GRASSROOTS GRANT FINAL REPORT

Part 1 - Summary Details

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

CRDC Project Number: CGA2103

CGA: **Southern Valleys CGA**

Project Title: **"Digitally Ready Cotton Farmers"**

Project Commencement Date: 1 September 2020 Project Completion Date: 31 May 2021

Recognition of support: The Southern Valleys CGA and Irrigation Research & Extension Committee acknowledges the financial assistance of the Cotton Research and Development Corporation in order to undertake this project.

Part 2 – Contact Details

Project Manager: Iva Quarisa

Organisation: Irrigation Research & Extension Committee

Ph: **0402 069 643**

E-mail: iva@irec.org.au

Signature of CGA Representative:

Date submitted: 16 August 2021

Part 3 – Final Report

Background
1. **Outline the background to the project.**
   Through a previous NLP funded project IREC and I-Ag Pty Ltd worked with a pilot group of 8 growers to develop the My Digital Farm Program. One of the main learnings from the pilot was that the group displayed a lack of understanding of their organisation's digital readiness and there was poor data standardisation. Understanding simple computer navigation, programming and cloud-based applications also proved difficult for all participants. Office hardware and software, housekeeping and data management process had not been considered nor had office hardware, operating systems and office process. The aim of this project is make sure growers start on the right path for their digital journey, which will set them up for success. Current PA training does not set growers up for success- it whets the appetite with visions of what can be done without giving them the digital foundations to make the most out of their ag data. It has been demonstrated time and again, if growers do not have the correct foundations for good ag data management they give up and lose the huge potential that ag data provides.

Objectives
2. **List the project objectives (from the application) and the extent to which these have been achieved.** The objective of the Digitally Ready Cotton Farmers project was to create a credible pathway to precision ag use and good ag data management for 25 cotton growers in the Southern Valleys CGA region.
   Unfortunately we were unable to attract the desired 25 participants. We had ten participants, three women and seven men, ranging in ages from 22 to 50. While most of the participants were farmers, we also had representation from one of the cotton gins.

Methods
3. **Detail the methodology and justify the methodology used. Include any discoveries in methods that may benefit other related projects.**
   This project was be made up of two specific parts. The first was the one-on-one farm visits, which was followed by a group workshop.
   The one-on-one farm visit comprised of an office audit and included updating all software and ensuing the office set-up was right and geared for maximum efficiency. This was to ensure participants are digital ready. A machine audit was also performed during the visit.

   In the one day group workshop, participants worked through data standardisation, learnt the steps to capture, store and share ag data collected from various sources such as My John Deere. It also gave them the opportunity to share their learnings, failures and successes with other project participants.

   This methodology was developed through NLP funded project where IREC and I-Ag Pty Ltd worked with a pilot group of 8 growers to develop the My Digital Farm Program. The one on one interaction is vital to ensure correct procedures are put in place at the start.

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.**

   The office &machinery audits have given participants to have a clear understanding of their physical resources. The office audit has provided confidence that the system they have in place will be capably to deliver what they require. The report cards has provided each participant clarity on how they can move forward on their digital journey. The group workshop has demonstrated the steps need to capture, store and share their ag data, collected from various sources such as My John Deere. It will also gave them the opportunity to share their learnings with others in the program.

5. **Please report on any:-**

Project participants were asked to complete a pre project survey and then a post project survey.

There were 7 respondents to the Pre project survey. The results from this survey are below:
- 86% currently collect, share and store data for analysis. 86% also currently analyse data and use data to inform decision making about farm management
- 57% currently follow a digital readiness process in office for farm business and currently have a data generation process in place
- 43% currently have a data standardisation process in place
- 57% currently analyse historical data
- 71 % Strongly agreed with the statement "believe that using data management on my farm will lead to better outcomes" while 14% agreed with the statement
- 71% either strongly agreed or agreed with the statement that "implementing new data management practices on my farm would be easy"
- 43% Disagreed with the statement "Most growers in my area think that using data management practices on their farm is a good thing to do"

The post project survey had 4 respondents. All said they were satisfied with the Digitally Ready Cotton Farmers Project.
- All respondents felt the project meet your expectations, with 50% saying it met their expectations better than expected
- 50% said content provided during the project was very helpful and all said content provided during the project was about right
- 75% strongly agree or agree that using data management on farm will lead to better outcomes
- 100% felt that compared to other issues you face running your farm, how important is data management is important or essential

When asked what are the main challenges in implementing new data management practices on their farms they said:
- 50% were constrained by the availability of contractors and/ or contractor's equipment;
- 50% said they do not have time;
- 25% felt it costs too much;
- 25% said it is not the way they have managed their farm in the past

The strongest recommendation to improve the Digitally Ready Cotton Farmers Project for future participants was:
- Discussion with industry involved in growers processes to thoroughly identify gaps in growers digital knowledge and understanding.
- Gaining an understanding of what is digitally required of growers for industry and how they can use that to better their growing processes.

Conclusion
6. **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?**
   As over 90% of project participants are continuing on their digital ag journey and have retained the services of I-Ag Pty Ltd the take home message is that with the right assistance and one on one guidance, cotton growers will gladly work to collect, store and use digital ag correctly.

   There are a range of benefits in doing this. Not only will it enable the use of Precision ag in agronomic application but is also valuable in keeping correct records of spray applications and the associated legislative requirements for the safe use of chemicals.

Extension Opportunities

7. **Detail a plan for the activities or other steps that may be taken:**
   (a) To tell other CGAs/growers/regions about your project.
       At this stage IREC has no plans to tell other CGAs about this project, however we have been working with Ben Simpson from the start of the project, with the intent of collecting and then sharing project participant feedback.
   (b) To keep in touch with participants.
       Over 90% of project participants are continuing on their digital ag journey and have retained the services of I-Ag Pty Ltd. We will likely hold update workshops to bring wider project participants together.
   (c) For future projects. IREC will be applying for funding through the Future Drought Fund and Southern Drought and Innovation Hub program which is currently open. IREC has the support for this from the other 6 Farming Systems Groups involved in the Hub as tier one partners.