multiples*

ABC Landline 1
ABC Country Hour 2
Radio National 3
Other (specify)_____________ 4
None 5

Q.18 I'd like your views on a series of attitude statements about the types and nature of the information you receive about both business and specific grape growing information.

For each, please tell me if you:
- strongly agree
- agree somewhat
- neutral
- disagree somewhat
- strongly disagree.

Attitude	Strong Agree	Agree S/what	Neutral	Disag. S/what	Strong Disag.	D.K.
There is **not** enough information available to help me run the business						
I don't get the **right type** of information I need						
Information provided by most sources is **too detailed** for my needs						
Many sources of information present the **same type** of information						
Different sources provide contradictory or inconsistent information						
I don't get the **time** to read much of the information I receive						
Things aren't bad enough yet for me to read all the information I get						
The information needs to be more relevant to my **local area and climate**						
There is plenty of information available, but its not provided the **right way**						
Technical information like production, nutrition, irrigation, is **more** important than business information like tax, finance, personnel, etc						
More emphasis is needed by the industry to **implement change** rather than provide information about it						
Information provided needs to move from paper based to electronic media						
I am happy with the **amount and quality** of information I receive						

Q.19a Do you use a computer in your business?

Yes 1 (go to Q.20) No 2 (continue)

Q.19b Do you intend to use a computer for business in the next year or so?

Yes/ will 1 No/ will not 2

NOW GO TO Q.25

Q.21 Do you have an Internet connection?

Yes 1 (go to Q.23) No 2 (continue)

Q.22 Do you intend to get an Internet connection in the next year or so?

Yes/ will 1 No/ will not 2

NOW GO TO Q.25

Q.23 Which of the following do you personally use the Internet for?
Read Out Accept Multiples This excludes use by family, kids etc.

Sending and receiving emails	1
Buying supplies for your business	2
Selling over the Internet	3
Accessing grape growing related web sites (e.g., local grower associations)	4
Accessing other business related web sites	5
Accessing non-business web sites (e.g., news, entertainment etc)	6
(None of these)	7

Q.24 Do you prefer information to be provided in hard copy (paper) or electronic form?

Hard copy	1	Depends on type of information	3
Electronic	2	No preference/ don't know	4

Q.25 Have you attended any national or state industry conferences in the last 2 years?

Yes	1	(continue)	No	2	(go to Q.29)

Q.26 What conference/s was that? *Accept Multiples Probe for Others*

National Winegrape Growers Council	1
Aust Dried Fruits Association	2
Winemaker's Federation	3
Other (specify)____________________________	4

Q.27 How useful was it to you? Would that be… *Read Out*

Very useful	1	(continue)
Quite useful	2	(continue)
Of limited use	3	(continue)
Of no use	4	(continue)
(Don't know)	5	(go to Q.29)

Q.28a What are your reasons for saying it was (..answer in Q.27..)?
Accept Multiples Do Not Read Out

Networking/ contacts	1
New ideas/ methods	2
Other (specify)	3
No particular reason/ don't know	4

Q.28b What presentations, topics, issues etc were the most useful?
Do Not Aid Accept Multiples

Tax/ accounting/ finance information	1
Industry trends/ changes/ demands etc	2
New research and development	3
Water management/ irrigation/ conservation	3
Business management/ how to run business better	4
Overseas information/ what's happening overseas	5
Grape quality/ how to achieve quality	6
Vineyard management/ operations	7
Other (specify)	8
None in particular/ don't know	9

Q.29 Have you been to any (other) seminars, conferences etc, in the **last year** which have been particularly useful?

Yes	1	(continue)	No	2	(go to Q.32)

Q.30 What was that seminar or conference? *Accept Multiples Accept Multiples*

Outlook conference (Winemaker's Federation of Australia)	1
Mildura Field Days	2
Wine Industry Expo (Barossa Valley, July 2003)	3
Australian Wine Marketing Conference (Adelaide, 28/29 July)	4
ABARE Regional Outlook Conference	5
Riverland Fields Days	6
Australian Wine Industry Technical Conference (Oct 2001)	7
National Wine Industry Environment Conference and Exhibition	8
Australian Wine Research Institute technical roadshow	9
Other (specify)	10
Can't recall/ don't know	11

Q.31 Over the last 5 years, what **changes** have you made to how you run the business as a **direct result** of any information you have received, whether business or operational? *Accept Multiples Probe for Others*

Computerisation/ introduced new systems	1
New machinery/ equipment/ technology	2
Accounting/ financial management/ costing systems	3
Chemical usage/ hazardous substances/ sprays etc	4
Water usage/ management/ conservation/ irrigation	5
Vine varieties/ clones	6
Plant nutrition/ fertilizer usage	7
Pruning/ canopy management	8
Yields/ lower yields	9
Staff training/ management	10
Other (specify)______________________________	11
None/ Don't know	12

Q.32 What needs do you or your staff have in relation to **learning and skill development**? *Accept Multiples* *Probe for Others*

Computerisation/ introduced new systems	1
New machinery/ equipment/ technology	2
Accounting/ financial management/ costing systems	3
Chemical usage/ hazardous substances/ sprays etc	4
Water usage/ management/ conservation/ irrigation	5
Vine varieties/ clones	6
Plant nutrition/ fertilizer usage	7
Pruning/ canopy management	8
Yields/ lower yields	9
Staff training/ management	10
Other (specify)______________________________	11
None/ Don't know	12

Q.33 The industry conducts research on many aspects of viticulture, through research institutes like CRCV, Universities, R&D Corporations. How important do you think such research and development is to the future of the industry?
Would that be… *Read Out*

Critical	1	(go to Q.35)
Very important	2	(go to Q.35)
Quite important	3	(go to Q.35)
Not very important	4	(continue)
Not at all important	5	(continue)
(Don't know)	6	(go to Q.35)

Q.34 Why do you say it is (…not very/not at all…) important? *Write in*

Q.35 In summary, what do you think are the main needs for your industry to improve future survival and profitability? What has to happen or change?
Do Not Aid *Accept Multiples* *Probe for Others*

More business-like/ more commercial knowledge	1
Accounting/ finance/ costing etc	2
GST/ taxation	3
Better co-operation/ communication in industry/ wine companies etc	4
Quality control/ assurance	5
Specific information from wine companies/ what they want	6
Agreement on quality/ clear quality parameters	7
Increase prices/ tonnage rates for grapes	8
Varietal changes	9
Market development/ overseas marketing	10
Improve work practices/ safety/ OH&S	11
More efficient production/ control costs	12
Water management/ irrigation/ conservation	13
Better production methods/ systems	14
Other (specify)	15
Nothing	16
Don't know	17

Q.36 Do you personally drink wine? *IF YES – Ask how often that would be?*
Read out if Necessary

No/ do not	1
Less than once a month	2
Monthly	3
Fortnightly	4
Weekly	5
Few times a week	6
Most days	7
Every day	8
(Don't know)	9

Now thank the respondent – record the following:

Respondent Name: ____________________________________

Phone Number: ____________________________________

Interviewer Name: ____________________________________

Date: _____/_____/2003

Q.36 Area (record automatically)

Riverland South Australia	1
Sunraysia/ Swan Hill Victoria	2
Riverina/ MIA NSW	3