

Managing Climate R&D Program

2007 – 2010



“Possibly the biggest risk facing Australian farmers in the coming century is that of climate change.”¹

Peter Corish, President, National Farmers' Federation

Climate change in Australia is predicted to:

- ▶ Increase the variability of Australia's already variable climate;
- ▶ Increase the frequency of extreme events – droughts, floods and cyclones; and
- ▶ Through the change in climatic attributes, shift the spatial opportunities and constraints for natural resource dependent industries and activities.

Much is at stake: adverse climatic conditions can drastically reduce agricultural production. The 2002-03 drought reduced the gross value of Australian farm production by 18% and lowered Australian GDP in that year by one percentage point.²

Decisions can no longer be made based on the averages of Australia's 150 year climate record. The Managing Climate R&D Program 2007 – 2010 will equip farmers and natural resource decision makers with information to meet this increasing variability; building on over a decade of research by its predecessors, the Managing Climate Variability Program and Climate Variability in Agriculture Program.

Goal

Increase the capacity of Australia to capture opportunities and manage risks related to climate change and variability.

Objectives

- 1 Develop more accurate climate forecasts with longer lead times; and
- 2 Translate forecasts into tools that assist farmers and natural resources managers to make decisions that capitalise opportunities and reduce exposure to risk from climate.



How to get involved

We would welcome the opportunity to discuss the Managing Climate R&D Program with you.

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¹ Peter Corish, National Farmers' Federation President, 4 August 2004, Speech to the National Press Club.
² Department of Agriculture, Fisheries & Forestry (2005) Agriculture, Fisheries & Forestry – at a glance.

More Information

Please visit www.managingclimate.gov.au, where you can:

- ▶ download the near final Managing Climate R&D Program Strategy
- ▶ subscribe to CLIMAG, our free newsletter

R&D themes

THEME	OUTCOMES
Seasonal forecasting	Exploiting Climate Change science to - <i>provide Australia with more certainty and longer range prediction in its seasonal forecasts</i>
Water Resources	Building on improved seasonal forecasting skill to - <i>provide Australia with the knowledge to predict the available water over time and across landscape as our climate varies and changes</i>
Agricultural Applications	Building on seasonal forecasting skill and improved knowledge of natural resources attributes to - <i>provide climate variability related commodity-specific decision support tools that identify benefits and opportunities for increased profitability and improved natural resources condition</i>
Adaptation to climate change	Interpreting Climate Change science and the likely longer term changes in natural resources attributes to - <i>identify adaptation scenarios applicable to natural resource based industries</i>
Adoption & Program Communications	Integrating climate variability, climate change, natural resource attributes and decision support tools to - <i>foster understanding and uptake of climate related opportunities that benefit natural resource based industries and Australia's natural resource condition</i>
Contribution to Fundamental Climate Datasets	Designing and undertaking all science activities so that - <i>fundamental data sets are enhanced, quality assured and made readily available</i>

The key climate challenges, R&D questions, components, timeframes and success for each theme is detailed in the near final R&D Strategy, which is being discussed and refined with key stakeholders and investors.

Highlights of Future R&D Investment

- ▶ Improved monsoon break prediction for Northern Australia
- ▶ Improved prediction of water yields
- ▶ Improved decision support tools for the cropping and grazing industries that link productivity and sustainability
- ▶ Masters of Climate - connecting researchers, advisors, farmers and resource managers to foster understanding and uptake of climate related opportunities
- ▶ Improve national climate datasets
- ▶ Scenarios for change - regional climate drivers

*"You can't dismiss climate information. -I try and look for the positives and if someone can get a forecast half right, well then they're getting there. The more we know, the better we can manage."*³

Brett and Fran Francis,
'Rocky Glen' Kimba Eyre Peninsula SA

³ Blackadder, J. (2005) Masters of the Climate revisited: innovative farmers coming through drought, p. 13.