

Food and water security in Southern Africa: Phase 1



Key details

Location

South Africa

Duration

Start Oct 2024

End Oct 2025

Budget

AUD 349,887

Commissioned organisation

[The Virtual Irrigation Academy](#)

Project Leadership

Dr Richard Stirzaker

ACIAR Research Program Manager

Dr Neil Lazarow

Program

[Water](#)

Project code

WAC/2024/100

the area under irrigation in response to climate change and to improve food security. ACIAR supported the development of the Virtual Irrigation Academy, in 2 consecutive projects between 2015 and 2023 to support the adoption of soil moisture sensors and other irrigation management tools. Within a year of the first sensors going into field demonstrations, there was unprecedented demand by farmers for the sensors. In 2022, the Virtual Irrigation Academy became a not-for-profit company and has distributed 70,000 Chameleon sensors and 35,000 wetting front detectors.

The project will support steps to automate aspects of the Chameleon sensor and upgrade the production facility to increase local production capacity and efficiency. The project will also review established distribution channels to supply, support and service these clients, to learn from past and current experience.



ACIAR



Research need

This small research activity aims to ensure that farmers, researchers, non-government organisations and governments have ongoing access to soil moisture sensors to support improved water management practices, integrated farming systems and market alignment in South Africa, Zimbabwe and Mozambique.

There are many thousands of irrigation schemes in southern Africa used by smallholder farmers but monitoring of water use is almost negligible. Most countries in the region have ambitious plans to scale