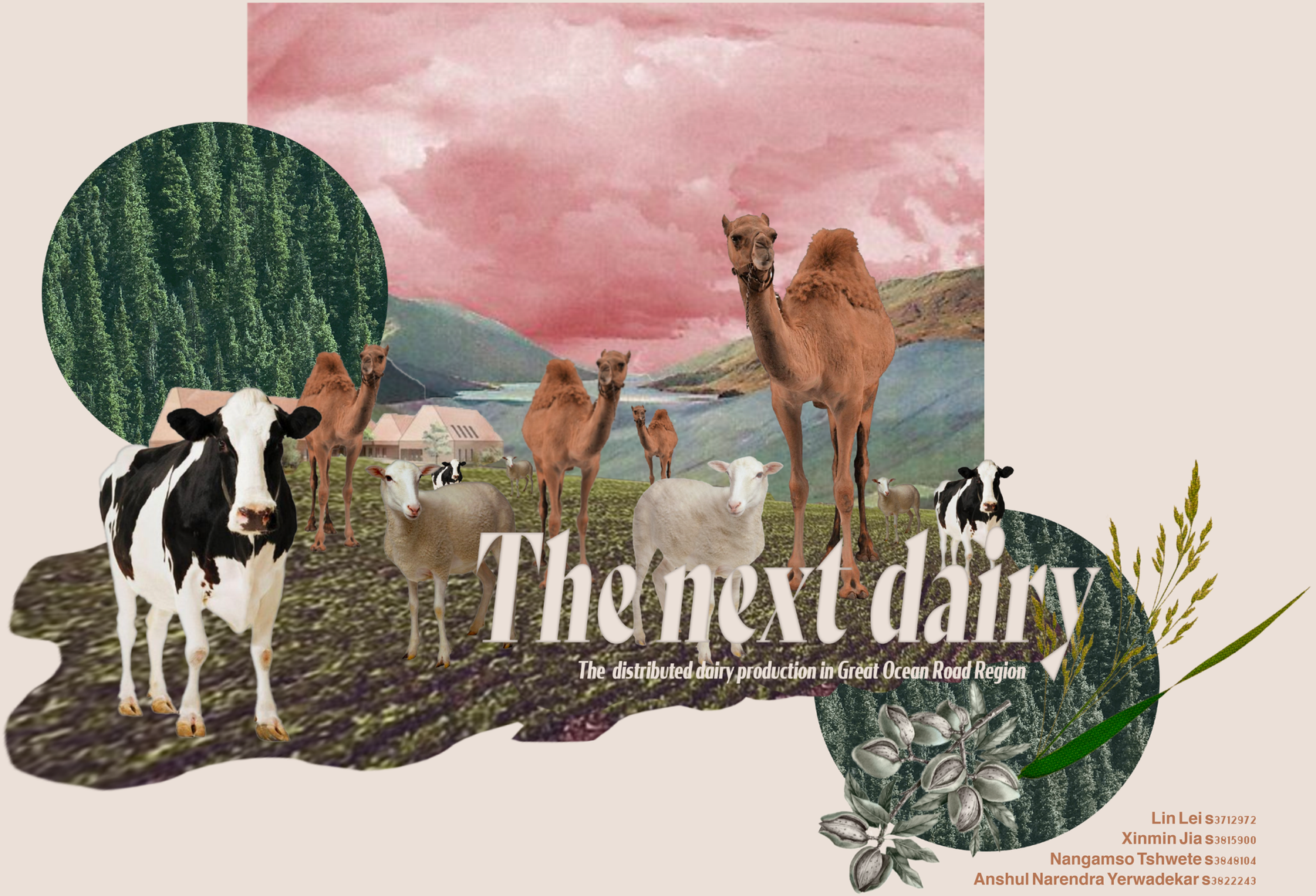
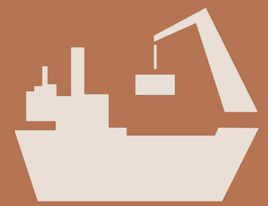


Lin Lei s3712972
Xinmin Jia s3815900
Nangamso Tshwete s3848104
Anshul Narendra Yerwadekar s3822243

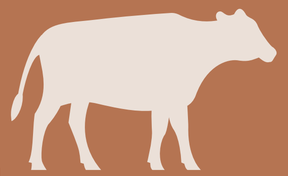
The dairy industry is Victoria's
largest
agricultural industries contributing
about 2.6 billion dollars.



Approximately **23%** of national milk
output.

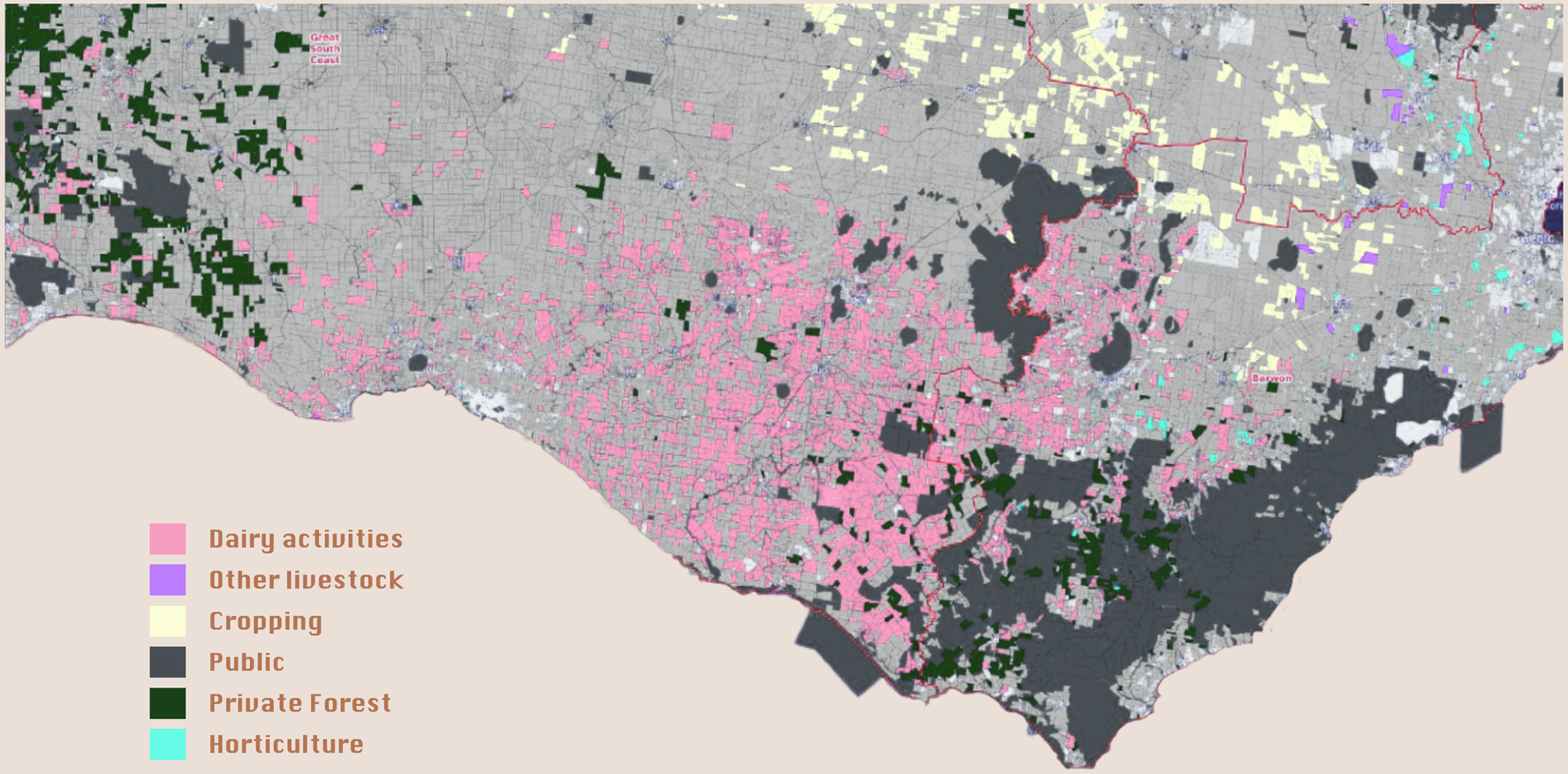


In 2018-2019, Western Victoria produced about
2.010 billion litres Of milk.
Strategic aim of the industry is to increased milk
production about **3.0 billions** litres by 2021.



*WestVic Dairy Annual Report 2019/20

Great ocean road region land use

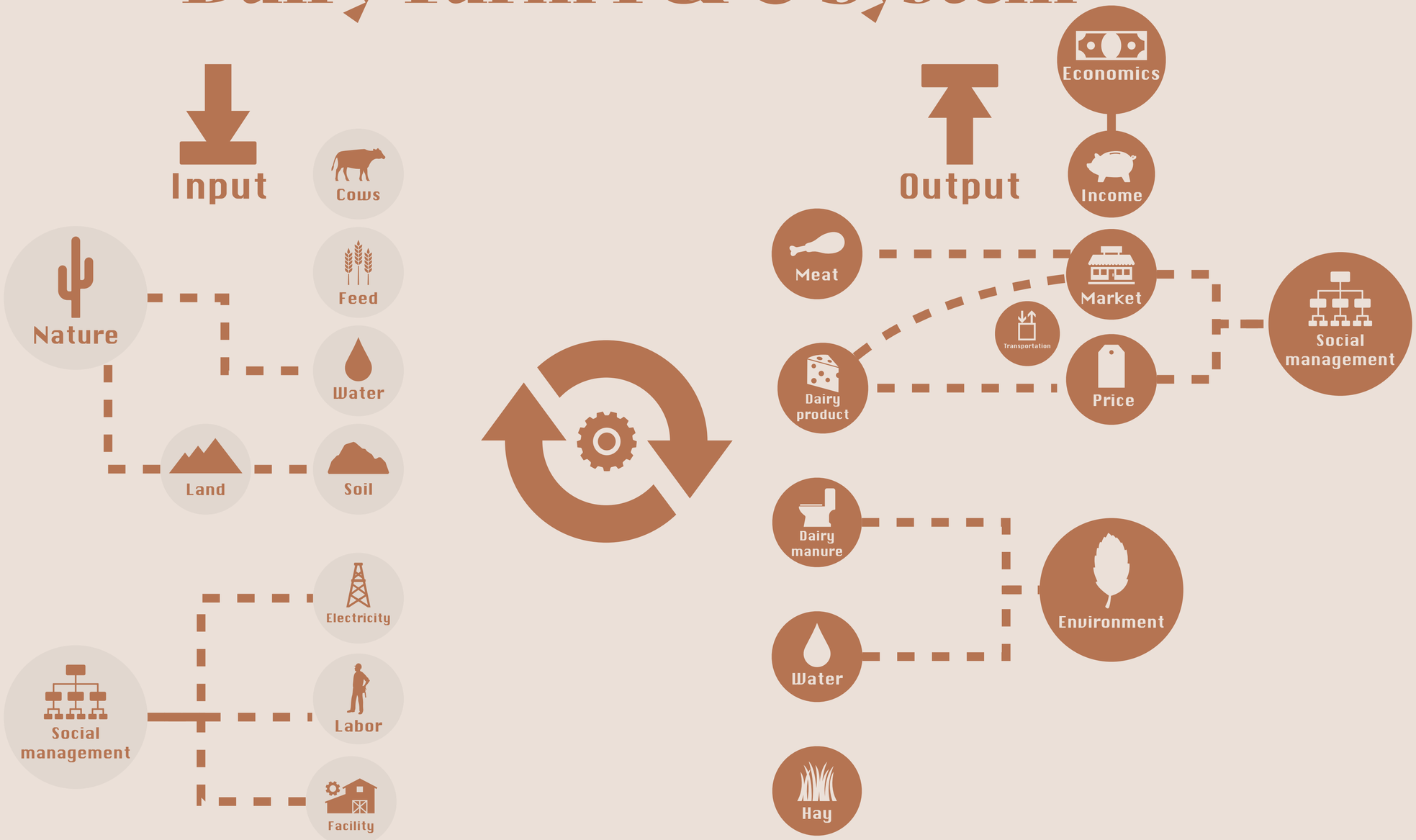


7 million hectare meter of land

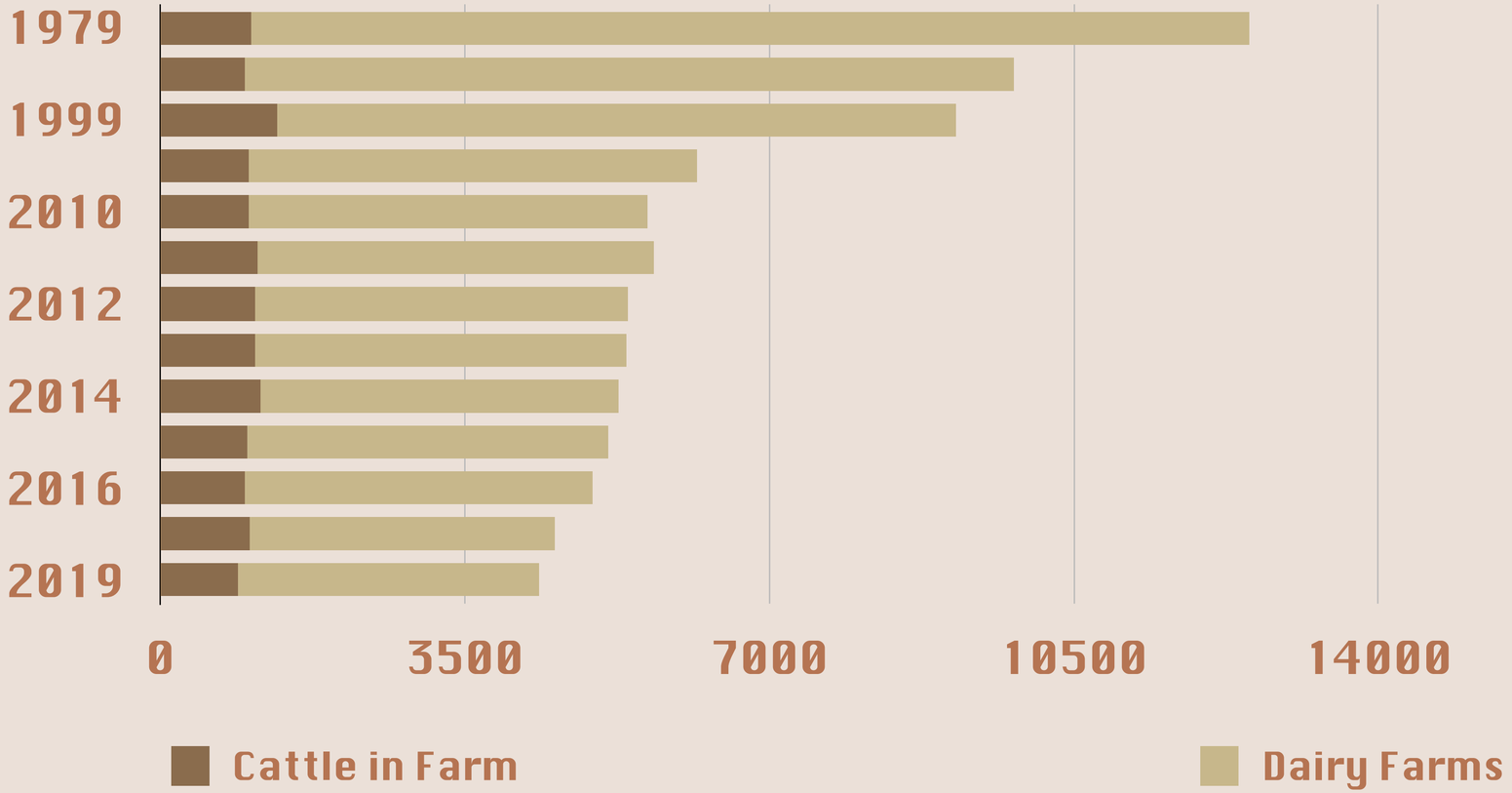
Dairy activities land use is more than **45%** of total land use in the region

*interactive mapped data; dairy activities; regions a by Invest in Victorian Agriculture,2021

Dairy Farm I & O System



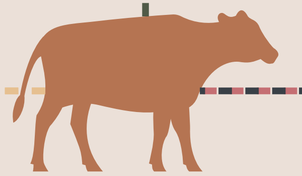
Cattle & Farms in Victoria 1979 - 2019



*ABS 7121.0 and 7503.0, 2015-16; Victorian Government


MILK

Dairy Farm Problem



Nature

Sunlight

Climate

Soil

Rain

Lake

Water

Groundwater

Grass

Agriculture

Labor

Facility

Electricity

Farm

Crop

Soy

Corn

Feed

Product

Meat

Dairy product

Cow manure

Methane

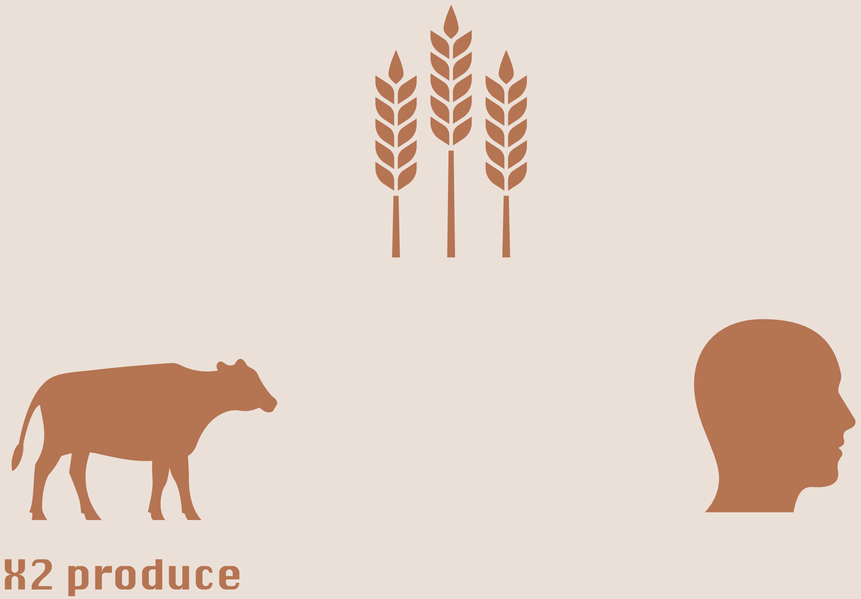
Manure

Problem

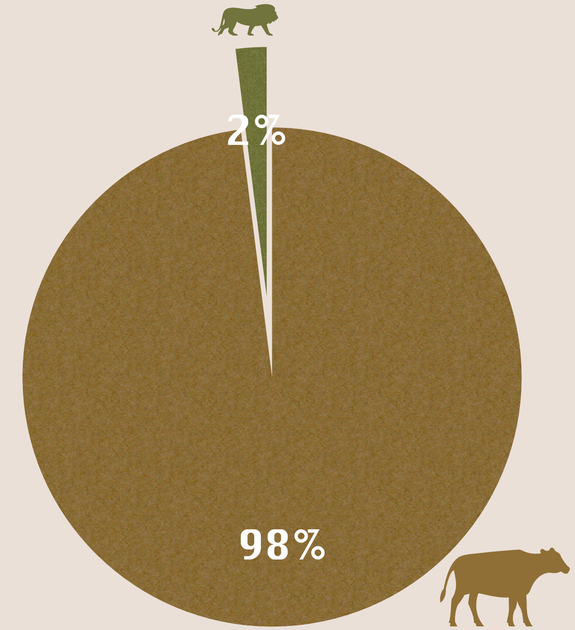
Climate change

Water use

Soil erosion/Salinity



Farmed animals consume more crops than humans in Australia, eating twice as much grains as humans. In other words, two-thirds of crop production for domestic markets are consumed as animal feed.



Animal as property
Wild animals

* COWSPIRACY: The Sustainability Secret. 2021

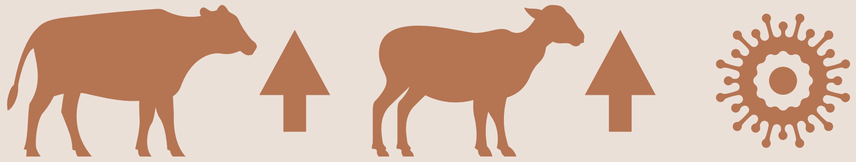
Case study

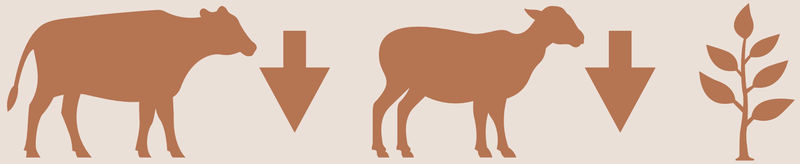
1982



2019







David Marsh’s Boorowa farm into a desert

BUT HOW?

The Next Dairy



Distributed Production Dairy System

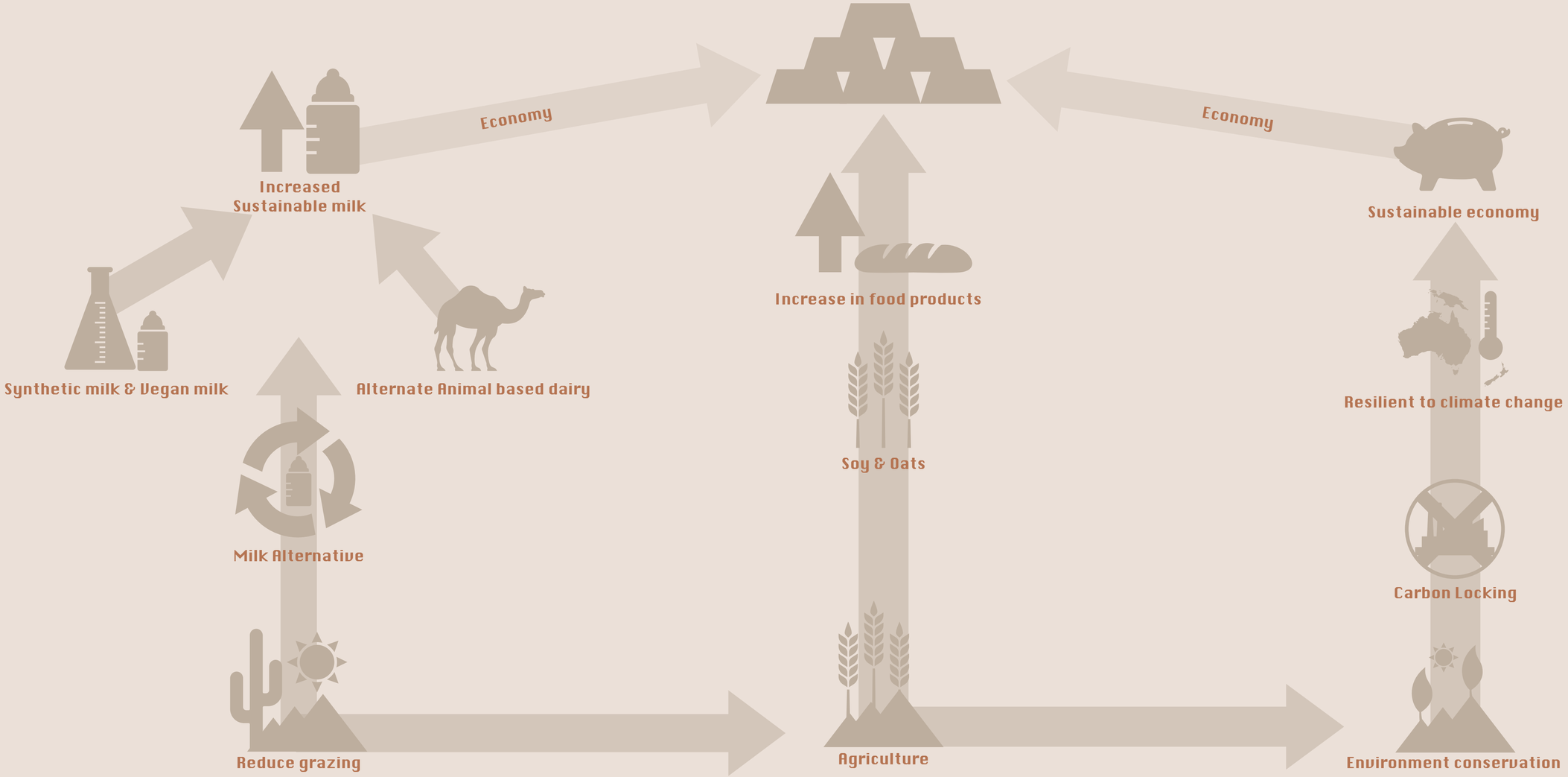
Price

Environment Impact

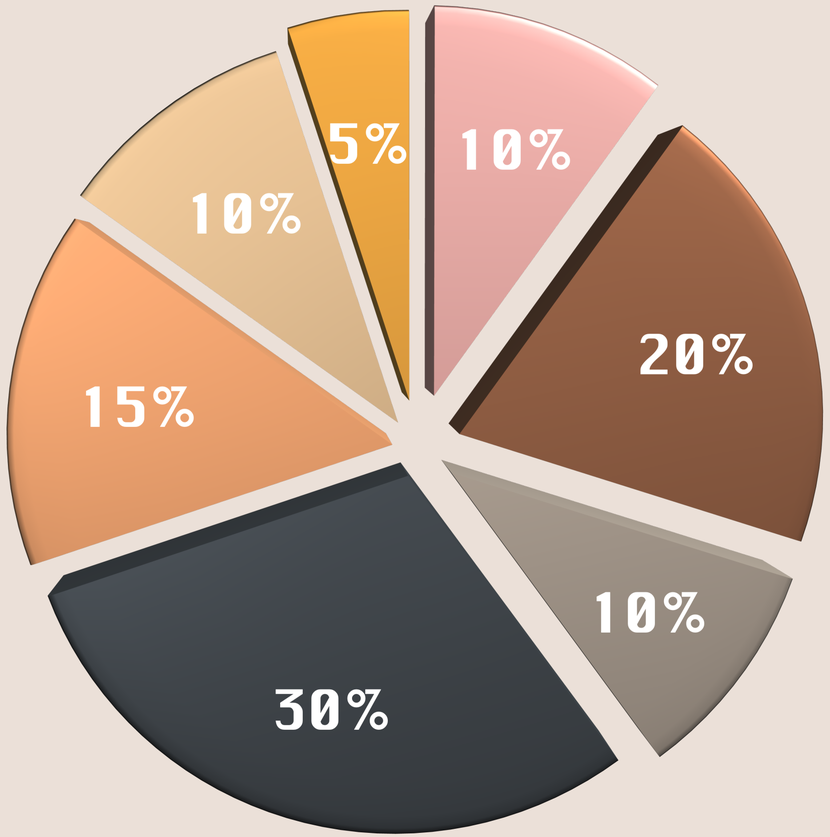
Taste

Nutrition

Concept Mapping



Dairy Alternative Percentage



Cattle Camel sheep Synthetic Soya Oat Almond

Why Camel Dairy

- Most similar to a human mothers milk.
- Rich in nutrients.
- Easier to digest than Cows milk.
- Camels are not picky eaters and can survive on scarce natural resources.
- Camels can adapt to multiple environment conditions as they can withstand both heat and cold, due to their woolly coat of insulating fur.

Why Sheep & Cow Dairy

- Sheep Dairy is High in nutritional value.
- Sheep Dairy is easier to digest than Goat and Cow Dairy.
- Many people still prefer Dairy from a cow(its affordable, enjoyable taste.

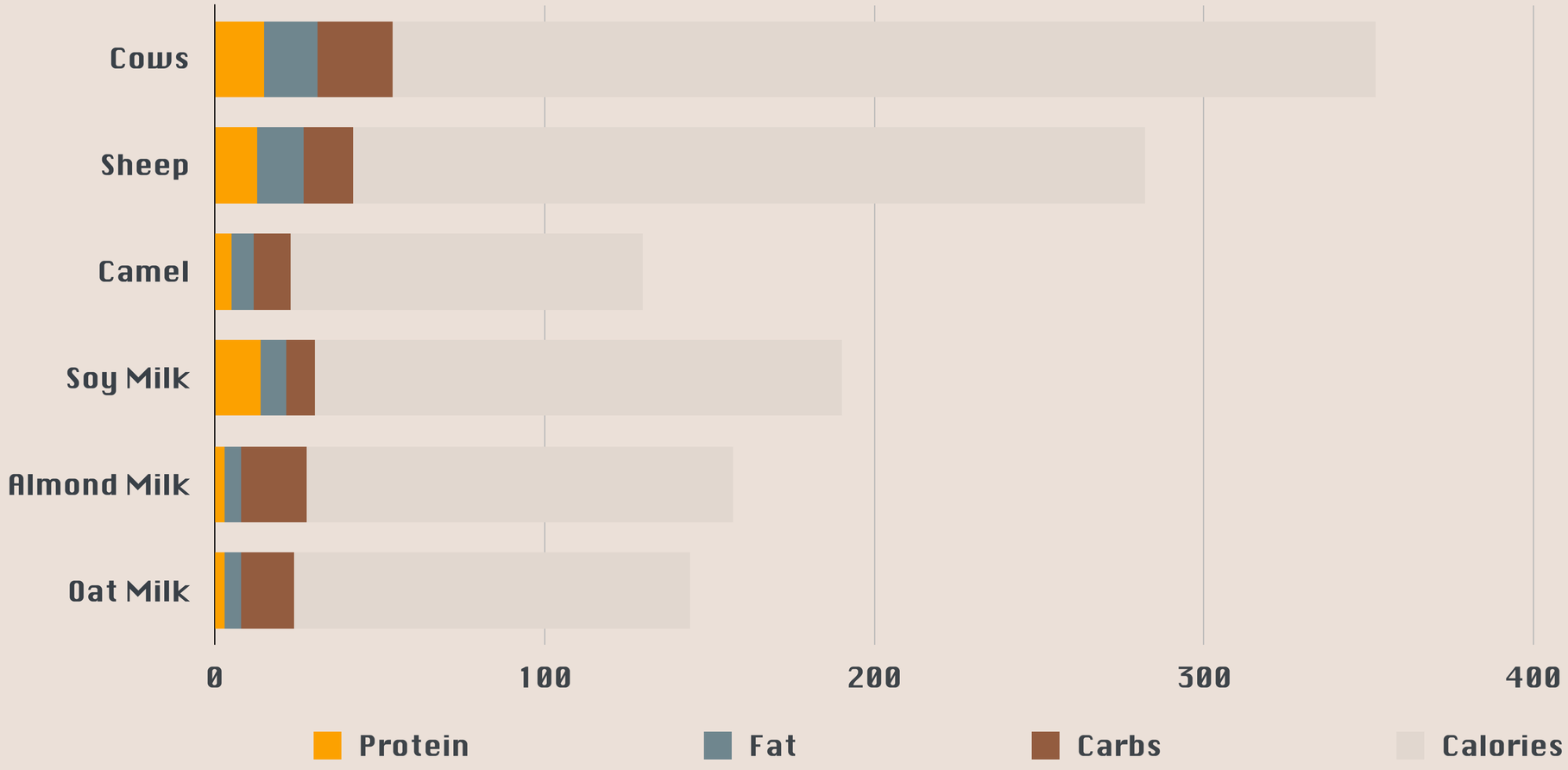
Why Plant-based Dairy

- Oat Milk is ideal for people with nut or dairy allergy.
- Plant-Based Dairy is Lactose free.
- Source of Natural protein and fibre.
- Crop framing is cheaper and has a reduced negative environmental impact.

Why Synthetic Dairy

- Doesn't require any animals, feedlots, or farmland.
- Unlike plant-based milk which have a different flavour and nutritional composition, lab milk is said to be identical to cow's milk in both nutrients and taste.
- It is vegan and lactose free.

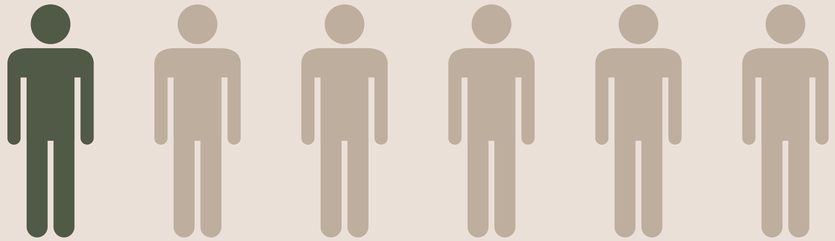
Nutrition Fact



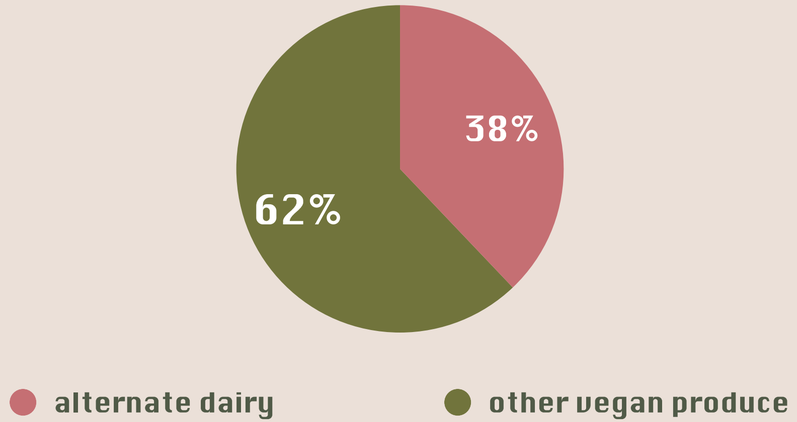
Per 1 server /250ml

*Myfooddata2021

Australia is the 3rd Fastest Growing Vegan Market in the World contributing $221M dollars.



1 in 6 Australians are steering clear of dairy products and opting for dairy alternatives consisting of 38% of vegan market

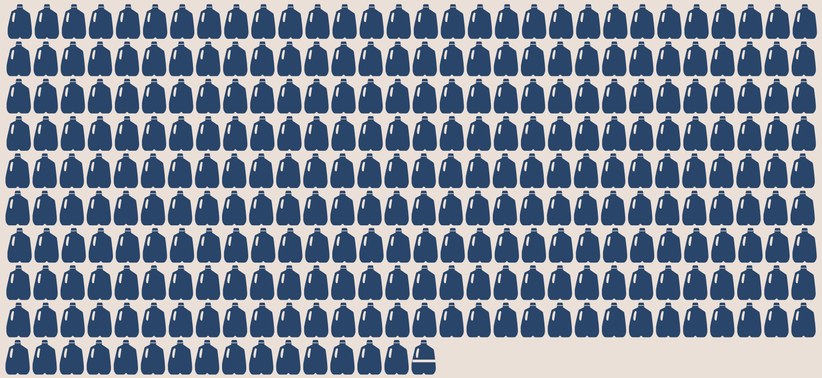


*Australia is the 3rd Fastest Growing Vegan Market in the World. May 2019

Amount of water is required to produce a single litre of vegan milk

Cow's milk

628L



Almond milk

371L



Oat Milk



48L

Soya Milk



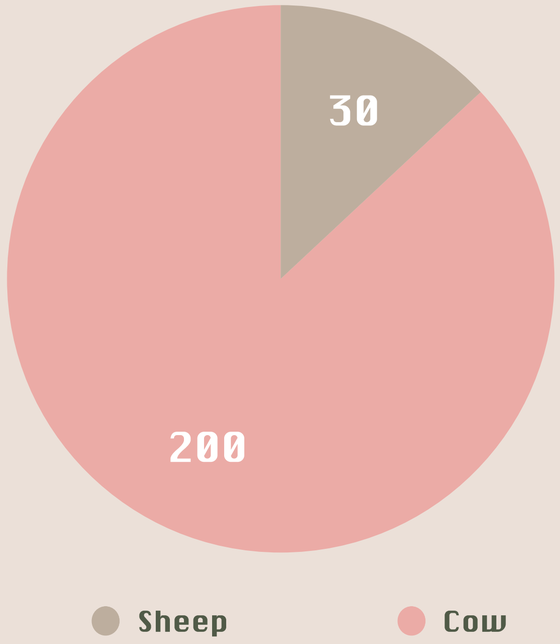
28L



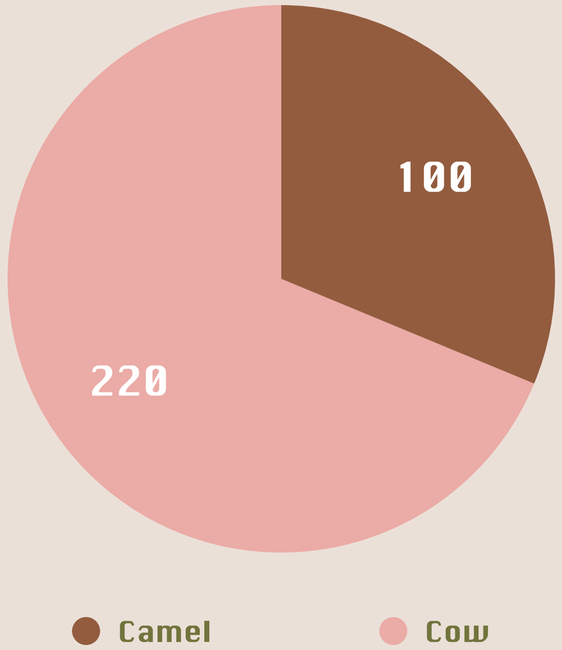
1 water bottle is equal to 2.2 litres

* Poore, Nemecek 2018

Animal based Greenhouse emissions



A Sheep can produce 30 litres of methane each day
A dairy cow can produce 200 litres of methane each day

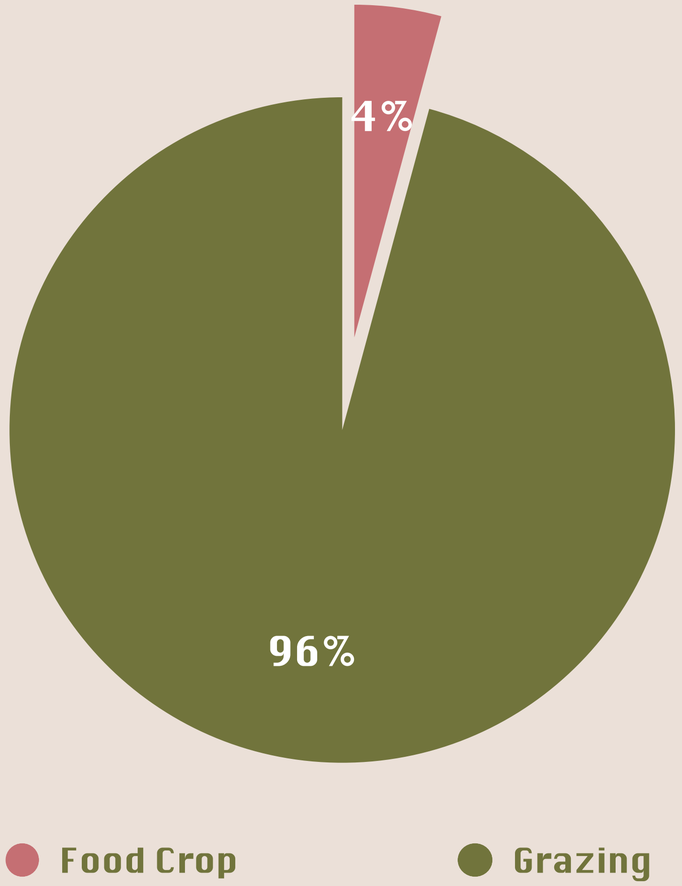


A Camel produce 100 pounds of methane a year
A Cow produces 220 pounds of methane a year

Nutrient Cultivation

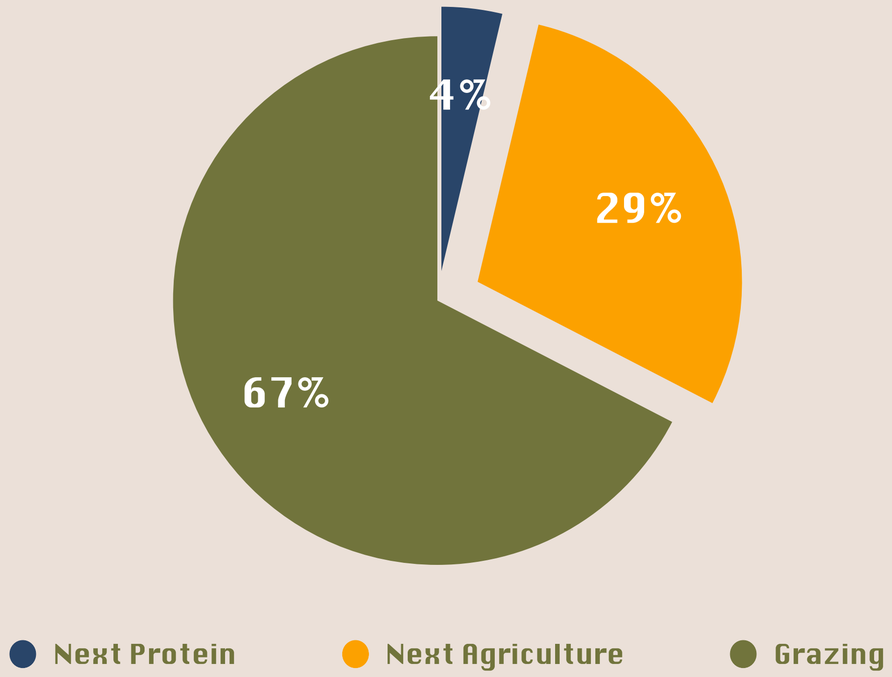
210,000 ha

7,000,000 ha



4% of land required to produce same amount of protein obtained from Dairy industry in GOR region, remaining land can be utilised for farming, environment conservation.

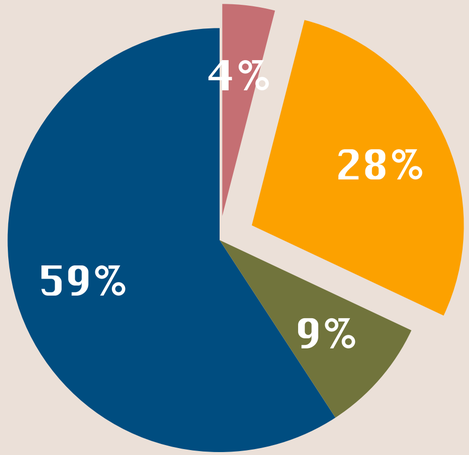
Next Agriculture





Remaining land can be utilised to produce Next agriculture.
Which consist of food products accounting for 60% of food market and consist of soy, oats etc.

Next Agriculture



Next Protein Next Agriculture Grazing Carbon locking







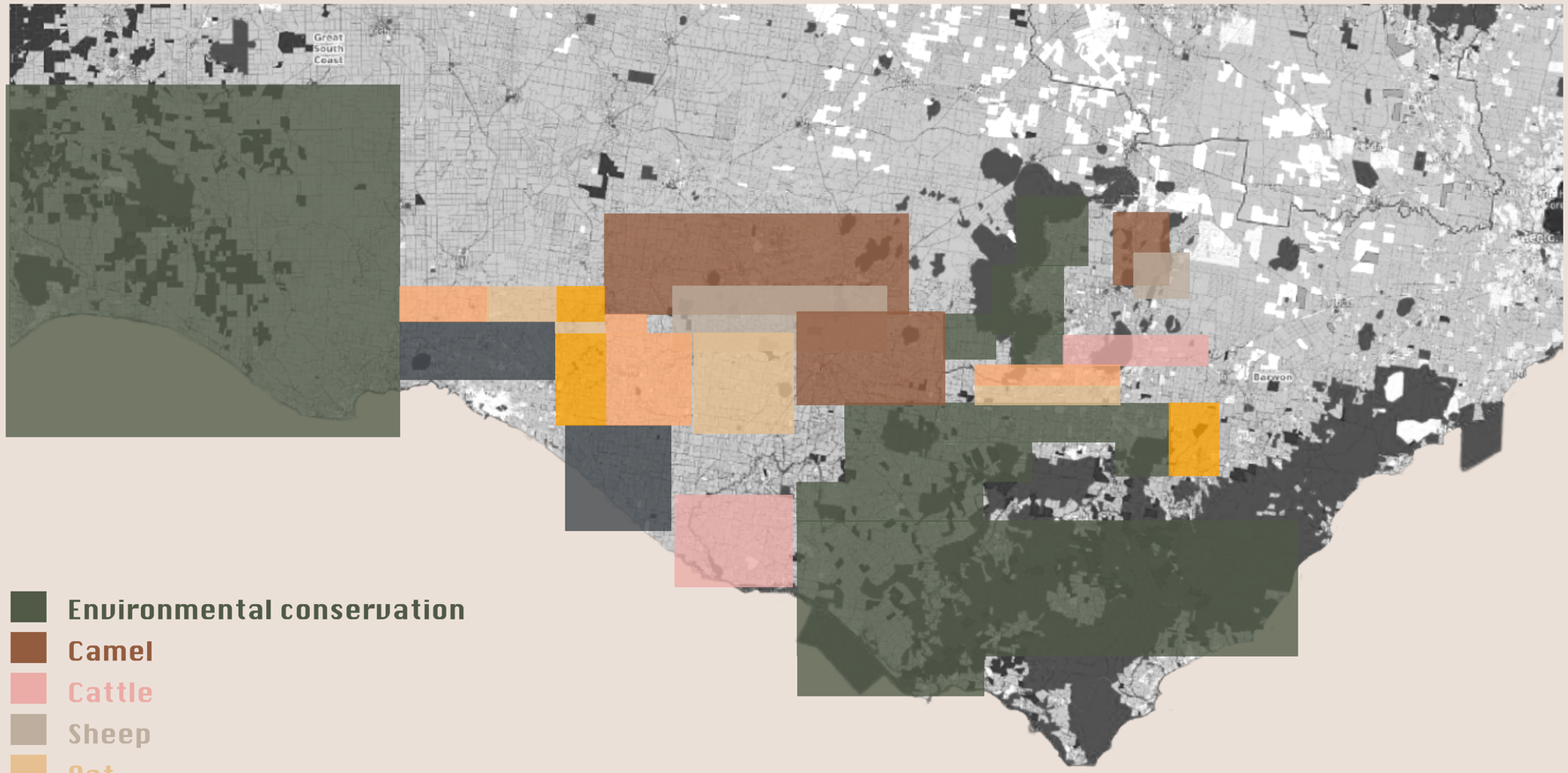




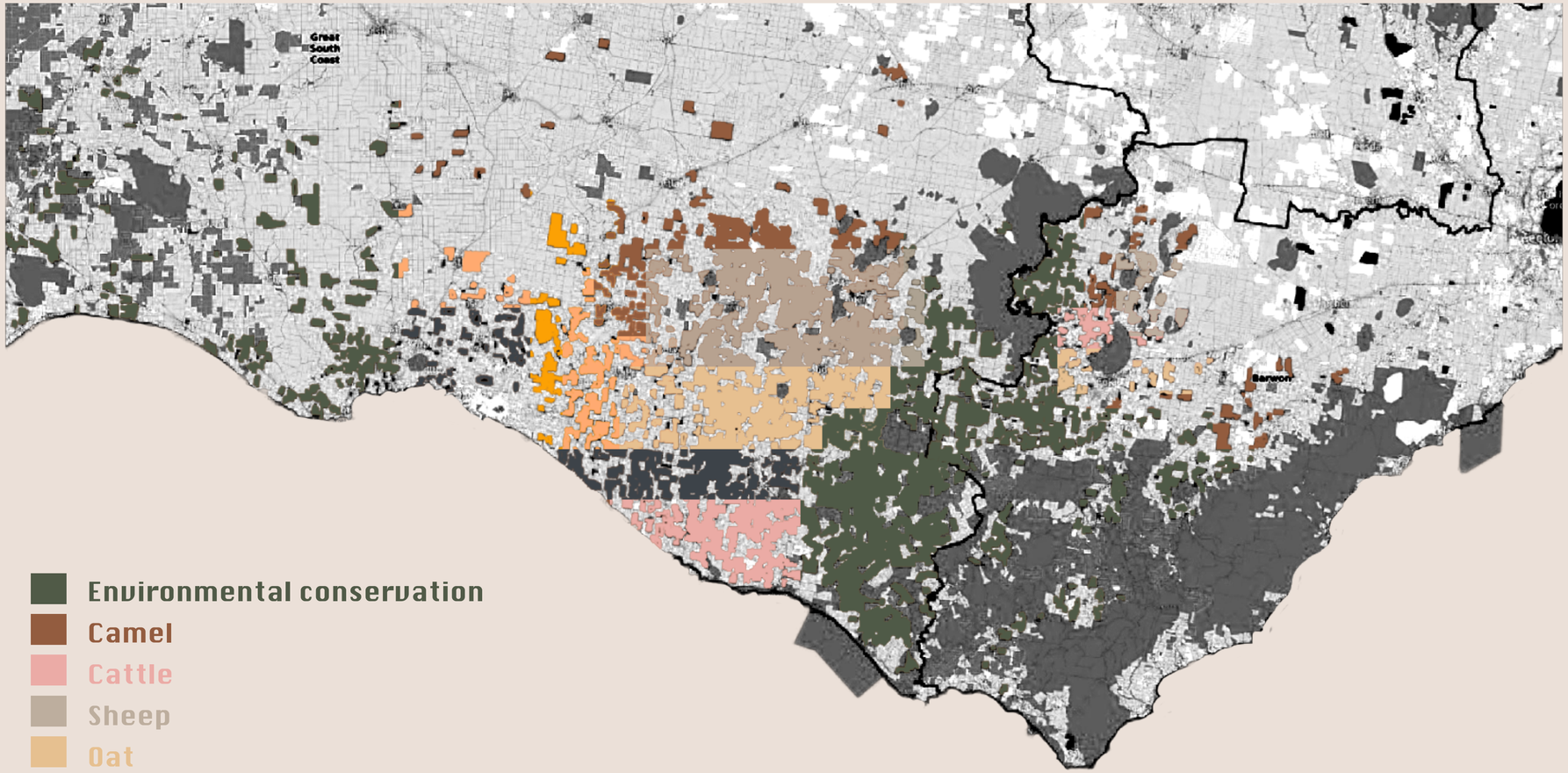


Where most of land will be given back to nature in Carbon locking scheme making the region abundant with native flora and fauna.

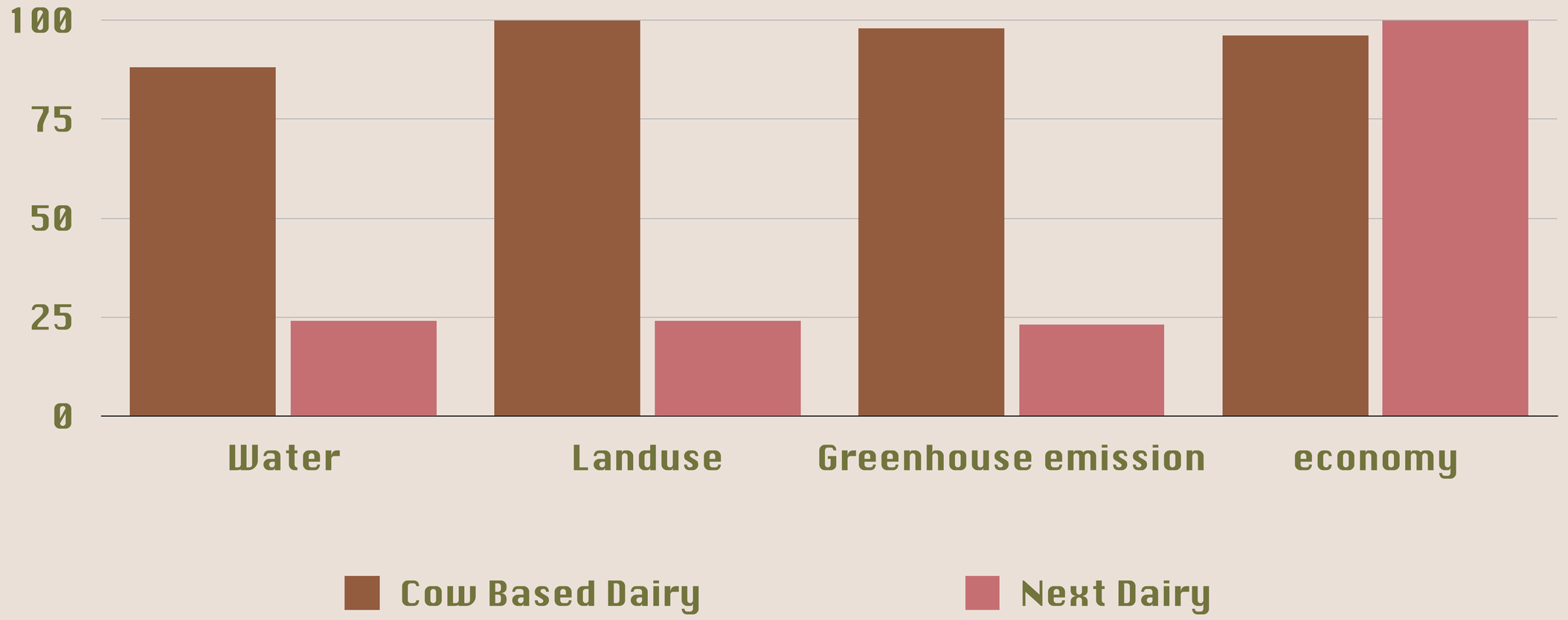
Next Dairy Land Zoning



Next Dairy Land Use



Sustainable Next dairy



Thank you