



Drought resilience dashboard for southern WA

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Project Aim

To provide an enhanced local weather forecasting and a centralised dashboard to enable farmers to make better business decisions and improve their farm's resilience to climate change:

- This project will install weather stations, soil moisture probes and digital rain gauges in southern WA and integrate the data into a dashboard to maximise farmer usage and understanding.
- Increasing the data collected will improve the accuracy of weather forecasting at a local level.
- Soil moisture probes will enable farmers to measure the water stored in the soil and determine how risky it would be to grow a summer crop or cut fertiliser applications late in the season.

Background

Enhanced local weather forecasting and a centralised dashboard will enable farmers to make better decisions & improve their farm's resilience to a changing climate. Once farmers are armed with better forecasting, they will make better input decisions (fertiliser & herbicides) for either cropping or livestock enterprises. Real-time data is beneficial but predicting pasture growth rates or cropping yields is the ultimate project goal to help build resilience and optimise productivity without negatively affecting our soils, water systems and vegetation.

Summer rain can be utilised via stored soil moisture for the upcoming winter crops. In some environments, growing summer fodder crops can generate income directly or provide feed for livestock in the form of silage, grain, or hay. The stored feed gives farmers fodder in the bank, which can be utilised during dry winters. Additionally, summer crops offer an alternate way to increase cropping diversity into farming systems. For example, Cowpea is a summer legume that can grow nitrogen and provide grain for feed.

Weather & climate data collected over time will become more helpful to landholders and reduce sub-optimal decisions. Poor decisions might be avoided if the complexity of the scenario is better understood through quantified data to complement farmer experience and intuition.

Drought resilience dashboard

In summary, the dashboard will host;

- Pasture forecasting for five locations in the Great Southern
- Soil moisture probe information
- Weather forecasting for 20 locations in the Great Southern (Note: weather forecasts will extend beyond the SCF region)
- Drought resilience resources (information materials).

The project will build on similar work conducted in NSW. To see how the dashboard will look, visit www.farmingforecaster.com.au. To keep up to date with project activities, head to the SCF website – <https://www.scfarmers.org.au/drought-resilience>.

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