

Today's discussion - CommBank

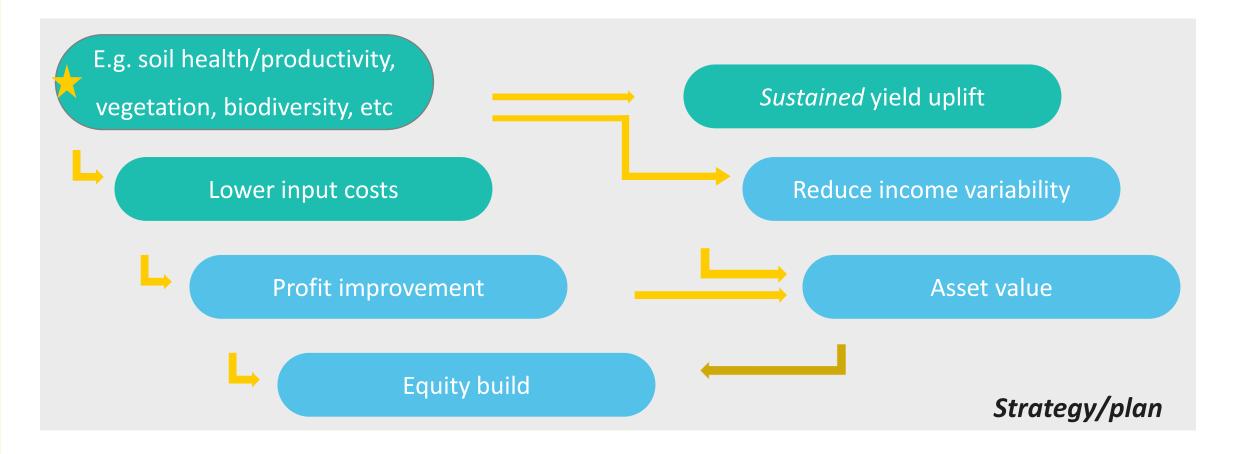
Sustainability strategies create value in banking relationships

Example – the economics of trees in farming systems

Q&A



The valuable link between environmental sustainability and financial sustainability

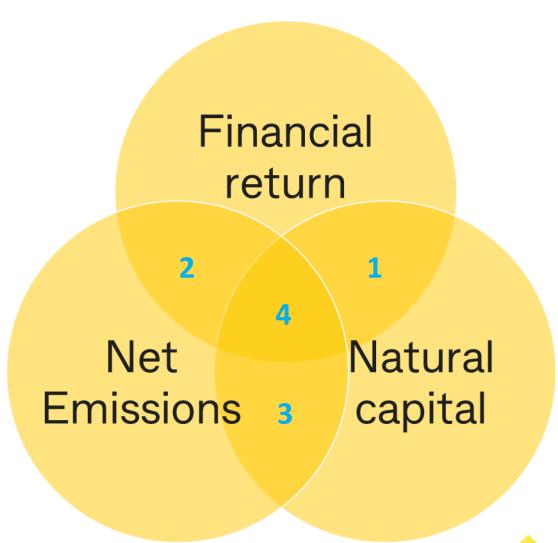




The co-benefits of sustainable farming options are win/wins

Examples

- A simple example, like legumes in rotations can equal lower input costs | better for soil biology too
- 2. Lower synthetic inputs reduce emissions from their production & use eg variable rate application
- 3. Practices that increase soil carbon sequestration lowers net emissions (farming footprint) and builds soil natural capital
- 4. Trees in landscapes protect production (livestock shelter, beneficial insects) + sequester carbon + restore nature

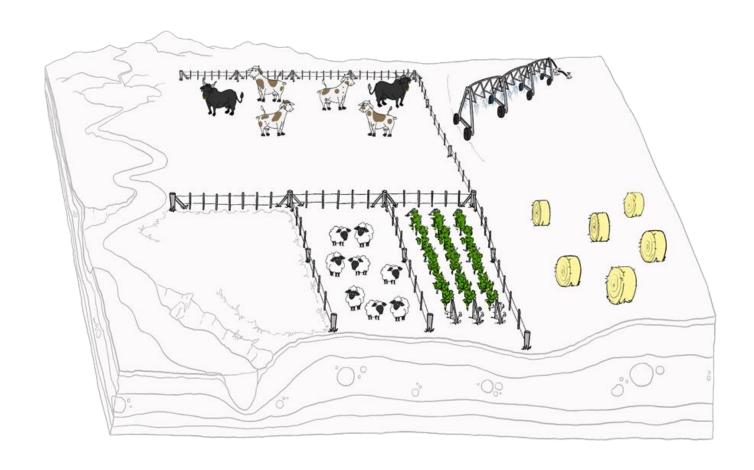






Traditionally, accounting focuses on a limited set of assets

Balance sheet assets

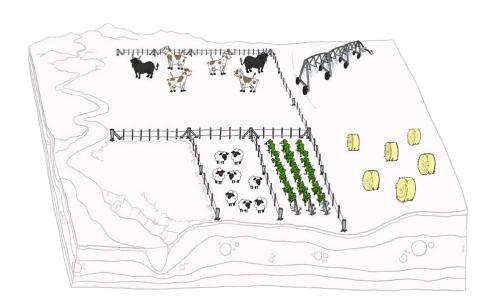


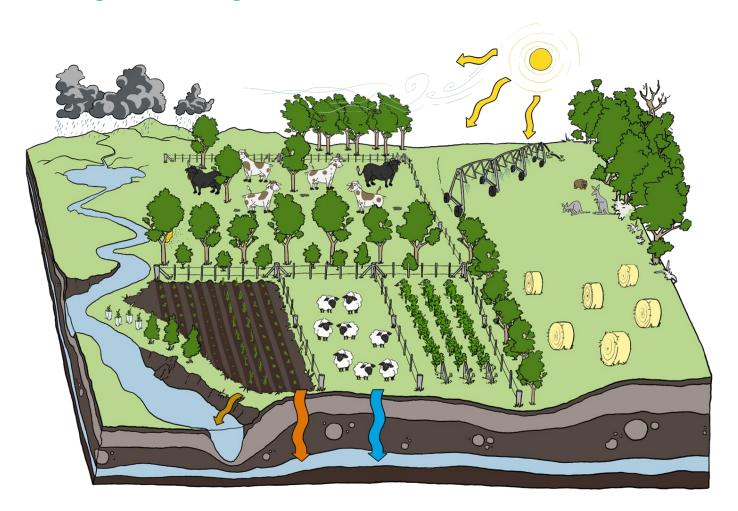


However it takes nature-based assets for farming

Biological & Ecological Assets can now be measured

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The 'hidden' production benefits of Natural Capital

'Free' inputs from nature



Microbats:

Microbats play an important role in controlling insect pest numbers, by eating around 40% of their body weight of insects each night.

www.bats.org.au

Crop Yields:

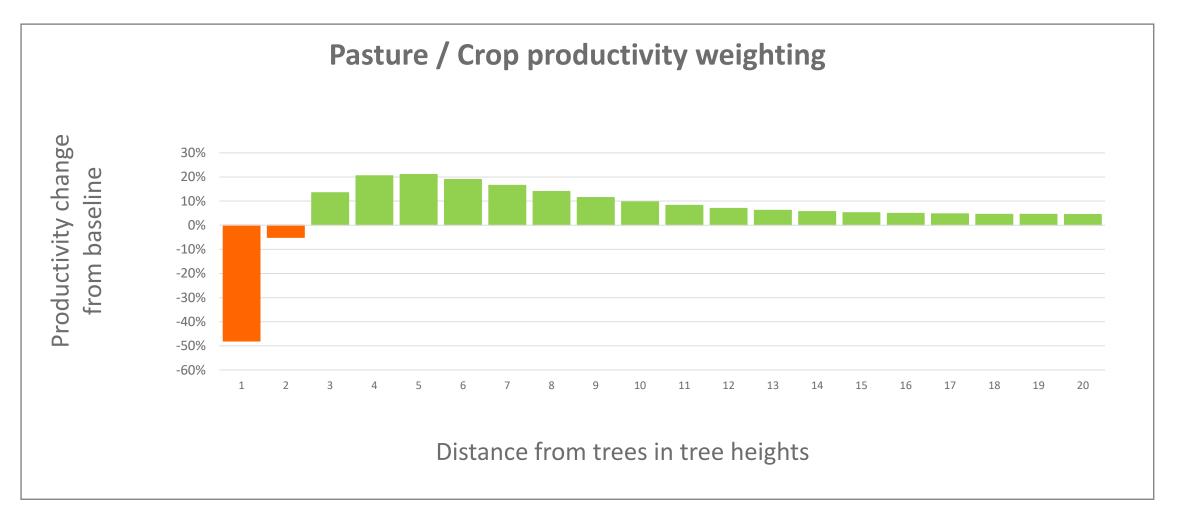
UniSA scientists evaluated the impact of native roadside vegetation & small, isolated patches of (fragment) vegetation on crop yields for canola and faba beans in the Yorke Peninsula (SA).

UniSA ecologists found the increase in yield near vegetation, compared to the Centre of a field, was up to 20% higher for canola and 12% higher for faba beans. The larger patches of vegetation produced the best results.

www.unisa.edu.au/media-centre/Releases/2025/dont-clear-native-vegetation-if-you-want-high-crop-yields/



The 'full' productivity value of trees



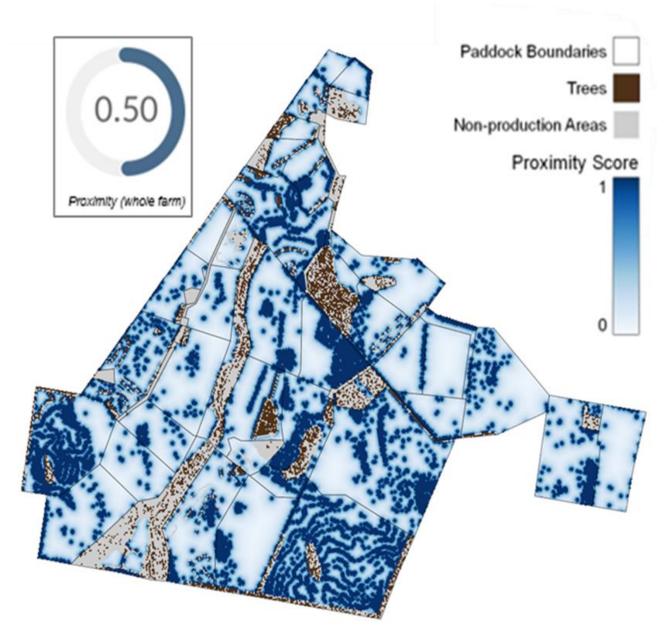
Source: CSIRO Perennial Prosperity Project



Proximity

The average distance of all production areas to wooded vegetation (native, exotic, planted or remnant.

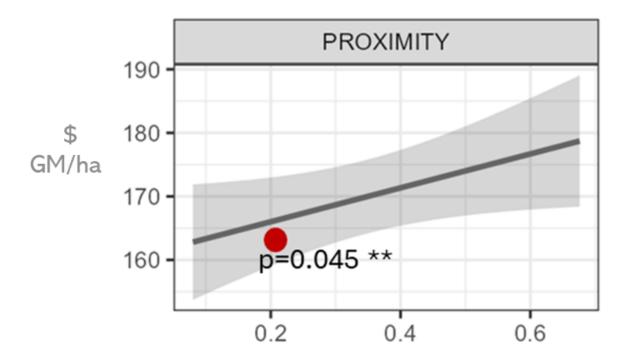
This index is a proxy for provision of ecosystem services such as shade and shelter.

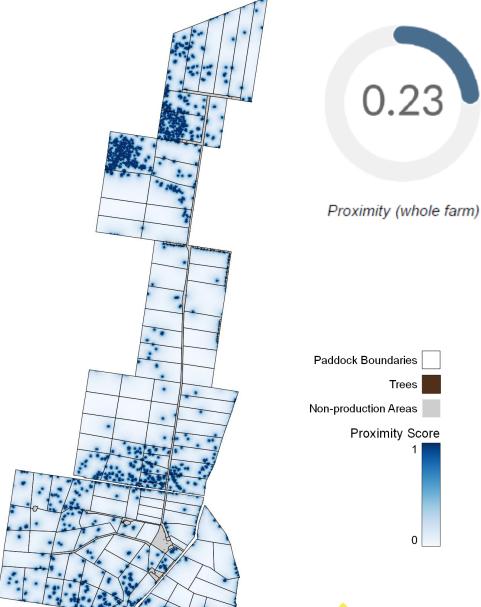




Proximity

Relationships between natural capital and farm performance observed from the full FFTF farm sample



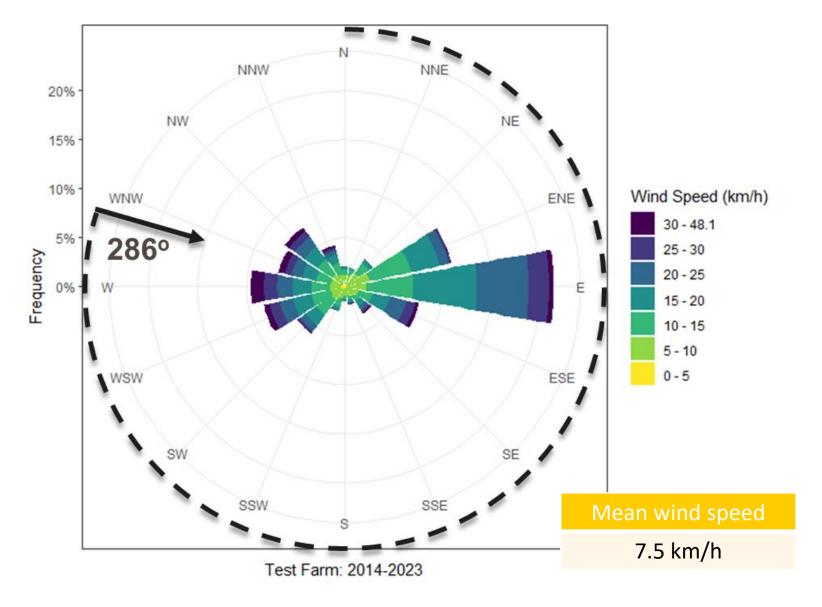




Mean wind direction / speed

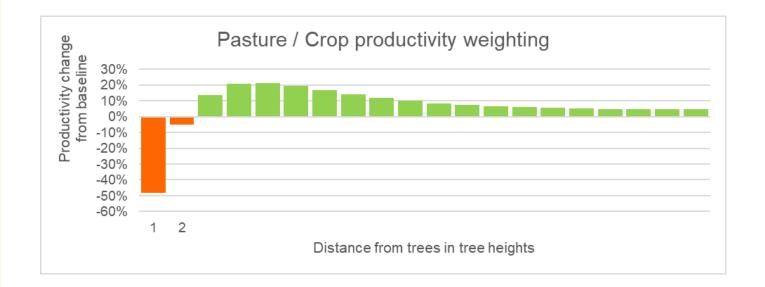
Speed-weighted mean wind direction is calculated to inform shelter belt benefit modelling.

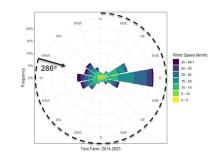
The stronger the wind (darker the colour), the more influence that observation will have on the mean wind direction.

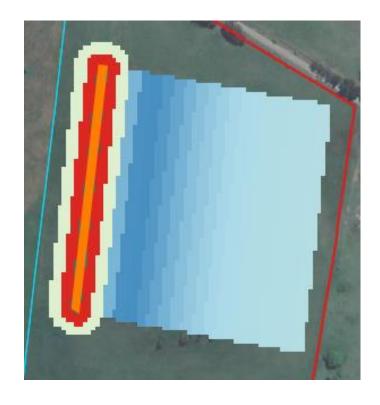




Productivity modelling of trees on farms

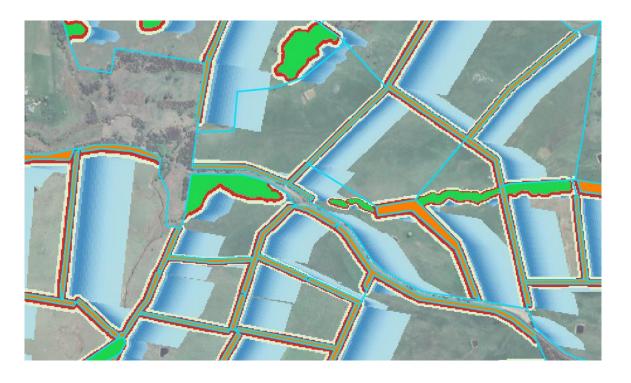


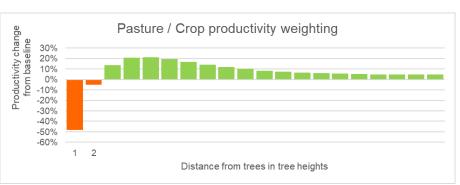


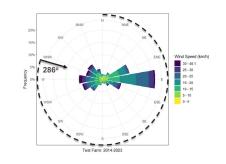


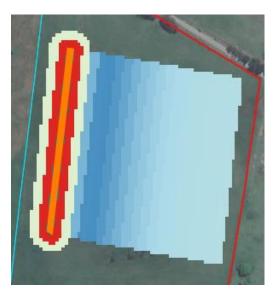


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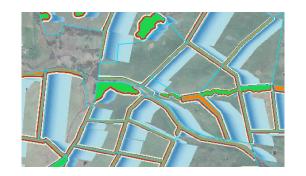








The value of shelter services



	Number of paddocks	Area (ha)
Shelter 0-20%	4	87.4
Shelter 20-40%	19	330.2
Shelter 40-60%	24	331.2
Shelter 60-80%	2	14.7
Shelter 80-100%	7	16.9

Primary Use	Area (ha)	Sheltered area (ha)	Proportion Sheltered
Production	777.0	293.5	38%
Conservation	61.2	60.8	99%
Infrastructure	6.1	5.3	87%



Example is for a farm carrying 4,000 DSE with NO SHADE TREES at all.

Value of shade to avoid heat stress	Information source	Best case	Medium case	Worst case
Number of days >30°C	From report	60	60	60
% loss of animal performance due to heat stress (animals have no access to shade)	Farmer estimate	10%	30%	40%



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+ avoided condition loss due to chill/rain + lower mortality rate + pasture productivity + ACCUs....



CommBank Agri Green Loan

Subject to standard lending policy

Interest only or P&I available

No redraw

Secured by property

Variety of loan terms

Standard fees

Available to existing CBA customers



Soil sequestration and development of carbon sinks



Converting degraded land to improve soil quality



Planting trees or installing shelter belts



Improving management of waste (e.g. effluent)



Shifting land use from monoculture to polyculture



Promoting biodiversity and healthy ecosystems.



energy (e.g. Solar or Biogas)



Reducing carbon emissions



Switching to regenerative farming practices

Protecting waterways

and water efficiency

upgrades



Deploying precision

use of chemicals

Preventing, controlling or restoring erosion



Installing renewable



