Australian Government
Cotton Research and Development Corporation

CGA FINAL REPORT

Part 1 - Summary Details

Please use your TAB key to complete Parts 1 & 2.

CRDC Project Number: **CGA1808**

Project Title: Local Weather Data Access

Project Commencement Date: 1/12/17 **Project Completion Date:** 1/02/18

Part 2 – Contact Details

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Part 3 – Final Report

Background

1. Outline the background to the project.

Until 2015, cotton growers in the Dawson Valley had no access to localised, accurate weather forecasting tools and had to rely on information relayed from weather stations located in Biloela which is 116 km away. Thanks to the CRDC's GrassRoots Grant program in 2015, three growers located in the Dawson Valley now have access to OzForecast services through the strategic placement of weather stations. These weather stations have significantly improved the decision making process of those cotton growers able to access them. However, the provision of timely and accurate data for some of the Valley highlighted the lack of this service in other geographic locations. Due to the topography of the Dawson Valley, the station located at Gibber Gunyah services the growers located on the Western side of the Dawson River but not the growers located on the Eastern side of the Theodore township. It was determined that one additional station, located strategically on the boundaries of three of the growers located on the Eastern side of Theodore would provide much-needed weather information to not only these three growers but an additional two located in the same precinct. Similarly, the weather station located at 'Glendale' provides excellent weather knowledge for the 1500 acres cotton planted in this locale but did not transcribe to the surrounding properties, located upstream.

The assistance to fund an additional two weather stations has provided the Dawson Valley with excellent and complete coverage of the weather patterns and forecasts, greatly assisting in farm, crop and environment management decisions.

Objectives

2. List the project objectives (from the application) and the extent to which these have been achieved.

a. Installation of two weather stations in key locations enabling increased access to timely, localised weather information across the entire Valley.
b. Better farm and crop management through utilisation of the weather station information – particularly of assistance during this year's 'wet' requiring alternative methods of spray application.
c. Reduced risk of spray drift – the provision of accurate weather and wind data has greatly assisted during the past month where aerial application was required in some circumstances.

Methods

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

Sourcing of the most economical and practical weather stations that would be able to be easily accessed by all cotton growers in the District; and compatible with the existing weather stations.

Outcomes

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

Economic Benefits:

a. Increased profitability / viability of local cotton farms due to increased access to relevant weather data resulting in better management decisions – particularly relevant during this past picking season where accurate, localised rainfall and wind predictions were required.

b. Better timing of spray application, planting and management decisions resulting in increased efficacy and less wastage.

Environmental:

a. Reduced risk of spray drift
b. Better land management

Social Benefits:

a. Reduced risk of spray drift and the community fall out and antagonism – no spray drift reported in spite of aerial application (normally a trigger point).

b. Reinforced local knowledge that the local cotton growers farm responsibly with minimal negative impacts on the surrounding town and environment.

c. Increased mental health by the provision of better information access and thus improved decision making.

d. Ability for the local community to access the weather data – growers have made the access details public and available if required.

5. Please report on any:-

a) Feedback forms used and what the results were
b) The highlights for participants or key learnings achieved
c) The number of people participating and any comments on level of participation

Feedback was sought from those growers (four) who are directly accessing the weather station information and all endorse the purchase and the increased management skills that it provides.

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?

The provision of the final two weather stations to provide accurate and timely, localised weather information now enables all permanent cotton growers in the Dawson Valley comprehensive access to data across the entire cotton growing area.
In addition, this coverage and information can be shared with the local community and other agricultural industries.

Extension Opportunities

8. Detail a plan for the activities or other steps that may be taken:
   (a) To tell other CGAs/growers/regions about your project.
   (b) To keep in touch with participants.
   (c) For future projects.

Development of media release to local newspaper (The Central Telegraph) highlighting the ability to access timely, localised weather information, thanks to the installation of the five stations across the valley, and the support of CRDC.