Climate-Smart Pilots
Adaptation options for Primary Industries

ABARES OUTLOOK: March 2021

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Outline

Climate Branch Research

Trialling adaptation through Climate-Smart Pilots

Early findings
The Primary Industries Climate Change Research Strategy

The Strategy will investigate policy and program areas that could support the primary industries sector to adapt to climate change. The Strategy seeks to identify through research, and innovation, energy supply and demand solutions, carbon opportunities and climate resilience building programs to enable our primary industries to prepare for the challenges and opportunities climate change presents. The results of this research will be useful in informing forward work programs and policy reforms to support the long term sustainability of primary industries for NSW.

An investment of $29.2 million from the Climate Change Fund

- Clean Energy Solutions: $4m
- Energy Efficiency Solutions: $3.7m
- Biomass for Bioenergy: $4m
- Emissions Reduction Pathways: $1.5m
- Accessing Carbon Markets: $1.3m
- Vulnerability Assessment: $8m
- Climate-Smart Pilots: $6.7m
Climate-Smart Pilots: Digital Technology

These pilots aim to provide on-ground demonstrations of how technology can provide more complete and close to real time information about production changes related to climate variability.

- Heat waves
- Water management
- Animal welfare
- Pest & disease
- Local variations
Climate Smart Pilots
Demonstrating the role of digital technology to manage climate variability.
Pilot: Fisheries

**Impacts**

- Demonstrate the use of IoT to reduce the impacts of climate variability
- Real-time tools to better understand local climate, improve yield and reduce losses
- Community network
Pilot: Livestock

Impacts

- Digital data and analytics for pasture prediction
- Grazing management responding to climate variability
- Digital sensor development
Pilot: Horticulture

Impacts

• Demonstrate the use of IoT to reduce the impacts of climate variability

• Real-time tools to better understand local climate, improve yield and reduce losses

• Innovation
Early findings

Farmers are aware of technology, and the economic argument. This project re-phrases the role of technology as a way to deal with future climate impacts.

Often, not aware of the value of simple options
- Weather station at Stoneleigh showed more difference to BOM than expected; In-canopy v field weather stations
- Temp sensors on oyster farms highlighted importance of local data (not 50km away)

Greater certainty from data
- Piece of mind in dealing with temperature extremes
- Trough level water management for livestock producers

Just touching base with you to let you know the FDT system is a godsend during this hot weather. Even when I was away over Christmas being able to check in on weather and water meant they [livestock] never went without water.
- FDT Farmer, Jan 2020