

Changing rainfall patterns and temperature extremes in Australia can lead to risks...

Quality and quantity of crops

Improved crop management strategies have enabled Australian wheat yields to remain constant. However, as Australia progresses towards 2°C warming with the associated changes in rainfall, it will be extremely challenging for crop yields to be maintained. As well as yield, the nutritional value of crops may be altered[^].

Biosecurity

The distribution and occurrence of pests and disease can be detrimental on crops and livestock. Pesticide applications may not be an effective solution, which may lead to resistance by the pest and also have negative environmental effects.

Heat stress on livestock

Animals experiencing heat stress have reduced appetites and are less likely to breed, thus leading to significant productivity losses for the livestock industry. This is region specific, for example dairy production has been expanded in some regions of Southern-Australia.

Distribution of crops and livestock

Crops may become inviable in regions where they are currently grown, for example, grape vines for wine production may need to be moved to cooler areas to retain their quality characteristics. Lower rainfall and higher temperatures reduces forage and pasture production for livestock[#].