



Industry Perspectives Report

What Future Primary Industries

RDA Murraylands and Riverland

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Introduction

RDA Murraylands and Riverland (RDA M&R) is developing a resource that sets out the current status and future development of primary industries across the Murraylands and Riverland region. The first stage of this suite of work was a draft report *Agricultural Production Overview* authored by Tamara Rohrlach (Corporate Services Manager). This Overview set out a baseline overview of the region's major commodities and a comparison of how regional production compares with internationally, national and to other regions in our state.

The second part of the *What Future Primary Industries* project is research with 38 industry leaders across a range of commodity producers and processors. These interviews, conducted in June 2014 by KPPM Strategy provide commentary on the future of each sector by people knowledgeable in their industry.

The *Overview* and *Industry Leader Research* documents will be used as a basis for further discussion to determine the sectors with potential for development.

The interviews were conducted by Dr Kristine Peters and Diane Rawley of KPPM Strategy (interview instrument is shown in the Appendix), and comments were recorded verbatim. Because we were encouraging people to be honest and open in their responses, we have maintained respondent anonymity.

This report is presented in two parts: Part One summarises the findings by sector (in the order set out in the *Overview*), and Part Two provides cross-sector trends.

We would like to express our thanks to the people who so kindly gave their time to discuss their industry, their own business and their passion for the region. With leaders of this calibre, the Murraylands and Riverland region is assured a good future.

This report presents comments verbatim. We have intentionally included contentious comments as presented to us, so that readers can appreciate the range of issues facing the primary industries sector in the region.

These statements do not necessarily reflect the views of the authors (KPPM Strategy) or RDA Murraylands & Riverland.

**Part One:
Findings by Sector**

Grains Industry

Introduction

Seven leaders were interviewed in the Grains sector, covering production, processing and advisory services. Of these seven responses, five were producers (of which three were industry advocates), one was a processor and distributor and one was an industry adviser. This section of the report starts with a summary of findings, and then presents the detailed comments.

Summary of findings

TRADE SITUATION

- This sector is predominantly export focused.
- Competition is seen as healthy and positive.
- World population growth, and particularly demand from Asia, will create demand.
- Quality Australian (South Australian and regional) product identity is important.

ACCESS TO CAPITAL

- Access to capital is essential to support sector development, and larger farms (or collaborative ownership models) are needed to achieve scale for profitability and capital investment.
- With a dearth of local investment, overseas investors are an important part of the industry finance mix, provided that they understand that farming doesn't necessarily generate a good return every year.
- Farmers are borrowing proportionally more of the cost of ever more expensive machinery, and need to acquire more land to make the business profitable. Farm capital is typically in the range of \$500,000 to \$1,000,000 which is not the focus of capital markets.

WATER USE, CLIMATE CHANGE AND R&D

- Farmers who use agronomists are seen to be more successful than those who don't.
- The sector is focused on water use efficiency, and continually developing better water management methods, but R&D in this area needs to be farmer driven.
- Research into new varieties is needed. Growers need encouraged to try new crops and varieties (especially frost tolerant).
- GM is supported, particularly for the development of frost tolerant varieties.
- RD&E is shifting from government to the private sector, which has benefits and drawbacks - not least of which is the difficulty in determining the worth of information provided by competing private sector advisers and manufacturers, and the loss of independent 'blue sky' R&D that is not commercially viable for private sector researchers and advisers.

- Governments in other countries are investing significantly in agricultural RD&E and the lack of Australian government investment is making us less competitive.

LEADERSHIP

- Farmer leadership programs and professional networks are essential to the development, direction and dissemination of RD&E.
- There are good professional development groups (e.g. Agriculture Excellence Alliance) but they are not operating in all areas. While it is important to build the leadership skills of young farmers, their life stage is more focused on managing the farm and raising families, so leadership programs should also target older people who have the experience and time to be involved.

TECHNOLOGY

- Precision production technology is enabling better yields and cost management.
- Climate change adaptation will require cloud-based technologies to provide real time intelligence for decision-making, reliable mobile and internet coverage is not available in all areas to support these technologies.

TRANSPORT AND LOGISTICS

- Storage and export pathways need to become more market oriented, with more efficient transport logistics (vehicle utilisation and timing), local supply chains and local value-add opportunities.
- Duplication of the Dukes Highway is essential for safety and transport efficiency (allowing for the extension of the Road Train network).
- B-Double access to local government roads is restrictive and creates costs that are not borne by competitor regions.
- Better roads and bridges are needed to accommodate bigger trucks and more efficient movement from production to port.
- Improved railway transport would reduce freight costs.

INFRASTRUCTURE

- The high cost and poor availability of power is restricting production and processing capacity.
- Social infrastructure (schools, hospitals etc.) are generally adequate, although it is difficult to attract and retain doctors.

SKILLED LABOUR

- The dryland farming sector is constrained by lack of skilled workers, which is driving investment in mechanised cropping systems.
- Professionally-operated farm businesses are 'employers of choice' and have less difficulty attracting good management and staff.

- In general, farming needs to improve its image and be more professional - with training and education to support this - to attract good employees and to create a pool of potential buyers so that the older generation of farm owners can sell and retire.
- Declining small town population is jeopardising sporting club membership which is the backbone of social connectivity, loss of critical mass in sporting clubs makes it difficult to retain young people.

BUSINESS MODELS

- Succession planning and implementation is essential for the success of family farms.
- Small time, traditional farming is not financially viable - particularly as this business model restricts access to capital.
- Share farming allows farmers to focus on their strengths, and to generate additional income through contracted use of their land.

GOVERNMENT REGULATION

- Planning and development approvals (government red tape) are holding back investment in some areas.

Commodities

Wheat, barley, canola, peas, lupins, legumes, triticale, hay

Many are also livestock farmers (mainly sheep but some cattle). Some have other business interests (machinery and fertiliser sales).

Markets

Grain:	Internationally into the Vitera Distribution System and other sellers (e.g. Glencore) for local and overseas
Hay:	Japan, Korea, Taiwan, China, Dubai, small amount of domestic (for product that is not up to export standard)
Lupins and feed grains:	Local and interstate
Malt barley:	Exported
Livestock:	Exported

Future for these commodities

General

- I'm very confident about agricultural commodities generally, although there will always be fluctuation in prices.
- I like the fact that it's a free and competitive market. It will be affected by what happens overseas but we have so many buyers in Australia and we're also competing with the domestic market.
- I like the competition, it will bring quite reasonable returns to farmers, and you're not just taking a price that someone has predetermined.
- The Australian Dollar will have more of an impact than anything else, it determines what farmers get paid.

Grains

- Our future depends on our ability to be competitive overseas, we will always have wheat, barley, canola but it depends on how much we get for grains.
- It's more about product identity rather than comingling into one great big heap. Segregating by variety and quality is probably the future, maintain integrity of the grain and know where it's come from, traceability.
- Grains have excellent potential on the export market due to the Asian move to a more westernised diet, increasing population and higher living standards. There will be huge demand coming from Asia.

Legumes/seeds

- New products and markets haven't yet been developed for new grain types or oil seed types. But unless there's a market no one is going to do the research to find out if types are suitable for this area, so they have mostly stuck to wheat and barley.
- We're starting to branch into grain legumes like peas and veg, chickpeas, lentils, and fava beans in the southern Mallee. These things been very stable for the last twenty years, but we're encouraging growers to look at them again because of agronomic issues, to set up rotations to avoid herbicide resistance, build-up of nitrogens etc., to look at new varieties. However, if the price is not there, it's pointless growing them.

Hay

- There's huge potential for expansion with better access to capital.

What's changing over the next 10-20 years

Expanding markets

- The future for the grains industry is generally pretty positive with the world population expected to reach nine billion, and they need to be fed and as populations expand there will be less cropping area.
- Buyers are more demanding of quality, and it all puts the grain industry in a decent place.

Supply chains

- Change supply chain and it will change markets.
- At the moment the grains sector is dominated by multinational monopoly storage and export pathways and that will change over time. We don't necessarily need more ports (the existing ports can manage a 50% increase with more efficiency), but we need the monopoly to become more market oriented.
- Box trade capabilities in grain handling will improve - we're constrained by lack of boxes and packing capacity.

Technology

- Lots more technology coming in, extension of existing technology in tractors (self-guided tractors and harvesters), in mapping, in application of herbicides and fertilisers using mapping and GPS techniques, that's really going to expand.

- Less farmers and larger farms, because it's more and more difficult to get skilled farm workers for dryland farming. One of the bigger constraints is getting people who want to work there, to put up with conditions. If it's not addressed it will choke production and expansion.

Breeding/GM

- The main thing that will have a huge improvement and certainty in farming is if we could get frost tolerant varieties in barley and wheat. The GM argument concerns me, especially with our Minister for Primary Industries hell bent on not going down the GM line. That is holding farmers back. Frost is the biggest thing for growers in WA, SA, Vic and Qld, they're losing huge amounts. Frost tolerant varieties have been bred, but if we could use GM to speed that up it would increase our certainty. It's our biggest issue by a long, long, long way.
- GM is going to have a big impact. If we can get access to GM and are allowed further development, it will have a big positive impact. If the rest of the world gets it and we don't, that will be seriously detrimental. The things we need in GM are productivity, pest/weed management, disease/rust reduction, frost susceptibility and maximising the use of water.
- Farms will get bigger, varieties will become company owned, not farmer owned. If people are impatient for new technologies, then GM will take over.

Climate change

- This is a marginal area, and climate change will affect us, so there's a need for lots of development so we get the best use out of every drop of moisture. Technology is a big part of that, to help us work out what to grow. Most information will be stored in the cloud and we will get better real time intelligence between the field and the computer. So we'll have better decision-making capabilities.

Business models

- There needs to be major structural change in family farms, hence our collaborative farming approach. There's no future for small time, traditional farming, it's not efficient and it doesn't allow access to capital.
- We need to get more capital into farming businesses. Our capital requirement is in the range of \$500,000 to \$1m. Corporations typically need a lot more than that and that's where the capital markets have focused, there's a need to develop the \$1m investment model.

Government

- At a State level I don't see that there will much of a Department of Agriculture - it will probably only focus on biosecurity and incursions of disease and threats from

overseas. PIRSA won't be out there in the paddock helping growers, so there will be more independents taking that spot. It's happening already, the private sector will pick up the gap, and they will be charging commercial rates.

What changes in your business?

The farming business

- We need to change the public perception of agriculture. We use a raft of social media, demonstrating how we are analytical and accurate. It's part of the transparency process, giving our investors access to everything we do. So we are active on social media, we see it as our responsibility to paint a true picture of agriculture.
- We already have an office in China, will probably have joint office with some other companies in other sites.
- The service that comes out of government is probably not as good as we'd like, so there's a tendency to use the private sector already, paying more for information.
- Capital is the next big thing for us, we have a structure that allows us to scale up and mitigate risks, but this means we need to develop systems and structures and accountability and transparency, the same as any listed company. So investors can examine the business and decide whether they should invest.
- Technology has a long way to go to integrate systems, it's moving fast but agriculture is a mile behind.
- Our generation is getting older and in 20 year's time none of them will be farming. We are hoping that there are viable people to sell the business to and to care for it as we have.

New breeds

- Looking at new products, new varieties, keeping up with developments, informing farmers what's available.
- A major constraint in the future is GM further development and some of that will be aimed to water use efficiency or returns.
- We need frost-tolerant crops. Triticale is the worst, then wheat, canola, then barley. The best we can do is do rotations around it. They're predicting better wheat and barley breeds in 4-5 years but if we could get GM, its 2 years or less and that improves our competitiveness.

Water use efficiency

- We are a natural rain fed business, with no potential for irrigation. So the critical issue is to maximise water use efficiency. We're gradually improving all the time.

Access to labour

- Access to labour is an issue, we have reasonably good access to labour compared to some states, but even so cropping systems are replacing employment with machinery.

Barriers and obstacles

Capital

- Lack of capital - outside equity investors are needed.
- We can't really move forward until we reach a level of profitability to afford to invest capital and we're assured that we're going to get a return to repay that capital.
- This business needs a lot of cash, you've got to be well set up, or find a partner or partners that are cashed up to go with you and add equity into the business.

Supply chain

- A big issue is supply chain costs post farm gate. Because we've come out of the single desk situation, we're used to just concentrating on harvesting it and putting it on a truck and getting rid of it and forgetting about it. But the costs of running that system are apparently going up (so they tell us because they're jacking their fees up). So we need to develop a system for short term storage on farm and then take it straight to port so that we get better utilisation of trucks and transport infrastructure: in harvest season, all the trucks are flat out going one way, and go back empty, and then when we need fertiliser the same thing happens in reverse.
- With the concentration on big regional grain storage centres, road use patterns are changing and it's creating serious issues for road repair (local, state and commonwealth governments) and rail costs (the Mallee line is almost defunct, and the Northern Mallee line is not in good shape, same on Eyre Peninsula). So do we improve the rail or improve the roads or get bigger trucks?
- If we rely more on road transport to Adelaide, it's a complete bottleneck between Glen Osmond and the Port. There's a lot of money being spent on South Road, but it's taking the road funds away from Portrush Road and the top end of Adelaide where it's needed.

Government red tape

- The local council needs to be more responsive to people, for instance I tried to put in a weighbridge, eight months later no reply, and finally found I had to spend an enormous amount on engineering drawings because the weighbridge I bought was from China. Local councils need to be more receptive to people trying to do

things. I suspect lots of people just bypass council as there's too much red tape and bureaucracy.

Telecommunications

- We need better communication networks. In our area mobile phones only work in patches around towns like Karoonda, Loxton, Pinnaroo, but the vast bulk of the Mallee is a mobile black spot. Our businesses are doing millions of dollars of business, what business in Adelaide would put up with substandard communications like that?

Water and soil efficiency

- Some things we can do, but it depends on profitability. The issue in our area with sandy soil is that water use efficiency is less than what it should be compared to better soils in other parts of the state. There are project funds to look at that, but it needs to be more farmer driven.
- Soil amelioration is what we're looking at, and we need equipment to enable that to happen.

Research, Development and Extension

- We have to pay for our services, nothing is free any more. But it means you have to do your homework on the people you are getting your information from. It's important to know whether they are independent and whether they are giving you credible information. We can no longer rely on independent advice, we have to look for second opinions, and to spend time assessing the worth of the information.
- RD&E funding is needed for GM and all aspects of production.
- We don't have the next generation coming through with the qualifications we need. There are so few in agricultural colleges. Yet we have more jobs than graduates, so we need to make agriculture look attractive, by being professional and paying good rates. To pay good salaries, we need to be profitable, so we need R&D to improve profitability so we can employ the right people.
- On the business side, GRDC is now doing updates so that farmers are more professional. This is essential. Farming needs to be professional, we need training and education. But unfortunately a lot don't think they need it.

Community attitudes

- The challenge as an industry is that agriculture is always 'glass half empty' and there's too much profanity and bagging others. It doesn't help. We need to be selective about how we present a constructive message about our industry.
- SA is the only state that's still backward in not allowing GM in.

Opportunities to address barriers within the region

Leadership

- Farmers get information by grouping together with likeminded people. So we need to organise for groups to get together to source information together across a fairly large area, to work as a group to employ agronomists. Ten to fifteen years ago there were farmer discussion groups and they worked really well. But today even the Ag Bureau is dwindling. It's very important that farmers can talk to farmers with the right facilitation to build capability.
- The business/research centre in Loxton is positive, as long as there's ownership by the agricultural community.
- The Nuffield Scholarships are excellent, they build the capacity of the district. A few years back there was only one from our region, now there are six or seven and it makes a huge difference in leadership. We need to make sure we get three per year from our region.
- It's frustrating that there's a lot of leadership and capacity building for 18-35 year olds but little available for people who are over 35 and that's when people have time and the realisation that they need it. People are ready to make a difference in their 50s, but a lot of industry capability development is aimed at the younger age group.

New products/processing

- The opportunity is to further develop primary industries in our region. Intensive feed is gradually moving out this way (although water is an issue) because of all the processing at Murray Bridge - but chooks are north of Adelaide and they don't want to travel more than 100s to be processed. So there are some opportunities to invest in chook farms and processing. That whole scenario would encourage farmers into feed grain production and more efficient local supply chains and logistics.
- We've had a chat to the Ambassador for Indonesia re flour manufacturing in Australia. Instead of exporting wheat, they want it made into flour here and branding it Australian made. Things like that should be on the radar.
- The only people who want to invest in Australian agriculture are from overseas. My answer is 'bring it on'. If Australians don't want to invest in Australian agriculture, well someone has to. There will come a day that resulting from the lack of interest in Australian agriculture, the land will get cheaper (the average age of a farmer is 59), and all the baby boomers will want to get out of it at the same time. We desperately need investment into agriculture and no one in Australia seems fair dinkum about it. China is interested, but there are lots of others (e.g. Qatar is having a run at the moment). There's plenty of overseas money keen to invest, they understand that agriculture is the future because of the rise in population and there are no more acres being made in the world.

Infrastructure

- Investment in infrastructure, better telecommunication systems.

Labour market

Good business attracts good staff

- There are skills and career opportunities. If we haven't got them we can access them - either through the internet or through companies, private enterprises and government people to try and educate us.
- On a personal basis, I've had no problems at all. I've had people approaching me, and these are young lads who have tried the mining industry and the pay is good but the lifestyle is crap. Its fine when they're single, but when they settle down they want to be involved in a local community and play local sport. It helps that we are progressive with good machinery.
- We've been fortunate because of our professionalism and good public profile, we have people with good CVs knocking on our door. But this is not indicative of the industry. It's harder to find good basic labour, but much easier to get fencing and general hands than skilled agricultural managers. If we had to replace staff, it wouldn't be easy.
- I think in our area we're OK with the next generation coming through to take on farms from baby boomers. There's quite a few in that age group in our area, we're reasonably well served with younger farmers. There's no doubt there are less farmers and no new farmers coming in, farms are bought by neighbours. You have to get bigger these days to justify the machinery and get your work done in the available time. I don't believe that the experience has been lost, it's still there in one shape or form.
- Finding available people with the knowledge that you want is not easy - Human Resources is a minefield for family owned farms.

Population decline

- Getting skilled labour is becoming harder and more expensive, if you are going to pay for someone you want someone who will work well. We're yet to see the real shortfall as population declines through Mallee, there are less and less people available, and training maybe not out there either.
- Our community is declining like every other community, but the established farmers, with one or two sons, are staying - they're getting bigger. The farms on the market are smaller.
- Our staff need to be computer savvy, but then there's the problem of living where there's a decent internet connection and a mobile phone that works - it's a barrier.

Aussie work and investment ethic

- Some of the more intensive livestock industries are having issues, perhaps because Australians don't want to do it.
- The Chinese are pushing access to Australian labour markets as part of the Free Trade Agreement, it will make it easier for us to source Chinese labour, and they want to work here.
- Generally it's OK. most people who need farm hands can get them, there are a lot of farm hands coming out of Ireland for short term employment for example in potatoes and onions where they need labour for a short time.
- Definitely we have employed people from overseas to fill skill gaps.
- We're finding that there are some older farmers who are selling (some are in a position where they have to sell) but they're still available in the workforce.

Competing with the resources industry

- We're still competing with the mines for any skilled machinery and mechanical work, because they can get good money at the mines.
- It's a balance: cost of production, cost of farms, return for products, input versus returns, if it's not viable young ones won't do it, they go and work in the mines.

Business models

Trusts

- Family trusts protect the property from marriage split ups etc., the land stays in the trust and it's just the funds that get divided up if there are issues.
- I think it is there you just have to work your way through and work out how to expand. They all get to share in the profit or the less, spreads the risk.

Succession

- The guys who go out and get good financial information about succession planning and investment are often better off - there are some terrible stories about lack of succession planning, often guys just want to farm and don't think about what happens next.
- I think we have to get a few things right - the first thing is succession. It's absolutely critical, the ones that get succession right are the successful farmers and the ones that don't, struggle. You can put any business model under that, but that's the key.
- You need a business model that supports succession and you have to do succession.

Different business structures

- The old traditional family farm isn't going to make it. There's a model out there that will work better for every situation. It's not just a matter of buying the neighbour's farm, few have the capacity to do it, and it's not good for the local community. So we need to look at other models like share farming, leasing, sharing equipment and labour. There are lots of options.
- I'm a strong advocate for family farming, but more of a corporate feel. However purely corporate farming seems to want a return every year and it doesn't fit the climatic and seasonal change in farming.
- We work with family farms to do the contract seeding and farm management and that seems to be working. Some have gone in and out but a lot stay.
- Our collaborative model would suit 5% of farms. Ours is two separate unrelated family farms, we formed a new company and leased our land to the company; we sold our old equipment and leased new equipment and more land.
- We share farm for others, it's better for them too - for example we approach livestock farmers who were doing cereals and stock, but know their sheep operation best. We took on the cereals on half of their farm, giving them a good income and letting them focus on what they do best. They're making more money out of sheep because they can concentrate on what they do well, and more money out of cropping because we're really good at that.
- Our model started with a blank page. I was looking at collaborative models around the world. Once I had a good idea of what I wanted, I went looking for the specific farm and farmer to complement my strengths.

Access to funds

- This year's Australian Farm Institute Conference is looking at the future of farm finance. The cost of funds to the family farm are very high. We pay more for our funds than a home owner does, and yet we're generating export income, we're stewards of the land. We have to address that. The government and Reserve Bank keep the mortgage belt happy at our expense.
- The banks are getting harder, we're hearing about well-established people being turned down by the banks, especially where people want long term finance. The banks haven't been helpful in our area, whether it's because they think farmers have had enough decent years to borrow less, or whether it's the risk, I don't know, but they are harder than they were in the past.
- People are borrowing proportionally more to buy machinery. Most farmers will borrow nearly all of the money - that's a change from the past and it's a fair bit of money they're borrowing.

- Farmers generally take more chances than what they ever did when I was a kid. Everyone aspires to buy new land and new machinery despite what the bank balance says, they tend to push things a bit.
- You can borrow your fertiliser against the next season's grain contracts. It's win/win, cheap money and no risk for the lender because he gets first go at the crop and the guarantee of that grain and for sale of the fertiliser. Those sorts of things are good for cash flow. It's nothing different to what stock firms offer - stock mortgages are quite popular.

RD&E

Funding RD&E

- We could always do with more R&D in the sector but run into government restraints about who funds it.
- I think the government has pulled out of R&D - there used to be a research centre here with 70-80 people, it's now reduced to 6-8 people. There are only two agronomists in South Australia who are on the Government books and they have to get outside funding. It's the reason there are so many private consultants.
- Some people would say that farmers or the industry should fund itself, but if you compare government assistance in agriculture in Australia to the rest of the world, it's pretty skinny.
- With soil amelioration, the state governments have been taking funds out of agricultural R&D and the primary industries fund for some time.
- There's a shift in RD&E away from government agencies into private fee-for-service. It's creating a challenge because the ones who need it most can't access it. We need to be able to access free local agronomists.
- We are very lucky in the tri-state (SA, VIC and NSW) program, and maybe this is the direction for government programs - bigger projects rather than smaller ones.
- We need more government funded agronomists ensuring the information gets out there.

Complexity

- Lots of information comes out from CSIRO.
- Farming is getting to be a very complicated business.
- PIRSA doesn't have the resources to delve into unusual left field things that might help on a farm.
- Government has severely cut the blue sky R&D that we'll be needing for the future. You don't know what you don't know so you need blue sky R&D.

Private agronomists

- The big swings have gone to private agronomists, a lot of farmers are paying for agronomy services. I don't believe farmers have a lot of confidence in PIRSA, it seems to have a stigma attached because of the terribly long time they take to come out with a recommendation, whereas a private agronomist will have a recommendation within one year.
- Private agronomists in SA and the Victorian Mallee have improved the country a hell of a lot. They have got people thinking about maximising the moisture that is available, getting into rotating pulses and canola, and early sowing (although there's some trepidation because of frost).
- Those who use agronomists are quite a bit ahead of those who don't.

Industry RD&E programs

- A lot of our Research and Extension comes from GRDC. It's a well-funded body, with grower levies and some government money, we get a lot from them.
- We do RD&E really well in Australia, especially in GRDC, particularly compared to overseas. The availability of \$1:1 from the federal government is good.
- Funding agreements between government and GRDC look pretty sound.
- GRDC are critically hamstrung by resources - the levies go towards research institutions but have to be backed by local state and federal governments. But government doesn't seem to want agriculture in Australia, or we would be getting more funding.
- The issue is getting extension onto the ground, in the past we have allowed PIRSA and Rural Solutions to drive it, and we just turned up. Farmers need to drive it and share the knowledge, using discussion groups that reflect the way they work.

Infrastructure

Transport and logistics

- A better arterial road system is needed.
- Duplication of the Dukes Highway is needed to help a number of industries. My drivers are constantly telling me horror stories about this road.
- If they duplicated the Dukes Highway we'd be able to use more efficient transport such as road trains. A B-Double is more efficient than a single trailer, but not hugely because of the registration costs. But if you have a road train with two or three trailers, then out of season that second trailer can be used on farm or for other things, where as a B-Double is a B-Double.
- Roads are only just sufficient - have just put 5 kilometres of road on our own farm to cope with bigger trucks.

- If we can't have bigger trucks, we have more trucks and it puts pressure on the local road system which isn't not heavy vehicle suitable. We need gazetted roads that have been upgraded to be suited to the transport load.
- B-Doubles have poor access to local government road networks. A lot are operating outside of the law to get access to farming country, but then it's impossible not to. Local government expect that we'll go the long way around but sometimes we just can't get in.
- Grain receival spots need more competition, when you have a monopoly you pay through the nose and that's what happening. We need competition in the country and at the ports - we're grain farmers and to be able to get your grain from you paddock to a plate overseas is a major issue and a major cost.
- The supply chain from farm to port is one of the most important areas of improvement in the future, to get produce to market in the most efficient manner possible, so we need better roads and bridges to accommodate bigger trucks and movement from production to port.
- Palmer silos have been relying on road transport. If the railway line was upgraded it would help with freight rates. We could put goods on the rail line to Melbourne and Adelaide.
- The burning problem at the moment is the capacity of the railway line that's owned by Genesee Wyoming, they're talking about shutting it down. This will affect the flow of grain and put more weight on the roads taking grain to Tailern Bend.
- A container lift on lift off facility might be an advantage in future, but at the moment we just transport to Adelaide so the system works but could be more cost effective.

Energy

- Power is a core cost of doing business, it's a straight out commercial decision about whether you invest and expand, but it needs to make a return or it's not worth it. We were quoted an augmentation fee of \$1m. The privatised power companies are just out to make profit, power costs have tripled in recent years and outstripped inflation.

Telecommunications

- We need good mobile and internet.
- We need better communications, mobile phone coverage.
- Mobile coverage - we just get away with it, there's limited coverage generally, but there are a lot of blind spots, and we rely on phones to do business.

Regional development

- The business centre in Loxton should be an asset for this area.
- It's disappointing that some of the strength has gone out of the RDA. When we had a Regional Development Board in the Riverland it was really strong, but some of that was lost in the merger to RDA and it feels like we have less clout than in the past. So a strong RDA would be helpful.

Local services

Sporting clubs

- The major thing is keeping our sporting clubs going, if we don't have them that's when our community disappears, more than anything else.

Health and education

- Riverland towns all have hospitals, but getting doctors is a challenge, there are fewer services offered in hospitals, less in regional hospitals, it's now all centralised. Schools still holding their own, but with decline over last ten years or so school numbers are still on downward spiral, not rapid.
- We're fortunate that Murray Bridge hospital is well funded. Tailem Bend has a small hospital (emergency and aged care) and then there's Keith and that's poorly funded and there are big issues in that area, it's a long way to Bordertown.
- Hospitals and schools are always under budgetary threat and it's not getting any easier, probably one of the biggest things lacking in rural areas are doctors who want to stay in rural areas, it's very difficult to attract GPs to serve local hospitals.
- Little towns are shutting down so all come into regional areas for schooling. We have several hospitals and are in close proximity with helicopters to Adelaide, we're only an hour and half out of the city.

Police

- Police always overworked, there are never enough around and they're probably dealing with more police issues in last two years and are stretched to cope. Bad behaviour just escalates if it's not dealt with.

Training providers

- Not really sure about training capacity. I think there are private providers out there at the moment but not sure how widespread they are.

Climate change

We're adaptive anyway

- Adaptation is the key, we're already dealing with changing water levels.
- Changing the types of crops grown and ways of farming, people are constantly evolving farming methods for low rainfall areas.
- Changing to minimum till, disk seeders, all sorts of strategies are being used to increase yield in a low rainfall area.
- We can't do a lot other than doing what we're doing better. Cropping revolves around using the available moisture the best way that we can.
- Adapting to the changes that happen with the climate: you're not going to fight it, so you have to join it and make sure you can work with it.
- We have probably already got things in place, use of internet and weather and climatology predictions to know whether it's an El Nina or El Nino climate pattern.
- We're using wider equipment to seed on time, and new fungicides and insecticides.
- Farmers are very adaptive, very resilient and have always been used to responding to changes in climate as well as markets. There are more and better crops that do well with less rain and better management, better herbicides. It won't happen overnight, but farmers are used to adapting.

Action is needed

- My personal opinion is that the focus is on researching how to deal with it rather than spending money to mitigate it. We'd be better off with money spent on measures to adapt. All the models seen so far are basically just wealth redistribution taxes.

Clarity

- We need a better understanding of what the climate change impact might be.
- The Federal Government has a scheme running a few surveys and because farmers really don't know the hard facts, the main issue is attitudinal barriers. There are strong anti-climate change beliefs out there within the farming community - either no interest, lack of interest, lack of belief or putting their heads in the sand.

New breeding technologies

- One of the biggest things in SA is to have access to the new breeding technologies (GM is one of them). The new SA Agriculture Minister is very anti-GM and isn't science based, purely emotion based. I think he's turning research away from SA (not just GM, all agricultural research), the Australian Wine Institute which is based in SA is looking at GM, and has to go to NSW to do it. The dairy industry is looking at GM for ryegrass and lucerne production, but because we're total non-GM. The Waite Institute has the Centre for Plant Genomics, its world renowned

but it will struggle to attract the bright young scientists from around the world because they can't apply the research, so other states are getting it.

- Access to GM technology is essential. Some areas are quite frost prone in wheat and canola, and crops can better utilise rainfall and tolerance to hostile soils. It's too slow doing it the old fashioned way.
- In the grains sector we need varieties that will cope with more heat stress and extremes - being able to not transpire their moisture so quickly, more drought tolerant - serious breeding is required to get these traits into their varieties and some of that stuff will no doubt come through GM.

Leadership

Government coordination

- The government is stopping from taking leadership. Last time I tried to get assistance from the Department of Agriculture, they were totally hopeless. I tried to get visa for someone to come from China to study haymaking and they got knocked back because the Department couldn't even give a letter to back them up or vouch for them, even though they were invited by AusTrade. I've also had some Chinese companies who wanted to do technology transfer but the Department of Agriculture has no standard contract to set this up for cost recovery. Yet they sent two councillors and government people to China and it was basically just a junket for the people who had set it up, it didn't achieve anything useful.
- The government has largely pulled out of provision of information, so people like the GRDC, which relied on the State Government for extension of all their research, is now having to look at different ways of getting information to farmers - there is a big gap between publication of information and getting it out in an understandable form.

Local groups

- There are good young leaders in the Agriculture Excellence Alliance, and cropping groups. But these groups are not in all areas, there's a good one in the Mallee but we don't have one in the Upper South East/Lower Mallee, it's a good opportunity to encourage young growers to develop something like that in our area.
- The cropping system groups are our future leaders. Young farmers are farm focused, growing crops, paying off the mortgage, looking after families. They don't have time to get involved in politics, but that's where the future leaders will come from.
- We can always do with more leadership, and there are areas of the state that could do with some leadership on the crop production side. We've also got the state no-till farming associations. They have been successful because 95% of farmers are into no-till. It's all reliant on one chemical (Roundup), the big poison

thing that Mr Bignall goes on about, but it's been fantastic for production and for NRM and no-till farming and carbon improvement.

- Brenton and his crew do a good job, as do local resellers, who have their agronomists out there to get market share, so the skills are there. But people don't use them when all is going fine, only when there are problems. There's probably not enough funding to put people with skills in the field.

On-farm leadership

- A lot of young farmers under 40 are driving farming operations and they're the ones who want new technology and GM as another tool they can use. The GM debate is confused with the anti-multinational argument because some of the GM stuff is owned by Monsanto, Bayer and other multinational. They're not talking about GM safety, the issue is choice.
- It's potentially an issue at farm level, but farmers are way smarter about what makes money on the farm.
- We've got enough lads around the late 30s age group who are leaders, it's probably lacking in my age group - it's not so bad. I quite like what I see coming on.

Community leadership

- Leadership has become an issue with the demise of the family farm, and the number of people leaving rural sector has put big burden on those left to carry weight of community. We're seeing that people become more and more stretched and some things get missed, we try to keep the church going, the football team, and youth groups but because we're running everything, there's not a lot of energy left to do state based advocacy.

Animal Products Industry

Introduction

Thirteen interviews were conducted with people in the meat production and processing sector:

- 4 x pork
- 3 x dairy
- 3 x sheep
- 1 x beef
- 1 x chicken

As with other sectors in the report, this section begins with a summary of findings.

Summary of findings

TRADE SITUATION

- Terms of trade are good, and demand is strong - although the value of the Australian Dollar is a disadvantage.
- Market access is a constant issue (e.g. through Free Trade Agreements), but also access to large supermarket chains within markets.
- The last ten years has been a mining boom, now we're heading into a dining boom.
- China is an important customer for protein products, but is maturing and new markets will be needed. The international focus on disease-free food quality is an advantage for Australian meat producers.
- Asia is driving new high-value milk (and milk product) markets. Recent Asian investment in dairy plants in the Murraylands suggests there will be further expansion of the Asian markets. However because of deregulation, competition from interstate and supermarket cost pressures, there is insufficient milk supply within the region, which will affect development of these dairy plants.
- Demand is changing from grain fed to grass fed - led by American concerns about obesity and health. This is a marketing opportunity for Australia.
- Price competition from overseas pork products has led to a decline in pork production, with mainly fresh meat sold to the domestic market. Pork waste and by-products are in demand in Asia, but religious dietary preferences restrict the potential market.
- Customers and international trade practices are driving increasing traceability, which will require producers to monitor individual animals.
- Consumer attitudes to animal welfare influence production methods and often result in increased costs.

- The demands of the major supermarkets and fast food chains are adding significantly to the cost of production at the same time as prices are under pressure.

ACCESS TO CAPITAL

- The biggest barrier to growth is money and investment, government and industry need to work together to fund development and marketing. To attract investors (especially overseas), plans and prospectuses are needed, investors expect this to be done before they enquire.
- Farmers don't leave the farm to the eldest son anymore, so young people need to buy in, and they can't access capital.
- Lenders are more cautious than in earlier times, and farmers need appropriate management and documentation systems to give lenders confidence.
- In some sectors, more consistent contracts have meant that it's easier for farmers to plan ahead, invest and service debt.

WATER USE, CLIMATE CHANGE AND R&D

- Uncertainty with agricultural produce, pricing, weather and exchange rates is inevitable. Producers need to be more efficient and more productive while containing costs.
- Businesses have invested in carbon reduction programs.
- Some businesses rely on water from the River Murray, which is likely to be less certain in future.
- Revegetation and rehabilitation programs from the most recent drought are now ending, but need to be renewed to ensure on-going landholder investment in natural vegetation and ecosystems.
- Information is available, but it costs so it's not as readily available as it should be. Most extension is from private services "but its people trying to sell you something, not necessarily something you need".
- Those who need R&D most who are least able to afford it.
- Government-run RD&E is often "reinventing the wheel", more focus needs to be on connecting with farmers who are doing trials themselves on their farms, who are open and happy to share the results with other farmers. This should be funded, it provides the most benefit.
- Some industries pay for research from levies. Businesses paying the Australian Meat Processing Corporation levy felt that the funds are not used to their best capacity, in that money is only spent on reports because the levy doesn't allow expenditure on capital equipment.
- The Australian pig industry levy is used for market research and advertising, and industry research, with twenty percent of funds allocated to state projects.

LEADERSHIP

- Cross-business networking is happening, but needs better promotion so that more businesses can be involved, and that government and other sectors have a point of contact. Discussion groups are thriving at the moment and people who go out and ask for help from other farmers generally get it, but those who are shy miss out.
- More collaboration is needed to enable businesses to support each other and provide incentives for labour to come to the region.
- The Murraylands Food Cluster Group represents the region's ten biggest employers.
- Thomas Foods is an important leader in the region.
- Businesses with a long-term tenure and investment in the region should be encouraged.

TECHNOLOGY

- Data-based technology is allowing traceability of individual animals, allowing for fine-tuned breeding, feed and management regimes to maximise product value.
- Technological innovation means the industry is more cost effective, more interesting, and opens up opportunities for making more profit.

TRANSPORT AND LOGISTICS

- Transport infrastructure (roads, rail and ports) need improvement to enable products to get to market quickly and competitively.
- Better Road Train and B-Double access is needed. Poor access affects animal welfare as animals are on trucks longer.

INFRASTRUCTURE

- Utility costs just keep going up. Five years ago, water cost \$1.20 per kilolitre, now it's \$3.45.
- We pay export prices for natural gas - our gas is sold overseas with no domestic reserves.
- Co-packing arrangements are needed to deliver cost efficiencies, regional branding and new markets.
- Mobile and internet coverage is poor in many areas and inhibits the effectiveness of cloud-based production and administration systems.
- Housing is insufficient or inadequate in some areas, and this is a barrier for attracting new staff.
- In smaller towns, is important to retain schools and hospitals and services to be able to recruit and retain quality staff. A diversity of jobs for partners is also essential for staff attraction.

ANIMAL PRODUCTION

- Poor road and power infrastructure is limiting competitiveness and opportunity.
- The cost of accessing power, even though supply is close by, is astronomical (e.g. \$1m to upgrade public infrastructure (substations) to ensure supply - and no guarantees that the money is actually spent on that site). Businesses cannot tap into the SEAGAS pipeline, even when it runs past their property.
- Infrastructure clusters are needed. With the level of employment within the meat industry in the region, the industry should be able to guide government about infrastructure development.

SKILLED LABOUR

- Access to skilled, hardworking labour is an issue across the sector, with many businesses using overseas workers because Australians are not interested in, or won't work hard enough for companies to survive or be competitive.
- Agriculture in general is finding it difficult to attract skilled labour at an affordable price due to competition from the mining industry. Some respondents suggested tax relief models to attract skilled labour to the region.
- It's difficult to attract "the youngest and brightest" management level staff to the region, their partners suffer discrimination (as non-locals) in getting work, and it's too far from the airport for people who need to fly regularly. Many businesses reported that they can only attract management level staff who live in Adelaide and commute, these people quickly leave for more convenient jobs.
- Businesses are focusing on good management practices, being professional, team development and internal promotion to attract and retain staff. While this helps, there are insufficient good, reliable staff in the region.
- Limited availability of good local labour is driving investment in mechanisation and automation. Cloud-based technologies mean that some services can be provided from anywhere, reducing dependence on skilled local staff.
- There are insufficient good TAFE courses in the region (e.g. apprentices need to go to Adelaide to do their training) and it inhibits staff development.
- Most of the people who are unemployed are unemployable. A centralised pool of work-ready staff is needed. There is a gap in the labour market for highly skilled people with food technology training.
- Overseas workers need more local support services when they arrive.
- Schools should do more to promote local agricultural careers to allow young people to understand the career opportunities in their local area.

BUSINESS MODELS

- Murray Bridge is a hub of meat processing, providing local value and supply chain benefits and market recognition.

- There is additional production potential in South Australia's dairy industry, but requires better returns to capitalise on these opportunities - led by industry marketing.
- Family farms, at sufficient scale, are a good lean model and many consider that they care for the property better. However the range of skills needed and the time to comply with consumer, industry and government demands mean that small businesses are unable to do all the things that are needed. Farmers are using different models, like joint ventures and equity partners, to achieve scale and attract investment.
- Succession planning is important.
- Single ownership, where used, allows businesses to make fast decisions and respond quickly to changing market conditions.
- The cost of doing business (labour, power, water) in Australia is high and increasing at the same time as there is downward price pressure as a result of cheap imports, competition and consumer expectations - it generates a low Return on Investment. Businesses can't sell products at a premium price because customers are only interested in quality if the price is right.

GOVERNMENT REGULATION

- Biosecurity threats are a continual concern to the meat industry.
- Government import policy can change our competitive advantage overnight (e.g. allowing importation and sale of fresh meat). The live shipping trade was disrupted by government because of one bad operator, it put a lot of pressure on good businesses and damaged international relationships.
- There are regulations and restrictions on inputs that generate additional costs.
- Government could be assisting by requiring Country of Origin labelling to ensure consumers know what they are buying.
- Government shouldn't get in the way. Red tape and regulation is a significant, and often unnecessary cost, with poor cross-government coordination that causes delays and adds risk and cost to doing business, "at times it's just bloody-mindedness".
- Workplace laws and workers compensation costs are "crippling the industry". The system is weighted toward the employee - even if they are doing the wrong thing.
- Businesses pay high council rates but get very little in return (poor roads, no rubbish collection). Compared to commercial businesses, councils appear to be inefficient and can pass the cost of inefficiency on to the community.

Commodities

Pork (meat and by products - waste, fat bone), **lambs and sheep** (meat and wool), **beef and stud cattle**, **dairy** (milk production, dairy products including cheese, whey powder, butter), **poultry**.

Murray Bridge is home to a large meat processing plant (Thomas Foods International), that have expanded from processing 600 cattle and 8,000 lambs per day five years ago to 1000 cattle and 11,000 lambs in 2014.

Markets

Beef:	Local processors, China, USA
Dairy:	Local, and domestic but planning to expand to overseas (China), specialist cheeses to Europe.
Lamb:	Domestic and export, mostly to China. Used to supply South America but now mostly China and USA.
Meat processing:	30% domestic, 70% export to 80 different countries.
Pork	Domestic (contracted to Coles and Primo - pigs go to Port Wakefield abattoir and Big River Port, and products are then distributed as fresh meat and by-products); and export to Singapore.
Pork waste:	Offal to Singapore and China especially.
Poultry:	China and Asia indirectly (contract grower for Inghams)
Sheep meat:	Local processors, and then to India, Asia, Japan (90%), USA is becoming a major market.
Stud cattle:	Local and interstate
Wool:	China is a dominant player in the wool market, so proximity to Asia is a benefit.

Future for these commodities

Meat generally

- Good, good demand!
- The terms of trade have never been better, although costs are ever increasing, particularly with regulation, red tape, water, power costs, costs of doing business, we have to drive efficiencies. If you take all that into consideration agriculture is better placed than it has been for a long time, but you can't rest on your laurels, have to grow your business. So we have a big focus on growth, reinvestment and diversity for business viability.

- China is our biggest customer, but we're competing with the rest of the world for China. They're urbanising, moving from self-sufficiency on farms into city factories, so they need to buy all food, and their income is increasing and they want more protein in their diet.
- There's a continual emphasis on food quality (disease free status), and emerging markets are more educated about what they eat. Quality is the opportunity for Australian producers, it's our point of difference. Having a continent that's also an island is good food safety branding. We need to educate producers so they are part of a *quality* supply chain.
- We have a good future as long as we can maintain our fresh status. The New Zealand government has just allowed fresh meat to be imported and sold retail - it's opened gates to disease importation, we're concerned a frightened Australian Govt will follow suit.
- Traceability is being driven by customers, the EU requires it, New Zealand is doing it well, and we need to keep up. Governments and producers need to realise that to introduce traceability we need a rigorous auditable system. It's tougher with meat processing because we start with the whole unit and pull it into bits, it's a different issue than putting together a product from a range of sources. It's especially difficult with sheep because there's no electronic ID, and introducing that will be another cost to farmers.

Dairy

- A lot of potential for growth in SA, it hasn't realised its full production potential. Family farms will be a part of it but will be larger rather than smaller. We are looking at value add and processing ourselves as well as supplying the bigger companies.
- Very exciting, a particularly exciting time because new high value markets opening in Asia. There will always be a need for fresh milk, but it won't be as cheap. The biggest area for growth is new markets and we need to build up boutique export markets - go where the price is best.
- If we do sent them to China, we'll have to increase production to meet demand. We're investigating products that add value, outside of commodities. There are different types of powders for infant formula markets, we're looking at that as part of our business model.

Lamb

- Meat lambs is a buoyant market at the moment, so the outlook is very positive. Very positive with rising international demand for red meat, very positive for lamb producers, and quite good relative to other commodities.
- Pretty good, the worldwide demand for animal protein is established and lamb and beef are strong participants in that additional demand.

Pork

- Value added products are being sold for premium returns, customers recognise the 'fresh and safe' aspect of Australian food.
- The Australian Dollar is too high to encourage export.
- In our industry it takes a long time to restructure if suddenly we have increased demand. The pork industry has declined to half of what it was in the 1990s and it's static and only supplying the fresh Australian market. Most Australians are happy to buy imported goods because they're cheaper. If we're going to compete, Australians have to understand that the rest of the world is more competitive and we have to be less greedy with wage increases and conditions.
- Hanging on to the fresh domestic product is the key. Overseas products are being imported frozen from Canada and China and are processed in this country (into bacon etc.).
- Our pork waste products are a commodity item for a specific Chinese/Asian market. Demand grows and drops off, it's reasonably static, and it's a matter of what other companies are doing with similar products. There's a peak in demand at Chinese New Year, but with the large Muslim population in Asia, not all markets are open to pork products.

What's changing over the next 10-20 years

Cost of doing business

- Regulations and restrictions on inputs. Biosecurity threats. Animal welfare, social values, climate change. The increasing costs of business.
- Utility costs just keep going up. Five years ago, water cost \$1.20 per kilolitre, now its \$3.45 and we use 3.5ML per day, it's a massive cost. We pay export prices for natural gas - our LNG is sold overseas with no domestic reserves.
- The dairy industry in SA is going backwards because of high costs in this country - fodder, electricity going up quite markedly and then discounting of milk in supermarkets, which is unsustainable. Unless the industry changes its marketing, producers will continue down a path of diminishing returns. SA has a chance to be at forefront of this. It's a whole new ball game for dairy - we need to be smart.

Technology

- Technology is just amazing in the sheep industry, DNA testing young sheep has led to mapping the genome to give us an idea of growth rates, quality of meat. We're able to test a day old lamb, and get good measurements and good recording. Technological innovation is fantastic and means the industry is more interesting as well as opening up opportunities for making more profit.

Labour

- Labour is an issue. To be competitive we need a labour force that can meet productivity requirements. Less than 10% of our production staff are Aussies, they won't work. So cost competitiveness means shifting to mechanical to eliminate people.
- More automation, employing technology rather than people, mainly because of the poor availability of people who will do something for the money they want to be paid.
- There are agencies for overseas labour, I'm heading down that path. I have employed a guy from the Ukraine, they know what they're doing, there are slight language issues, but they're keen as mustard to work and know what they're doing.
- The people who are picking up the biggest salary are concerned that overseas people will get their jobs, so work hard and be a half decent employee.

Business models

- Different ownership models and business structures. The pressure has never been greater on the family farm to do all the things that are needed.
- We'll investigate co-packing arrangements so that we can supply others with raw materials (e.g. milk) and they'll package so we can supply into the market.
- There's always uncertainty with agricultural produce, pricing and weather, exchange rates - it's a combination you can't do much about. So we need to be more efficient, most likely through being more productive - more per acre, while containing costs. Not necessarily reducing costs, rather containing costs at the same time as we produce more.

Regulation and traceability

- Things we're doing now are commonplace, ten years ago we would have had a heart attack.
- Regulation will be the big thing. It's over regulated now, but there will be more traceability and regulation in what we do.
- Obstacles are cost of production, animal welfare, and dealing with the continual demands of the major supermarkets and other fast food outlets. There are demands on traceability, on making sure there are no foreign objects in the food, it will continue to grow. If I walk into the plant and take a notebook and pen I have to fill in a register when I go in to say I have 1 notebook and 1 pen and when I leave I need to sign out that I have them with me. We do a daily stock take for everything that goes in and out.

Dining boom

- The last 10 years has been the mining boom. Now we are heading into the dining boom. It's real, and the growth in demand from China is evidence of that.
- Demand is tipping from grain fed to grass fed (led in USA by obesity and health concerns). We are marketing our products as Australian, clean, grass fed.
- Primary industry processing in Australia is challenged by import volume. It's a barrier and a concern, but could be an opportunity if other countries have an outbreak of disease.
- We have our own (lamb) label, it's useful for marketing.

Market access

- Market access is a constant issue: political, disease, competition (e.g. Free Trade Deals).
- We're looking at a shorter timeframe into markets like China.
- Supermarket demands determine everything.

Animal welfare

- Animal welfare is a continual battle and we will need to continue to invest money to upgrade what we do across the whole production and processing chain. It will create flow-on costs though.

What changes in your business

Automation

- Automation is needed to make labour savings, grow scale, increase values and attributes which products can be marketed with.
- We need smart investment and automation.
- The biggest thing is bringing in robots for milking etc. Most have carousels for cows, but the new ones coming in are quite exciting - cows come in any time of day or night and 'milk themselves', it's all automatic, we have TV cameras and computers to record every cow. We measure the composition of milk as they're milked and they get feed while they're being milked and their rations are individually tailored. Operating on the River flats is ideal for that - cows haven't got far to walk, out factories are really close.

Business models

- The large family farm has had rapid growth. We have considered a joint venture and are looking at equity partners or investing in someone else's business.

- Small farms are selling up because the kids aren't interested, but there are other ways of doing it. Individuality is our greatest strength but biggest downfall.
- These days we need to have a HR person, someone who can spend a considerable amount of time sorting the paperwork. If you're flat out running the property you don't have time. We have a young family and my wife can't do it while looking after the kids. There are templates, but it's time consuming to set up and keep going. If you can't get quality employees you are spending more time in the business, with good staff we could spend more time on the business.
- Productivity is driving this business. Single ownership and our brand is has freed decision-making so we can drive productivity and move quickly.
- Going to have to move forward, no good saying 'we're not going to do it' because we won't be able to supply. A big part is getting our employees to understand that, so we have a much bigger focus on employee communication - they're on the road with us, why we need to change things.
- We keep looking at labour saving technology and adapting some of that into the business, streamlining and being better at what we do, working with better data, new and better equipment. Technology is the only option to improve efficiency.

Finance

- Lenders are very nervous about the serviceability of loans, so farmers need to be more mature in managing and documenting the fundamentals.
- Will be looking at raising capital to recruit new staff in line with increased production, and developing partnerships with other companies.

Regulation and traceability

- The key thing is recording of the animals, years ago we managed flocks on a flock basis and treated all animals the same, now we're managing each sheep at individual level - all have electronic identification, and each can be treated individually to get the best from them.
- Being open minded in our thinking, cost focused at all times, and to try and get some sensibility about workplace laws, workers compensation costs are crippling the industry. I'm not sure where that's going but it's a big drain on industry.

Market opportunities

- There is a five year window in China so we need to develop new markets (e.g. USA). If we trim costs too much we can't invest in those markets. We're looking to increase revenue from each carcass, to value add to get them shelf ready - the abattoir is becoming the butcher shop. It's deskilling the retail staff, but making more work for the abattoir. It also means we need to get the transport right, our product is "sell it or smell it".

- We need to be smart enough to be able to find extra markets and to find investment to access them. Opportunities are opening up because in last twelve months Asian interests have purchased dairy plants in the Murraylands so they have plans to expand to take product into Asia.
- A lot of farmers are going through programs where they are involved in rehabilitation of heavily damaged vegetation resulting from years of drought and being starved of water. Those programs now need to be renewed. It's a costly exercise, and needs investment by farmers and government, but it's pointless if we don't find new markets to grow and expand into.
- We do whatever the supermarkets tell me to do! We have just been told we have to change the way we are growing and must become RSPCA certified otherwise they won't accept our chicken. It's entirely 'voluntary' but if we don't we can't supply, so we're forced into doing what supermarkets say and increase the supermarket's profits - they dictate price. So if costs to the producer go up, they can't necessarily pass it on, they have to reduce margins.

Barriers and obstacles

Cost of business

- Cost of business (labour rates, power, water etc.), low ROI, cheap imports, consumer pressure, competing for local markets using cheaper input costs or subsidies to lower cost base.
- We self-insure for Workers Comp to manage costs, but businesses can get too focused on costs, the real opportunity is in revenue.
- The cost of doing business in Australia is the highest in the world. Most people overseas are only interested in quality while the price is right.

Finance and capital

- Biggest barrier is money and investment - we need government and industry working together to fund development and marketing.

Telecommunications

- The biggest hindrance is mobile coverage, and we're only 100ks from Adelaide, but it's still very patchy. We have water leak detection systems on all meters, which is great, but it relies on a Telstra system to feed data back so continual coverage is vital.

Government policy and efficiency

- Red tape.

- Reducing quarantine restrictions on imported products.
- Unnecessary regulation is a huge cost, for instance when had to change to stall-free pig enclosures, we built a big purpose-built shed and gave each sow a space where she could see and move freely. Now we're in a legal wrangle with local CFS who want us to put a \$100k ring-routed fire hydrant fire system around the piggery, it would be totally useless.
- Rural industries shouldn't be under same guidelines as industrial resident areas in the city.
- Government needs to understand our industry well, and we need to lobby to make sure they do.
- I work seven days a week and love what I do, but because we employ about 15 people, mostly families in regional areas, every month I have to pay \$1000 in payroll tax. If we are not careful the costs will be just too great to do business in this country. That's why all these businesses are going broke and getting out - they just can't be bothered any more.
- When we bought this business, no one in government could tell us what the stamp duty would be.
- Why have water costs gone up 400% in the last four years? I know it's a limited resource, but then why are power costs so high? They're through the roof.
- We have high council rates yet no one picks up rubbish. All we want is a decent road to drive on. The costs to repair roads is all taken up in overheads and tied up in wages. Millions of dollars are tied up in machinery but there's no-one operating it.
- The live shipping trade was banned because of one bad abattoir. Lots of other abattoirs that Australian businesses invested in are professionally run but got shut down because of pressure. Local politicians are to blame too for giving in to pressure, lots of pressure on good businesses, and it ruined international relationships, we lost a lot of trade and it had a huge knock on effect. A stupid decision affected the whole cattle industry.
- Country of Origin labelling needs be put in place to ensure consumers know what they are buying.
- The whole employer/enterprise agreement legislation is heavily weighted toward the employee. It should be turned around. If you're doing the wrong thing as an employer you should be dealt with, but an employee should be equally liable - if they are doing something they shouldn't be doing, they should be sorted out.
- Schools could do more to promote local agriculture. The same teachers are teaching my kids who taught me when I was at school - they have stale ideas. We need fresh ideas to help our kids to see the opportunities. If the kids are shown agriculture from an early age they might show an interest in it and stay in the community.

- TAFE is a nightmare to deal with. Some courses are available but TAFE is so difficult to understand. You have to invest in your staff, the more they know the more they can do. I've invested quite a bit of paid time for them to go and do training, but now TAFE has gone away from the area, we can't do it.

Raw materials

- Milk supply has become a challenge. There's not much growth in milk supply and there are companies who are now looking at SA for product that they previously sourced locally in the eastern states.
- It comes down to how much we have to pay for our milk. A few cents a litre extra can be enough to switch companies.
- There were two dairy plants Murray Bridge and Jervois - both old plants owned by Lyon. Lyon decided they were going to close them and build new high tech plants in Tassie. Normally when plants are decommissioned, they get sold off and knocked down. Here the plants were acquired by UDP which has now been sold to Singaporean Chinese, we think they have acquired them because they can see potential in Asian markets, they are indicating that their intention is to modernise and expand and invest in the plants. The biggest problem then will be acquiring sufficient milk to make them work. We are hoping they will get the supply they need to get viable, local people need to support a local processor to give people confidence in the future and more investment.

Business culture

- The main barrier is our own inability, we have to change with the times, and it's all available to us and is a matter of rising to the challenge.
- There are plenty of people pushing new technology at you all the time, you can do DNA testing of a calf and know the quality of the meat from the day it's born, in the past you had to wait until the animal was killed. So it's a matter of being able to assess technology and adapt to it - to discern whether the technology will assist and adopt it if it does.
- If your staff don't believe you need to change and get better, there's no hope.

Labour

- We fight to get good labour in the pig industry, we can't just take anybody. We're heavily reliant on Filipino workers because they're good pig husbandry people. Without them wouldn't survive here in Australia.
- Getting quality staff, it's hard to find someone happy to pick up dead chickens day in day out who is also bright and motivated enough to take responsibility.
- For managers who need to fly a lot, Murray Bridge is too far from the airport, so senior managers tend to live in Adelaide.

Opportunities to address barriers within the region

Collaboration

- Collaboration, support and incentive for local employers.
- In the lambing industry there has not been as much networking as there is now, but we need to let people know it is happening.
- It would be good to have a farmer coop locally. There's a lot of milk produced in the area, it would be good to share in the value add of your milk, and local processors would be good, the money's there for the taking.

Labour

- We are now part of the Murraylands Food Cluster Group with the ten biggest employers. Being remote has advantages, but a lot of disadvantages. Disadvantages are that you can't find good people locally. We are hiring a HR manager and everyone on the short list is Adelaide based. It's a big barrier, travel time and cost.
- It would be good to have some tax relief for people driving daily from Adelaide - like the distance benefits in the mining industry. When we advertise, we get people who are temporarily out of work and they take a job with us while they look for a long term job in Adelaide. You invest a lot to hire them, only to find that they're gone in six months.
- We've had some discussion with RDA that we need a more centralised pool of staff, maybe a group of people who are groomed for the meat industry and have undergone training in food handling. We are thinking of putting up two apprentices, but they have to go to Adelaide for training - need an apprentice support base locally so they don't have to go to Adelaide all the time.

Supportive government

- Government shouldn't get in the way. Red tape and EPA issues are not helping. It's becoming more and more difficult to operate because of all the things you have to do and there's enough cost pressure without the pressure from government and council. At times just bloody mindedness. If governments could assist businesses rather than hinder them that would be a great step forward.
- Less red tape, more sensible rural zoning.
- Fix the stupid red tape, for example we wanted to put chicken sheds up in existing farmland with no trees but it still got referred to the Native Vegetation Department. They said they don't have staff so we had to hire a consultant to have a look and write a report. Quotes for a report ranged from \$4k to \$11k. The consultants came back with stuff that was already in our plans.

Utility costs

- Review cost of essential services to remain competitive. Create a level playing field for imported products with local products.

Infrastructure

- Invest in infrastructure to ensure better internet and mobile coverage.
- Better road and power infrastructure, we recently had an improved water supply, but the infrastructure issues are still a limiting factor. We have to use diesel power, don't have proper electricity because it's too expensive even though it's only a kilometre away.

Capital and finance

- Access to funding to support adopting new technology to help increase change.

Labour market

Attracting and retaining labour

- Agriculture in general is finding it harder to attract skilled labour against big businesses like mining who can pay a lot more for similar skill set.
- We can't get management employees to relocate to Murray Bridge, and if they do move here they find that their partners can't get jobs because they all go to locals (jobs for the boys, even if not capable), so eventually they move back to Adelaide or leave. We can't get the youngest and brightest here, so in future we'll need to look at centralised head office services in Adelaide.

Automation

- Dairy is so automated, there's a lot of technology to cut back on the low end employment.
- We're struggling at moment because of prices and costs, but this will change with investment in robotics. Once industry starts to expand and take advantage of the opportunities opening up, it will attract better people.

Overseas workers

- We use overseas production workers, but can't get good management.
- We can't get Australians to work, so we use overseas workers. Murray Bridge is the right spot for production, but we suffer in our head office function.
- Whenever we have labour requirement in the piggery we will advertise locally and just don't get applications, people just don't want to come. There is support

around the state, training etc., they do their bit, have students coming on apprenticeship from Roseworthy for work experience, but just hard to retain them. We use overseas labour.

Retention through good business practices

- Our hiring is better now, we looked in the mirror at what we were doing, now we've got a really good team, we look after them, it's a very stable team. Plenty of people are now concerned about job security, it's easier to keep them if you do things right and be professional.
- Our philosophy for management is that except for people with specialist skills, we're promoting our internal people and putting a lot of time into training and mentoring because they already live here. We've chosen to employ local people but going forward that's more and more difficult. I'd pay more, but we can't find the people.
- Do people need high level of skills? We turn over most staff on lines and machines where it's technical and boring work. Our full time staff who operate cheese vats and powder plants have been there a long time because they've had to learn a lot.
- We need to focus on leadership skills, business skills, employing staff, getting most efficient use out of staff, knowing legal responsibilities (increasingly important as the size of farms increases). We're doing a Company Directors course to help improve our effectiveness.

Unemployment

- With high unemployment, 90% I wouldn't employ anyway. There's a lot of people in this area who should but won't work.

Contracting and labour hire

- We can source the skills to operate equipment through Adelaide based labour hire - they have people on their books throughout our region. We don't have too much trouble with that.
- We use a lot of contractors, so the skills you need on your payroll are less and less. Plus we have an office in Adelaide to do the accounting and computing, it might be difficult to do that in the region, and our accountant lives in Brisbane - a lot of the work doesn't need to be on site.

Training

- Where there is a gap is for highly skilled people with food technology training. Not many people have food handling training, it's rare that people have those skills. So any courses that could help with food technology and food handling

would be beneficial. We have people who just don't understand handling food and basic hygiene principles. If they've already been trained it's very appealing to us.

- We need attitude and food hygiene. If they don't have a drug problem that would be even better.
- Definitely getting right staff is key. We pay for a group of TAFE of students to learn on site to help with their education and give us a potential pool of employees.
- We are prepared to invest a lot of time and effort into training people, but often to no avail. It means the quality of people doing the work isn't there and that reduces profits, we need five people to do the work of four.

Business models

- I'm a big fan of family farm, there is no substitute for owning and getting the best out of that property, and families do tend to care for it a little better. Some big corporate farms are doing well but they're more reliant on good staff who have passion, which is harder to find if they're just there for a wage.
- In the pig industry the smaller farms have disappeared and have been replaced by larger farms, we've lost a lot of small ones. Backyarders finished about 50 years ago. There are probably only two or three pig farms in whole region. All are either family owned or corporations, they're not being sold on the open market - you've got to have a contract, secured price, quantities - those come with demands and stipulations. It's easy to operate on larger scale, with 100-120 sows per worker.
- Farmers don't leave the farm to the eldest son anymore and young people need to buy in and they can't get capital. So it's becoming a corporate world, and they have to adjust to weather, climate, exchange rates, prices - they don't like it.
- The business model for this industry work quite well - big farms are getting bigger and then service the needs of the bigger processors, and there is one small processor who utilises the smaller farms. Larger processors require bigger farms that are more professionally run, smaller processors require small farms so smaller farms get picked up by smaller processor, and if they grow too large, they then move onto the bigger processor. Something for everyone, the bigger they get, the better economies of scale.
- Our business model is excellent for our business. We're private and can make quick decisions. We've funded all growth through cash flow.
- We've just gone through succession planning, my brother is running the beef side of the business. But separating the business also makes it hard, I'm winging it as a result of the volatility of things - curve balls out of left field that catch you by surprise.

Shareholders

- We are dictated to by our shareholders. Our business will grow or slow based on what our shareholders do in their business. So if one of our shareholders decides to get rid of 50% of their piggeries, we will suffer enormously. Similarly we will benefit if they grow. Our business model is reasonably sound and evolving all the time. The general philosophy won't change, but depends on the fortunes of the shareholders, and their fortunes are guided by customers (Coles and Woolworths).

Investment

- There will be changes in partnerships, joint ventures, equity partners to continue to capture various markets and the investment required to keep them on the world stage. If you're not doing it, get off the farm and hand over to someone who can.
- I have just spent a week in Darwin with a station owner and rural business consultant, and they are working out an investor plan where outside investors can pay for the crop to be put in and everyone shares a dividend at the end. It should return a higher dividend, so there will be more investor farming. You might be a land owner and own the machinery, but you will be planting someone else's crop, or milking someone else's cows. There are a million options. It's happening now in the cropping world.
- In respect of our suppliers, the farming sector is driven by returns, if we're getting \$4.50 per kilo for lambs, farmers are getting \$100 per lamb, so they can continue to invest and develop their business.
- Because the demand for meat means more contracts, it's driving a better balance in the market - hence consistency in pricing and increased ability for farmers to service debt. Speed and flexibility. We have good relationships with our workers because it's a private company.
- Some people say not to have debt, but it's hard to be a progressive farmer if you're not carrying debt. Debt gives you a better ROI, but volatility makes planning more difficult.

Margins

- If consumers aren't willing to pay more than a \$1 per litre for milk, there are going to continue to be small margins in factories and farms. People pay more for water than for milk. The supermarket chains promote low cost milk and it puts a lot of strain on the industry. So for the kids who want to stay on farm and make a decent living, things need to change and they need to get more money for their milk. Otherwise they go off and do other things because it's more viable.

RD&E

Sheep and Beef

- We have had good RD&E in the past, whether it will be the same in the future with federal and state governments all feeling the funding pinch I'm not sure. Farmers are all being asked to fund a lot more themselves and ironically it's those who most need it that are probably least able to afford it.
- I think we get a fair bit out of it, we pay for a lot of extension work, and we're part of several sheep management groups. Information is available, but possibly not as readily available as it should be - it's there for businesses ready to pay, but it could be subsidised more.
- The FarmBiz program was a good way for everyone to access information at a cheaper rate, these days we have to pay, there are not many subsidies around.
- Most extension these days is from private services, people trying to sell you something, find better ways and sell the benefits, and there are a lot of international companies in the game. We have plenty of consultants and suppliers who are providing us with everything we need.

Pork

- There are a lot of inefficiencies but everyone has to take their cut. Everyone is getting on the bandwagon.
- One discouragement for businesses is the volume of gratis survey work that is requested. I believe that if agencies or companies value the input of those contributing to the information trail there should be an offer for remuneration for time spent.

Dairy

- A lot of RD&E stuff is just reinventing the wheel (especially the government-run stuff), there are a lot of guys that do trials themselves on farms and are very open and happy to share the results and issues with any farmer who is happy to have a chat about it. So we need properly funded stuff on farms, this is where you get the most benefit. Government departments are not farmers. A farmer is out for the best possible result and a government has the tendency to stick within the guidelines that don't necessarily make sense.
- The dairy industry pays a lot for its own research using from levies.
- Dairy Innovation Australia do most of dairy research in Australia. There was a centre in the Adelaide Hills but lots of regional centres have been closed down, leaving Extension officers to pass out information about efficiencies etc.
- The dairy cooperative is very high tech, with high level DNA testing for animals and plants, but they have been too slow with value adding.
- At the dairy boutique level SA is very good, with cheese makers, the Cheese Fest and the national cheese-making academy at Regency Park.

- We use Dairy Innovation Australia Limited and pay a fee per year. They help with improving existing products or developing new products, they do engineering work on the machines. They're pretty good. We buy starter cultures off them, and pay a yearly fee and they supply the bacteria to make cheese and have an R&D component for those cultures. They also assist us with government funding and overseas research - they have access to all of that.

Poultry

- There's a committee with TAFE to set up Cert 3 and 4 for training staff - so we're expecting some funding from government.

Meat processing

- The Australian Meat Processing Corporation levy can't be adequately spent because it doesn't allow expenditure on capital equipment, so it all goes on reports. We need to stop doing reports and do it.
- We are just opening those doors now to start having a far bigger dialogue with RDA to see what is available and what we can use. We haven't done a good job of this in the past.
- The Australian pig industry has set levy whereby well funds go to marketing research and advertising so we're well covered. It's always evolving, experimental design of sheds, nutrition, sow welfare etc.; projects are going on all the time, it's a very dynamic industry. Twenty percent of levy funds comes back for state projects.

Infrastructure

"Roads, power and water are inadequate - but that's SA."

Social infrastructure

- Schools, hospital, supermarkets and services.
- Community and social aspects to encourage lifestyle balance.
- Housing would be great, there's no magical answer although it's a big issue and good housing is the biggest barrier when we bring someone in.

Telecommunications

- Mobile networks the main one.
- Internet isn't good enough. We're working across a number of states, and we can't always connect to them.

- I'm not dependent on high speed internet or anything, just need a basic internet connection.
- Mobile phone reception is critical and needs improving in some areas.

Transport infrastructure

- The only way to growth of Australian businesses is exports, and you need to get your product to market.
- Roads, rail are a bit of an issue, ports as well. Infrastructure is not getting improved at all, it comes down to investment, and we need a combination of government plus private and even foreign investment.
- We need better road train and B-Double access. Our Lobethal plant is the only abattoir in Australia that doesn't have B-Double access. It's costing us, and it's costing other industries like the wine growers.
- Quality of roads needs to improve, lots of trucks on roads these days, shifting livestock and grain, great to see stronger rail network to get trucks off the road, but think that's a thing of the past. Improve road quality for safety and ease of movement, make things easier for truckies - reduce freight rate that farmers have to pay.
- From an animal welfare perspective, not being able to access product or our sites with larger trucks means that animals are on transport longer - we don't like that.
- There's a fair bit of employment in our industry in the region. The region needs to encourage and guide government where infrastructure needs to be centralised.

Water infrastructure

- Water infrastructure is an issue in Tintinara.

Power

- We need to keep developing infrastructure to stay in pace with the growth of industry. It's easy to bargain in a free market - but we're not there. We can't tap into the SEAGAS pipeline, the government needs to support industry to operate competitively.
- Power, power and power! Augmentation. Electricity - the power company has been privatised and 51% of profits now go to Malaysia. If I am in the process of building a new farm out Swan Reach way, I have to pay to upgrade the substation to provide enough power for now and the next ten years, I'm up for half a million dollars to improve infrastructure that I don't own. I have built three farms that cost nearly \$1m to upgrade the substation at Mypolonga, and there is no independent board to check that money has been spent or even that it was needed in the first place.

Training and workforce development

- More training, industry focused training to have a more centralised labour force to suit the most prominent industries: meat is the huge one.

Local services

Near Murray Bridge

- Schools and health are reasonably fortunate and we're not far from Adelaide in the Murraylands. The Riverland is a bit more difficult, but they have big towns and that makes it easier.
- Murraylands' proximity to Adelaide will continue to provide reasonably good services.
- In Meningie the Aboriginal population gives us more services, and that's good.
- Housing and schools and hospitals are there. TAFE training is done on site.
- Murray Bridge is well equipped. Hospital services depend on what you need, if you need an operation you need to go to Adelaide, but our services and schools aren't bad. We have a fair range of options public and private schools. Even from a lifestyle perspective (shopping) we have most here, and it's growing all the time.
- Housing is affordable and services are improving, but nepotism is holding the region back.

In more remote areas

- Employment support is needed to encourage workers.
- It is essential to keep schools and hospitals and services available. If these reduce it becomes more difficult to recruit and retain quality staff.
- Always going to be a problem, it all comes down to population - I'm concerned that we're not going to have school bus if there aren't enough kids. I accept that, but all the inefficiencies that make it unviable are what annoy me.
- We have access to local schools, people in the country get used to travelling, hospitals not too bad, jobs will attract people out to the country more, but we need a diversity of jobs for partners (we might have job for the husband on farm but need other jobs for the rest of the family).
- There are a few dead spots in mobile and internet coverage. Everyone uses mobiles these days, better coverage would help.
- No local support in Lameroo. Every time a Filipino family has come, we've had to house them in our own houses, but then they buy their own homes locally. There aren't a lot of services in town - schools have shrunk in terms of number of

students, and we worry about the future at secondary level. I hope the school survives to support the families there. We've got a hospital and a doctor most days but on rotation and it's hard to get in. We have to drive most weekends to Murray Bridge.

Climate change

Things we've done

- Increase returns per input used (e.g. \$/ML of water), increased water use efficiency, better feed conversion and utilisation (Pork).
- We've spent lots on covering our ponds in a gas reduction strategy to reduce carbon dioxide. The Clean Technology Investment Program was embraced by this industry, everyone covered their anaerobic lagoons. We use less coal, more natural gas and less water. The industry has responded really well. Drought is not an immediate issue for us, it provides lower cost inputs, and if it's an extended drought in one area, we have other suppliers across Australia to ameliorate risk. In this business you need to act quickly, and we're energised! We're the third largest Australian processor and the largest Australian owned processor in the country.
- Like all industries, we have to be very vigilant and have our own internal programs to make sure we do everything we can to support climate change. We don't do a lot that has a big impact, but it's in our focus.

Farming attitudes

- We are affected with seasonal infertility in hot weather. We have to find ways to reverse this trend though better nutrition, better shed design and air flow to combat. Don't know if this would impact greatly, we rely on grains to feed so any impact on that would be felt. We have bought land south of where we are with better rainfall to do cropping to ensure better yields and we're changing cropping practices to preserve water and maintain soil. Developing strategies to beat the challenge.
- We're accustomed to being responsive to volatility. If I'm facing a climate change issue, so is my neighbour and the region. If you can't cope with change you're in the wrong industry. Climate change can throw you a bumper year as much as it can give you the driest year ever. You only have to look at the historical data, the 1904 Federation drought took another 100 years to happen again. I'm not a climate change denier, it's not as uniform as it used to be, the extremes are always there and if you don't like it you're in the wrong game.
- Everybody is going to have to play a role in that - greater research about what lamb producers can do to reduce impact, at the moment they don't really know what to do. Like to access to take-home strategies, better communication and information dissemination

- We're not looking at climate change as we build our next three year business model. I should be raising it for planning for future markets - particularly domestic/overseas. If we have another drought, it will hurt.
- All we need is to make sure there's enough power and water to cover increased cooling costs and heating costs. We take all our water from the Murray so if the level drops too low we will run out. But water isn't as much of a problem as access to power and infrastructure to deliver products to where it is needed.
- Climate change is a popular bandwagon - if we hadn't had climate change we would still be in the ice age - have to accept weather extremes. Irrelevant.

Leadership

Leadership programs

- Greater effort should go toward encouraging businesses with long-term tenure and investment in the region to co-invest or diversify into new business structures.
- We should encourage young people to become involved in agriculture as a career, starting with exposure at primary school level and encouragement through secondary school.
- Agriculture careers are not promoted well enough or incentivised enough through the pay rates offered. Greater returns to primary producers and regional businesses allows wage structures to improve and the cycle of training and development to grow.
- We need better infrastructure clusters. There's a fair bit of employment in this industry in the region, the industry should be able to guide government as to where infrastructure should be centralised.
- This industry, like all industries in Australia right now, are facing significant hurdles. Manufacturing has almost disappeared from the Australian dictionary. We need to be as smart as we can collectively to feed off one another and reduce costs and allow us to be competitive. It may mean sharing employees and managers. There's a whole bunch of stuff we can do that doesn't break trade practices laws. That's where groups like RDA can assist (like in the cluster) to get people around the table, it's been fantastic.
- PIRSA currently working to link into the Asian opportunities, with delegations going from SA for instance, nothing much is happening though. The reason is that if you want Chinese to come down and invest in dairy processing here, then you have to have plans and prospectuses, something for them to put their money into. We can't expect them to do their homework, they expect us to do it for them. We need more leaders to drive this.
- I'm involved in a number of boards but more a state level than regional, but there's plenty of local opportunities to get involved, probably more opportunities than available people! This includes things like sport and volunteering - at the

moment people have to take on multiple roles that can clash because meetings are on at the same time.

Leaders in the region

- I like Brenton - reckon he's a good guy, but leadership is pretty shallow after that, advocacy in regional areas needs a shakeup. Everyone is getting out of the National farmers Federation, we need a strong voice and it's not happening.
- The most disappointing thing about the region is it is such a safe Liberal seat, marginal seats get more attention, it feels like we don't get so much. I don't know if local MPs take us for granted, although at Regional Development level it's pretty good.
- People have to be born with the skills to lead, you can only develop so much.
- Some people like a badge to show they're a leader and they are usually on 15 boards and committees, but they aren't always the ones you want to learn from. The good farmers are on farm doing it well and they're happy to share examples and that's what a proper leader is.
- We've got some field rep people who are very supportive of the farmers and very vocal about supporting those guys. In Melbourne we have people who talk to government officials and Dairy Aust - we have good leadership.
- We're very fortunate to have Thomas Foods in our industry and area, to have a business as strong as forward as they are. They can bring animals in from anywhere but costs them a lot less to bring it in from local suppliers. A lot of regions would like a business like them in their region. Thomas Foods is far more important than anything else in our industry - government, RDA, roads, water. We would all benefit from improved infrastructure that keeps them in town and expanding.

Informal leadership

- Leadership is more of a networking thing than a leadership type thing. It does leave some people on the outside if they're not outgoing enough to make a phone call or visit another farmer. It's more informal. I talk to dairy farmers a lot, people of all ages, and if I have an issue I have 5-6 farmers I call regularly and they're more than happy to tell me their experiences.
- Discussion groups on the Fleurieu, Murray Bridge and Meningie are thriving at the moment. It's not exactly leadership but it's getting people out talking about things.
- We have lacked good leadership, too much outside influence and insufficient development of the people involved (making our employees stronger with more understanding of the business). We've changed our focus and it's improved out of sight. Leadership comes with experience, you can't buy it, you have to learn it.

- In the Murraylands and Riverland we don't really need producer groups like we used to have - the industry isn't big enough. It's happening at state and national level, but there's not enough demand for anything more localised. We use newsletters and have a new industry body with strong membership (Pork SA) that keeps people informed. We're well catered for.

Fruit and Nuts Industry

Introduction

Eleven farmers from the fruit and nut sector were interviewed:

2 x citrus

1 x nuts

1 x olives

1 x caper

1 x dried stone fruit

1 x fresh stone fruit

1 x pomefruit

3 x winegrapes

As with previous sections of the report, a summary of findings precedes the detailed findings. It should be noted that only a small number of people were interviewed from each sub-sector of the fruit and nut industry and that the findings may not be representative of all operators in that sub-sector.

Summary of findings

TRADE SITUATION

- Apples are sold domestically through supermarkets and restaurants, as well as exported to Asia.
- Capers are sold domestically into the restaurant industry. Demand outstrips supply.
- Citrus is sold domestically and internationally. Australian citrus products also use raw product from overseas. The industry needs collaboration and cooperative buying systems to ensure supply meets demand.
- Fruit beverages are sold to Asia, New Zealand and domestically through supermarkets and restaurants. China is the biggest growth market.
- Nuts are predominantly sold overseas into expanding markets in Asia, Europe and the Middle East. Strong future growth is expected.
- Olives targeting the premium market are sold domestically and exported. Production is focused at the premium end as Australian producers cannot compete with low cost, lower quality Mediterranean imports.
- Stone fruit is sold domestically and there is potential for growth.
- Wine grapes are sold to winemakers who sell domestically and overseas. The wine industry is in a global down turn, but future opportunities lie in quality regional wines.

ACCESS TO CAPITAL

- Access to capital is generally an issue in both production and processing businesses.
- Capers is a high yield, low capital, niche crop that can provide production diversity.

WATER USE, CLIMATE CHANGE AND R&D

- Growers are adapting to climate change with new varieties that are more drought and heat tolerant, new technologies, more efficient forms of energy, and new production methods.
- There is a stronger focus on waste management, and using resources better.
- Climate change and lack of water are the main barriers, but additional green tape will also create challenges.
- Capers are ideally suited to the Riverland climate and demonstrate how new products can be successfully added to the production mix to support climate change adaptation. Research into pests and diseases is needed.
- The Almond Board of Australia are providing good ROI.
- Citrus reported that there is a deficiency in the depth of structured research, with information coming through a mix of private consultants and CSIRO.
- Wine grape growers feel that they have insufficient influence over R&D in their industry fund, however they are well served by the Australian Wine Research Centre, CSIRO and Adelaide University. Wine producers also carry out their own R&D.
- The government is now disbanding RDCs, and there are concerns that future research may not address the needs of industry, and new models could potentially destabilise industry levy systems and hence reduce industry-funded R&D.
- Government needs to provide more support for research. The Loxton Research Centre may assist, but growers report that they were not consulted as to how this Centre will operate - even though they are being asked to contribute funds.
- More work needs to be done to improve regional understanding of social media, and online marketing and sales.

LEADERSHIP

- Regional collaboration is important to assist in the growth of individual industry sectors as well as across sectors. Extension and leadership will be required to secure a strong future in emerging markets such as Asia. There were calls for a regional focus on areas of common interest such as biosecurity.
- The primary industries sector in South Australia is dominated by small producers, but most government programs and industry groups focus on larger growers. SME development is essential for diversification, innovation and food tourism.

- It's important that people hear about the good things that are being done - and not just in the big industries, there are excellent opportunities for niche products.
- Regular networking sessions are organised by some sectors (e.g. wine grapes) to keep members involved and informed.
- Leadership and training is needed for management staff. The citrus and stone fruit industries reported that leadership structures that were in place a decade ago are no longer appropriate and more leadership development structures are needed.
- Different farming techniques in the nut sector (new technologies, changed harvest methods, better product management) will require industry leadership although the Almond Board of Australia is reported to be doing a good job keeping growers up to date with the latest trends.
- Cross-council leadership is needed, it was suggested that the three Riverland councils should have one person with overall responsibility for agriculture, tourism and environmental compliance.

TECHNOLOGY

- Automation is becoming more important across a number of sectors, but is inhibited by access to mobile phone and internet services.

TRANSPORT AND LOGISTICS

- More investment in the main arterial roads is needed, including extension of the dual highway from the Barossa to the Riverland.
- Roads are generally deteriorating.
- A commercial airport is needed in the Riverland.
- Fruit quality and profits are hampered by transport access and cost.
- Olive processing must shift to onsite to reduce transport costs, maximise product quality, and re-use organic waste.

INFRASTRUCTURE

- The Riverland is still recovering from the drought and global financial crisis. Water security is an ongoing concern.
- Access to water and power (particularly three phase power) is limiting development and value add/on-site processing.
- The price of energy is critical, and adds to the disadvantage of being distant from major markets.
- Green power produced in South Australia should make energy cheaper, but it's sold interstate and local producers and processors are paying ever higher prices.
- Internet and mobile phone coverage is poor in some areas - with insufficient bandwidth to skype. NBN should go to all areas, not just the main centres.

- Telstra's monopoly in some country areas means that businesses have no leverage to deal with poor service. Government should put pressure on the companies they sold public assets to, to provide a basic level of supply to ensure everyone can do business on a level playing field.
- The cost of waste is high, partly because waste is transported to Adelaide.
- Small towns without shops or services find it difficult to attract workers at peak times, and businesses report that they can only hire workers with their own transport and accommodation (e.g. caravans), which restricts the labour pool. Even larger centres report a lack of single and family accommodation for workers during harvest.
- A co-operative commercial kitchen in the Riverland would encourage boutique food processors to increase volume and sales.
- Retirement facilities are needed to enable people to live within the region and reduce the time and effort needed to maintain social connections when retired people live outside of the region.

SKILLED LABOUR

- Labour is an issue for peak periods in labour-intensive industries such as capers, olives, and wine-making.
- Labour costs are driving increased mechanisation in citrus, olives, wine grape and food processing businesses.
- If skills aren't available, smaller operations struggle. Larger, well run operations that offer good conditions have less trouble attracting staff.
- Farmers are now required to have high level of technical and computer modelling skills to enable them to use data for decision-making. Basic farming, computer based analysis, agronomy, chemistry and financial packages (in fact a "really cool" farm training package for young people) should be provided at Murray Bridge. There is nowhere in South Australia that this is provided. The priority should shift from mining to agriculture.
- Horticulture is not taught at Adelaide universities, the only place producing horticulture graduates is Sydney.
- Management skills need development in the wine grape sector, with businesses reporting that some companies don't understand concepts like gross margins, and this is making it difficult to engage them in industry development.
- The citrus industry is challenged by the capacity to educate staff and to attract good people into the industry. As the industry automates more, skilled technical staff are needed and people won't relocate to the region to work.
- The fresh fruit sector relies on backpackers for harvest, although this source of labour can be variable.

BUSINESS MODELS

- Good governance structures and strategic planning assist in maintaining a strong market position.
- Intergenerational family businesses delivers enthusiasm and experience.
- Differentiation is occurring through organics, premium products and environmental branding. Marketing innovation, including better use of social media is needed.
- In the wine grape industry there are fewer growers and producers, but the yield per hectare is increasing. The industry is focused on expanding markets and redeveloping markets that have been going through a downturn. Wine grape producers need to become more involved in the value chain - adapting to market needs.

GOVERNMENT REGULATION

- Regulatory costs are a particular burden on small business.
- Government has a stronger role to play in making sure imported goods comply with Australian standards, for example better regulation is needed for labelling of imported overseas products (e.g. 'extra virgin' olive oil).
- Uneven import/export duties are making it difficult for some sectors to be competitive (e.g. costs to export to the EU, with the same products having no Australian import tariffs).
- Government policy unpredictability is a challenge (e.g. changes to WHS). Penalty costs for wages are a barrier, as is red tape. There were calls to deregulate the labour market in line with deregulation of "everything else".
- There are opportunities to get grant funding, but it's hard to get it at the right time, or have the skills to write the application when the funding is announced.

Commodities

Almonds

Apples

Capers (capers and caper products)

Citrus (oranges, lemons, red grapefruit, mandarins)

Non-alcoholic drinks (fruit drinks and juices)

Olives

Stone fruit

Wine grapes and wine

Markets

Almonds:	A lot into India, plus Asia, Europe, Middle East
Apples:	Distribute nationally through Coles, Woolworths and restaurants, Asia
Capers:	Top chefs nationally
Citrus:	Australia, New Zealand, Indonesia, Japan, Europe, India, Pacific Islands, Canada
Non-alcoholic beverages:	Japan, New Zealand, China. Distribute nationally through Coles, Woolworths and restaurants
Olives:	Locally and export to Japan, looking at China and USA
Stone fruit:	Domestic
Wine grapes:	Small producer supplies export winery. Large producer supplies UK, Canada, US, Asia, Netherlands, Switzerland. Largest markets are UK, USA, China, Canada, and Scandinavia. In total Riverland Wine members export to 28 different countries.

Future for these commodities

Commodity	Future
Almonds	<p>Fantastic, opening up new markets all the time Korea, China, with FTA coming off a big help will hopefully give them an advantage. Also looking at Indonesia. Demand as a good healthy eating snack or recovery food is huge, particularly amongst the middle class in China and India, outlook very good.</p>
Capers	<p>The limit is what you can pick. Picking is in the heat of summer and you have three weeks between berries and fruit (but at least you can harvest both).</p> <p>There's a huge market but its labour intensive. There's a big opportunity for the future as more people with a label and know-how to produce top quality produce.</p> <p>The only opportunity for Australia is quality, our product is better than overseas and sell at eight times the imported price to cover costs, because the picking in Italy and Spain is done by villagers who don't get paid by the hour. But their produce is wild and often sprayed with poisons, so the quality and food standards aren't there.</p>
Citrus	<p>We'd like to think we could do more oranges. Most of the orange product goes to NZ and we'd like to do more.</p> <p>A lot of lemons were pulled out over the years and there's more demand and we could do more with our lemonade quencher product.</p> <p>We'd like to do things with new grapefruit varieties, and mandarins.</p> <p>We bring in raw product from around the world - you have to in this business.</p>
Fresh stone fruit	<p>Will always be in demand. In terms of future growth always needed.</p>
Non-alcoholic beverages	<p>China is the biggest growing market, good reasonable prospects.</p>
Olives	<p>Have to focus on quality producers, won't compete with Spain, Italy or Tunisia for quantity. But there's not a lot of extra virgin grade oil in the world and 95% of Australian oil is extra virgin. Most of the oil from overseas is mislabelled.</p>
Wine grapes	<p>Wine industry in down turn globally at the moment, future is in high quality wines that reflect regions and countries and show great skills. Bulk wine is oversupplied worldwide.</p> <p>Very good - there is a really large local and international market, particularly having a strong environmental brand which works very well for us.</p> <p>Riverland is the largest wine producing region in Australia with more than 1000 growers and wine makers who produce 60% of the SA crop, and 25% of the national crop.</p> <p>Very positive, regions collaborate and our first objective is to grow the market, then to become more competitive. Extension and leadership are very important both at community and government - strong future, producing for emerging markets particularly the Asian markets.</p> <p>Business into the future needs to operate on sustainable models, doing business that way will become more important into the future and business not doing that may in fact disappear. Businesses need to be very strategic and mindful of using sustainable methods.</p>

What's changing over the next 10-20 years

Commodity	Changes
Almonds	<p>Water security is the big thing at the moment, particularly during drought, We own about 40% of their water but are going into market to secure more.</p> <p>Compliance and environmental issues are becoming much harder to work with; we have people employed just to ensure compliance, all areas, not just WHS, labour, wages and regulatory.</p> <p>Climate change certainly will be a challenge, requiring different methods or different areas.</p> <p>Producers are now shareholders in processing as well as marketing to try and add value, Paddock to Plate Model to deliver directly to customer.</p>
Capers	<p>As the industry grows, there are more people with a good product and well known label, and others with plantations that just grow and pick. We pay these suppliers well - at retail rates. The beauty of capers is that it's a niche market for fruit or grape growers with a couple of spare acres. They can make \$10-\$15k per acre after four years.</p> <p>Australia imports 400-600 tonnes per annum, and there's another 300 tonnes in domestic production. Demand is growing, our chefs take all our crop. We're organic and biodynamic, and this is a big change for farmers converting to niche markets.</p> <p>There are no big growers coming into the sector because of the cost of labour. It's hard, hot work. But on the positive side, because the bushes are low, you can sit in one spot and pick for half an hour without moving.</p>
Citrus	<p>Our capacity to compete internationally, increasing costs.</p> <p>The best way of growing is to have some commitment to each other via contracts to supply fruit. Otherwise you need a buying system. It's a challenge to make sure we have supply secured to meet demand, but also being as efficient as possible to be competitive.</p>
Fresh stone fruit	<p>We just deal with what we have in front of us today rather than 10-20 years' time, the key thing is that the product meets consumer expectations.</p>
Non-alcoholic beverages	<p>Labour costs, mechanisation.</p>
Olives	<p>More robotic, the cost of labour and finding qualified people who want to do farming is challenging, especially in the mining boom when retaining staff was just about impossible. So we've concluded that our weak link is labour, and we're aiming to be as robotic and mechanically driven as possible. With GPS in an olive orchard, a lot can be done robotically.</p> <p>If the government doesn't help level the playing field, farming will hurt. When we export, we pay \$1.80 per litre to export to Europe, it costs nothing to come in. There's no import duty to USA or Asia, we're priced out of the EU market.</p>
Wine grapes	<p>Diminishing number of enterprises. The number of growers and producers will decline, but the yield per hectare is improving markedly, we're more productive. Fewer, bigger enterprises.</p> <p>I believe that we will become the Vineyards of the World, we are just beginning to realise our potential.</p>

Commodity	Changes
	<p>Trying to run very sustainable business organic-registered business with quality, sustainability and identity.</p> <p>A very important part of that is being innovative, particularly with marketing via social media. IT media will more important into the future than even making good wines, marketing the product will be the key, capitalising on new opportunities and challenges.</p> <p>It will still be a very strong and increasing emphasis on the environmental message and how this is practiced in vineyards. Good products with a very green message through the total production.</p> <p>There will be increased expansion into global markets, particularly Asia, and redeveloping markets that have been going through a downturn such as US, Canada, UK. Will need to look outside the square to keep the brand sustainable.</p>

What changes in your business

Commodity	Your business changes
Almonds	Might be farming differently. Be leaders rather than followers so look at new technology, change harvest methods, better ways to treat product once harvested.
Capers	Encourage more growers. We can produce more if we can source more. It's a niche operation because of labour costs, and can generate a good income from a small plot for farmers who want to diversify.
Citrus	<p>More automation, employ the best consultants both in agronomy, marketing, particularly international marketing</p> <p>Need to be more efficient, utilise our resources more, less waste -that's the focus now (working with Zero Waste on it), it's a company-wide focus.</p>
Non-alcoholic beverages	We will become more mechanised.
Olives	<p>The business model for olives is processing fruit on site where trees are grown. Now we put them into 4 tonne bins and take them to Keith where they are processed and stored. But olive is only 18% oil, you're shipping a lot of product for a small amount of oil.</p> <p>The largest grower processes on site and doesn't have transport costs, they harvest into tippers and straight into receival hoppers, saving on processing time/equipment/cost. The 82% of waste product can go back on the orchard as fertiliser (retaining the goodness you've grown).</p> <p>In order to get costs down, need to invest in processing plant, but don't have three phase power (we have to use a generator). If you then ship and store oil, that's OK because it's a smaller volume. The next step would be to store and package on site. Every time you move oil it costs 10 cents per litre.</p> <p>It costs \$350k to put in a modest sized plant, but we'll only succeed if we do that. It is an essential.</p> <p>Expansion is not an issue of the amount of land, it's of lack of water and onsite processing plant. We've considered collaboration, but then we're still moving olives - no-one takes cows to processing plant to be milked, it's the same</p>

Commodity	Your business changes
	<p>concept. People liken us to the wine industry, but we have more similarities to the dairy industry.</p> <p>Marketing will aim more at health benefits above every other oil. Olive oil is the only oil that's not chemically extracted, it has unique health benefits that are peer reviewed and documented. We will be working more on that.</p>
Wine grapes	<p>Grape growers need to become more engaged in value chain - they have effectively been closeted for the last few decades but are now beginning to understand the market more and to respond more effectively to what consumers want. There will be more collaboration between wineries - adapting to suit market needs.</p> <p>Marketing methods, sourcing of supplies that go into wine making process always look for best quality input, efficient pricing. Cost of production and methods and marketing.</p> <p>We are looking at developing the site more, building broader awareness of the brand, developing accommodation facilities and private tasting areas.</p>

Barriers and obstacles

Commodity	Barriers and obstacles
Almonds	<p>Some of the regulatory barriers. Technology is also a barrier, but it's more of a help than a hindrance as it constantly evolves.</p> <p>We're close to Almond Board of Australia who are doing fantastic job, keep up with latest trends.</p> <p>Our main barriers are climate change or lack of water, who knows what green tape there will be as this has more effect?</p>
Capers	<p>The policy of the local papers that we have to put in a \$300 ad to be able to provide an article. It's stopping the smaller producers getting a voice, and is damaging the region because people aren't hearing about the good stuff that's being done. I'd put articles in to support the paper, but they won't publish without a paid ad, they have no interest in contributing to food tourism. Its short term profits at the expense of long term benefits to the region from food variety and quality.</p>
Citrus	<p>Same as any business - need to be alert to change, adaptable, reactive. Unpredictability is a big challenge, particularly in what governments throw at us. For example at the moment, there are changes to OH&S which are a challenge - to comply is difficult, have to seek training and advice externally.</p> <p>Price of energy is a critical one. We're working with the RDA to look at energy costs. The biggest issue is energy cost, its gone berserk in the last few years. When you have the disadvantage of being away from major markets and the problems of distance, the extra impost on the cost of power when SA is exporting power, it's ludicrous. We're producing all this green power which should be cheaper and more efficient and we're selling energy to VIC and NSW and paying more for it ourselves.</p> <p>There's a lot of opportunity to get funding, but it's hard to get it at the right time, or have the right person to obtain that funding. We've not been able to access it at the right time.</p>

Commodity	Barriers and obstacles
Fresh stone fruit	Barriers are numerous - penalty costs for wages, competing with imports that don't meet Australian standards, red tape of government controls, high cost of operating (chemicals particularly), power costs, and it's very labour intensive.
Non-alcoholic beverages	Financial
Olives	<p>Money.</p> <p>Not having 3 phase power.</p> <p>Not having decent internet and mobile phone (Coonalpyn). It's a real impediment, we can't skype because there's not enough bandwidth.</p> <p>We recently changed phones to a company that went into administration over an argument with Telstra and so Telstra turned off all their customers. We went through whole harvest with no phones, it was an absolute debacle. It highlighted Telstra's monopoly, they have the ultimate power to control - we went to the ombudsman and others but none would touch Telstra. They said our only option was to join with Telstra but then it took another five days to get phone put back on. It was a massive, massive problem because when people called us there was a message that our phones had been disconnected, and looked like we hadn't paid our bills.</p> <p>There are a lot of companies to supply machinery, but not a lot of money, it would be good if there were low cost loans to farmers.</p>
Wine grapes	<p>We are having to come from well behind in educational standards, many don't understand enough about gross margins for instance, or even what a gross margin is, and about there being a role for them to play further up the chain. This requires education in the area of extension and adoption and encouraging farmers to see themselves as business people in what is a high risk area of agriculture.</p> <p>Generally the cost of doing business is huge, all of the fees and levies that have to be paid to regulatory bodies is a burden particularly on small business (we pay nearly \$4k per annum in registration fees just to run the business). This needs to be alleviated into the future. They're not helping business to do business.</p> <p>Meeting environmental standards and conditions. We are really mindful of the wishes and needs of the original landowners and ensuring that any changes made comply with their needs.</p>

Opportunities to address barriers within the region

Commodity	Regional opportunities to address barriers
Almonds	Less regulatory limitations, water security.
Capers	I set this business up as a demonstration to the Riverlanders in 2006 in the middle of the drought. It proved that you don't need 100 irrigated acres to make money. We have a lot of plants in a small area, and its high value. We chose capers because they bear in three years, and there are plenty more high value herbs and spices that can be grown in desert areas.

Commodity	Regional opportunities to address barriers
	<p>The biggest issue in South Australia is that there are a lot of small producers, but most government programs and industry groups concentrate on larger growers. If you have 10 employees you're classed as small business, but most small operators are micros and the subs and co-payments are too high for us. It's a major problem with FoodSA, although PIRSA are starting to recognise the needs of SMEs, and that micros are the driver of food tourism. The big producers can attract the big brands, but people are interested in small micro producers, people who do fantastic food and wine. South Australia is becoming known as the food and wine state, so the small producers need recognition.</p> <p>In the last two years PIRSA have sponsored small producers to the Cellar Door Festival that's becoming more food oriented. We went the first year and generated fantastic sales over the two days. When PIRSA do these sponsorships, they need to be selective, to focus on high quality product.</p> <p>Keep doing farmers markets, get to know each other's products and form partnerships. I have a partnership with the Wagyu resort on Kangaroo Island who use our products in their restaurant from being near their stand at a market. Simon Bryant took our product to New York for the Australia Festival.</p>
Citrus	<p>Well, we are a relatively small rural region and with the centralisation of government, we understand it is not easy to do things on a regional scale. It is the simple things that I probably find the most frustrating - for instance the difficulty of getting good internet service, or good mobile coverage - I have had to come outside to talk to you on the mobile.</p>
Fresh stone fruit	<p>Government can act in terms of making sure imported goods comply more with standards, more policing of imports, wage control, penalty rates need to be kept to a minimum - can't just pick Monday to Friday if fruit is ready at weekends.</p> <p>Costs need to be properly managed. Structure of government of commodities across Australia leaves a lot to be desired.</p> <p>Transport costs.</p>
Non-alcoholic beverages	<p>Bring back in enterprise bargaining or deregulate the labour market - everything else is deregulated except the labour market.</p>
Olives	<p>Telstra not interested in rolling out the network because there's only 1-2 customers, it's a business decision. The government should be putting pressure on these companies they sold out to, to provide a basic level of supply so that people can carry on a business the same as anyone else.</p>
Wine grapes	<p>We have been arguing for a long time for the region to collaborate more effectively across groups (wine, almonds, grain etc.) - This should be at the regional level to give a more collaborative approach. We need a regional business centre where we can take care of lot of areas of common interest, for example bio security - we should be working towards establishing national standards by coming together and collaborating to perform more effectively.</p> <p>Hong Kong has very interesting model - they only charge 15% income tax on businesses, so more businesses set up there, make more money, and successful businesses mean more money to government. Local politicians need to continue to work to get burdens lifted, they are doing it, local</p>



Commodity	Regional opportunities to address barriers
	<p>members in the Senate and State doing well. Regional politicians needs hands on understanding of what's happening in their regions.</p> <p>Good communication with locals, good community involvement, raising awareness. We hold Friday and Saturday night events to keep everyone involved and aware of what we are doing.</p>

Labour market

Commodity	Labour Market
Almonds	<p>We try to take on young science graduates who specialised in horticulture, but it's not taught at Adelaide universities any more, just general science and general agriculture. The only place with horticulture graduates is Sydney so it's a bit of a limitation, more training is required.</p> <p>The rest of the orchard staff is no problem. We put general hands through local training anyway. This used to be done out of Roseworthy, but now resources are just not there, and hope to train them up through the ranks.</p>
Capers	<p>Yes, because of the size of the operations. We focus on quality and are paid enough to cover our labour costs.</p>
Citrus	<p>We are always challenged by the capacity to educate people and attract those people into the agriculture industry. For instance, as you automate more, you need technicians and very few qualified technicians want to come and work in agriculture. We have been very lucky to benefit from a good migration program into the region from overseas, and this has enabled us to access skills of some very clever people, but then there is the language problem. Education in general and training (nationally) is not enough available.</p> <p>It has been a challenge in the past, general labour is OK, we are spending money on training people to upskill the people we've got. But if you want qualified people it can be hard to get them to move away from the city.</p> <p>We currently work through the SARDI and FOODSA regional access GAP program. We employed a food technologist under that program but had a number turn us down because they wouldn't leave Adelaide.</p>
Fresh stone fruit	<p>There is some difficulty, last year there was a good influx of backpackers - some fly in overseas workers, people who are willing to work in the industry.</p>
Non-alcoholic beverages	<p>We can get staff.</p>
Olives	<p>NO, there isn't enough skilled labour!</p> <p>One son is interested in staying on the farm (the others are engineers). The skills we need are in horticulture, agronomic chemistry, plant physonometry - the high level skills, he can do all the basic things. The next scientific step is to analyse so he can manage at a high level, to do modelling in Excel, budgeting, forecasting, understanding world exchange rates - as well as soil and tissue analysis, and understanding of fertiliser and how it works. High level chemistry is the next step.</p> <p>We need smarter farmers to cope with the range and level of knowledge needed to run a modern farm. You need analytical business and agronomy and computer skills to be a good farmer. If you can't do these you're doomed,</p>



Commodity	Labour Market
	<p>you need high level computer skills to run the business modelling to understand it properly.</p> <p>It would be very good to see computer qualifications in Murray Bridge, even basic farming skills like welding aren't taught there. We also need training in agronomic chemistry, financial packages - there should be a really cool farm package for local kids. We need to be able to put them through a 'farming as a trade' course to learn how to produce food in a competitive and sustainable way - we need to be clued up to be competitive. There's a lot of analytical skills needed, looking at options (fertiliser, nitrogen, different ways to get the same result without having to spend money).</p> <p>There's nowhere we can send our young people to learn it. Roseworthy don't offer it - they do for vineyards but no other horticultural crops. The potato farmers will be in a similar situation. It would be good to see them understand passive diseases, integrated pest management, controlling things without chemicals. It hasn't been a priority for a long time because everything's mining, but graduate engineers aren't getting jobs now and we need them on the land.</p>
Wine grapes	<p>In the past 15 years more mechanisation has meant that the majority of producers don't need to employ as many or as skilled labour.</p> <p>There are only five major wineries in the region so not as big an issue for them in their industry in their region. Not generally a high priority.</p> <p>Yes and no - we have very high standards so to succeed and survive we have to produce high quality wine all the time, my wife and I have good set of skills but is difficult to get other skilled staff, although we do have some very good harvest staff here.</p>

Commodity	How will skills supply affect the future of your industry?
Almonds	Smaller family operations are going to struggle if their children can't be trained in the industries. We employed a couple from Sydney but they ended up going back to NSW.
Capers	It's just another challenge that we will meet and overcome.
Fresh stone fruit	Not sure if it will be limiting factor, expect if growth occurs labour will be found.
Wine grapes	<p>Yes and no - if there is a need, people will move to fill the need.</p> <p>No - I am a strong believer in training to bring standards up and believe the way to do this is to lead by example. Having a good reputation helps - whenever I advertise a vacancy I have plenty of applicants, many very well qualified, and we are prepared to train people up. Lots of people have heard of us so have no trouble getting staff who want to work here.</p>

Business models

Commodity	Business Models
Almonds	We've just done complete review for two businesses, and restructured our board in the last 12-18 months with horticultural sub-committees, it's a pretty



Commodity	Business Models
	good model going forward. Its strengths are integration and shared knowledge, regional and horticultural committee meetings are really important for culture of both properties.
Capers	<p>Yes, and bigger farmers should be looking to herbs and spices to get better returns. The word needs to be spread about getting into different crops in the Riverland. Lots of people are doing world class things, and sell their entire crop every year, but no-one knows about them.</p> <p>SMEs don't need much debt, we paid for the set-up of our business from our first crop, and surpluses from subsequent crops went into product R&D and purchasing more product from other suppliers.</p> <p>It's a small family business with not much debt. We keep spending within our means, and the value add to high quality means we can do something different with it.</p>
Citrus	<p>Don't know, I would imagine so much will change but we will need to continually adapt to that. We are a family run business - four generations of the family working together. The greatest strength in this is the intergenerational interaction - the experience of age with the enthusiasm of youth. For instance I work with my son and he has great skills in technology which is being driven by the younger generation. They are receptive to changes, and he has enormous networking capacity through international networks through the internet, which enables him to keep alert to what is happening around the world, for example US and NZ, and share knowledge.</p> <p>Not a major issue. You can be innovative within our structure.</p>
Fresh stone fruit	Collaborative working does have its advantages (e.g. storage sheds), it works pretty well.
Mushrooms	<p>It will be the right ones for the next five or so years but we have to change to adapt to changing conditions. Meeting the changes that are sprung on us needs good management is very good. Australia is at the forefront of working together in the mushroom industry.</p> <p>Larger operations - the bigger ones will survive. Businesses need economies of scale and money to invest to have ability to employ people with expertise in specialist areas.</p>
Non-alcoholic beverages	We run a fairly lean operation, it's a family run business so we try to run leanly, a smaller workforce is an advantage.
Olives	Originally we thought that clustering (one plant servicing a lot of growers) would work, but the problem is transporting and transferring, and the business model only works on site. Although we could look at mobile processing - take the equipment to the farm and do it as quickly as possible after picking. The trick to making a good oil is to process it within 24 hours.
Wine grapes	<p>We've had a lot of revision of business models, have seen examples of other sectors, such as the grains sector, encouraging their members to look at new more appropriate models, working with institutions and government at both national and international level. We did a lot of work last year to put strategy in place for future (5 and 10 years), but the model hasn't changed a lot from when we started 10 years ago. It's important to keep reviewing the model and to have a business and strategic plan - this is lacking in several businesses.</p> <p>Apparently only 10% of businesses have a plan, but those that do that are strongest and most able to survive. We measure business success and costs.</p>



Commodity	Business Models
	<p>Good planning and innovation will be vital in the future - people who succeed will be those who innovate and offer good service - service is vitally import.</p> <p>Yes. We are owned by a progressive Adelaide company. We stay up to date with good business practices and models, and are constantly evolving to adapt to requirements.</p>

RD&E

Commodity	RD&E services
Almonds	Yes through the Almond Board of Australia, we can always spend more money but at the moment they are doing a good job with limited funds.
Capers	Need research into pests and diseases. It's not bad for us, but Queensland has a new fruit fly problem in the caper crop, it's an unusual type of fruit fly that attacks the native capers in desert Queensland.
Citrus	<p>There is a deficiency in the depth of structured research. Whereas previously we turned to Department of Agriculture for research, we now take on a lot more private consultants for advice and research. Suppliers also offer research services. If we need something now, we use our networks to find it - a mix of private consultants and CSIRO.</p> <p>There's no need for high powered research.</p>
Fresh stone fruit	We are involved in one research programme at the moment. Government attitude needs to change so there's more support for that sort of thing, they used to do it years ago, now it's all gone but there's still a role for government to play. The Loxton Research Centre is government owned - looking at revamping that, the government is putting in some money into that, although nobody asked industry what they thought should happen. Then they ask industry to match investment! We can't do that as we don't have the funds for it, and we know it can be done for a fraction of the cost. Very frustrating, not consultative, not collaborative.
Non-alcoholic beverages	Yes, there's enough.
Olives	<p>Depends where the research is offered. In the olive industry we have an R&D program with a levy, and an industry advisory group to advise, but the government is getting rid of RDCs and changing the way it works (they have instructed Horticulture Australia to change). It worries the 43 horticulture industries that are a part of that. We like to get research that benefits us, not government employment of researchers to do what they want - it might not be what we need, and I'm not liking how it's changing.</p> <p>Government policy has the potential to destabilise industry levies, and horticultural industries might revolt and stop paying levies. It would be a shame because this is the only way R&D gets done.</p>
Wine grapes	There is a lot being done, quite often we feel that as main contributors to the fund, we don't have enough influence over content and direction of that; for instance in recent years we wanted to put more research dollars into researching better business models but it was not encouraged, and there is scope to increase the amount of funding available for a levy mechanism, and scope to improve dialogue between regions. They are well served by regional



Commodity	RD&E services
	<p>and national bodies such as the Australian Wine Research Institute, CSIRO, Adelaide Uni, etc.</p> <p>R&D is always under pressure, and depends on funding. There has been some more recently and wine producers also carry out their own R&D into new varieties, new ways of doing things all the time. This has been revitalised a little bit in the Riverland, but needs to be maintained. The overall model is good, finding better ways of doing things. Generally good collaboration between smaller and larger wineries. Works quite well.</p> <p>Some of the IT area may need some fine-tuning, for example the use of social media, online marketing and sales.</p>

Infrastructure

Commodity	Infrastructure
Almonds	<p>Electricity is a huge problem, a killer for new industry, a huge barrier.</p> <p>I'd like to see some money spent on the main arterial roads in and out of the area, a dual highway like the Barossa has should be extended to Riverland to extend to other industries outside of horticulture.</p> <p>Internet is a huge problem, particularly on wrong side of the river, the only internet is satellite or through a modem, you can't even get call recognition on phones that side of the river. We pay way too much for internet because no unlimited ADSL</p> <p>We have enough hospitals, the health system is very good for a regional area, most towns have own hospital and then they have the main regional one in Berri. Schools are OK, but we'd love to get a secondary college or university hub there so kids don't have to travel to Adelaide. It would be more accessible to more kids, otherwise it's very expensive for parents to pay for their kids to move or travel to Adelaide.</p>
Capers	<p>Cheap transport - we can get product to Adelaide, but the cost to transport interstate is very high - it's \$550 for a pallet to Queensland.</p> <p>A commercial community kitchen is essential to help people move from home kitchen to commercial production. They have one in Willunga and we need one in the Riverland. We're a low risk food hygiene product so it's relatively easy, but it's hard and very expensive to set up a higher risk production. Quite a few people produce nice stuff but in such low quantities because they don't have the facilities. They want to go bigger, but it's a huge investment to set up your own commercial kitchen. If we had a community commercial kitchen here, it would draw in a lot more new business.</p>
Citrus	<p>The roads are generally deteriorating in the country. We no longer have a commercial airport which would be a strong point for growth in the region.</p> <p>We need a greater development of retirement facilities.</p> <p>Getting energy delivered to site is expensive to upgrade the line - it could be an issue for expansion.</p> <p>Cost of waste is ridiculous, we're in the middle of the bush and have to transport rubbish to Adelaide.</p>

Commodity	Infrastructure
	I grew up in the region and I'm back. It seems that most people move away for a career - only accountants seem to stay. It would be good to help people who went to Uni to come back to work in professions.
Fresh stone fruit	<p>Communications cost has come down enormously.</p> <p>Transport is adequate for our needs.</p> <p>Cost of power a big issue.</p> <p>The big thing that has knocked the region around is the restriction on water and drought and the economic hit that affected so many industries, it will take a decade to recover from that.</p>
Non-alcoholic beverages	<p>Roads need improving.</p> <p>Need good internet and mobile coverage.</p>
Olives	We're an hour from Murray Bridge so the things offered in Murray Bridge aren't the things we need. Our town is pretty much dead, there's no service station so no need to go into town. We employed people with their own motor homes, we used to put them in the caravan park, but they couldn't get food and there was nowhere for them to go or do. So we put in 15V power outlets and they come onto the farm with their motor homes.
Wine grapes	<p>Water delivery is first rate, winery infrastructure is world standard.</p> <p>There's always room for improvement in roads and transport, but the core is pretty sound.</p> <p>Being a regional area, roads important - regional road infrastructure needs to be maintained and renewed.</p> <p>Also, we would like to see a good regional air service from Riverland to Adelaide for business meetings.</p> <p>Phone coverage reasonably good throughout regional areas.</p> <p>Need NBN through into regional areas, to regional towns not just main centres. Good access to internet is vital.</p> <p>Sporting clubs are owned and operated by the community.</p> <p>We always need more health services and education, but they're quite good. In fact, we have excellent schools here.</p> <p>Accommodation can be an issue, and is often a problem for labour to find suitable accommodation, family and single accommodation particularly during harvest periods.</p> <p>More B&Bs and some 4-5 star accommodation options. We are looking at developing more accommodation on site, but more throughout the region is needed. More accommodation in the region would enable marketing to be targeted at a wider audience.</p> <p>We are also looking at putting up QR codes on the walking trails. A local coach tour would be good.</p> <p>More council involvement - we have to deal with three different councils, although we do have very good relationship with them all.</p>

Climate change

Commodity	Climate change
Almonds	We're looking at different ways to farm to combat climate change - new varieties are being developed and planted, new harvesting methods.
Capers	Capers is a good crop for diversified small blocks.
Citrus	<p>Surety of supply of irrigation water - there are things we can do, and have done to overcome extremes, but our greatest vulnerability is a secure water supply.</p> <p>The biggest cost is energy, but that's not all climate change costs. All the other costs have been added on.</p> <p>We have to be adaptable.</p> <p>We are going through a very positive growth stage. The State Government Riverland Sustainable Futures Fund has supported us well. I believe we are focussed on an area that has been neglected in the past but we are very fortunate in having a strong family business - I am still working and loving it at over 70. It is a pretty strong challenge to maintain confidence but I feel we have great capacity in the region, it just needs direction.</p>
Fresh stone fruit	Deal with it as it happens.
Non-alcoholic beverages	Probably, already looking at different varieties, more efficient forms of energy, services.
Olives	<p>Climate change is interesting, we started to see olive orchards in Esperance selling carbon credits to big business. It really put me off. We wouldn't get involved. They weren't interested in olive oil, just selling the carbon credits. The trees didn't survive (30,000 hectares) and it all fell over. I'm a bit sceptical that too many people are trying to make money out of it.</p> <p>We haven't seen any big difference, it's such a variable climate anyway. Not seeing anything alarming in our industry. Doesn't come up at our conferences. We had a speaker with doom and gloom and told us we'd all be underwater and die, it was very negative and we haven't had one on the subject since.</p>
Wine grapes	<p>Developing clones and varieties of grapes from fruit stocks that have more drought tolerant, heat tolerant output, more R&D support on initiatives rather than lip service.</p> <p>Not too concerned, industry just needs to adjust - we are very efficient users of water which will help into the future, if climate continues to warm, we'll change varieties to those that suit a hotter and drier climate. Innovative in types of varieties and types of wine.</p> <p>More solar, we have just put in a system to purify the river water from the Murray using enviro-cycles. Not buying in water. Clean green energy.</p>

Leadership

Commodity	Leadership
Almonds	<p>The Almond Board of Australia have some pretty good leadership - but always falls to same people to serve on committees.</p> <p>Leadership and training is essential for Manager level and above.</p>



Commodity	Leadership
Citrus	<p>There is good community leadership. The citrus industry however is greatly deficient in leadership - the structures that were there 10 years ago are no longer appropriate to the region and are minimal. More structure is needed. I don't mind paying for services - but at the moment we don't pay for any, and don't get any!</p> <p>Our industry is Australia-wide, it's not focused in local regions - just look at the distribution chain.</p>
Fresh stone fruit	<p>Probably one thing we are lacking - there are great people in individual commodity groups but lacking in structure resources and leadership overall to deal with issues that are common across the region. We had something years ago but that got killed.</p> <p>When the water issue came up they formed an emergency structure to deal with it but that was just a one-off. The region is not rich enough to sustain that.</p>
Beverages	<p>Reasonably good.</p>
Olives	<p>That's me! I used to look after Olives SA as their president for 10 years and have been involved in industry 17 years, and am CEO of national body, and run that out of the Murraylands.</p>
Wine grapes	<p>Yes, great structure, strong continual improvement, raising management competence with independent panel of recognised achievers. We have a number of industry bodies based here.</p> <p>Not in local government, there are three different councils involved which means three lots of fees to be part of those. It would be nice to have one person with overall responsibility for tourism and the environmental side. Destination Riverland is a step in the right direction but not sure of their future funding and plans, to have someone to work for the region as a whole, one body or person accountable, would be great.</p>

Vegetables and Associated Industry

Introduction

As with previous sections of the report, a summary of findings precedes the detailed findings. It should be noted that only a small number of people were interviewed from each sub-sector of the vegetable and bee industry and that the findings may not be representative of all operators in that sector.

Eight businesses were interviewed:

2 x mushrooms

1 x onions

1 x mixed herbs/vegetables

1 x tomatoes

1 x nursery plants

1 x potatoes

1 x bees

Summary of findings

TRADE SITUATION

- Australia's clean and green reputation supports new export markets. The growth in Asian population and protein dietary restrictions in some cultures will create opportunities for vegetables and vegetable products.
- Produce from the vegetables and bee sectors are generally sold domestically, often locally, with the exception of honey (small volume exports) and potatoes which are exported to the Middle East and Asia.
- The mushroom market is growing through domestic demand.
- Potato business profitability is affected by availability of local processing, and the closure of the McCain factory in Penola is causing concerns.
- Fresh food quality and price is dictated by the large supermarket chains. While costly, these requirements have encouraged the introduction of accreditation and better cost control.
- The future for honey is uncertain, as bee numbers are declining as a result of the dominance of monoculture in primary industries, poisons and disease.
- Improvements in packaging and product segmentation will help the vegetable industry increase its domestic market share.

ACCESS TO CAPITAL

- Businesses with marginal profitability cannot access funds for growth. Even for larger companies, it's difficult to get finance for expansion.

WATER USE, CLIMATE CHANGE AND R&D

- The farming sector is accustomed to managing season and climatic change.
- Water security is a concern.
- Government R&D support is diminishing, producers rely on private companies.
- Industry associations have levy-based research funds, for many vegetable businesses, this is the only assistance available. Smaller sub-sectors may not have access to industry R&D.
- Bee numbers are reducing rapidly and R&D is needed to identify cause and interventions. Bees are essential for fertilisation of many crops. The big companies dominate the bee research agenda so that chemicals which affect bees are not being identified or regulated.

LEADERSHIP

- Australia needs a national approach to marketing of potatoes for domestic consumption and for new export markets.
- In the almond industry, producers are shareholders in processing and marketing - using Paddock to Plate models to deliver directly to customers.
- The mushroom industry has a regional collaboration group that meets regularly to help each other.
- Small sectors use the RDA's business groups for networking.

TECHNOLOGY

- Mechanisation is necessary to be competitive, but this creates entry barriers for new businesses.
- Good mobile phone connectivity is not available, and yet increasingly business and operating systems rely on stable telephony.
- NBN connections are needed in smaller population areas to support business demand for fast and reliable internet.

TRANSPORT AND LOGISTICS

- A better link between the eastern Mallee and the city would assist in attracting workers.
- Freight infrastructure is inadequate and freight costs are expensive.
- Refrigerated transport costs are too high.
- Businesses need large economies of scale to be cost competitive in transporting their goods. There are limited options for transportation of small to mid-range freight.
- Some producers sell at local farmers markets to manage transport costs.

INFRASTRUCTURE

- Water and power costs are too high.
- Power supply is insufficient for full production.
- The sector is continually adopting better water efficiencies, as water is the key limiting factor. If allocations continue at the current level, the sector forecasts regional demise.
- Land prices have fallen, which affects the exit or retirement plans of some farmers.
- Limited good backpacker accommodation is affecting labour supply. Young people want things to do, and there is little to attract them to some parts of the region.

SKILLED LABOUR

- The cost of labour in these labour-intensive industries affects competitiveness, especially in export markets.
- The mean age of the primary industries labour force is the highest of all Australian industries and it is difficult to attract young farmer investment. Young people don't come out of agricultural university courses wanting to work in vegetables.
- It's difficult to attract labour to the region "workforce issues are huge, we don't have enough skilled people".
- Farming is not seen as a desirable career, people look down on farmers and educated people who go into farming. Agriculture needs to be marketed better in school and university to create pathways for "smart young people" and build the focus on R&D.
- Employees don't necessarily come with the skills needed, in-house training is a good option.
- Unemployment is high in the region, but people don't want to work, and they are paid not to.
- TAFE runs horticulture courses in the Riverland.
- The potato industry has done a workforce development plan, part of which is repositioning the industry to be more attractive to domestic workers, as well as capitalising on 457 visa overseas workers to manage seasonal demands.
- It's difficult to find Australians who are prepared to work hard. Overseas workers have a better work ethic: "If I had to replace my workers with locals and pay Australian wages, I would have to close the doors".

BUSINESS MODELS

- Vegetable production tends to be labour-intensive, with associated high costs. Because of the dominance of supermarkets, vegetable suppliers into national markets are price-takers and many businesses struggle to make profits.
- The availability and allocation of water is a constraint on business models.
- Some businesses don't qualify for development grants because of the way they are structured, businesses need to keep an eye on this aspect of governance.

GOVERNMENT REGULATION

- Compliance with employment and environmental requirements is becoming more difficult and more costly, companies need to devote more and more staff to managing compliance. Australia is not competitive on the world market because of these costs.
- Regulation of chemicals that affect bees is needed to safeguard flowering crops.
- Food quality standards are increasing, with pressure to increase food hygiene practices - these add costs.

Commodities

Bedding and foliage plants (nursery lines)

Bees and honey

Mushrooms

Herbs (herbs/bunch lines)

Vegetables: (potatoes, tomatoes, cabbages, cauliflower, broccoli, eggplant, capsicums, kale, chard, celery, onions)

Markets

Bee pollination services: Local almonds, olives, vegetables, stone fruits, cherries

Honey: Some sold local, some bought by packers and exported. Honey has gone to Afghanistan, around the world but mainly just supplies SA and VIC.

Mushrooms: Local and interstate

Nursery: Local and interstate

Potatoes: Potato industry represents \$440m (value-added) to the state economy, half a billion farm gate nationally, second top commodity SA and top 4 nationally.

SA produces more potatoes than any other state of Australia; 80% of the nation's fresh washed potatoes for domestic exports, mainly to the eastern states. There are also irregular export to WA. WA is quite independent as it is under a regulated market.

Exports internationally include all sectors (seed processing potatoes, and fresh potatoes) small amount (refrigerated) sent to the Middle East, selected markets in Asia: Indonesia, Singapore, Malaysia and the Philippines

Vegetables (bunching): Local and interstate on a small scale

Vegetables: Mainly local, some to supermarkets and wholesalers, some through farmers' markets

Future for these commodities

Commodity	Future
Bees/honey	Very bad because honey packers have no honey at the moment and you can't put that down to seasonal factors.
Mushrooms	We are probably self-guided and look after own promotions so quite good. Pretty good, not overseas, mushrooms are pretty unique as they're best when fresh. We have high labour costs so overseas markets are not attractive to us, growth opportunities will come from within the country.
Nursery	Hopefully pretty good.
Potatoes	<p>Possible demise of processing sector because the McCain factory in Penola has closed. We must export, have to be export driven and New Zealand has the perfect model - agriculturally safe, and able to do it professionally as one country. Australia is hampered by state issues when we need to have national access into foreign markets; secondly need to increase demand of consumers - get consumers to consume more potatoes.</p> <p>Processing is an industry under severe stress because of lack of competitiveness in Australia. SA now sends potatoes from the South East to Ballarat for processing and into Thailand and Indonesia. Exports are very small - only 2% of production.</p> <p>Australia is the least competitive country in the world for growing and processing potatoes. All processed potatoes are consumed here, but the fast food sector mainly uses imported products,(except MacDonald's) this of great concern and could limit SA's processing future</p> <p>There's a huge scope for potatoes in the region, the Mallee produces 40% of the state's potatoes - so there are significant players here, but the industry sector is very disparate. We set up an organisation to coordinate and collaborate the state and national industry - it will grow, no doubt, through being smarter and value adding.</p> <p>There is a market for seed potatoes, based on our 'clean and green' reputation for the best potatoes and best seed in the world. We'll work on getting market access into various countries in southern Asia where there's growing disposable consumer income (50M in Indonesia alone), a more western diet and a growing snack food industry.</p> <p>There are opportunities in packaging other services, technology, expertise and collaborating via joint ventures, in country trails and field work.</p> <p>Fresh food sales and marketing are dictated by supermarkets. This has brought a huge level of accreditation and cost control into the supply chain. Packaging is generally poor - we can value add, look at what other countries do, provide smaller quantities of specific branded potatoes ('this is for mashing, boiling').</p> <p>We need industry funding for marketing at a national level. People don't know how good potatoes are for you, and we need to change public perception. Improve the level of sophistication, perception, research demand, help exports. To be R&D driven, consumer driven and make the industry far more cohesive.</p>
Vegetables	Looking good for us - it's a limited market but good prospects.

Commodity	Future
	<p>We'd love to know future opportunities, can't make much of a living, the wholesale system is disastrous, we are price takers not price makers, take whatever we can, sell some retail which is where most money can be made. Wholesale is oversupplied and it keeps the price down. Tomatoes are hard to grow in winter in soil - although there's exceptional favour, superior product - but it's not about that, it's all about price.</p>
Bees/honey	<p>Bees are dying out, it's getting worse, no one really knows the reason, but in my opinion, it is due to systemic poisoning, through the whole plant system. Since 1990s the world has had colony collapse disorder. We're told that a veroa mite might cause the problems but I suspect the big agricultural chemical companies are putting out Neonicotinoid which is a poison - Monsanto use it on all their GM crops. This is used on the engineered seed to coat it, and as the plant grows, the poison is taken up throughout the whole system of the plant through the stalk and the leaves. The main purpose is to deter insect attack - so it also comes out in the pollen and nectar to bees, butterflies and ladybirds and onto birds and on through the food chain.</p> <p>Neurotoxins make bees disorientated and take sub lethal doses back to the hive so Queens don't last long. Sometimes not even a year and hives are under tremendous stress, die out, and bees disappear.</p> <p>Losses getting greater, often not restored in Spring, numbers are always falling. Big companies have a lot of influence over government and the media, so it doesn't get publicised. Bees are not thriving right across the country - have had three calls from packers in one day looking for honey.</p>

What's changing over the next 10-20 years

Commodity	Changes
Mushrooms	<p>All the on costs. Labour and power are the main two that affect us greatly. Food quality standards are increasing, we're finding that there's a lot more pressure to increase level of food hygiene practices, adding costs to the business.</p>
Nursery	<p>Labour costs.</p>
Potatoes	<p>Far more export focussed, need to try and be more competitive in global markets, need to deregulate labour market, reduce the cost of power and water. Australia's costs are among the highest in the world, we have serious skilled and unskilled workforce issues</p> <p>The mean age of the primary industry workforce is the highest of any industry in the country.</p>
Vegetables	<p>Labour is a huge issue, the cost of wages.</p> <p>The monopoly of the big supermarkets is a huge threat to the vegetable industry as a whole, particularly for small businesses.</p> <p>Mechanisation a huge issue, and funding to be able to compete with already established people is really hard when you are small and trying to break in.</p>

Commodity	Changes
	<p>In 10 or 20 years' time hopefully I've sold the business and retired. I can utilise our tourism location if necessary, we have a beautiful river frontage so I might be able to sell as a tourist place rather than just agricultural.</p> <p>Would love to get a little better at it but investment funds are an issue, a balancing act and a battle to make a living so I can't get ahead to reinvest. We're just about keeping heads above water, but not enough to have any left over for growth.</p>
Mushrooms	<p>Mushrooms have to be picked by hand - wages is 53% of company expense - so will look to be more efficient.</p> <p>Upgrades need to be supported by growth opportunities, efficiencies.</p>
Nursery	More mechanised.
Potatoes	The industry needs to be in touch with stakeholders, through the whole of the value chain, paddock through to consumer. We need to do things to increase marketing efforts to increase demand, a coordinated national approach to export: collaboration across country working with the federal department of agriculture to make things happen.
Vegetables	We would need to mechanise, change what we are doing and mechanise as much as we can, but that is really hard.

Barriers and obstacles

Commodity	Barriers and obstacles
Bees/honey	Too much influence by big companies over research. Too much money or power.
Mushrooms	<p>Having hands tied by red tape and normal wage increases that are done nationally. It's a huge cost, we have five people there just looking after regulatory issues. Europe laughs at us.</p> <p>The biggest one we have struggled with is to get money for expansion plans.</p>
Nursery	Barrier is getting enough return to do it, upfront costs and capital.
Potatoes	<p>High costs of all inputs: power, water, workforce</p> <p>The perception of the industry: even amongst our professional friends and colleagues, people still look down on farmers and educated people who go into farming. The perception of primary production and the food industry must change to attract talent; it is highly technical across many disciplines.</p>
Vegetables	<p>Some of the produce can be mechanised but the market is not really big enough (e.g. radishes orders aren't big enough to warrant that sort of equipment and investment) you have to be really big or just keep going as you are. Without economies of scale, it's very hard to make money in the business.</p> <p>Money. Would love to build another glasshouse but can't afford it.</p> <p>Land prices have fallen since I bought in 2007 so will be lucky to sell for what I paid.</p>

Opportunities to address barriers within the region

Commodity	Regional opportunities to address barriers
Bees/honey	<p>More information about the Neonicotinoids in the public domain - people just don't know about it. Also used for grains, it's very widespread and carried on the wind as well, and soil will go on producing plants for two years that will kill bees.</p> <p>Canola used to be a good source of nectar for the bees, so we used to put weak hives on there to build them up, but now it will kill the weak ones and make strong ones sick, now lots of apiarists won't even put bees onto Blue Gum because it flowers at same time as Canola.</p>
Mushrooms	<p>Lot of it is done by state and federal government, regional people can get together but have little influence. Governments need to change their attitude about way they run the country, spend unwisely and put up costs to cover it.</p>
Nursery	<p>We have just had a grant to help, a Sustainable Futures grant, so more of that should be available for specific projects.</p>
Potatoes	<p>Need to market agriculture better at school and University, open pathways to encourage smart young people into the industry, to have a real focus on R&D. There has to be enormous focus to reposition agriculture as an attractive industry in which to work.</p> <p>It's the responsibility of the federal and state governments, together with the industry to change perception and really market agriculture as very smart industry to be in. We should be called food producers rather than farmers.</p>
Vegetables	<p>We have tried a few things but don't know what the answer is, the biggest problem is price they get for produce (80c to \$2 wholesale), and that needs to cover packaging which goes up, fuel that goes up, everything but price of tomatoes. We just have to take the price we are given by the supermarkets. There's no love for us as a producer, just want to screw us and screw us, if I have too many tomatoes I have to give them away.</p> <p>Wages are a killer.</p>

Labour market

Commodity	Labour Market
Mushrooms	<p>No, we spend half million dollars a year on training in house.</p> <p>It's challenging, certainly go through fluctuations with varying levels from picking to qualified people to supervise. It's extremely challenging, internal people are better, we would like to be able to bring in higher quality staff but location is a battle to get people to come out here.</p>
Nursery	<p>We solve the problem through in house training, we get plenty of people but they're not qualified, so we need to train them up ourselves.</p>
Potatoes	<p>Workforce issues are significant; there are insufficient skilled workers and poor pathways to attract offshore employees.</p>
Vegetables	<p>When it is not orange season we rely heavily on backpackers and pay piece rate to be competitive with Woolworths and Coles. If we paid on hourly rate we would be bankrupt in two days.</p>

Commodity	Labour Market
	<p>No young guys are coming out of agricultural university courses wanting to grow tomatoes, it's a dead end. We do it for lifestyle as much as anything, our family have grown vegetables all their life, it's in the blood, but we don't do it to make money, it's a constant battle to make a living.</p> <p>There is so much work that goes into producing good quality foods that is not recognised or valued. It is a very difficult industry but there should be more people doing it to guarantee future food security. Everyone should have to spend time working in farming for six months as part of their education, so they appreciate and value the industry. Some young adults have no idea what fresh fruit and vegetables even look like - we had one backpacker who had never seen a sweet potato before, thought it was an odd carrot! In 10-20 years' time it will be realised that there are not enough producers, and something needs to be done about it now.</p>

Commodity	How will skills supply affect the future of your industry?
Mushrooms	<p>Certainly getting people who want to work in a regional area is the biggest part. There's high unemployment in the region but they get too much money to sit at home.</p> <p>Yes definitely as company grows, going to need more people, some people getting towards end of careers.</p>
Nursery	<p>No not particularly, because the people are there, we have been lucky as TAFE run horticulture courses locally.</p>
Potatoes	<p>We were commissioned and funded through DFEEST last year to do a workforce development plan for industry - it was received very well and is being implemented and has application with very minor changes to other sectors and at national level. It looked at repositioning the industry, making it far more attractive, migration (lot of 457 visas), managing a workforce that in many respects is seasonal, a more uniform system, in-house training done regionally. We're working with an RTO to achieve this.do</p>
Vegetables	<p>In every industry skills are an issue and more than skills, work ethic. Ours is a 7 day a week job and it's hard to find people prepared to work as hard as they need. There are lots of people capable of doing the work, but not the willingness to do it.</p> <p>Need to have a work ethic - hard to find - use a lot of packers on an exchange system, give them accommodation and keep for their work, usually overseas and students, WHV people. The work ethics of Japanese, Germans leave Australian kids in the dust. Australian children have a problem with work, certainly in agriculture. If I had to replace workers with locals and pay Australian wages I would have to close the doors.</p> <p>For little farmers, its lots of hard work, and not much money, we're one of the very few still growing on some of the best dirt in Australia.</p>

Business models

Commodity	Business Models
Bees/honey	Need to ban Neonicotinoids before it's too late. Australia relies on lots of wild bees for pollination. Lots of genetics are being wiped out.
Nursery	Yes although it is changing. Our strength is in the staff we have, their dedication.
Potatoes	Any business model has to evolve as new issues come up - currently a significant issue is use of and allocation of water. We're contesting the government on water allocation planning at the moment and have been in negotiation for months for access to the River Murray and aquifers in the Mallee region, some allocations have been cut by 50%, so water is a critical issue. Continually improving water use efficiency is almost permanent research. Family farms are a dying breed, it's becoming highly corporate.
Vegetables	<p>You have a dilemma of a lot of immigrants who are quite prepared to work, competing in the tomato industry is very hard because the immigrants that came 40 years ago now at wholesale level (e.g. Italians) now have another influx of very good workers (Vietnamese) working their butts off for lower wages so whatever they get given for their produce is what they take. The whole family helps, the only way the small farm will survive is with family labour. Have to have volumes of scale.</p> <p>Out of 200-300 workers we have had only a handful of Australians.</p> <p>We need to restructure things to give more help with grants etc. - restructuring to do whatever needs to be done - sometimes you don't qualify for development grants etc. because of way company is structured. We will change whatever we need to do.</p>

RD&E

Commodity	RD&E services
Bees/honey	<p>Needs to be more Primary Industries research into Neonicotinoids. Some countries (Germany, France, Italy and Slovenia) have already banned them, but Bayer is suing the European Union for allowing this to be banned. Italy was becoming devoid of birds.</p> <p>All I can do is reduce bee numbers and keep small numbers.</p>
Mushrooms	<p>We do it all ourselves through the Australian Mushroom Growers Association. The growers pay a levy and that pays for research. Currently it meets our needs, but we get nothing from outside sources.</p> <p>We don't really get involved in any bodies outside of our own. Mushrooms are pretty unique so we get a lot of consultants from overseas, private companies - a lot of research has been done on better processes and how to build stuff more efficiently.</p>
Nursery	We pay levies for research, but don't get much back, not enough in our areas. There's lots of money for research for bigger crops, oranges, peaches plums, but the nursery industry is very small so it's very hard to get any sort of directed R&D.



Commodity	RD&E services
Potatoes	<p>There is a review on R&D spend (the HAL Review) at the moment. If we don't have dedicated targeted R&D, the industry will not survive. Research dollars should generate a tenfold return to the industry. Research is critical in the industry; at the moment all potato producers pay a levy to the government matched by federal government funding. It's worth millions of dollars, which is then attributed to RD&E - but there is no doubt that this area isn't functioning at all well, it's currently being addressed through the Horticulture Australia Ltd Review. The Minister for Agriculture, Barnaby Joyce will legislate on selected recommendations in November. Potatoes South Australia put in submission in collaboration with stakeholders around the country because we need targeted R&D relevant to the industry with industry determining where it is needed. Potatoes South Australia is particularly active in pursuing R&D projects and has several at a national level and Federally funded at present.</p>
Vegetables	<p>No, we don't get a lot of help with finance - quite hard to do stuff - we do the research but then it goes nowhere. Need financial backing to enable more to be done.</p> <p>We did a bit of research last year and learnt a lot, but not even sure there is a Department of Agriculture in Murray Bridge. They have to do research, lots of money has been pulled out recently, but private companies are available.</p>

Infrastructure

Commodity	Infrastructure
Mushrooms	<p>Mobile phone connections is an important one, telecommunication for when you are running an operating system that relies on it, important to have it up and running all the time. As the business grows in this area, the potential for fibre optic cable to speed up - it's not out there and if we want it we would have to pay to get it out there at huge cost.</p> <p>Transport is not a big issue - would be nice to have some sort of better link from the city - lots of workers come from there.</p>
Nursery	<p>Need NBN for industry, the majority deal directly with customers via the internet, so we need fast and reliable connection. We have the cable only 100m from our place but we can't connect, that's a major problem in the Riverland. It even creates problems in Berri for banking, it's industry-wide. The area has reached capacity over last six months so we're getting lots of drop outs.</p> <p>Roads are fine.</p> <p>Power is fine.</p> <p>Schools are under-utilised.</p> <p>We have to go to Berri for hospital but can't complain.</p>
Potatoes	<p>Water is the critical issue. If allocations in the Mallee WAP are not modified in favour of industry, the industry may halve and the regional community will suffer. There will be massive negative on-flow.</p>
Vegetables	<p>Refrigerated transport - transport costs are ridiculous (my two biggest expenses other than wages are transport and packaging).</p>

Commodity	Infrastructure
	<p>We don't have good freight infrastructure, it's too expensive, and don't have the economies of scale to justify trucks. There's nothing in the mid and small range for freight, adds to the cost of wages and fuel. Its three hours from Murray Bridge to the Pooraka Wholesale Market and that takes wages and fuel for long drive which all cuts into any profit margin. Big trucks won't stop for just a pallet of tomatoes without charging large amount of money.</p> <p>Would like gas perhaps.</p> <p>We rely a lot on backpackers and there is a severe shortage of good, budget accommodation for them and nothing for them to do in the area.</p> <p>Murray Bridge needs to add things that are good for people to do to move from the city: decent accommodation, entertainment, if they bring visitors from overseas there's not even a decent restaurant. Everyone worries about building houses, but there's nothing for people to do and that's why young ones are leaving. It affects the work force and anyone brought in to work for the company. Murray Bridge has nothing from a community point of view.</p>

Climate change

Commodity	Climate change
Bees/honey	Bees have done not so bad this year because we have had good rains, but overall they're going downhill.
Mushrooms	<p>We are very efficient but look at it now and again to see what new innovations come out and make changes if economically viable - keeping informed about what is happening is the main thing.</p> <p>Not an issue, all our farm is inside temperature controlled with a lot of controls to manage it. We would be affected if raw materials (wheat straw, poultry manure) changed.</p>
Nursery	Ongoing change, use of technology. We're used to dealing with the weather all the time anyway.
Potatoes	Irrigated horticulture's success is completely dependent on water supply-in South Australia we have 24/7 supply of potatoes which is unique. Adaptation through new more salt and drought resistant varieties and improvements in irrigation practices (variable rate) must be on-going. The Association has commissioned independent reviews of water planning in the region, and also irrigation efficiencies in the Mallee. We are also partnering with SARDI in the SARMS proposal.
Vegetables	<p>I think in agriculture we are already used to dealing with changing weather patterns, changing varieties with the season etc. So we are probably already dealing with it. Sometimes people are more sensitive than we need to be to climate change.</p> <p>Not too worried about climate change, waiting for it to happen but there are always going to be people in the world who want cheap produce. The supermarket influence is large.</p> <p>The next step in Farmers Market is for little producers to buy wholesale and sell at markets saying they have grown it themselves, but this affects whole reputation of the farmers markets.</p>

Leadership

Commodity	Leadership
Mushrooms	<p>We take control of our own industry, but there is also a collaboration group here in the Murraylands that meets every three months to see if there is anything they can do to help each other.</p> <p>The RDA is pretty good in terms of getting to talk to people in business and understanding the issues.</p>
Nursery	<p>In our industry, no, it's very small so there isn't any. We do have a state run thing but the industry is too small to support a local one.</p> <p>The best advisors are the RDA and we belong to their business group.</p>
Potatoes	<p>The Association has a key objective of collaborating with like-minded bodies at a state, national and international level. This includes research institutions, industry associations, individual stakeholders, all levels of government and their agencies. We have a strong industry network including all sectors of PIRSA and RDA. We have a voluntary level for ongoing operations which is successfully funded by all sectors. It was critical that we develop a strong skills-based Board and key to our governance and profile is Independent Chair, Brian Cunningham. At a national level, RD&E is poorly managed, hence the HAL Review to seek reform.</p>
Vegetables	<p>The RDA and PIRSA are extremely helpful and supportive.</p> <p>Going to something in an AusVeg opening for a South Australian division, might be a good sign.</p>

Part Two: Cross Sector Trends

Regional Trends

This section of the report summarises the issues and trends identified across a number of sectors. It concludes with a discussion of themes for further development.

Export

The majority of commodities are exported, either in raw or processed form. The exceptions are mainly fresh produce:

- apples
- capers
- fresh pork
- mushrooms
- nursery plants potatoes
- stone fruit
- vegetables

As well as lupins and feed grains, stud cattle, and bee pollination services. All sectors were looking at value add opportunities to expand markets, add diversity and increase returns.

Grain producers were concerned that the South Australian government policy on GM would make this state uncompetitive in the race to develop frost tolerant varieties.

Confidence

Overall, there was a high degree of confidence in the future of the sectors interviewed. The growth of the world population, increasing wealth in Asian countries, loss of arable land and Australia's reputation as a quality 'clean and green' producer are creating strong market advantages. Exporters, who focused on premium products were more confident than suppliers to the domestic market, who are more likely to be price-takers from the large supermarket and fast food chains.

The rapid growth in the ability of technologies to achieve cost efficiencies, provide real-time information, overcome the recurrent problem of regional labour markets, and to monitor production was seen as positive by most producers. Smaller producers can be disadvantaged by the cost of new equipment and technologies.

The ability to attract and retain good labour is a concern across most sectors, and many businesses can only operate by employing overseas workers and migrants who generally have a better work ethic than Australians.

Producers were surprisingly unconcerned about climate change - with the most common attitudes being: we've done all we can; and we are accustomed to managing climate

variation. However water security was mentioned as a risk by many, and is likely to be exacerbated by climate change.

Business models

In most sectors, the days of the small family farm are almost over. Access to capital, debt servicing and economies of scale are driving the need for larger farms. However there was limited support for corporate farming, which was thought to rely too heavily on regular annual returns that are often not possible.

Producers described a number of robust business models, including well-planned family farms, collaborative farming, joint ventures and contract farming. There was support for nimble private companies that could make decisions quickly as conditions changed and new opportunities arose. The most important issue to be managed on family farms is succession - this was seen to be the difference between successful and unsuccessful intergenerational businesses.

Modern farming is big business, and producers need better access to finance and capital. Producers spoke about high interest rates (higher than unproductive residential home loans), difficulty in gaining bank finance for producers that had previously had no trouble and had a good credit history, and the lack of capital for \$500,000 to \$1m investments that are typical for large farm machinery. A number of different funding models were discussed, some of which are being used successfully - however there is risk inherent in any approach that has not been widely tested.

Government policy and efficiency

Even taking into account community attitudes about reductions in funding, there was a high level of concern about government inefficiencies, and outright obstruction of business by government.

Government policy and regulation is adding significantly to the cost of doing business and contributing to South Australia's poor competitiveness against other states and countries.

Red tape is an on-going issue, it is excessive and appears to be getting worse. Lack of clarity and consistency in policy and decision-making is adding to the problem.

Outsourced government utilities are contributing to the high cost of business, with extreme cases of expensive and poor service from electricity and telecommunications suppliers. There are large areas where mobile telephone and internet coverage is sub-standard.

Poor heavy vehicle freight access is adding to costs, and businesses reported that Councils appear to be discouraging B-Double access to farms and processing facilities. The duplication of the Dukes Highway is needed to allow Road Train access to the region. Road trains are comparatively cheaper and more flexible than B-Doubles and reduce the number of heavy vehicles on the road at any given time.

Access to Port Adelaide and Outer Harbor from the South Eastern Freeway is slow and congested, and government infrastructure spending is prioritising other routes that will not address this problem.

Government policy is largely responsible for the loss of training within the region.

Producers suggested that government should take a leadership role in promoting agriculture as a desirable profession, and encouraging the appointment of school staff who understand the opportunities in agriculture; as well as the development of higher education and vocational training courses that deliver desperately needed agricultural and management skills.

Labour and workforce

The overwhelming message from this research is that Australian employees want high wages but deliver lower productivity than overseas workers. Many businesses said that if they had to rely on Australian semi-skilled labour, they would be uncompetitive and go out of business. The region's production is sustained by overseas workers and increasing mechanisation.

It is difficult to attract skilled management to the region, and there are many more positions than can be filled by the number of applicants. Many people who do take jobs in the region, leave as soon as they can get secure employment in the city. However good operators reported fewer problems attracting good staff, reinforcing the need for business management skills.

The ageing population will contribute to a continued squeeze in the labour market, as many farmers head toward retirement and there are insufficient new managers to take their place. Farm agglomeration will take up some of this pressure, but larger farms result in lower regional population which in turn contributes to a decline in community and services that exacerbates the unattractiveness of the region for potential new residents.

Research, Development and Extension

RD&E is shifting from government to private provision. There was a general acceptance of the funding imperatives of this move, but producers reflected that it has added both a cost and time burden as there is now a need to assess the value of the advice, and it may not be easy to get this information.

A number of industry sectors had producer-funded levies, sometimes matched by government, which put funds toward R&D. There were concerns that these funds were being directed by government policy, not by industry needs.

Some producers noted that as RD&E moves to fee-for-service, farmers who need it most are those who cannot afford it.

Leadership

In most sectors, there is good leadership - both formal and informal. The research did however identify a number of gaps. It is likely that these can be addressed through social capital/networking programs that 'kick start' local groups.

Producers reflected that many leadership programs are aimed at younger farmers, but it is the more mature farmer, with less pressure from mortgages and young families - and a better understanding of the role of leadership in the sector or community - who is better placed to take on leadership. Leadership programs should therefore be available to all ages.

Themes for further sector development

The research suggested a number of themes that are worthy of further regional development activity (note that many of these have been priorities for RDA Murraylands & Riverland, either in the past or on an on-going basis):

1. Improving the public perception of primary industries as a career

- Marketing and social media
- Positive promotion in schools
- Dedicated vocational and higher education courses

2. Information, networks and nodes

- Farmer networks to share information about adaptation strategies
- Farmer networks to test and disseminate information about RD&E
- Leadership programs (including opportunities for older farmers)
- Maintain a state focus on applied research within South Australia
- Supporting the education of farmers to provide a quality food supply chain
- Access by small businesses to government and industry programs and services
- Creation of a community commercial kitchen in the Riverland to support growth of micro food businesses
- Articles in local papers about niche opportunities

3. Better labour supply

- Housing, internet access and activities for young workers and their families
- Programs that support GPs and other health and service workers
- Local farm management, HR and skill development training
- Equitable access to jobs for families of employees
- Regional labour pool with generic skills like food technology and handling
- School leaver farm management certificate delivered within the region
- Regional apprenticeship training, and apprentice support base
- Migrant worker support in small communities

4. Access to capital

- Upskilling businesses to attract equity investors
- Management skill development to support professional farm operations
- Sharing information and experience of different farm management and governance structures

5. Efficient, value-add supply chains

- Upskilling farmers accustomed to a single desk trading system
- Engaging grape growers in the value chain
- Informing farmers about opportunities and requirements of Asian markets
- More efficient transport systems to maximise use of trucks and storage facilities
- Peer education networks regarding alternatives to current grain storage and transportation practices (e.g. on farm storage)
- Encourage discussions (such as that with Indonesia for Australian flour rather than wheat export) that create local processing opportunities
- Strategies for on-farm olive processing
- Development of niche packaging/processing opportunities that position local businesses as price makers in commodity markets
- Promote involvement in Product to Plate programs

6. Infrastructure

Freight

- Monitor road use patterns and influence future infrastructure spending
- Rail transportation for large volume commodities
- Better freight access through Adelaide to Outer Harbor

Telecommunications

- Fast and reliable mobile and internet coverage across the region

Power

- Alternative energy generation to improve access and reduce the cost of power
- Transparent processes to assess the need for power augmentation, and checks that work has been carried out
- Access to the SEAGAS pipeline

Water

- Forward planning for water allocation to provide better surety

Waste

- Cost effective local waste management services

7. Government regulation and red tape

- B-Double and Road Train access to the region
- Reduction of red tape that affects industry, particularly relating to employment, planning approvals and heavy freight access
- Regulation and policing of imports to ensure they meet Australian standards (e.g. labelling)

Appendix: Interview Instrument

Survey Participants

To identify industry representatives to participate in the survey, RDA MR Board Members and staff were invited to be involved in a mapping exercise of the main regional commodities in the Murraylands & Riverland. As part of this mapping exercise staff and board members were asked to identify industry representatives for each commodity. This resulted in a list of over 200 industry representatives. This information was then provided to KPPM who contacted these individuals. If the individuals were available and agreed to participate in the survey their results were recorded.

KPPM and RDA MR have tried to ensure that each of the commodity sectors was equally represented. We ask readers to be mindful of the small sampling size (40 survey participants) and the qualitative nature of this survey when interpreting the results.

Questions

1. Just so I have my facts straight, I'm interviewing you in your capacity as XXX in the XXX sector. Is this right?
2. What are the main commodities that you produce?
3. Do you supply local, interstate or international markets?
If international, which countries? If not overseas: are you looking to supply overseas in the future?
4. What are the future opportunities for these commodities?
5. I don't need to tell you that primary industry is facing more uncertainty. From your point of view, what are the main things that will be different for you and the way you operate your business in say 10-20 year's time?
6. What will you change in your business to adjust to these changes?
7. What barriers or obstacles do you face in making these adjustments?
What should be done to overcome these barriers?
8. What can be done within the region to overcome these barriers?
9. Can you *easily* source the skills you need to meet the current and future needs of your industry?
10. Does skill supply affect the future of your industry in this region?
11. Will the current business models (that's structure, finance, operations) in your sector be the right ones for the future? IF YES to business model: what are the strengths of these business models? If NO to business model: what needs to change?

12. Are the services that are currently available in Research, Development and Extension meeting demand in your sector? If NO to RD&E, what is needed?
13. What infrastructure is needed in the region to secure a good future for your industry?
14. Are there adequate local services in your region to support industry growth?
15. What changes does your industry need to consider to accommodate climate change?
16. Is there strong leadership in your industry in the Murraylands & Riverland region? If NO to leadership, how can this be improved?
17. Is there anything else you'd like to add - anything you thought I might ask but didn't?