

## Lesson 1 – Introduction to agricultural adaptation to climate change

Learning intentions	Students will know: <ul style="list-style-type: none"> <li>- Definition of climate change, mitigation and adaptation</li> <li>- Difference between climate and weather</li> <li>- Causes of climate change</li> <li>- Examples of climate adaptations in the food and fibre sector</li> </ul>
Materials	<ul style="list-style-type: none"> <li>- Computer with projector</li> <li>- Students will need access to computers and the internet</li> </ul>
Resources	<ul style="list-style-type: none"> <li>- Lesson 1 PowerPoint</li> <li>- Lesson 1 teacher notes</li> </ul>

### Lesson preparation:

- Send students the link for the survey on Slide 2 of the PowerPoint.
- The below notes and glossary of terms is designed to help teachers use the terminology associated with this lesson

### Lesson plan:

- 1) Present PowerPoint to the class
  - Stop to discuss student results to the survey on Slide 2, have the students think about how much or little they know about climate change
  - Allow students time to complete the short activity on slide 10 about Biome's (approximately 5 minutes). Encourage them to discuss other town biomes with their own and why certain animal and plant species are grown in some areas but not others, for example, the southern states produce a large amount of the country's cereal crops whereas tropical species like sugarcane and mangoes are grown in the northern areas. Similarly, different breeds of cattle are farmed in different areas, with more drought tolerant but slower growing cattle managed in northern QLD and WA compared with smaller framed cold tolerant breeds in the southern states. Encourage students to think about differences in climate, temperature, humidity and timing of rainfall about why these differences occur.
  - Note on Slide 15: *the **Paris Agreement** was signed in 2015 when 196 countries came together in Paris, France to discuss climate change at a meeting held by the United Nations. The aim of the agreement is to keep global warming below set levels. Under the Paris Agreement, each country must determine, plan, and regularly report on the contribution that it undertakes to mitigate global warming.*
  - Give students time to complete the Plus/Minus/Interesting task (there is an example of how to complete this task on Slide 20)
- 2) End of lesson discussion

- Check student's comprehension by asking them to explain in their own words the meanings of key terms like: climate change, biome, mitigation and adaptation. See glossary below for help with fact-checking students answers.
- Ask students: 'what did you learn today about climate change and adaptation that you didn't know before?'

## Glossary of terms

**Climate change:** Climate change is any change in the climate, lasting for several decades or longer, including changes in temperature, rainfall or wind patterns.

**Biome:** an area of the planet that can be classified according to the plants and animals that live in it.

**Adaptation:** To change to become adjusted to new conditions.

**Mitigation:** To make (something bad) less severe, serious, or difficult.

**Food security:** the state of having reliable access to a sufficient quantity of affordable, nutritious food.