# Smart Irrigation control for water and labour savings in rice growing systems

#### 1. What is the project about?

Developing a 'Dry Rice' system which aims to minimise water application and use will be critical in ensuring the industries future in a water constrained environment. A partly ponded or strategic ponded rice growing system will need at its core significant advancements in water management. Soil moisture, water control, crop stress monitoring and timely irrigation management will be critical to ensure success.

This project will develop the robust automated sensing and control systems required for the success of a 'Dry Rice' system.

Project sites are located near Griffith and Jerilderie.

#### 2. Why do irrigators need to know about it?

Water price and labour costs are fundamental drivers of irrigation decisions and business success. Optimal sensing and forecasting systems linked to automated irrigation systems ensures irrigators are maximising productivity of their most valuable resource.

### 3. How will the research benefit irrigators?

This project will develop linked sensing, forecast and automation systems to achieve optimal water management. Systems capable of sensing soil, water and crop stress; together with automated Internet of Things (IoT) irrigation control structures and weather forecasts will allow water and labour savings to be achieved. The outcome being reduced labour costs while optimising water productivity in a 'Dry Rice' system. Ensuring rice production can be maintained in a water constrained environment.

## 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







