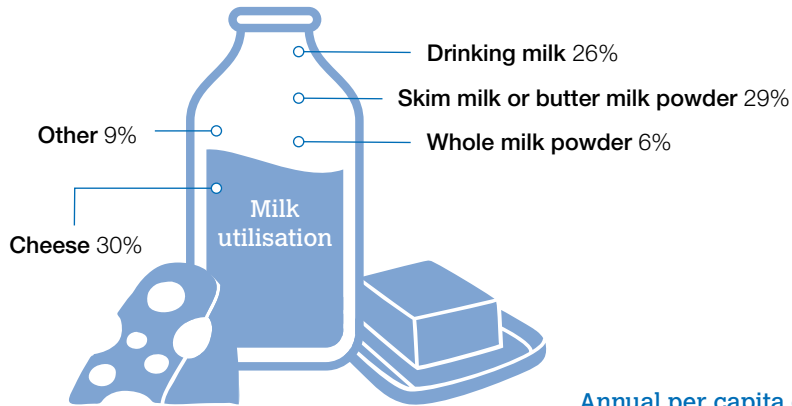




**A guide for investment and  
the Australian dairy industry**



**Annual per capita consumption**

Drinking milk 105 litres  
Cheese 13.9 kg

**Farm ownership**

Family owned and operated 97%  
Corporate farms 3%

**Share farming**

Employed on 18% of farms

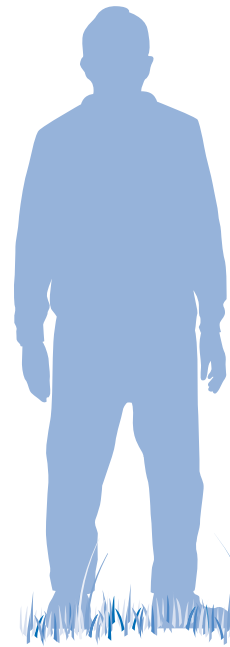
**Annual production of main commodities**

Milk powders 321,900 tonnes  
Cheese 344,300 tonnes  
Butter 118,600 tonnes

**On-farm carbon footprint**

**1.11kg CO<sup>2</sup>**

per litre of milk produced



**Dairy industry workforce**

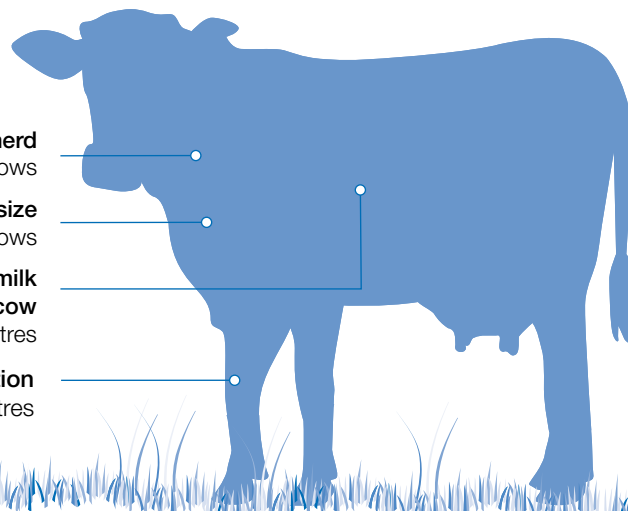
Approximately 38,000 people are directly employed in the industry

**National dairy herd**  
1.66m cows

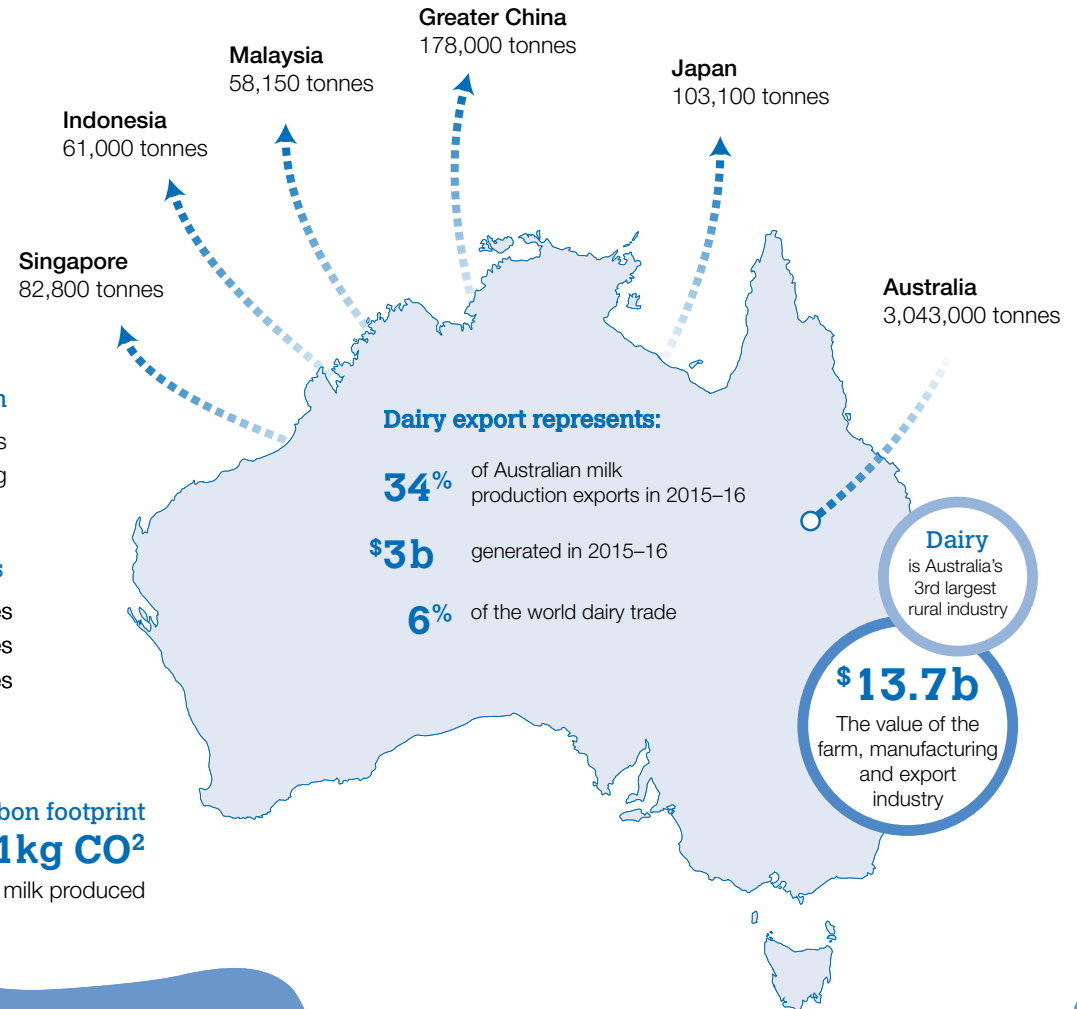
**Average herd size**  
273 cows

**Average annual milk production per cow**  
5,669 litres

**Milk production**  
9,539m litres



**Major markets for Australian dairy products**



**Pasture**

Farms are predominantly pasture based with approximately 70-75% of dairy cattle feed requirements coming from grazing in a year of 'normal' seasonal conditions

**Grain, hay and silage**

Supplementary feeding is widespread predominantly



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# Foreword

The Australian dairy industry, as one of the most important and vibrant rural industries in Australia, is an attractive proposition for both domestic and international investors.

Our sector is characterised by businesses focused on continual improvement from on-farm management strategies and techniques, through to enhancements and investment in the processing sector, all of which is supported by world leading research and extension.

The continued growth in the global demand for dairy products provides strong market support for the high-quality product the Australian dairy industry producers. Our strong production and processing is enhanced by our proximity to key global markets which supplement the strong demand for dairy products domestically in Australia.

Sustainability, across the supply chain, is a key platform for the industry and one that Dairy Australia has invested significantly into. We believe that this focus is critical to ensuring that the industry remains competitive whilst also focusing on what is important being the people, the livestock and the products.

Dairy Australia has produced this document to provide investors considering the dairy sector with a starting point for you to consider the sector as a component of your overall portfolio. The guide doesn't seek to answer all of your questions and we strongly suggest that you seek expert advice to supplement both the information contained in the guide and your own understanding of the sector.

We believe that the dairy industry of Australia is an attractive proposition for investors across a wide range of fronts and that you should look at opportunities within the sector optimistically.

I trust that you will find this guide as a valuable source of information on our industry.

Regards



Ian Halliday  
**Managing Director**

## SECTION 1

Understanding the global and  
Australian dairy industry



# Global dairy – at a glance

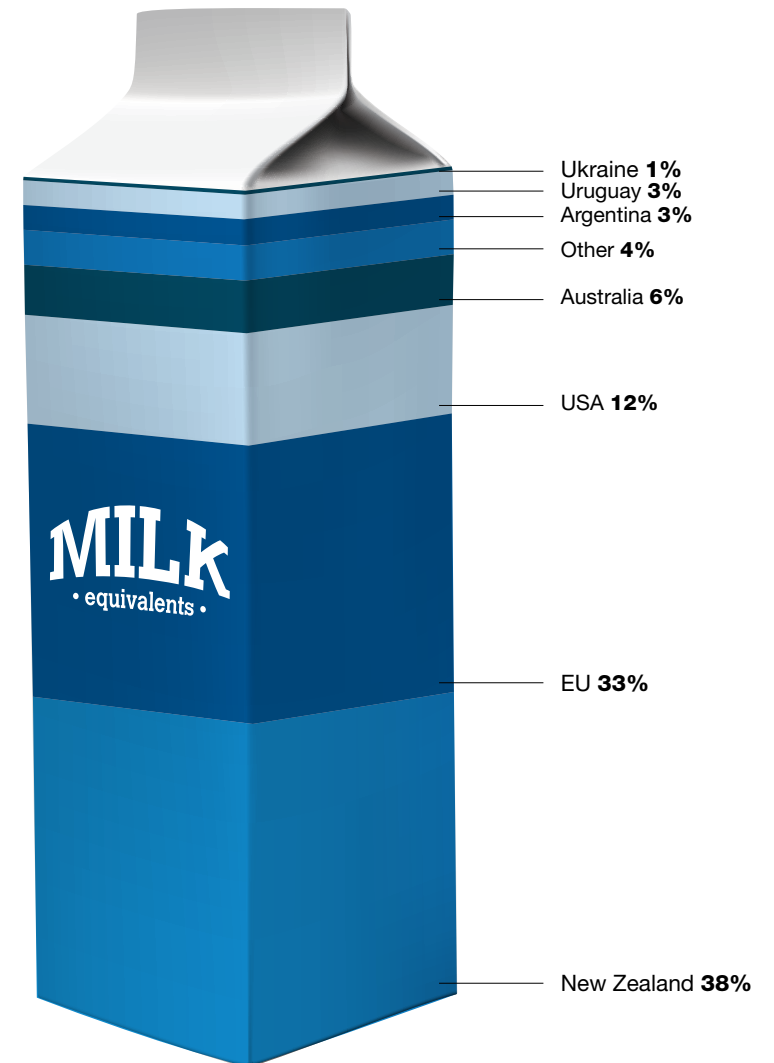
The global dairy sector is a dynamic industry which has been on a consistent growth trajectory for many years as it looks to support demand for dairy products from across the globe. Increasingly the major emerging food markets of India, China, Southeast Asia and Brazil are underpinning demand growth. These growth markets are supported by more static demand within the traditional markets of Europe and North America.

As diets within the key emerging markets continue to ‘westernise’ the global dairy sector stands to benefit significantly from an increasing desire from consumers for the wide range of dairy products available. Products such as milk powders, cheeses, butters, infant formula, and yoghurts are the key drivers, however many more products and derivatives of these key products also have strong demand profiles.

It is estimated that around 626 billion litres of milk is produced globally per annum by around 260 million cows. This represents a gross value of production of around USD\$292 billion, or approximately 9% of the entire gross value of global agricultural production.

Global cross-border trade, as estimated by the FAO, of milk products sits around the 58 million tonnes of milk equivalents, or around 9% of total production. This highlights the fact that the majority of milk production is consumed domestically, with the exception of key markets focused on export – including Australia and New Zealand.

Exporters’ share of world dairy trade in 2015 (milk equivalents)



Source: Dairy Australia

# Global supply and demand overview

Growth in demand is mixed, but positive overall. However, lower average prices have kept US dollar values depressed.

## United States

At-capacity US cheese plants are generating plenty of whey for export, while a buoyant fat market is keeping the protein coming.

### Export volume trends

Total volume change:

▲ 4%

### Significant product shifts

- ▲ Whey powder (17%)
- ▲ SMP/NDM (2%)
- ▼ Lactose (-2%)
- ▼ Cheese (-6%)

## Mexico

Despite political uncertainty, the US is growing its share of the Mexican market for now. Overall SMP/NDM demand was lower, however.

### Import volume trends

Total volume change:

▲ +4%

### Significant market shifts

- ▲ North America (+5%)
- ▼ South America (-41%)
- ▼ European Union (-1%)
- ▲ New Zealand (+12%)

## Greater China

Chinese imports continue to grow, albeit at a more moderate pace with highly varied trends amongst products and suppliers.

### Import volume trends

Total volume change:

▲ +3%

### Significant market shifts

- ▲ Australia (+18%)
- ▲ North America (+14%)
- ▲ New Zealand (8%)
- ▼ European Union (-7%)

## European Union

With less milk, and Intervention the channel of choice for many SMP manufacturers, European tonnages fell. A long awaited recovery in cheese volumes is apparent.

### Export volume trends

Total volume change:

▼ -3%

### Significant product shifts

- ▲ Liquid milk (+10%)
- ▲ Cheese (+6%)
- ▼ WMP (-17%)
- ▼ SMP (-18%)

## Russia

The embargo looks set to continue in the medium term, but shipments from other suppliers - including NZ - have led to growth in the small volume of reported Russian imports.

### Import volume trends

Total volume change:

▲ +37%

### Significant market shifts

- ▲ New Zealand (+170%)
- ▲ South America (+42%)
- ▼ European Union (-8%)
- ▼ East Asia (-24%)

## South East Asia

Lower powder volumes have been offset by increased demand for other products, while Indonesia and the Philippines have been the growth engines at the market level.

### Import volume trends

Total volume change:

▲ +2%

### Significant market shifts

- ▲ North America (+7%)
- ▲ Australia (+7%)
- ▲ European Union (+6%)
- ▼ New Zealand (-7%)

## Japan

A recovery in domestic production together with softer demand, has better balanced the internal market, reducing imports.

### Import volume trends

Total volume change:

▼ -3%

### Significant market shifts

- ▲ European Union (+5%)
- ▼ North America (-7%)
- ▼ New Zealand (-7%)
- ▼ Australia (-11%)

## Australia

Despite a significant drop in milk production through the period, Australian exports increased slightly in tonnage terms, driven by a limited recovery in WMP volumes and continued growth in liquid milk.

### Export volume trends

Total volume change:

▲ +3%

### Significant product shifts

- ▲ WMP (+13%)
- ▲ Liquid milk (+12%)
- ▼ Cheese (-3%)
- ▼ SMP (-19%)

## Middle East

New Zealand and the EU continue to tussle over the region, while economic and political challenges keep downward pressure on overall demand.

### Import volume trends

Total volume change:

▼ -2%

### Significant market shifts

- ▲ New Zealand (+4%)
- ▼ European Union (-6%)
- ▼ North America (-9%)
- ▼ Australia (-26%)

## New Zealand

New Zealand continues to pursue the liquid milk market, whilst constrained milk supplies kept overall export growth flat.

### Export volume trends

Total volume change:

■ 0%

### Significant product shifts

- ▲ Liquid milk (+27%)
- ▲ Cheese (0%)
- ▼ SMP (-1%)
- ▼ WMP (-4%)

Changes 12 months to February  
Source: GTIS, Dairy Australia

 Four largest exporters

# Australian dairy – at a glance

The Australian dairy industry is one of the key sectors of the agricultural economy, ranking third in farmgate value behind beef and wheat at \$4.3 billion for the latest financial year. Internationally Australia ranks fourth in terms of world dairy trade with a 6% share of the global market, sitting behind New Zealand, the European Union and the United States.

Whilst Australian dairy farmers have not been immune to the impacts of a deep and persistent trough in global dairy markets, the ability of the industry to adapt and adjust their businesses to the changing market conditions has been testament to the fortitude of the sector.

Australian dairy farmers operate in a deregulated and open market, and have done so for over a decade. Therefore, the industry has had a strong focus on being a low-cost producer which has become increasingly difficult to maintain as production costs (e.g. supplementary feed, water, and labour) have increased in recent years.

There are several key drivers to focus on when assessing the Australian Dairy Industry, which include the following:

**Inputs:** The major inputs to dairy farming in Australia, such as irrigation water and feed, are a key driver to the performance of the sector. These factors can vary season by season and need to be keenly monitored.

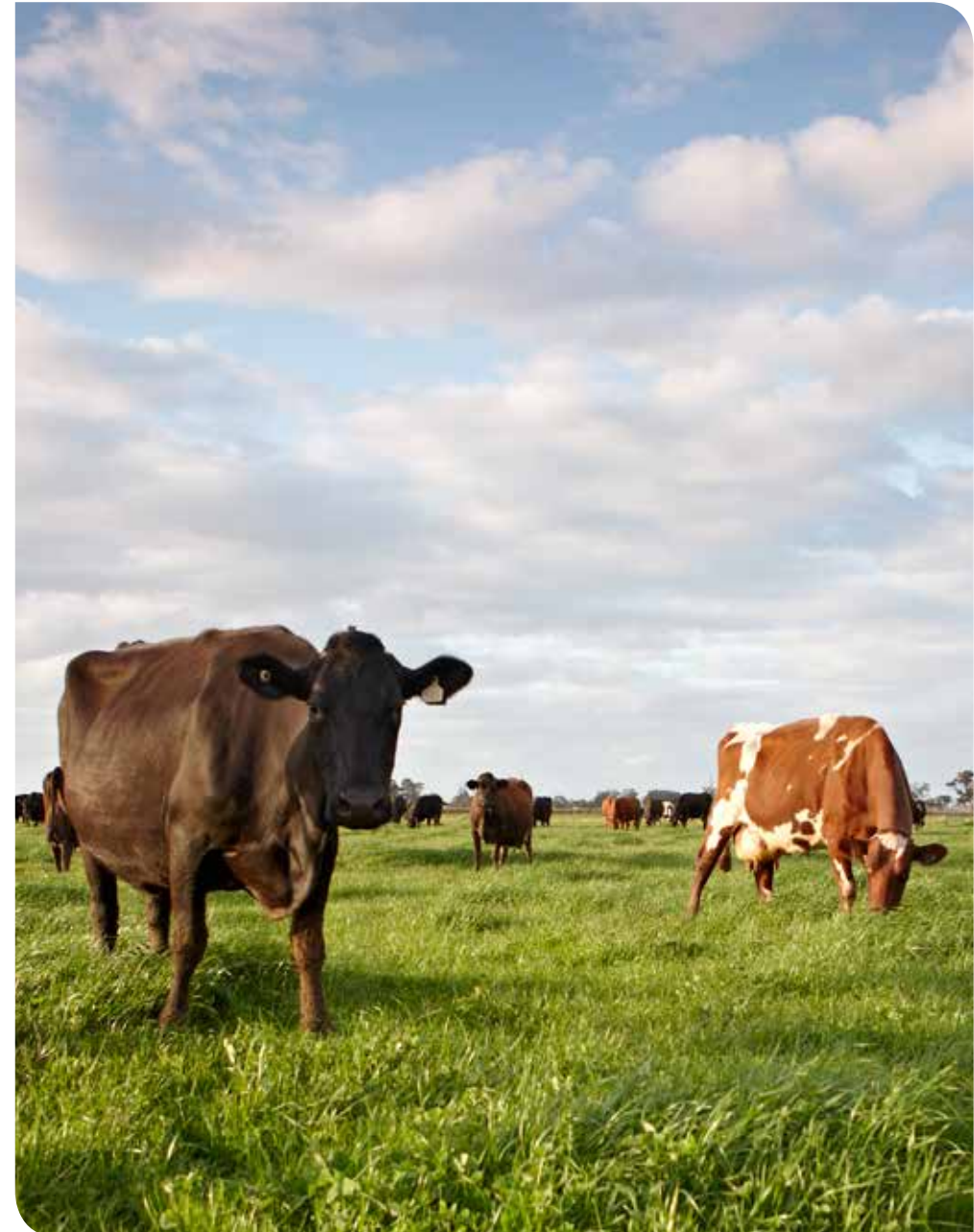
**Global supply:** Production volatility in key export producing markets can have a strong impact on the amount of product in the market, thus having a significant impact on demand and pricing.

**Global economy:** Overall economic conditions in Australia's key markets will impact demand from those markets and thus have an impact on their desire for Australian dairy products.

**Australian market:** Domestic market conditions can have a strong impact on local demand for dairy products, with some geographic regions more exposed to this demand than others.

**Global demand:** With a large component of Australian production destined for the global marketplace, the demand of these key markets has a large impact on local performance of processors and farms.

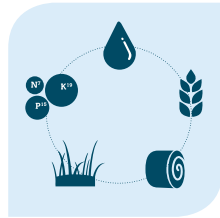
**Exchange rates:** The strength of the AUD will impact our competitiveness in the global market in comparison to other key exporters, a weaker AUD provides more opportunities to place products into key markets.





# Six key drivers of the Australian Dairy Industry

## Inputs



Situation: ▲  
Outlook: ■

The start of calendar 2017 has been unseasonably warm and wet in most of the country with summer rainfall around 49% above average. Grain and hay markets remain subdued, and fertiliser in general remains much cheaper than a year ago. Most irrigation systems are expected to receive a high seasonal determination in 2017/18.

## Global supply



Situation: ■  
Outlook: ■

Globally, improved margins have arrested the fall in milk production in most exporting regions, and whilst supply growth remains limited, a responsive farm sector means any gains from further commodity price increases would likely be fought over.

## Global economy



Situation: ■  
Outlook: ▲

According to the IMF, global economic growth faces a slightly more optimistic outlook as a result of higher projected growth rates in the US, increasing global investment and improved commodity prices, a result of supply restriction and increased demand.

## Australian market



Situation: ■  
Outlook: ■

Supermarket sales volumes showed growth in all dairy categories. Milk sales have been particularly strong, and the sales value of the category grew almost 7%. Value growth is under pressure in other categories - particularly cheese and yoghurt and dairy desserts.

## Global demand



Situation: ▲  
Outlook: ■

Demand for exports continues to grow, though lower average prices have dampened total US dollar values over the past 12 months. A recovery in demand from Greater China accounts for around 30% of volume growth over this period, while Southeast Asia has also seen growth.

## Exchange rates



Situation: ■  
Outlook: ▲

The median consensus forecast is for the AUD to depreciate slightly against the USD for the remainder of the year, as a result of the Federal Reserve further increasing interest rates and expectations that the new US government will lower corporate tax rates.

# Inside the farmgate

Australian dairy farmers generally operate within one of two production systems, either a seasonal based system where cows calve in line with feed supply and therefore the farm has significant peaks and troughs in production, or a year-round system whereby cows calve consistently all year to target a flat production curve. The former system generally supports production focused on export markets (Southern Australia) and the latter generally exists where demand comes from domestic fresh markets (milk and other products).

Farmer numbers have reduced significantly over recent decades as farms have amalgamated in line with improvements in systems, processes and infrastructure. These reductions have seen the sector reduce from 19,400 farms in 1985 to around 6,100 farms today – milking a similar number of cows with significantly higher per cow production figures.

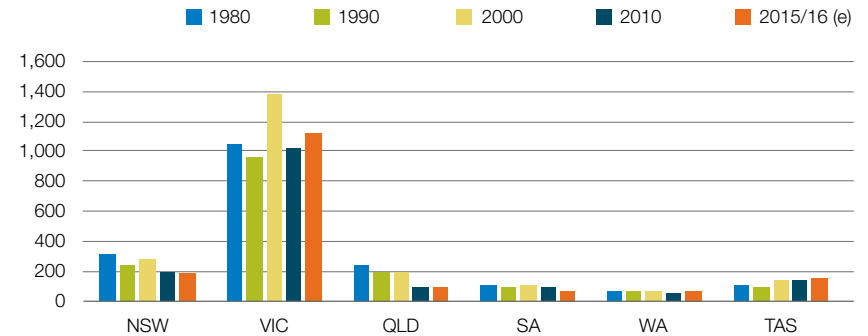
As with most Australian agriculture, dairying is dominated by family owned and operated businesses which hold around 98% of Australian dairy farms. Of these farms, some 16% have some form of sharefarming arrangement in place. The remaining 2% of farms are owned by corporate entities and consist of several large-scale farming operations and conglomerations operating primarily in southern Australia.

Farms range in size from 100 head or less, through to several large-scale operations running more than 1,000–2,000 head of milking cows in single

operations and across a range of sites. The current average herd size sits around the 300-cow mark, which is significantly larger than the average herd size in the US (115) and EU (35) however smaller than that of NZ (400).

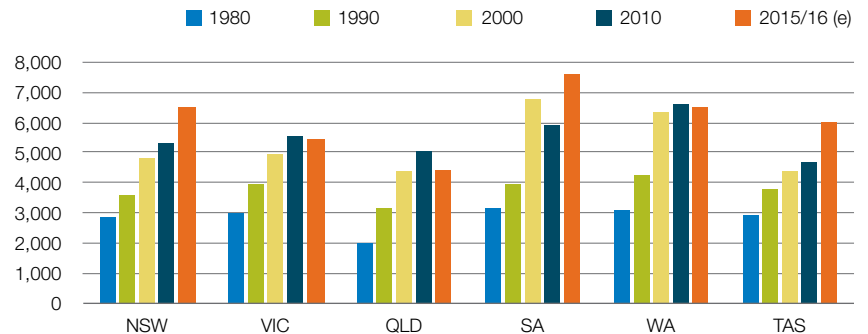
The Australian herd is dominated by Holstein cows which represent between 65–70% from a purebred perspective, and up to 80% when cross-bred herds are taken into account. The remainder of the herd is made up of breeds such as Jersey, Guernsey, Brown Swiss, Ayrshire and the local breeds of Australian Red and Illawarra. Herd production and performance recording is a key attribute of most successful farming businesses in Australia with industry supporting significant resources to herd improvement and research on genetic performance across the sector.

**Australian state dairy cow numbers ('000)**

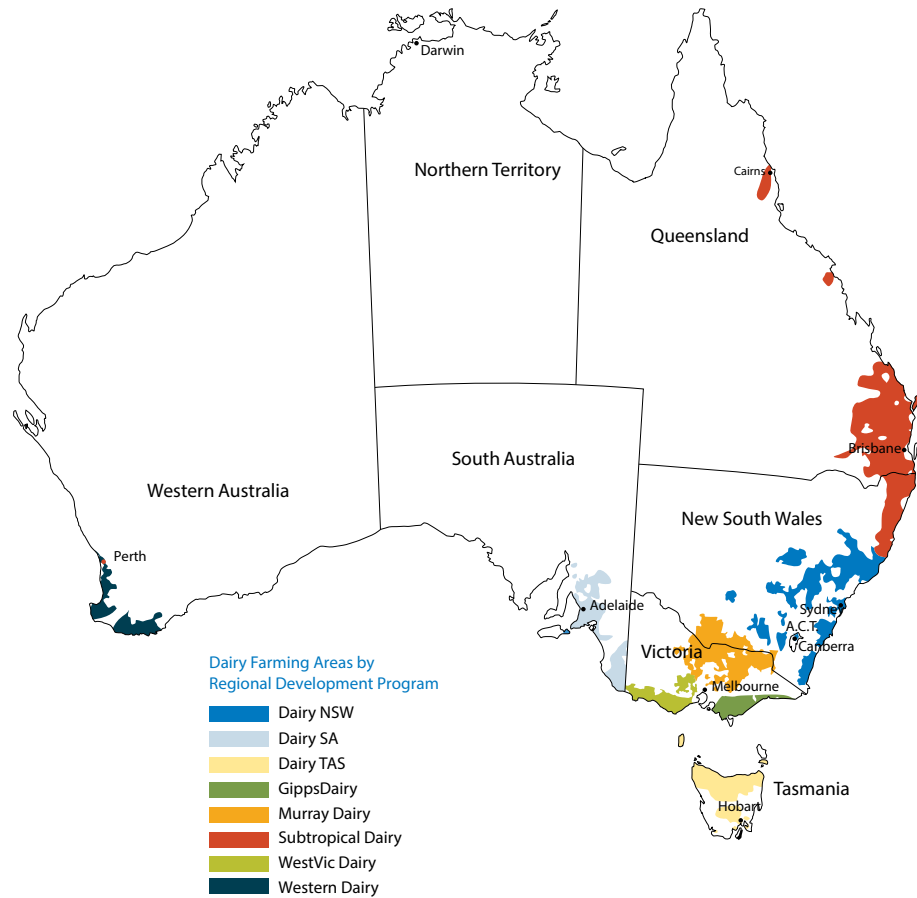


Source: Australian Dairy Industry In Focus 2016

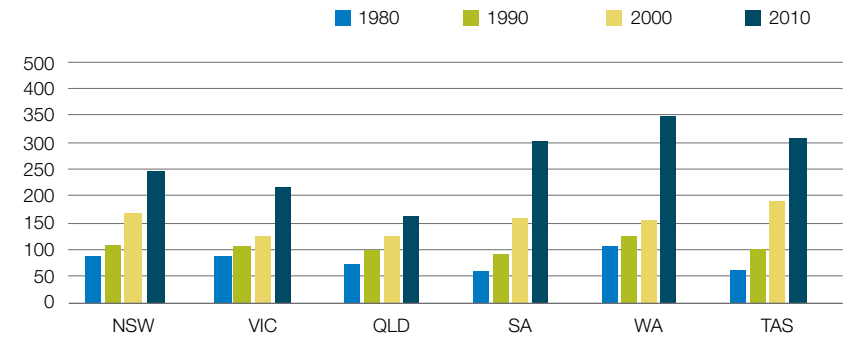
**Australian average annual production per cow (litres)**



Source: Australian Dairy Industry In Focus 2016

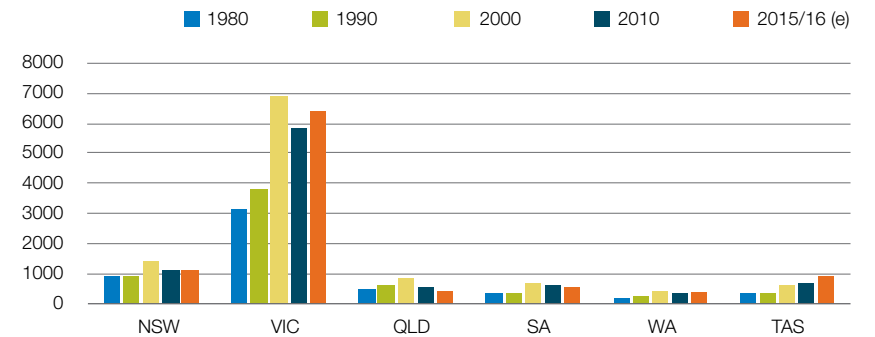


### Australian state average cow herd size



Source: Australian Dairy Industry In Focus 2016

### Milk production by state (million litres)



Source: Australian Dairy Industry In Focus 2016

# Beyond the farmgate

The Australian dairy production sector has a range of participants operating within it, from farmer owned co-operatives through listed, private and multinational dairy and food specialists. The six largest processing firms account for around 85% of farmgate milk collection with varying representation across the Australian dairy producing regions.

Farmers are generally aligned with a single processor to off-take their supply with many of the other specialist market participants (manufacturers, traders, exporters) taking product from these primary or initial processors who manage the logistics from farm to factory. There has been an increase in smaller specialist organisations across most dairying regions, however the major processors continue to hold significant market share.

The focus of processors varies across the regions and is aligned with market opportunities either within the local domestic marketplace or within the global trade. Many, if not all, of the larger organisations have fully integrated operations which support sales in all markets, whilst several of the smaller organisations are more focused on niche products, regional marketplaces and/or specific export markets.

In total, around 25% of Australia's milk production consumed as drinking milk, with the remaining 75% manufactured into products such as milk powders, butter, cheese and yoghurt. Following on from this around 63% of the manufactured product (in milk equivalent

terms) was exported during the 2015/2016 season, which contrasts significantly to 94% of drinking milk which was consumed domestically.

Generally manufacturing plants look to specialise in a small number of products, with the primary range of products manufactured in Australia including:

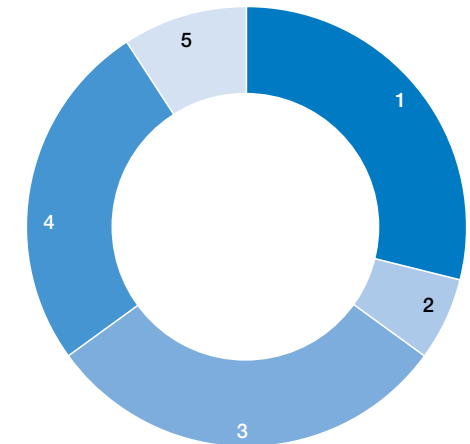
- > cheese
- > drinking milk (fresh, ESL and UHT long life)
- > skim milk powder (SMP) and buttermilk powder (BMP)
- > butter
- > wholemilk powder (WMP)
- > yoghurts, custards, dairy desserts, and other consumer products
- > specialised ingredients.

Sales of dairy products in the Australian market are dominated through the Supermarket channel, which in turn is strongly influenced by the position that Coles and Woolworths has within the market. The variety, quality and scope of products has increased significantly over the last 10 to 20 years such that boutique manufactured products and specialist

drinking milk are becoming much more prevalent. Per-capita domestic consumption of milk products has remained relatively static in recent years.

Export markets have remained focused on both northern (China, Japan, South Korea) and southern (Singapore, Indonesia, Malaysia, Philippines) Asia, with the Middle East, Americas, Africa and Europe also taking varying levels of product. Cheese and Wholemilk Powder products accounted for around one-third of all products exported in the most recent financial year, with Northern Asia dominating the market accounting for around 50% of Australia's total exports.

**Australian milk utilisation in 2015/16**



- 1 SMP/Butter **29%**
- 2 WMP **6%**
- 3 Cheese **30%**
- 4 Drinking milk **26%**
- 5 Other **9%**

Source: Dairy Australia

# Sustainability framework

Sustainability has been part of everyday life in the Australian dairy industry for generations. With our customers and the broader community increasingly demanding proof that the industry, and all within it, are doing the right thing by our people, animals and our planet the industry has developed the Australian Dairy Industry Sustainability Framework.

The industry has set targets to 2020 under its sustainability framework and reports progress against these targets honestly and transparently each year. The industry's sustainability work has been recognised by Unilever and all Australian milk production has been assessed as meeting Unilever's sustainable sourcing code. The industry was also awarded a prestigious Banksia Food For Sustainable Thought Award.

This commitment is focused upon:

- › enhancing livelihoods by investing in dairy people (providing a safe work environment, creating a skilled and motivated workforce)

- › improving the wellbeing of our community and animals (focus on safe and hygienic milk production, deliver "best care" for all animals)
- › reducing environmental impact (doing more with less, improving management practices and reducing greenhouse gas emissions).

The industry periodically reviews its sustainability targets to ensure progress is achieved and that they are in line with community expectations and meet investor needs. The current targets are being revised to reflect ongoing materiality reviews and to support the UN Sustainable Development Goals that have set targets to 2030.

## Enhancing livelihoods


**49%**   
of farmers planning capital investment\*

**67%**   
consumers agree dairy is an essential part of the community#

**100%**   
OH&S training for all manufacturing employees#

**39%**   
Dairy farmers in training and development activities

## Improving wellbeing


**100%**   
compliance. No chemical residues.

**71%**   
consumers agree dairy is essential for good health#

**92%**   
of farmers have infrastructure and keep cows cool

## Reducing environmental impact

**58%**   
of farmers have nutrient management plans

**7%**   
drop in manufacturers' consumptive water intensity since 2010/11

**21.7%**   
reduction in company GHG emissions intensity since 2010/11

**48.4%**   
cut in waste to landfill since 2010/11

Source: \*National Dairy Farmer Survey 2016, #Dairy Monitor Survey 2016

## SECTION 2

### Investing in the Australian dairy industry



# Investing in Australian agriculture

Australian agriculture provides investors with wonderful opportunities to participate across the breadth of the sector, from those industries supporting primary production, through primary product and into the likes of marketing, exporting, processing and retailing.

Australia has a well-founded reputation for producing high quality agricultural product, in a cost and productively efficient manner, which has a high level of food safety and traceability. Our proximity to the key consumer markets in both Southern and Northern Asia, in combination with well-established trading relationships into Europe, North America and the Middle-East provides a range of outlets for our export dominated agricultural sector.

Agriculture can be a complex investment class for an investor to understand in comparison to more traditional investments in the form of listed equities, bonds, commercial and residential property, however it can provide portfolio benefits to those more traditional investment classes through un-correlated returns.

Agricultural investments can bring volatility of returns in comparison to other asset classes, with this annual and seasonal volatility needing to be taken into account at the outset of considering an investment within the sector.

The underlying theme of economic and population growth in both the developed and developing world driving the global desire for agricultural products is the key pillar for growth of the sector globally. This thematic is well articulated and understood across all major global agricultural markets, including Australia, which is seeing an increasing focus on the sector by investors both domestically and internationally.

Whilst the Australian agricultural sector has had external investment since its earliest incarnations, the sector

continues to be dominated by families who own and operate the farming business. These families have expanded over the years, consolidating smaller operations and transitioning ownership through generations. Traditionally growth has come through both cashflow and debt, however in recent years an increasing desire to understand the potential of outside equity to support expansion, or free up capital, has gained greater traction.

Should you be considering whether Agriculture is an appropriate investment class for you, we consider the following to be some of the key considerations to explore:

- › **Volatility:** Both production and price volatility is inherent within most Australian agricultural systems with limited ways and means in which require proactive risk management strategies to be implemented.
- › **Cyclicality:** As with most commodity sectors, Agriculture has a well-entrenched cycle based upon core

supply and demand metrics. This is especially evident within those products exposed to global markets and competing with other production regions.

- › **Liquidity:** Moving in and out of an Agricultural investment can be challenging in that the market can at times be illiquid which will limit an investors ability to realise their investment.
- › **Timeframe:** Generally agricultural investments lend themselves to a longer-term investment horizon rather than one of a short term trading nature.

# Investing in the Australian dairy sector

The Australian dairy sector provides investors with exposure to a vibrant and vital component of the Australian economy. The industry has established itself as a key component of the Australian agricultural sector over decades and has developed a highly sought after position in a range of markets for the products it produces.

The Australian dairy farming sector can be characterised as having:

- › world-class production
- › a breadth of farming operations supporting various domestic and international markets
- › geographic diversity
- › strong sustainability credentials
- › high standards of farmer safety, animal welfare and milk quality
- › leading research and market support infrastructure
- › a focus on encouraging, supporting and educating the next generation in the industry
- › highly cost-effective milk production systems
- › opportunities for growth and expansion
- › a focus on innovation across the breadth of the industry
- › a dynamic processing sector involving both domestic and international organisations
- › a breadth of organisations who value-add products and market both domestically and internationally.

The industry as a whole, from farmers through to processors and the industry bodies, has a combined focus on several areas which provides a differentiated investment thesis, these include:

- › high food safety and biosecurity standards, coupled with advanced product traceability systems – which support Australian products gaining and holding share in key export markets
- › a sustainability framework and commitment that is focused on delivering continual improvement within a wide range of facets across the breadth of the sector
- › low levels of taxpayer support and government intervention – which ensures efficient costs of operating and focus on underlying financial performance
- › flexible farming systems. While the Australian dairy industry is predominantly pasture-based, there is flexible farming systems that allow a farm business to adapt to the variability of our climate and manage financial and operational performance more pro-actively.

- › a vibrant and diversified pool of over 125 companies who are exporting Australian dairy products
- › world class innovation across both production and processing which ensures Australia is at the forefront of the global sector.

Australia offers investors a breadth of dairy production systems in which investors can participate, something that differs from many other dairy operations across the Northern and Southern Hemispheres. The Australian dairy sector comprises farming operations which span a broad spectrum of feeding systems ranging from almost entirely pasture based through to systems that utilise a total mixed ration. Many farms have the ability to flex between systems according to factors such as seasonal conditions, water availability, feed prices and milk price.

This diversity in production systems allows an investor to participate in the system that best suits their investment objectives.



# Five production systems



## High pasture

Grazed pasture and other forages and feed less than one tonne of grain or concentrates per cow per year in the bale.

23% of farms in Australia  
13% of production  
186 cows = Average herd



## Moderate-high bale system

Grazed pasture and other forages and feed more than one tonne grain or concentrates per cow per year in the bale.

60% of farms in Australia  
61% of production  
210 cows = Average herd



## Partial mixed ration (PMR) system

Pasture for most or all of year and a partial mixed ration on a feed pad.

12% of farms in Australia  
16% of production  
267 cows = Average herd



## Hybrid system

Pasture for less than nine months of year + partial mixed ration on feed pad.

3% of farms in Australia  
5% of production  
340 cows = Average herd



## Total mixed ration (TMR) system

Cows housed and fed total mixed ration.

1% of farms in Australia  
5% of production  
404 cows = Average herd

# Investment structures

There are a wide variety of ways in which an investor can participate inside the farmgate, all of which have varying return and risk profiles that enables an investor to best match their requirements to that of the opportunity presented to them.



	Positives	Challenges
<b>Direct own and operate</b>	<ul style="list-style-type: none"> <li>› Full upside participation (both operational and capital growth)</li> <li>› Control of management strategy and direction</li> <li>› Strong focus on individual investment requirements</li> </ul>	<ul style="list-style-type: none"> <li>› Full exposure to production volatility</li> <li>› May require employment of management staff creating key personnel issues</li> </ul>
<b>Sale and lease back</b>	<ul style="list-style-type: none"> <li>› Simple structure</li> <li>› No volatility in returns</li> <li>› No operational exposure</li> <li>› Easy to compare with other asset classes</li> </ul>	<ul style="list-style-type: none"> <li>› Upside limited to lease returns and capital value increase</li> <li>› Credit risk of lease counterpart</li> <li>› Interests of owner and lessee may not be aligned</li> </ul>
<b>Sharefarm</b>	<ul style="list-style-type: none"> <li>› Alignment of interests between owner and sharefarmer</li> <li>› Natural investment exit strategy to sharefarmer, over time</li> </ul>	<ul style="list-style-type: none"> <li>› Significant reliance upon sharefarmer to deliver results</li> <li>› Risk of sharefarmer performance and retention</li> </ul>
<b>Equity co-investment/partnership</b>	<ul style="list-style-type: none"> <li>› Alignment of interests between equity partners</li> <li>› Ideal structure for intergenerational transfer of farming assets</li> <li>› Participation in performance upside</li> </ul>	<ul style="list-style-type: none"> <li>› Requires strong shareholders agreement and understanding by both parties to succeed</li> <li>› Exposure to production volatility</li> </ul>
<b>Private fund investment</b>	<ul style="list-style-type: none"> <li>› Ability to gain a diversified exposure which could minimise yield and growth volatility</li> <li>› Economies of scale across various investments</li> <li>› Scale provides relevance to processors</li> </ul>	<ul style="list-style-type: none"> <li>› Handing overall investment decisions to fund manager</li> <li>› May include illiquid assets that are difficult to realise, reducing ability to realise investment</li> </ul>
<b>Listed investment</b>	<ul style="list-style-type: none"> <li>› Generally a diversified portfolio of assets (geography, production cycle, etc.)</li> <li>› Robust reporting and governance requirements</li> <li>› Liquid market for realising investment</li> </ul>	<ul style="list-style-type: none"> <li>› Sharemarket volatility</li> <li>› Portfolio investment approach</li> <li>› Additional operational costs with being listed</li> </ul>



## Equity co-investment/ partnership

A southern Australian farming partnership, established between an Australian farming family and two off-shore equity partners, to develop and establish a greenfield dairying operation on an established beef/ sheep property. Initially milking 1,000 cows, with plans for a further 1,800 cows in the short to medium term.

### Key learnings

- › Sharing the same goals around the business has ensured the three partners are consistent in their approach to the management and operations of the farm.
- › The diversity of skills across the partners, in addition to utilising expert advisors and local employees, has enabled the farm conversion to be achieved successfully.
- › Reporting on a regular basis is critical to ensuring that all stakeholders are kept apprised of business performance against expectations.
- › Establishing clear roles and responsibilities between the partners, employees and consultants ensures operational efficiencies.

## Large international conglomeration of farms

A Tasmanian dairy operation, owned by a larger international conglomeration of farms which now has several thousand dairy cows with plans for further growth. The operation has significant engagement with its offshore owners and takes lead from them on a range of key operational issues such as sustainability and animal welfare.

### Key learnings

- › Clear processes, with defined authorities, enables efficient management of the operation which is geographically remote from ownership.
- › Transparent and timely financial reporting ensures that owners are well informed on the performance of the operations on a consistent basis.
- › A core focus on sustainability and animal welfare has driven management and overall decision making and is a key differentiating factor of the business.

## Common overarching management structure

A multi-farm operation across Victoria and South Australia which has several ownership structures (outside investor equity partnerships, operational equity partnerships, and sharefarming) with a common overarching management structure. The farms are built around achieving optimised farming units, of 650 cows with a rotary dairy and two operational staff, which the manager and investors feel provide the best returns.

### Key learnings

- › Ensure you have the right joint venture partners from the outset who are culturally well aligned and agree with the strategies of the business.
- › Having a clear exit strategy from the outset ensures that all partners understand the future directions for their business.
- › Farm management is critical and they need to understand the production model in combination with the objectives and goals of the partners.
- › Ensure the strategy of the business is well understood by all involved as this enables all parties to stay focus on the key deliverables.

# Investment options

## Inside the farmgate

Investing inside the farmgate will allow investors to farming assets can allow farmers to participate, fully or partially, in the production side of dairying. There are a range of investment structures which can vary the involvement and exposure, however traditionally the key investment would own farms, cows, and capital infrastructure (dairy plant and equipment).

## Investing in both inside and beyond the farmgate

The ability to invest in an integrated manner across the sector is becoming increasingly attractive and a point of focus for organisations looking to retain margin and product control. This is especially relevant for investors looking to export products into markets where they may have some existing positions or advantageous contacts.

## Beyond the farmgate

Moving beyond the farmgate into the processing sector allows investors to gain exposure to organisations across a range of areas – from both a geographic and product perspective. Investment structures can be passive (such as within a listed company) or active (where substantive or controlling share is obtained), depending upon the opportunities that present themselves.



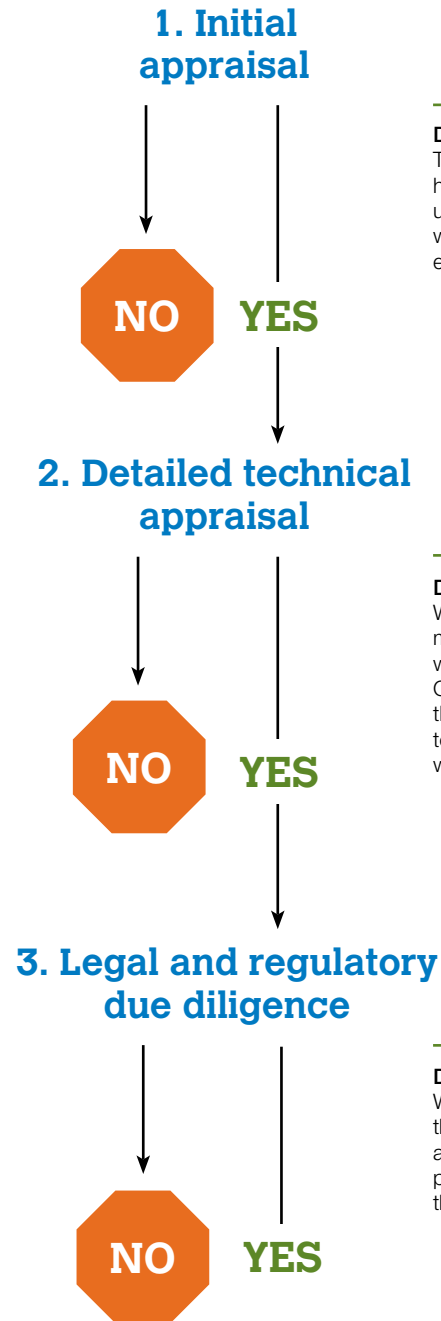
# Investor due diligence focus points

Whether you are an Investor considering an investment in the Dairy sector, or a current organisation in the sector looking for external capital, the importance of preparing for, and executing, the Due Diligence process remains critical to the success and sustainability of any investment.

Taking the necessary time and effort to undertake a thorough and mutual due-diligence process is highly recommended. Utilising external advisors, in any areas required, should also be a strong consideration.

Whilst there are many ways in which to undertake due-diligence, and we suggest that you work closely with your external advisors to support you on this process, the following is a broad structure that we feel provides a pathway to follow.

We suggest that having “gateways” at the end of each phase of due diligence will provide you with an opportunity to assess what you have learnt and whether it supports further analysis, or indeed moving away from the investment to look at alternative opportunities.



## Decision gateway

The key question at this point is whether or not the initial work has supported your desire to invest, or created uncertainty. If the uncertainty is significant then we strongly suggest that you look at whether or not to pursue the opportunity further given the costs and effort involved.

## Decision gateway

With a wealth of additional information, this Decision Gateway is the most critical of the due diligence process as it provides the investor with a full suite of information from which you can make your decision. Carefully reviewing and understanding the information is critical to the process. The end of this phase of due diligence will generally lead to the establishment and/ or agreement of an indicative term sheet which will be subject to legal due diligence.

## Decision gateway

With all of the assumptions and analysis reviewed and confirmed, does the investment 'stack-up', are there any issues causing you concern, and is the price and/or shareholding structure within acceptable parameters. If the answer is yes following this phase of due diligence, all that remains is to complete settlement of the transaction.

## 1. Initial appraisal

The initial phase of due diligence is to determine if the potential investment lies within your investment parameters, answering questions such as:

- › Is the size, scale and potential of the business aligned to your investment requirements?
- › Is the investment structure aligned to your parameters?
- › Is the location of the investment within your area of focus?
- › What external supporting services (such as Vets, Technicians, Advisors, etc.) are utilised by the business and how accessible are they?
- › What has been the recent historic performance of the investment (production, financial, etc.)?
- › What are the obvious key risks of the investment (people, water, effluent, stock, supply, etc.)?
- › What is the reputation of the business within the local community?
- › If relevant, is the current management able to continue managing the farming operation?
- › If relevant, can the investment support any additional ambitions you have within the sector?
- › How are returns distributed to investors?
- › What are the opportunities to exit the investment?
- › Does the investment, and most importantly Management if it is to be retained, match with your desires around sustainability and cultural fit?

## 2. Detailed technical appraisal

On the assumption that you have passed through the initial Decision Gateway following an initial appraisal of the investment, we suggest that you now move into a more technical appraisal of the farming operations across a wide range of factors. You may require a range of external advisors to support your efforts in this phase of due diligence which could include the likes of Farm Consultants, Accountants, Lawyers, Catchment Management Authorities, Shire Councils and Water Authorities.

The information below provides a basic overview, with specific issues relevant to individual operations which should be considered. If you aren't comfortable with assessing any of the technical areas, we suggest that you engage an appropriate advisor.

There will be additional areas that relate specifically to that individual business which will expand this basic overview. It is important to ensure that all necessary questions are asked in this phase of analysis.

Herd productivity/ supplier	Key questions
<b>Herd composition</b>	What is the composition of the herd (Breed, Age of herd, Genetics, etc.)? What Replacement stock exist? What are the Breeding strategies?
<b>Herd production figures</b>	What are the average lactation volumes (litres, fat, protein)? Obtain and Review supplier statements (volume, quality, pricing, etc.)
<b>Herd health and reproductive efficiency</b>	What is the incidence of health issues (mastitis, etc.)? What are the "in-calf" rates of the cow herd? What is the Bulk Cell Count performance?
<b>Herd management</b>	What framework is in place for herd management? What is the annual cull rate? What is the average age of the cow herd? How are calves managed? What are the animal welfare standards?
<b>Stocking rates</b>	What is the stocking rate of the property? Is the property considered to be Over or Under stocked? What external property is used within the business, if any (for example run-off blocks, out-paddocks, leased land, etc.)? Is there an opportunity for growth?
<b>Suppliers</b>	Who does the business currently supply to? Where are they located in proximity to the farm? What alternatives exist?



Farm productivity	Key questions
<b>Climatic conditions</b>	What is the historic rainfall variability (quantity, seasonality)? What is the likelihood and impact of risk events (fire, flood, drought, frost, etc.)?
<b>Water availability and security</b>	What water is required for the operation? How is the water sourced? How secure and reliable is the water source? If irrigation is in place, What water licenses exist (system, amount, annual cost, etc.)? What is the allocation history? Is temporary water available? At what cost?
<b>Natural resources</b>	What information exists around soil tests, fertiliser history, etc.? Does the property have a nutrient management plan? What plans/ strategies are currently in place to remediate soils (if necessary)? Does the property consider and manage factors such as biodiversity, watershed impact, erosion, etc.? Are key sensitive areas (riparian zones, tree-lots, etc.) adequately fenced? Does the property have sufficient shade and shelter for livestock?
<b>Pasture and crop productivity</b>	How much land is available to graze/ crop? What is the current pasture/ fodder composition? Are there any issues with weeds? What is the history of pasture renovation and what are the plans for future plantings? What supplementary crops are grown (yields, history, etc.)?
<b>Feed requirements</b>	What is the mix between grown and purchased feed? What is the annual Dry Matter (DM), measured in tonnes/ hectare, grazed? Is any external feed sourced? If so, from whom, what quantity, quality, what price, etc.? How reliable is the source/s of external feed? How is feed price risk managed?
<b>Farm structure</b>	Are there any farm maps? What are the distances from pasture to dairy (where relevant) Are there any forestry or protected areas? Is a whole farm plan in place? Does it detail any future capital expenditure plans?

Farm capital improvements	Key questions
<b>Dairy infrastructure</b>	What is the status of the current dairy? Does it support the current and future plans of the business?
<b>Farm infrastructure</b>	What is the current status of infrastructure such as fencing, tracks, roads, gates, etc.?
<b>Water infrastructure</b>	What water infrastructure is currently in place (pumps, storage, dams, troughs, etc.)? Can it support any growth plans of the operation? What is the quality of the water?
<b>Irrigation infrastructure (if relevant)</b>	What irrigation infrastructure is currently in place (pumps, pipelines, channels, etc.)? Who owns/ manages the infrastructure? Is any additional expenditure required to maintain the system?
<b>Effluent infrastructure</b>	How is effluent managed? Are there any issues with the existing effluent management systems and processes? If expansion is planned, can the effluent system support the expansion? Is there an effluent management plan in place?
Farm financial performance/ structure	Key questions
<b>Historical financial performance (3-5 years full taxation and management accounts)</b>	Are there any trends within the financial performance of the business that need review? What has the financial volatility been over the period? Does performance appear sustainable? How does the historical performance compare with similar dairy operations over the same period?
<b>Budget/forecast financial performance (3-5 year look forward)</b>	Has the business established a forward-looking plan? Are the underlying assumptions of the forecast realistic? How does the forecast relate to actual performance? How does the forecast compare with similar dairy operations?
<b>Capital structure</b>	What is the current capital structure of the business? What is the proposed post-investment structure? Are there any additional capital requirements for the business over the short to medium term post investment?
<b>External agreements (suppliers, lease, etc.)</b>	What external agreements exist? What is the tenure of these agreements? Are there any notable issues within the agreements?



People	Key questions
<b>Management</b>	<p>Who currently manages the day-to-day operations of the business?</p> <p>What is their on-going involvement?</p> <p>How are they remunerated (now and in the future)?</p> <p>Are there any “key-person” risks that need to be managed?</p>
<b>Workforce</b>	<p>How many staff are required to run the operation?</p> <p>Who are the staff (including how long they have worked there, what is their remuneration, has there been any issues, etc.)?</p> <p>Do the staff have employment contracts?</p> <p>Are all entitlements (superannuation, workcover, PAYG, etc.) recorded and up to date?</p> <p>What supplementary staff are required?</p> <p>Are any staff housed in on-farm accommodation? If so, under what terms?</p>
<b>Policies and engagement</b>	<p>What policies/ plans are in place around factors such as sustainability, water management, animal health, worker health and safety, etc.?</p> <p>Are staff adequately trained and inducted into the business?</p> <p>What engagement does the business have with the local community?</p> <p>What is the culture of the business?</p>

Structure	Key questions
<b>Exit</b>	<p>What are the options available for exit?</p> <p>What is the liquidity of the investment like?</p> <p>What is the likely time frame of the investment?</p> <p>Who are the most likely purchasers?</p> <p>How is the investment valued? By whom and how often?</p>
<b>Distributions/returns/dividends</b>	<p>Is there an established policy for distributing returns?</p> <p>How are distributions determined?</p> <p>When are distributions paid?</p>
<b>Control</b>	<p>Who has control of the investment?</p> <p>Are the objectives of investors aligned?</p> <p>What decisions require investor approval?</p> <p>What authorities are delegated and to whom?</p> <p>How are authorities delegated?</p>

If the investment proposal being considered is more greenfield in nature, or is focused on expanding through property acquisition, then some of the additional critical components to consider will include:

- › How will the farms be sourced? Have they already been identified and/or are they under contract?
- › What are the proposed organisational and operating structures?
- › Who is involved in the management of both the farm and the investment vehicle (if the two aren't one in the same)?

- › What experience does the management have in operating dairy farms?
- › Over what timeframe is the project planned to come to fruition?
- › What are the key execution risks of the project?
- › What will be the reaction from the local community to the project?



## Decision gateway

### 3. Legal and regulatory due diligence

The final phase of due diligence which should occur once an indicative offer has been established and accepted between the parties and will lead up to subsequent contract creation, execution and settlement.

This phase is a critical component of the process where the assumptions made earlier in due diligence are confirmed through reviewing necessary documentation and/ or reports.

Legal due diligence	Key questions
<b>External valuation</b>	Who will undertake the valuation? What happens if discrepancies exist? Establish the terms of the valuation?
<b>Asset inventory</b>	What assets are included within the investment (or sale)? What assets are excluded (and why) from the investment (or sale)? Where are the assets located? What condition are the assets in?
<b>Land title/s</b>	Are there any liens or encumbrances against land titles? Are there any noted limitations to land use on the titles? Are there any easements or overlays on the titles?
<b>Lease arrangements (if relevant)</b>	Do the terms and conditions of any lease agreements match what has been presented in due diligence? Are arrangements on market terms and at arms length? Can leases be assigned to another party?
<b>Consents or restrictions</b>	Are all the necessary consents in place for buildings on owned property? Are there any restrictions on land use?
<b>Environmental permits</b>	Are any environmental permits required and in place? Is effluent an issue within the business
<b>Water licenses/permits</b>	Are there any liens or encumbrances over the water licenses/ permits? Are there any noted limitations to water use? What has been the historical allocation within the catchment? Is additional water available (if required)?
<b>Workplace health and safety records</b>	Are there any outstanding WorkCover, or health and safety, issues? If so, what is the status of the issue? Has there been any historic issues?
<b>Existing contracts with purchasers/suppliers</b>	Who are existing supply contracts with? What are the contractual terms of any agreement?
<b>Internal policies and governance</b>	What is the governance structure of the business? What internal policies are in place? How often are they reviewed? By whom are they reviewed and modified?



### Decision gateway

# Other investment considerations

## Investors tax considerations

Investors need to ensure they obtain appropriate advice and guidance around the broad range of taxation implications that could impact upon their proposed investment.

Areas such as those summarised below are several that should be considered by an investor, and the investor should look to gain a detailed understanding of how these areas, and any others, could impact their investment.

Factoring these tax considerations into the due diligence process along with the on-going investment and exit scenarios is seen as a critical component of any investment in the Australian dairy industry.

**Stamp duty:** Stamp duty is a general tax that is imposed upon certain documents and some undocumented acquisitions in Australia. These include title transfers as a result of selling real estate, vehicles, business assets and other property and is paid by the purchaser as a component of the settlement process. The amount of stamp duty varies between States and Territories and there are occasional exemptions or special conditions. This tax can be a substantial cost in a transaction and needs to be clearly understood and incorporated into your due diligence process.

**Land tax:** There are certain exemptions under the respective State or Territory legislation where the primary use of the land is for primary production. The definition of primary production, and therefore the exemption, varies between each State or Territory and therefore it is critical to gain a strong understanding of your own circumstances when undertaking due diligence on an investment.

**Funding source:** The source of the funding, or capital, to support the investment can impact upon the treatment of a range of taxation requirements and needs to be carefully considered when analysing an investment.

**Tax structure:** Especially relevant for foreign investors, however also relevant for domestic investors, the consideration of the investment tax structure, along with its position within the structure of the broader group may impact upon a range of factors relating to the investment.

**Tax residency:** The residency of the investor, from a taxation perspective, can impact upon a range of facets of an investment. This includes, but is not necessarily limited to, areas such as capital gains, capital losses, taxing rights along with other taxation obligations and exemptions.

**Tax conventions or double tax agreements:** Particularly relevant for foreign investors, these agreements exist between Australia and more than 40 countries where tax treaties exist. These conventions have been established to prevent double taxation and fiscal evasion in addition to enabling cooperation between Australian and international tax authorities to assist in enforcing the respective tax laws of each jurisdiction.

## Debt funding

Australia has a very well established banking and finance sector which ensures a very competitive landscape for investors requiring debt funding to support their investment. Several organisations have dedicated Agriculture and Agribusiness divisions with deep expertise across the Australian dairy sector.

It is very common for financial services organisations in Australia to have relationship managers who have a detailed understanding of both on-farm and post-farmgate businesses who can be a very valuable source of information and support to any investment decision.

You are encouraged to make contact with banking organisations within the area of your interest, or one in which you have an established relationship. Contact details for each of the major banking groups contained within the appendices of this document, however we also

encourage you to discuss financing with your accounting and/or legal advisors.

Breaking down the typical farm business finance opportunities there is only a set number of ways that this debt can be structured. When the funding requirements become more significant, and more “wholesale” in nature, there are a broader range of debt and capital markets style products that are available from the majority of the specialist Agribusiness banking groups in Australia.

In general, banks will look at three primary ‘styles’ of debt to fund businesses within the Australian dairy sector, namely:

**1. Short term:** A debt that is generally fully fluctuating or seen to be repaid over a short period of time through cashflow or a specific event. Products within this area will generally be extended for a 12-month period and reviewed annually;

**2. Long term:** Generally a debt that relates to a substantial asset (land, capital improvements, etc.) that will require several years, or more, to repay. Products within this area will generally be extended for a period of more than 3 or 5 years, up to a maximum of 10 or 15 years depending upon the specific policies of the bank. Whilst the term of the facility will be longer, banks will generally undertake some form of review on an annual basis;

**3. Equipment finance:** There are a range of structures within this style of financing that can vary between organisation, however the general tenet is that this style of financing will be aligned over a short to medium term and relate to the specific asset being financed. Assets financed in this manner could range from small transactions such as motorbikes, farm trucks and smaller capital equipment up to more substantial items such as dairy parlors, vats, tractors and the like. A broader market exists for this style of financing which can include programs provided by, or promoted by, the equipment manufacturer.

The Australian dairy industry is supported by a range of suppliers and financiers who provide funding products and arrangements that either support their underlying business or a specific product focused on the dairy sector.

These can include the likes of:

**Banking organisations:** Australia has a vibrant and competitive banking sector that includes several major domestic and international financial services organisations along with other regional and specialist organisations. Most banks with a focus on Agriculture have specialist Relationship Management staff to structure and manage banking facilities and relationships. A wide range of banking organisations support the Australian Dairy sector, many of whom have staff with intimate knowledge of the dairy industry;

**Milk supply companies:** In the past milk supply companies, have provided financing across a range of areas such as vat purchases and input supplies (where the company has an input supply business). Generally, this form of financing is funded through direct payments from the dairy farmers monthly milk cheque over an agreed term;

**Rural merchants/suppliers:** Rural merchants can provide financing alternatives to dairy farmers which could include the likes of deferred terms on key inputs or livestock financing options

**Livestock financing specialists:** There are a range of financiers currently in the market that provide financing products specifically targeted to the funding of livestock through a range of specialist products. Key to the successful use of this style of financing is a full understanding of the costs and benefits of the product which should be analysed before taking it on.

## Foreign Investment Review Board

Through the Foreign Investment Review Board ('FIRB') Australia has an established structure for reviewing investments by Foreign individuals and entities into Australian agriculture to determine whether the investment is in the Australian national interest.

There are a range of rules, limits and exemptions that the FIRB utilises to review investments which change from time to time as the associated legislation and regulations change.

Agribusiness and Agricultural Land investments have specific parameters within FIRB and it is important to gain a strong understanding of these parameters prior to committing to an investment.

The legislation supporting FIRB is one that is constantly under review and has the potential to change from time to time. Understanding the specific circumstances that relate to a potential investment, along with any queries or concerns around the process should be directed to either your investment advisor or directly to the FIRB.

Web	<a href="http://firb.gov.au">firb.gov.au</a>
Phone	+61 (0)2 6263 3795
Email	<a href="mailto:firbenquiries@treasury.gov.au">firbenquiries@treasury.gov.au</a>

## Who owns Australia's farms?

Ownership of farming businesses in Australia remains predominantly within family businesses with the Australian Tax Office recently showing that some 13.6% of Australia's farmland is owned by foreign domiciled individuals and entities as at June 2016. This has increased slightly from 12.4% in and 11.3% for the periods of June 2013 and June 2010 respectively.

In turn, UK based investors own around 53% (or 27.5m hectares) of that amount, with the USA 15% (7.7m hectares), the Netherlands 6% (3m hectares), Singapore 4% (1.9m hectares), and China 2.8% (1.5m hectares). The top ten countries investing in Australia is rounded out by the Philippines, Switzerland, Jersey, Indonesia and Japan.

A vast proportion of this land from a hectare perspective is based in the key pastoral regions of central and northern Australia (QLD, Northern Territory, South Australia and Western Australia)

In comparison to other areas of the Australian Agricultural sector – in particular pastoral livestock and broadacre mixed cropping and livestock, the Australian Dairy industry has a much smaller overall component of foreign investment in comparison to family investment.

In recent times there have been several notable larger-scale investments that have involved foreign investors either as primary investors or participating investors which is a trend that is expected to continue.

**Table 1** Proportion of agricultural land held by foreign person<sup>1</sup>

State/Territory <sup>2</sup>	Foreign interests ('000 ha)	Australian agricultural land ('000 ha)	Percent foreign (%)
NSW/ACT	2,375	57,434	4.1
VIC	607	12,009	5.1
QLD	17,658	135,918	13.0
WA	8,841	81,399	10.9
SA	7,156	45,837	15.6
TAS	342	1,569	21.8
NT	15,169	50,392	30.1
<b>Total</b>	<b>52,147</b>	<b>384,558</b>	<b>13.6</b>

**Table 2** Freehold and leasehold land interests held by foreign persons

State/Territory	Freehold ('000 ha)	Leasehold ('000 ha)	Total <sup>3</sup> ('000 ha)
NSW/ACT	2,146	232	2,378
VIC	565	71	636
QLD	5,426	12,860	18,286
WA	798	8,045	8,842
SA	141	7,015	7,156
TAS	302	40	342
NT	46	15,123	15,169
<b>Total</b>	<b>9,423</b>	<b>384,558</b>	<b>52,808</b>

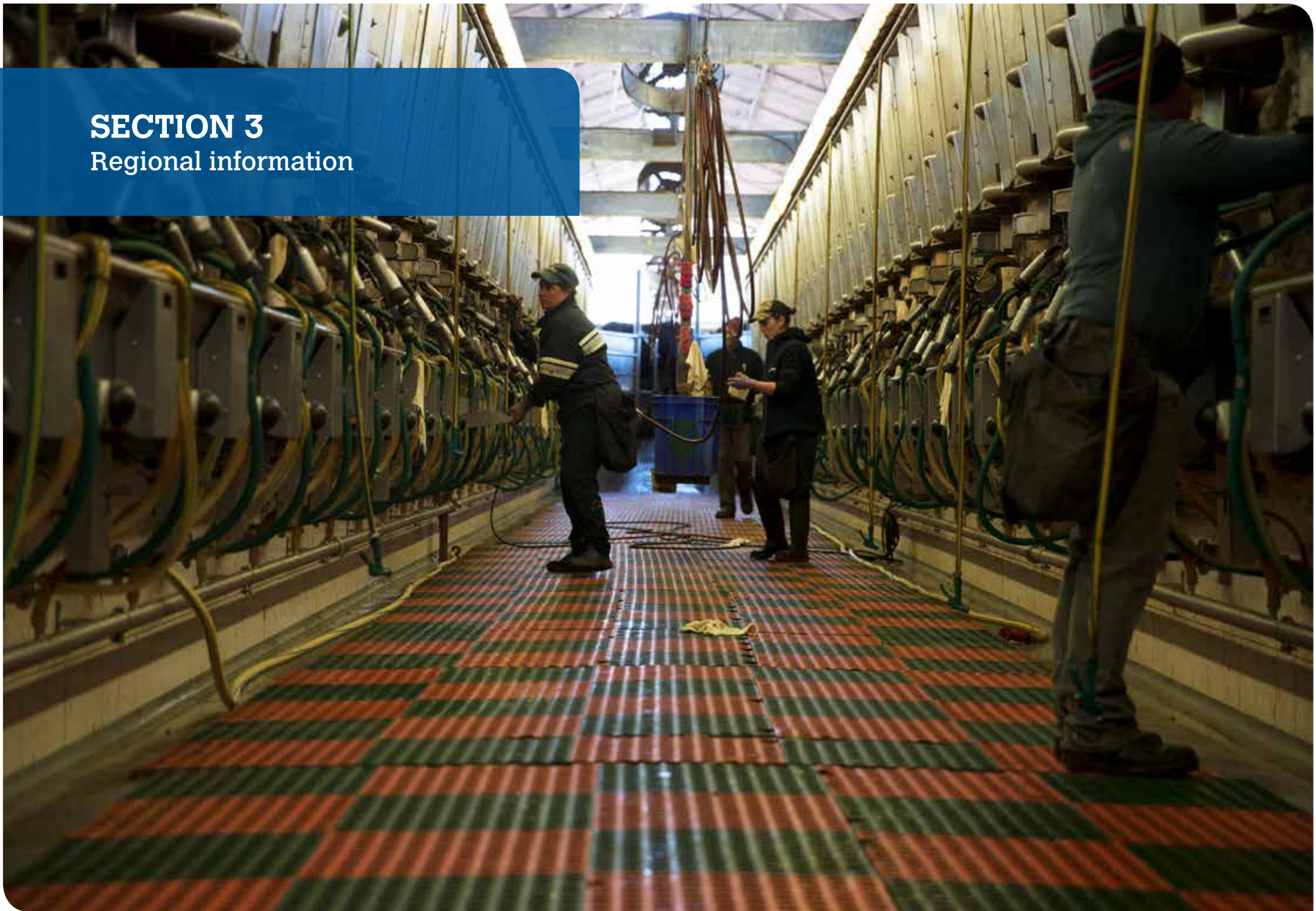
<sup>1</sup> The proportion of foreign interests in agricultural land by State/Territory shown in Table 1 was calculated by dividing the total area of foreign-held agricultural land in each State/Territory registered on the Agricultural Land Register, by the total area of agricultural land in each State/Territory sourced from the Australian Bureau of Statistics (ABS) 2014-15 Rural Environment and Agricultural Commodities Survey (REACS).

<sup>2</sup> Some properties span multiple States/Territories. For these properties, the property address provided by the registrant has been used to determine the State/Territory.

<sup>3</sup> In some instances, the same property has been separately registered by a foreign person with a freehold interest in the land and a foreign person with a leasehold interest in the land, as required under the Register of Foreign Ownership of Agricultural Land Act 2015. Land size information from both registrations has been included in Table 2 only.

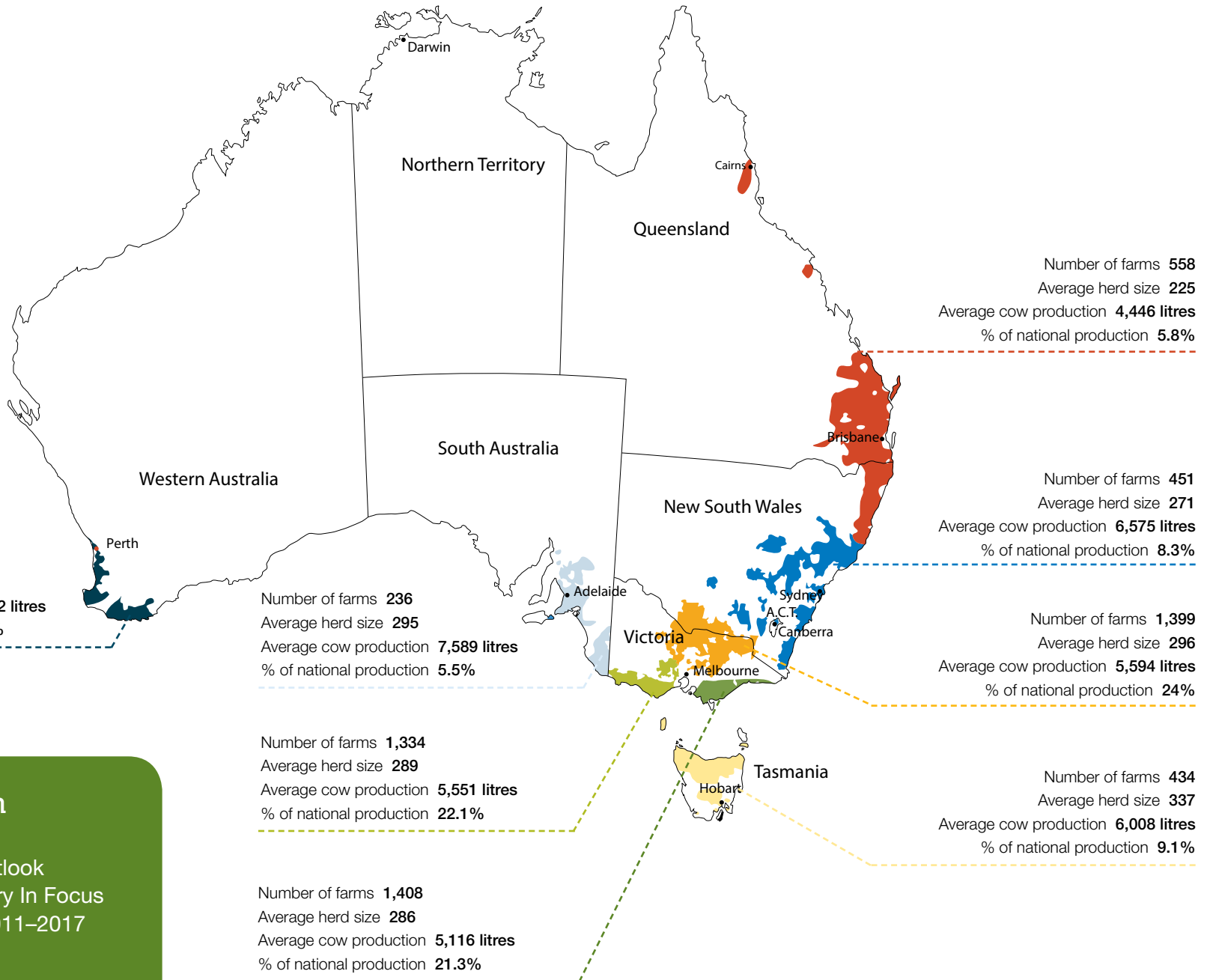
## SECTION 3

Regional information



Dairy Farming Areas by  
Regional Development Program

- Dairy NSW
- Dairy SA
- Dairy TAS
- GippsDairy
- Murray Dairy
- Subtropical Dairy
- WestVic Dairy
- Western Dairy



More information

Dairy Situation and Outlook  
Australian Dairy Industry In Focus  
The Dairy Australian 2011–2017

## Gippsland

Gippsland is a high rainfall dairying area based to the east of the Melbourne CBD. The region has a strong focus on pasture production with areas within the Region (such as the Macalister Irrigation District) supporting irrigation based production. Land is tightly held and generally trades at a premium to other dairying regions, with support coming from several of the major processors along with a broad range of other processors.

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## Northern Victoria/ Southern NSW

Spreading across the Murray and Goulburn River irrigation areas, this region relies upon irrigation to support intensive production. The region has the most diverse range of feeding systems (from pasture base through to total mixed rations) providing a range of production systems. The region also includes the higher rainfall alpine valley areas of north-east Victoria. Processing support comes from a range of major processors supplemented by several regional based processors.

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## Western Victoria

The Western Victorian dairy region spreads from just west of Melbourne CBD across to the South Australian border, predominantly within a reasonable proximity to the southern coastline. The region is characterised by low rainfall variability, fertile soils and a consistent long growing season for pastures and fodder crops. Small pockets of irrigation also exist throughout the region. The area is well serviced by both larger and smaller processors focused on export and domestic markets.

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## New South Wales

The NSW dairy region has the largest geographic spread of any of Australia's production regions with farmers based in a wide range of areas from the southern coastal areas and valleys, the Riverina, Western Sydney, the lower North Coast, Hunter Valley, and inland irrigation areas in the Central West of the state. Dairying in NSW has a long history across these regions with a primary focus on year-round production systems to support key drinking milk and fresh product markets in and around the Sydney CBD. Several processors operate across the region, with many having speciality focus in addition to those focused on more commoditised domestic and export products.

## Northern NSW/Queensland

The sub-tropical dairy region, which extends from North Coast NSW to the far north QLD coast is a diverse production region that is widely dispersed and extends across a very broad variety of environmental, climatic and production conditions. Almost all farms are year-round producers supporting fresh milk markets within the Region. Processors have established a presence in the key production areas and tend to remain focused on domestic markets in reasonable proximity to their plants.

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## South Australia

Production in the South Australian region is spread across several areas within the state, with the largest area being in the South-East of the state near the Victorian border. More traditional production areas exist closer to Adelaide in reasonable proximity to the Murray River. Production varies across the region, with some systems looking very similar to those in areas of Victoria (seasonal) and others focused on supporting suppliers focused on the domestic market and looking for consistency of supply year-round.

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## Tasmania

Tasmania has seen significant growth in dairying in recent years with the temperate local climate combined with fertile and productive soils supporting pasture based production systems. There has been significant transitions from grazing (beef & sheep) properties across to dairying in recent years, which has been supported by significant investment from several major dairy processors across the northern areas of the state. The key production areas are focused in the Northern area of the state with a strong focus on export markets given the relatively small domestic market in Tasmania. The development and expansion of irrigation areas within the region have seen an increase in a number of large scale dairy conversions in areas not normally engaged in dairying.

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## Western Australia

The WA dairy industry is located in the south-west of the state in reasonable proximity to the main Perth based domestic market. The region enjoys a reliable climate, good water supply and access to significant grain and fodder supplies from the highly productive WA grain belt. Production has been primarily structured to support local domestic demand, however the proximity of the region to key Asian export markets creates some relatively unique opportunities. A small number of processors support this region in comparison to other regions of south-eastern Australia, with the processors having strong local market positions.



## SECTION 4

### Contacts and statistical information



# Contacts

The contacts provided below are for information and research purposes. These contacts do not necessarily represent a complete listing of organisations or entities that an investor may need to utilise during a due diligence process. Further advice and guidance should be taken on an individual basis.

For Foreign Investors we recommend the Australian Trade and Investment Commission ('Austrade') as your first point of contact regarding investing in the Australian Dairy sector. Austrade can provide a wide range of advice to you around establishing the right industry and government contacts needed to establish, or expand, a business in Australia.

Federal Government organisations	
Australian Trade and Investment Commission ('Austrade')	<a href="http://austrade.gov.au">austrade.gov.au</a>
Department of Agriculture and Water Resources	<a href="http://agriculture.gov.au">agriculture.gov.au</a>
Foreign Investment Review Board	<a href="http://firb.gov.au">firb.gov.au</a>
Australian Competition and Consumer Commission	<a href="http://accc.gov.au">accc.gov.au</a>
Australian Taxation Office	<a href="http://ato.gov.au">ato.gov.au</a>

State Government organisations	
Victorian Department of Economic Development, Jobs, Transport and Resources	<a href="http://economicdevelopment.gov.au">economicdevelopment.gov.au</a>
Invest Victoria	<a href="http://invest.vic.gov.au">invest.vic.gov.au</a>
Agriculture Victoria	<a href="http://agriculture.gov.au">agriculture.gov.au</a>
Tasmanian Department of State Growth	<a href="http://stategrowth.tas.gov.au">stategrowth.tas.gov.au</a>
Tasmanian Coordinator General	<a href="http://cg.tas.gov.au">cg.tas.gov.au</a>
Tasmanian Department of Primary Industries, Parks, Water and Environment	<a href="http://dpipwe.tas.gov.au">dpipwe.tas.gov.au</a>
New South Wales Department of Industry	<a href="http://industry.nsw.gov.au">industry.nsw.gov.au</a>
New South Wales Department of Primary Industries	<a href="http://dpi.nsw.gov.au">dpi.nsw.gov.au</a>
Queensland Department of State Development	<a href="http://statedevelopment.qld.gov.au">statedevelopment.qld.gov.au</a>
Queensland Department of Agriculture and Fisheries	<a href="http://daf.qld.gov.au">daf.qld.gov.au</a>
South Australian Department of State Development	<a href="http://statedevelopment.sa.gov.au">statedevelopment.sa.gov.au</a>
South Australian Dept of Primary Industries and Regions	<a href="http://pir.sa.gov.au">pir.sa.gov.au</a>
Western Australian Department of State Development	<a href="http://dsd.wa.gov.au">dsd.wa.gov.au</a>
Western Australia Department of Agriculture and Food	<a href="http://agric.wa.gov.au">agric.wa.gov.au</a>

Federal and State real estate organisations	
The Australian Property Institute (Valuers)	<a href="http://api.org.au">api.org.au</a>
The Australian Valuers Institute (Valuers)	<a href="http://valuersinstitute.com.au">valuersinstitute.com.au</a>
Real Estate Institute of Australia	<a href="http://reia.asn.au">reia.asn.au</a>
Real Estate Institute of Victoria	<a href="http://reiv.com.au">reiv.com.au</a>
Real Estate Institute of Tasmania	<a href="http://reit.com.au">reit.com.au</a>
Real Estate Institute of New South Wales	<a href="http://reinsw.com.au">reinsw.com.au</a>
Real Estate Institute of Queensland	<a href="http://reiq.com">reiq.com</a>
Real Estate Institute of South Australia	<a href="http://reisa.com.au">reisa.com.au</a>
Real Estate Institute of Western Australia	<a href="http://reiwa.com.au">reiwa.com.au</a>

Federal and State dairy organisations	
Dairy Australia	<a href="http://dairyaustralia.com.au">dairyaustralia.com.au</a>
Australian Dairy Industry Council	<a href="http://australiandairyfarmers.com.au">australiandairyfarmers.com.au</a>
WestVic Dairy	<a href="http://westvicdairy.com.au">westvicdairy.com.au</a>
GippsDairy	<a href="http://gippsdairy.com.au">gippsdairy.com.au</a>
Murray Dairy	<a href="http://murraydairy.com.au">murraydairy.com.au</a>
DairyTas	<a href="http://dairytas.com.au">dairytas.com.au</a>
DairyNSW	<a href="http://dairynsw.com.au">dairynsw.com.au</a>
Subtropical Dairy (Northern NSW & QLD)	<a href="http://dairyinfo.biz">dairyinfo.biz</a>
DairySA	<a href="http://dairysa.com.au">dairysa.com.au</a>
Western Dairy (Western Australia)	<a href="http://westerndairy.com.au">westerndairy.com.au</a>

## Farm performance

The following Australian Dairy Farm performance data is derived from the Dairy Farm Monitor Project and the Queensland Dairy Accounting Scheme. Dairy Australia in partnership with Agriculture Victoria, New South Wales Department of Primary Industries, Department of Agriculture and Fisheries Queensland, Tasmanian Institute of Agriculture, Dairy SA and Western Dairy annually collects approximately 250 sets of detailed farm data covering both physical and financial farm performance. The figures

detailed below represent a weighted average of dairy farm performance based on each states contribution to national milk production. More regionally specific data can be obtained on the Dairy Australia web page [dairyaustralia.com.au/Business-and-financials/Dairy-Farm-Monitor-Project.aspx](http://dairyaustralia.com.au/Business-and-financials/Dairy-Farm-Monitor-Project.aspx) or by registering with DairyBase at [dairybase.com.au](http://dairybase.com.au)

Financial parameters		FY 2013/2014		FY 2014/2015		FY 2015/2016	
Profit and loss		Average	Top 25%	Average	Top 25%	Average	Top 25%
Milk income	\$	1,222,888	1,687,883	1,222,058	1,636,911	1,139,813	1,614,696
Gross farm income	\$	1,326,662	1,842,918	1,345,953	1,805,983	1,270,365	1,808,368
Total variable costs	\$	614,372	830,905	681,545	849,499	729,259	935,557
Total overhead costs	\$	386,516	430,354	404,194	444,906	412,421	483,323
<b>Total operating costs (variable &amp; overhead)</b>	\$	1,000,888	1,261,259	1,085,738	1,294,405	1,141,680	1,418,880
<b>Earnings before interest &amp; tax (EBIT)</b>	\$	325,774	581,659	260,215	511,577	128,685	389,489
Total finance costs	\$	112,029	120,512	109,761	126,603	113,232	155,589
<b>Net farm income</b>	\$	213,745	461,147	150,454	384,974	15,453	233,899
Balance sheet		FY 2013/2014		FY 2014/2015		FY 2015/2016	
		Average	Top 25%	Average	Top 25%	Average	Top 25%
Total current assets	\$	98,235	154,224	137,580	191,271	127,185	218,248
Total non-current assets	\$	4,167,869	4,353,159	4,374,604	5,058,772	4,582,740	5,718,958
Total farm assets owned	\$	4,266,104	4,507,384	4,512,185	5,250,043	4,709,925	5,937,207
<b>Return on assets</b>	%	7.4	14.0	5.0	9.8	1.2	6.0
Total current liabilities	\$	59,248	45,962	43,069	35,249	58,451	42,945
Total non-current liabilities	\$	1,333,807	1,343,252	1,365,927	1,490,148	1,433,152	1,924,143
Total liabilities	\$	1,393,055	1,389,214	1,408,996	1,525,397	1,491,603	1,967,088
Total equity	\$	2,873,049	3,118,170	3,103,188	3,724,646	3,218,322	3,970,119
<b>Equite as % of owned assets</b>	%	67.1	62.9	68.1	66.2	68.1	65.5
<b>Return of equity</b>	%	8.1	19.1	4.1	11.7	-1.6	6.0

# Farm performance

Financial parameters		FY 2013/2014		FY 2014/2015		FY 2015/2016	
		Average	Top 25%	Average	Top 25%	Average	Top 25%
<b>Profit and loss</b>							
Milk income	\$/kg MS	6.86	7.01	6.37	6.49	5.86	6.11
Gross farm income	\$/kg MS	7.44	7.64	7.00	7.17	6.50	6.85
Total variable costs	\$/kg MS	3.39	3.32	3.50	3.26	3.75	3.43
Total overhead costs	\$/kg MS	2.39	1.87	2.30	1.85	2.34	1.94
<b>Total operating costs (variable &amp; overhead)</b>	\$/kg MS	5.77	5.19	5.80	5.11	6.09	5.36
<b>Earnings before interest &amp; tax (EBIT)</b>	\$/kg MS	1.66	2.45	1.20	2.06	0.41	1.49
Total finance costs	\$/kg MS	0.62	0.54	0.57	0.54	0.58	0.63
<b>Net farm income</b>	\$/kg MS	1.04	1.90	0.63	1.52	(0.17)	0.85
<b>Balance sheet</b>							
		Average	Top 25%	Average	Top 25%	Average	Top 25%
Total current assets	\$/kg MS	0.57	0.72	0.69	0.71	0.65	0.87
Total non-current assets	\$/kg MS	25.8	18.2	24.8	20.2	25.8	22.0
Total farm assets owned	\$/kg MS	26.4	18.9	25.5	20.9	26.4	22.9
<b>Return on assets</b>	%	7.4	14.0	5.0	9.8	1.2	6.0
Total current liabilities	\$/kg MS	0.39	0.21	0.26	0.17	0.36	0.15
Total non-current liabilities	\$/kg MS	7.42	6.11	7.34	6.15	7.60	7.72
Total liabilities	\$/kg MS	7.81	6.33	7.60	6.32	7.95	7.88
Total equity	\$/kg MS	18.6	12.6	17.9	14.6	18.5	15.0
<b>Equite as % of owned assets</b>	%	67.0	62.9	68.1	66.2	68.3	65.5
<b>Return of equity</b>	%	8.1	19.1	4.1	11.7	-1.6	6.0

## Physical performance

Physical Parameters	FY 2013/2014		FY 2014/2015		FY 2015/2016	
	Average	Top 25%	Average	Top 25%	Average	Top 25%
Usable area (Ha)	282	310	287	310	286	349
Milking area (Ha)	158	174	163	182	163	206
Cows milked	357	438	370	462	372	478
Milk production (litres)	2,369,343	3,199,840	2,539,754	3,328,047	2,540,352	3,479,418
Milk production (kg milk solids)	176,116	237,851	190,824	250,621	191,829	261,201
Cows per labour unit (FTE)	104	119	106	117	104	118
Milksolids per cow (kg/cow)	487	536	507	537	506	534
Litres per cow (litres/cow)	6,499	7,125	6,732	7,114	6,696	7,087
Income per kg of milk solids (\$/kg)	6.86	7.01	6.36	6.48	5.87	6.11
Income per litre of milk (\$/litre)	0.51	0.52	0.48	0.49	0.44	0.46

# Inputs



## Fertiliser

### Urea (granular Middle East)

179 US\$/t

▼ -23% LY

▼ -44% 5Y

### DAP (US Gulf)

360 US\$/t

▼ -45% LY

▼ -60% 5Y

### MOP (granular Vancouver)

214 US\$/t

▼ -35% LY

▼ -59% 5Y

Price is April 2017 average, compared to the 2016 April average (LY) and 5-year (5Y) April average.

Source: Bloomberg

## Water and weather

### Northern Victoria

96 \$/ML

▼ -53% LY

▼ -10% 5Y

1,838,667 ML

▼ -5% LY

▲ +9% 5Y

### Murray Irrigation System

62 \$/ML

▼ -72% LY

▼ -30% 5Y

165,336 ML

▲ +42% LY

▼ -8% 5Y

Price of water traded is 12 month average and volume of water is 12 month total, both to April 2017, and compared to year earlier (LY) and last 5 years (5Y).

Source: Victorian Water Register, Murray Irrigation Ltd

## Cows

### Cull cows

460 c/kg

▲ +13% LY

▲ +29% 5Y

106,363 head

▲ +1.5% LY

▲ +40% 5Y

### Dairy cattle exports

66,345 head

▼ -12% LY

▼ -17% 5Y

Price is April 2017 average, compared to April last year (LY) and 5-year (5Y) averages. Number of head is last 12 months (cull cows to April, dairy cattle exports to April 2017) compared to year earlier (LY) and 5-year (5Y) averages.

Source: NLRS, ABS

# Grain and hay prices

## Australian dairy regions

### Grain and hay



The relevant stockfeed wheat available in a region (ASW, AGP, SFW1 or FED1).

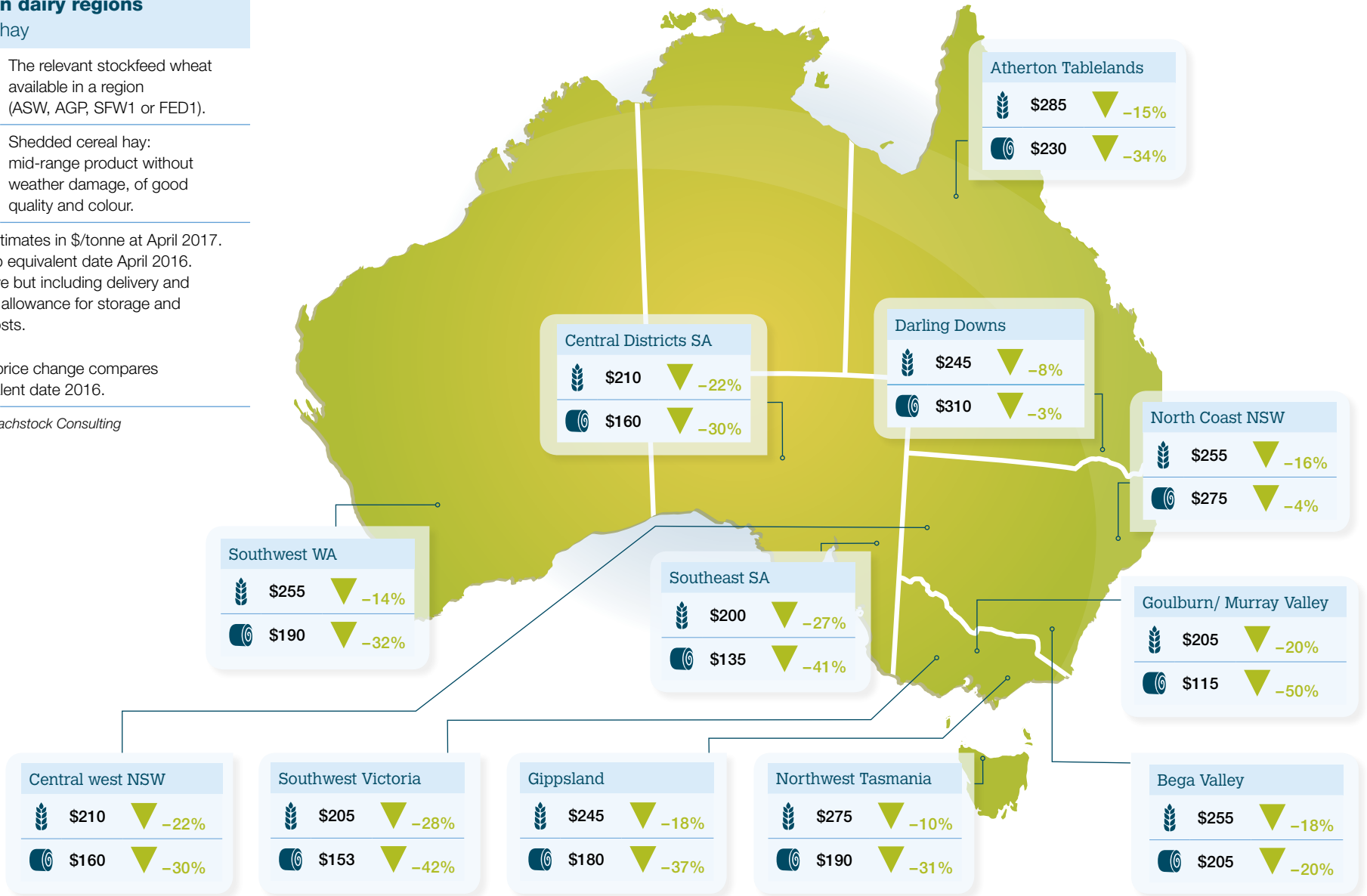


Shedded cereal hay: mid-range product without weather damage, of good quality and colour.

Prices are estimates in \$/tonne at April 2017. Compared to equivalent date April 2016. GST exclusive but including delivery and (for grain) an allowance for storage and marketing costs.

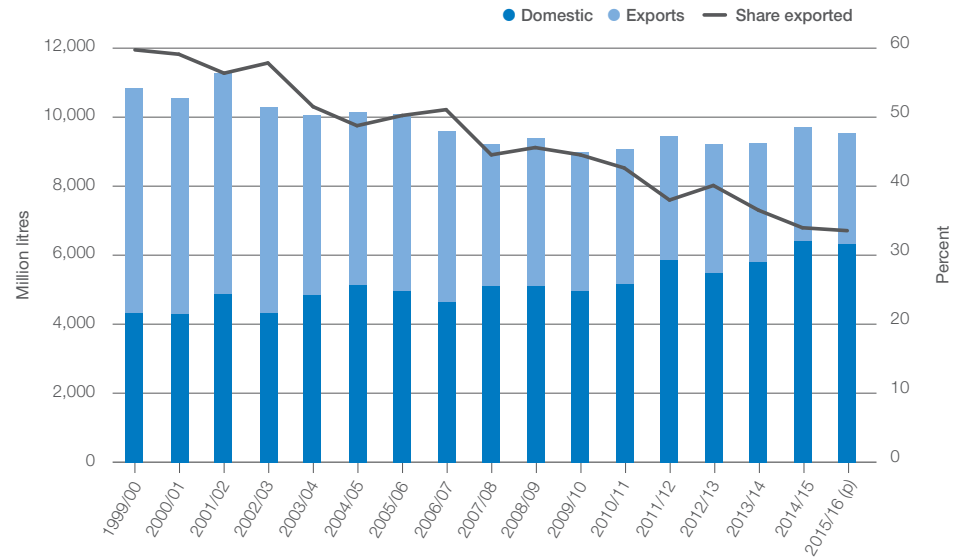
Percentage price change compares to the equivalent date 2016.

Source: AFIA, Lachstock Consulting



# Dairy markets

Australian consumption and exports (milk equivalent)



Source: Dairy manufacturers and ABS

Australian dairy markets by product, 2015/16 (A\$ million)

	SE Asia	Other Asia	Europe	Middle East	Africa	Americas	Other	Total
Butter/AMF	56	51	2	18	4	19	6	157
Cheese	147	577	2	47	21	35	27	856
Milk	85	121	0	2	1	0	23	232
SMP	297	125	0	66	15	2	12	516
WMP*	57	480	2	15	1	15	25	595
Other	195	199	5	67	24	28	119	637
<b>Total</b>	<b>838</b>	<b>1,552</b>	<b>11</b>	<b>215</b>	<b>66</b>	<b>99</b>	<b>211</b>	<b>2,993</b>

\*Also includes infant powder  
Source: Dairy Australia estimates and ABS





**Disclaimer**

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**Dairy Australia Limited** ABN 60 105 227 987  
T + 61 3 9694 3777 F + 61 3 9694 3701  
E [enquiries@dairyaustralia.com.au](mailto:enquiries@dairyaustralia.com.au)  
[dairyaustralia.com.au](http://dairyaustralia.com.au)