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16 March 2010

Dr Kate Grenot  
Chair, Rural Research and Development Council  
Department of Agriculture, Fisheries and Forestry  
18 Marcus Clarke Street  
CANBERRA CITY ACT 2601

Dear Kate

The Winemakers Federation of Australia (WFA) is the national peak body for the wine industry with voluntary membership representing more than 95% of the wine produced in Australia. It develops policies and programs for the whole industry on a range of political, social, environmental, trade and technical issues with both a national and international dimension.

Research, development, extension and Innovation are a fundamental to a successful Australian wine sector. The sector has historically been well served with world class research institutions. Although there are too many to list here, they include the Australian Wine Research Institute (AWRI) which was established in 1955 by the Australian wine sector to supply cutting edge oenological research; CSIRO which is the premier viticulture research agency in Australia; State government research agencies and a very vibrant University sector.

The sector's R, D & E is funded by the grape and wine sector through levies and direct investment, by the Australian Government through levy co-investment, by State Governments (via research agencies and infrastructure grants), by the universities and by the CSIRO. The money raised by levy varies each year, based on the number of tonnes crushed. For 2007-08 the estimated annual investment in recurrent wine R, D & E from these sources was \$59m with the estimated capital investment in R, D & E of \$25m for that year.

The GWRDC is a critical plank in the R&D framework for the wine sector. Not only does it determines which R, D & E projects will be funded based on the priorities of the sector and of the Australian Government (through its Rural, Research and Development program) it is a key coordinating body for research. It plans and funds collective research and development programs, and then facilitates the dissemination, adoption and commercialisation of the results throughout the sector. It does not undertake research and development itself but purchases it from existing providers on behalf of the Australian grape and wine sector.

Additional research is funded by private companies, particularly wine companies and supplier companies; some of the sector research funded by suppliers and wine companies is conducted overseas; government innovation; major research bodies such as the University sector and CSIRO and through regional association levies; Australian Wine and Brandy Corporation (AWBC) levies and the Phylloxera and Grape Industry Board of South Australia.

The Wine Sector is taking an active role in determining the research directions to maximize the short, medium and long term objectives for the sector. Innovation driving sustainable success – a Research Prospectus for the Australian Grape and Wine Sector in December 2009. The Prospectus has been developed to inform investment decisions about the research, development and extension that are needed for the sector for 2010-2012.

The research themes identified by the Strategic Directions Group were influenced by the Australian Government Rural research and development priorities, the Innovation Policy of the Winemakers' Federation of Australia (WFA) and the Wine Grape Growers' Australia (WGGA) and obviously colored by the current state of the sector. The Wine Restructuring Action Agenda announced in November 2009 outlines a plan to address the difficult position the sector now finds itself in. Robust and practical research is needed to assist the sector manage in this new era and the areas identified within the prospectus will enable the sector to rebuild itself and prosper in the new environment.

The Primary Industries Ministerial Council comprising the Australian Government and State Government ministers with responsibilities for primary industries has called for the development of a national strategic framework for primary industries R, D & E. The aim of this initiative is to ensure Australia's research, development and extension capacities are aligned nationally with future sector needs, to initiate collaboration that strengthens Australia's position in international markets and to ensure that R, D & E delivery is both more efficient and effective. These strategic frameworks are being developed for each of Australia's major primary industries and for cross-sectorial collaboration.

The driving forces behind this initiative have been a decision made by State jurisdictions that they will not directly invest as much in research and extension as previously may have been the case and that they needed to invest in sectors which offer maximum returns to their jurisdictions.

The other aspect of the national RD&E initiative is that the Australian Government has been keen for agricultural industries to collaborate on research projects so that limited research dollars can have maximum effect in rural industries. Many of the issues we face in the wine sector are shared in other industries: understanding and serving international consumers, managing our environment in a responsible manner for future generations, knowledge about the value chain and consumer preferences, and adding value wherever possible to ensure a positive farm gate return. Meaningful collaboration would be a sensible and effective approach in these areas. Cross-sectorial collaboration in areas such as climate change, water usage and bio-security are good examples of where synergies can be made.

The development of the Wine Sector Strategy has been led by the GWRDC, WFA and Primary Industries and Resources South Australia (PIRSA) with support from CSIRO and the State Governments of New South Wales and Victoria.

This structure is not intended to be another piece of bureaucratic nonsense that simply adds to the meeting time of industry, researchers and government. It is meant to allow a better flow of communication between the industry who decide the priority areas of research and use the research in their business, funding bodies including the GWRDC, State and Federal Agencies, CSIRO universities etc and research and extension providers including the AWRI, University sector and CSIRO.

WFA and WGA have a keen interest in making research more targeted and more efficient. To provide advice to the Boards of the respective wine sector organizations, the Innovation Policy Committee (IPC) chaired by Phillip Laffer was established a couple of years ago. The IPC is the key point of contact between the priority setting process undertaken by the Strategic Direction Group and the coordination process overseen by the National Research Coordination Forum which both report through it. The IPC would be delighted if you could attend our next meeting to be held in Sydney on 13 April to expand on our views on rural R&D.

Please find attached a detailed response to the questions posed by the Rural Research and Development council attached. I would be glad to elaborate on any of the issues raised in the submission or on any additional issues if desired. Should you wish further information, please contact Tony Battaglone on 0413014807 or by email on [tony@wfa.org.au](mailto:tony@wfa.org.au).

Yours sincerely

A handwritten signature in black ink, appearing to read 'Tony Battaglone', with a long horizontal flourish extending to the right.

Tony Battaglone  
General Manager  
Strategy & International Affairs

## **1. The Rural R&D System**

### **What does the system do well?**

The current R&D system is designed to overcome the 'market failure' that is inherent in a diverse sector with a large number of small businesses and diverse operations and strategies. The levy based system that funds a large proportion (but by no means the entire amount) of R&D ensures that all the potential beneficiaries of R&D also pay. The requirement for the RDCs to incorporate government national and rural research priorities ensure that it is not just farmers (in our case grape growers and winemakers) that benefit but the community as a whole. There is no doubt that a vibrant and prosperous agricultural sector contributes immensely to welfare in rural and regional Australia.

Within the wine sector the R&D system has been undergoing considerable change over the past decade.

### **What does it not do well?**

Rural R&D falls across many government portfolios at the Australian government level, State jurisdictions as well as various research institutions and funding agencies. This has led to a lack of coordination in many situations. In addition, the reliance on competitive funding grants has led to excessive competition between research agencies and it could be argued into increasing diversification of skill sets in order to be able to target additional funding pools. Less attractive (in terms of availability of research funding) areas of research have suffered a loss of available skills and capability as a result.

There is also a chronic underfunding of rural research in Australia.

An important function of the WFA and WGGGA, as the pre-eminent bodies of the grape and wine industry, is to direct the path of innovation as part of the wine industry's overall Future Directions.

As the key advisory body to the wine industry on innovation, the Innovation Policy Committee (IPC) aims to apply more efficiently existing research funds to industry innovation needs and to both expand the quantum of funds and the range and diversity of research and extension providers.

In a major way, industries have grown and prospered through innovation and strong leadership. Industry has used two processes to drive this innovation – through the provision of new knowledge from research and through industry led and directed activity. Exploring the 'new territory' of human knowledge has been the classic role of Research; exploiting this new knowledge has been the classic role of business entrepreneurs. Specialised cultures have grown up around each of these areas, each with their specialised skills.

In the R, D, E & I (Research, Development, Extension & Implementation) model the R and E is driven through largely one culture and the D and I largely through another.

The Australian grape and wine industry has a long history of successful innovation by which it produces a range of wines of interest to the global consumer, has become internationally competitive and supports a significant number of regional communities.

Innovation is driven by the companies that make up the Australian wine industry, either individually or collaboratively, and uses information from a wide variety of sources, such as in-house research and technical activity, publicly funded research, extension and education, suppliers to the industry, private companies and consulting organisations, and its own research organisation, The Australian Wine Research Institute (AWRI). The Australian wine industry supports the established role of the AWRI as a world class research institution.

There is a strong need for improved collaborative relationships between research providers, to deliver research, education and extension across the whole wine production and marketing chain, including its social and economic impacts.

Since 1986 the Australian grape and wine industry has formed a partnership with the Australian Government by which levy funds collected from industry on a per tonne basis are matched by Government up to 0.5% gross value of production to invest in research and extension activities.

These levy funds have been invested in research and extension projects undertaken by the AWRI, by publicly funded organisations, such as the CSIRO, State Departments of Agriculture/Primary Industries, universities, and by organizations that are publicly funded. The investment of levy funds is managed by the Grape and Wine Research and Development Corporation (GWRDC), an Australian Government statutory organisation.

In recent times the operating environment for the Australian grape and wine industry has changed with a prolonged drought, concerns over the global financial crisis, the future impacts of climate change, increased competition in global markets, customer aggregation, and a highly variable currency.

Such changes drive the need for intensified innovation by the industry. As a result, all research providers should review their forward plans and ensure adequate flexibility to accommodate the changing environment.

The Innovation Policy Committee, with representation from the Winemakers' Federation of Australia and Wine Grape Growers' Australia, recommends a set of industry innovation priorities through the work of the Strategic Directions Group that takes into account the needs and aspirations of the mix of companies within the industry.

Individual members of the Australian wine industry, suppliers to the industry, private companies and consulting organisations are responsible for their innovation activities; however, the Australian grape and wine industry seeks to maximise the return from the efficient investment of levy funds and funds from other sources in research, extension and pre-competitive technical activities. To this end the IPC recommended the implementation of the following policies which were adopted by WFA and WGGA in 2009. In effect the industry:

- encourages a range of institutions, public and private, Australian and international, to compete for levy funds;
- encourages these institutions to seek co-investment from sources other than that of the levy funds, provided that the priorities and interests of the industry are met;

- encourages institutions to develop an area/s of expertise, particularly those relying on levy funds for core activities, to reduce duplication and to increase efficient use of scarce levy funds;
- encourages institutions to collaborate, e.g. utilising the Wine Innovation Cluster on the Waite Campus of The University of Adelaide, to integrate research across the entire supply/value chain from the environment to the consumer;
- recommends the investment of up to 30% of total GWRDC revenue in knowledge generation activities in areas of long term interest to the industry;
- supports, wherever possible, a strong nexus between research and education activities to maintain the intellectual capacity of the industry;
- supports targeted extension activities to ensure that research information is made available quickly and efficiently to levy payers;
- supports pre-competitive technical collaborative activities against industry priorities by organisations other than those publicly funded;
- recommends the allocation of up to 30% of total GWRDC revenue to entities, such as the AWRI and the National Wine and Grape Industry Centre (NWGIC), for core activities; and
- supports the industry's own research organisation, the AWRI, with sufficient funds to undertake core activities and to harness to maximum extent the resources of all wine industry supportive organisations, including CSIRO, the universities and Departments of Agriculture/Primary Industries, by collaborative and non-duplicative endeavor

### **What does it need to do better?**

Many of these questions have been addressed in the above answer.

The Australian wine sector has recognized that it needs to provide more funding for collaborative research and that there are considerable benefits in cross-sectorial research, international collaborations and industry driven research.

In our view, many of our research institutions and collaborations are overly concerned with intellectual property and the ability to make money from commercial developments arising from research. The Winemakers' Federation of Australia undertook a comprehensive review of Research & Development in 2003. The Review focused on existing R&D entities, existing and potential collaboration and the integration of these entities. Priority setting, research uptake and infrastructure, and Intellectual Property (IP) were identified as the key issues.

Commercialisation of IP is not the key driver for wine industry research. From the industry perspective, the critical issue surrounding R&D is to make sure that any IP policy does not prevent the timely dissemination of research results. It is critical that potential IP be identified at the beginning of the research project and that the owners of such IP also are identified.

### **Recommended Intellectual Property Principles**

- 1) The protection and commercial exploitation of IP from publicly<sup>1</sup> funded research will only be pursued if there is a net benefit to the Australian**

<sup>1</sup> Publicly funded research is defined as research funding obtained partially or wholly from government sources or industry levy funds. It does not refer to research funded solely through private investment.

- grape and wine industry and a partner willing to take the risk and fund commercialization is identified.
- 2) Any intellectual property management must give priority to the timely dissemination of research results and uptake of research by the Australian grape and wine industry.
  - 3) Ownership of IP should be assigned by an appropriate contractual arrangement between the research funders and the providers, in association with a commercialisation partner.
  - 4) The pre-condition for international participation in publicly funded research is that all research results will be made available as a priority to the Australian industry. IP ownership will be on the basis of the negotiated contractual arrangement between the partners.
  - 5) Where benefits accrue from the commercialisation of intellectual property developed through publicly funded research, these should be returned for further industry R&D

Collaborative activities is also an area that need to be improved. Although WFA has adopted a set of policy principles for international collaboration, to date it has not seen it to be necessary to adopt overarching principles. The key issue that the wine sector needs to address is that when industry has a significant problem or opportunity, such as variability, how do we go about ensuring that the appropriate resources are brought together to tackle the problem or opportunity. The current institutional framework still does not provide a clear framework to do this.

Broadly speaking the same principles that apply to international collaboration also apply within Australia and between Australian research institutions. Principally, collaboration should only be undertaken if there is a net benefit to Australian grape and wine industry and/or the Australian people. Collaboration shouldn't be undertaken if it is only beneficial to research institutions and if the benefits do not outweigh the transaction costs.

It is acknowledged that *ex ante* it is difficult to measure the potential costs and benefits of collaboration. However, if researchers consider collaboration could lead to future gains and they can (or even if they can't) get funding then such collaboration could be considered. Collaboration may not lead to immediate gains, but the development of strategic partnerships may have long term benefits

#### What is collaboration?

Proponents of research collaboration include the following benefits:

- Reduced unnecessary duplication of research efforts;
- Enhanced economies of scale and scope in research teams;
- An improved ability to exploit synergies between different capabilities, types of instrumentation and natural circumstances;
- Improved knowledge transfer;
- Enhanced skills development and recruitment;
- More effective work addressing challenges; and
- Facilitating access to research infrastructure.

Given the limited (and in real terms diminishing) funds available for wine sector research in Australia, domestic and international collaboration is particularly important because it allows participation in and access to activities from which scientific and technological innovation largely derive, especially where the cost of major research facilities and associated research projects are prohibitive when spread across Australia's research institutions.

In addition, to permit the most effective use of research collaboration being transferred into commercial application it requires the integration of the wine sector into the process.

Unfortunately most of the definitions of collaboration and measurement indices revolve around publications data or research projects. These measurement indices do not provide a good measurement of effective or productive collaboration.

#### Increase the capability to use knowledge generated elsewhere

A frequently quoted statistic is that Australia generates only 2 per cent of the world's knowledge, so must seek the remaining 98 per cent overseas. Many countries, particularly in Europe, are making major investments to strengthen their access to international knowledge, through a variety of programs, such as: enabling students to move between universities in many countries during their degree studies (the Barcelona Agreement), supporting students to study abroad for a semester or year, international exchange programs, funding for researchers to participate in international research programs and funding for the interchange of personnel between Research Institutions and industry. The same level of investment for similar programs does not exist in Australia.

This is one area where Australian wine researchers (and perhaps more significantly Australian wine innovators outside the institutionalized research community) have significant opportunities to establish an "Innovation Clusters" in Australia that link the knowledge base with appropriate organizations. This process will also help to develop collaborations that will be of long-term benefit to the process of innovation.

#### **Is the system adapting to current challenges at a rate that is likely to address them?**

Yes. A good example is the National RD&E model, but there is still much work to be done to integrate the cross –sectorial activities into the structure. However, a risk to the system is that in diverse and geographically separate sectors, such as the wine sector, when they are facing significant challenges due to oversupply, declining profitability, then private investment in R&D may fall. In turn, this will trigger a decline in investment by the research bodies who seek more profitable (read more available research funds). Research capability needs to be maintained in sectors that will have long term bearing on Australia's future

#### **If not, what policy adjustments could accelerate change without increasing risk**

The Australian government is a key funder of research through several institutions and via the GWRDC. In recent years, the government has taken an approach that collaboration on research projects by different institutions is desirable, and this has directly or indirectly influenced funding decisions by government agencies and consequently the form of applications by research providers.

While collaboration can bring about significant advantages through bringing together of top class researchers and multi-disciplinary research, collaboration for collaboration's sake can also build in mediocrity and increase transaction costs that can slow down research and even reduce its effectiveness. What is necessary is to develop guidelines on when to collaborate and when not to.

One of the advantages of collaboration is that individual institutions are not required to develop their own expertise and capability across all research areas, but can concentrate in their particular areas of strength. This becomes more akin to a commercial model where particular skills are brought in as required. Long term collaborative agreements and relationships as per the WIC can assist this process.

The government could invest more into long term research capability.

## 2. Your perspective

### **As investors, what principles do you use to balance short-term claims with long-term requirements?**

The Wine Sector released **Innovation driving sustainable success – a Research Prospectus for the Australian Grape and Wine Sector** in December 2009. The Prospectus has been developed to inform investment decisions about the research, development and extension that are needed for the sector for 2010-2012.

This Prospectus is the second prepared by the Strategic Directions Group (SDG), a group of practitioners with expertise through the supply chain, it has sought to identify knowledge that needs to be generated, packaged up for use and then disseminated for commercial adoption.

The research themes identified by the Strategic Directions Group were influenced by the Australian Government Rural research and development priorities, the Innovation Policy of the Winemakers' Federation of Australia (WFA) and the Wine Grape Growers' Australia (WGGA) and obviously colored by the current state of the sector. The Wine Restructuring Action Agenda announced in November 2009 outlines a plan to address the difficult position the sector now finds itself in. Robust and practical research is needed to assist the sector manage in this new era and the areas identified within the prospectus will enable the sector to rebuild itself and prosper in the new environment.

### **Background**

There were a couple of overarching priority issues that were indicated by the SDG. These issues relate to the R&D process rather than priority areas for research and don not necessarily come out strongly in the prospectus.

First, the SDG was strongly supportive of the National RD&E process. It identified that there was a need to maintain an assessment of research capability and a need to maintain core research capacity in the areas of viticulture and oenology.

Second, it was recognized that the current commercial conditions surrounding the sector could not be solved by a quick 'research' fix and that the strategic nature of research needed to be maintained or even expanded. Resources should be allocated to fund research which has no immediate application, but has the potential to improve the sector's knowledge base.

Third, it was emphasized that more resources need to be allocated to transfer research results into innovation and that the GWRDC had a role in this area. This is an area that the WFA Innovation Policy Committee has made a high priority for 2010 with the application of the WFA Innovation Policy.

Fourth, the nature of the Australian wine sector with its exposure to a narrow number of key markets means that research activity will need to be undertaken to develop new markets (be they in existing markets but with new products and/or target demographics) or new and emerging markets. This will require greater integration with the AWBC and collaborative market development activity.

Fifth, research that targets cost reductions and efficiency in production were identified as major areas of potential improvement. It was recognized that some of this research may fall outside the current capability of providers and alternative providers and cross-industry collaboration may be advantageous.

Finally, a better understanding of vine physiology, more emphasis on biosecurity and exposure to a wide variety of rootstocks and vine varieties of recognized provenance and health status was identified as essential to deal with climate change.

### **Specific areas of research identified by the SDG**

Four themes have been identified that will enable the sector to be competitive, profitable and resilient. They are:

- Customer focus
- Integrated grape growing and wine making
- Environmental sustainability, and
- Sector development.

Within each theme there are a number of research opportunities that outline the knowledge required to move the sector forward. Some of these opportunities are already being addressed but work must continue on them. Specific attention will be paid to dissemination and extension so that practitioners can use the outcomes of this knowledge quickly.

<b>Themes:</b>	<b>Research opportunities:</b>
Customer focus ... what drives our customers	<ul style="list-style-type: none"> <li>• Identify elements of the value chain that add value to the consumer and that can generate high returns</li> <li>• Understand what influences consumer choices of beverages</li> <li>• Identify market opportunities and develop products in price segments with sustainable margins to satisfy consumer preferences</li> <li>• Develop innovative approaches to inform consumers about wine</li> <li>• Develop innovative approaches to distribution and packaging</li> <li>• Develop alternative grape products</li> </ul>

Integrated grape growing and wine making	<ul style="list-style-type: none"> <li>• Understand the attributes of grapes and wine of relevance to consumers</li> <li>• Broaden the base of genetic material</li> <li>• Understand environmental impacts and management practices on vineyards and wineries</li> <li>• Identify the distinctive characteristics that define regional wine styles</li> <li>• Improve understanding of handling processes on wine potential</li> <li>• Improve fermentation and winery processes to enhance wine quality and efficiency</li> <li>• Optimise the life of packaged wine</li> </ul>
Environmental sustainability	<ul style="list-style-type: none"> <li>• Support environmental best practice</li> <li>• Adapt viticultural practices to mitigate the impact of climate change</li> <li>• Continually improve water use</li> <li>• Improve winemaking efficiency by reducing waste, energy and manual intervention</li> </ul>
Sector development	<ul style="list-style-type: none"> <li>• Develop a governance structure and sector strategies for capacity building, efficient resource use, knowledge sharing and consistent priorities</li> <li>• Provide dedicated extension teams to facilitate uptake and commercial adoption of research</li> <li>• Attract, educate, develop and retain people to lead the industry</li> </ul>

### **Customer focus ... what drives our customers**

Value chain analysis will provide information about consumer preferences, distribution and resource use so the sector can access more profitable market segments including those at higher price points.

Information dissemination to all suppliers and participants in the value chain will allow them to match their wine specifications, attributes and processes to meet consumer preferences and new market opportunities.

Australian winemakers need improved market intelligence and behavioral research, through greater direct engagement with consumers, so they can produce wine that consumers will buy.

## **Integrated grape growing and wine making**

As Australia's climate and environmental conditions change, a broader genetic base of planting material is required.

Knowledge of gene technology to better manage vineyards, planting materials, and fermentation, which will further facilitate responses to threats, such as climate change, and will enable adaptation of wine styles to better meet customer preferences.

Improve wine making flexibility through the production of different wine styles from a single grape variety based on vineyard practices and microbiology processes.

Knowledge of materials, additives and processes will reduce viticulture and wine making interventions and will increase efficiency and quality

## **Environmental sustainability**

Water use efficiency, soil health, preparedness for climate variability and managing greenhouse gas emissions are important for our sector. Processes for natural resource management must be continually improved to ensure all elements of the value chain are environmentally sustainable.

Biodiversity and ecosystems, life cycle studies of energy, packaging materials and waste streams, will be critical knowledge for the sector's environmental reputation.

## **Sector development**

The sector is complex and has several national bodies with different objectives and membership. This creates confusion and potential duplication. The opportunity exists to determine the role, responsibility and key stakeholders of each group to ensure that the sector is efficient, focused, consistent and effective in its work on behalf of its members. This needs to integrate the R&D sector.

Research and development in agribusiness must be disseminated in an effective way so that its benefits can be realised. Dedicated teams focusing on the importance and relevance of current research for their region will enable timely and effective dissemination to practitioners and commercial adoption. The missing link is then research outputs to innovation and innovation to drive research.

**Do these differ from the principles that balance commercial interests with public good objectives?**

**Where do 'big break throughs' come from in your area of interest?**

**What potential do you see for 'step ups' in system performance and what are the necessary pre-conditions?**

**What are the implications of these papers for your industry or area of rural R&D interest?**

The papers talk a lot about productivity gains, but in the most simplistic terms. Productivity is about returns to the dollar, including value added and is not necessarily measured in productive capacity. There is also a social dimension to

productivity which includes the support of rural and regional Australian communities which needs to be considered.

**Are there any models in your industry that have been particularly effective and are suited to broader application?**

Priority setting: The Strategic Directions Group

Priority setting was identified as a key policy issue in a major review of R&D undertaken by WFA in 2004. A key issue was seen as the need to improve the approach of setting research priorities for the wine industry and to ensure that the industry articulated R&D priorities are translated into research applications to a range of investing organisations including, but not limited to, the Grape and Wine Research and Development Corporation (GWRDC).

Central to the policy is a proposal that wider engagement of industry and ownership by industry is required. The policy proposes that a single priority setting body undertake the role of all industry priority setting at the national level, thus avoiding duplication and potential misalignment of priorities. A key element of this process is to engage the industry at Regional, State and National levels to maximize the opportunity for industry input into the priority setting process and ensure that priorities from the full diversity of the Australian wine and grape industry are represented.

In addition, it was envisaged that the clear identification of priorities could attract additional private sector investment on issues that lie outside that of the current funding base provided by the traditional investment providers. The attraction of new investment into grape and wine R&D is a major objective of the prospectus. The SDG was established in 2004, following nominations of potential members by sector bodies and other interested groups with the skills and experience needed to provide advice on the future research needs of the sector. Attention was also given to the geographic spread of members to ensure that the major wine-producing regions were represented. While SDG members do not represent their nominating agencies they are required to consult with their organisations on the contents of the Prospectus.

The SDG charged with preparing the second Prospectus met for the first time in October 2008 and concluded its work on the Prospectus in November 2009. The four main tasks of the group have been to:

- 1 Release each three years a Prospectus of sector priorities for additional research and development, to be updated annually
- 2 To provide specific advice to WFA, WGGA and GWRDC and to other sector bodies, as required, for the development of their own planning processes
- 3 To broadly assess progress and new opportunities for research and development in topic areas identified as being of high priority for the sector, and to consider the relative priority of potential new or emerging research and development issues
- 4 To engage the grape and wine industries at regional, state and national levels to maximize the opportunities for sector input into the priority identification process.

Wine Industry Cluster

The Australian wine sector has already set up a number of collaborative ventures. The launch of the Wine Innovation Cluster (WIC) and the opening of its new \$28 million building at the Waite Campus of the University of Adelaide in November 2008 was a prime example of the establishment of a physical collaborative venture,

although there are many examples of collaborative activities being undertaken by researchers from different institutions.

The WIC brings together the resources of The Australian Wine Research Institute (AWRI), CSIRO Plant Industry, South Australian Research and Development Institute (SARDI) and The University of Adelaide. Benefits include sharing of facilities, and the bringing together of people with a wide range of skills to provide a capability to carry out research and deliver information to the wine industry across the whole wine value chain, from grape to wine to consumer. It may be appropriate that the WIC look at collaborative opportunities across areas of the value chain where they do not have expertise.

### **National RD & E Framework**

The Primary Industries Ministerial Council comprising the Australian Government and State Government ministers with responsibilities for primary industries has called for the development of a national strategic framework for primary industries RD & E. The aim of this initiative is to ensure Australia's research, development and extension capacities are aligned nationally with future sector needs, to initiate collaboration that strengthens Australia's position in international markets and to ensure that RD & E delivery is both more efficient and effective.

The development of the Wine Sector Strategy has been led by the GWRDC, WFA and Primary Industries and Resources South Australia (PIRSA) with support from CSIRO and the State Governments of New South Wales and Victoria.

The strategy has been developed by key stakeholders from the wine sector, research organizations, universities and government agencies. The centrepiece of the strategy is a proposed structure and system that includes:

- A National Wine Research Network
- A National Wine Extension and Innovation Network
- A National Research Coordination Forum.

The National Wine Research Network will be a forum for wine research and development providers to share research and information, to encourage consultation, coordination and communication amongst research and development providers and to be a point of contact for sector bodies.

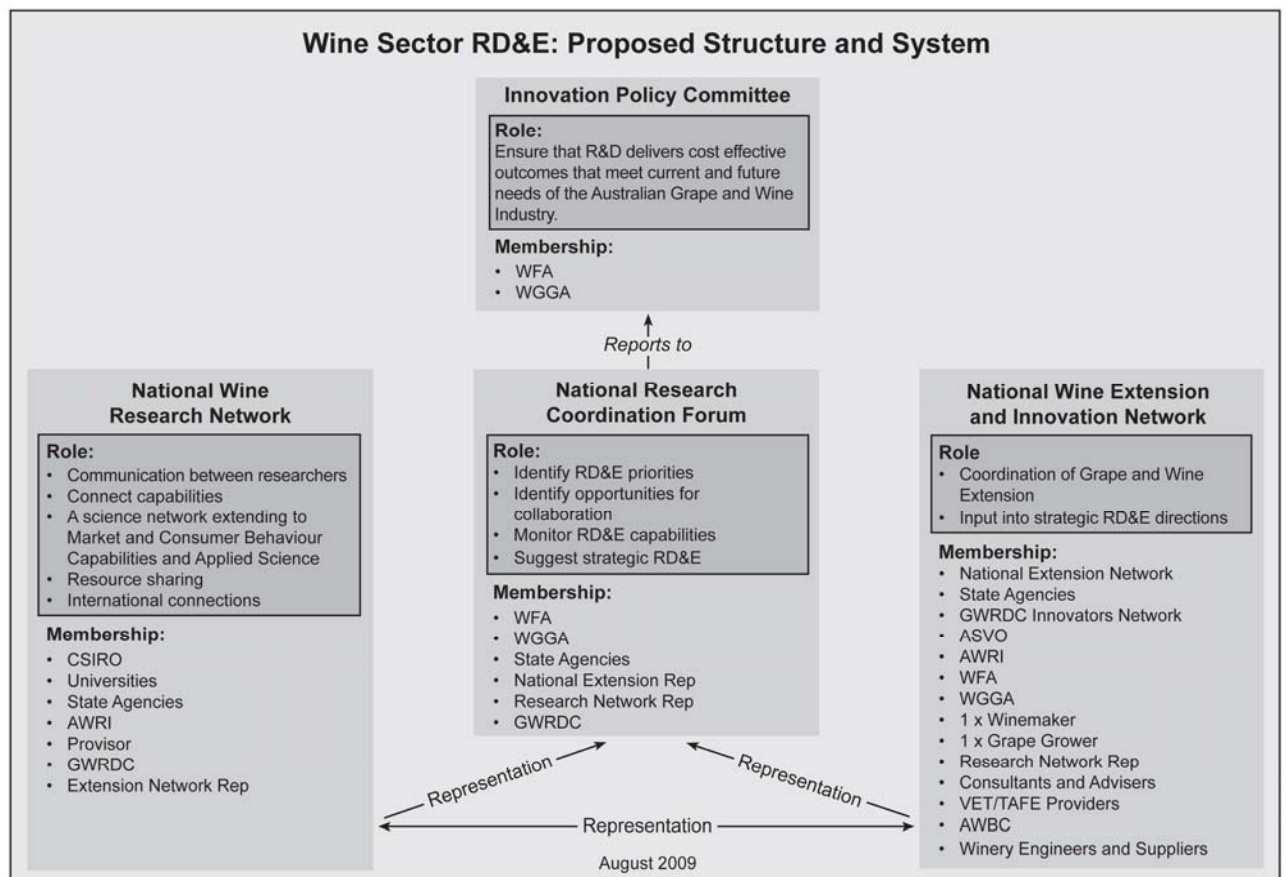
The National Wine Extension and Innovation Network will coordinate wine sector extension and innovation services to ensure those services are delivered in the most timely, client-focused and cost effective manner.

The National Research Coordination Forum will lead, coordinate and link the parts of the system. It will provide a regular high-level forum of wine sector leaders, researchers, funders, government agencies, regions and extension service providers to ensure that wine RD & E is responsive to sector requirements and is conducted and delivered in the most efficient and effective manner.

The key outcomes, once the strategy is fully implemented, are an Australian wine sector development and extension system that:

- Has clear, market-driven priorities that cover the whole of the value chain and are updated regularly
- Comprehensively meets the needs of the sector
- Is integrated, independent and specialised, with large critical mass and less fragmentation across the nation
- Funds research on the basis of programs requiring collaboration rather than on the basis of projects
- Has a high level of collaboration and exploitation of synergies through strategic partnerships and sharing of expertise and research infrastructure
- Is efficient and effective including in its use of infrastructure
- Retains and builds capability in areas strategically important to participants
- Has national centres of research excellence supported by well-linked development and extension systems so that wine sector research developed in one location will be available nationally for the whole sector
- Has a high level of sector access to international and Australian RD & E capabilities with faster and more effective 'concept to application'.

The proposed structure and system is shown diagrammatically in the chart below.



This structure has been adopted by the States and Australian governments and endorsed by the wine sector. Resource allocation issues will be addressed by the National Research Coordination Forum, while the National Wine Research Network and National Wine Extension and Innovation Network are well placed to identify collaborative opportunities.

## **1. Evaluation**

### **On what basis do you assess adequacy of investment?**

It is difficult to measure the adequacy of investment empirically. We believe there is an underinvestment in rural R&D in particular given the importance of the sector in dollar terms and its social value to the community.

### **How do you think a 'national investment plan' should be measured and monitored?**

### **How do we ensure that major cross-sectoral and cross-portfolio issues are addressed?**

I would endorse the current activities under the national strategic framework for primary industries RD & E and support the efforts for our sector of the GWRDC in seeking collaborative activities.

1. International

### **What opportunities and threats do you see for Australia as a result of international drivers**

There are clearly many opportunities for international collaboration in the R&D sector. Much of our research is pre-competitive and has implications for the wine sector internationally. As mentioned previously technology transfer occurs freely within our sector and attempts to lock up IP are counter-productive.

The RDC model gives us a competitive research advantage and will encourage the attraction of quality international researchers. This means that we have the opportunity to encourage research in priority areas for Australia.

### **How can the flow of foreign knowledge be encouraged and enhanced for the benefit of Australian industry and the community?**

### **What are the implications for the structure and composition of Australia's 'receptive' capacity?**

### **In developed countries there is a trend towards greater private investment in rural R&D. To what extent is this likely to be a trend in Australia?**

This is difficult to answer definitively. One of the strong elements of private investment in Rural R&D in Australia is due to the RDC model. This is extremely effective in obtaining private investment funds and maximizing pre-competitive

research. It is the envy of many of our competitors in other wine producing countries who are trying to copy our model.

However, I believe that we will need to try and increase private R&D funding to maintain our competitiveness

## **2. Education**

**To what extent is there a shortage of skilled researchers and other professionals to support the agriculture, fisheries and forestry sector?**

**How is this impacting on the sector's productivity?**

**What should be done to address this?**

**What best practice models for extension and knowledge transfer exist?**

I am not sure if it best-practice, but the GWRDC has recently undertaken a major revision of its extension activities. In our view this is a major step forward and working extremely effectively for our sector.

I would also draw your attention to the seafood industry where they have created a service delivery model known as Seafood Services Australia which has the potential to be extremely effective in this area. This may be applicable for other sectors.

What is clear is that there is no single model that is 'best-practice' across all sectors.

**How are they evaluated?**

Seafood Services Australia (SSA) was established in 2001 as a not-for-profit company limited by guarantee. Its goal is to enhance the profitability, international competitiveness, sustainability and resilience of the Australian seafood industry. It works with the seafood industry and government to help improve industry practise and to capitalise on opportunities that would not otherwise be realised. SSA describes itself as the industry development arm of the FRDC and the Australian seafood industry

... an investment in infrastructure aimed at helping the Australian seafood industry to capitalise on opportunities for sustainable development that would not otherwise be realised.

SSA has received funding from the FRDC to deliver the project 2007-203 'SSA: The Next Generation (2007-2012)'. An independent mid-term review of SSA's performance against its contract was a condition of receiving funds.

**Is diversity, including community (indigenous and cultural) and industry diversity adequately provided for in the current model?**

There is certainly no evidence of any discrimination.