

Tocal Virtual Farm

Case study workbook



Acknowledgements

Lead Author:

Meg Dunford (Project Officer School programs, NSW DPIRD).

Editors, Advisors and Co-authors:

Michelle Fifield (Education Officer Schools, NSW DPIRD) and

Jo Hathway (Project Officer School programs, NSW DPIRD).

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Virtual Farm Case Study Workbook

The following workbook along with the additional worksheets, are designed to cover the Stage 6 Preliminary Farm Case Study and associated outcomes of the NSW Agriculture Stage 6 syllabus.

Outcomes:

- P1.1 describes the complex, dynamic and interactive nature of agricultural production systems
- P1.2 describes the factors that influence agricultural systems
- P2.3 describes the farm as a basic unit of production
- P3.1 explains the role of decision-making in the management and marketing of agricultural products in response to consumer and market requirements
- P5.1 investigates the role of associated technologies and technological innovation in producing and marketing agricultural products.

For the best learning outcomes we suggest students visit [Tocal College, CB Alexander Campus](#) to carry out the first hand observations and practical activities associated with the Farm Case Study syllabus requirements.

Farm tours are accessible year-round via appointment. However, information for completion of this booklet can be accessed through the [Tocal Virtual Farm](#).

The Farm Unit

Property description

Property Name	
Location	
Managers	
Size (Hectares)	
List the main farm enterprises and 'herd/flock size'	

Give a brief history of the property (see the [People on Tocal](#)).

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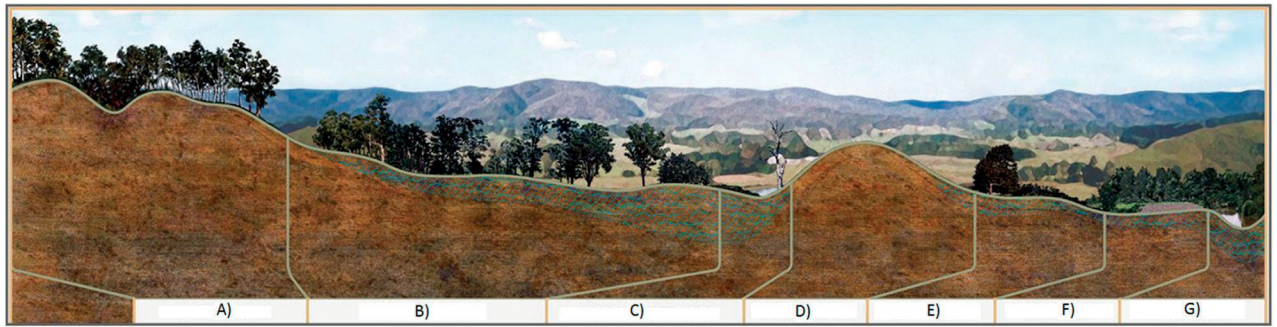
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Physical and biological resources on the farm



Topographic landscapes on Tocal

Label the topographic landscapes of Tocal in the transect A)-G).

A.....

B.....

C.....

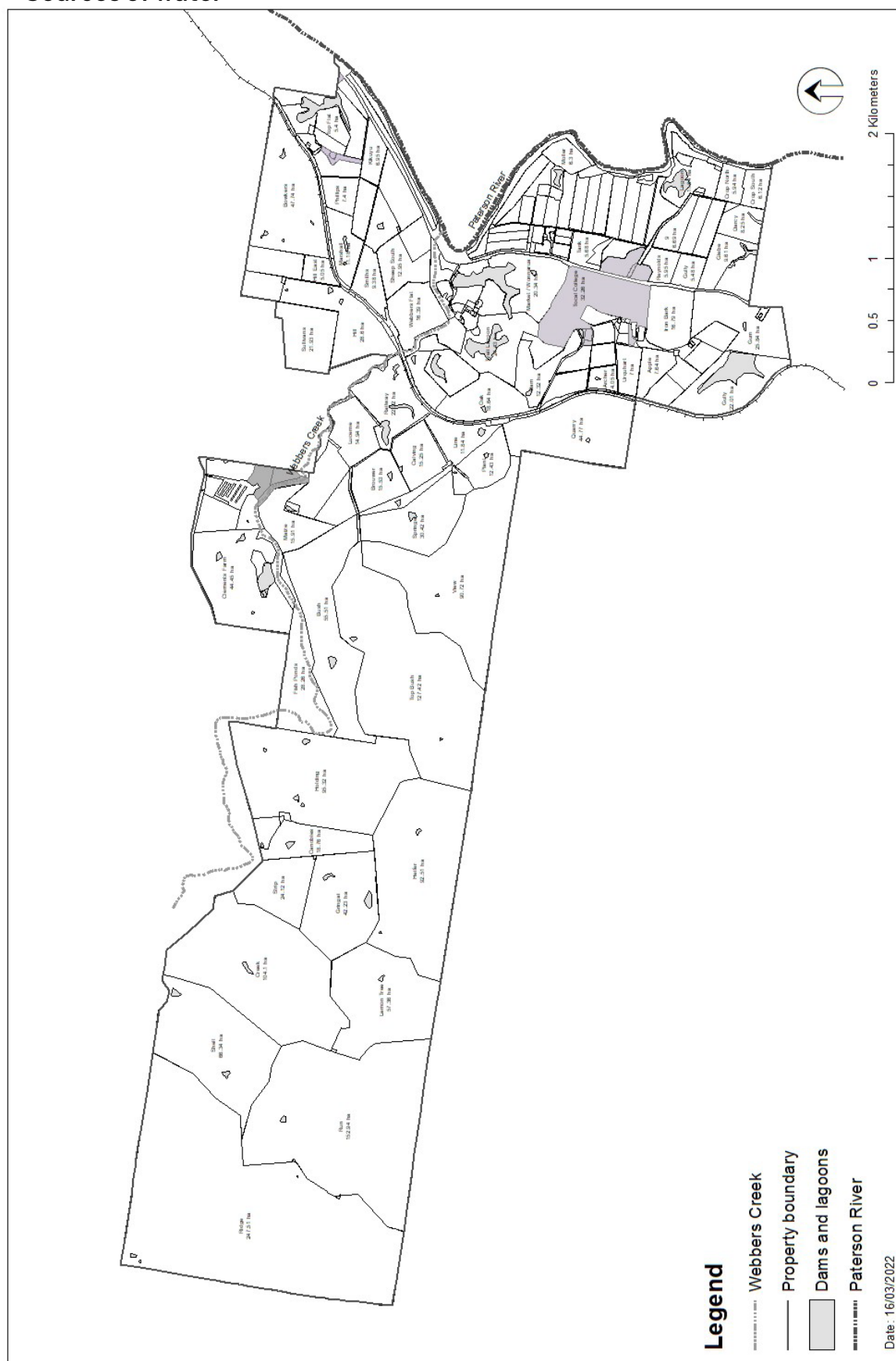
D.

E.....

F.....

G.

- Land capability classifications
- Sources of water



Describe the importance of the following physical features to production. In your description address how each effects the type of production on the farm and how any problems are overcome?

Soils:

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Water:

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Climate:

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Topography:

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Infrastructure:

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Describe the importance of the following biological features to production. In your description address how each affects the type of production on the farm and how any problems are overcome?

Vegetation:

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Pest and disease:

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Enterprises- Animals

Answer the following parts for at least one Tocal College enterprise.

Enterprise name:

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Enterprise size:

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List production figures:

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List the inputs:

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List the outputs:

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Identify the operations and processes within the enterprise:

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List the purpose of plants in this enterprise:

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Identify methods used to control pest and disease:

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Describe methods of marketing the products from the enterprise:

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List 10 technologies used for production in this enterprise:

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Outline management practices used to improve production:

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Enterprises- Plants

Identify 5 introduced, improved pasture species at Tocal College.

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Identify 5 naturalised pasture types at Tocal.

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Identify 5 native pasture species at Tocal College.

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Identify 5 invasive weeds at Tocal.

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List 5 factors the farmer can change to manage pastures.

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Describe two important features of legumes in a pasture.

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Discuss the importance of a mixed pasture for grazing enterprises.

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Sustainability

Define biodiversity

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Defne remnant vegetation

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List remnant vegetation types on Tocal College.

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Outline the importance of developing vegetation corridors and where possible protecting areas of remnant vegetation.

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Tocal College has a strong ecological management plan to improve sustainability. It focuses on holistically managing climate, soils, water, vegetation, organisms and minimising pollution. For each of the following, briefly outline the goals, policy and management procedures.

Climate:

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Soils:

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Water:

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Vegetation:

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Organisms:

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Pollution:

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Conserving cultural heritage:

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Production goals

Identify 5 production goals for Tocal College:

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Risk Management

Identify 5 causes of risk and uncertainty in agricultural production.

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Identify 5 ways producers can manage risk and uncertainty.

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List 5 identified Workplace Health and Safety (WHS) hazards at Tocal College.

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References and Further Reading:

Tocal Virtual Farm

<https://www.tocal.nsw.edu.au/farm-and-facilities/tocal-farms/tocal-virtual-farm-navigation>

History of Tocal

<http://www.tocal.nsw.edu.au/about-us/history-of-tocal>

Soils of Tocal

<https://arcg.is/5aqXq0>

Water on Tocal

<https://arcg.is/1vP8aS2>