



Accelerating precision agriculture to decision agriculture



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The Australian Farm Institute (AFI) is continuing its focus on digital agriculture through involvement in a new project recently announced by the Deputy Prime Minister and Minister for Agriculture and Water Resources, the Hon Barnaby Joyce. This project has the goal of ‘designing a solution for the use of big data in agriculture – increasing the profitability of producers, providing clarity about data ownership and access rights, and improving farming strategies.’

The project, *Accelerating precision agriculture to decision agriculture*, is a partnership between 13 of Australia’s 15 rural research and development corporations (RDCs), led by CRDC and including MLA, Dairy Australia, GRDC, SRA, RIRDC, AWI, HIAL, APL, AGWA, FWPA, AMPC and FRDC, plus other research partners. The project is funded under round two of the Rural R&D for Profit program.

The recent AFI report, *The implications of digital agriculture and big data for Australian agriculture*, detailed productivity gains observed in the US Corn Belt through the use of digital agriculture technologies and big

data analytics. The report also made a number of recommendations and observations for steps that needed to be taken so that Australian agriculture could start to capture the benefits of the big data revolution.

One of the themes that the AFI report focused on was the need for cross industry and multi-disciplinary collaboration in the development of big data research. The precision to decision project is a very positive step down that collaboration pathway. The fact that 13 of the 15 RDC’s have decided to participate in this project is an indication of the importance that all of agriculture places on the development of digital agriculture and big data in agriculture.

The key issues that will be covered by the project were discussed at an inception meeting for the project held in Brisbane on the 18th of July and can be described by three broad subject areas.

- Who will hold the data produced and how will access to that data be controlled?
- The need to have commonality and portability of data sets.

- Demonstrated business cases and value propositions for cross industry collaboration and the application of big data in agriculture.

The AFI’s role in the project will be centred around the third issue area. Case studies from the US will be developed that focus on businesses that are implementing big data analytics for productivity and profitability gains. This is an important part of the project as it is critical that practical outcomes are delivered from the promise that is big data. While the potential for digital agriculture is widely accepted, the actual use of big data analytics is still confined mostly to the Corn Belt in the US. The case studies developed for this project will explore issues around the use of big data in other agricultural sectors with more direct relevance to Australian production systems.

Research partners working on other aspects of the project include the Data to Decisions CRC, CSIRO, Griffith University, University of New England, and the University of the Sunshine Coast.