FINAL REPORT 2017
For Public Release

Part 1 - Summary Details
Please use your TAB key to complete Parts 1 & 2.

CRDC Project Number: CCA1601

Project Title: Annual qualitative and quantitative surveys for Australian cotton industry

Project Commencement Date: 1/07/2015  Project Completion Date: 31/10/2017

CRDC Research Program: 5 Performance

Part 2 – Contact Details

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Signature of Research Provider Representative: __________________________

Date Submitted: 9 January 2018
Part 3 – Final Report

(The points below are to be used as a guideline when completing your final report.)

Background

1. Outline the background to the project.

Since at least 1993, Crop Consultants Australia has been working with its members to provide qualitative and quantitative data for the cotton industry. In the past, survey questions were developed in conjunction with CRDC, Cotton CRC and CCA, with responses providing data about what is happening on cotton farms in different regions/valleys, in both irrigated and dryland systems and different gene traits.

Over the years the data has helped the industry tailor research, extension and communication programs including monitoring BMP initiatives. The surveys have also provided an opportunity to gain feedback on industry issues and allow emerging issues to be further investigated.

With survey questions being reviewed and developed annually the survey activities are responsive to new or emerging issues and research needs which ensures data collected continues to be relevant and meet the needs of industry.

The opportunity to collect data for different research projects through a well-coordinated, targeted survey project has proved successful. A key success factor is that this project is strongly supported by many of Australia’s leading crop consultants, advisors and agronomists.

Objectives

2. List the project objectives and the extent to which these have been achieved, with reference to the Milestones and Performance indicators.

<table>
<thead>
<tr>
<th>Objective Description</th>
<th>Milestone Description</th>
<th>Performance Indicator Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review survey process and plan delivery</td>
<td>Annual planning meeting 2015, 2016, 2017</td>
<td>Meetings and discussions were held to review the past season and preparation for the next season in 2015, 2016, 2017.</td>
</tr>
<tr>
<td>Develop cotton industry surveys to deliver to consultants</td>
<td>Develop surveys 15/16 and 16/17</td>
<td>Qualitative and quantitative surveys were accurately set up in on-line systems in 2016 and 2017.</td>
</tr>
<tr>
<td>Engage individual consultants to complete surveys</td>
<td>Launch and conduct survey 15/16 and 16/17</td>
<td>The minimum number of consultants participating, and geographical coverage were achieved for 2016 and 2017 for both surveys.</td>
</tr>
<tr>
<td>Provide qualitative and quantitative raw data sets and reports to CRDC</td>
<td>Provide survey responses and data 14/15, 15/16 and 16/17</td>
<td>The Qualitative raw data and draft report was submitted to CRDC for 2015, 2016, 2017. Final Qualitative data sets and reports submitted to CRDC for 2015, 2016, 2017. The reports are published and available on CRDC website and have been promoted by CCA.</td>
</tr>
<tr>
<td>Verify survey responses and data 14/15, 15/16 and 16/17</td>
<td></td>
<td>The Quantitative raw and final data sets were submitted to CRDC 2015, 2016, 2017.</td>
</tr>
</tbody>
</table>

Methods
3. Detail the methodology and justify the methodology used. Include any discoveries in methods that may benefit other related research.

a) Preparation and engage participants – Each year a review of the survey collection methodology and approach was reviewed and refined, with input from CRDC to ensure the survey remains responsive to the needs of the industry and is of a high quality. A review discussion with CRDC in 2017 raised the opportunity to further ensure the data is meeting collection and management standards and for future applications. An external review by the Data to Decisions CRC was recommended.

Each year the questions in the qualitative survey were developed by CRDC, in consultation with CCA and other cotton industry stakeholders and considered current and new research projects, BMP linkages, hot topics and emerging issues. Additional questions in the Cotton Consultants Survey included the Resistance in Bollgard Survey. CCA also provided CRDC with member up-skilling data on an annual basis as well as the quarterly readership reports for the consultants e-newsletter. The data collected through the Cotton Market Audit was reviewed annually with CRDC.

CCA members (being crop consultants, advisors, agronomists and reseller agronomists) committed annually to contributing data to the Survey Project. New CCA members were encouraged to participate.

b) Collection methods – CCA used CVENT to collect responses for the Cotton Consultants Survey. A number of collection methods were used for the Cotton Market Audit including simple excel templates, the CCA Data Management Program and by partnering with Agworld as a data service provider. Export reports from other data management programs were also provided by members.

c) Participation and collection – CCA Members were encouraged to participate through direct contact, promotion at annual CCA Cropping Solutions Seminars, and the CCA newsletter. Information about participation in the surveys, including policies and procedures are located on the CCA website.

d) Collation and reporting - CCA collated the data contributed by individual members of the survey team into raw datasets and provided to CRDC in Excel spreadsheet format (with the identity of individuals removed).

e) Review – Inconsistencies in the raw data sets identified by CRDC were raised with CCA and followed-up. This ensured that the data sets were able to be used accurately in analysis.

f) Reporting – The final raw data sets were collated and submitted to CRDC. The Qualitative data was published in the Qualitative Report and published on the CRDC website with links and promotion provided through CCA.

g) Review – CCA contracted a project manager who was responsible for day to day coordination of project activities with the CCA Survey Director (CCA Board member) supervising the project. Financial management was overseen by the CCA Finance
Director (CCA Board member). CCA’s financial records are audited annually by an independent, qualified auditor.

Mechanisms for feedback ensured survey activities were relevant and being delivered effectively each year. This involved monthly reviews by the CCA Board, ongoing monitoring by CCA Survey Director, annual reviews with CRDC and ongoing feedback from the CCA survey team and feedback from the CCA membership at Annual General Meetings.

Results

4. Detail and discuss the results for each objective including the statistical analysis of results.

A summary of the statistical results for the two surveys is outlined in the table. The results demonstrate consistent participation and coverage each year.

<table>
<thead>
<tr>
<th>Cotton Season</th>
<th>Survey</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014/15</td>
<td>Qualitative – Cotton Consultants Survey</td>
<td>41 participants, 111 069 ha, 54% coverage</td>
</tr>
<tr>
<td></td>
<td>Quantitative – Cotton Market Audit</td>
<td>34 participants, 86 330 ha, 42% coverage</td>
</tr>
<tr>
<td>2015/16</td>
<td>Qualitative – Cotton Consultants Survey</td>
<td>63 participants, 193 601 ha, 62% coverage</td>
</tr>
<tr>
<td></td>
<td>Quantitative – Cotton Market Audit</td>
<td>37 participants, 107 426 ha, 34% coverage</td>
</tr>
<tr>
<td>2016/17</td>
<td>Qualitative – Cotton Consultants Survey</td>
<td>65 participants, 318 472 ha, 55% coverage</td>
</tr>
<tr>
<td></td>
<td>Quantitative – Cotton Market Audit</td>
<td>39 participants, 224 782 ha, 39% coverage</td>
</tr>
</tbody>
</table>

Outcomes

5. Describe how the project’s outputs will contribute to the planned outcomes identified in the project application. Describe the planned outcomes achieved to date.

The project’s planned science outcomes were for CRDC to provide data to relevant researchers and partners, with the intention of contributing to a better understanding of farm level activities, adoption and uptake and identification of research, development and communication gaps and needs.

The project has achieved its commitment to collect and provide quality quantitative and qualitative data of good geographical representation (coverage of Australia’s cotton production area) relating to economic, environmental and social factors of Australia’s cotton industry. The data collected each year and provided to CRDC is able to be compared with data from other years to determine progress on various issues and changes in management practices.

CRDC determined the priority survey questions based on input from researchers and industry stakeholders to better understand the management response to current issues on farm. CRDC has received feedback from consultants on priority issues affecting management responses.

The data was provided to CRDC to be utilised by industry for benchmarking, trending and research purposes.
6. Please describe any:
   a) technical advances achieved (eg commercially significant developments, patents applied for or granted licenses, etc.);
   b) other information developed from research (eg discoveries in methodology, equipment design, etc.); and
   c) required changes to the Intellectual Property register.

   NA

Conclusion

7. Provide an assessment of the likely impact of the results and conclusions of the research project for the cotton industry. What are the take home messages?
   CCA continues to provide quality raw farm level data to the cotton industry to inform research and issues and report to the wider industry and community. CCA will work with CRDC to continually improve the surveys to meet industry requirements and build on opportunities to provide feedback to the industry on key issues. Technological advancements need be considered to ensure the project is delivered in the most appropriate way.

The coverage and extent of the surveys provides a statistically valuable representation of the practices and attitudes of practicing agronomists in the cotton industry. The likely impact of the surveys is extended through all aspects of the cotton industry by informing researchers and industry stakeholders of priority and emerging issues on farms at the regional level, management responses to issues and gaps, industry trends, and communicating performance and adoption of practices.

Extension Opportunities

8. Detail a plan for the activities or other steps that may be taken:
   (a) to further develop or to exploit the project technology.
   (b) for the future presentation and dissemination of the project outcomes.
   (c) for future research.

   CCA will continue to utilise technology to improve engagement and participation in the surveys, and is liaising with data service providers to enhance collection opportunities for members. A review of the project will be conducted with the advice of Data to Decisions CRC (or similar) to ensure industry practices and management relating to the data collection, storage, management and use is in line with current and future expectations.

   Value has been recognised for distributing the published annual Qualitative Reports through the CCA networks and will be continued, including promotion through the e-newsletter, social media, and hard copies distributed at Seminars to members and industry personnel. Seminar presentations and other training may be developed around specific relevant topics that are included in the report.

   CCA will be further servicing the industry by conducting specific queries from the Cotton Market Audit data for members, regional groups, and agribusinesses. The capacity of CCA to perform ‘queries’ will improve access and use of the data to better understand relevant and local issues plus will assist in being responsive to industry needs relating to specific scenarios.

9. A. List the publications arising from the research project and/or a publication plan.
   (NB: Where possible, please provide a copy of any publication/s)

   Each year the Qualitative Report is published and linked on the CRDC website.

   2016/17 Qualitative Report
   2015/16 Qualitative Report
2014/15 Qualitative Report


B. Have you developed any online resources and what is the website address?

Any publically accessible reports are available from the CRDC website (as above). A CCA webpage provides a link to the CRDC website and provides an overview about this project, https://cropconsultants.com.au/surveys/.

Part 4 – Final Report Executive Summary

Provide a one page Summary of your research that is not commercial in confidence, and that can be published on the World Wide Web. Explain the main outcomes of the research and provide contact details for more information. It is important that the Executive Summary highlights concisely the key outputs from the project and, when they are adopted, what this will mean to the cotton industry.

The annual qualitative and quantitative survey project measures the impacts and outcomes of research and production critical to the Australian cotton industry. Crop Consultants Australia (CCA) has collected quantitative and qualitative data for the industry since the early 1990s. The data helps the industry to better understand the impact of research and extension, technology adoption, farming practices and product usage as well as identifying new issues and opportunities.

This project collected and provided quality quantitative and qualitative datasets of good geographical representation (coverage of Australia’s cotton production area) relating to economic, environmental and social factors of Australia’s cotton industry for the seasons 2014/15 – 2016/17. The data collected each year and provided to CRDC is able to be compared with data from other years to determine progress on various issues and changes in management practices.

The data provided to CRDC is utilised by industry for benchmarking, trending and research purposes.