



# Cotton Industry Succession and Professional Development - A Cotton Agri-business Sector Industry Engagement Strategy

## Final Report - To Cotton Research and Development Corporation Project No. GSA 1301



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## Executive Summary

Based on the data that emerged from a project undertaken earlier in 2012 and reported on in March 2012, the objectives of this project were to investigate the likely level of support for a Strategic Program that would address key succession and professional development issues in the cotton agribusiness sector, in terms of:

- What would be the key issues for attention?
- What would be the key factors affecting how to address these key issues?
- What level of support would the sector be prepared to supply – and how?
- How would such a program best be run?
- To what extent would the sector be prepared to assist / buy in?

### **Project numbers and roles in the cotton agribusiness sector to 2016**

Drawing on the findings of the original review reported in March 2012 and drawing on the results of this project, the following projected numbers and roles of cotton agribusiness personnel required by 2016 is updated. This recognises that making predictions about likely staff numbers in the cotton industry has a high degree of uncertainty and that there is no allowance made for key non-operational roles and for retiring or departing industry personnel:

Personnel / Role	Nos. from 2011/12 review	Additional Nos. with multiplier (nos. were doubled)	Projected numbers required in 2016
Agronomists	65	22	87
Researchers	34	10	44
Professional water engineers	2		2
Technicians	2	6	8
Science Graduates	4		4
Sales (agronomist)	4	22	26
Plant Pathology	2		2
Plant Breeder	2		2
Other	4		4
<b>New total – end 2012</b>			<b>179</b>

#### *Conclusion:*

Close to 180 professional university trained cotton industry agri-business personnel, of agronomists, researchers, engineers, technicians, science graduates, sales, pathologists and breeders are likely to be required in the industry by 2016. They do not make allowance for a range of other occupations, nor of retiring or departing personnel. The type of scan proposed in the March 2012 report remains valuable to create a more accurate forecast of numbers and types of personnel needed in particular time scales and locations.

#### **Recommendation 1**

That a more comprehensive scan of professional cotton agri-business personnel needs is undertaken as part of the proposed cotton agribusiness succession and professional development program – see March 2012 report for detail.

***The focus of an industry based strategic program***

The top priorities, regarding what agribusiness personnel consider is most important for their own business needs, and for the wider industry program, reveal some common findings. Due to likely program management and funding constraints, the top 5x priorities are highlighted as being the most important issues on which to commence such a program:

<b><i>Priorities for their own business / organisation</i></b>	<b><i>Priorities for an industry wide program</i></b>
<ol style="list-style-type: none"> <li>1. Creating a <b>supply chain</b> of young people into the industry</li> <li>2. Establishing a <b>mentoring</b> program for key personnel</li> <li>3. Changing young people’s <b>perceptions</b> of the industry</li> <li>4. An outreach program to <b>demonstrate the value and benefits</b> of working in the cotton industry</li> <li>5. Learning from <b>known programs</b> including the PICSE model and the Qld Resources Council personnel program.</li> </ol>	<ol style="list-style-type: none"> <li>1. Attract more of the <b>right people</b> (young people)</li> <li>2. <b>Mentoring</b> for young persons</li> <li>3. Ensuring universities develop <b>more relevant courses</b></li> <li>4. Increasing cotton industry <b>skill levels</b> *</li> <li>5. How to position the cotton industry as an <b>employer of choice.</b></li> </ol> <p>* including professional development of current personnel</p>

A range of additional relevant issues were also canvassed in finalising a series of priorities on which such a program should be based.

***Conclusion:***

The cotton agribusiness sector appears to have a clearly articulated appetite to engage in a Cotton Industry Wide Succession and Professional Development Program.

The highest priority activities for such a program are to:

1. Use the networks and relationships formed during creation of a cotton agribusiness professional development and succession program to undertake a more accurate scan of future cotton agribusiness job and personnel needs
2. Briefly review the Key Success Factors or KSFs of existing, demonstrably successful, personnel acquisition and professional development programs – both within and external to the cotton agribusiness sector – and base future work on those KSFs
3. Create a supply chain of the most suitable and mostly young people, who are prepared to undertake challenging yet rewarding cotton industry careers and who will contribute to satisfying future industry professional personnel needs
4. Identify the most relevant university courses that fit with future industry needs and develop strong relationships with those universities, to collaboratively identify ways to maximise student entry into and exit from those courses into rewarding cotton industry careers
5. Maximise the extent and value of current cotton industry programs in schools, to feed the right students into the most relevant university courses to meet the expected future cotton industry personnel needs
6. Create an outreach program to demonstrate the value and benefits of cotton careers focussing initially on mentoring and on-the-job type activities such as internships, cadetships, etc including outreach into current workers through professional development programs (yet to be defined).

Activities 1 and 2 are proposed as being concurrent to the establishment of such a Program.

Such a Program will be dependent on strong continued engagement across the cotton industry and continued buy-in from the cotton agribusiness sector. The level of cotton industry agribusiness buy-in must be monitored over time and a program implemented accordingly to facilitate regular robust reporting.

### **Recommendation 2**

That the six highest priority activities outlined in this report form the basis of the proposed Cotton Agribusiness Succession and Professional Development Program that commences as soon as practicable.

### **Recommendation 3**

That the buy-in of the cotton agribusiness sector is a crucial element of the Program and its level and extent is monitored over time.

### ***Organisation Contribution***

The project respondents reported that many were prepared to readily support in-kind contributions to the proposed Cotton Agribusiness Succession and Professional Development Program; some were willing to contribute their knowledge of 'what works / does not work and why' to the Program while others were prepared to pay fee-for-service if suitable activities were made available.

It was concluded that a 'user-pays' or 'beneficiary-pays' principle should be a core element of the Program. Overall it was proposed that the Program should be regarded as a Joint Venture (JV) between CRDC, CA and the cotton agribusiness sector, with initial underwriting or 'seed funding' from CRDC and CA and an intent that the agribusiness sector's contribution could increase over time.

The main issue appeared to be to get the Program underway. Most were happy to contribute to a roundtable discussion on exactly how this would occur. The type and level of continued activities and support was to be canvassed at such a meeting.

### ***Conclusions:***

There is a desire by the cotton agribusiness sector to get started on such a Program in a JV between the CRDC, CA and the cotton agribusiness sector. Accordingly an initial roundtable discussion to canvass a range of issues appears the best first step. This is proposed to occur early in 2013.

The purpose of the roundtable discussion would be to have the key ideas presented to a representative sample of project respondents as a scenario for consideration. The meeting could review and modify those issues and sign off some form of 'document of intent' to get the Program underway. Issues of program, process, representation, activities, funding, etc would all need to be canvassed and agreed to some extent at that meeting.

### **Recommendation 4**

That a roundtable discussion is convened in first quarter 2013 to discuss and sign-off a strategy to commence work on the Program.

### **Recommendation 5**

That a scenario paper, based on this report, is presented at that roundtable to stimulate robust discussion to the extent that sign-off on a suitable Program intent and activities can be achieved.

It is noteworthy that this Program could form an agriculture industry wide pilot study to showcase the implementation of such a Program more widely.

#### **Recommendation 6**

That the project personnel regard this as an agriculture industry wide pilot study, so that the learnings can be conveyed to others in the industry.

#### ***Strategies to implement the Program***

It was concluded that key elements of how to best manage such a strategic program are for:

- An independent panel, board of management or reference group to guide the project
- A project manager who could be (at least initially) panel chair to manage the project
- A regular process of engaging with the agribusiness sector – to brief it on progress and obtain input regarding future plans
- Varied engagement processes – that would include – an e-forum / newsletter / blog, an annual review or briefing session at the Cotton Conference and / or the CCA meetings, plus a dedicated or shared website
- The engagement processes to not only seek input and outline progress, but also to outline success stories that other cotton agribusinesses could use.

#### ***Conclusions:***

The key elements of implementing the Program appear to be best focussed on – an independent panel, board of management or reference group to guide the project; the input of CRDC and CA; an independent contracted project manager who could be initial panel chair to manage the project in accordance with the panel's needs and interests; a regular process of engaging with the agribusiness sector – to brief it on progress and obtain input regarding future plans; plus varied engagement processes focused on personal interaction with the sector at key events and also electronically .

The engagement processes would seek input and outline progress, while also outlining success stories that other cotton agribusinesses could use.

The panel could represent the various cotton agribusiness sectors, commencing with representatives of the project respondents. They would be varied / confirmed at the proposed roundtable discussion in first quarter 2013, which would meet potentially quarterly thereafter. Initially the panel would need to ensure a defined longer term vision is scoped out, so the annual activities have some context in which to operate and the evaluation process has some outcomes to monitor to demonstrate the panel / project effectiveness.

#### **Recommendation 7**

That the Program implementation is based around – having an independent agribusiness dominated panel to guide the project which includes senior CRDC and CA personnel; management by an independent contractor who has a responsibility to meet all stakeholder's needs and interests; a defined focus on meeting key outcomes signed off at the initial roundtable meeting in context of a 5-year strategy; such a strategy to be developed by conclusion of Meeting 2 and followed by regular annual industry engagement at a face-to-face and electronic level.

#### ***Summary***

Through this project it is apparent that there is agreement and buy-in to a Cotton Agribusiness Succession and Professional Development Program.

A roundtable discussion of invited members of the cotton agribusiness sector, and senior CRDC and CA personnel, is proposed for 1<sup>st</sup> quarter 2013. At that time, the full terms of reference would be canvassed so the Program could become operational very quickly, through the provision of resources initially funded by CRDC / CA then expanded in a JV with the cotton agribusiness sector.

The Program would operate in strategic annual and 5-year context and report back to industry annually using varied methods.

## 1. Project Objectives

During 2011 the Cotton Research and Development Corporation (CRDC) noted concerns in the cotton industry regarding its 'future supply of labour'. These concerns became particularly relevant due to the increased acreage planted to cotton following the last decade of drought, plus reported plans regarding industry expansion in southern areas of the cotton region. A range of other factors also created greater urgency to consider this issue at a strategic level.

These included awareness that many in the industry had not replaced key personnel who had left during the drought, nor had they actively sought additional key personnel – and it was widely assumed that there was an aging workforce. These were some particularly compelling issues.

The CRDC identified three components of the future supply of labour issue:

1. On farm operational labour
2. Skilled on-farm labour, and
3. Access to professional advisers and service providers.

This issue also took on a degree of urgency as the industry was poised to move forward and expand, due to an expectation that water would be available over at least the next few growing seasons and that cotton had returned to being an important crop for many growers.

### 1.1 The cotton agri-business sector's needs

During 2011 the CRDC commissioned a project to review the extent to which some form of strategic investment in industry succession and professional development support is required in the cotton agri-business sector. The particular focus was on those employers / personnel engaged in professional cotton careers which generally required a tertiary qualification as a pre-requisite for employment. This project addressed issue 3 above regarding securing cotton industry access to suitably qualified professional advisers and service providers.

In March 2012 the Report entitled – 'A Review of Employer and Industry Needs (for Succession and Professional Development) in the Agri-business Sector' (Project CRDC 12013) – was delivered to the CRDC. It outlined the professional personnel succession and professional development issues and the extent of the expected professional personnel shortages facing the agri-business sector of the cotton industry over the next 5-years. The Report articulated a strategy to address these and related issues.

The Report also noted that the cotton agri-business sector expressed interest in strong participation in the strategy, as long as it met their needs and was practical and relevant to them. They acknowledged wider industry needs than simply those of their own sector, e.g. seeking R&D personnel, key farm personnel, etc.

The Report proposed a series of actions for 2012 and beyond. Those for 2012 included:

- Implementing key steps – due to the urgency of addressing the problem
- Creating a wider industry funding consortium to activate the strategy – of which the agri-business sector would be a part funder / supporter / facilitator
- Further engagement with the agri-business sector – in order to determine the extent of their buy-in to these strategies.

Key elements relevant to the agri-business sector, of a fit with a wider cotton industry labour supply strategy including issues 2&3 above, were explored further at an industry wide meeting in Narrabri during May 2012.

It was later agreed that a short sharp project would be undertaken during second half 2012 to canvass the level of understanding of key personnel in the cotton agri-business sector regarding what the March 2012 report proposed, what they see is required in terms of their own businesses and particularly canvass options for their engagement / buy-in to the implementation of the proposed strategy.

The primary aim of the resulting project – the subject of this report – was to have the data to support a structured ‘roundtable discussion’ with key cotton agri-business sector representatives late in 2012 to define what action ought to be taken on the issue. The focus of the roundtable was proposed to be the creation of a series of defined actions to start addressing these problems and resolving appropriate issues.

## **1.2 Project objectives**

The project objectives were to:

1. Engage with those who provided input to the 2011/12 project to gauge their level of further commitment, and buy-in, to the process outlined in the March 2012 report
2. Engage with a further / wider group in the cotton agri-business community to gauge their level of interest, commitment and buy-in to the proposed process
3. Report to CRDC in order to define the extent to which real, practical buy-in can be expected from the sector, and any factors affecting this, in order to guide future cotton industry decision making regarding strategy implementation.

The Key Outcome was proposed as a short, sharp project report that would guide the implementation of practical next steps. Its focus was to support defined CRDC and cotton agri-business engagement to ‘get started’ on resolving some of the most pressing professional development and succession issues and to create discussion about a defined ‘roadmap’ that could continue to be implemented over time.

## **1.3 A strategic industry wide initiative**

The basis of the project was to determine the extent to which some form of strategic initiative would play a role in the future. It was also to gauge the level of tangible buy-in from the cotton agri-business sector which would inform thinking about the implementation of the strategy recommended in the March 2012 report. This would form the basis of the proposed ‘roundtable discussion’ proposed for late 2012. This reflected the ‘degree of urgency’ noted in the March 2012 report.

## **1.4 The definition of agri-business**

In this project report ‘agri-business’ is an overarching term that deals with on-farm advisers, who work in the private sector for some form of financial remuneration, and work directly with farmers or others in the industry in solving their enterprise management issues, through some form of collaborative decision-making process. It encompasses resellers and suppliers of products that service cotton farmers as well as the larger ‘more corporate’ cotton farmers.

Input to the project was sought from the resellers of products and services, the suppliers of those products and the range of private consultants from single operators to organisations of several consultants. In addition the input of other components of the corporate agri-business sector – processors of cotton and larger corporate farms – was also sought.

For the purposes of the data sought during the project, the following categorisation was made:

- National merchandise resellers with advisers
- Regional merchandise resellers with advisers
- Global input suppliers – fertiliser, chemical, etc
- National input suppliers
- National banking and finance
- Commodity marketers
- Specialist private consultancies – non-agronomic
- Agronomic consultancies
- Machinery suppliers
- Corporate / larger family cotton growers
- Other.

### **1.5 The definition of ‘researchers’ and ‘research’**

In this project report ‘researchers’ or ‘research’ are specific terms relating to more applied on-farm research work conducted to support the agri-business sector’s advisory work. In most cases it focuses on trial work rather than the more strategic work undertaken by those commissioned by CRDC. However the agri-business sector does undertake both strategic and applied research.

## 2. Project Process

### 2.1 Overview

The focus of the cotton agri-business sector engagement strategy development was to obtain data to determine the extent to which some form of strategic initiative would play a role in future succession and professional development. It was also to gauge the level of tangible buy-in from the cotton agri-business sector and identify the key priorities and processes which would inform thinking about the implementation of the strategic initiative. This would form the basis of a proposed 'roundtable discussion' between key cotton agri-business sector representatives and CRDC and CA that would identify the defined actions needed to start addressing and resolving the relevant issues.

### 2.2 Methodology

The key elements of the proposed project process were to:

- Determine **key issues** from the March report – particularly Section 4.5 'Reactions / Interest in a proposed Industry Wide Program'; Section 5.4 addressing the relevance of the proposed program and Section 5.6 regarding the proposed Action Plan – that require further investigation, consideration and buy-in from the agri-business sector
- Develop a **checklist** of key questions / issues to be canvassed with cotton agri-business sector representatives to support a structured interview process to address the Project Objectives
- Make phone, email and personal contact with all **respondents to the 2011/12 project** – to brief them on the key findings of the March report and canvass their views on the issues contained in the checklist via a structured interview. This includes seeking personal discussions / meetings with those attending the Cotton Conference, 14-16 August 2012 at the Gold Coast
- Attend the **2012 Cotton Conference** and seek out additional agri-business sector representatives – including relevant corporate farm agri-businesses – and seek their views using the structured interview process
- **Analyse** the findings and implications of the data obtained
- **Report** the findings and implications of this to CRDC in a draft summary report
- Attend a proposed **November meeting** of CRDC (and Cotton Australia) and contribute to discussions regarding workforce and skills strategy ideas being developed.
- An optional action was to canvass whether a Roundtable Meeting of key agri-business representatives is needed – and how it would be structured – to progress their increased engagement / involvement / next steps in implementing the strategy.

It was noted that, as respondents are likely to be time poor, 'catching them at the Cotton Conference' was expected to be highly effective in seeking their input and views. Similarly, a good way of engaging other key personnel who have yet to be engaged in the project was also 'catching them on the run at the Conference'.

#### ***Actual project process***

In reality the 2012 Cotton Conference proved to be very busy and it was not possible to personally interview previous respondents there. Despite contacting all previous respondents by email, only three replied prior to the Conference. During the two days spent by the project leader at the conference few of the previous respondents were interviewed – the majority were respondents not previously engaged in the project.

This meant that follow-up phone interviews were used to engage with the remaining previous and 'new' respondents.

### ***Acquiring and analysing data and reviewing findings and implications***

Attachment 1 is the questionnaire process used during the face-to-face and telephone interviews.

During the telephone interviews, participants were asked to rank their responses on a scale of 1 to 3 where 1= highest priority and 3= lowest priority. In using this data to make conclusions and recommendations, an average ranking was calculated for each response. These average rankings are provided for all relevant questions. Those responses which received a ranking closest to 1 were recommended as being the highest priority, and those closer to 3 as a lower priority.

### **2.3 Attribution**

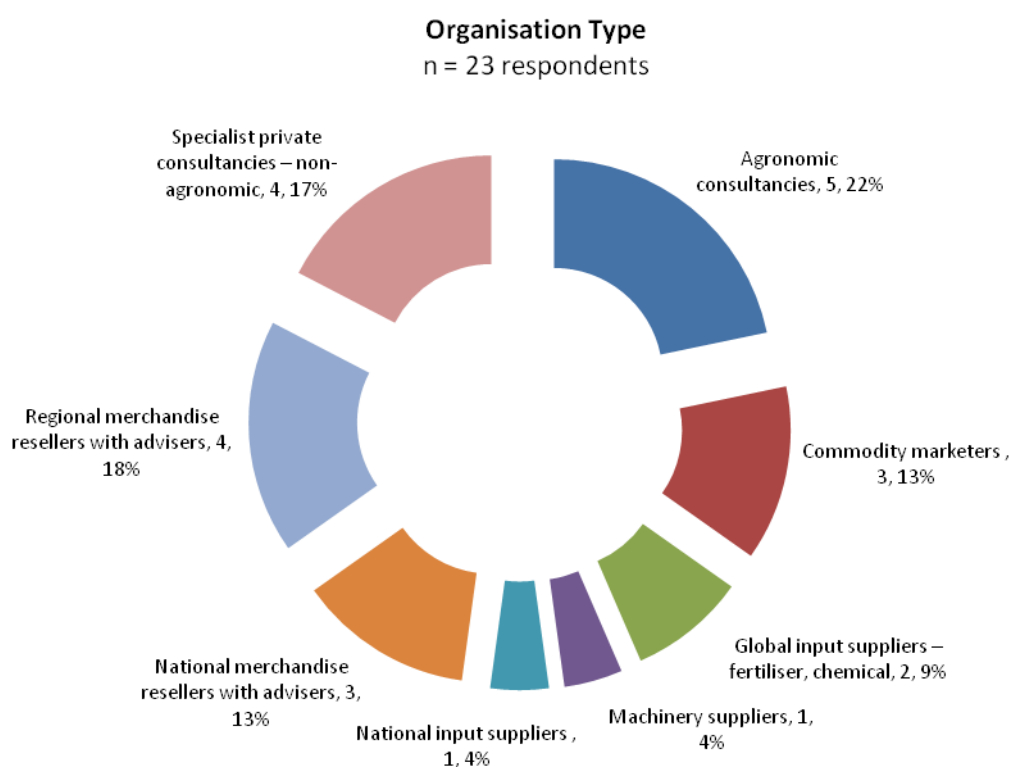
Based on the experience of developing the March 2012 report it was determined that all responses should be regarded as being anonymous and attributed only to the sector to which respondents belonged.

As a result these results are reported on the basis of 'sector type attribution'.

### 3. Results

#### 3.1 Participant Organisation Details

**Figure 1:** Participants in this second stage project review of cotton industry Agri-business professional development included representatives (13) who were involved in the first project review as well as another 10 who had not participated during the first round. Of the total of 23 participants, the largest groups additionally represented in the second round included Agronomic Consultancies (22%, 5 respondents), Regional Merchandise Resellers with advisers (18%, 4 respondents) and Specialist (non-agronomic) Private Consultancies (17%, 4 respondents). One national agri-business bank respondent (Head of Agri-business) supplied a range of qualitative comments based on general observations rather than answering the pre-planned questionnaire. This was due to his desire to have input, while having a lack of time, when approached at the Cotton Conference. His comments are reported separately.



#### 3.2 Additional Staff Requirements

**Table 1:** Of the 23 participants, 10 participants who had not participated during the first stage review were asked to predict the likely number of additional personnel required over the next 5 years. These figures are detailed below according to stakeholder group, noting that some were unable / unwilling to predict numbers and made comments only.

	Sales	Agronomic advice to self/clients	R&D or trials	Other
Specialist private consultancies (non-agronomic)				Trainee Graduates in Science agronomy
Commodity marketers	3	8		
Machinery suppliers				We increasingly need hands-on practical Advanced

				Engineer type technicians
National input suppliers	5	1	Outsourced to resellers & specialists (Peracto)	Overall have 43 people working in gas business
Global input suppliers (fertiliser, chemical)	3		5	Including Territory Mgrs

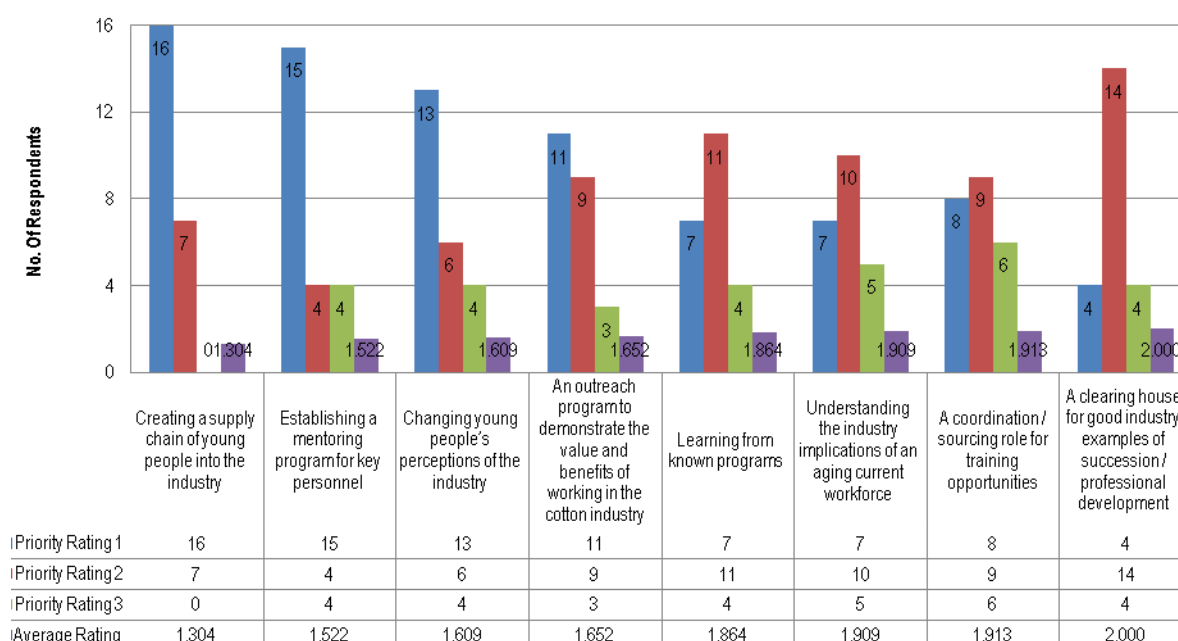
The additional personnel required by the cotton industry agri-business sector from the additional new respondents were – 11 sales personnel, 9 agronomists and 5 R&D personnel.

### 3.3 Priority own organisation / own business initiatives and needs sought over the next 5 years

**Figure 2:** In order to update the things that are emerging as most important to them in running / managing their own businesses, respondents were asked to prioritise those activities which would be most important to their organisation over the next 5 years (priority rating 1 = highest priority and 3 = lowest).

Based on an average rating, it can be seen that participants rated *creating a supply chain of young people into the industry* (average priority rating 1.304) as the highest priority to their organisation over the next 5 years. This was followed by *establishing a mentoring program for key personnel* (average priority rating 1.522), *changing young people’s perceptions of the industry* (average priority rating 1.609) and *creating an outreach program to demonstrate the value and benefits of working in the cotton industry* (average priority rating 1.652). The activity rated as being the least important priority over the next 5 years was *creating a clearing house for good industry examples of succession / professional development that could be learned from – and that supports cotton agri-business networking opportunities* (average priority rating 1.652).

**Priority activities over the next 5 years**



**Table 2:** Priority organisational activities and initiatives over the next 5 years, ranked by priority 1 to 3 where 1 = highest priority and 3 = lowest.

Activity/Initiative	Average Rating	Total Responses
Creating a supply chain of young people into the industry	1.304	23
Establishing a mentoring program for key personnel	1.522	23
Changing young people’s perceptions of the industry	1.609	23
An outreach program to demonstrate the value and benefits of working in the cotton industry	1.652	23
Learning from known programs	1.864	22
Understanding the industry implications of an aging current workforce	1.909	22
A coordination / sourcing role for training opportunities	1.913	23
A clearing house for good industry examples of succession / professional development	2.000	22

Rated as the highest priority, comments relating to creating a **supply chain of young people into the industry** included the fact that *work needs to be done to promote agriculture as a career. Not just career rewarding but financially rewarding. One private consultant notes I keep employing people but they leave and work in competition to me.* It is suggested that the industry needs a *futuristic strategic approach*, to attract young people to the industry. “Grad link” is highlighted as a good program and a good way to *encourage and to introduce graduates who (are) interested.*

The **establishment of mentoring programs** is discussed by several participants as being *essential* internally and for the whole of the agricultural industry. However several agree that mentoring programs can be too difficult *... for an agency (business) to implement this sort of thing and too many dollars to do it. The outcomes are not tangible.*

**Changing young people’s perceptions** of the industry is noted by some participants as being an *agricultural wide* issue, with one emphasising the need to *first stop is (to) stop industry 'bad news (and) whinging.* Evidence that young people’s perceptions of the industry are not as positive as they could be, is seen in the *low (number) of graduates in the industry.*

**Outreach programs** to demonstrate the value and benefits of working in the cotton industry were rated as important in terms of *influencing young people’s career decisions.* It is suggested that the industry needs to *show alternative employment pathways.* Although it is noted that the industry is in a profitable growth phase, it is highlighted that *the greatest risk to the cotton industry is that it could be too inwardly focused.* Outreach programs are regarded as being important in attracting people from outside of the industry and should potentially occur through the education system.

Although not rated as highly, participants did comment on the importance of acting as **coordination/sourcing role for training opportunities and work placements.** Comments included the fact that the industry must *(deliver) positive messages to young people; have some good ideas to share; the pool of possible personnel is limited and don’t know how it is going to work.*

Some participants commented on the importance of **learning from known programs** including the PICSE model and the QLD Resources Council personnel program. One Private Consultant noted that programs need to be *locally lead or (led) by professional organisations, not government led.* However it is suggested that at the end of the day, it comes down to the funding. Another agronomic consultant suggests that following existing program models may be too restrictive. They commented:

*Any one model is too narrowly focused, most of the successful managers come from a broad range of experience and a broad prospective and no (one) model will be successful in the long term. We have managers for our times and (the) technical side (of the industry) but all of these things go in cycles. When people stop being important to the industry then technical side is increasingly important. The management needs to be flexible. Management cannot be tied to a model.*

Understanding the **implications of an aging workforce** was rated as a lower priority. Some participants felt the industry was not as affected by this issue commenting: *the cotton industry will attract the cream of the industry. Maybe a problem in other industries; we are getting young personnel to buy into the business and we train them; we have a strategy; others in industry are less clear.* Others suggested that it is somewhat of a concern noting *as a global company we understand this; succession planning is required.* Others noted that a more likely issue is that the industry is not seen as a career path, commenting: *the modern generation do not see a career as lifelong; they think of (it in) three years terms and because the cotton industry runs in cycles, business people move on.*

In terms of being a **clearing house for good industry examples relating to succession and professional development**, participants felt this was *not a tangible outcome and it is not really a business you can sell – it is more about the actual person or individual who is interested.* One participant notes that this is what is already happening through the CCA network.

Overall, participants note that for all initiatives, *it is important to have (a) whole of agricultural industry approach; not just cotton*, in particular, an industry wide approach is important in creating a supply chain of people. The importance of connecting with students is highlighted; with comments such as *... connect with students in year 10 – this must be via a ‘Call to Action’ starting in years 8-10.* It is also important to *influence senior personnel in education systems that influence young people’s career decisions.*

One participant notes, in summary, that initiatives should be prioritised accordingly, with the highest priority being those things that can firstly, be measured to demonstrate their level of success and secondly, achieving a result quickly. The respondent commented *...where there are significant issues such as perception, supply chain, outreach programs – I think these are all important but require huge resources to be done well, should be done cooperatively with the grains industry, and coordinated with/across all cotton industry groups (CA, CRDC, CCA). For a student or young person, the issue or interest is around cropping at the entry point to a study/career path in agriculture, rather than a specific commodity. Not only can students select a commodity they have a specific affinity for as they learn more about crops and their own interests, but also agri-business service industry members transfer between grains, oilseeds and cotton according to drought, prices etc., and in many cases work in all three like myself. This is not a negative but something that we should acknowledge and work with.*

**Comments:**

**Table 3:** Participant comments in relation to priority initiatives and activities over the next 5 years are detailed below:

Stakeholder Group	Creating a supply chain of young people into the industry
Agronomic consultancies	<ul style="list-style-type: none"> <li>• It is important .Limited means to action it</li> <li>• Need futuristic strategic approach</li> </ul>
Global input suppliers (fertiliser, chemical)	<ul style="list-style-type: none"> <li>• Also for our retailers to increase (their personnel)</li> </ul>
National merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Get away from 'poaching'</li> <li>• Also need IT and engineers</li> </ul>

Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• We need young people attracted to the industry</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• I need people to train to work as consultants so they can serve the industry. I keep employing people but they leave and work in competition to me</li> <li>• Work needs to be done to promote agriculture as a career. Not just a career that is rewarding but financially rewarding. Like “Grad link” would be a good program and a good way to encourage and to introduce graduates who were interested</li> </ul>
<b>Stakeholder group</b>	<b>Establishing a mentoring program for key personnel</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• To hard for an agency to implement this sort of thing and too many dollars to do it. The outcomes are not tangible</li> <li>• Mentoring is good with the right people for some people it doesn’t work. It is important</li> <li>• Also v important for whole of agriculture</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• We haven’t put this in the formal basis but this is important. We encourage an open forum type approach</li> </ul>
Machinery suppliers	<ul style="list-style-type: none"> <li>• It is so important we do it internally</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Can use our experience, mentoring is essential</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• Mentoring! I would love to do it but I haven’t got the time in my own business as it is too hard a game. I don’t do it as much as I would like too. I would like to see a tax incentive to train young people to put them through uni</li> <li>• Very difficult to get this happening. Unless programs like “grad link” step up</li> </ul>
<b>Stakeholder Group</b>	<b>Changing young people’s perceptions of the industry</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• I don’t think there is a problem at the moment</li> <li>• Has to be of general agriculture</li> <li>• First stop is stop industry 'bad news / whinging'; then use media appropriately to reposition the messages</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Their (perceptions) are not good - shown by low no. Of grads in the industry</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• The perception is the smartest child goes to uni and these are the ones I target and most likely to succeed in the cotton industry or any agricultural irrigation industry</li> <li>• Best to do ag wide; make it sexy</li> </ul>
<b>Stakeholder Group</b>	<b>An outreach program to demonstrate the value and benefits of working in the cotton industry</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• We do want to attract people outside the industry as we need diversity in the industry. The greatest risk to the cotton industry is that it could be too inwardly focused</li> <li>• People don’t know where their food is coming from these days unless they know about farming then you wouldn’t go into agronomy</li> <li>• Must show good career paths</li> <li>• Start with agriculture; then broadacre then cotton</li> </ul>
Machinery suppliers	<ul style="list-style-type: none"> <li>• Got to show alternative employment pathways</li> </ul>
National input suppliers	<ul style="list-style-type: none"> <li>• Cotton is very profitable and in growth phase</li> </ul>

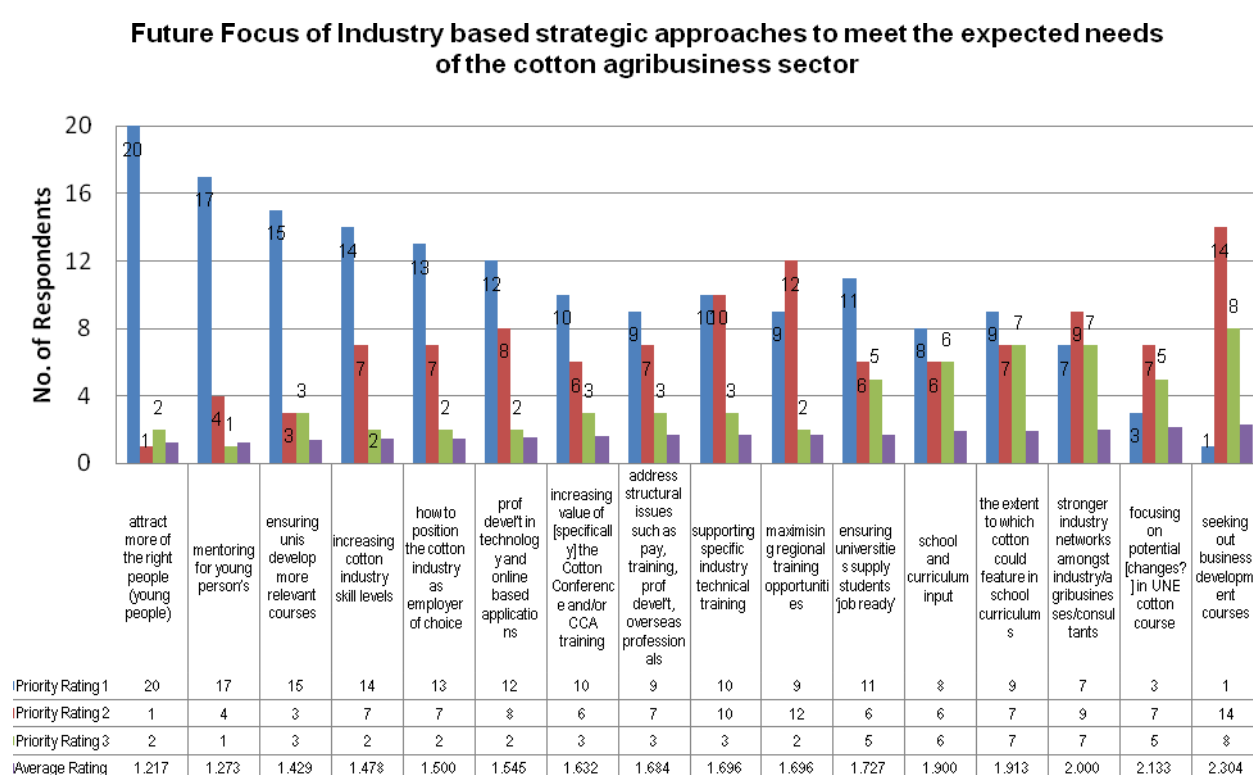
National merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Must do it properly</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• We have to influence young people career decisions</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• The mining industry is doing a lot of that and taking our staff. It is working well for them</li> </ul>
	<ul style="list-style-type: none"> <li>• Needs to happen in education system and linking this with industry</li> </ul>
<b>Stakeholder Group</b>	<b>Learning from known programs including the PICSE model and the Qld Resources Council personnel program</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• Any one model is too narrowly focused, most of the successful managers come from a broad range of experience and a broad prospective and no (one) model will be successful in the long term. We have managers for our times and (the) technical side (of the industry) but all of these things go in cycles. When people stop being important to the industry then technical side is increasingly important. The management needs to be flexible. Management cannot be tied to a model</li> </ul>
	<ul style="list-style-type: none"> <li>• It comes down to the money. They were attracting people with big money which overrode the real issues and then the program came into being</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• Unaware of these programs</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• The work done today is being shown to be quite good</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• Not aware of the programs so I can't comment</li> </ul>
	<ul style="list-style-type: none"> <li>• Needs to be locally lead or by professional organizations not government lead</li> </ul>
<b>Stakeholder Group</b>	<b>Understanding the industry implications of an aging current workforce</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• Because the cotton industry will attract the cream of the industry. Maybe a problem in other industries</li> </ul>
	<ul style="list-style-type: none"> <li>• The top three are of most important problems as people ageing and people going out of the industry. We are 1500 short of qualified agronomists</li> </ul>
	<ul style="list-style-type: none"> <li>• We are getting young personnel to buy into the business and we train them</li> </ul>
	<ul style="list-style-type: none"> <li>• We understand it for our business</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• We are struggling in the natural fibres industry with this issue</li> </ul>
	<ul style="list-style-type: none"> <li>• As a global coy we understand this</li> </ul>
Global input suppliers (fertiliser, chemical)	<ul style="list-style-type: none"> <li>• Succession planning required</li> </ul>
	<ul style="list-style-type: none"> <li>• We have a strategy; others in industry are less clear</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• The modern generation do not see a career as lifelong - they think of three years terms</li> </ul>
	<ul style="list-style-type: none"> <li>• Because of the cotton industry runs in cycles, business people move on</li> </ul>
<b>Stakeholder group</b>	<b>A coordination / sourcing role for training opportunities; workplace placements and creating a source of HR and training resources</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• Not that important it should be not be done as a high priority</li> </ul>
	<ul style="list-style-type: none"> <li>• We can get tied up on things before we start getting an interest from people</li> </ul>

	The pool of possible personnel is limited
Global input suppliers (fertiliser, chemical)	Must have right +ve messages to young people
Machinery suppliers	Relevant to dealers rather than the company
National input suppliers	We have a learning and development coordinator
Specialist private consultancies (non-agronomic)	Don't know how it is going to work
	We have some good ideas to share
<b>Stakeholder Group</b>	<b>A clearing house for good industry examples of succession / professional development that could be learned from – and that supports cotton agri-business networking opportunities</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• This is not a tangible outcome and not how the world works</li> <li>• Not really a business you can sell it is more about the actual person or individual who is interested</li> <li>• Happens through CCA networking</li> <li>• Recognise commercial-in-confidence</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• That I think can work</li> <li>• Auscott has some good ideas</li> </ul>
<b>Stakeholder Group</b>	<b>Other Comments</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• poaching staff is only sustainable if pool big enough; must recognise depts of agriculture and resellers are basic training ground for agros in particular - they need to continue that role</li> </ul>
Global input suppliers – fertiliser, chemical,	<ul style="list-style-type: none"> <li>• important to have whole of industry approach; not just cotton</li> </ul>
Machinery suppliers	<ul style="list-style-type: none"> <li>• important to connect with students yr 10 on; this must be via a Call to Action starting in Yrs 8-10</li> </ul>
National merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• need to consider expansion of corporate farming</li> <li>• has to be industry wide; about creating a supply chain of people</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• have to careful that it really meets industry needs</li> <li>• must also influence senior personnel in education systems who influence young people career decisions</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• we have a range of needs and also a lot of systems in place; believe a company of about 30 personnel requires good systems</li> <li>• I think all of these items are important however, given the critical stage that I think the industry is in, I prioritise most highly the things (with 1 ranking) that can be measured, and achieved as a result quickly. Where there are significant issues such as perception, supply chain, outreach programs - I think these are all important but require huge resources to be done well, should be done cooperatively with the grains industry, and coordinated with/across all cotton industry groups (CA, CRDC, CCA). For a student or young person, the issue or interest is around cropping at the entry point to a study/career path in agriculture, rather than a specific commodity. Not only can students select a commodity they have a specific affinity for as they learn more about crops and their own interests, but also agri-business service industry members transfer between grains, oilseeds and cotton according to drought, prices etc., and in many cases work in all three like myself. This is not a negative but something that we should acknowledge and work with.</li> </ul>

### 3.4 Meeting the expected future needs of the overall cotton agri-business sector

**Figure 3:** Participants were asked to prioritise those activities which they thought should be the focus of an industry based strategic approach aimed at meeting the expected future needs of the cotton agri-business sector. The activities were based on comments made in the previous project report.

Respondents rated each strategic approach on a priority scale of 1 to 3 (where 1 = highest priority and 3 = lowest). Based on average ratings, it can be seen that participants felt the strategies that would have the greatest impact and should be the focus of a more industry based strategy included *attracting more of the right people* into the industry (average priority rating 1.217), *Mentoring for young person’s* (average priority rating 1.273), *ensuring unis develop more relevant courses* (average priority rating 1.429) and *increasing cotton industry skill levels* (average priority rating 1.478). Those strategies rated as the least priority included *focusing on potential (changes?) In UNE cotton course* (average priority rating 2.133) and *seeking out business development courses* (average priority rating 2.304).



**Table 4:** Priority strategies aimed at meeting the expected future needs of the cotton agri-business sector, ranked by priority 1 to 3 where 1 = highest priority and 3 = lowest.

Strategic Approaches	Average Rating	Total Responses
Attract more of the right people (young people)	1.217	23
Mentoring for young person’s	1.273	22
Ensuring unis develop more relevant courses	1.429	21
Increasing cotton industry skill levels	1.478	23
How to position the cotton industry as employer of choice	1.500	22
Professional Development in technology and online based applications	1.545	22
Increasing value of (specifically) the Cotton Conference and/or CCA training	1.632	19
Address structural issues such as pay, training, professional development, overseas professionals	1.684	19

Supporting specific industry technical training	1.696	23
Maximising regional training opportunities	1.696	23
Ensuring universities supply students 'job ready'	1.727	22
School and curriculum input	1.900	20
The extent to which cotton could feature in school curriculums	1.913	23
Stronger industry networks amongst industry/agri-businesses/consultants	2.000	23
Focusing on potential (changes?) In UNE cotton course	2.133	15
Seeking out business development courses	2.304	23

**Attracting more of the right people** into the industry was rated by participants as being the top priority in relation to the role of an industry based strategic approach, which could be developed and aimed at meeting the future expected needs of the cotton agri-business sector. Although this was widely discussed by participants as being important, there is concern as to how to attract more of the right people. Participants comment that the age of staff is not the main concern, instead noting that the industry needs people who are *prepared to be challenged and will participate in the industry*.

In line with this discussion, participants commented on the need for **mentoring for young people** with comments including, *this is where it all where it begins as far as interest levels*. **Ensuring universities develop more relevant courses** was highlighted as a positive step towards meeting industry needs. One Commodity Marketer noted that *unis need to be more up-to-date in their thinking*. In **increasing the cotton industry skill levels**, one Agronomic consultant notes that it is not necessarily only about formal qualifications, but instead, seeking *more dynamic people* as well as *maintaining the skilled people*.

Other factors rated as a high priority included the need to **position the cotton industry as an employer of choice**, encouraging professional development in technology and online applications, specific industry technical training as well as addressing structural issues such as pay and training. Comments included:

- *It is a difficult sell (as an) employment choice, but by mentioning how much money is being spent on cotton research now, could be a plus (in attracting more people into the industry).*
- *There is already low technology adoption - rectify that too*
- *The online (delivery process) means it is efficient and can be rolled out easily*
- *Industry has a stated intent to reduce numbers in the on-farm labour force rather than the professionals; want right skilled people for a skilled industry; need communication and interpersonal skills and how to run activities such as workshops*

In terms of training, participants acknowledge the importance of **improved regional training opportunities**, however they note the difficulties associated with it including travel and distance issues. Comments relating to the role of **universities in supply students 'job ready'** are varied with comments including: *Implies that there should be work experience and that is a very good thing*, however others noted that this is not practical as *most learning is done on the job. It would require them to organize students to be paid*.

The extent to which **cotton should feature in school curriculums** and the **input of schools** towards an industry based approach to meeting future agri-business needs, although rated as a lower priority, was discussed by participants as being of value to the industry overall. Comments included:

- *Doing this through PICSE program*

- *Important but it is difficult as children are indeterminate of their future but recruitment would be better at university level*
- *This could result in broadening the interest in the industry*

**Comments:**

**Table 5:** Participant comments in relation to the focus of industry based strategic approaches needed to meet expected future needs of the cotton agri-business sector are detailed below:

Stakeholder Group	Attract more of the right people (young people)
Agronomic consultancies	<ul style="list-style-type: none"> <li>• We need to attract any age to the industry and see if they fit. We need a diverse number of people and we can't be too descriptive on who is the right person</li> </ul>
	<ul style="list-style-type: none"> <li>• Highly critical</li> </ul>
	<ul style="list-style-type: none"> <li>• How do we do this?</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• I want the best kids in cotton industry</li> </ul>
	<ul style="list-style-type: none"> <li>• This is the ongoing challenge</li> </ul>
National merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Highly important. This is always going to be a challenge. We need people who are prepared to be challenged and participate in the industry</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• Attracting the "right people" is very dependent on hands on working in the industry</li> </ul>
	<ul style="list-style-type: none"> <li>• All young people are fine; they just have to be given the opportunity</li> </ul>
Stakeholder Group	Mentoring for young person's
Agronomic consultancies	<ul style="list-style-type: none"> <li>• It came from a commercial point of view, good, if through government it would be bad</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• If we could pull it off it would be good. It could go either way depending on what way it was structured</li> </ul>
National merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• This is where it all begins as far as interest levels</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Mentoring within the employment environment is the best thing if you have poor mentoring then this is where you are left out</li> </ul>
	<ul style="list-style-type: none"> <li>• Must immerse them in industry programs</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• For the right person it is good, for some people it doesn't work so well</li> </ul>
Stakeholder Group	Ensuring universities develop more relevant courses
Agronomic consultancies	<ul style="list-style-type: none"> <li>• Basic university training is important but applied courses are much less important</li> </ul>
	<ul style="list-style-type: none"> <li>• Unis need to be more up-to-date in their thinking</li> </ul>
	<ul style="list-style-type: none"> <li>• Main role of unis is to teach grads to think properly</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• Show an example of the work where the uni is bringing the students out to regional areas, meeting and have interaction with growers and consultants. This is win win, the first win, students get to see what the industry is like the second one is the consultants get to meet the students. The lecturers get out of the academic area, get out of the moth balls and talk to the industry</li> </ul>
	<ul style="list-style-type: none"> <li>• It is concerning that the agri-business school is diminishing and wanting to keep young people in the country areas is a problem</li> </ul>
	<ul style="list-style-type: none"> <li>• Within 3/4 yrs; don't continue 'course amalgamation'</li> </ul>

National input suppliers	<ul style="list-style-type: none"> <li>• Has to be transferrable agriculture wide</li> </ul>
National merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Need to be stronger links on what is required in the industry</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Making sure the researchers have good industry links</li> </ul>
	<ul style="list-style-type: none"> <li>• Need real applied science</li> </ul>
	<ul style="list-style-type: none"> <li>• They just provide background knowledge and base expertise</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• Unis need to change and government has to play a role</li> </ul>
	<ul style="list-style-type: none"> <li>• Nothing wrong with the ones that have come out lately</li> </ul>
	<ul style="list-style-type: none"> <li>• I learnt more in the first 6 months out on the farm than the 4 years I learnt at uni</li> </ul>
	<ul style="list-style-type: none"> <li>• Concern about demise of diploma course - very important to us</li> </ul>
<b>Stakeholder Group</b>	<b>Increasing cotton industry skill levels</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• We don't need highly skilled people – we need more dynamic people. Formal qualification is not what we need</li> </ul>
	<ul style="list-style-type: none"> <li>• Industry needs up-skilling</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• That is survival. We need to keep at the top</li> </ul>
	<ul style="list-style-type: none"> <li>• The industry is so small we have really struggled to get the qualified and the standard of the personal in the industry and when the mining industry can offer more dollars, to have them stay</li> </ul>
	<ul style="list-style-type: none"> <li>• Do we know the baseline of current skills?</li> </ul>
Machinery Suppliers	<ul style="list-style-type: none"> <li>• More advance machinery skills needed with precision agriculture increasing.</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Maintaining the skilled people</li> </ul>
	<ul style="list-style-type: none"> <li>• Our current buying group provides support</li> </ul>
	<ul style="list-style-type: none"> <li>• Needs to be targeted to varied skill levels</li> </ul>
Global input suppliers – fertiliser, chemical,	<ul style="list-style-type: none"> <li>• We do some good internal work</li> </ul>
<b>Stakeholder Group</b>	<b>How to position the cotton industry as employer of choice</b>
Commodity marketers	<ul style="list-style-type: none"> <li>• It is high</li> </ul>
	<ul style="list-style-type: none"> <li>• I think anything we do to make it so they choose a career in cotton is based on needing to articulate this better</li> </ul>
	<ul style="list-style-type: none"> <li>• However business as the employer has a role</li> </ul>
National merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• I think it should be broadened to agriculture not just one crop</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Less important to us - we do it anyway</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• It is a difficult sell (as an) employment choice, but by mentioning how much money is being spent on cotton research now, could be a plus (in attracting more people into the industry).</li> </ul>
<b>Stakeholder Group</b>	<b>Professional Development in technology and online based applications</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• There can be some benefit but this needs to be market driven. There is a place for these skills and tools but they need to come from a commercial background. It depends on how the funding comes – better if it was funded from the commercial area</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• There is already low technology adoption - rectify that too</li> </ul>
National merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• The online side means it is efficient and can be rolled out easily</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• The next issue is addiction to computers and online instruction</li> </ul>

	<ul style="list-style-type: none"> <li>• In technology / equipment</li> <li>• We are time poor however have to invest time in understanding / using new technologies</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• There is a lot of technology happening all the time. Does it make it any better? A lot of it is toys etc. On the net is all very well but it doesn't make you a better agronomist</li> </ul>
<b>Stakeholder Group</b>	<b>Increasing value of (specifically) the cotton conference and/or CCA training</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• Right where it is</li> <li>• CCA is #1 priority; conference is #2</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• Define their value first</li> <li>• The reason being I was impressed with what I saw</li> </ul>
National input suppliers	<ul style="list-style-type: none"> <li>• Cotton conf a good place to brief people, CCA has its niche</li> </ul>
National merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• I think it is a point of focus</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• CCA is more important than the cotton conference</li> </ul>
<b>Stakeholder Group</b>	<b>Address structural issues such as pay, training, professional development, overseas professionals</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• The cotton industry is seasonal employment and sometimes there is plenty of rain and sometimes there is drought and we can't get continuous employment of people under those conditions</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• I have to pay for someone to come out to the regional area. If I don't pay them well then you won't have the consultants to go and look at your business. The cotton farmers complain about being charged extra and yet they just have to pay</li> <li>• Got to stop 'us/them' attitude</li> </ul>
Global input suppliers – fertiliser, chemical,	<ul style="list-style-type: none"> <li>• Pay is a big issue; getting harder to replace skilled people</li> </ul>
National input suppliers	<ul style="list-style-type: none"> <li>• Industry has stated intent to reduce numbers of labour rather than professionals; want right skilled people for a skilled industry; need communication and interpersonal skills and how to run activities such as workshops</li> </ul>
National merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Need to be competitive yet profitable</li> <li>• Market forces are best way</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Have to be competitive with other industries</li> <li>• Big challenge for whole industry</li> <li>• Leave to market forces</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• Pay vs life style is important when thinking mining</li> <li>• I don't believe mines are competitors</li> </ul>
<b>Stakeholder Group</b>	<b>Supporting specific industry technical training</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• We do a lot in-house, if available / relevant we would use it</li> <li>• Important for whole of industry</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• I think again something that you have to give industry is an incentive to do it but if someone came to me and said they would fund someone for cotton based training it would be great. My business put trainees through university and is still taxed on it</li> </ul>
Global input suppliers – fertiliser, chemical,	<ul style="list-style-type: none"> <li>• Done internally</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• industry needs to be more of "grains courses" or the UNE cotton</li> </ul>

	course not TAFE
<b>Stakeholder Group</b>	<b>Maximising regional training opportunities</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• See it being important for others</li> <li>• If you are going to do training it needs to be regional</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• Saying it is a good idea but I doubt that it is easy to do. The people involved are going to have to pay the teachers to go to the regional industries to train</li> <li>• Very hard to bring organized training out to the regions around ginning and plant maintenance, asset management and leadership training we struggle to find good training in the regions and it is very expensive. Also ginning is 6 months not 3 months as it used to be owing to the good rain and bigger crops. People don't want to give up their time and there is no certificate at the end of it. Businesses will only agree to 2 day courses</li> <li>• On industry specific issues</li> </ul>
National input suppliers	<ul style="list-style-type: none"> <li>• Must be on the job work</li> </ul>
National merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Difficult to be regional and many of the regions are a long way apart so depends on how you define region</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• You can go to training for the sake of training but there is only so much one can do for a business.</li> </ul>
<b>Stakeholder Group</b>	<b>Ensuring universities supply students 'job ready'</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• Implies that there should be work experience and that is a very good thing</li> <li>• They can't; only on-the-job training is practical and relevant</li> <li>• Do a lot in-house</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• I think in the main thing is to continue on with the courses and secondary is being job ready</li> </ul>
National input suppliers	<ul style="list-style-type: none"> <li>• Recognise our seasonal needs</li> </ul>
National merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• They need to have the ability to think concepts through. It is unrealistic to think they could be job ready</li> <li>• That is our role once we get them</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• It is not possible as most learning is done on the job. It would require them to organize students to be paid</li> <li>• Stronger uni links needed</li> <li>• Hard for unis to do</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• Not important</li> <li>• They can't; only on-the-job training in practical and relevant</li> </ul>
<b>Stakeholder Group</b>	<b>School and curriculum input</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• This is important</li> <li>• Doing this through PICSE program</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• Because a lot of the school curriculum is tied up in the knots and the difficulty is that there needs to be something of interest done in the schools about the cotton industry to show the kids</li> <li>• I can't imagine it could get into a national curriculum and would be unfair to include only one of Australia's agri-business industries. However, if possible, this would be excellent</li> </ul>

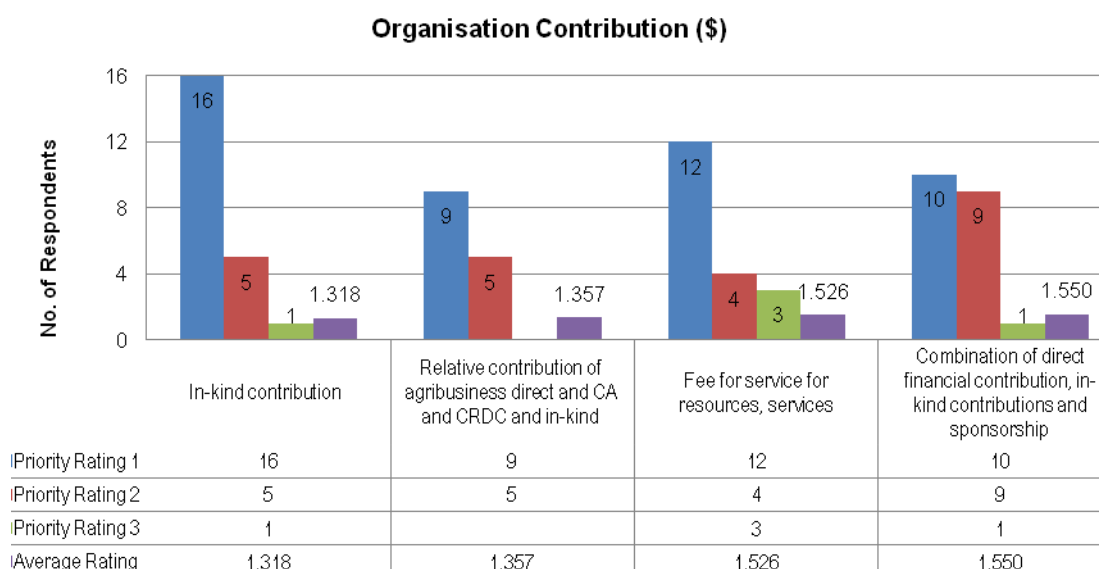
	<ul style="list-style-type: none"> <li>• Just make teachers life easier</li> </ul>
Global input suppliers – fertiliser, chemical,	<ul style="list-style-type: none"> <li>• This is a #1 for the industry</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Important but it is difficult as children are indeterminate of their future but recruitment would be better at university level</li> <li>• Should be more about agriculture</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• Influence upper mgt of education institutions</li> </ul>
<b>Stakeholder Group</b>	<b>The extent to which cotton could feature in school curriculums</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• This could result in broadening the interest in the industry</li> <li>• More about wider agriculture than just cotton</li> <li>• Should be more about agriculture in general than just cotton</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• I think given the opportunity if it is co-ordinated, we would be happy to talk to the teachers</li> <li>• This is a good idea</li> <li>• More about image change - to something 'funky'</li> </ul>
National merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• I think it is already in</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Need holistic interest in agriculture first</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• No one really knows about the cotton industry in school except for the bad stuff</li> <li>• Should be more about agriculture in general than just cotton</li> </ul>
<b>Stakeholder Group</b>	<b>Stronger industry networks amongst industry/agri-businesses/consultants</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• When it was a strong industry we had a strong network. Now we don't have one</li> <li>• Not really relevant = commercial realities</li> <li>• Note commercial-in-confidence issues</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• Should be continued</li> <li>• We are quite good at it already</li> <li>• Important - everyone has a role to play in industry</li> </ul>
Global input suppliers (fertiliser, chemical)	<ul style="list-style-type: none"> <li>• Pretty much ok for now</li> <li>• Big challenge - mindset change required</li> </ul>
Machinery suppliers	<ul style="list-style-type: none"> <li>• CCA is part of the fragmentation problem</li> </ul>
National merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• It is already really strong</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Create some form of a forum</li> <li>• A good network exists just needs to be maintained</li> <li>• Strong ideological / commercial differences between some and others in the sector</li> <li>• Not an issue</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• We have a pretty good net work already</li> <li>• Use communication - blogs, etc</li> </ul>
<b>Stakeholder Group</b>	<b>Focusing on potential (changes?) In UNE cotton course</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• This should be done through TAFE</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• Cotton course is good but needs more funding to keep it on top of</li> </ul>

	<ul style="list-style-type: none"> <li>the ladder it is getting tired. It is all to do with lack of funding</li> <li>• Not aware of the course</li> </ul>
National input suppliers	<ul style="list-style-type: none"> <li>• Not a big issue; get our grads from lots of places</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• They need to be careful about teaching base knowledge not focusing on the latest things such as environment issues etc</li> <li>• Need to know more about what it is / does</li> </ul>
	<ul style="list-style-type: none"> <li>• One of my staff is doing it present, seems pretty good</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• Understand it is very good so not concerned</li> </ul>
<b>Stakeholder Group</b>	<b>Seeking out business development courses</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• Waste of time</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• All the courses are city based not regionally based therefore it is very difficult to get people to the courses and travel is expensive</li> </ul>
Global input suppliers (fertiliser, chemical)	<ul style="list-style-type: none"> <li>• Done internally</li> </ul>
National input suppliers	<ul style="list-style-type: none"> <li>• Needs based</li> </ul>
National merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• I don't think there are too many issues there</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Very important for dealers</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• Internal access available</li> </ul>
<b>Stakeholder Group</b>	<b>General Comments</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• consultants are time poor - no 'talkfests' only meaningful engagement that makes a difference to the business</li> </ul>
	<ul style="list-style-type: none"> <li>• yield data is good example of high tech requirements; the role of unis is lower priority - we just want to get young people to have base knowledge - we take it from there</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• need to partner more strongly with unis so things more targeted</li> </ul>
Machinery suppliers	<ul style="list-style-type: none"> <li>• got to improve industry wide connections; our dealers have greater need than we the parent company as they are independent businesses</li> </ul>
National input suppliers	<ul style="list-style-type: none"> <li>• competitive market place vs mining; important for industry to drive this change before it becomes 'necessary'; innovation a must in this</li> </ul>
National merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• not a great believer in pressuring kids at school</li> <li>• take care of assumption that cotton industry will grow; also get 'crystal ball' out - try to predict size of industry=size of personnel needs and plan accordingly; remember we need field people - not just ones to sit behind computers</li> </ul>
	<ul style="list-style-type: none"> <li>• need to define who are 'the right people', ie very clear target audiences</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• need to step up stronger values based work experience / scholarships</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• 1. Ranked most highly those things which can be done straight away to help consultants who are time poor, short on staff and unable to commit time for themselves or staff to travel away from their businesses for training. Can't comment on the UNE Course as I have not attended but have heard from those who have attended that it is very good. 2. I think the statement attracting the "right" sort of young people is questionable in two parts - one you will get a greater pool of keen, competent young people if you attract a larger pool of young people full stop, so the premise</li> </ul>

should be about attracting more people initially - secondly I wonder whether this indicates in inability to describe the real skills and attributes needed by employers or whether, if the intent is attitudinal, we as an industry have to better understand the changed aspirations of the younger generation coming through schooling and university, as compared to those of baby boomers and genx? 3. How would the value of the Cotton Conference be increased? - I understand that the 1400 people attending this year is a record. 4. With the increasing capacity of the networks - I would hate to see a new network set up but would like to see reinvigoration of the CCA, if that's what the question is asking. I am a member of the CCA, APEN, AIAST as well as others and I wonder what value they bring me - certainly CCA for event updates and APEN for knowledge are the best. I don't think there are more than 5 members of CCA in CQ which presents problems for the organisation to speak on behalf of consultants in national and state, or industry forums. 5. Mentoring is very important - no one leaves uni "competent" and it's easy to be critical of graduate skills when you're 20 years down the track with experience under your belt - while I understand there is an issue with the science component of ag at uni which needs to be addressed, I think it's easy for us who are 40 plus to be revisionist about our level of skills as graduates! I credit mentors for any skills I may have developed over the years.

### 3.5 Organisation Contribution

**Figure 4:** Participants were asked to rate the most likely contribution capabilities of their organisation towards the implementation of the proposed 'industry program'. The contribution type rated highest on a priority scale of 1 to 3 (where 1 = highest priority and 3 = lowest) was *In-kind contribution* (average priority rating 1.318), followed by the *relative contribution of agri-business direct and CA and CRDC and in-kind* (average priority rating 1.357) and *fee for service* (average priority rating 1.526). The contribution type rated the lowest priority was a *combination of direct financial contribution, in-kind contributions and sponsorship (where between \$1001-5000/year would be a fair financial contribution)*, (average priority rating 1.550).



**Table 6:** Organisation contribution capabilities ranked by priority 1 to 3 where 1 = highest priority and 3 = lowest.

Contribution Type	Average Rating	Total Responses
In-kind contribution	1.318	22
Relative contribution of agri-business direct and CA and CRDC and in-kind	1.357	14
Fee for service for resources, services	1.526	19
Combination of direct financial contribution, in-kind contributions and sponsorship	1.550	20

Participants rated ***in-kind contributions*** as the most likely contribution their organisations could make to the program in terms of its implementation. Several participants do note that their organisations are already running these types of programs including *internal training, a graduate agro course and summer scholarships*. Overall participants support these programs and are happy to assist, some suggested *work experience to see if the persons involved fit the cotton industry and cadetships*.

In terms of the ***relative contribution of agri-business, CA and CRDC***, several participants agreed that perhaps the CA and CRDC *should (not) have a major involvement as they use grower funds (and) this is an agri-business sector issue – it is our responsibility, so a joint venture is appropriate*. It is suggested that as the CRDC and CA have *a lot of calls on their funds, beneficiaries should pay* and CRDC and CA *provide basic underwritings*. As one participant notes, it should be a *'those who benefit pay' approach*.

Participants generally agree that a ***fee for service*** approach is an option, *as long as it is relevant; happy to pay for relevant training opportunities* and it is based on a *value offering*.

The discussion relating to the ***combination of direct financial contribution, in-kind contributions and sponsorship*** was an option that several participants are open to and *happy to discuss*. However this option would depend on the programs being offered, the need for *larger organisations to put in more money than smaller ones*. One Specialist Private Consultant noted they were *prepared to pay \$3-\$4k readily*.

**Comments:**

**Table 7:** Participant comments in relation to most likely contribution capabilities of their organisation towards the implementation of the program are detailed below:

Stakeholder group	In-kind contribution – which out of professional work experience, scholarships, internships or cadetships, as well as paid holiday work for periods of up to 2 weeks
Agronomic consultancies	• Work Experience to see if the persons involved fit the cotton industry
	• Not sure how it would work for us
	• Just let us know
Commodity marketers	• Support all of these programs
	• Do internal training that could be expanded; we have global support
Global input suppliers (fertiliser, chemical)	• For senior personnel to decide
National input suppliers	• Our support is sporadic due to seasonal / resource gaps
National merchandise resellers with advisers	• We run a graduate agro course in this region; 3x booked in for

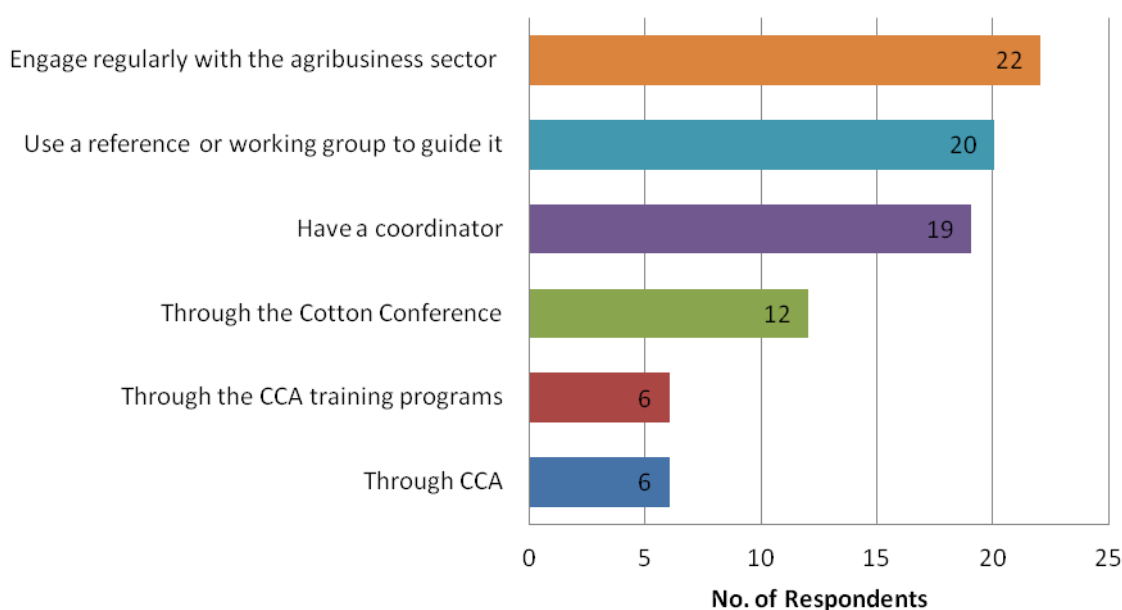
	2013
	<ul style="list-style-type: none"> <li>• Happy to help = easy to do</li> <li>• Can take a larger role</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• We like and do summer scholarships</li> <li>• We are doing these things</li> <li>• Cadetships are best</li> <li>• I only run my business roughly 3 - 4 days per week and rely on sub-contractors, but would be happy to use my networks to communicate and help find links.</li> </ul>
<b>Stakeholder group</b>	<b>The relative contribution of agri-business direct, CA and CRDC \$ and in-kind</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• This is seasonal work</li> <li>• Would have to consider ROI</li> <li>• CRDC and CA to provide basic underwriting; we support it from there</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• CRDC / CA have a lot of calls on their funds, beneficiaries should pay</li> </ul>
Global input suppliers (fertiliser, chemical)	<ul style="list-style-type: none"> <li>• For senior personnel to decide</li> <li>• Need to take a 'those who benefit pay' approach</li> </ul>
National merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Best seen as a coalition / collaboration</li> <li>• Could support cadetships; have to think about the direct financial costs tho</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Don't think CRDC / CA should have major involvement as they use grower funds - this is an agri-business sector issue = our responsibility so a JV is very appropriate</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• Suggest co-investment of agri-businesses to 30-40% of overall cost</li> </ul>
<b>Stakeholder Group</b>	<b>Fee for service for resources, services, etc</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• We pay for our PD anyway</li> <li>• As long as it is relevant</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• It is a drain that they can't contribute to help financial resources</li> </ul>
Global input suppliers (fertiliser, chemical)	<ul style="list-style-type: none"> <li>• We do a lot internally</li> </ul>
National merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Professional development is v high priority, especially for agronomists</li> <li>• Based on value of offering</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• Would pay for value no problems</li> <li>• Funding from the gov is not working well</li> <li>• Happy to pay for relevant training opportunities</li> </ul>
<b>Stakeholder group</b>	<b>Combination of direct financial contribution, in-kind contributions and sponsorship, where between \$1001-5000 per year would be a fair financial contribution</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• Have to put effort into meaningful activities</li> <li>• Would depend on program, larger orgs put in more \$ - smaller ones less</li> </ul>

Commodity marketers	• Possibly
	• Happy to discuss
Global input suppliers (fertiliser, chemical)	• For senior personnel to decide
National input suppliers	• Probably easiest for us re budget and other support needed
National merchandise resellers with advisers	• Happy to support this
	• As a coop type organisation not so easy to speak for members
Specialist private consultancies (non-agronomic)	• Prepared to pay \$3-4k readily
	• I agree
	• Too small a business at the moment, however would consider it
Stakeholder group	Comments
Agronomic consultancies	• Just have to be sure the practical value is there otherwise it won't be supported
Machinery suppliers	• We know we need to support this - only question is how? Just let us know. Must have clear outcomes and clear strategy
National merchandise resellers with advisers	• Each sector needs to put \$ in ideally = collaboration / cooperation
	• Based on WIFM for each contributor
	• Need a joint govt, industry and employer package as everyone benefits; this is over a 5-8yr horizon
Regional merchandise resellers with advisers	• Need to see extent of genuine / tangible benefit for \$ paid

### 3.6 Strategies to implement program

**Figure 5:** Almost all participants (22, 95.6%) indicated that the implementation of the program should involve *engaging regularly with the agri-business sector*. 86.9% of participants (20) suggest that the program *should be guided by a reference or working group* and 82.6% of participants (19) suggest the program should be *led by a coordinator*. In terms of delivery, 52.2% of participants (12) felt the program should be *implemented through the Cotton Conference* and 26% (6) through *CCA training programs or the CCA* (26%, 6 participants).

### Strategies for implementing program



In relation to strategies for the implementation of the program, most participants suggested **engaging regularly with the agri-business sector**. Strategies suggested included: a 'panel' that is independent, maybe coordinator is panel chair; an e-forum as the easiest way; regularly update the sector and beneficiaries; specific review event each year and Committee / board of management; newsletter; email; blogs; website.

Discussion included delivery through the Cotton Conference, with participants highlighting its value in allowing networking and briefing on successes and showcasing success. Participant's responses regarding the CCA included the fact that the delivery of this program is possibly bigger than the CCA; they are players like us all.

#### Comments:

**Table 8:** Participant comments in relation to the implementation of the program are detailed below:

Stakeholder Group	Engage regularly with the agri-business sector
Agronomic consultancies	<ul style="list-style-type: none"> <li>• Maybe have a 'panel' that is independent, maybe coordinator is panel chair?</li> </ul>
	<ul style="list-style-type: none"> <li>• Must go across the key players - suggest an e-forum as the easiest way because every-one is time poor, then add other engagement on top of that</li> </ul>
	<ul style="list-style-type: none"> <li>• Most important to regularly update the sector and beneficiaries and those who pay</li> </ul>
Global input suppliers (fertiliser, chemical)	<ul style="list-style-type: none"> <li>• Unsure but necessary</li> </ul>
	<ul style="list-style-type: none"> <li>• Updates and input at cotton conference and regular industry meetings that most of sector attend</li> </ul>
National input suppliers	<ul style="list-style-type: none"> <li>• Must be proactive, coordinator responsible for making it work; must be accountable</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Committee / board of mgt; newsletter; email; blogs; website</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• How, is the problem!</li> </ul>
	<ul style="list-style-type: none"> <li>• Through some kind of panel representative to those needs being</li> </ul>

	<p>met</p> <ul style="list-style-type: none"> <li>• Why not have a specific review event each year - cotton conference would provide a venue where all agri-business attend from each region</li> </ul>
<b>Stakeholder Group</b>	<b>Use a reference or working group to guide it</b>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• Could work in with the CA human capacity panel</li> </ul>
<b>Stakeholder Group</b>	<b>Have a coordinator</b>
Global input suppliers (fertiliser, chemical)	<ul style="list-style-type: none"> <li>• Reference group important to give guidance; coordinator is important to coordinate, communicate and 'be the face'</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• But must work cooperatively with CA &amp; CRDC</li> </ul>
<b>Stakeholder Group</b>	<b>Through the cotton conference</b>
Commodity marketers	<ul style="list-style-type: none"> <li>• Should be broader than just CCA, each organisation uses its special skills</li> </ul>
Global input suppliers (fertiliser, chemical)	<ul style="list-style-type: none"> <li>• Only one venue</li> </ul>
National input suppliers	<ul style="list-style-type: none"> <li>• Showcase successful outcomes</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Should be to showcase successes / industry attributes to uni, teachers, students, schools, etc</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• Allows networking and briefing on successes; maybe some localised working groups there??</li> <li>• Getting the kids involved. At a CCP conference what was about water, very little if anything is discussed about water. Water is so important</li> </ul>
<b>Stakeholder Group</b>	<b>Through the CCA training programs</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• Can be part of the forum process for attendees</li> </ul>
Global input suppliers (fertiliser, chemical)	<ul style="list-style-type: none"> <li>• They are just one player</li> <li>• One of the industry players</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• No knowledge of what CCA does</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• It is aimed only at agronomists we need engineers as well.</li> <li>• Must be tailored to their part of the industry</li> </ul>
<b>Stakeholder Group</b>	<b>Through CCA</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• Can be part of the forum process for attendees</li> </ul>
Commodity marketers	<ul style="list-style-type: none"> <li>• Should be broader than just CCA, each organisation uses its special skills</li> </ul>
Global input suppliers (fertiliser, chemical)	<ul style="list-style-type: none"> <li>• They are just one player</li> </ul>
Machinery suppliers	<ul style="list-style-type: none"> <li>• This is bigger than the CCA; they are players like us all</li> </ul>
National merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• The CCA is a player like everyone else; need a coordinator to do the work + maintain accountability</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Only if best people for job</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• I am a member but it is not relevant to what we do as an irrigation engineer.</li> </ul>
<b>Stakeholder Group</b>	<b>Comments</b>
Agronomic consultancies	<ul style="list-style-type: none"> <li>• Have to get clear focus on direction then look at resources needed</li> </ul>

National merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Before worrying about CCA / cotton conf ask 'who are most influential, best Return on Interest, best buy-in immediately and go with them'; coordinator must be independent so they rise above industry politics and ensure things are 'inclusive'; recognise most businesses are risk averse when planning these types of programs</li> </ul>
	<ul style="list-style-type: none"> <li>• May not be CCA, maybe UNE takes lead role, have to address perception of consultants being at logger heads with bigger agri-businesses</li> </ul>
Regional merchandise resellers with advisers	<ul style="list-style-type: none"> <li>• Mgt has to be practical and realistic in its outcomes</li> </ul>
Specialist private consultancies (non-agronomic)	<ul style="list-style-type: none"> <li>• Cotton courses not the cotton conferences has no relevance</li> </ul>
	<ul style="list-style-type: none"> <li>• Please don't build massive team; create a one-stop shop; ensure it delivers real results; all beneficiaries must put real \$ on the table</li> </ul>
	<ul style="list-style-type: none"> <li>• Everyone is so short staffed already that I think we need to avoid duplication and work to maximise anything that exists and that works already. CA has recently undertaken a synergy analysis to strategically target gaps and find partners in existing programs to leverage investment - I'm guessing that this project is already communicating about how to work together but wanted to highlight it.</li> </ul>

### 3.7 General Comments

Closing comments made by participants in response to the program are detailed below.

#### **Agronomic Consultants:**

- *While CRDC and CA ought to take initiating role, others like us could put in small amounts to kick-start it; this is very important to industry strategic direction and viability; strong need to get started on it*
- *Very important to take the initiative; if value for money we will pay; must be practical*

#### **Commodity Marketers:**

- *Cotton is being pushed by mining all the time; big issues is generational exit through older more experienced personnel; hard to find right people regionally*

#### **Global input suppliers (fertiliser, chemical):**

- *Important to get this going; all of industry must engage; keep commercial sensitivities out of it - bigger than that*

#### **Machinery suppliers:**

- *Need to be very clear what gaps need to be filled; our representation might be through Tractor and Machinery Assoc - contact is Matt King, CNH Australia; this should work well in cotton then be rolled out wider*

#### **National input suppliers:**

- *Maybe Incitec Pivot could start a graduate program in cotton? Very keen to work with cotton industry*

#### **National merchandise resellers with advisers:**

- *Over-riding issue is 'what will our cotton industry look like in 10-years and plan accordingly*
- *General lack of commercial acumen about \$ and risk mgt and sales as outcome of business, have to change perceptions of careers counsellors and teachers, industry must become outward looking / expansive, what are they doing globally that works and we can do?*

### **Regional merchandise resellers with advisers:**

- Needs to be complete industry wide buy-in so a unified approach taken
- Must take united approach across industry
- Each time we use an Agency (for staff recruitment) it costs us \$15k - so we would put that money into this if it stopped this spend; everyone who uses this program should pay - as agri-business doesn't put real \$ into CRDC / CA; we need to focus on our salesmanship to promote our industry to the most important influencers / users; we simply can't find the talent - we have 7x agro vacancies at present and can't fill them; ethically we won't poach staff

### **Specialist private consultancies (non-agronomic):**

- People in these programs must be personally committed; they must appreciate what is being done to benefit them
- An area not covered is the void left by the diminished DPI services. This was a key training ground for many of the consultants I respect who are now private. It was a highly sought after graduate destination as it offered a secure wage with the opportunity to learn and be mentored by senior and experienced researchers, technical staff and extensionists. It also offered a career pathway for those interested in ag research. I think the career pathway for those interested in ag research is now largely eroded as DPI offers very few opportunities to pursue this - this is turn will deter part of the group who would have pursued ag at uni. I think as an industry we need to work out how we address this gap structurally as it's unlikely that particularly QDPI will be funded to an extent that they can play this role again in the short term, enforced also but the fact that many of their senior staff have left or are retiring shortly. DPINSW is also in the process of contracting.

### **3.8 Head of Agri-business – national agri-business bank respondent**

As noted above one national agri-business bank respondent (role of Head of Agri-business) supplied a range of qualitative comments rather than answering the pre-planned questionnaire, due to his desire to have input, while having a lack of time when approached at the Cotton Conference. His overall comments are reported below:

- The biggest question is how to make agriculture attractive to young people
- There are a range of missed opportunities – we can't afford to miss anymore
- This requires very rigorous thinking at a highly strategic level
- His bank gets their recruits direct from uni – with a generalist background
- They seek 10 students / year Australia wide
- Ideally they want students with Ag Science / Ag Economics or commerce qualifications
- They must be suitable to enter into a regional agri-business community – and be able to operate across all industries generally
- His bank has 2x specialist cotton personnel – in the central and southern parts of the cotton region
- His personnel numbers could decrease due to access to more specialist technologies and farm consolidation
- His bank is predicting bright rural future for graduates – with new and novel things occurring
- The industry is expected to become more integrated generally – with less call for specialist personnel

In summary his bank would like to be part of the discussion about this cotton project – with a possible longer term involvement as a supporter.

### **3.9 Willingness to engage in future**

A range of respondents were asked in an unstructured way about the extent to which they would be personally prepared to engage with the industry and contribute to future thinking about this issue.

All those asked agreed to be further engaged. Some were advised about a potential roundtable discussion which may be convened in future. Most indicated interest in personally or others in their organisation being involved to that extent in strategic thinking.

## 4. Key Findings and Implications

In this section the key findings of the data in Section 3 are reported and the implications are considered.

The ability to interpret implications is somewhat restricted due to the commitment made to the majority of respondents of respondents that their anonymity would be respected. They generally preferred to be reported on a sub-sector basis rather than by company / staff member name. Accordingly a 'sector based reporting' process is used.

### 4.1 Organisation Details

During development of the questionnaire it was identified that potential respondent categories of Type of Organisation could be:

- National merchandise resellers with advisers
- Regional merchandise resellers with advisers
- Global input suppliers – fertiliser, chemical
- National input suppliers
- National banking and finance
- Commodity marketers
- Specialist private consultancies – non-agronomic
- Agronomic consultancies
- Machinery suppliers
- Corporate / larger family cotton growers
- Other

Figure 1 demonstrates that this second stage project review of cotton industry Agri-business professional development included 13 representatives who were involved in the first project review as well as another 10 who had not participated during the first round. Of the total of 23 participants, the largest groups represented in the second round included Agronomic Consultancies (22%, 5 respondents), Regional Merchandise Resellers with advisers (18%, 4 respondents) and Specialist (non-agronomic) Private Consultancies (17%, 4 respondents).

#### 4.1.1 Key findings

Past project respondents show continued interest in participating in work that addresses their succession and professional development needs. 'New respondents' show similar levels of interest – and represent a wider industry group of respondents – including machinery dealers, input suppliers and banks.

#### 4.1.2 Implications

The implications for this project are that that the respondents can be considered a group of 'informed persons' and that their views can be considered to be broadly representative of the cotton agri-business sector.

### 4.2 Additional Staff Requirements

Ten participants who had not participated during the first stage review were asked to predict the likely number of additional personnel required over the next 5 years. Five participants provided details, the others noting they were unable / unwilling to predict numbers, and making comments only. One Specialist Private Consultancy noted they are looking for *trainee Graduates in Science Agronomy*. A Machinery Supplier noted, *we increasingly need hands on practical Advanced Engineer type technicians*.

One Commodity Marketer notes a need for 3 sales staff and 8 Agronomists. A National Input supplier reports the need for an additional 5 sales staff and 1 agronomist, noting that their company currently outsources the R&D to resellers and specialists, including Peracto. A Global Input supplier notes the need for an additional 3 sales staff and 5 R&D staff as well as territory managers.

#### **4.2.1 Key findings**

These results can be used to add to and confirm the needs identified by respondents during the first round review that there is a lack of young professionals entering the agricultural arena. The need for additional sales staff and agronomists continues the trend identified in the first round project by adding a defined need for the following cotton agribusiness personnel over the next 5 years – 11x sales staff, 9x agronomists, 5x R&D staff and ‘practical Advanced Engineer type technicians’.

#### **4.2.2 Implications**

These reported additional staffing requirements are justification that the industry is in need of a more resolute approach to, and successful implementation of, a strategic cotton industry program focussed on succession and professional development.

### **4.3 Priority Needs for Their Own Organisation**

In the context of issues emerging as most important to them in running/managing their own businesses, participants were asked to prioritise those activities which would be most important to their organisation over the next 5 years. The activities which participants rated and discussed were in priority:

1. Creating a supply chain of young people into the industry
2. Establishing a mentoring program for key personnel
3. Changing young people’s perceptions of the industry
4. An outreach program to demonstrate the value and benefits of working in the cotton industry
5. Learning from known programs including the PICSE model and the Qld Resources Council personnel program
6. Understanding the industry implications of an aging current workforce
7. A coordination / sourcing role for training opportunities; workplace placements and creating a source of HR and training resources
8. A clearing house for good industry examples of succession / professional development that could be learned from – and that supports cotton agri-business networking opportunities .

Based on an average rating, participants rated *creating a supply chain of young people into the industry* (average priority rating 1.304) as the highest priority to their organisation over the next 5 years. This was followed by *establishing a mentoring program for key personnel* (average priority rating 1.522), *changing young people’s perceptions of the industry* (average priority rating 1.609) and *creating an outreach program to demonstrate the value and benefits of working in the cotton industry* (average priority rating 1.652).

The activity rated as being the least important priority over the next 5 years was *creating a clearing house for good industry examples of succession / professional development that could be learned from – and that supports cotton agri-business networking opportunities* (average priority rating 1.652).

#### **4.3.1 Key findings**

Creating a supply chain of young people into the industry was reported by industry representatives as being the highest priority concern for their own business – and therefore any wider industry program focused on meeting their succession and professional development needs. This was followed by in order of priority – the establishment of mentoring programs, changing young people’s perceptions of the industry and outreach programs. Comments regarding these priorities included the fact that ... *work needs to be done to promote agriculture as a career ... not just (being just) career rewarding but financially rewarding.* It was further noted that the industry needs a ... *futuristic strategic approach*, to attract young people to the industry. “Grad link” is highlighted as a good program and a good way to *encourage and to introduce graduates who (are) interested.*

Participants acknowledged the importance of accessing a coordination/sourcing role for training opportunities and work placements, as well as the importance of learning from known programs including the PICSE model and the QLD Resources Council personnel program.

#### **4.3.2 Implications**

Respondents commented that, for all proposed activities, it ... *is important to have a whole of agricultural industry approach; not just cotton*, and in particular ... *an industry wide approach is important in creating a supply chain of people.* The importance of connecting with students is highlighted by participant comments such as ... *connect with students in year 10 – this must be via a ‘Call to Action’ starting in years 8-10.* It is also important to ... *influence senior personnel in education systems that influence young people’s career decisions.*

In context of an agriculture wide approach it is noteworthy that cotton is a relatively homogeneous, defined and forward thinking industry. In that respect, the cotton industry could well be regarded at an agriculture wide level as being a valuable ‘trial industry’ in which to commence such as initiative.

It is also noted that the implications of an aging workforce were rated as a lower priority by participants in relation to the needs of their own business. Some participants felt the industry was not as affected by this issue commenting: *the cotton industry will attract the cream of the industry.* It was suggested that the more likely issue is that the industry is not seen as a career path, commenting: *the modern generation do not see a career as lifelong ... they think of (it in) three years terms and because the cotton industry runs in cycles, business people move on.*

These comments confirm the need to change young people’s perceptions of the cotton industry, establish outreach programs, mentoring programs and the opportunities for professional development.

#### **4.4 Meeting Expected Future needs of the Cotton Agri-Business Sector**

The findings of the previous review created a focus to establish the current priorities for an industry based strategic approach, aimed at meeting the expected future succession and professional development needs of the overall cotton agri-business sector. The reactions to these priorities are detailed in Figure 3 and Table 4.

The current issues and priorities for an industry-wide strategic program are, in order:

1. Attract more of the right people (young people)
2. Mentoring for young persons
3. Ensuring universities develop more relevant courses
4. Increasing cotton industry skill levels
5. How to position the cotton industry as employer of choice

6. Professional Development in technology and online based applications
7. Increasing value of (specifically) the Cotton Conference and/or CCA training.
8. Address structural issues such as pay, training, professional development, overseas professionals
9. Supporting specific industry technical training
10. Maximising regional training opportunities
11. Ensuring universities supply students 'job ready'
12. School and curriculum input
13. The extent to which cotton could feature in school curriculums
14. Stronger industry networks amongst industry/agri-businesses/consultants
15. Focusing on potential (changes?) In UNE Cotton Course
16. Seeking out business development courses.

The rankings were – Attracting more of the right people into the industry (average priority rating 1.217), Mentoring for young person's (average priority rating 1.273), ensuring unis develop more relevant courses (average priority rating 1.429) and increasing cotton industry skill levels (average priority rating 1.478) were rated as the highest priority industry based strategies aimed at meeting the expected future needs of the cotton industry. Those strategies rated as the least priority included focusing on potential (changes?) In UNE cotton course (average priority rating 2.133) and seeking out business development courses (average priority rating 2.304).

#### **4.4.1 Key findings**

The highest priority was creating a supply chain of people into the industry – in line with this finding; it is implicit that effort should be directed towards attracting more of the right people into the industry. It is notable that amongst the industry representatives, there was a level of concern as to how to attract more of the right people.

It was also noted that the age of staff is a lesser concern; rather it is that the industry needs people who are prepared to be challenged and will participate willingly in its growth and development. This is closely related to the need to position the cotton industry as an employer of choice, encouraging professional development in technology and online applications, specific industry technical training as well as addressing structural issues such as pay and training.

The second priority was mentoring of these key personnel. The third priority was focussed on the role of universities and school curriculums in relation to increasing the level of skills in the cotton industry. It was suggested that strategies be developed to ensure universities develop more relevant courses, and the possibility of supplying students *job ready*. Including cotton in school curriculums and the input of schools towards an industry based approach to meeting future agri-business needs, although rated as a lower priority, was discussed by participants as being of value to the industry overall.

#### **4.4.2 Implications**

In terms of creating an industry wide strategic approach to succession and professional development, it is apparent that the most important issue is to attract firstly the right quality and secondly the right quantity of the 'right people'. They cannot necessarily be expected to be job ready, however the universities clearly have a strong role to play in this process and that industry mentoring plays an equally important role – and is one that the agribusiness sector is prepared to champion and support.

While these are somewhat complex issues, they must somehow be addressed. The fact that respondents reported willingness to contribute and to support such a process, provides real value and benefit to the intent to change industry circumstances.

#### **4.5 Organisation Contribution**

The Organisational contribution towards the implementation of the *proposed industry program*, as detailed in Figure 4, included support of *In-kind contribution* (average priority rating 1.318), followed by the *relative contribution of agri-business direct and CA and CRDC and in-kind* (average priority rating 1.357) and *fee for service* (average priority rating 1.526). The contribution type rated the lowest priority was a *combination of direct financial contribution, in-kind contributions and sponsorship (where between \$1001-5000/year would be a fair financial contribution)*, (average priority rating 1.550).

##### **4.5.1 Key findings**

In-kind contributions are the most likely way in which industry representatives felt their organisations could contribute to making the program work. Some note that their organisations are already running these types of programs including *internal training, a graduate agro course and summer scholarships*. Overall participants support these programs and are happy to assist.

*In terms of the relative contribution of agri-business, CA and CRDC*, several participants commented that perhaps CA and the CRDC should (not) have a major involvement in the program, as they use *grower funds (and) this is an agri-business sector issue – it is our responsibility, so a joint venture is appropriate*. It is noted that as the CRDC and CA have ... *alot of calls on their funds, beneficiaries should pay* and CRDC and CA could / should ... *provide basic underwritings*. As one participant notes, it should be a ... *'those who benefit pay' approach*.

Fee for service is noted is an option, *as long as it is relevant; happy to pay for relevant training opportunities* and it is based on a *value offering*.

The discussion relating to the combination of direct financial contribution, in-kind contributions and sponsorship was an option that several participants are open to and *happy to discuss*. However this option would depend on the programs being offered.

##### **4.5.2 Implications**

It is apparent that the cotton agribusiness sector is happy to contribute to the industry wide program in varied ways, as long as it is considered 'value for money'. While there was not a specific question asked to all respondents on exactly how they would contribute, of those who commented in general discussion, most were also happy to contribute to some form of roundtable discussion on exactly how this would be implemented.

The use of a roundtable discussion would potentially cement their way of making a contribution – as such a discussion can be structured to result in some form of buy-in / agreement with the key concepts at some level. This could be to contribute directly through funds, or more likely indirectly through defined industry support that is yet to be finalised / formalised. The type and level of such support could be canvassed in detail at such a meeting.

It was also apparent that, if CRDC and CA were to take an 'initiating' or 'seed funding' role, over time the cotton agribusiness sector generally felt it could be expected to continue to increase its contribution in collaboration with CRDC and CA. If the program yields strong and tangible results, it could also be expected that the cotton agribusiness sector may well increase the level of its direct and indirect financial contribution.

As noted earlier, this program could form an interesting agriculture industry wide pilot study to showcase the implementation of an industry wide succession and professional development program.

#### **4.6 Strategies to implement program**

Figure 5 details suggested strategies for the implementation of a proposed 'industry' program. Almost all participants indicated that the implementation of the program should involve *engaging regularly with the agribusiness sector, should be guided by a reference or working group* and should be *led by a coordinator*. In terms of delivery, some participants (12) felt the program should be *implemented through the Cotton Conference* and through *CCA training programs* (6) or *the CCA* (6).

##### **4.6.1 Key findings**

In terms of program implementation regular engagement with the agri-business sector is clearly vitally important. Strategies mentioned as possibilities included: *a 'panel' that is independent, coordinator is panel chair; an e-forum as the easiest way; regularly update the sector and beneficiaries; specific review event each year and Committee / board of management; newsletter; email; blogs; website.*

Delivery through the Cotton Conference is highlighted as being valuable, *allowing networking and briefing on successes and showcasing success*. In terms of CCA involvement, it is felt that the delivery of this program is possibly *bigger than the CAA; they are players like us all*.

##### **4.6.2 Implications**

The key elements of how to best manage such a strategic program are to have:

- An independent panel, board of management or reference group to guide the project
- A project manager who could be panel chair to manage the project
- A regular process of engaging with the agribusiness sector –to brief it on progress and obtain input regarding future plans
- Varied engagement processes that would include – an e-forum / newsletter / blog, an annual review or briefing session at the Cotton Conference and / or the CCA meetings, plus a dedicated or shared website
- The engagement processes that not only seek input and outline progress, but also outline success stories that other cotton agribusinesses could use.

The project leader of this project, Gordon Stone, has some experience in developing such strategic programs and leading them through their infancy. One such program was the development of an Agribusiness Engagement Strategy undertaken for the Grains R&D Corporation (GRDC). Lessons can be learned from that project and applied to this one.

## 5. Discussion

The focus of this project was to consider the likely level of support for a Strategic Program that would address key succession and professional development issues in the cotton agribusiness sector, in terms of:

- What would be the key issues for attention?
- What would be the key factors affecting how to address these key issues?
- What level of support would the sector be prepared to supply – and how?
- How would such a program best be run?
- To what extent would the sector be prepared to assist / buy in?

### 5.1 Professional roles most sought over the next 5-years

Drawing on the findings of the original review reported in March 2012 and drawing on the results of this project, the following projected numbers and roles of cotton agribusiness personnel required by 2016 is updated. It is noted that – making predictions about likely staff numbers in the cotton industry has a high degree of uncertainty, 3 additional respondents in late 2012 predicted actual numbers required in 5-years and 2 made general comments. These predicted numbers have been extrapolated as they were for the March 2012 report:

Personnel / Role	Nos. from 2011/12 review	Additional Nos. from 2012 project	Additional Nos. with multiplier (nos. were doubled)	Projected numbers required in 2016
Agronomists	65	9 (and say +3?)	22	87
Researchers	34	5	10	44
Professional water engineers	2			2
Technicians	2	3? (machinery)	6	8
Science Graduates	4			4
Sales (agronomist)	4	11	22	26
Plant Pathology	2			2
Plant Breeder	2			2
Other	4			4
<b>New total – end 2012</b>				<b>179</b>

As outlined in the March 2012 report, these numbers of 180 personnel required in the next 5-years do not make allowances for a range of occupations including – Senior/strategic professional management staff, Farm managers, Management Staff, Business Advisors, Finance personnel including CFOs, IT and electronics personnel, as well as company directors. Nor do they make allowance for retiring or departing personnel from the industry.

#### *Conclusion:*

Close to 180 professional university trained cotton industry agri-business personnel, of agronomists, researchers, engineers, technicians, science graduates, sales, pathologists and breeders are likely to be required in the industry by 2016. They do not make allowance for a range of other occupations, nor of retiring or departing personnel.

The type of scan proposed in the March 2012 report remains valuable to create a more accurate forecast of numbers and types of personnel needed in particular time scales and locations.

### Recommendation 1

That a more comprehensive scan of professional cotton agri-business personnel needs is undertaken as part of the proposed cotton agribusiness succession and professional development program – see March 2012 report for detail.

## 5.2 The focus of an industry based strategic program

The top priorities, regarding what agribusiness personnel consider is most important for their own business needs, and for the wider industry program, reveal some common findings. Due to likely program management and funding constraints, the top 5x priorities from each are highlighted in bold type as being most important. This doesn't preclude others (highlighted in italics), as many are relevant and aligned to the top five priorities:

<b><i>Priorities for their own business / organisation</i></b>	<b><i>Priorities for an industry wide program</i></b>
<ol style="list-style-type: none"> <li>1. Creating a <b>supply chain</b> of young people into the industry</li> <li>2. Establishing a <b>mentoring</b> program for key personnel</li> <li>3. Changing young people's <b>perceptions</b> of the industry</li> <li>4. An outreach program to <b>demonstrate the value and benefits</b> of working in the cotton industry</li> <li>5. Learning from <b>known programs</b> including the PICSE model and the Qld Resources Council personnel program</li> <li>6. Understanding the industry implications of an <i>aging current workforce</i></li> <li>7. A coordination / sourcing role for training opportunities; workplace placements and creating a source of HR and training resources</li> <li>8. A clearing house for <i>good industry examples</i> of succession / professional development that could be learned from – and that supports cotton agri-business networking opportunities .</li> </ol>	<ol style="list-style-type: none"> <li>1. Attract more of the <b>right people</b> (young people)</li> <li>2. <b>Mentoring</b> for young persons</li> <li>3. Ensuring universities develop <b>more relevant courses</b></li> <li>4. Increasing cotton industry <b>skill levels</b> *</li> <li>5. How to position the cotton industry as <b>employer of choice</b></li> <li>6. Professional Development in <i>technology and online based applications</i></li> <li>7. Increasing value of (specifically) the Cotton Conference and/or CCA training.</li> <li>8. Address structural issues such as pay, training, professional development, overseas professionals</li> <li>9. Supporting specific industry technical training</li> <li>10. Maximising regional training opportunities</li> <li>11. Ensuring <i>universities supply students 'job ready'</i></li> <li>12. <i>School and curriculum input</i></li> <li>13. The extent to which <i>cotton could feature in school curriculums</i></li> <li>14. Stronger industry networks amongst industry/agri-businesses/consultants</li> <li>15. Focusing on potential (changes?) in UNE Cotton Course</li> <li>16. Seeking out business development courses. * including professional development of current personnel</li> </ol>

Additional relevant Comments on these priorities and notes regarding the Implications of them are reported below. The key issues of interest / relevance are italicised:

<b>Relevant comments</b>	<b>Relevant comments</b>
<ul style="list-style-type: none"> <li>• Need to promote agriculture as a career – a satisfying career – and a financially rewarding career</li> <li>• A futuristic and strategic approach needed</li> <li>• Existing programs like ‘Grad Link’, PICSE and Qld Resources Ccl are a good way to start</li> <li>• Support training and work placements</li> </ul>	<ul style="list-style-type: none"> <li>• How to attract the right people – with right personal characteristics?</li> <li>• Need to have personnel who are prepared to be challenged and participate in a changing industry</li> <li>• Mentoring is a key starting point for engaging the right people</li> <li>• Need more up to date thinking in unis</li> <li>• Employer of choice characteristics are crucial</li> </ul>
<b>Implications</b>	<b>Implications</b>
<ul style="list-style-type: none"> <li>• Need to take a whole of agriculture approach vs. use cotton as a pilot study / trial industry</li> <li>• Start with <i>students in Yr 10</i></li> <li>• Use a <i>call to action</i> for students</li> <li>• Also try to influence senior educators who influence career decisions</li> <li>• Does cotton supply a career path?</li> <li>• Will cotton attract the cream of the crop?</li> <li>• How does industry thinking align with the thinking of the current generation (3-yr periods)</li> <li>• Cotton industry runs in cycles and people move on</li> </ul>	<ul style="list-style-type: none"> <li>• A strong focus is needed on getting the right people</li> <li>• No need for job ready – <i>on the job mentoring is the best support</i> for that process</li> <li>• Need to engage with unis to change their thinking</li> <li>• A strong focus needed on good management and retention strategies once we get them into the industry</li> </ul>

**Conclusion:**

The cotton agribusiness sector appears to have a clearly articulated appetite to engage in a Cotton Industry Wide Succession and Professional Development Program.

The highest priority activities for such a program are to:

1. Use the networks and relationships formed during creation of a cotton agribusiness professional development and succession program to undertake a more accurate scan of future cotton agribusiness job and personnel needs
2. Briefly review the Key Success Factors or KSFs of existing, demonstrably successful, personnel acquisition and professional development programs – both within and external to the cotton agribusiness sector – and base future work on those KSFs
3. Create a supply chain of the most suitable and mostly young people, who are prepared to undertake challenging yet rewarding cotton industry careers and who will contribute to satisfying future industry professional personnel needs
4. Identify the most relevant university courses that fit with future industry needs and develop strong relationships with those universities, to collaboratively identify ways to maximise student entry into and exit from those courses into rewarding cotton industry careers
5. Maximise the extent and value of current cotton industry programs in schools, to feed the right students into the most relevant university courses to meet the expected future cotton industry personnel needs

6. Create an outreach program to demonstrate the value and benefits of cotton careers focussing initially on mentoring and on-the-job type activities such as internships, cadetships, etc including outreach into current workers through professional development programs (yet to be defined).

Activities 1 and 2 are proposed as being concurrent to the establishment of such a Program.

Such a Program will be dependent on strong continued engagement across the cotton industry and continued buy-in from the cotton agribusiness sector. The level of cotton industry agribusiness buy-in must be monitored over time and a program implemented accordingly to facilitate regular robust reporting.

### **Recommendation 2**

That the six highest priority activities outlined in this report form the basis of the proposed Cotton Agribusiness Succession and Professional Development Program that commences as soon as practicable.

### **Recommendation 3**

That the buy-in of the cotton agribusiness sector is a crucial element of the Program and its level and extent is monitored over time.

## **5.3 Organisation Contribution**

Many project respondents reported that they were prepared to readily support in-kind contributions to the proposed Cotton Agribusiness Succession and Professional Development Program. A number noted that they are already running programs including internal training, a 'graduate agro-course' and summer scholarships and are happy to extend these activities / assist in the proposed Program. Some reported willingness to contribute their knowledge of 'what works / does not work and why' to the Program. This knowledge could form part of the Program contribution to the wider industry.

For some organisations fee-for-service was an option if suitable activities were made available through the program. There was a general feeling that a 'user-pays' or 'beneficiary-pays' principle should be a core element of the Program. While some minor disagreement was evident, there was a general feeling that it would expedite matters if a CRDC and CA funding consortium was to commence the program. Then through structured engagement in the initial phase, the focus could be on the cotton agribusiness sector taking a greater role / greater self funding into the future.

Overall though, the view was that the Program should be regarded as a Joint Venture (JV) between CRDC, CA and the cotton agribusiness sector, with initial underwriting or 'seed funding' from CRDC and CA and an intent that the agribusiness sector's contribution would increase over time.

The main issue appeared to get the program underway. Most were happy to contribute to a roundtable discussion on exactly how this would be occur. The type and level of continued activities and support could then be canvassed at such a meeting.

### *Conclusions:*

There is a desire by the cotton agribusiness sector to get started on such a Program in a JV between the CRDC, CA and the cotton agribusiness sector. Accordingly an initial roundtable discussion to canvass a range of issues appears the best first step. This is proposed to occur early in 2013.

The purpose of the roundtable discussion would be to have the key ideas presented to a representative sample of project respondents as a scenario for consideration.

The meeting could review and modify those issues and sign off some form of 'document of intent' to get the Program underway. Issues of program, process, representation, activities, funding, etc would all need to be canvassed and agreed to some extent at that meeting.

#### **Recommendation 4**

That a roundtable discussion is convened in first quarter 2013 to discuss and sign-off a strategy to commence work on the Program.

#### **Recommendation 5**

That a scenario paper, based on this report, is presented at that roundtable to stimulate robust discussion to the extent that sign-off on a suitable Program intent and activities can be achieved.

It is noteworthy that this program could form an agriculture industry wide pilot study to showcase the implementation of such a Program.

#### **Recommendation 6**

That the project personnel regard this as an agriculture industry wide pilot study, so that the learning's can be conveyed to others in the industry.

### **5.4 Strategies to implement program**

A number of suggested strategies for the implementation of a proposed 'industry' program were canvassed in context of key issues identified in the March 2012 report. It is notable that almost all participants indicated that the implementation of the program should involve engaging regularly with the agribusiness sector, should be guided by an independent cotton agribusiness based reference or working group and should be led by a coordinator.

While the Cotton Conference and CCA programs featured as methods of continued annual engagement, other proposed methods of industry updating and input by the cotton agri-business sector included a newsletter; email; blogs; website, etc. Other issues included to – *allow networking and briefing / showcasing successes*. In terms of CCA involvement, it is felt that the delivery of this program is possibly *bigger than the CCA; they are players like us all*.

It was concluded that key elements of how to best manage such a strategic program are to have:

- An independent panel, board of management or reference group to guide the project
- A project manager who could be panel chair to manage the project
- A regular process of engaging with the agribusiness sector – to brief it on progress and obtain input regarding future plans
- Varied engagement processes that would include – an e-forum / newsletter / blog, an annual review or briefing session at the Cotton Conference and / or the CCA meetings, plus a dedicated or shared website
- The engagement processes to not only seek input and outline progress, but also to outline success stories that other cotton agribusinesses could use.

These issues could initially be canvassed at the roundtable discussion outlined above.

The experiences of this project leader, Gordon Stone, particularly in the development of an Agribusiness Engagement Strategy (through creation of a National Agribusiness Reference Group and Regional Agribusiness Reference Groups) undertaken for the Grains R&D Corporation (GRDC) could prove valuable. These included:

- The project leader acting as chairperson for the initial establishment period – in that case one year – while the project and the reference group personnel became clear on how the project scope would be delivered in a practical sense
- The Reference Group consisting of a representative group of senior agribusiness personnel (resellers, consultants and suppliers) who could represent their organisations / sector while speaking about issues on behalf of the whole sector. All representatives had decision making authority – so that decisions could be taken during meetings without reference to others
- Senior GRDC representatives attended – again so that decisions could be taken during meetings
- Quarterly meetings – a range of meetings at national and regional level were held. They were all agenda based with pre-reading of relevant papers on key issues that had emerged from previous meetings. Nationally one meeting was held at the GRDC head office to allow agribusiness personnel to meet GRDC senior staff and with other meetings being held in regional locations
- Creation of an Annual Plan of issues to be covered and addressed – which was in context of a broad 5-year strategy focused on defining and delivering on outcomes related to the purpose of the project (this had been developed during the initial scoping phase and signed off at the second meeting).

*Conclusions:*

The key elements of implementing the Program appear to be best focussed on – an independent panel, board of management or reference group to guide the project; the input of CRDC and CA; an independent contracted project manager who could be initial panel chair to manage the project in accordance with the panel's needs and interests; a regular process of engaging with the agribusiness sector – to brief it on progress and obtain input regarding future plans; plus varied engagement processes focused on personal interaction with the sector at key events and also electronically .

The engagement processes would seek input and outline progress, while also outlining success stories that other cotton agribusinesses could use.

The panel could represent the various cotton agribusiness sectors, commencing with representatives of the project respondents. They would be varied / confirmed at the proposed roundtable discussion in first quarter 2013, which would meet potentially quarterly thereafter. Initially the panel would need to ensure a defined longer term vision is scoped out, so the annual activities have some context in which to operate and the evaluation process has some outcomes to monitor to demonstrate the panel / project effectiveness.

**Recommendation 7**

That the Program implementation is based around – having an independent agribusiness dominated panel to guide the project which includes senior CRDC and CA personnel; management by an independent contractor who has a responsibility to meet all stakeholder's needs and interests; a defined focus on meeting key outcomes signed off at the initial roundtable meeting in context of a 5-year strategy; such a strategy to be developed by conclusion of Meeting 2 and followed by regular annual industry engagement at a face-to-face and electronic level.

**5.5 Summary**

The March 2012 report proposed the creation of a Cotton Agribusiness Succession and Professional Development Program late in 2012, once a level of certainty existed regarding the extent of buy-in from the cotton agri-business sector.

This project investigated the extent to which the cotton agribusiness sector would support such a Program and the expected level of buy-in, including how it would best be structured to secure their

engagement and support. If they did support the Program, this project's purpose was to define how it would function and its key areas of focus.

Through this project, it is apparent that there is agreement and buy-in to such a Program.

A roundtable discussion of invited members of the cotton agribusiness sector, and senior CRDC and CA personnel is proposed for 1<sup>st</sup> quarter 2013. At that time, the full terms of reference would be canvassed so the Program could become operational rapidly. The Program would become operational through the provision of resources initially funded by CRDC / CA, then expanded through some form of a JV with the cotton agribusiness sector that is yet to be formalised.

The Program would operate in strategic annual and 5-year context and report back to industry. A monitoring and evaluation function is proposed to support structured reporting back to funders and the industry on the level of success of the Program in achieving the objectives that had been set.

The findings of this project provides a high level of confidence that the Program will be a success and will achieve the outcomes originally envisaged. One area that will require greater attention is the ability to better support professional development of existing personnel.

## Attachment 1 – Succession / Professional Development Questionnaire for the cotton agri-business sector

### Introduction for 2012 project respondents

Hi my name is ..... I am one of the project team members. And I am following up on an email you would have recently received from Gordon Stone, about *Succession and Professional Development in the cotton agri-business sector*. The reason we are calling is because you participated in a CRDC benchmarking survey for this review last year.

CRDC have now asked us to get further feedback and advice on the expected level of support from the agri-business sector in implementing the Action Plan recommendations.

We have several questions we would really like to run through with you, they will take about 20 minutes to complete. Your responses will remain anonymous. Would you mind helping us out and when might be a good time for you?

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### Further information if required to explain to participants:

In summary the report we prepared earlier this year proposed a cotton industry succession and professional development program. This is clearly **a necessary innovation to address areas of market failure and the need to support the development of the cotton agri-business sector into the future.**

There appears strong industry support and buy-in as a result of our initial enquires earlier this year. The **proposed questions I am going to ask you, provides a check of the level of real buy-in early in the process**, to ensure the agri-business sector commitment remains high and they are prepared to take a real stake in the successful outcome of the proposed program.

Based on the data that has emerged from this project, the following key issues of interest to the industry were raised. Recommendations were made relating to each of these issues. Our questions today aim to determine the level of support for the recommendations we made.

You might remember that the questionnaire we are about to go through – a copy of which was sent to you – was built around some assumptions that summarise the main findings of the report. Would you like me to explain them in more detail, or would you like to just get on with the questions?

If yes start Qs – if No go to the below ...

These were in summary:

### 2. The expected professional staffing needs of the cotton agri-business sector over the next 5-10 years

We recommended that the cotton industry moves swiftly during 2012 to create strong relationships and partnerships with suitable universities to secure the well over 100 undergraduates expected to be needed in the next 5-years to service the needs of the cotton agri-business sector.

We then recommended that the cotton industry moves swiftly during 2012 to secure the future relevance of the UNE Cotton Course in all its forms to service the needs of the cotton agri-business sector. (This recognises that UNE are changing their course at present to make it more relevant. There was also some discussion regarding whether they would create some professional development / short courses – we are unsure where this is up to, tho' they are aware from this project of the agri-business sector's views).

### 3. Factors affecting succession and professional development in the cotton agri-business sector

This all lead us to recommend that an industry based strategic approach to professional development (and industry succession) warrants serious consideration in the cotton industry.

### 4. The extent to which a program – focussing on young professionals and/or cotton industry succession and professional development – is relevant to the future of the industry

We suggested that the proposed cotton industry succession and professional development program would commence its focus on the priority issues identified from this study.

Then we recommended that a highly contemporary name relevant to a 'vibrant, creative and exciting cotton industry' ought to be created as a public signature statement and its creation could be posed as a challenge for participants in for example, a cotton PICSE program, where young people gather.

### 5. The extent to which current service providers could or would support addressing identified cotton industry succession and professional development issues.

#### **Recommendation 8**

Finally we recommended That one of the first roles of the proposed cotton industry succession and professional development program in 2012 is to secure a 5-year graduate supply chain of young people from Years 11 and 12 and through partner universities; using the resources of the PICSE program and RIRDC, to lock-in the maximum numbers of young people it can acquire to meet the industry needs identified above.

## Standard Questions for all respondents – previous and new

These questions are based on the following assumptions emerging from the 2011/12 project:

**Assumption 1** – industry seeks more ‘right’ young people in 5yrs; starting at school and thru uni, in professional roles, eg. agros, researchers, engineers, IT, technicians, sales, plant specialists, etc.

**Assumption 2** – an industry succession and professional develop’t program would assist based on joint funding by industry (CRDC, CA) and beneficiaries, with Agri-business putting in \$ and/or in-kind.

**Please note neither names nor organisations will be attributed:**

Name: \_\_\_\_\_ Role: \_\_\_\_\_

Organisation: \_\_\_\_\_ Type: \_\_\_\_\_

Organisation Category options are (please tick):

- National merchandise resellers with advisers
- Regional merchandise resellers with advisers
- Global input suppliers – fertiliser, chemical,
- National input suppliers
- National banking and finance
- Commodity marketers
- Specialist private consultancies – non-agronomic
- Agronomic consultancies
- Machinery suppliers
- Corporate / larger family cotton growers

Other: \_\_\_\_\_

If your organisation was not included in the survey in 2011/12, please predict likely numbers of additional personnel required over the next 5-years, in which categories:

- Senior / strategic management
- Staff management
- Sales
- Agronomic advice to self / clients
- R&D or trials
- Other: \_\_\_\_\_

1. What is most important to your organisation over the next 5-years (prioritise each item, 1=highest to 3=lowest) with comments:

- Creating a supply chain of young people into the industry \_\_\_\_\_
- Changing young people’s perceptions of the industry \_\_\_\_\_
- Understanding the industry implications of an aging current workforce \_\_\_\_\_
- Establishing a mentoring program for key personnel \_\_\_\_\_
- A coordination / sourcing role for training opportunities; workplace placements and creating a source of HR and training resources \_\_\_\_\_
- A clearing house for good industry examples of succession / professional development that could be learned from – and that supports cotton agri-business networking opportunities \_\_\_\_\_
- Learning from known programs including the PICSE model and the Qld Resources Council personnel program \_\_\_\_\_

- An outreach program to demonstrate the value and benefits of working in the cotton industry. \_\_\_\_\_
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_

2. The focus of a more industry based strategic approach, to meet expected future needs of the cotton agri-business sector, should be on (prioritise each item, 1=highest to 3=lowest):

- Increasing cotton industry skill levels \_\_\_\_\_
- Prof devel't in technology and online based applications \_\_\_\_\_
- Seeking out business development courses \_\_\_\_\_
- Supporting specific industry technical training \_\_\_\_\_
- Maximising regional training opportunities \_\_\_\_\_
- Mentoring for young person's: \_\_\_\_\_
- Ensuring universities develop more relevant courses \_\_\_\_\_
- Ensuring universities supply students 'job ready' \_\_\_\_\_
- Focusing on potential (changes?) In UNE cotton course \_\_\_\_\_
- The extent to which cotton could feature in school curriculums \_\_\_\_\_
- Attract more of the right people (young people) \_\_\_\_\_
- Stronger industry networks amongst industry/agri-businesses/consultants \_\_\_\_\_
- How to position the cotton industry as employer of choice \_\_\_\_\_
- Increasing value of (specifically) the cotton conference and/or CCA training. \_\_\_\_\_
- School and curriculum input \_\_\_\_\_
- Address structural issues such as pay, training, prof devel't, overseas professionals: \_\_\_\_\_
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_

Comments general:

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3. The contribution of your organisation / the sector at large is best via (1=highest to 3=lowest):

<b>How</b>	<b>Your organisation – rating / comments</b>	<b>Other organisations in your sector – rating / comments</b>
Fee for service for resources, services, etc		
In-kind contribution – which out of professional work experience, scholarships, internships, or cadetships as well as paid holiday work for periods of up to 2-weeks, etc		
Combination of direct financial contribution, in-kind contributions and sponsorships between \$1,001-5,000 per year would be a fair financial		

contribution		
The relative contributions of agri-businesses direct and CA and CRDC? both \$ and in-kind		
Other – please elaborate		

4. How do you see industry should best go about Implementing this program (please tick):

- Have a coordinator
- Use a reference or working group to guide it
- Engage regularly with the agri-business sector – if so how?
- Through the CCA training programs?
- Through CCA?
- Through the Cotton Conference?

Comments:

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Comments general:

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*Many thanks for participating in this interview*