



New tech integrated smart sensing & automation for cotton

1. What is the project about?

This project aims to increase the adoption of automated irrigation technologies into the Australian cotton industry. Water price and labour costs are fundamental drivers of irrigation decisions and business success.

The project will bring together key research and industry partners involved in the automation and sensing areas to integrate automated irrigation technologies into an easy to use and adoptable platform that meets the demands of cotton irrigators.

It will also build the capacity of research and industry partners to offer 'fit for purpose' automated irrigation platforms. These platforms will be showcased at sites in Whitton and Darling Point.



2. Why do irrigators need to know about it?

Currently most irrigators manually check the status of fields and crops and manually control irrigations. The process of checking status and controlling irrigation is both time consuming and inaccurate. This project will combine existing low cost 'off the shelf' independent sensing and automation technologies already available in the cotton industry to develop a low cost, integrated sensing and automation platform.

The project will also investigate the use of the field and crop data to provide optimised and automated irrigation control. This automation will make use of the same wireless networks used by the sensors. Algorithms to enable precise delivery of water to the crop will be developed and integrated into automation infrastructure.



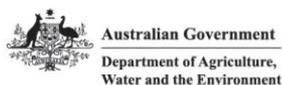
3. How will the research benefit irrigators?

Optimal sensing and forecasting systems linked to automated irrigation systems will enable irrigators to maximise productivity of their water whilst also reducing labour costs.

The key learning sites will provide an opportunity for a series of workshops on site to help irrigators assess/understand/use irrigation technologies and management, which will enable them to readily adopt best management practices on their own enterprises. Commercial industry partners in this project will offer systems developed in the project across the Australia cotton growing areas and already have established networks for such products.

4. Key results to date

For further information or project progress updates, contact: John Hornbuckle, Project Leader; T: 0429 862 920
E: j.hornbuckle@deakin.edu.au



This project is supported by funding from the Australian Government Department of Agriculture, Water and the Environment as part of its Rural R&D for Profit program.

