

# Communicating Climate Change

Module 18

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An initiative of the National Agriculture and Climate Change Action Plan

## Making farm decisions in a changing climate

Climate change presents all farmers with a new challenge that will fundamentally affect all farm decisions.

CSIRO describes the implications for natural resource management as follows:

“Compared to most threatening processes that we deal with, climate change is more **complex, uncertain, dynamic** and **poorly understood**.”

Advisors have a vital role to play with farmers in helping them to make confident decisions when facing climate change. If farmers become overwhelmed by the change in risk and uncertainties, this will affect their decision making and could lead to profound and frightening consequences.

### Complex decisions

The prospect of climate change will lead many farmers to consider questions such as:

- Should I change my system (crop/livestock)?
- Should I change my approach to sowing?
- Should I change my crop types?
- Should I cultivate more/less?

The list of decisions that climate change could stimulate is endless. This in itself (on top of drought) will increase stress and make farming less attractive. And all of these decisions are complex. This means that there are many right answers and no single right answer.

A decision is complex when there are many complicated parts to consider, and, on top of these many complicated parts, there is risk, uncertainty, unknowns and social factors.

#### Risks and uncertainty – examples

- increased storms
- variability of the autumn break

#### Unknowns – examples

- interactions between increases in carbon dioxide and changes in temperature and rainfall

#### Social factors – examples

- increased labour costs if I change towards livestock
- the prospect of living in a less attractive environment

A cooperative venture between



**Australian Government**  
**Department of Agriculture,  
Fisheries and Forestry**  
**Bureau of Meteorology**

## How advisors can help farmers make complex decisions

A few points to remember on how to help people make complex decisions:

- Because there are too many things to consider, people will establish principles and boundaries which guide their decisions.
- Past experience is important for establishing these principles; however, if the future is changing, then past experience may not be relevant. Farmers will try to establish new principles.
- Storytelling is important to assist with making confident decisions in a complex environment. Hearing other farmers' stories will help a farmer establish principles.
- Intuition and gut feeling are important. This may be worrying for some people as they want to be more certain they are doing the right thing.
- It can be helpful to provide whatever objective information is available to paint a picture that can be discussed through storytelling.
- Highlight risk management tools such as insurance.

Farmers will be trying to establish a new set of principles. If the amount of objective information is limited, the level of uncertainty may result in 'paralysis', where no decisions can be made.

Advisors can assist farmers by providing information, telling stories about how other farmers made similar decisions, and establishing principles.

### Further Information

Grain & Graze – Managing complex systems:

<http://products.lwa.gov.au/products/pr081463>