

Understanding climate change knowledge in the dryland Mallee



Above: Wheat harvest in the Mallee. Photo: Mallee CMA.

It is expected that climate changes in the Mallee region will include reduced annual rainfall, increased temperatures and increased occurrence of extreme weather events such as drought and heavy rainfall. These predicted climate changes are expected to intensify some of the existing environmental issues within the region.

This fact sheet presents the results of a project to investigate dryland farmers' views on climate change and how they may change their farming practices in response to a changing climate.

Method

During April and May 2012, a total of 50 farmers were randomly selected and interviewed. The sample of farmers was taken from across the Mallee dryland area and covered property sizes ranging from less than 2,000 ha to more than 4,000 ha. The sample included all ages.

The farmers were asked a set of questions about climate change, current and future farming practices, carbon farming and mitigation, and where they look for information on farming decisions, weather and climate projections.



Above: Mallee wheat crop during harvest. Photo: Mallee CMA.

At a glance

- In autumn 2012, a project was undertaken to investigate dryland farmers views on climate change and how they may change their farming practices in response to a changing climate.
- The results of the project will help guide potential research areas around adapting to climate change.

Key results

Farmers’ opinions on the science and impacts of climate change and their level of concern about how they will adapt was divided. Around half of the farmers interviewed were relatively unconcerned about climate change, largely because they did not accept that climate change is occurring.

Different demographics varied in their level of concern. For example, 69 percent of farmers surveyed with larger farms (larger than 4000 ha) were concerned about climate change and their ability to adapt to the predicted long term changes in seasons and climate (Figure 1).

Of the farmers interviewed, 90 percent felt they were already adapting to changes in the seasons and climate. This may explain why many farmers are unconcerned about their ability to adapt to climate change. However, many landholders did raise concerns about their financial ability to cope with large-scale changes if required.

Farmers were asked how they might respond to some of the possible changes in climate, including less growing season rainfall, more summer rainfall and more extreme weather events. Over 60 percent of farmers would consider expanding livestock if there was less growing season rainfall. Less than five percent of farmers indicated they currently burn stubble in response to summer rainfall and 33 percent said they would consider doing so. Most landholders felt there was little that could be done to plan against an increase in extreme events and said they would deal with difficulties as they arose.

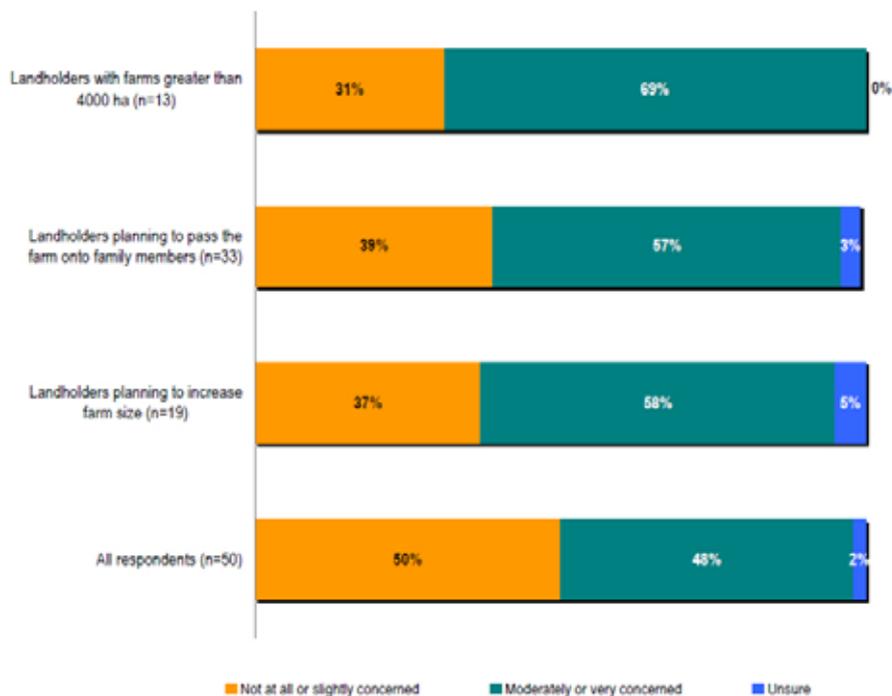


Figure 1. Level of concern about the impact of predicted climate change on business viability (Q. How concerned are you about the impacts of predicted climate change on the viability of your farm business?).

Outcomes

The results of this project will help inform the Mallee Catchment Management Authority (CMA), regional agencies and partners about potential research areas around adapting to climate change. It is important to further understand the impact adaptation practices may have on soils and production, and discuss and research the risks involved in differing farming systems. The Mallee CMA has started this process through a series of projects, which apply climate change scenarios to existing research projects. Examples of these include ‘Applying climate change scenarios to summer weed control strategies and related impact on soil health’ (Dodgshun Medlin 2012) and ‘How will climate change affect time of sowing and variety selection at Ouyen?’ (MSF 2012).

Acknowledgments

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Further information

The information for this fact sheet has been taken from the following report: RMCG 2012, ‘Climate change knowledge in the Mallee: final report’ unpublished report for the Mallee CMA.

For further information on applying climate change scenarios to Mallee CMA research and demonstration projects, visit the Mallee CMA website www.malleecma.vic.gov.au or contact the Mallee CMA on 5051 4377.

Project Partners



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