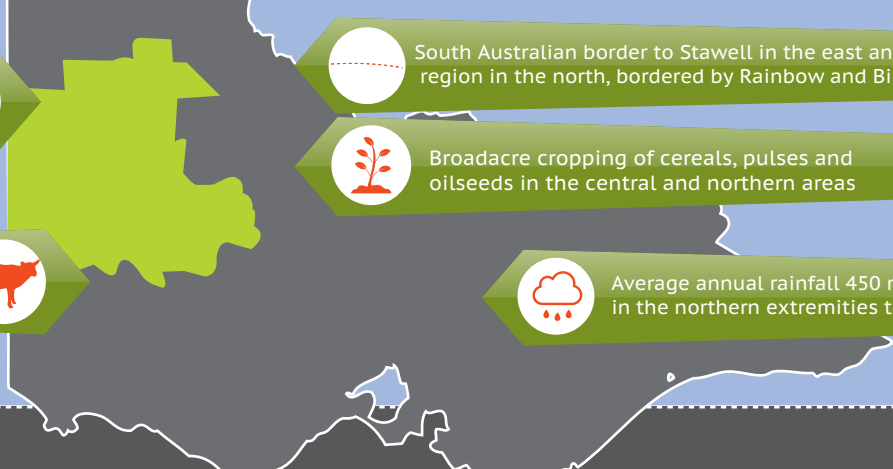
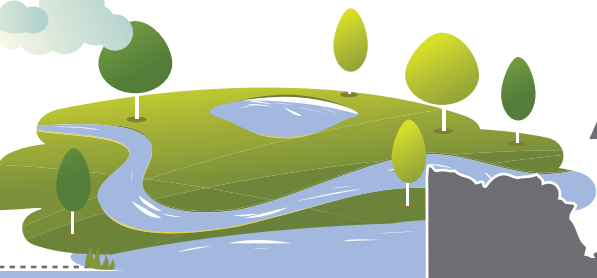


Future Education and Training Needs of the Agriculture Sector in the Wimmera May 2015



Agriculture in the Wimmera



OVER 30,000sq
KILOMETRES **km**

South Australian border to Stawell in the east and the Mallee region in the north, bordered by Rainbow and Birchip



Broadacre cropping of cereals, pulses and oilseeds in the central and northern areas

Cropping and dryland livestock grazing in the South



Average annual rainfall 450 mm, y 350 mm in the northern extremities to 550 mm in the south.

Major Industries



Wheat suitable for general food use, Middle Eastern flat breads and instant noodles. Biscuit, noodle and feed wheat are also produced.

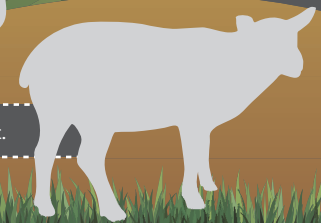
Barley is the second most prevalent crop in the region and is grown as either malting quality or feed.

Field peas, chickpeas, lentils, faba beans, broad beans, lupins and vetch. Most are exported to Asia and the Middle East, predominantly for food.

Canola is the major oilseed grown in the Wimmera. Small amounts of safflower are also grown for oil.



Some beef cattle one dairy.



Sheep are produced for wool and meat.

Niche and Emerging Industries

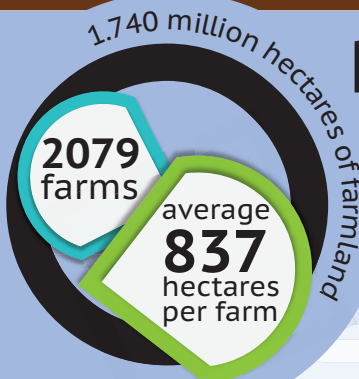
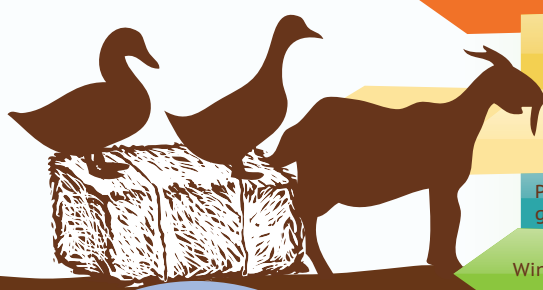
Nhill has the largest duck meat processing facility in Australia

Olive oil - Produced and bottled by three companies in the Wimmera. The largest olive oil production establishment is in Telopea downs, with nearly 600 ha of olives, all processed on site.

Hay - The stockfeed industry is also significant with large quantities of oaten hay exported to Japan.

Pulses, cereals and oilseeds - value-adding through cleaning, grading and bagging.

Wine grape production, herbs and goats for meat are emerging.



Regional Agricultural Statistics

2012 Statistics

Gross Regional Product **\$2.4 billion**

Total Gross value of agricultural production - **\$900 million**

60 per cent of all crop products exported

33 per cent of the region's manufacturing value added was from the food production

Agriculture contributed to **30** per cent of the region's Gross Value Added (GVA)

Agriculture provided nearly **20** per cent of regional employment.

THE wimmera
Everything you need.

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Further Information:

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1. Exploring Future Training and Education Needs

A strong, productive agriculture sector is the key to the economic future of the Wimmera Southern Mallee.

The Wimmera Southern Mallee Workforce Committee has identified that the education and training needed to ensure the future strength of the sector is unclear.

This research paper has collected data on:

- Current learning habits of agricultural producers and the agribusiness sector
- Level of innovation and future knowledge requirements of agricultural producers and the agribusiness sector
- Education and training opportunities currently available in the region
- Education and training opportunities currently taken up outside the region or online.

1.1. Knowledge, Learning and Education

It is important to consider the knowledge required by future agricultural businesses, rather than the qualification, and then consider options to attain that knowledge. This will be impacted by:

- Learning styles of agricultural producers and agribusiness employees
- New subject matter that will influence the operation of farm businesses, including business management, technology and production methods
- Barriers to participation in formal education and training.

This report has captured data from agricultural producers, agribusiness employees, education providers and agricultural member-based organisations to map out the current and future education and training needs of the region.

1.2. Definitions

Agriculture can be perceived as a narrow domain, when the reality is that agriculture and agribusiness require input from a broad range of sectors to be successful.

For the purposes of this report, the following definitions are applied:

Agricultural Producer – an owner/operator employee of a family or corporate farm business

Agribusiness – an employee or business owner in the fields that support and enable agricultural production, including:

- Researchers and extension providers
- Agronomists
- Stock agents, seed, fertilizer and chemical advisers and sales representatives
- Grower groups and other membership-based organisations
- Financial advisors, bankers, bookkeepers, financial counsellors
- Machinery dealers, mechanics, parts sales, fuel providers
- Marketing and trading companies for grain, wool, livestock
- Freight and logistics companies
- Manufacturers of farm equipment, storage, small machinery

2. Current Environment

What We Heard from Regional Agriculture

2.1. Creating a Culture of Excellence

An overriding theme in this research has been the low aspirations held by the young people who remain in the region, for educational attainment and career advancement. This is understandable given that the rhetoric around the sector remains that of 'the battler' having a 'tough season'.

By recognising and celebrating the success of those who have achieved interesting careers and successful businesses, we can begin to change attitudes and then the culture of the agriculture sector.

2.2. Innovation Rather than Expansion to Grow a Farm Business

A number of agricultural producers have indicated their intention to buy more land and invest in new machinery and infrastructure to expand the size of the farm over the next five years. This brings benefits but also risks.

Producers need to build their skills to objectively assess the risks of expansion, and also be able to look at other ways to increase productivity and hence profitability.

2.3. Succession Crisis Looming

The large number of farm businesses without a succession plan in place indicates the potential for a crisis of knowledge transfer in the next 5-10 years. While each farm business is unique, certain responsibilities will be retained by the current owner until the succession is in place. Given the ageing demographic, this increases the risk of farm planning, risk management, financial planning and production planning not being fully handed down.

We can extrapolate that the lack of employment and income security for the younger generation waiting for succession has also led to the development of off-farm careers. The longer and more successful those careers are, the harder it will be to return to the farm.

2.4. Low Perceived Value of Accredited Education

The Wimmera Southern Mallee has one of the country's lowest rates of completion of formal secondary and post-secondary education. This has led to alarming numbers of disengaged, unemployed and under-employed young people.

It will be necessary to both counter and accept this perception. To counter, it will be necessary to highlight and publicise the variety of careers, and the long-term benefits (income, promotion etc.) of completing tertiary education.

It will also be important to be realistic, and accept that while the perception exist, it is necessary to find alternative ways to equip our agricultural producers and agribusiness employees with the skills needed for success.

2.5. Acknowledging Agribusiness Farmers

Almost a quarter of agribusiness employees in the region are also involved with a family farm. This has advantages for the family farm as expert level advice is freely available, and it also has advantages for local agribusiness sector, which can benefit from first-hand knowledge of clients circumstances.

2.6. Outsourcing Knowledge

The prevalence of outsourcing to agronomists and other agribusiness professionals indicates that a lot of expert knowledge is held off-farm. While some of that advice will be objective, some of it will be from a commercial supplier rather than an independent expert.

An obvious requirement is for our agribusiness professionals to be experts in their field, with ongoing professional development.

It is also important to keep producers abreast of latest developments so that they can critically assess the advice they receive.

This is another opportunity to strive for a culture of excellence in the sector. Thought leadership, continual learning and awareness-raising of the careers paths of consultants will all assist.

2.7. Short-term Off-farm Income

Around one fifth of survey respondents indicated that, at times, they have taken up off-farm employment to secure short-term income for the farm business. The need for supplementary income, especially in times of low production (drought, flood, disease outbreak), will occur periodically and our producers need the skills to secure employment. Up to date skillsets and regulatory qualifications (licencing, safety certificates etc.) will assist farmers to gain short-term employment.

2.8. Matching the Learning Styles of the Sector

It is clear that certain delivery methods are more appropriate than others, with traditional post-secondary methods of classroom learning, at set times, over a year or more, perhaps the least likely to attract participants.

Membership-based organisations and government departments already offer a large number of events, small group exercises and written material to their members. However half of survey respondents indicated they do not belong to such an organisation.

The challenge therefore is how to reach those people and deliver training face to face in a small group if not through an established membership.

2.9. Making Knowledge More Accessible

The data indicates a growing trend in the use of the internet and social media as a knowledge source. This is a key to the long-term future of knowledge exchange, whether it is formal education delivered online, the availability of local, useful information on a website or the development of networks through social media.

- Membership-based organisation are all competing for members and funding, and are aware their greatest competition is information freely available on the internet
- A local portal where relevant, credible websites are linked could be useful, along with high-quality, focussed social media presence

2.10. Making Careers in Agriculture More Accessible

Although agriculture and agribusiness require a significant variety of skillsets, the prevailing image of the sector remains that of a middle-aged male farmer. For those young people who will not inherit a family farm, that traditional image sends a signal that a career in agriculture is not available to them

It will take significant thought leadership from education, business and community leaders to fully acknowledge and celebrate the many and varied ways young people can develop a career in this sector. There are many interesting examples of men and women who have successful careers that support agriculture but which do not involve being a farmer.

3. Mapping the Wimmera's Agricultural Knowledge

3.1. The Learning Habits of the Wimmera's Agricultural Sector

A survey was used to produce a clear understanding of the future and emerging needs and opportunities for education and training in the agriculture and agribusiness sectors of the Wimmera.

The survey looked at:

- different types of training and education
- experience and preference amongst the sector for different delivery methods
- gaps in skills, delivery and take-up of existing offers
- potential models for improving relevance and delivery across the region.

3.1.1. Collecting Data

A 27 question survey was distributed, resulting in 265 responses. The survey questions are included at Appendix 1. Data was collected between 16 February and 9 April 2015. In total, 265 Wimmera agricultural producers and agribusiness employees participated in the study. Data collection consisted of telephone surveys, surveys completed by email, and in person at the Wimmera Machinery Field Days.

The survey was distributed via a social media campaign on Facebook and Twitter.

The survey was sent directly to agribusinesses, government departments, grower groups and producers.

The link to the survey was included in newsletters for WDA's Building Resilience in Farming project, Birchip Cropping Group, Victorian No-Till Farmers Association, Wimmera Farming Network, Victorian Farmers Federation and West Wimmera Women in Ag.

With an estimated 2079 farms operating within the Wimmera¹ the margin of error at a 95% confidence level is estimated to be 5.6% percentage points, which means that we can be sure that the results are within 5.6% percentage points of the population figures 19 times out of 20.

3.1.2. Stakeholder Input

In addition to the survey, this report contains information and recommendations based on the outcomes and experiences of key education providers and stakeholders in the region. This information was collected during in-depth interviews with Federation University, Longerenong College, Department of Education and Training, Horsham College, Wimmera LLEN, Birchip Cropping Group, Department of Economic Development, Jobs, Transport and Resources, CBH Grain, Landmark, Rabobank and three agricultural producers.

In developing recommendations, several case studies were examined to better understand different ways organisations are responding to the changing needs of the sector. These can be found at Appendix B.

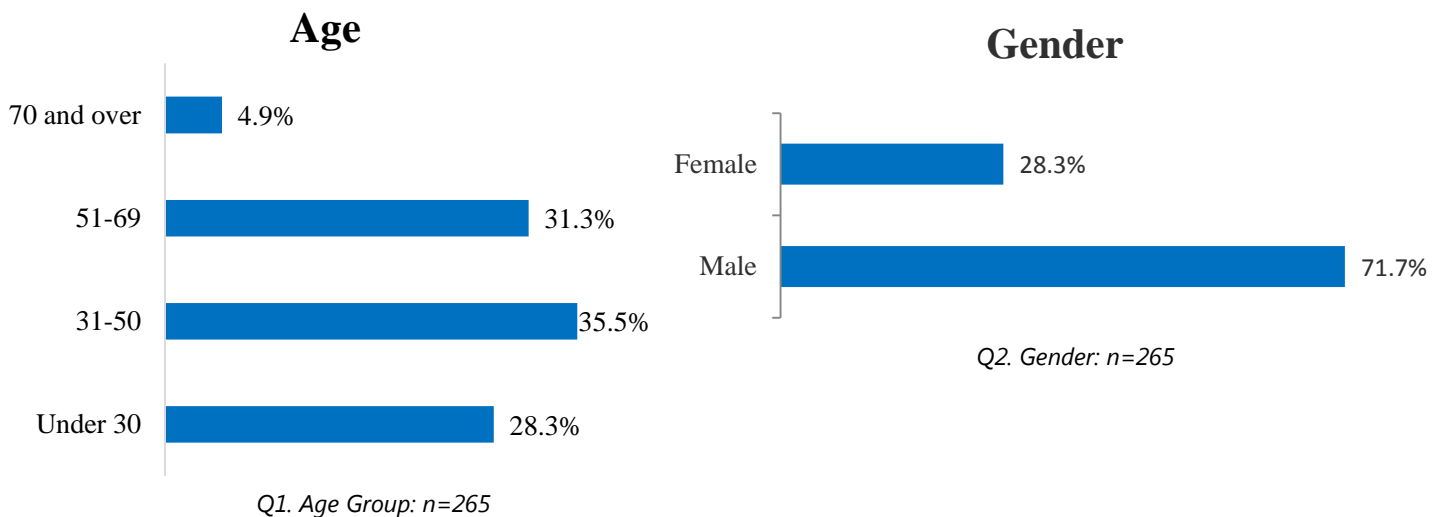
¹ DEPI website www.depi.vic.gov.au/agriculture-and-food/food-and-fibre-industries/region-overviews/wimmera

3.2. Survey Results

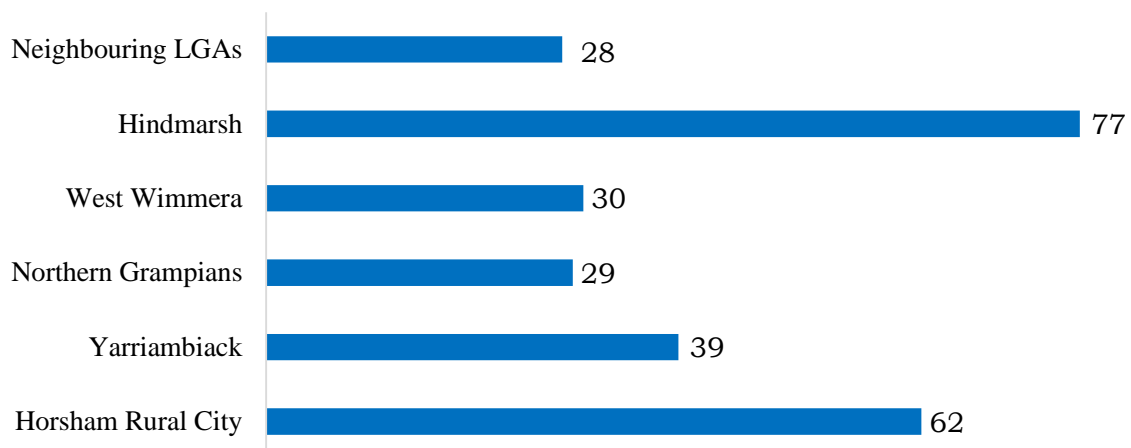
Key Findings

- Nearly a quarter of respondents work both on and off-farm
- Off-farm work is seen as a pivotal part of the farm's long-term viability
- A career is perceived to be off-farm
- Informal hands-on learning is preferred delivery method
- Time away from the farm/work is the biggest barrier to participation in education and training
- Educational attainments levels are well below national averages
- Business as well as agronomy skills are priority training areas over the next five years.

3.2.1. Demographics

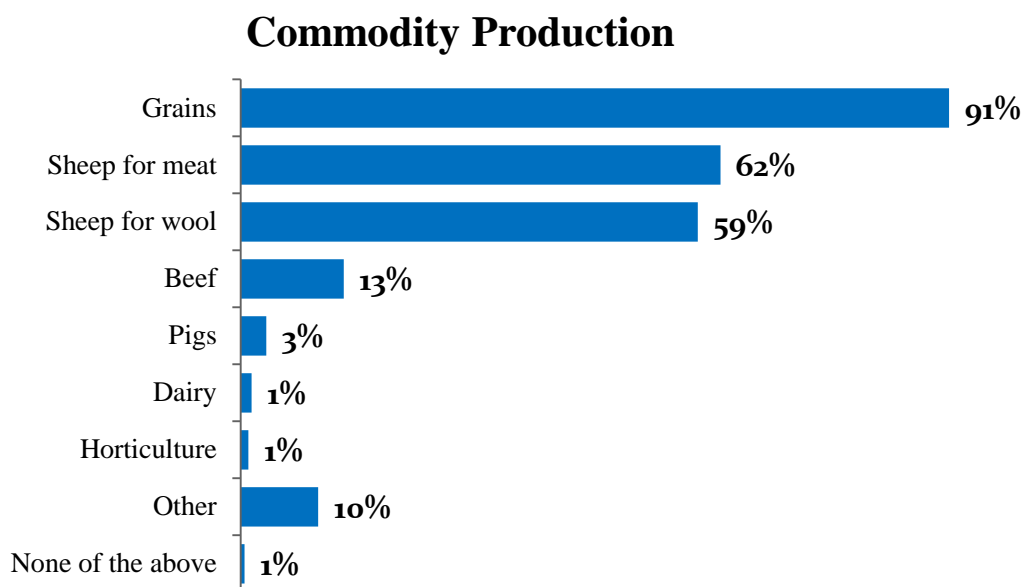


Geographic Location



3.2.2. Production

The average farm size of respondents was 2,333.6 hectares. Grain was the dominant commodity, with a growing variety of livestock and increasing hay production.



Q6. What does your farm produce? Base: n=210.

Other:

- Alpacas
- Ducks
- Goat meat
- Sheep for breeding
- Stock feed Poultry
- Export hay
- Fodder for dairy
- Hay

3.2.3. Employment

An interesting outcome from the survey is the growing number of people engaged with both a family farm and a career off-farm. While 58% of respondents were solely working on a family farm, 22% combined careers in either agribusiness or an unrelated field.

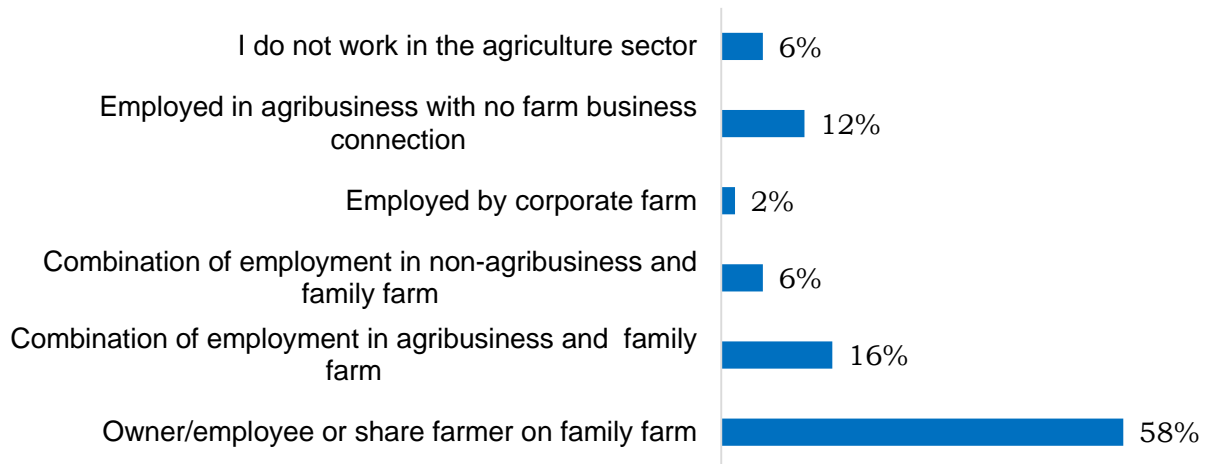
Motivation to take up work off-farm is mostly with long-term objectives in mind. This could be influenced by:

- low succession plan rates which lead to uncertainty for younger generations
- the need for a secondary income to maintain the viability of the farm business for more than one generation or family member
- higher levels of outsourcing of advice to professionals and the attraction of varied, higher paid work over being part-owner of a family farm.

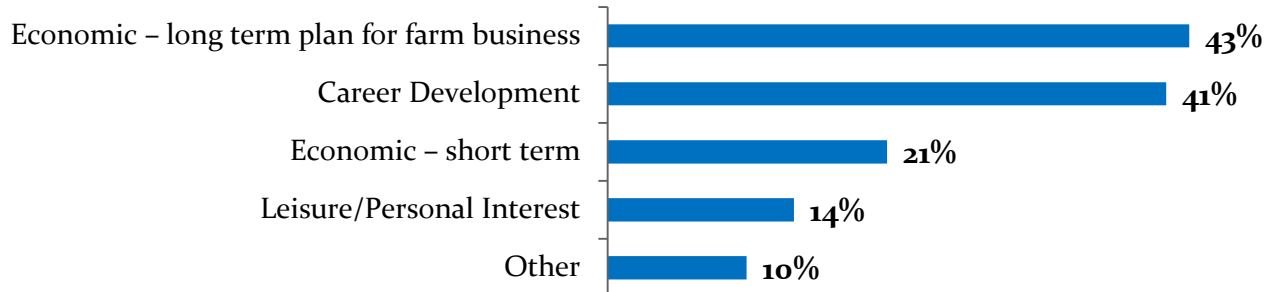
This information helps to paint a picture of the modern agricultural producer. He or she is likely to want to develop a degree of independence and security, especially if succession plans are not complete.

This opens up opportunities for specialised education and training within the region, which would facilitate both on-farm and off-farm employments.

Occupation



Motivation to Work Off-farm



Q5. What was your motivation to take up off-farm work? Base: Respondents who are employed in agribusiness and an owner/operator of a family farm, n=58.

Reasons for working off-farm...

“Went to work during the drought, now looking at long-term career off farm”

“Regional development - farming alone will not sustain regional economy”

“I work in Melbourne. If employment opportunity arises in farm area may consider permanent residence at farm.”

3.3. Education and Training Opportunities and Barriers

By focussing on the learning styles of producers and agribusiness employees, the data can show preferred delivery methods for future education and training. This may be used to influence the development of new training packages.

There are four learning styles:

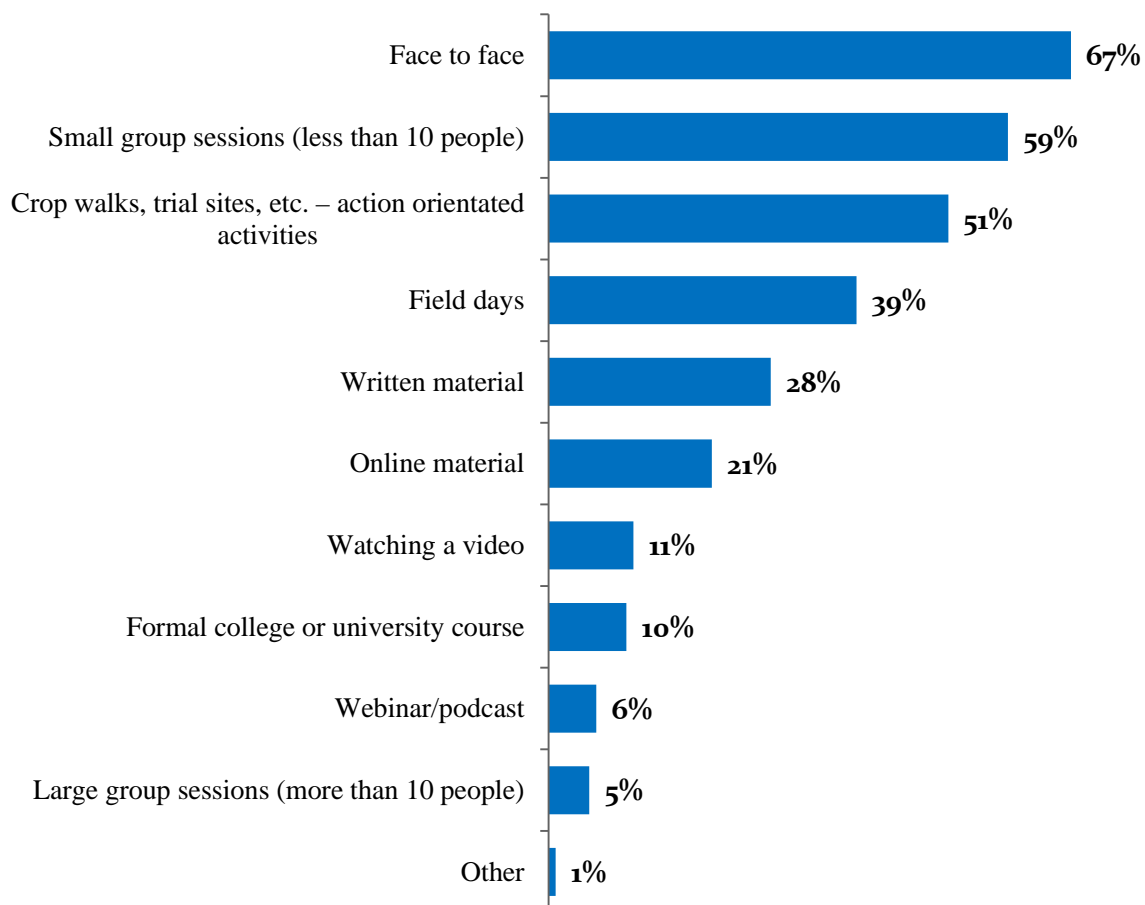
- Visual (learn through seeing)
- Auditory (learn through hearing)
- Tactile (learn through touch)
- Kinaesthetic (learn through doing and moving)

The data shows that respondents preferred visual and kinesthetic delivery in small, personalised settings.

3.3.1. Formal and Informal Learning

When asked about the most effective methods of learning, most respondents (67%) say that face to face interactions are the most productive when time and money are factored in as well. Small group sessions are second most productive (59%), followed by crop walks (51%).

Most Productive Methods of Learning



Q15. In which of the following situations do you feel you learn the most and get best value (of your time and/or money)? (Please select your 3 preferences from the list below). Base: n=212.

3.3.2. Most Productive Learning Methods by Age Group

While it is no surprise that the younger respondents rely heavily on digital and social media for information, it is revealing that the next age group (31-50) feel most comfortable learning from other’s experience and expertise face-to-face rather than online. This presents two distinct communication and learning styles for training providers to contemplate.

This chart also provides an indication of the value placed on knowledge gained in different ways, by respondents’ willingness or otherwise to pay for the information they receive.

Respondents aged under 30

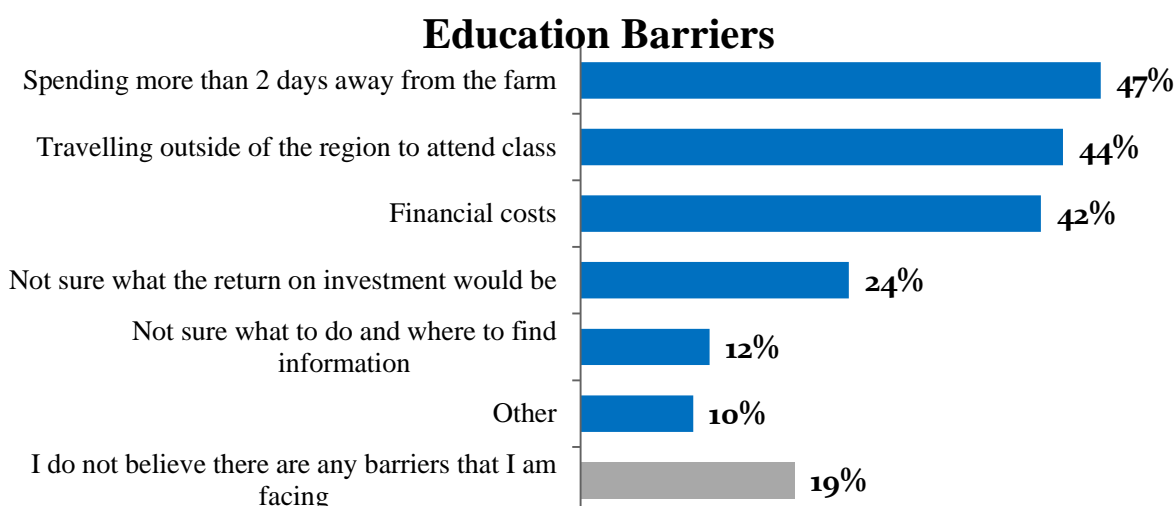
	Used/Attended	Paid to Use/Attend
Websites	49	7
YouTube videos	46	0
Facebook/Twitter	42	2
Asking other farmers	42	5
Crop Walks	40	16

Respondents aged 31-50

	Used/Attended	Paid to Use/Attend
Websites	61	7
Asking other farmers	59	3
Visits by machinery, chemical, other sales reps	49	10
Rural Newspapers and Radio	49	43
Meeting with bank, accountant, investment advisor	46	25

3.3.3. Barriers to Continuing Education

The most commonly reported barriers to enrolling in accredited training are spending more than two days away from the farm (47%), traveling outside of the region to attend classes (44%), and financial reasons (42%).



Q18. What barriers do you face when considering enrolling in accredited training (certificate, diploma, degree)? Base: n=206.

What's stopping our producers from formal education...?

“Childcare.”

“Time away from young children.”

“Lack of confidence with computer knowledge but know it would help our business.”

“On line learning would be appropriate, but internet reception & speed is a factor as well as mobile phone reception.”

“Attending courses seems to be inefficient use of time. A written or online course can be done to suit student time and pace.”

“Who will do the work while I am away training?”

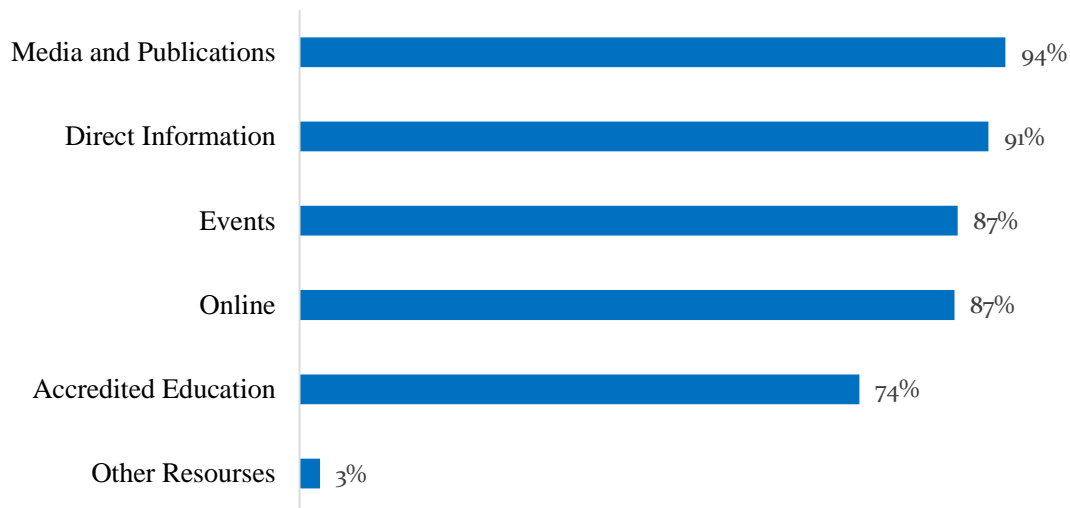
“Targeted training. Eg I want to do book keeping but doing a Cert. 3 course is not specific enough. How do we cherry pick topics that are relevant to my business as I don't want to be a qualified book keeper or accountant?”

3.4. Industry Knowledge Advancement

When asked about different methods of sourcing industry information and educational tools, most respondents (94%) report using media and publications. Roughly three quarters (74%) look to accredited education for regulated training such as OH&S or chemical handling.

Responses show varying degrees of willingness to pay for education and training, whether it is formal or informal.

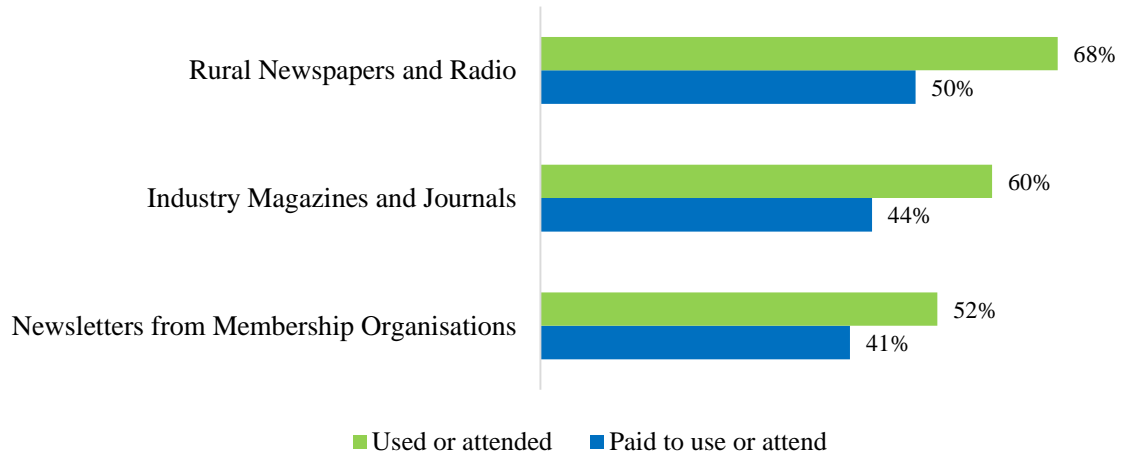
General Industry Sources Used Overall



Q11. The following list includes a range of information sources and educational tools. Please select all of the tools that you have used to advance your knowledge of the industry and whether or not you have paid for them. Base: n=222.

The most commonly used media sources among respondents are rural newspapers and radio, with half paying for these services.

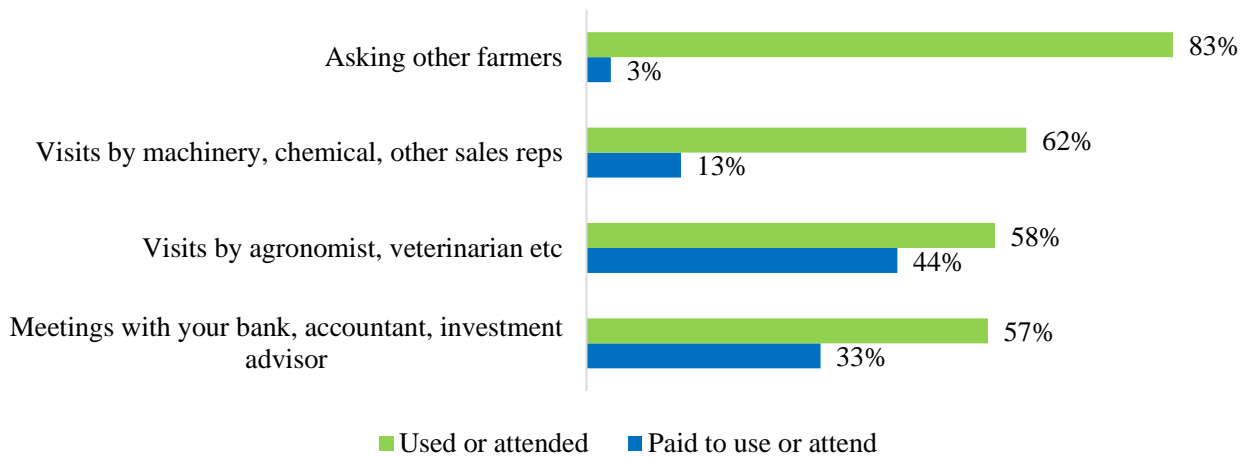
Media and Publications Sources and Tools



Q11. The following list includes a range of information sources and educational tools. Please select all of the tools that you have used to advance your knowledge of the industry and whether or not you have paid for them. Base: n=208.

Asking other farmers for advice is the top direct information source for 83%. Agronomist or veterinarian visits are the top direct source paid for by respondents (44%).

Direct Information Tools

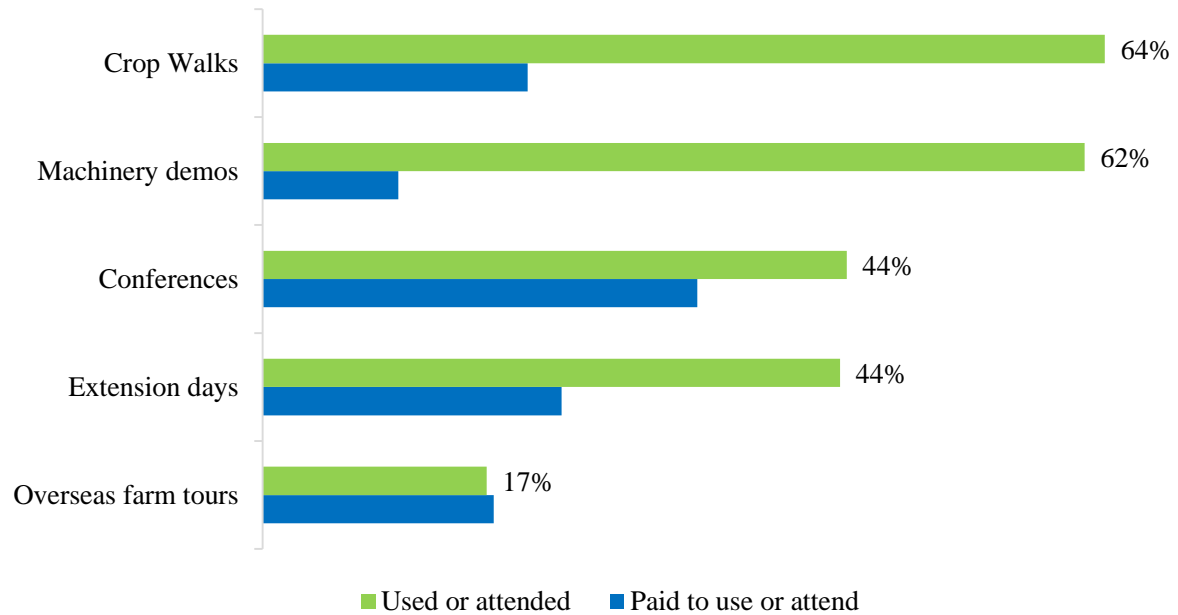


Base: n=203.

Crop walks are the most common event used as a source of information by 64% of respondents. Conferences (33%) are the most commonly paid for event.

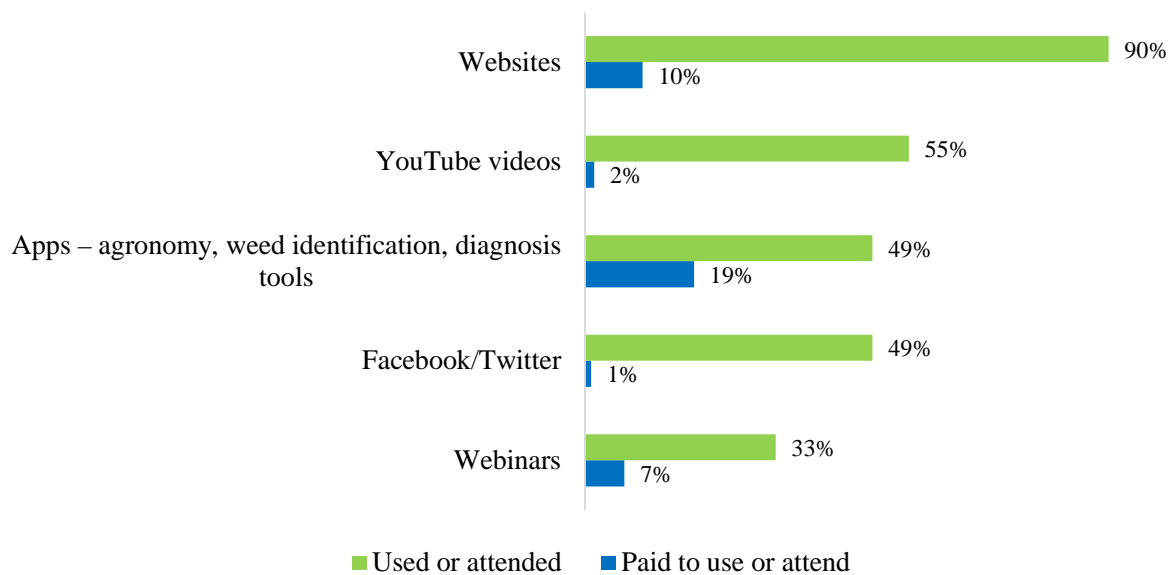
n=194

Events as Sources and Tools



Websites are used by nine in ten respondents to advance their industry knowledge. The most commonly paid for online sources are agronomy apps (19%).

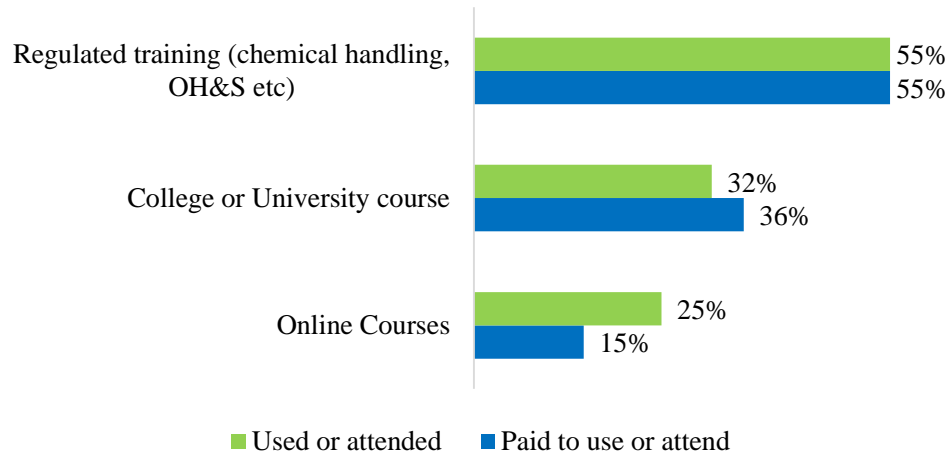
Online Sources and Tools



Base: n=193

Regulated training is the most commonly used and paid for accredited education source, with all the respondents who use it (55%), paying for it as well (55%).

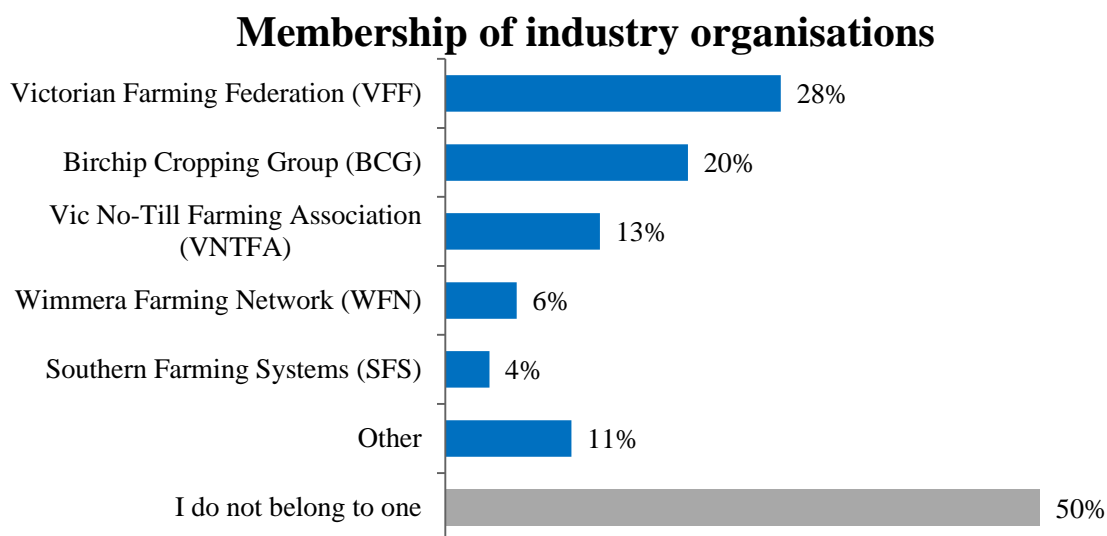
Accredited Education Sources and Tools



Base: n=165

3.4.1. Networks

One of the main ways to deliver the events, crop walks, written and online material is through membership-based organisations as well as government departments. Interestingly, only half of respondents are members of such an organisation.

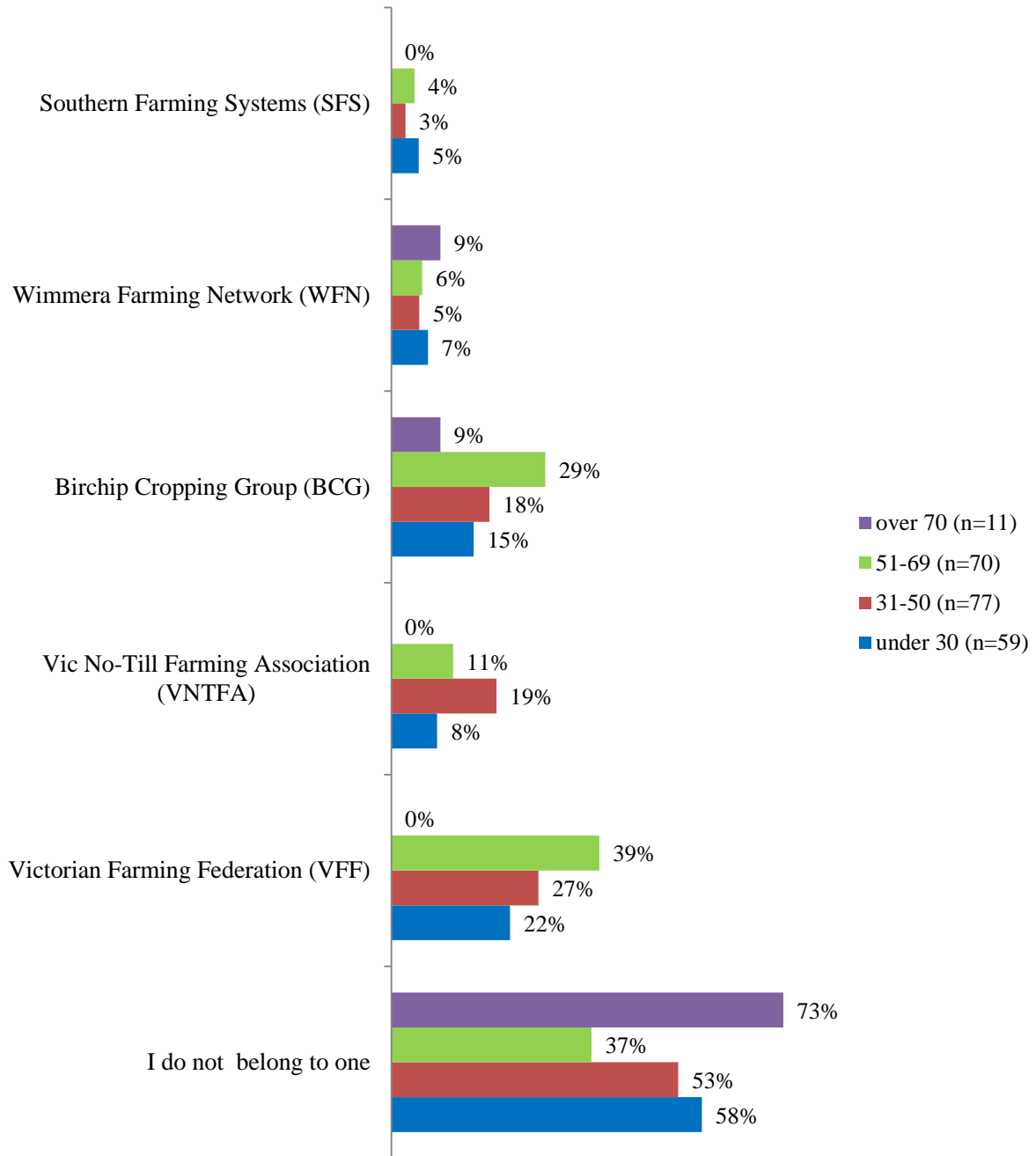


Q14. If you belong to a membership group(s), which do you belong to? Please select all that apply. Base: n=216.

Other memberships included

- Woorak Community and Landcare Management Group
- West Wimmera Women in Ag
- Kondinin Group
- Mallee Sustainable Farming
- Wallup Ag group
- Northern Grampians best wool best lamb
- Perennial pasture systems
- Project Platypus
- Grain Growers
- Australian Alpaca Association
- Pulse Australia
- Grain Industry Association of Victoria
- White Suffolks Association
- MacKillop Farm Management Group
- South Australian No Till Farming Association
- Biodynamic Association Australia

Membership by age group



This breakdown of membership by age group provides an indication of the younger age groups' lack of formal networking through membership-based organisations. For the 31-50 bracket, this is particularly interesting given they see face to face information exchange as their most effective way of learning.

In this digital age, formal and ongoing engagement with younger age groups is more difficult and previously popular models, such as membership-based organisations, seem to be decreasing in favour.

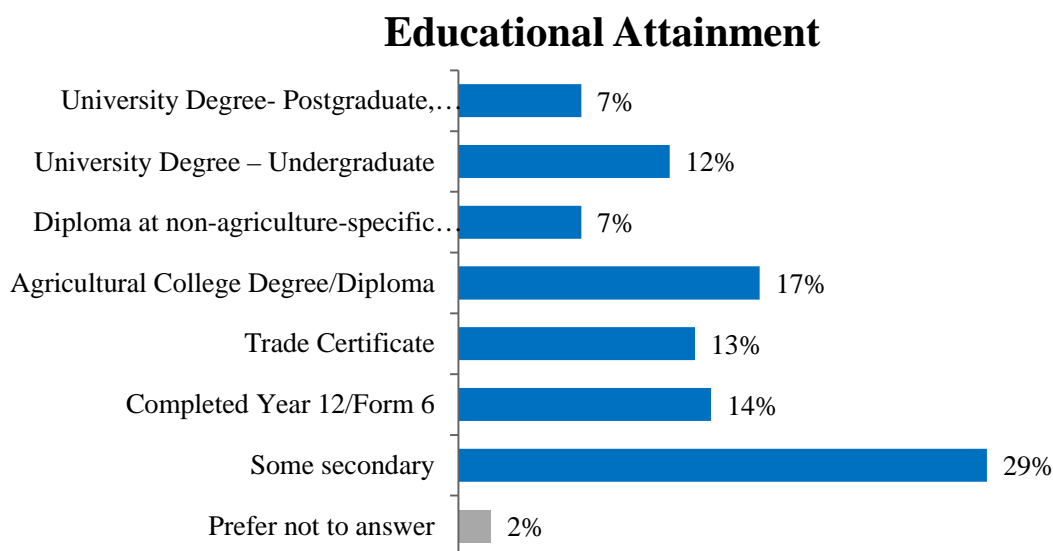
3.5. Education Levels and Providers

In order to develop strategies to equip agricultural producers and agribusiness employees with the knowledge they need to achieve productivity and profitability, it is necessary to have a realistic understanding on the level of educational attainment in the region.

Almost one third of respondents have some secondary school education as their highest level education. All age groups are represented in that category, the majority in the 51-60 age bracket (46%) followed by the 31-50 age group (23%). This indicates that the middle generations – who still have lengthy working lives ahead of them – are doing so without ongoing accredited education.

Nearly 80% of respondents with some secondary school education are owner operators of a family farm with no off-farm employment and 70% of them do not have a succession plan in place.

Across Australia, the Australian Bureau of Statistics reports that in 2013, the proportion of people aged 15-64 years with a non-school qualification was 57%, with the proportion of people with a Bachelor Degree or above being 25%. The proportion of people whose highest non-school qualification was an Advanced Diploma or below was 32%.²



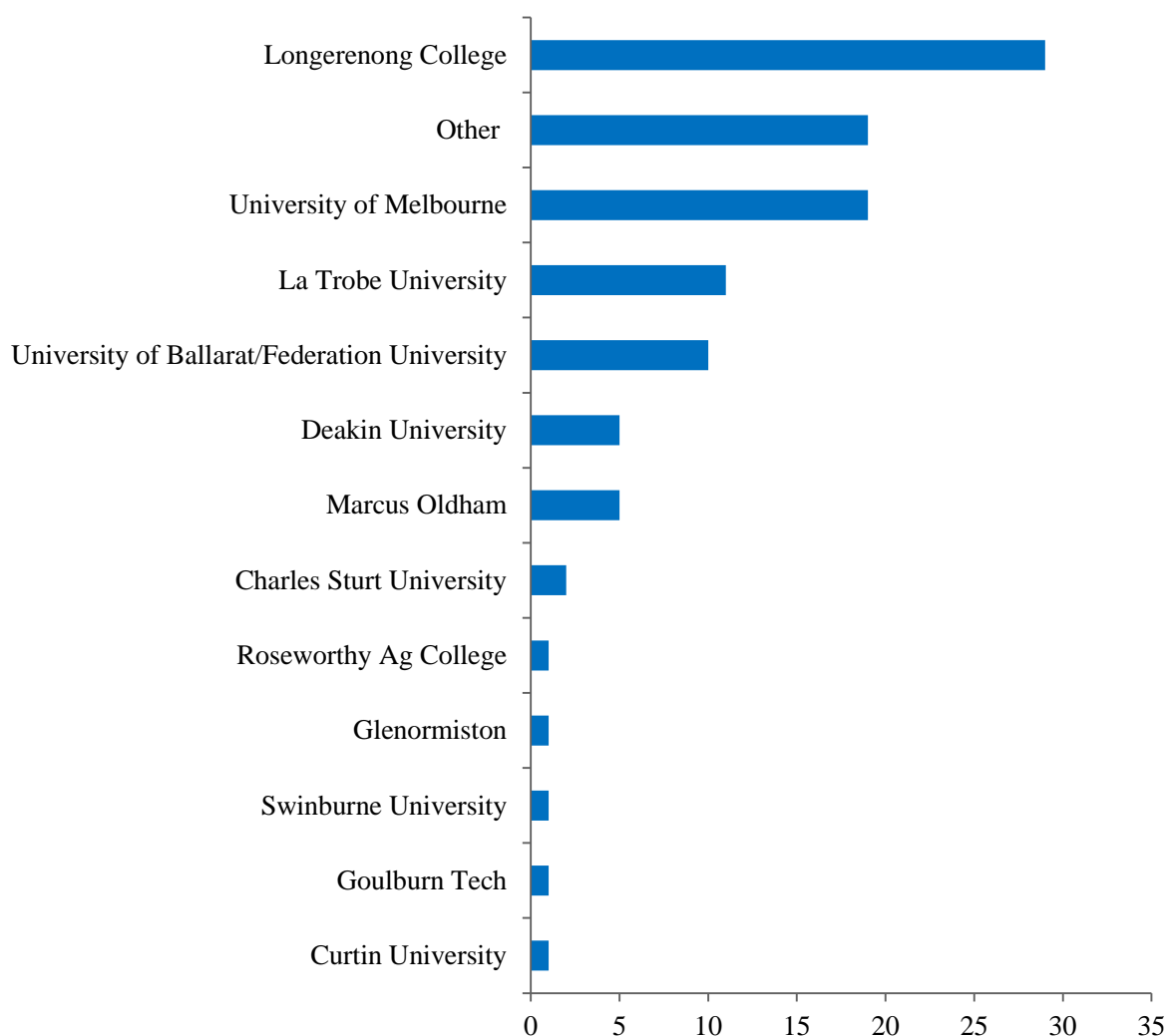
Q12. What is the highest level of education you have attained? Base: n=222.

At this stage, it appears private registered training organisations have not made great inroads into the region, with the majority of education providers being well-known local providers, established TAFE or universities, as indicated overleaf.

²

<http://www.abs.gov.au/ausstats/abs@.nsf/Products/6227.0~May+2013~Main+Features~Attainment?OpenDocument>

Post-Secondary Educational Institution

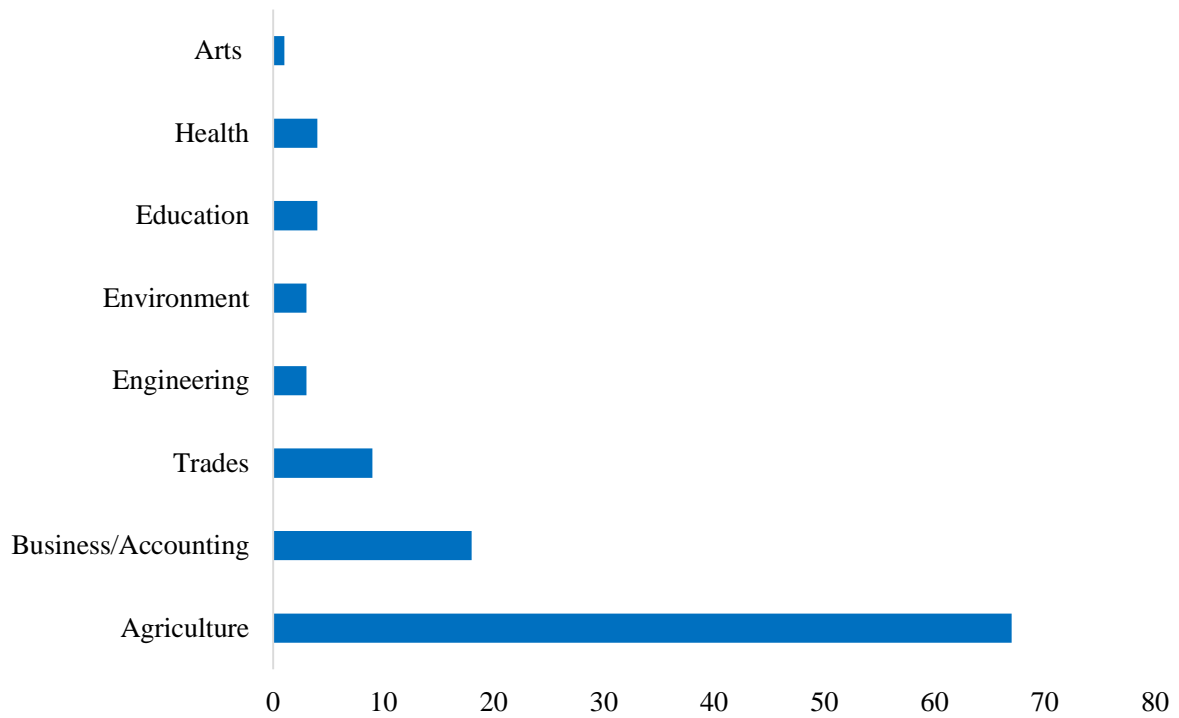


Q13. Which organisation/institution did you take this course through, and what was the course? Base: Respondents who have completed post-secondary education, n=109.

Other Institutions listed:

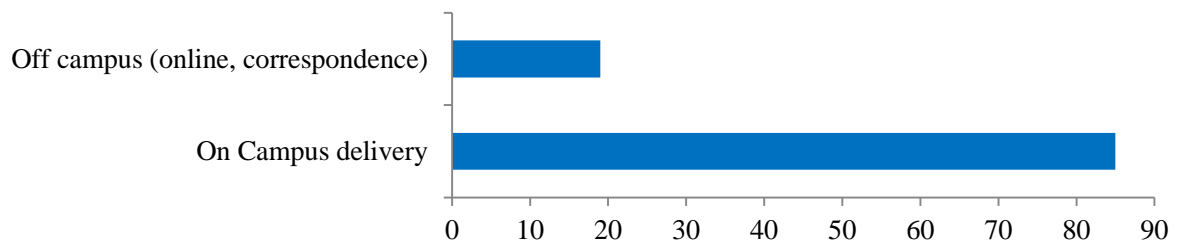
- Adelaide University
- Alfred Hospital
- Assiniboine College, Manitoba, Canada
- Avoca College
- Batman TAFE
- Institute of chartered accountants Australia and New Zealand
- Lincoln University
- Regional Skills Training
- RMIT
- University of Canberra
- University of Southern Queensland
- VACC

Areas of Post-Secondary Study



Q13. Which organisation/institution did you take this course through, and what was the course? Base: Respondents who have completed post-secondary education, n=109.

3.5.1. Course Delivery

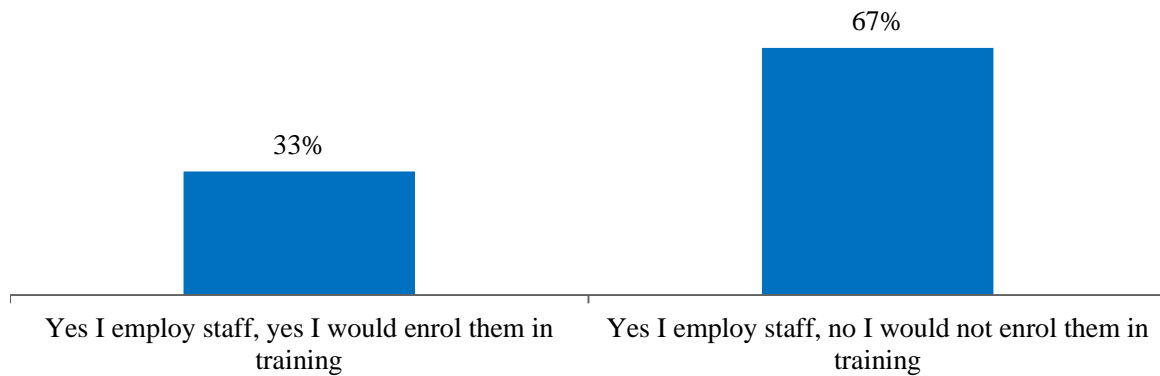


Q13. Which organisation/institution did you take this course through, and what was the course? Base: Respondents who have completed post-secondary education, n=109.

3.5.2. Training Plans

More than half of respondents (54%) do not employ staff in their farm business. Of the 93 respondents who do have employees, roughly two thirds (67%) would not enrol their staff in accredited training to improve their skills.

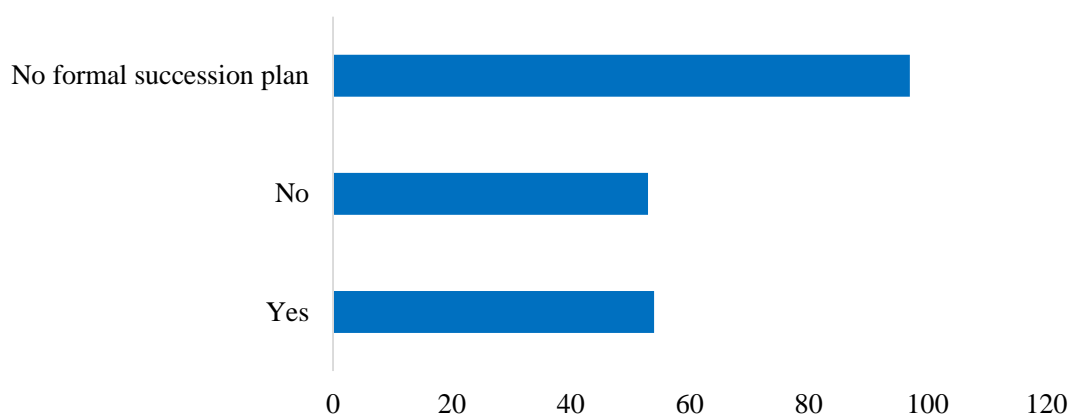
Staff and Education



Q8. Do you employ staff in your farm business? If so would you enrol them in accredited training to improve their skills? Base: Respondents who are owner/operators of a family farm, employed in agribusiness and an owner/operator on a family farm, or employed by corporate business to operate a farm, n=93.

The majority of respondents do not have a succession plan in place. Of those that do, only half have included training as an element of the plan.

Is training part of your succession plan?

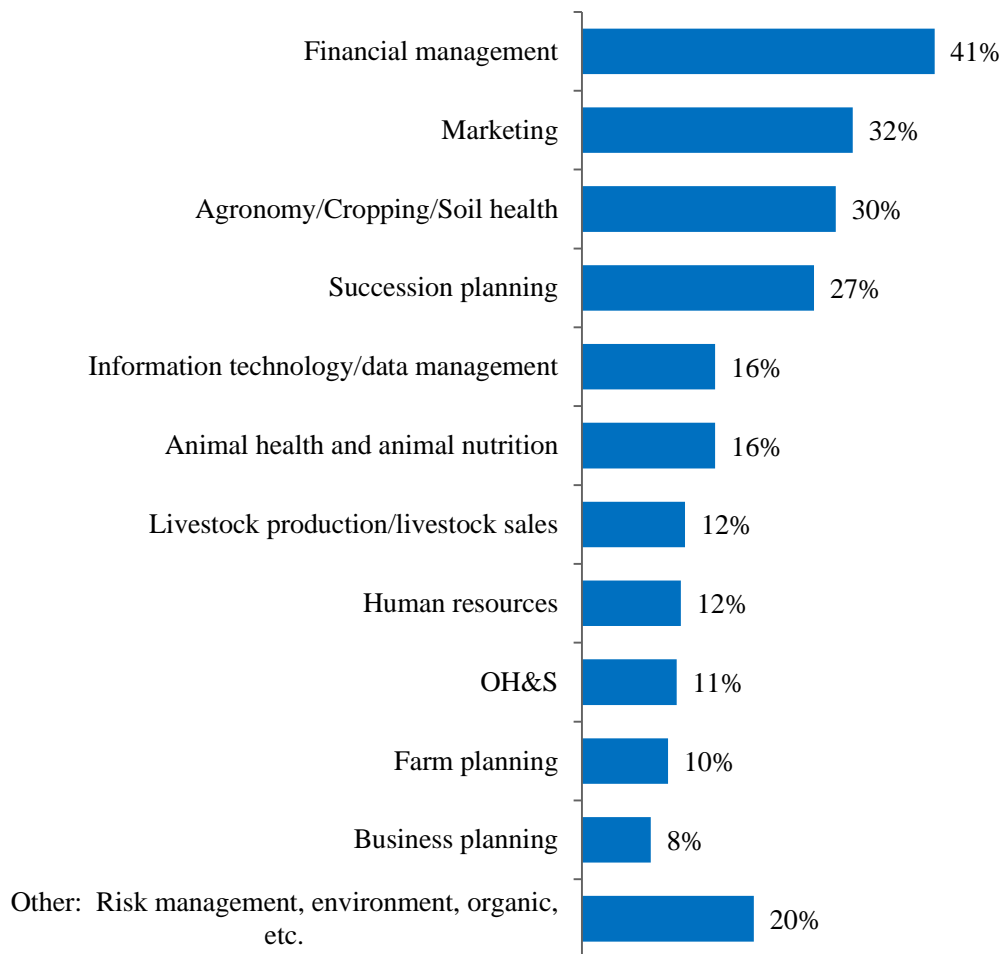


Q10. Is training or skill development part of that succession plan? Base: Respondents who have a formal succession plan documented or implemented in their farm business, n=204.

3.6. Education over the Next Five Years

Over the next five years, around 40% of respondents say that they plan to improve their knowledge and skills in financial management. Roughly 30% say they will improve in marketing, and 30% say they will improve in agronomy, cropping, and soil health.

Knowledge and Skills Improvement over the Next Five Years



Q17. Please list the top 3 areas where you plan to improve your skills and knowledge over the next 5 years.
Base: respondents who left a comment, n=198.

The information from this graph may provide some useful planning support to education and training institutions in the region as well as government departments and membership-based organisations.

A breakdown of the knowledge and skills improvement plans for the two younger age groups (next graph) shows a strong interest in financial management, succession planning, agronomy and marketing.

Knowledge and Skills Improvement over Next Five Years - 18-50 age groups



Advice for young farmers...

“Work on another farm/agriculture store first for at least 7 years before you go home to your family farm to understand the right and wrong things to do in an enterprise. Too many kids have too many bad habits from family farms.”

“More time spent studying, comparing and working in different operations to get a perspective on good and bad management.”

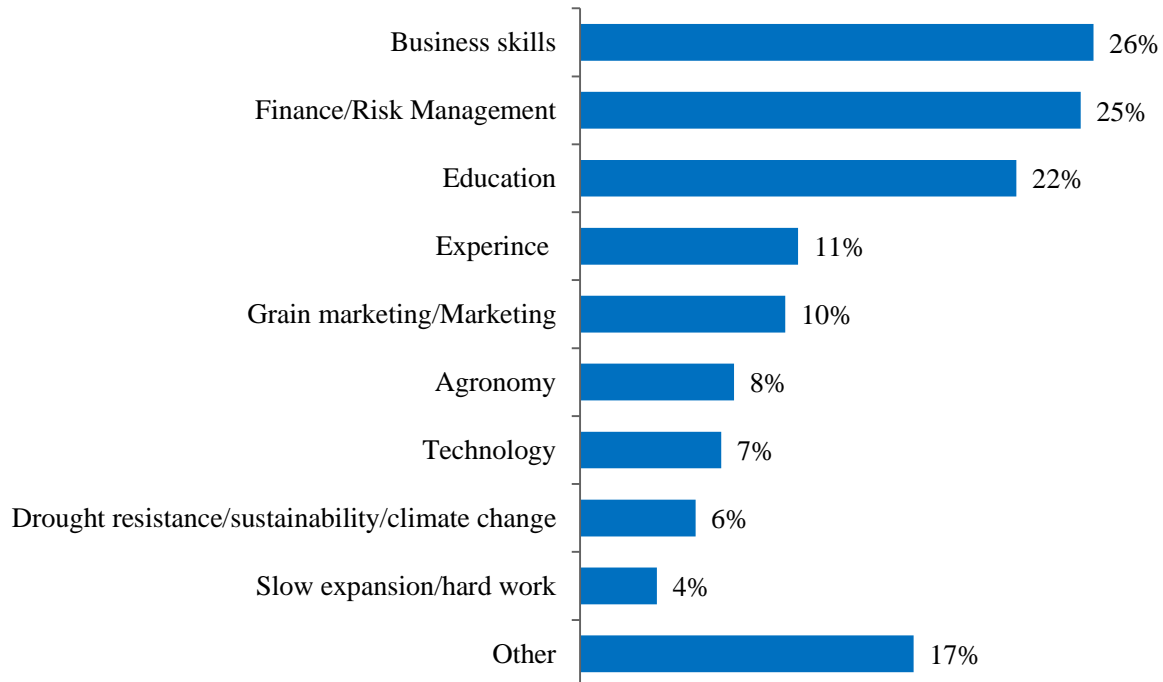
“Patience. Seems to be a lack of understanding that farming is a long haul exercise and too many rash decisions will rebound in the long term.”

3.6.1. Skills Needed for Success

When asked about what the younger generation of farmers need to run a long term successful farm, the most common response is business skills (26%), followed by finance/risk management (25%), and education (22%).

Given the high number of family farms without a succession plan in place, this is an important indicator of the skills that are perhaps still held by the older generation. Given the ageing workforce on family farms, there may be a sense of urgency in equipping the younger generations with these skills with or without a formal succession plan.

Training and Skills Needed



Q25. What additional training and skills do you believe the younger generation of farmers needs to develop to run a successful and profitable farm for the long term? Base: Respondents who left a comment, n=153.

The next generation need to learn...

“Financial management, innovation and plain work ethic with a long term view.”

“To be given opportunities to enter the industry. If their family doesn't help them, there isn't much chance of owning their own land. We know several keen young people that just don't have the money or backing to get their own land.”

“Need to be able to find farming satisfying comparative to other options they have.”

“Financial and working capital management... Too many want the big new gear first up and sometimes fall into a financial hole and get into trouble. “

“External farm experience, environmental training, long term viewpoint.”

“Business Management. Commitment/focus. Formal relevant technical training .i.e. maths, physics, chemistry basics etc. Entrepreneur training/thinking.”

“Business skills, it's a business not a lifestyle.”

4. Current Industry Knowledge

Key Findings

- Most respondents rated their industry knowledge as average or above average.
- There were no major differences in self-rated knowledge based on educational attainment levels.
- Self-rated knowledge of information technology and succession planning varied based on age groups.

The survey asked respondents to assess their own skills level in a range of business management and agricultural production areas. This process identified the key areas that the sector feels they either excel in or need training on. It also identifies the links between formal tertiary education and a higher skill level in business and production subjects.

When asked to rate their level of current knowledge in several areas of farming, more than four in ten respondents (44%) consider their financial management knowledge as a four out of five (33%), or expert (11%).

Self-Rated Levels of Knowledge



Q16. Please rate your level of current knowledge in the following areas on a scale of 1 to 5 with 1 being "no knowledge" and 5 being "expert level of knowledge". Base: n=207

Nearly half of respondents (49%) tend to rate their level of current knowledge on succession planning as having no knowledge (17%) or as a two out of five (32%).

4.1. Knowledge by Level of Education

Respondents who have a degree or diploma in agriculture tend to have higher average ratings of current knowledge in agronomy, animal health and nutrition, livestock sales, and succession planning.

Levels of Knowledge by Education (Average Ratings out of 5)

	Some secondary	Completed Year 12/Form 6	Trade Certificate	Agricultural College Degree/Diploma	Diploma at non-agriculture-specific institution	University Degree Undergraduate	University Degree Postgraduate, Masters, PhD
Book keeping/ accounting	2.9	3.2	3.2	3.3	3.5	3.2	3.6
Agronomy	2.7	2.8	3.1	3.5	2.7	3.2	2.4
Animal health	2.8	3.2	2.6	3.2	2.4	2.8	2.6
Animal nutrition	2.7	3.1	2.6	3.3	2.7	2.7	2.4
OH&S	2.7	3.3	3.6	3.2	3.9	3.4	3.2
Grain marketing	2.6	2.9	3.0	2.9	2.5	3.1	2.9
Livestock sales	2.7	2.8	2.8	2.9	2.5	2.6	2.4
Risk management	2.9	3.1	3.3	3.1	3.3	3.5	3.2
Financial management	3.0	3.1	3.5	3.2	3.5	3.6	3.4
Human Resource Management	2.3	3.0	3.0	2.6	2.5	3.2	3.3
Succession planning	2.5	2.7	2.5	2.8	2.2	2.7	2.9
Data management & farm planning tools	2.3	2.9	3.2	3.1	3.4	3.3	3.1

Q16. Please rate your level of current knowledge in the following areas on a scale of 1 to 5 with 1 being “no knowledge” and 5 being “expert level of knowledge”. Base: Respondents who provided a rating, excluding “not applicable” and “prefer not to say” regarding level of education n=182 to 199.

4.2. Knowledge by Age

Respondents between the ages of 51 and 69 rate their levels of current knowledge (on average) consistently higher across all areas. Interestingly, this is the age bracket with the highest number of respondents whose highest educational attainment is some secondary schooling. Experience, networks and informal education all clearly have led to improved knowledge outcomes for this age group. Those who are 70 and over tend to self-report lower levels of knowledge relative to the other groups across most areas.

Levels of Knowledge by Age (Average Ratings out of 5)

	Under 30	31-50	51-69	70 and over
Book keeping/ accounting	2.8	3.3	3.4	3.0
Agronomy	2.8	3.0	3.0	2.9
Animal health	2.9	2.8	2.9	2.8
Animal nutrition	2.8	2.8	2.8	2.7
OH&S	3.2	3.3	3.1	2.1
Grain marketing	2.6	3.0	2.8	2.9
Livestock sales	2.6	2.8	2.8	2.4
Risk management	3.0	3.2	3.2	2.8
Financial management	3.0	3.4	3.8	3.0
Human Resource Management	2.6	2.9	2.7	2.0
Succession planning	2.6	2.5	2.6	2.2
Data management & farm planning tools	3.0	3.1	2.7	1.9

Q16. Please rate your level of current knowledge in the following areas on a scale of 1 to 5 with 1 being “no knowledge” and 5 being “expert level of knowledge”. Base: Respondents who provided a rating, excluding “not applicable” and “prefer not to say” sorted by age group n=178 to 196.

5. Innovation

Key Findings

- High rates of innovation in production methods, technology, management and infrastructure show strong appetite for knowledge and change.
- Technology, grain storage, livestock related knowledge, equipment and infrastructure upgrades and succession planning are priorities for the next five years.

The capacity and experience of our agricultural producers to adapt to new innovations is indicative of their risk appetite, commitment to improving practices and the pace of change that is able to be absorbed into their farm business.

The level of innovation is encouraging, in particular producers' willingness to try new crop varieties, embrace the technology of new machinery and taken on direct marketing.

However all of these innovations, and more notably those which have a low take up rate, all indicate that producers are taking on more responsibility while also stating that they need training in these very areas.

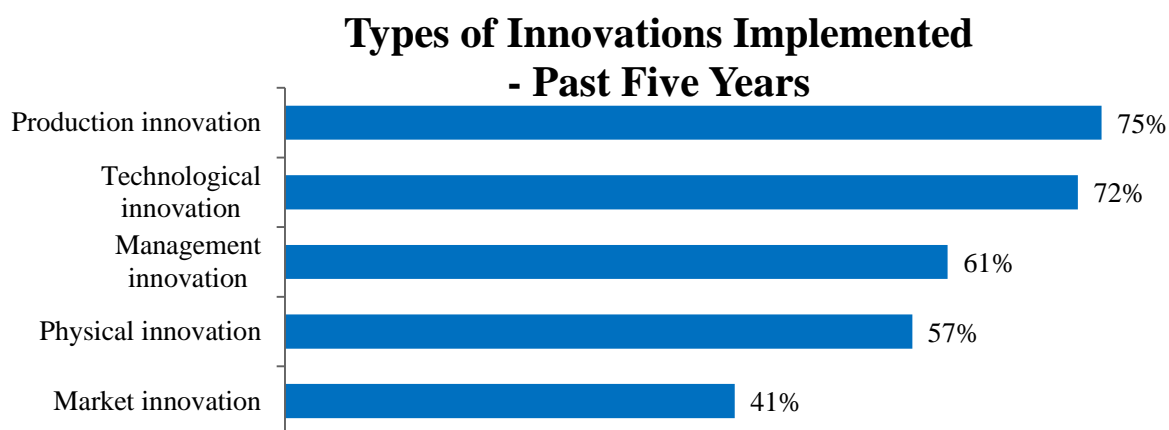
It indicates that there is a degree of urgency around issues such as direct marketing and participation in the global trading system, given the high level of on farm storage, contract management required for direct selling and risk management related to new crops, feedlots and other new business and production models.

5.1. External Influences

While the level of innovation is encouraging in the region, it is also important to take into account external factors that have forced change in practice. The most notable of these is deregulation of grain markets and the shift of responsibility for grain marketing onto the producer. This has, in turn, led to changes in on farm storage, freight and logistics, with many producers expanding their business model to include transport.

5.2. Past Innovations

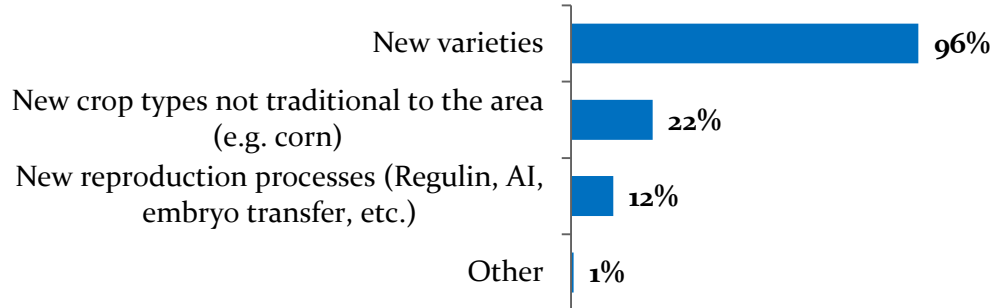
Respondents were asked if they had implemented any innovations within their farming operation in the past five years. Of the 185 respondents who had implemented an innovation, three quarters implemented a production innovation, followed by 72% implementing a technological innovation and 61% implementing a management innovation.



Q22. In the past five years have you implemented any of the following within your farming operation? Base: Respondents who have implemented various innovations, n= 185.

The most common production innovation implemented in the past five years for 96% of respondents was using new varieties of seeds. Two in ten introduced crops that were unconventional for the area.

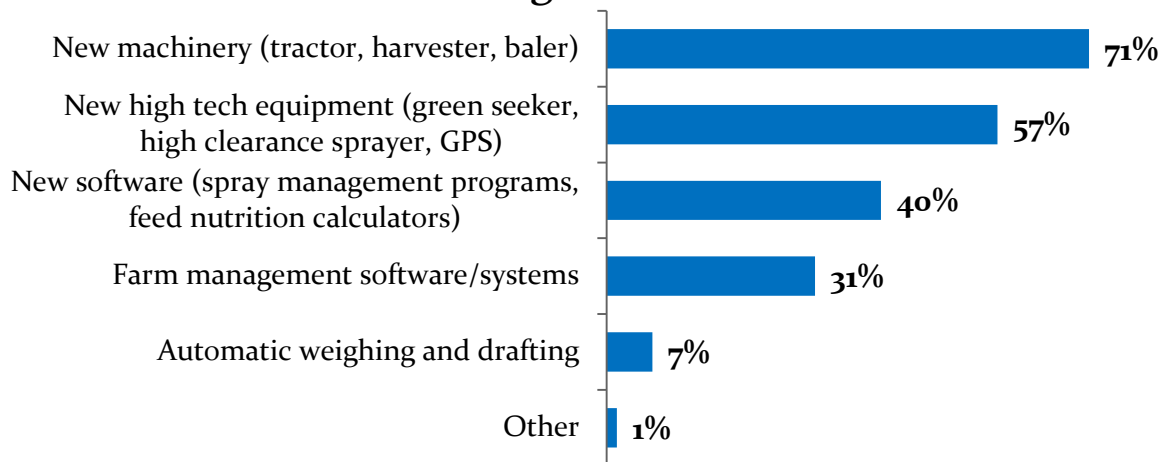
Production Innovation



Q22. In the past five years have you implemented any of the following within your farming operation? Base: Respondents who have implemented various innovations, n= 138.

The most common technological innovation was the acquisition of new machinery for 71% of respondents who implemented various innovations in the past five years. New high tech equipment was acquired and used by 57% of these respondents and new software (40%).

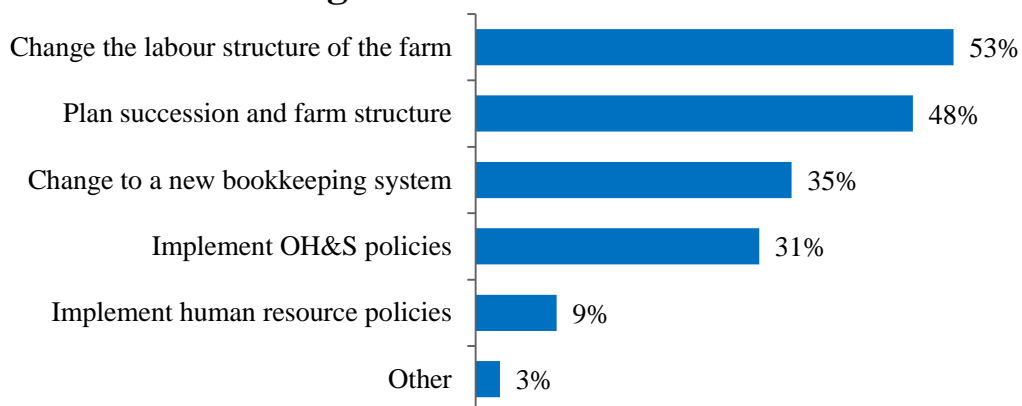
Technological Innovation



Q22. In the past five years have you implemented any of the following within your farming operation? Base: Respondents who have implemented various innovations, n= 134.

More than half of respondents (53%) who implemented various innovations in the past five years changed how they manage the labour structure of their farm. Nearly half (48%) updated or created a succession plan and their farm structure.

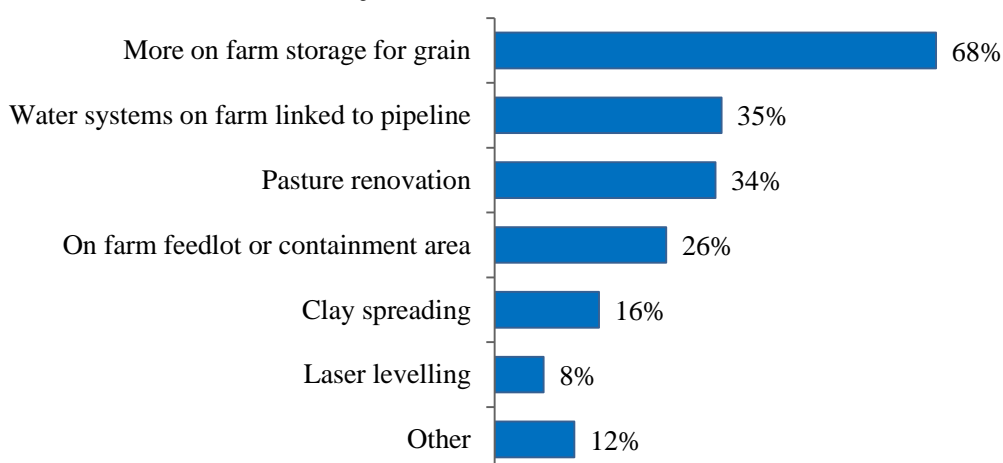
Management Innovation



Q22. In the past five years have you implemented any of the following within your farming operation? Base: Respondents who have implemented various innovations, n= 112.

Of the respondents who implemented various innovations in the past five years, more than two thirds (68%) increased their on-farm grain storage.

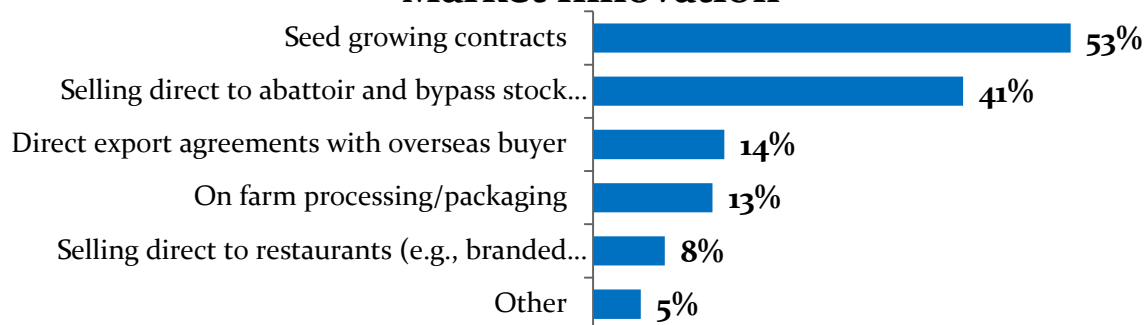
Physical Innovation



Q22. In the past five years have you implemented any of the following within your farming operation? Base: Respondents who have implemented various innovations, n=106.

More than half of the respondents (53%) who implemented an innovation within the past five years improved their marketing with seed growing contracts. Four in ten of these respondents sold directly to abattoir instead of using a stock agent.

Market Innovation

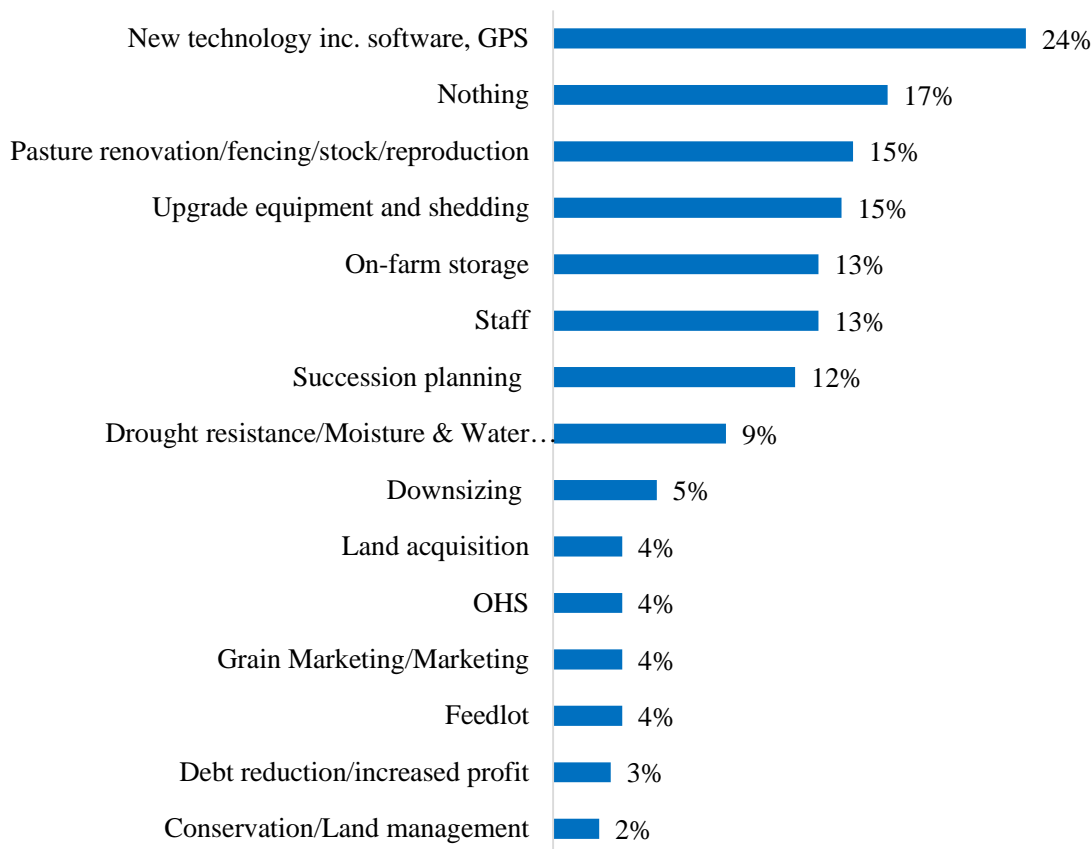


Q22. In the past five years have you implemented any of the following within your farming operation? Base: Respondents who have implemented various innovations, n=76.

5.3. Future Innovations

When asked about the three most important things that respondents intend on implementing in the next three years, there was a strong emphasis on technology, livestock related activities, upgrading equipment and increasing storage. Of interest are the 17% who do not plan to undertake any innovations over the next three years.

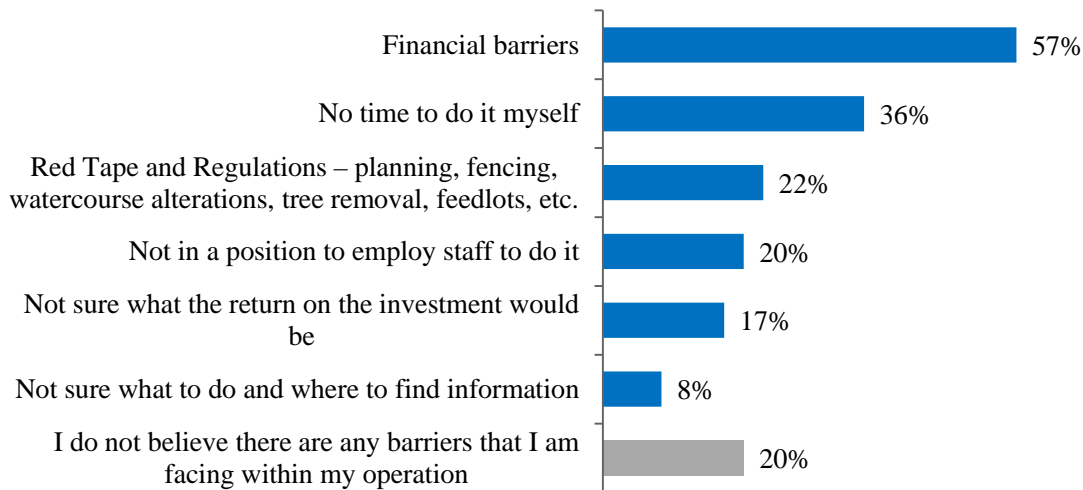
Future On-Farm Priorities



Q23. What are the three most important things you intend to implement on your farm in the next three years? Base: Respondents who left a comment, n=171.

When asked about the perceived barriers to implementing more on-farm innovations, most (57%) stated that finances are the top barrier, followed by not having time to do it themselves (36%).

Barriers to Implementing Additional Innovations



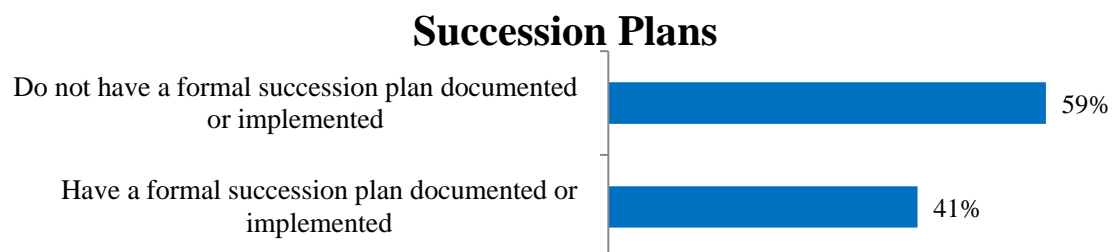
Q24. What barriers exist that stop you from implementing additional innovations on your farm? Base: n=185.

6. Succession Plans

Key Findings

- The number of farm businesses without a succession plan in place is high.
- Uncertainty over succession may be linked to pursuit of off-farm careers in the middle age groups.

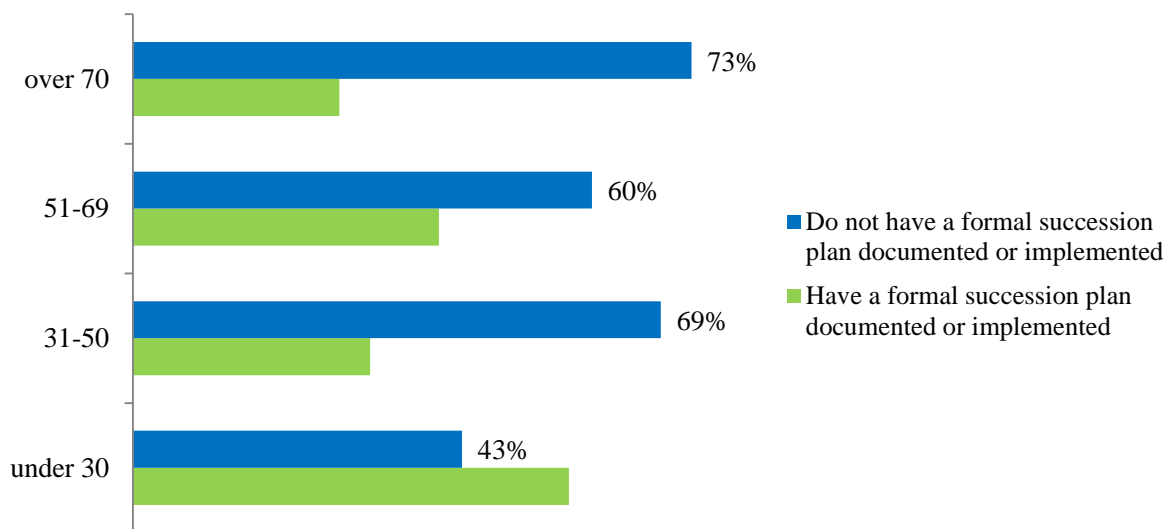
When asked about the presence or absence of a succession plan, roughly four in ten respondents report that they have a formal succession plan documented or already implemented.



Q9. Do you have a formal succession plan documented or implemented for your farm business? Base: n=203.

6.1. Succession Plans by Age Group

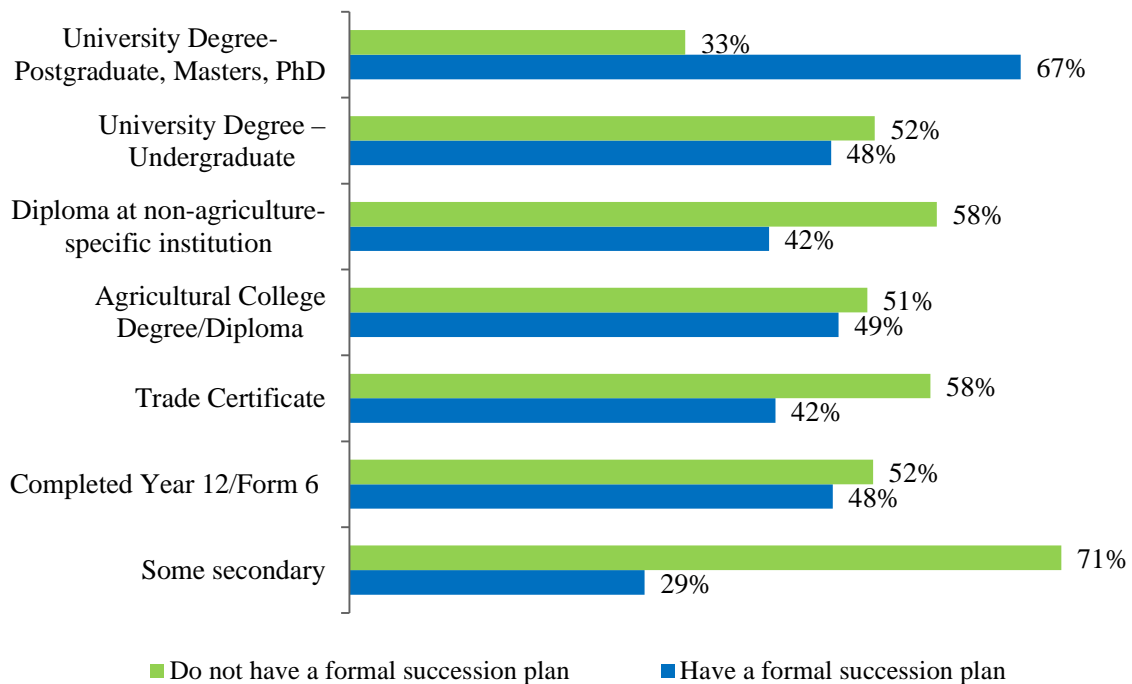
Succession Plan by Age Group



6.2. Succession Plans by Education

Two thirds of those who have a postgraduate degree (67%) have a succession plan in place. Respondents with this educational background are the most likely to have a succession plan. Those with a degree or diploma in agriculture are the next most likely to have a succession plan (49%). The least likely group to have a succession plan (based on highest level of education) is those with some secondary schooling.

Presence of Succession Plan by Education



Q9. Do you have a formal succession plan documented or implemented for your farm business? Base: Respondents who answered Q9, excluding “prefer not to say” responses regarding level of education, n=191.

7. Quality Advice

Key Findings

- Farm businesses show a high reliance on external agronomy advice.
- Livestock related activities have low outsources rates.

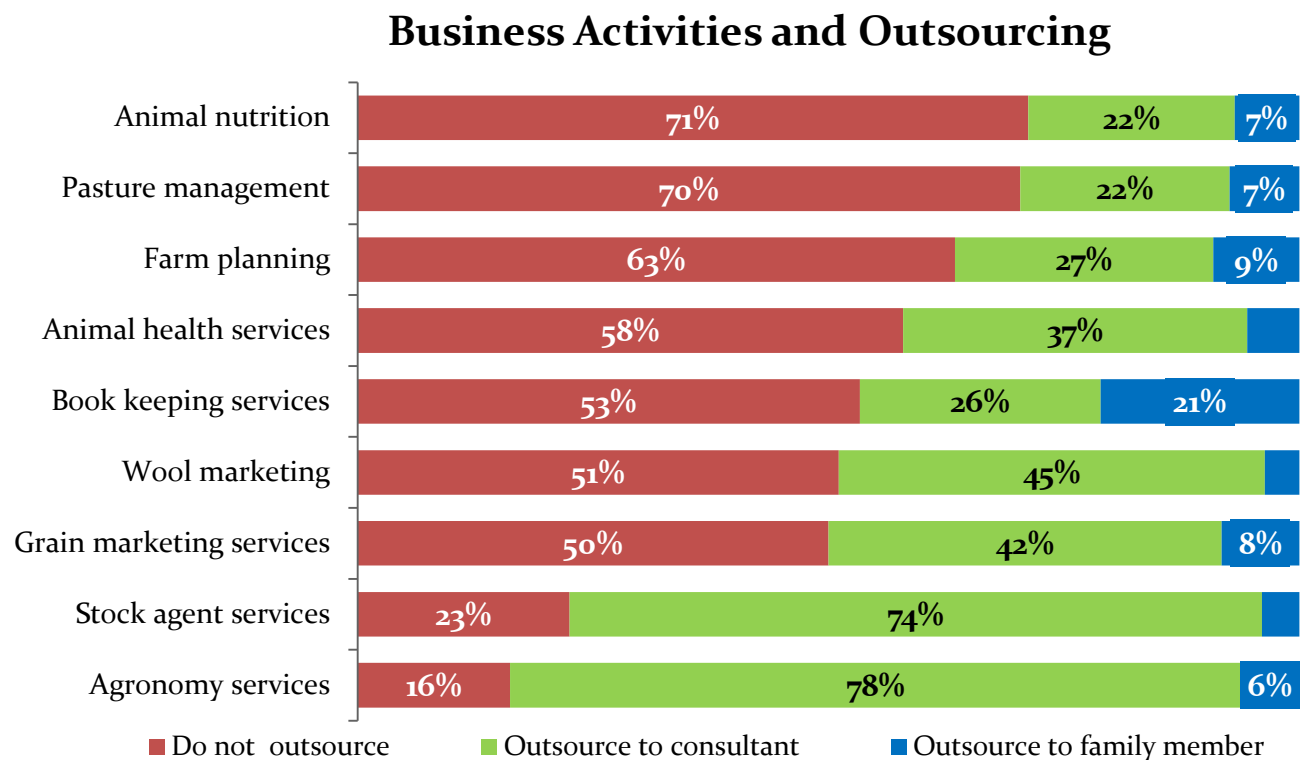
The data relating to the tasks our producers outsource to consultants shows that modern farm business are predominantly a team effort, based on a series of trusting partnership with agronomists, stock agents and marketers.

This indicates that the skills and knowledge of the agribusiness sector is paramount to the success of family farms in the Wimmera Southern Mallee.

When activities are not outsourced, respondents said they tried to keep their skills up to date to perform those tasks well by researching on the internet, attending workshops, asking peers and reading material provided by membership groups.

7.1. Outsourced Activities

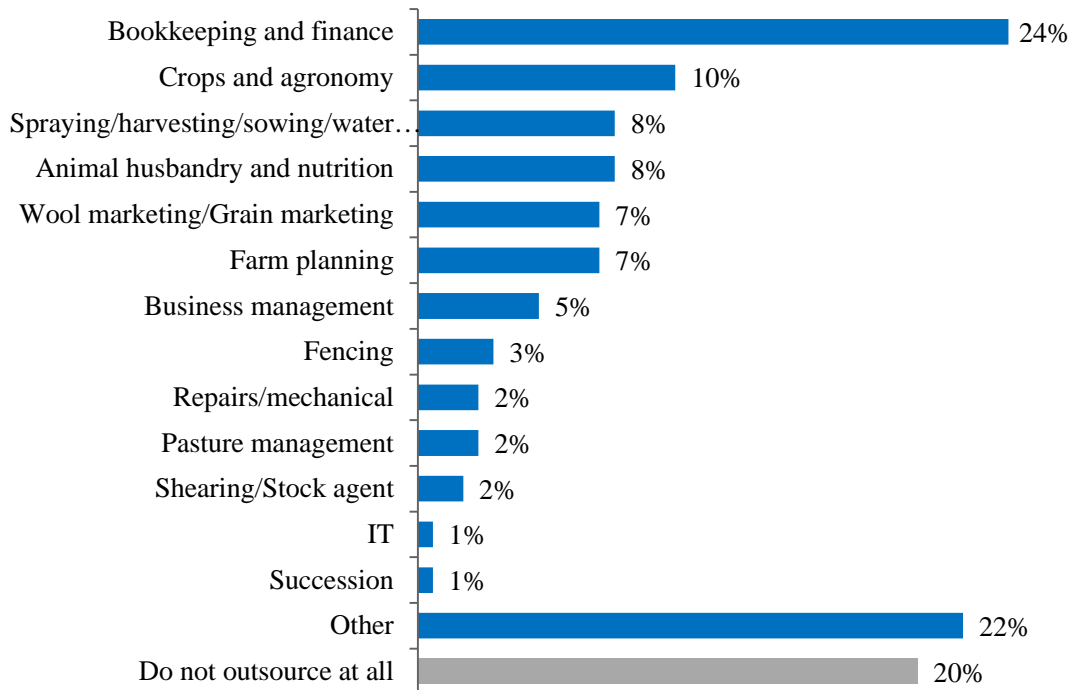
The most commonly outsourced business activities are agronomy services with 78% outsourcing these services to a consultant and 6% outsourcing to a family member. Stock agent services are outsourced the second most with 74% outsourcing to a consultant and 4% to a family member.



Q19. What business activities do you currently outsource to a consultant/company or a family member?
 Base: Respondents who provided a response, excluding "not applicable" responses, n=135 to 182.

When asked an open-ended question about the tasks that they do not outsource, most commonly, one quarter of respondents report that they do not outsource book keeping and financial services. **Two in ten respondents report that they do not outsource any services.**

Tasks Not Outsourced



What tasks do you not outsource? Base: Respondents who left a comment, n=165.

Keeping up to date...

“Attending workshops and consultants advice I try to surround my business with good advisors to get the information I need.”

“Observe what we do and what other farmers do to look for ways of improving.”

“Information days, written materiel, ask neighbours.”

“Constant practice and research.” “Read articles, field days.”

“Been doing it for years, listened to my father.” “YouTube, accountant”

“Ask the experts if I get stuck. Talk to mates.”

“Regular reading, communication with others, field days, and online is a big one now.”

“Training and knowledge gained from my off farm employment.”

“Familiarity and use of online information to find results for any queries.”

“I struggle with self-education and development in these areas using what I can find on internet, expensive accountant and 1 course offered locally”

8. A Roadmap for the Future

8.1. Thought Leadership and Advocacy

Action	Reference	Description	Stakeholders
1. Smarter Farming Thinktank	2.4 2.5 3.3 3.4 3.6 4	Establish a forum (facilitated workshop style rather than committee) of agribusiness, small business, agricultural producers, education providers, government to have ongoing discussion of what knowledge is required in the future. Use teleconference and social media to convene.	WDA FedUni Longerenong
2. Inclusion and Diversity	3.3	Lead change within business, community and government, including ensuring <ul style="list-style-type: none"> • diversity on advisory committees and boards • use of gender neutral language • inclusion of wider agribusiness sector in discussion at leadership level such as WDA, local government 	WDA LGAs Membership Organisations
3. Telecommunications	3.3	Lobby for high speed broadband coverage and reduction of mobile phone blackspots.	WDA LGAs Membership Organisations RTOs
4. Childcare	3.3	Availability of childcare at training and education activities, in particular any delivered as a result of this research, will make participation available to more people.	RTOs

8.2. Positive Promotion of Agriculture

Action	Reference	Description	Stakeholders
5. Celebrate Innovation	5.2	<p>Case studies on Top 10 innovative agricultural producers in the WSM</p> <ul style="list-style-type: none"> • business development • value adding • risk management • Options for improvement other than expansion 	WDA
6. Illustrate Careers in the Sector	3.2	<p>Case studies and seminars/teleconferences with 10 young people working in the sector. Show study and career pathway and how subjects such as sciences, technology, business and many others relate to agriculture.</p> <ul style="list-style-type: none"> • banking • accounting • IT and data analysis • electronics • engineering • marketing • sales • logistics • agronomy • mechanic • manufacturing • management • research • project administration (grower groups) • PR and event management 	WDA DET Schools
7. Profile raising	2.5 3.2 3.5	Use Case Studies, social media, careers teachers and the Smarter Farming Thinktank to increase awareness of the presence of this segment of the sector, especially to encourage young people from farms to continue their education and develop skills off-farm as well as on-farm.	Schools RTOs Membership Organisations
8. Hands-on Experience	2.10 3.5	<p>Work Placements/Mentoring for secondary students from agribusiness</p> <p>Small and large agribusiness to accommodate secondary school students during school holidays. Ensure wide variety of jobs is covered.</p>	Schools Businesses DET
9. Professional Development for Careers Teachers	2.10	Revisit Careers Teachers professional development and investigate ways to best coordinate limited resources across the region.	DET Schools

8.3. Agricultural Training Network

Action	Reference	Description	Stakeholders
10. Establish an Agricultural Training Network for the region	2.4 2.6 5.3	Build communication between the numerous Registered Training Organisations delivering training in the region. Purpose would be to explore potential collaboration and work to offer the training needed by the sector. Include Building Resilience in Farming and membership-based organisations as potential conduits for training and to access individual producers/members.	WDA/BRIF RTOs Member Organisations
11. Deliver targeted training	3.6 4 5.3 7.1	Targeted training on areas highlighted in the survey <ul style="list-style-type: none"> • financial management • grain and livestock marketing • soil health • succession planning • data analysis • farm planning • animal health and nutrition • human resources • risk management 	RTOs
12. Wimmera expertise at degree level	2.9	Collaborate with education providers to assess the viability of offering an Agriculture Degree, and the potential for this to be a revenue stream (international students) and reputation enhancer.	RTOs
13. Accreditation for producers' skill sets	3.2 3.6	Short course and industry accreditation of producers' skills to enable short-term off-farm employment when required. This could be based on the successful Rural Skills Connect program, funded by Regional Development Victoria during the last drought.	RDV RTOs
14. Innovation in training delivery	3.1 3.6	Explore the potential for training to be delivered in appropriate settings, and the financial viability of education providers delivering fee for service training. Schools as learning centres for the agriculture sector Availability of teleconferencing seminars, workshops and small classes available in all secondary schools, at low or no cost. DET available to coordinate.	Ag Training Network RTOs DEECD Schools Member Organisations

		<p>Small group local training</p> <p>Based on survey responses, deliver small group training in local communities, with or without grower groups, on specific issues. Could be a bookkeeper answering specific questions, a unit of study delivered by an RTO, via teleconference, international experts etc.</p>	
<p>15. Prepare producers to implement their ideas for the future</p>	5.3	<p>RTOs and membership-based organisations to continue and expand issue-specific training and education</p> <ul style="list-style-type: none"> • skills needed for successful expansion such as contracts, negotiation, risk management • uptake of technology from basic IT to analysing big data • Use of data in agriculture • Climate change and carbon policy 	<p>Ag Training Network</p> <p>RTOs</p> <p>WDA</p> <p>Member Organisations</p> <p>Dept EcoDev</p>
<p>16. Succession Planning Professionals</p>	6	<p>Professional Development coordinated by BRIF for those involved in succession planning, to grow a culture of excellence and leading best practice in this field.</p>	<p>WDA</p>

Appendix 1 – Survey

WDA – Mapping Wimmera’s Agricultural Knowledge

Wimmera Development Association (WDA) will be conducting research over the next month to gain an insight into the knowledge and skills of agricultural producers and agribusiness professionals. With so much change taking place in the industry, we need to make sure local education opportunities match producer’s needs.

We understand in this day and age there are many ways to be involved in the agriculture industry. Whether you are a grain farmer who also does contract spraying or an agronomist who is involved in the family farm, we really value your feedback.

Please answer questions individually, not on behalf of others at your workplace -however we would love for you to pass on the survey link to others when you’re finished.

This survey is carried out in compliance with the Privacy Act, the information and opinions you provide will be used only for research purposes. Your responses will be treated in the strictest confidence. The responses of everyone who participates in the survey will be combined and **no** individual information will be made available.

Tell Us About Yourself

1. Age Range?

- Under 30
- 31-50
- 51-69
- 70 and over

2. Gender?

- Male
- Female

3. Postcode? _____

4. Occupation:

- Owner/Operator on family farm (*go to 6*)
- Combination of employment in agribusiness and owner/operator on family farm
- Employed by corporate business to operate farm (*go to 6*)
- Employed in agribusiness with no farm business connection-*please state agribusiness sector in comment box below*(*go to 9*)
- None of the above (*end survey*)

Agribusiness Sector? _____

5. What was your motivation to take up off-farm work?

- Economic- short term
- Economic-long term for farm business
- Career Development
- Leisure/Personal Interest

6. What does your farm produce? (*select all that apply*)

- Sheep for wool
- Sheep for meat
- Pigs
- Horticulture
- Beef
- Grains
- Dairy
- Other (please specify) _____
- None of the above (*end survey*)

7. What is the size of your total farming operation in hectares?
 _____Ha Prefer not to say
8. Do you employ staff in your farm business? If so would you enrol them in accredited training to improve their skills?
- I do not employ staff
- Yes I employ staff, **no** I would not enrol them in training
- Yes I employ staff, **yes** I would enrol them in training
9. Do you have a formal succession plan documented or implemented for your farm business?
- Yes (go to 10)
- No (go to 11)
10. Is training or skill development part of that succession plan?
- Yes
- No

Your Knowledge and Information Sources

11. The following list includes a range of information sources and educational tools.

Please select all of the tools that you have used to advance your knowledge of the industry and whether or not you have paid for them.

	Used or attended?	Paid to use or attend?
Online		
Websites		
Webinars		
Facebook/Twitter		
YouTube videos		
Apps – agronomy, weed identification, diagnosis tools		
Media and Publications		
Rural Newspapers and Radio		
Industry Magazines and Journals		
Newsletters from Membership Organisations		
Accredited Education		
Online Courses		
College or University course		
Regulated training (chemical handling, OH&S etc)		
Events		
Extension days		
Crop Walks		
Conferences		
Machinery demos		
Overseas farm tours		
Direct Information		
Visits by agronomist, veterinarian etc		
Meetings with your bank, accountant, investment advisor		
Visits by machinery, chemical, other sales reps		
Asking other farmers		
Other		
Any other resources:		
None of the above		

12. What is the highest level of education you have attained?

- Some secondary (go to 14)
- Completed Year 12/Form 6 (go to 14)

- Trade Certificate (go to 13)
- Agricultural College Degree/Diploma (go to 13)
- Diploma at non-agriculture-specific institution (go to 13)
- University Degree – Undergraduate (go to 13)
- University Degree- Postgraduate, Masters, PhD (go to 13)
- Prefer not to answer (go to 14)

13. Which organisation/institution did you take this course through, and what was the course?

Institution: _____

Course name(s): _____

Delivery Method (online/on campus etc.): _____

14. If you belong to a membership group, which do you belong to?

Please select all that apply.

- Birchip Cropping Group (BCG)
- Southern Farming Systems (SFS)
- Vic No-Till Farming Association (VNTFA)
- Victorian Farming Federation (VFF)
- Wimmera Farming Network (WFN)
- Other (please specify) _____

15. In which of the following situations do you feel you learn the most and get best value (of your time and/or money)? (Please select your 3 preferences from the list below).

- Face to face
- Small group sessions (less than 10 people)
- Large group sessions (more than 10 people)
- Watching a video
- Crop walks, trial sites, etc. – action orientated activities
- Webinar/podcast
- Written material
- Online material
- Field days
- Formal college or university course
- Other (please specify) _____

16. Please rate your level of current knowledge in the following areas on a scale of 1 to 5 with 1 being “no knowledge” and 5 being “expert level of knowledge”.

For example: an agronomist with a degree and specialist expertise would be a 5 in the agronomy area and a farmer who has never performed any book keeping /accounting tasks would rate as a 1 in that area.

	1	2	3	4	5	Not applicable
Book keeping/ accounting						
Agronomy						
Animal health						
Animal nutrition						
OH&S						
Grain marketing						
Livestock sales						
Risk management						

Financial management						
Human Resource Management						
Succession planning						
Data management and farm planning tools						

17. Please list the top 3 areas where you plan to improve your skills and knowledge over the next 5 years.

18. What barriers do you face when considering enrolling in accredited training (certificate, diploma, degree)?

Please select all that apply

- Travelling outside of the region to attend class
- Spending more than 2 days away from the farm
- Financial costs
- Not sure what to do and where to find information
- Not sure what the return on investment would be
- I do not believe there are any barriers that I am facing
- Other (please specify) _____

19. What business activities do you currently outsource to a consultant/company or a family member? *Please select all that apply.*

	Do not outsource	Outsource to consultant	Outsource to family member	Not applicable
Agronomy services				
Farm planning (land sales, drainage, fencing)				
Animal health services				
Book keeping services				
Grain marketing services				
Pasture management				
Stock agent services				
Animal nutrition				
Wool marketing				
Other (please specify):				

20. What tasks do you not outsource?

21. How do you maintain the skills and knowledge to perform these tasks effectively? _____

22. In the past five years have you implemented any of the following within your farming operation?

Production innovation

- New varieties
- New crop types not traditional to the area (e.g. corn)
- New reproduction processes (Regulin, AI, embryo transfer, etc.)
- Other (please specify) _____
- None of the above

Market innovation

- Selling direct to restaurants (e.g., branded pork, saltbush lamb)
- Selling direct to abattoir and avoid stock agent
- Seed growing contracts
- On farm processing/packaging
- Direct export agreements with overseas buyers
- Other (please specify) _____
- None of the above

Technological innovation

- New high tech equipment (green seeker, high clearance sprayer, GPS)
- New machinery (tractor, harvester, baler)
- New software (spray management programs, feed nutrition calculators)
- Automatic weighing and drafting
- Farm management software/systems
- Other (please specify) _____
- None of the above

Management innovation

- Change the labour structure of the farm
- Change to a new bookkeeping system
- Implement OH&S policies
- Implement human resource policies
- Plan succession and farm structure
- Other (please specify) _____
- None of the above

Physical innovation

- Laser levelling
- Clay spreading
- Water systems on farm linked to pipeline
- Pasture renovation
- More on farm storage for grain
- On farm feedlot or containment area
- Other (please specify) _____
- None of the above

23. What are the three most important things you intend to implement on your farm in the next three years?

24. What barriers exist that stop you from implementing additional innovations on your farm?

Please select all that apply.

- Financial barriers
- No time to do it myself
- Not in a position to employ staff to do it
- Not sure what to do and where to find information
- Not sure what the return on the investment would be
- Red Tape and Regulations – fencing, watercourse alterations, tree removal, feedlots, etc.

I do not believe there are any barriers that I am facing within my operation

25. What additional training and skills do you believe the younger generation of farmers needs to develop to run a successful and profitable farm for the long term?

If you would like to receive a copy of the report from this project please fill out details below:

Name (optional): _____

Email: _____

- Tick if you would like to join the Building resilience in Agriculture newsletter and events calendar mailing list.
- Tick if you would like to receive more information about education and training in the Wimmera.
- Tick to receive the results of this survey

Appendix 2 - Case Studies

Birchip Cropping Group Expo

BCG is set to launch a new-look Expo for farmers wanting to future-proof their businesses and improve overall profitability.

The 'Future Farmers Expo', will bring to the region leading farm business, technology, stewardship, supply chain, risk management, succession planning and climate experts, with forward-thinking agribusinesses also invited along to showcase their latest products and services.

The changes to the former BCG Grains Research Expo have been made in response to grower and agribusiness feedback.

BCG events manager Ciara Cullen said while the long-standing BCG Expo has been widely acclaimed, in recent years it has become evident that there is an increased interest in the event's farm business, succession planning and technology sessions - the things that happen outside of the paddock.

While agronomic research remains a key focus of BCG, the organisation is acting on feedback that objective advice on things like crop insurance, grain marketing, farm software or even when to invest in more land or newer machinery, is not always easy to source.

With BCG's theme for 2015 'Building a better bottom line' and a collective focus on improving the profitability of our region's farm businesses, Ms Cullen said the idea to re-vamp of the Expo seemed obvious.

Global Institute for Food Security

The Global Institute for Food Security (GIFS) is a unique public-private partnership that enables innovative, multi-disciplinary research, training, and technology development to improve sustainable crop production, enhance human and animal nutrition, and address the growing global demand for safe, reliable food.

Formed in 2012 as a partnership between PotashCorp and the government of Saskatchewan, the GIFS will received to CDN\$35 million over seven years from private investment and CDN\$15 million from government.

Focusing on crops grown in Saskatchewan and in many other parts of the world such as wheat, lentils, peas and canola – essential sources of food for a significant portion of the world's population – the institute will develop research and innovation solutions that can be applied to relevant regions around the world. To do this, GIFS's success draws on the scientific and technical skills within in Saskatchewan's 'bio-cluster' including the academic and allied centres of the University of Saskatchewan, the advanced analytical tools of the Canadian Light Source and government research units such as the Saskatchewan Research Council, National Research Council and Agriculture and Agri-Food Canada. GIFS also draws on the private-sector business and industry in Saskatchewan whose enterprises foster and depend on agriculture and food.

The Mansfield Model

Julie Aldous, a finalist in the RIRDC Rural Woman of the Year Award 2014, has developed a new model of meaningful, applied learning opportunities for students through local land management placements; the development of partnerships between schools and their rural communities; as well as the promotion and increased uptake of the myriad of career pathways in primary Industries within schools and further education.

In 2009, Julie developed the applied learning course for Year 9 and 10 students entitled 'Agribusiness – The Mansfield Model' to address the need for skilled young people to choose careers in primary industries. The course utilises TAFE Certificates, school-based apprenticeships and university courses to scaffold career opportunities, with applied learning taking place within the content of local farms. The course has been very successful and has seen an increase in the participation of young women, passionate about the agricultural industry.

The model aims to promote sophisticated food and fibre education in schools across Australia and heighten the awareness and appreciation of food and fibre production across both rural and metropolitan communities. It aims to connect schools with their rural communities through the formation of sustainable partnerships so that skills and leaning in food and fibre are fostered.³

³ <http://www.rirdc.gov.au/rural-women%27s-award>

Appendix 3

Selected Agricultural Education Providers and Qualifications

Name of Institution	Campuses	Online	Courses
Marcus Oldham College	Waurm Ponds	No	Bachelor of Business (Agriculture)
Marcus Oldham College	Waurm Ponds	No	Degree of Business (Agriculture)
Marcus Oldham College	Waurm Ponds	No	Associate Degree (Agriculture)
Marcus Oldham College	Waurm Ponds	No	Diploma of Agribusiness
Marcus Oldham College	Waurm Ponds	No	Associate Degree of Agribusiness
Marcus Oldham College	Waurm Ponds	Combo	Bachelor of Business (Agribusiness)
Marcus Oldham College	Waurm Ponds	Combo	Graduate Certificate in Agribusiness
Marcus Oldham College	Waurm Ponds	Combo	Graduate Diploma of Agribusiness
Marcus Oldham College	Waurm Ponds	Combo	Masters of Agribusiness
Longerenong College	Longerenong	No	Advanced Diploma (Agriculture)
Longerenong College	Longerenong	No	Diploma of Crop Agronomy
Longerenong College	Longerenong	Combo	Diploma of Agribusiness Management
Longerenong College	Longerenong	No	Certificate IV in Agriculture
Longerenong College	Longerenong	Combo	Certificate IV (Wool Classing)
Longerenong College	Longerenong	No	Farm Apprenticeships
Longerenong College	Longerenong	No	School Based New Apprenticeships
Longerenong College	Longerenong	No	Certificate II in Agriculture (VETis)
Longerenong College	Longerenong	No	Certificate II in Wool Handling
Longerenong College	Longerenong	No	Certificate III in Agriculture
Longerenong College	Longerenong	No	Certificate III in Wool Clip Preparation
Melbourne University	Parkville	Combo	Masters of Agribusiness
Melbourne University	Parkville & Dookie	No	Bachelor of Agriculture
Melbourne University	Parkville & Dookie	No	Undergraduate Bachelor of Agriculture (Animal Health)
Melbourne University	Parkville & Dookie	No	Undergraduate Bachelor of Agriculture (Production)
Melbourne University	Parkville & Dookie	No	Master of Agricultural Sciences
Melbourne University	Parkville & Dookie	No	Graduate Certificate In Agricultural Sciences
Melbourne University	Parkville & Dookie	No	Graduate Diploma in Agricultural Sciences
Federation University	Ballarat (SMB)	No	Certificate IV (Wool Classing)
Federation University	Ballarat (SMB)	No	Diploma of Agriculture
Federation University	Ballarat (SMB)	No	Farm Chemical Use Level III
Federation University	Ballarat (SMB)	No	Operate Tractors
Federation University	Ballarat (SMB)	No	Conduct Front End Loader Operations
Federation University	Ballarat (SMB)	No	Operate Quad Bikes
Federation University	Ballarat (SMB)	No	Broadacre Harvesting
Federation University	Ballarat (SMB)	No	Certificate III in Agriculture
Federation University	Ballarat (SMB)	No	Certificate III in Heavy Commercial Vehicle Mechanical Technology
Federation University	Ballarat (SMB)	No	Certificate III in Poultry Production
Regional Skills Training	Ashburton (SA)	Combo	Certificate II in Agriculture
Regional Skills Training	Ashburton (SA)	Combo	Certificate II In Rural Operations
Regional Skills Training	Ashburton (SA)	Combo	Certificate III in Agriculture

Regional Skills Training	Ashburton (SA)	Combo	Certificate III in Rural Operations
Regional Skills Training	Ashburton (SA)	Combo	Certificate IV in Agriculture
Regional Skills Training	Ashburton (SA)	Combo	Diploma in Agriculture
Regional Skills Training	Ashburton (SA)	Combo	Diploma of Agribusiness Management
Regional Skills Training	Ashburton (SA)	Combo	Advanced Diploma of Agribusiness Management
Regional Skills Training	Ashburton (SA)	Combo	Advanced Diploma of Agriculture
La Trobe University	Melbourne & Albury	No	Bachelor of Agricultural Sciences
La Trobe University	Melbourne	No	Bachelor of Agriculture and Technology
La Trobe University	Melbourne, Bendigo, Mildura & Shepparton	No	Bachelor of Accounting (Business)
La Trobe University	Melbourne	No	Bachelor of Accounting and Finance
Kangan TAFE	Melbourne Docklands	No	Certificate in Automotive Diesel Technology
Kangan TAFE	Melbourne Docklands	No	Certificate III in Agricultural Mechanical Technology
University of Adelaide	Adelaide	No	Bachelor of Agricultural Sciences
Sunraysia TAFE	Mildura	No	Certificate III in Agriculture
Illawarra TAFE	Goulburn	No	Certificate II in Agriculture
Illawarra TAFE	Goulburn	No	Certificate III in Agriculture
Illawarra TAFE	Goulburn	No	Certificate IV in Agriculture
Charles Sturt University	Wagga Wagga, Wangaratta	No	Bachelor of Agriculture
Charles Sturt University	Wagga Wagga, Port Macquarie, Dubbo, Wangaratta	No	Bachelor of Agriculture Business Management
Open Training & Education Network	Online	Yes	Certificate III in Agriculture
Open Training & Education Network	Online	Yes	Diploma in Agriculture
TAFE SA	Mt Gambier, Naracoorte, Port Lincoln	Combo	Certificate II in Agriculture
TAFE SA	Mt Gambier, Naracoorte	Combo	Certificate II In Rural Operations
TAFE SA	Gillies Plains	Combo	Certificate II in Shearing
TAFE SA	Gillies Plains	Combo	Certificate II in Wool Handling
TAFE SA	Mt Gambier	Combo	Certificate II in Dairy Induction
TAFE SA	Gillies Plains	Combo	Certificate III in Advanced Wool Handling
TAFE SA	Mt Gambier, Naracoorte, Port Lincoln	Combo	Certificate III in Agriculture
TAFE SA	Mt Gambier	Combo	Certificate III in Agriculture (Dairy Production)
TAFE SA	Online	Yes	Certificate III in Pest Management
TAFE SA	Gillies Plains	No	Certificate III in Pork Production
TAFE SA	Gillies Plains	Combo	Certificate III in Shearing
TAFE SA	Gillies Plains	Combo	Certificate III in Wool Clip Preparation
TAFE SA	Mt Gambier, Naracoorte, Port Lincoln	Combo	Certificate IV in Agriculture
TAFE SA	Gillies Plains	Combo	Certificate IV in Wool Classing
TAFE SA	Mt Gambier, Port	Combo	Diploma of Agriculture

	Lincoln		
TAFE SA	Online	Yes	Diploma of Viticulture
GO TAFE	Wangaratta	No	Advanced Diploma of Agriculture
GO TAFE	Wangaratta	No	Diploma of Agriculture
GO TAFE	Wangaratta	No	Certificate IV in Agriculture
GO TAFE	Wangaratta	No	Certificate III in Agriculture
GO TAFE	Wangaratta	No	Certificate II in Agriculture
GO TAFE	Wangaratta	No	Certificate II in Agriculture (Dairy Production)
GO TAFE	Wangaratta	No	Certificate III in Pork Production
South West TAFE	Warrnambool	No	Certificate II in Agriculture (Farm Job Skills)
South West TAFE	Warrnambool	No	Certificate II in Agriculture
South West TAFE	Warrnambool, Hamilton, Portland	No	Certificate III in Agriculture (Dairy Production)
South West TAFE	Warrnambool, Hamilton, Portland	No	Certificate III in Agriculture
South West TAFE	Warrnambool, Hamilton, Portland	No	Certificate IV in Agriculture
South West TAFE	Hamilton, Online	Combo	Certificate IV in Wool Classing
South West TAFE	Online	Yes	Diploma of Agriculture
South West TAFE	Online	Yes	Diploma of Agronomy
Imperial College of Trades	Adelaide	No	Diploma of Agribusiness Management
Imperial College of Trades	Adelaide	No	Advanced Diploma of Agribusiness Management
ACS Distance Education	Online, Correspondence	Yes	Advanced Certificate in Farming - Self Designed
ACS Distance Education	Online, Correspondence	Yes	Advanced Diploma in Agriculture - Alternative Agriculture
ACS Distance Education	Online, Correspondence	Yes	Advanced Diploma in Agriculture - Animal Husbandry
ACS Distance Education	Online, Correspondence	Yes	Agricultural Marketing
ACS Distance Education	Online, Correspondence	Yes	Agronomy
ACS Distance Education	Online, Correspondence	Yes	Animal Anatomy and Physiology
ACS Distance Education	Online, Correspondence	Yes	Animal Behaviour
ACS Distance Education	Online, Correspondence	Yes	Animal Breeding
ACS Distance Education	Online, Correspondence	Yes	Animal Diseases
ACS Distance Education	Online, Correspondence	Yes	Animal Husbandry III
ACS Distance Education	Online, Correspondence	Yes	Animal Husbandry II
ACS Distance Education	Online, Correspondence	Yes	Aquaculture
ACS Distance Education	Online, Correspondence	Yes	Beef Cattle Production and Management
ACS Distance Education	Online, Correspondence	Yes	Profitable Calf Raising
ACS Distance Education	Online,	Yes	Certificate in Agriculture

	Correspondence		
ACS Distance Education	Online, Correspondence	Yes	Certificate in Alternative Farming
ACS Distance Education	Online, Correspondence	Yes	Manage Dairy Cattle
ACS Distance Education	Online, Correspondence	Yes	Diploma in Agriculture
ACS Distance Education	Online, Correspondence	Yes	Diploma in Animal Management
ACS Distance Education	Online, Correspondence	Yes	Engineering I - Machinery and Equipment
ACS Distance Education	Online, Correspondence	Yes	Engineering II - Engineering Applications
ACS Distance Education	Online, Correspondence	Yes	Goat Production
ACS Distance Education	Online, Correspondence	Yes	Irrigation - Agricultural Irrigation
ACS Distance Education	Online, Correspondence	Yes	Irrigation Management
ACS Distance Education	Online, Correspondence	Yes	Organic Farming
ACS Distance Education	Online, Correspondence	Yes	Pasture Management
ACS Distance Education	Online, Correspondence	Yes	Pig Production
ACS Distance Education	Online, Correspondence	Yes	Poultry
ACS Distance Education	Online, Correspondence	Yes	Proficiency Award in Agriculture
ACS Distance Education	Online, Correspondence	Yes	Sheep Husbandry and Production
ACS Distance Education	Online, Correspondence	Yes	Soil Management - Agriculture
ACS Distance Education	Online, Correspondence	Yes	Sustainable Agriculture
ACS Distance Education	Online, Correspondence	Yes	Viticulture
Rural Skills Australia	Online	Yes	Certificate II in Agriculture
Rural Skills Australia	Online	Yes	Certificate III in Agriculture
Rural Skills Australia	Online	Yes	Certificate IV in Agriculture
Rural Skills Australia	Online	Yes	Diploma of Agriculture
Rural Skills Australia	Online	Yes	Advanced Diploma of Agriculture
Rural Skills Australia	Online	Yes	Certificate II in Poultry Production Operations
Rural Skills Australia	Online	Yes	Certificate III in Agriculture (Dairy Production)
Rural Skills Australia	Online	Yes	Certificate III in Pork Production
Rural Skills Australia	Online	Yes	Certificate III in Poultry Production Operations
Rural Skills Australia	Online	Yes	Certificate IV in Poultry Production Operations
Rural Skills Australia	Online	Yes	Certificate IV in Organic Farming
Rural Skills Australia	Online	Yes	Diploma of Pork Production
Rural Skills Australia	Online	Yes	Diploma of Organic Farming
Rural Biz Online	Online	Yes	Advanced Diploma of Agribusiness Management

Rural Biz Online	Online	Yes	Advanced Diploma of Agriculture
Rural Biz Online	Online	Yes	Diploma of Agriculture
Rural Biz Online	Online	Yes	Diploma of Agribusiness Management
Rural Biz Online	Online	Yes	Diploma of Organic Farming
Rural Biz Online	Online	Yes	Certificate IV in Agribusiness
Rural Biz Online	Online	Yes	Certificate IV in Agriculture
Rural Biz Online	Online	Yes	Certificate IV in Organic Farming
Rural Training Queensland	Online	Yes	Diploma of Agribusiness Management
Open Colleges	Online	Yes	Fundamentals in Small Engine Repair Certificate
Open Colleges	Online	Yes	Fundamentals in Auto Mechanics Certificate
Online Courses Australia	Online	Yes	Farm Management
Online Courses Australia	Online	Yes	Farm Engineering Applications
Online Courses Australia	Online	Yes	Farm Engineering Machinery Management
Online Courses Australia	Online	Yes	Organic Farming
Online Courses Australia	Online	Yes	Sustainable Agriculture
Online Courses Australia	Online	Yes	Viticulture
Flowerdale Alpacas	Dandenong Ranges	No	Assisting New Breeders of Alpacas