Case Study

Research and collaboration for more sustainable and resilient agriculture and rural communities

The Faculty of Veterinary and Agricultural Sciences is leading collaborative research in the field of agriculture and sustainability and, in 2021, launched two transformative hub projects in the field of agriculture for the wider rural community.

Victoria Drought Resilience Adoption and Innovation Hub

The Victoria Drought Resilience Adoption and Innovation Hub, led from the University of Melbourne’s Dookie Campus, addresses issues of drought-related preparedness, environmental resilience, food security, and economic sustainability.

A key feature of the hub project is a collaborative and multidisciplinary approach to drought resilience through co-designed and co-governed research and innovation. Through a multi-faceted partnership, the Victoria Hub will translate research into impactful outcomes and support testing, adoption and commercialisation of technologies.

Receiving $8 million in funding over four years through the Future Drought Fund, the hub brings together partners from government, industry and the wider university sector. This includes Agriculture Victoria, Birchip Cropping Group, Food & Fibre Gippsland, Mallee Regional Innovation Centre, Riverine Plains, and Southern Farming Systems, together with Deakin University, Federation University, and La Trobe University.

Australian Research Council (ARC) Hub for Smart Fertilisers

The ARC Hub for Smart Fertilisers established at the University of Melbourne Parkville campus. Essential to modern agriculture, the work undertaken by the hub will develop a new class of fertiliser, reducing cost burden to farmers and the environmental impacts of productive agriculture.

The project will take a multidisciplinary approach, bringing together plant and soil science, and chemistry and chemical engineering to develop new biochemical inhibitors and ‘smart fertilisers’, potentially increasing the efficiency of nitrogen fertilisers by up to 20 per cent. Additionally, the Hub will develop evidence-based estimates of the environmental and health costs of nitrogen loss, and any social benefits from the new fertilisers to inform government policy, industry and the community.

The project will contribute significant value to the $67 billion Australian agriculture and agribusiness sector and bring together researchers from the University of Melbourne’s Faculty of Engineering and Information Technology, Faculty of Science, Faculty of Veterinary and Agricultural Sciences, as well as from La Trobe University and industry partners.