



THE UNIVERSITY  
of ADELAIDE

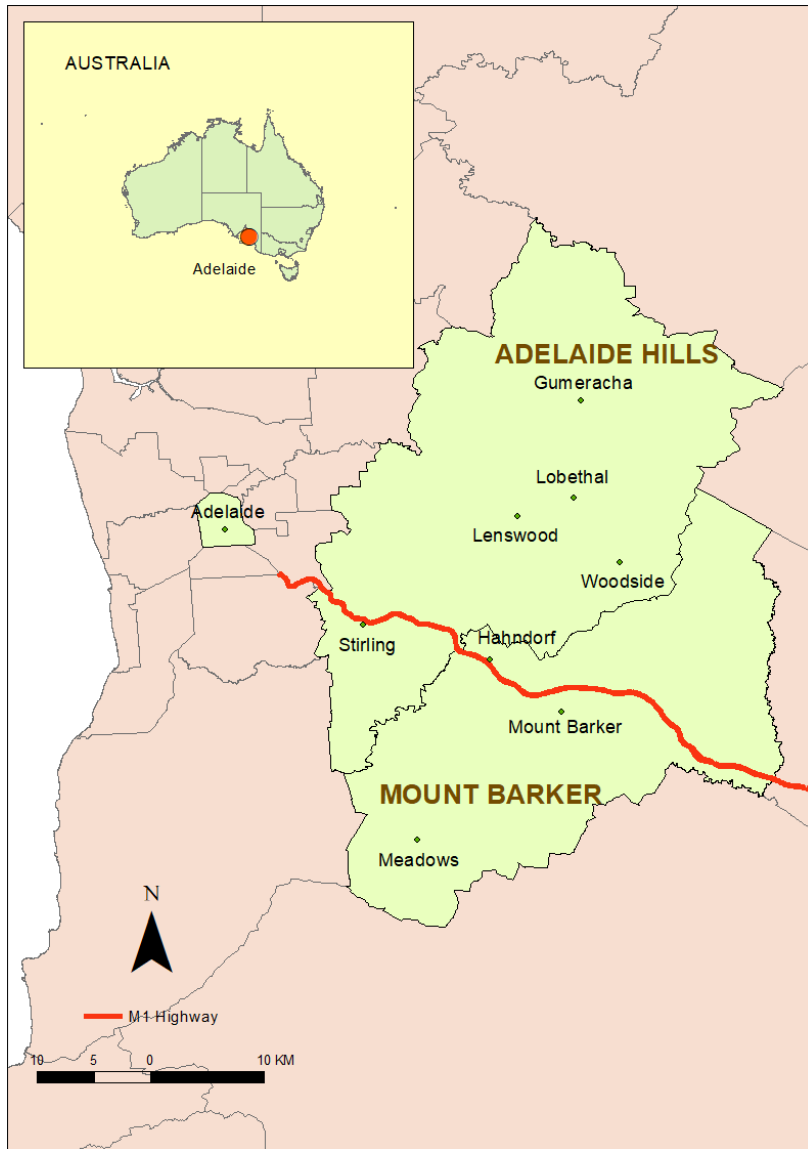
# Exploring Multifunctional Agriculture in the Adelaide Hills: A Brief Review

CRICOS PROVIDER 00123M

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*seek* LIGHT



## • The Adelaide Hills

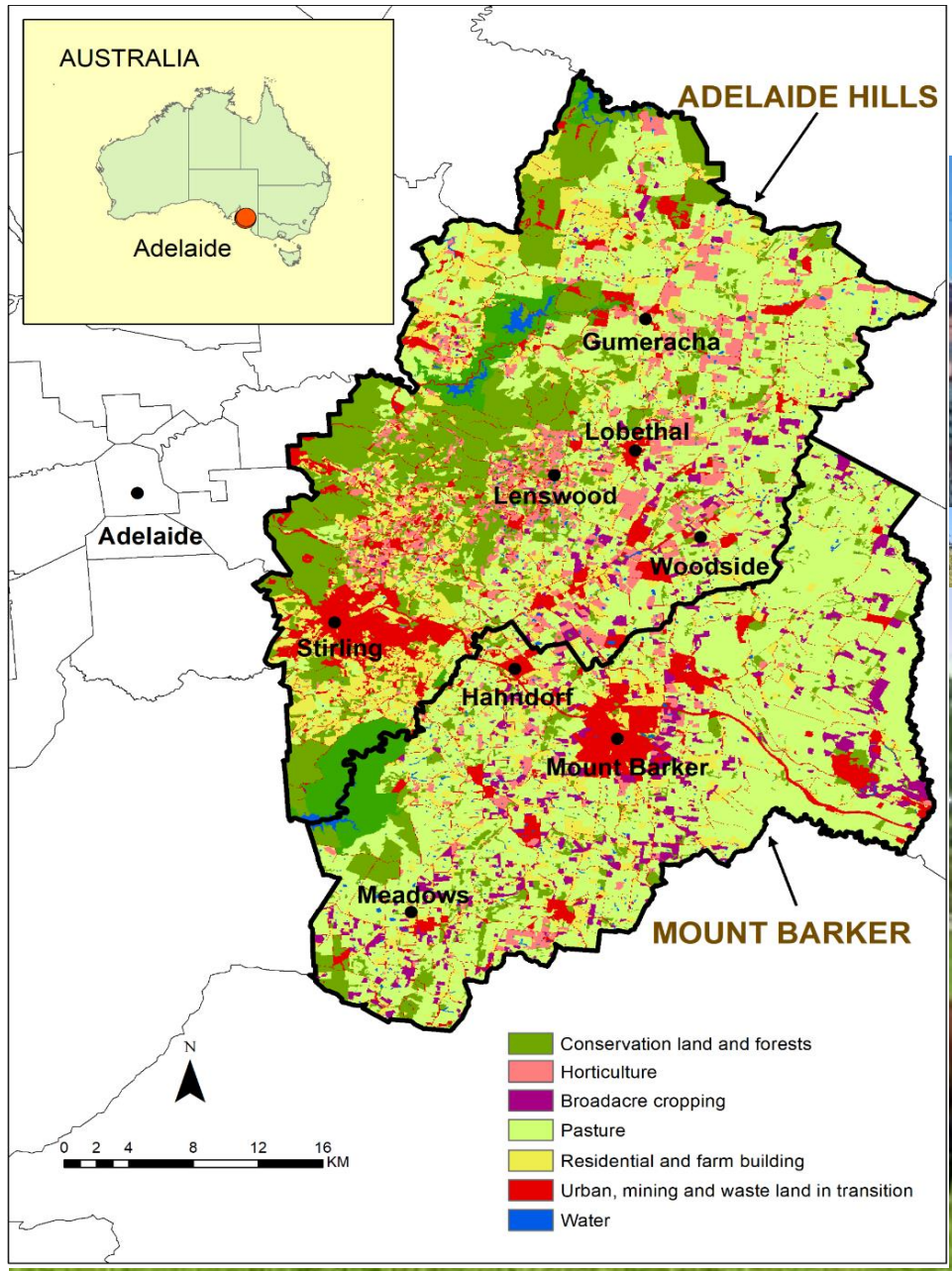
Comprising the administrative districts of Adelaide Hills and Mount Barker

Once dominated by fruit and vegetable production with some dairy herds + poultry

More recently **specialisation developed** in growing strawberries, cherries, vineyards and beef cattle

Hobbyists and past-timers

Farm-based tourism + processing + horses



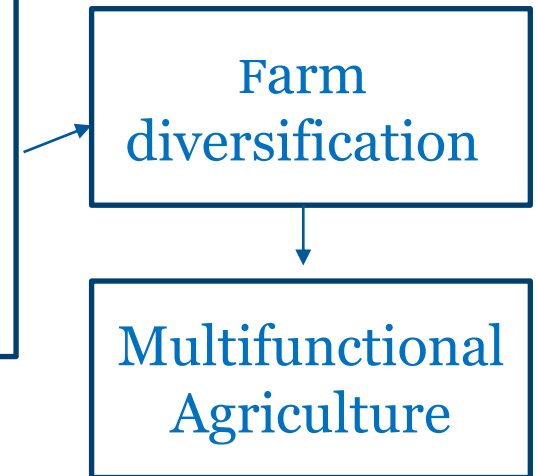
**Multifunctional agriculture (MFA)** = Farms producing more than just traditional crops and livestock.

This occurs through

→ Enterprise diversification by farms: e.g.

..... Farm-based processing,  
Tourism and recreational activities,  
Direct sales to customers,  
Generation of environmental outputs, and  
Contributions to rural community.

→ Generating multifunctional landscapes



**Horticulture** is the dominant enterprise, with wine grapes, apples and cherries, the principal enterprises of full-time farmers.

**Cherries** are the main crop of the part-timers while hobbyists pursue a range of horticultural activities, but often focus primarily on environmental management.

For all farmers, the average age group is >65 years of age, highlighting a problem apparent across the developed world and also some developing countries, that of an **aging population of farmers**.

# MULTIFUNCTIONAL AGRICULTURE

## AGRI-ENVIRONMENT

### Major Contributors:

Most **hobby** and some **part-time** farmers intentionally participate in various pro-environmental activities.

These **hobbyists** – provide habitat and landscape & causing growing **fragmentation**.

Other **hobbyists** (horse owners) – proliferation of invasive weeds; conversion to pasture.



# MULTIFUNCTIONAL AGRICULTURE

## RURAL ECONOMY



### Main Contributors:

**Commercial farms** – many have diversified over a long period (stable diversifiers).

Greater **farm diversification** on full-time farms – wine grape growers (**tourism activities** + **on-farm processing** )



# MULTIFUNCTIONAL AGRICULTURE

## RURAL ECONOMY



### Main Contributors:

Commercial farms -- large-scale family farms focused on production (productivist)

Highly productivist - mainly horticulturalists + orchardists & diversified wineries

Succession?



# MULTIFUNCTIONAL AGRICULTURE

## RURAL ECONOMY



Orchards contribute to rural economy – largely long-established family businesses whilst some viticulture is associated with more recently created enterprises.

Locked-in?

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# MULTIFUNCTIONAL AGRICULTURE

## RURAL ECONOMY



Compared with the commercial farmers, most hobbyists generated limited income from the land.

40% of hobbyists' farms  
--- no income

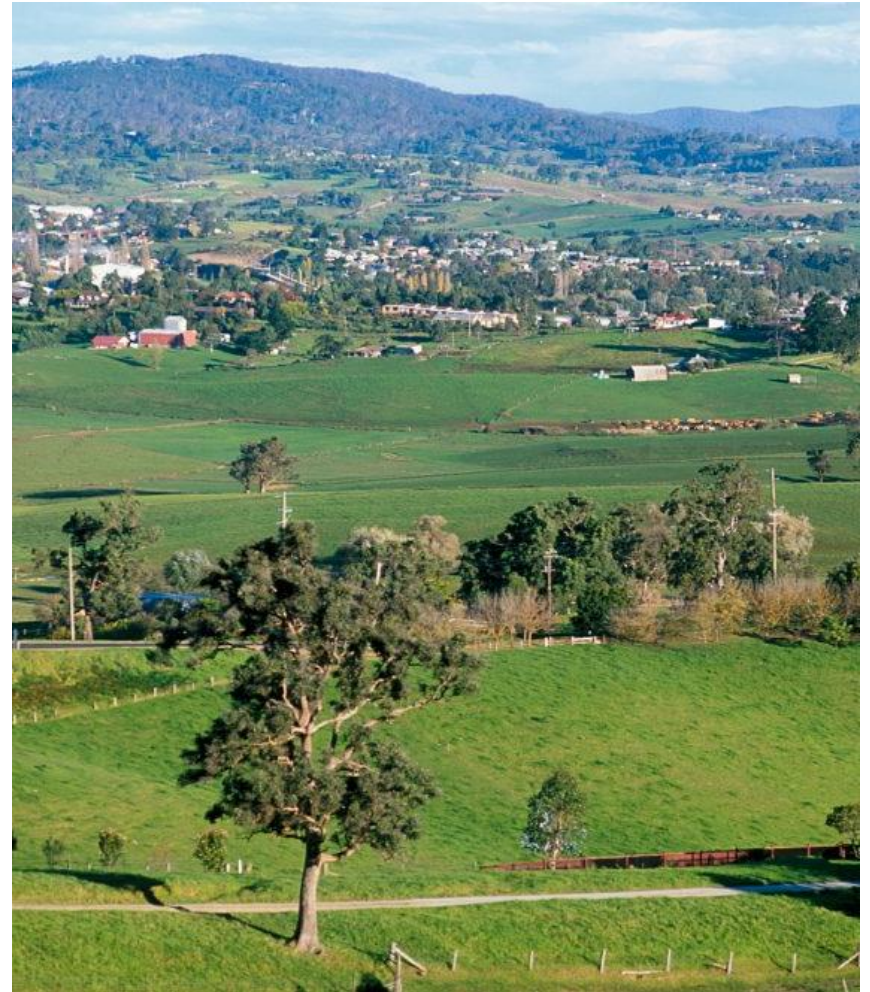
30% --- <5% income

# MULTIFUNCTIONAL AGRICULTURE SOCIAL-RURAL COMMUNITIES

Providing local employment.

Food supply and food  
security

Cultural heritage and  
education



A scenic landscape of rolling green hills and a vineyard under a cloudy sky. The foreground shows rows of young grapevines in a vineyard, supported by wooden stakes. The middle ground features rolling green hills with scattered trees and a small stream. The background shows more hills under a blue sky with white and grey clouds.

Though **Multifunctional agriculture** brings greater opportunities...

## **Potential issues/risks?**

Aging

Succession

Land fragmentation

A lack of official government support – limited protection to maintain and protect the farming landscape

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# Risks

Climate Change – drought/heat,  
storm/hail/bushfire

Agricultural  
production and  
farm profitability

Diversify - new  
activities

Plant multiple  
crops or  
different  
varieties

Threat to life,  
property and  
general safety

Protect  
riparian  
environment

Provide  
sufficient and  
regular  
irrigation



# Risks

Pests and diseases-  
Lead to a decline in the  
quality and quantity of  
produce



Applying new or  
upgrading agricultural  
technology



Chemical control



Organic farming

# Risks

## Cost of labour and other inputs

- Most produce is consumed in local areas, but cost-price squeeze.
- Competition from stable markets of wholesalers, processors and supermarkets
- Aging farmers

Stable diversifiers: Trusted or familiar contractors; Agricultural machinery

Large-scale productivists: Local communities; Family members during slack times

# Risks

## Economic downturn, oversupply and other market risks

- External marketing environment (e.g., unstable international trade)



### Alternative markets and networks

Online and direct sales; farmers' markets



### Tourism activities

Family orchards: Pick-Your-Own activities

Wine-making viticulturalists: opening cellar doors



### Processing

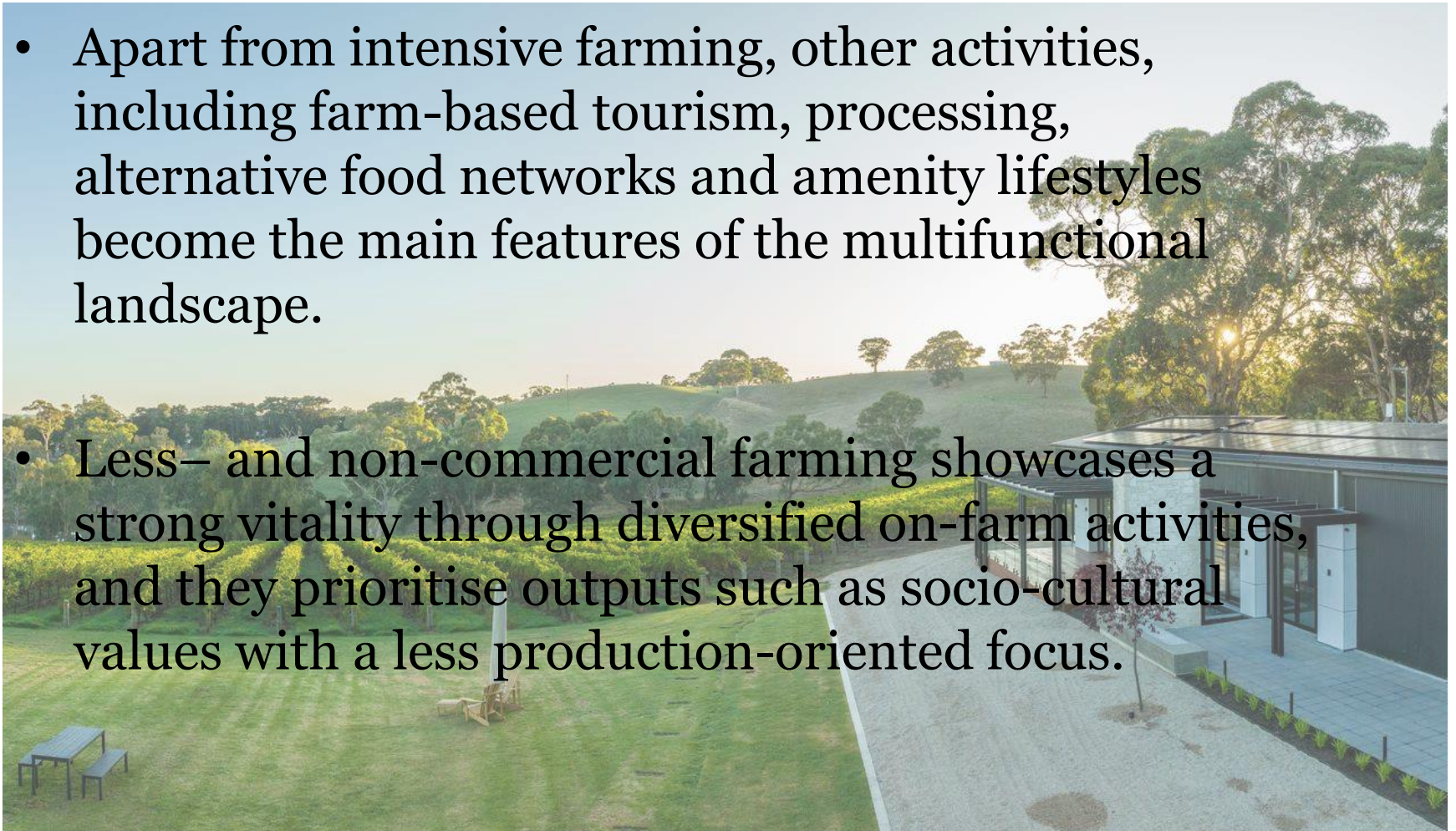
Jam, chutney, ice-cream and ciders relying on fresh apples, pears and cherries grown in the Hills



# REVISITING MULTIFUNCTIONAL AGRICULTURE IN THE ADELAIDE HILLS

- Apart from intensive farming, other activities, including farm-based tourism, processing, alternative food networks and amenity lifestyles become the main features of the multifunctional landscape.

- Less- and non-commercial farming showcases a strong vitality through diversified on-farm activities, and they prioritise outputs such as socio-cultural values with a less production-oriented focus.



# REVISITING MULTIFUNCTIONAL AGRICULTURE IN THE ADELAIDE HILLS

## MORE ISSUES TO BE SOLVED....

- Growth of hobby farming can lead to high-quality farmland being replaced by non-economically productive activities (horses, fragmented environment)
- Population growth has led to new settlements being built on high-quality farmland.
- Fragmentation
- Declining number of farms because of the economics of farming (lack of scale economies → farm amalgamations)



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