



## Food and agriculture - dairy

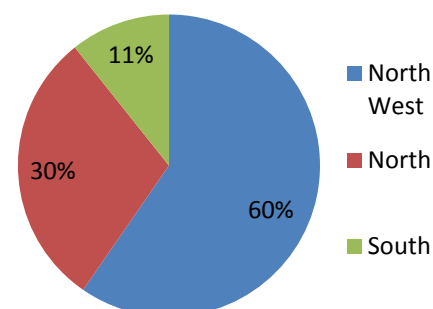
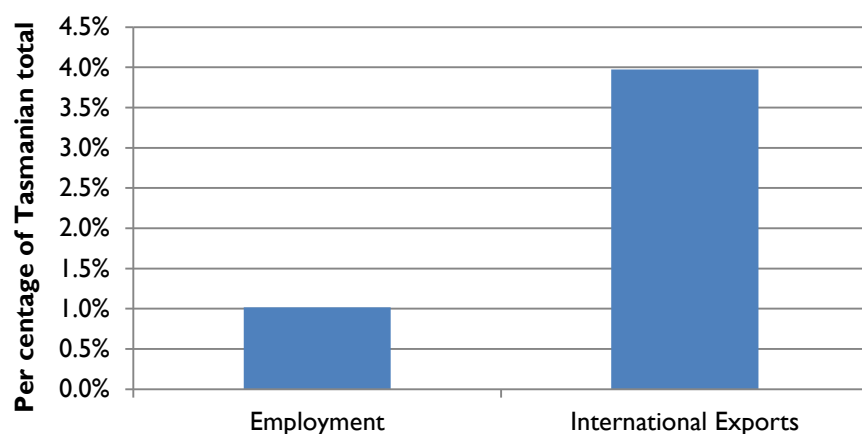
The trade and investment sectors contained in the sector summary series have been compiled from Australian and New Zealand Standard Industry Classification (ANZSIC) classes using a value chain approach. This means that industry classes from ANZSIC have been grouped together to provide estimates of the size of the particular trade and investment sectors.

**Coverage:** The farming of dairy cattle and the production of dairy products.

### Key indicators

### Regional employment

## Dairy



The above statistics have been represented to the nearest whole number.

### Key statistics at a glance

Indicator	Units	Period	Data	Change from five years ago	Per cent of Tasmania	Per cent of Australia
Gross packed and processed value <sup>(a)</sup>	\$M	2010-11	\$802	NA	NA	NA
Employment <sup>(b)</sup>	No.	2011	2 149	9.9%	1.0%	0.3%
International exports <sup>(c)</sup>	\$M	2012-13	\$166	NA	4.0%	0.9%
Interstate exports <sup>(a)</sup>	\$M	2010-11	\$619	NA	NA	NA
Incomes (average weekly) <sup>(d)</sup>	\$	2011	\$841	22.0%	95.3%	105.9%
Education <sup>(e)</sup>	No.	2011	600	NA	27.9%	37.9%
Employment (proportion full/part) <sup>(f)</sup>	Type	2011	Full-time	NA	76.3%	79.7%

Sources: Australian Bureau of Statistics (ABS) (2012, 2013), Department of Economic Development, Tourism and the Arts (2013), Department of State Growth (2014), AEC Group

(a) Source AEC Group. Industry value add (IVA) is a component of the ABS estimate of Gross State Product and measures the total value of goods and services produced by the sector, less the value of inputs. Estimated change in IVA from five years ago for a sector is heavily influenced by change at the highest 'ANZSIC Division 1' level of industry aggregation and is not reported.

(b) 2011 ABS Census. AEC Group considers this the most accurate estimate of employment at the detailed four-digit ANZSIC level.

(c) Estimates of international exports using ABS data.

(d) 2011 ABS Census. This includes employment and non-employment related income (e.g. rents, dividends, interest, child support and government pensions and allowances). A percentage above 100 per cent of average weekly income suggests workers in this industry earn higher than the average wage.

(e) 2011 ABS Census. Education measured by the number of employees who have completed Year 12 (or equivalent studies). Per cent of Tasmania/Australia shows the proportion of workers in this sector who have attained this level of education.

(f) 2011 ABS Census. Per cent of Tasmania/Australia shows the proportion of workers employed in this manner.

## Summary of sector

Tasmania's temperate climate, fertile soils and reliable rainfall support low-cost, pasture-based milk production and a range of processed dairy products for domestic and international markets. Tasmania's milk production costs are consistently lower than most other Australian dairy regions, resulting in higher returns on capital invested. This has helped drive industry growth over the past two decades.

Of the Australian states, Tasmania is the third-largest dairy producer, accounting for 8.3 per cent of the nation's milk output, or 760 mega litres (ML) in 2012-13<sup>1</sup>. In the 10 years to 2011-12, Tasmanian milk production grew by around 22 per cent, while Australian milk production declined by 14 per cent<sup>2</sup>. A national trend towards fewer but larger farms is particularly pronounced in Tasmania, which had 437 dairy farms in 2012-13 and the largest average herd size in the country at 367 (against a national average of 240)<sup>3</sup>.

The majority of Tasmanian product was sold into the Australian domestic market (\$619 million in 2010-11)<sup>4</sup>. Tasmania has the lowest exposure to the drinking milk market of all states – less than eight per cent of production is consumed locally as drinking milk. International exports totalled around \$166 million in 2012-13. Economic growth and changing diets in China and other emerging economies saw global dairy exports grow from eight million to 11 million tonnes per annum between 2000 and 2012<sup>5</sup>. The international demand outlook appears to remain positive, though substitute products are emerging as a potential risk.

The 'packed and processed value' of Tasmanian food and beverage production in 2010-11 was \$2.85 billion, of which dairy accounted for \$416 million, making it the largest single industry in Tasmania agriculture<sup>6</sup>. Between 2010 and 2013 there was significant investment in new and upgraded 'stainless steel', creating an additional 350 ML in processing capacity and providing a platform for further milk supply growth. These investments included:

- Fonterra's \$6.5 million gas conversion at Spreyton (2011) and \$18.6 million upgrade of its cheese plant at Wynyard (\$12 million in 2010 and \$6.6 million in 2013)
- Lion's \$150 million investment to expand and modernise its Burnie specialty cheese plant (due to be completed in 2014, followed by King Island by 2017)
- Tasmanian Dairy Product's \$80 million milk-powder plant in Circular Head (commissioned in September 2012)
- Mondelez International (Cadbury) has announced plans for expansion in Tasmania which could mean demand for an additional 30-34ML of milk per annum.

The state's processing sector is dominated by Fonterra, Murray Goulburn (through a majority shareholding in Tasmanian Dairy Products, Lion (formerly National Foods), and Mondelez (Cadbury) along with a handful of smaller processors such as Ashgrove, Pyengana Cheese, Bruny Island Cheese, Wicked Cheese, Red Cow Dairy and Tamar Valley Dairy (owned by Fonterra). A range of commodity, niche and branded products are manufactured in Tasmania including cheeses, skim and whole milk powder, butter, whey, yoghurt, milk, confectionery (chocolate) and cream.

<sup>1</sup> Dairy Tasmania, personal correspondence with Mark Smith, 23 October 2013 and Dairy Australia website access on 30 October 2013 <<http://www.dairyaustralia.com.au/Statistics-and-markets/Farm-facts/Dairy-at-a-glance.aspx> >

<sup>2</sup> Department of Economic Development, Tourism and the Arts, *Tasmania Delivers Dairy*, accessed 04 September 2013 at <[http://www.investtasmania.com.au/\\_data/assets/pdf\\_file/0007/65806/Tasmania\\_Delivers\\_Dairy\\_English\\_2012.pdf](http://www.investtasmania.com.au/_data/assets/pdf_file/0007/65806/Tasmania_Delivers_Dairy_English_2012.pdf) >

<sup>3</sup> Dairy Australia, *2013 Situation and Outlook*, page 61 accessed on 04 September 2013 at: <<http://www.dairyaustralia.com.au/~media/Documents/Stats%20and%20markets/S%20and%20O/May%202013/Dairy%20Situation%20and%20Outlook%20May%202013%20-%20Full%20Report.pdf> >

<sup>4</sup> *Food and Beverage Industry Scorecard 2010-11*, Department of Primary Industry, Parks, Water and Environment

<sup>5</sup> Dairy Australia presentation, access on 18 October 2013 at:

<<http://www.dairyaustralia.com.au/~media/Documents/Stats%20and%20markets/COAG/Charlie%20McElhone%20DOC1322163.pdf> >

<sup>6</sup> , *Food and Beverage Industry Scorecard 2010-11*, Department of Primary Industries, Parks, Water and Environment <<http://www.dpipwe.tas.gov.au/inter.nsf/WebPages/CART-76FVXV?open> >

In response to the growth in processing capacity and forecast global demand for dairy products, industry body DairyTas instigated an industry development project to help drive sustainable milk supply growth. The *Into Dairy Sustainable Development Project* incorporates a range of initiatives focused on attracting investment, developing skills and growing Tasmania's herd. The \$1.7 million project is funded by the Tasmanian and Australian Governments, milk processors, industry suppliers, DairyTas and Dairy Australia.

## Constraints and opportunities

Consultation with industry stakeholders has identified the following key constraints and opportunities:

### Constraints/risks

- Factory capacity currently exceeds annual production by approximately 350ML. Milk supply growth rates of 8-10 per cent per annum (rather than historic growth rates of around three per cent per annum) are necessary to sustain recent investment in new factory capacity. High growth rates bring financial, environmental and animal welfare risks that need to be carefully managed.
- Shortage of high-calibre managers able to manage farms on behalf of or in partnership with investors.
- Difficulties attracting and retaining labour (particularly on farms).
- Negative perceptions of dairy farming and high entry costs (land prices) for new owners and operators in the farm sector.
- High debt levels and limited business and financial management skills of some producers impact on their capacity to manage volatility and respond to opportunities.
- Genetically Modified (GM) pasture varieties for use on dairy farms are expected to be ready for commercialisation within the next five years. While there are varying opinions in the industry dairy, farmer representatives expect that jurisdictions able to leverage GM pasture technologies will obtain a productivity advantage over areas where farmers are prevented from using this technology.
- A number of dairy farms are currently on the market and these operators are looking to exit the industry at the right price (approximately 5-10 per cent of farms).
- Volatility of international dairy commodity markets and flow on cost-price squeeze on producers. The milk price is 25 per cent up in 2013-14 on the previous year. The 2012-13 price and season was a difficult one for dairy farmers.
- Rising costs of key inputs such as water, electricity, natural gas and labour, which affects producer and processor competitiveness.
- Lack of irrigation in some key production areas (such as Circular Head). State funds have been committed to the scheme but federal funding is also required for the project to progress.
- Impact of intensive farming practices on sensitive environments.

### Opportunities

- Significant scope for increased, low-cost milk production which could see Tasmania's milk output more than double to 1.5 billion litres per year.
- Opportunities for investment in new farm development, expansion of existing farms and ancillary businesses such as heifer agistment, bobby calf rearing and feed production.
- The global demand outlook for dairy product appears positive, and will continue to grow with the expanding middle class in emerging markets such as China, changes in diet, increasing urbanisation and rising global population.

- Tasmania’s comparative water advantage – supplemented by planned irrigation investments, and absence of major animal diseases all create ideal conditions for grass-based production.
- Opportunity to develop higher value and branded products.
- Opportunity to capitalise on climate change impacts driving Australian milk production to cooler, wetter parts of the country.
- Improved understanding and management of key pasture species to boost productivity.
- Well organised, cohesive production sector with clear, demonstrated capability.
- Lion’s Burnie cheese plant redevelopment may stimulate goat milk production in Tasmania.
- Proposed \$66 million expansion at Cadbury’s may require an additional 30-34 million litres of milk.

## Industry strategy

Dairy Tasmania has developed the *Into Dairy – Sustainable Dairy Development Project* (previously known as ‘Filling the Factories’) to support investment in additional dairy processing capacity, with a range of initiatives aimed at stimulating and supporting milk supply growth of 350ML by 2017.

The \$1.7 million budget for the project has been funded by the Tasmanian and Australian governments, Dairy Australia and Tasmanian dairy processors including Fonterra, Tasmanian Dairy Products, Mondelez International (Cadbury) and Lion.

The project builds on industry’s earlier *2011-2015 Strategic Plan* and aims to create 550 new jobs across the industry, on-farm investment of \$600 million and additional gross farm milk income of \$130 million per annum. It incorporates a range of initiatives and activities around the key focus areas of investment, people and animals (cows). Further information can be found at: [www.dairytas.com.au/intodairy/](http://www.dairytas.com.au/intodairy/)

The project plan is focussed mainly on farm gate activity and priorities, but also seeks to improve supply chain relationships across the industry. According to the plan, industry continues to concentrate on delivering optimum performance across the core farm-based activities of:

- a. animal and feed base performance
- b. natural resource management
- c. animal health and welfare
- d. human resources and skill development
- e. business planning and financial management.

The project plan states that, ‘a vibrant dairy industry in Tasmania requires high performance in each core activity area addressed across all levels of the industry. This must be balanced by continuing investment in processing capacity and innovation in alignment with industry and market development.’

## Government strategy

The Tasmanian Government, through its *Cultivating Prosperity: A 2050 Vision for Agriculture policy*, is putting the state's primary industries on the path to achieving a ten-fold increase in the value of the sector by 2050.

The Government seeks to support the dairy industry in its growth and sustainability by creating an investment-friendly environment (including accessible, adequate infrastructure; appropriate, responsive regulations; best-practice risk-based biosecurity measures; up-to-date relevant research, information and industry support programs; available labour, and opportunities for skills development) to facilitate sustainable investment in processing capacity and growth in milk production on-farm.

Key Tasmanian Government initiatives include:

- allocating \$740 000 to support the Dairy Tasmania *Into Dairy* project by funding a project manager and conversion planning
- building and co-funding irrigation schemes in existing (NE and NW) and new (midlands) dairy regions
- attracting Australian Government funding to improve, upgrade or extend infrastructure such as natural gas, power lines and waste water infrastructure
- assisting investors understand and navigate regulatory approval processes.

## Discussion

Growing milk production sustainably and profitably: the dairy sector is growing in response to increasing international and domestic market demand, but producers (farmers), particularly those that are highly geared, must be able to manage the price volatility (and flow on, cost-price squeeze) that characterises international dairy commodity markets. New investment in processing capacity, government-funded irrigation expansion and positive price signals from the market provide a foundation for growth. Programs run through DairyTas and the Tasmanian Institute of Agriculture assist producers to manage price and seasonal volatility. DairyTas' Planning for Conversion and Planning for Growth programs promote sustainable milk production growth.

Difficult seasonal conditions and low milk prices along with increasing input costs in 2011/12 and 2012/13, have impacted growth and investment in the sector. However, 2013/14 has been climatically favourable and has seen near-record high milk prices which are expected to continue into the medium term. These improved conditions are resulting in increased farmer confidence and investment.

Processing capacity: while the milk supply sector has the desire and capacity to grow, increases in milk production must be driven by market demand and matched by investment in processing facilities. This is particularly true for those manufacturing high-value, differentiated products (such as premium cheeses and yoghurts, nutritional supplements and high-specification ingredients) with the potential to support higher farm gate prices. The Tasmanian Government is assisting processors expand or establish a presence in Tasmania, including assessing and managing infrastructure constraints (particularly around energy, waste and waste water management) and training requirements. The Government has encouraged and lobbied for Australian Government investment in infrastructure, such as extending natural gas to Smithton, introducing electricity into areas with dairy potential and removing storm water from Burnie's waste water treatment system.

Labour/skills: the availability and quality of farm management and labour is cited as a key constraint to growth while high entry costs and negative perceptions of dairying are deterring new farm owner operators from entering the industry. These issues are being addressed through a Dairy Industry Skills Plan developed in 2009 by Skills Tasmania in partnership with industry. The plan is being implemented through training delivered by TasTAFE, Dairy Australia's Workforce Planning and Action project and programs run by DairyTas (in-school programs, such as financial management training). The AgriTas agricultural trade college in Smithton will also deliver practical certificate to diploma-level training.