



Sustainability Cross-Curricula Priority Submission-September 2011

Purpose:

To include a focus on food and fibre production as part of the Sustainability cross-curriculum priority by the inclusion of a specific Organising Idea related to this topic.

Suggested Organising Idea:

(For inclusion under the 'Futures' heading.)

“Food and fibre production is essential to human life and must be managed in ways that support current and future generations.”

Rationale:

Sustainability addresses the ongoing capacity of Earth to maintain all life” (Australian Curriculum v1.2 – Cross-curriculum Priorities)

By definition Sustainable Food and Fibre Production is essential to all human life on Earth. Maslow’s hierarchy of needs states that the need for food and shelter are our primary needs as humans. To do this in a sustainable way is crucial.

Understanding the resources and processes required to produce food and fibre is an essential educational outcome if we are to ensure future food and fibre security in a changing world.

The challenge of providing food and fibre to an increasing world population will need to be addressed by current and future students. Empowering future generations to make informed decisions about these resources and their value, supports the well being of all individuals.

This submission is designed to promote effective, engaging, relevant food and fibre education programs within Australian schools. The basic premise is that food and fibre are essential to life. All students from Foundation to year 12 should learn where food and fibre comes from and the resources required for sustainable production.

An understanding of food and fibre production is necessary for informed decision making particularly as urban communities are becoming less connected with rural Australia.

This submission provides a unique opportunity to embed sustainable food and fibre production into this cross curriculum perspective and thus enables sustainability to be quantified into real life terms without additional content being needed.

An informed population is an empowered population able to understand;

- basic resources and processes required to produce food and fibre
- diversity of food and fibre production systems
- land and water use conflicts and consequences of loss of productive areas
- the important role food and fibre producers play in environmental management, climate change, food and nutrition, economics, cultural and social well being.
- the capacity and resilience of the human capital required for sustainable food and fibre production.
- impacts of consumer choices and government policy on long term food supply
- the importance of research and development underpinning sustainability of food and fibre production
- that the production of food and fibre is sophisticated, knowledge intensive, challenging, provides an attractive and viable career choice.
- the need to balance competing demands for resources

Sustainable food and fibre production provides a powerful context to engage students across all learning areas in thinking about the natural world and their place in it.



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Content Examples related to Primary Production and Sustainability

Stage	English	Maths	Science	History
F-2	<p>Recording observations of growing plants over time.</p> <p>Names of animals and their young.</p> <p>Collective nouns for 'farmed' animals. E.g. school of fish, herd of cattle.</p>	<p>Recording in a pre-prepared table to record data such as those who have visited a farm or been fishing.</p>	<p>Sorting and grouping materials into man-made and natural fibres and products.</p> <p>Earth's resources including water are used in a variety of ways. E.g Sailing, rec. Fishing, fish farming and diving.</p>	<p>Examining and commenting on photographs to find out how environments have changed (positive and negative e.g land clearing to natural resource management).</p>
3-4	<p>Using a factual text to identify important primary industries in Australia.</p>	<p>Investigating the use of fractions as a way to manage natural resources from an indigenous perspective e.g. take only half the abalone.</p>	<p>Monitoring climatic variable in the school vegetable garden - establishing the effect of annual temperature variations on the crops that may be grown successfully.</p>	<p>Identify and discuss the types and sources of food associated with multicultural celebrations.</p>
5-6	<p>Compare and contrast information written by different sources on similar topics. E.g Forestry or Live Exports.</p>	<p>Determine the optimum herd size on a given piece of land.</p>	<p>Investigate a scientific gain that has improved sustainable primary production. E.g. Drip irrigation or no-till farming.</p>	<p>Investigate the expansion of the colonies to productive farming lands, what was its impact? What was the relationship like between early farmers and indigenous populations?</p>

7-8	Explain the way in which particular articles are written effect the audience	Plotting points for tables of values from non-rule based data. E.g. water consumption over a month. Compare with different months of the year.	Looking at different ways of propagating food crops (eg. we breed new fruit tree varieties from seed, but then multiply the new variety by grafting or tissue culture)	Examining the food and fibre traded between empires and civilisations e.g Russia and the East via Constantinople Or Evaluating evidence of theories for deforestation of Easter Island
9-10	Debate the reliability of coverage in a range of news media in relation to contentious issues such the logging of old-growth forests, marine parks vs commercial fisherman and Coal Seam Gas.	Investigating biodiversity changes in Australia since white settlement and how primary producers are responding.	Investigate changes caused by natural selection in a particular population as a result of a specified selection pressure such as artificial selection in breeding for desired characteristics. E.g layer hens/wrinkle free sheep/dairy cow	Investigate the effects of government policy promoting land clearing for agricultural development as part of the solider resettlement schemes,