# AGRICULTURE AND FOOD



[**www.csiro.au**](http://www.csiro.au/)

**Digital agriculture**

**Transforming agriculture for the future**

## As the national science agency and Australia’s largest agricultural research organisation, we are combining our expertise in data and digital technologies with our agricultural knowledge and experience like no other organisation can.

Our research combines the disciplines of phenomics and sensing, software engineering, data analytics, precision agriculture, modelling, food innovation, farm systems management and more.

**From gene to plate, we work with over 500 partners in agribusiness, IT, farmer and producer groups, research and development corporations, the food industry, government, research and more.**

**Example applications we are innovating in right now**

**Farm and landscape assessment**

Better understanding the status, trend and

prediction of productivity and sustainability

**Risk management** Decision support tools

for real time decision making in cropping and livestock sectors

**Smart breeding with phenomics** Quantifying

crop and animal performance in response to the environment

**Smart irrigation** Improving yields and

reducing irrigation in both developing and developed countries

**Digital livestock** Wearable

technology to control the location of livestock and monitor feed and animal performance

**Farm demonstration** Our purpose- built Boorowa

Agricultural Research Station for testing emerging digital agriculture technologies

**Data, sensing, modelling and analytical platforms**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Soil information** | **Climate services** | **Crop phenomics** | **Sensors** | **Senaps** | **APSIM** | **Value chain** | **Artificial** |
| Enhancing | Application- | Sensors and | for rapid | Cloud based | CSIRO’s | **analytics** | **intelligence** |
| the Soil and | specific climate | analytics for | measurement | data and analysis | farming system | Optimisation, | **and knowledge** |
| Landscape Grid | products at local | breeding and | of soil properties | services for | simulation | risk assessment | **management** |
| of Australia | scales and new | agronomy |  | sensor and | system | and scenario |  |
| for precision | time horizons |  |  | spatial data |  | analysis |  |
| agriculture |  |  |  |  |  |  |  |

**FIND OUT HOW YOU CAN PARTNER WITH US** | Dr Dave Henry | Digital Agriculture Leader | t +61 3 9731 3231 | e [dave.henry@csiro.au](mailto:dave.henry@csiro.au)

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