



Australian Agriculture: Growing a Digital Future

DIGITAL TRANSFORMATION IS A BIG CULTURAL CHANGE FOR ALL SECTORS, BUSINESS AND PEOPLE: A STRATEGIC GUIDED APPROACH IS NEEDED TO MANAGE THE CHANGE.

The Australian agricultural sector has examined the current and future state of digital agriculture in Australia via the Australian Government's Rural R&D for Profit project *Accelerating precision to decision agriculture (P2D)*. The project was led by CRDC and estimated that digital agriculture could lift the gross value of production (GVP) of agriculture by \$20.3 billion, a 25 percent increase on 2014-15 levels. However, according to findings from the P2D project, Australian producers are not ready to reap these benefits.

CRDC's Jane Trindall says the report from the project made 13 recommendations in areas of strategy, leadership, governance, digital literacy and enablers to achieve these gains. This collaboration was the first time all 15 of Australia's RDCs joined forces on a sector-wide initiative.

To implement the recommendations from P2D, 11 RDCs have collaborated to submit a new Rural R&D for Profit application: *Australian Agriculture: Growing a Digital Future*.

"We made this application so we can lift the digital maturity of the sector from ad-hoc to competitive, lift economic growth and prepare the workforce for the future," CRDC's Jane Trindall said.

"This effort could lift GVP by an additional 1.8-3.6 percent over and above the average GVP growth of the sector by 2022, adding \$1.3-2.7 billion to the sector.

"We will do this through three key investment areas."

DIGITAL TRANSFORMATION HUB

A virtual digital transformation hub will include a team of digital/data experts to initiate digital strategies and support their implementation. Supporting resources including a digital maturity framework, agricultural data governance framework and information architectures will be developed. These may be the first of their kind for agriculture.

DIGITAL CAPABILITY (DIGITAL LITERACY AND LEARNING PATHWAY FOR DATA SCIENTISTS)

The focus of which will be both upskilling those within industry and making sure those coming into the industry have the required skills. This project will develop and deliver a digital capability framework and training program, establish digital farms and fisheries and deliver a digital immersion program for imagining the future.

There is a need to build the STEM capability in the agricultural workforce and research community to solve today's and tomorrow's problems. This project aims to excite data scientist/analyst students to pursue a career in agriculture.

FOUNDATIONAL DATA AND ANALYTICS

Interoperability has long plagued precision agriculture. This project sets out to harmonise identifiers for Australian producers, farms and fields to increase

the interoperability of agricultural data. This will enable automated data exchange and/or the application of machine learning to provide producers with insights from their data.

This project is supported by funding from the Cotton Research and Development Corporation, Meat and Livestock Australia, Sugar Research Australia, Australian Wool Innovation, Fisheries Research and Development Corporation, AgriFutures, Wine Australia, Dairy Australia, Australian Pork Limited, Australian Eggs and Horticulture Innovation Australia. The project will be delivered in collaboration with six research partners and supported by the National Farmers' Federation, Food Agility CRC and four international digital agricultural programs.

"While the success of the application is unknown, RDCs are getting on with the job and will kickstart activities this year with the commencement of a Digital Transformation Taskforce for the Australian agricultural sector, and development of the digital maturity, data governance and digital capability frameworks with project partners including CSIRO and Griffith University and the University of the Sunshine Coast for endorsement by the taskforce," Jane said. ■