

AUSTRALIAN DAIRY ANNUAL REVIEW

JUNE 2017

About the research

The Australian Dairy Annual Review includes data and outlooks on production in Australia and globally, seasonal conditions, prices, demand and the financial performance of Australian farms.

Significant effort has been taken to secure the most recent data available.

About Ag Answers

Ag Answers is a specialist insights division of Rural Bank and Rural Finance. Recognising that good information is the key to making good business decisions, Ag Answers provides research and analysis into commodities, farmland values, farm business performance and topical agricultural issues to enable farmers to make informed decisions.

About Rural Bank and Rural Finance

Rural Bank has been a wholly-owned subsidiary of Bendigo and Adelaide Bank Limited since 2010 and is the only Australian-owned and operated dedicated agribusiness bank in the country. From 1 July 2014, Victorian agribusiness lender, Rural Finance joined Rural Bank as a division of Bendigo and Adelaide Bank Limited. As a specialist rural lender, Rural Finance has been fostering the sustainable economic growth of rural and regional Victoria for more than 70 years.

Together, Rural Bank and Rural Finance are supporting farmers and farming communities by providing them with specialist financial tools, industry insights and investment into the future of the Australian agribusiness sector.

The future for agriculture is bright

We provide exceptional financial services, knowledge and leadership for Australian farmers to grow.

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SUMMARY

Australian dairy producers experienced a difficult 2015 and first half of 2016 due to dry conditions and lower global dairy product prices. The breakdown of El Nino in May 2016 was the turning point for improved seasonal conditions as a dry start to the year quickly changed to the second wettest winter on record, which was followed by more rain in early spring. Conditions look set to revert back to being warmer and drier for the east of Australia and cooler for Western Australia in 2017.

Globally dairy prices eased significantly in 2015 and early 2016 with increased supply from the EU and US flooding a market which already had high inventory levels. In the second half of 2016 on the back of decreased supply in the southern hemisphere

prices began to slowly trend upward. Australian dairy producers reacted to milk price cuts in mid-2016 by reducing milk supply. Year to date figures for 2016/17 show a decrease of 8% in national milk production to April 2017.

Export demand for milk powder is likely to grow in 2017 led by China which increased export volume by 46% in 2015/16. Australia's fastest growing milk powder market Vietnam has grown from 4,900 tonnes in 2012 to over 20,000 tonnes in 2016.

This report presents information about current national and international production, seasonal conditions, prices, demand and the financial performance of Australia's dairy sector.

Total milk supply
as at April 2017

7.7

billion litres, down -8%
compared to 2015/16.

Skim milk powder
production has averaged

5.1%

growth per year since
2009/10

Australian winter
rainfall was

82%

higher than average in 2016

European Union milk
production is up

2.6%

in 2016/17 YTD

In 2015/16, the average
farm gate milk price in
Australia fell

7.4%

The volume of milk powder
exports decreased

11.9%

for July 2016 – March 2017

PRODUCTION – AUSTRALIA

Total milk supply as at April 2017

7.7

billion litres, down -8% compared to 2015/16.

Milk yield per cow has averaged

1.8%

growth per year since 1972/73

Skim milk powder production has averaged

5.1%

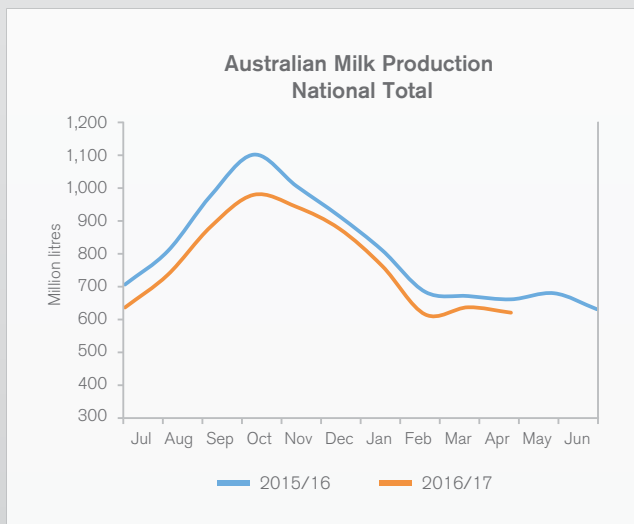
growth per year since 2009/10

Dairy production in Australia has stayed above 9 billion litres since 2006/07. Prior to this period milk production exceeded 10 billion litres between 1998/99 and 2005/06, reaching a peak of 11.27 billion litres in 2001/02. In 2015/16 total milk production was 9.7 billion litres a decline of 2%. In the current financial year Australia's milk production is down 8.0% to April 2017. Victoria produces 65% of Australia's milk and year to date production is down in 2016/17 by 9.6%.

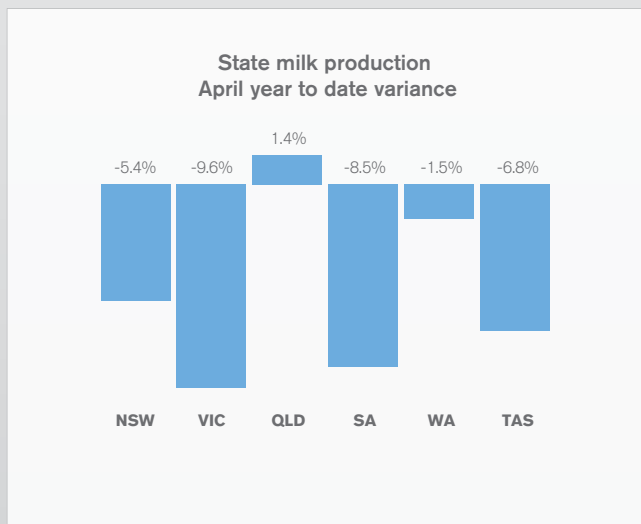
The number of dairy cows in Australia has fluctuated between 1.5 million and 2.6 million over the last 44 years. In 2015/16 the national herd was 1.66 million and decline of 1.5% compared to 2014/15. More important than the total number of cows is the milk yield per cow. Milk yield per cow has never been higher reaching over 5,700 litres per cow for last two

years. Milk yield per cow has grown at an average of 1.8% per year since 1972/73.

The volume of manufactured dairy products such as cheese and milk powder are an important measure of value to the industry. Skim milk powder (SMP) production has been growing to satisfy world demand. In 2015/16 Australia produced 255,800 tonnes of SMP a 6% increase on 2014/15. SMP production has grown faster than any other product at an average of 5.1% per year since 2009/10. Cheese production has declined at an average of 0.3% since 2009/10. Production in 2015/16 was 344,300 tonnes. Manufactured production has declined in 2016/17 with January year to date figures showing a reduction of 11.2% for SMP and flat growth of 0.0% for cheese.



Data: Dairy Australia

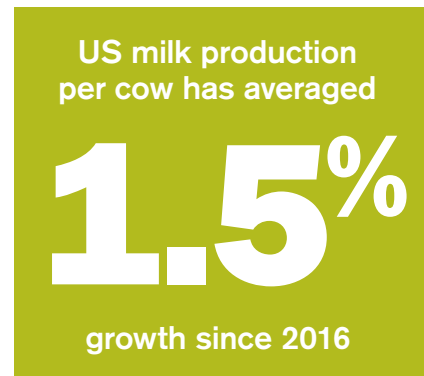


Data: Dairy Australia

Outlook

Global price movements either up or down trigger a response from processors which then makes farmers respond accordingly. The response lags behind the event, as is the current case for supply with a 10% drop in production year to date in response to global price declines which occurred over 10 months ago. Global skim milk powder price is only just above May 2015 and 2016 prices, the overall movement since May 2016 is slightly positive. Processors will come under pressure to lift prices in a positive market which would then start a new production growth cycle. Expect production growth to be slow as it's much easier to cut production than it is to breed more cows. Though this equation sounds positive for production global demand needs to increase to avoid another price decline.

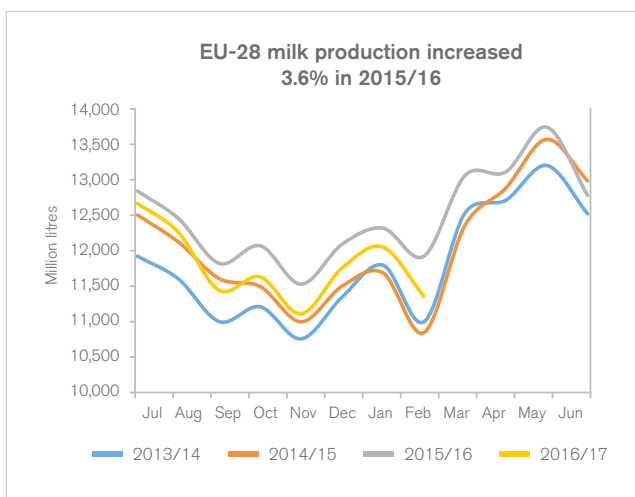
PRODUCTION – WORLD



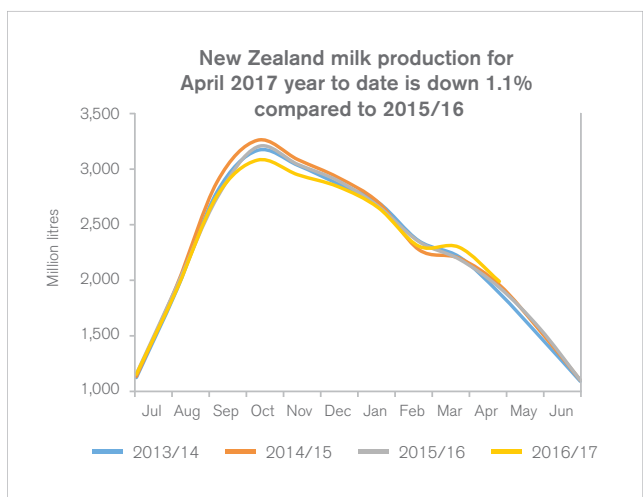
Milk production in Europe (EU-28) increased to a record 150 billion litres in 2015/16 up 3.6%. The increase in production was a result of the removal of milk quotas and favourable seasonal conditions. For 2016/17, February year to date milk production is 2.9% lower than 2015/16. Ireland, Netherlands and Germany increased production significantly in 2015/16 up 14.4%, 12.3% and 3.5%. All three countries have eased back production in 2016/17 in response to poor weather and environmental requirements in the Netherlands.

New Zealand milk production declined by 1.6% to 20.9 billion litres in 2015/16. In 2014/15 New Zealand produced a record volume of milk at 21.3 billion litres. April year to date figures for 2016/17 show a 1.1% deficit compared to the same period in 2015/16. Herd size declined 0.4% to 5 million in 2015/16 which is the first decline in 10 years.

Annual milk production in the United States (US) increased 1.8% in 2016 to 93.5 billion litres. Herd size continues to grow at an average of 0.2% since 2003. The major contributor to the growth in volume is the improvement in litres per cow. Average annual growth for litres per cow since 2003 has been 1.5%. The 2016 average was 10,024 litres per cow. Key export partners for the US are Mexico, South East Asia, Canada and China. The main export product is skim milk powder with export volumes up 8% for January to November 2016. South East Asia and in particular the Philippines is the fastest growing market for the US. SMP exports to the Philippines were up 71% for January to November 2016.



Data: Eurostat



Data: DCANZ

Outlook

Relying on organic growth in demand to increase dairy prices and in turn supply may not be an option in the short term given the volume of product on the global market. Instead securing market access may be the most important thing in 2017/18 to achieve production growth at an individual country level. The US is competing strongly in Asian markets and it has the milk supply to take advantage of any opportunities. The full potential of milk production in countries such as Germany, Netherlands and Ireland is yet to be realised and will be monitored closely in the short to mid-term. Something that could constrain mid to long term milk production is environmental degradation, which is becoming an issue for not only the Netherlands but also New Zealand.

SEASONAL CONDITIONS

Australian winter rainfall was **82%** above average in 2016

Rainfall in Australia in September 2016 was the **2nd** highest on record

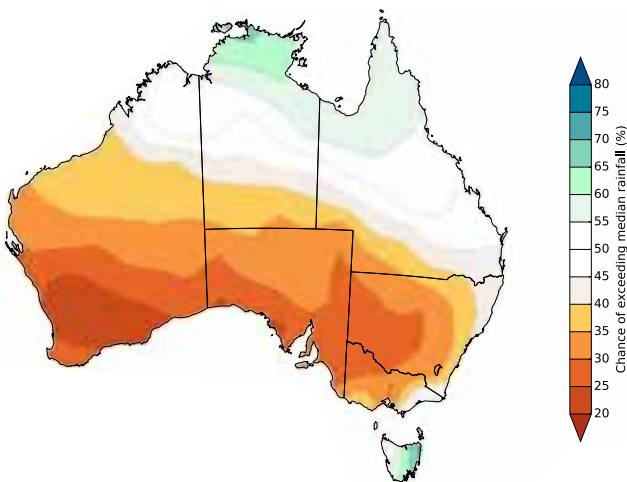
South Australia experienced its **10th** wettest April on record in 2017

Winter in 2016 was the second wettest on record for Australia with total winter rainfall over the season being 82% above average. Queensland experienced its second wettest winter, recording rainfall 172% above average. New South Wales and the Northern Territory also experienced very much above average rainfall. Most of Western Australia received above average rainfall except for the south west of the state which saw average to below average rain. The wet winter was followed by a wet September for all states except Western Australia. October saw a return to more average rainfall across most of the country except Tasmania which received above average rainfall.

More recent conditions have been mixed in regard to rainfall and temperature. The eastern side of the country has experienced above average temperatures coupled with above average rainfall. Whilst the in the West temperatures were average and rainfall below average.

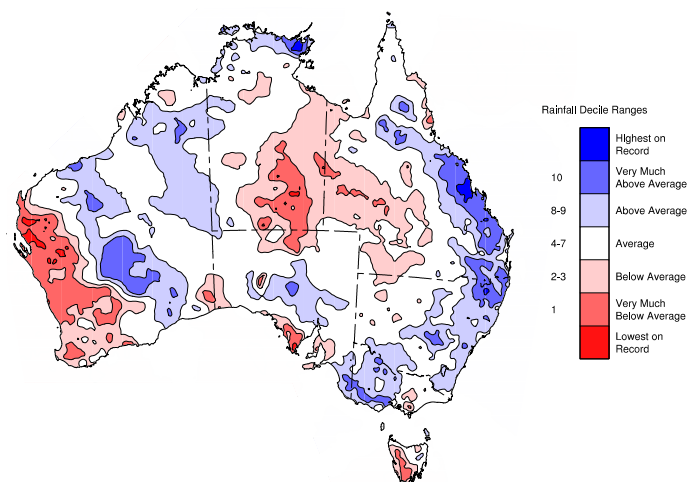
The Bureau of Meteorology's Normalised Difference Vegetation Index (NDVI) shows higher than normal autumn pasture density and greenness for the East coast of Australia. This suggests pasture growth was given a boost from above average rainfall and warmer than average temperatures in autumn.

Chance of above median rainfall from June to August



Source: Bureau of Meteorology (BoM)

Recent rainfall deciles between March and May 2017



Source: BoM

Outlook

Winter 2017 is forecast to be drier than average for the southern half of Australia. Whilst Queensland and the Northern Territory are forecast to receive close to average winter rainfall. Climate models are still predicting a period of El nino conditions for the second half of 2017. However, the severity has been downgraded and is likely to result in a weak El nino or neutral conditions. Local ocean temperatures aren't moving strongly in either direction suggesting there will be a period of stable weather with less rainfall events. For a monthly state specific forecast from meteorologist Jane Bunn please visit our website www.ruralbank.com.au/for-farmers/ag-answers

PRICES

In 2015/16, the average farm gate milk price in Australia fell

7.4%

The 2016/17 average farm gate milk price is below the 5 year

20th
percentile in Victoria

Queensland's average farm gate milk price increased

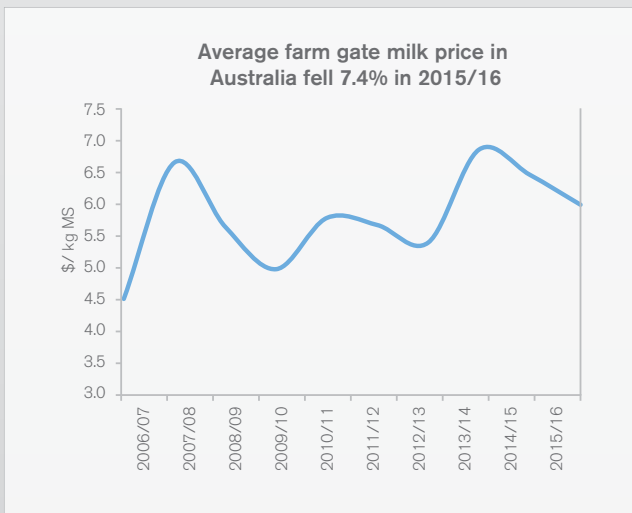
1.8%
in 2015/16

Farm gate milk price is never far from the headlines and 2016 was no exception. When Murray Goulburn (MG) cut prices late in the 2015/16 season it triggered cuts from all major processors for the opening of 2016/17. Each processor has pointed to falling global dairy prices as the main reason for a lower opening milk price.

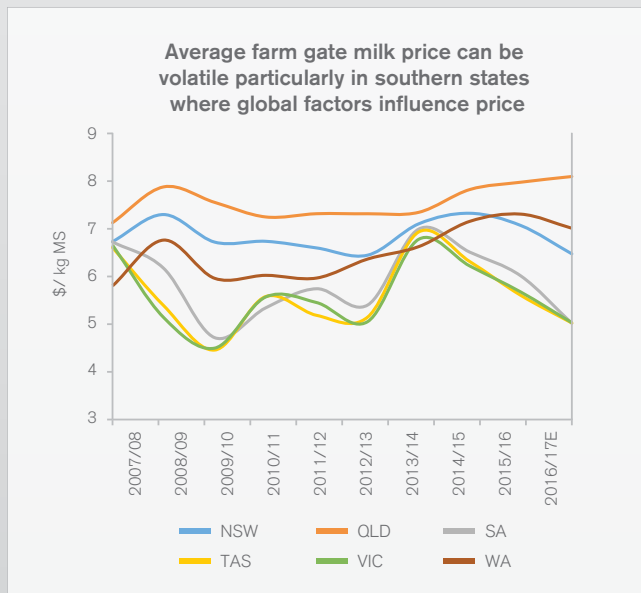
The first half of the 2016/17 season saw lower production across most states in response to price cuts and decreasing herd size. Step ups were applied as the global dairy market recovered. Farm gate milk price is averaging between \$4.95 - \$5.20/ kg MS in southern states. Fonterra expect to close the 2016/17 season at \$5.20/kg MS, whilst Murray Goulburn will

close around \$4.95/kg MS. Northern NSW and Queensland producers are negotiating the 2017 contract with Parmalat. Parmalat initially kept its price unchanged from 2015/16 opting to negotiate price in December 2016. Parmalat are proposing a 1.5c/L drop in milk price for the 2017 contract.

Western Australian dairy farmers had a difficult 2016 with the states two milk processors Brownes and Harvey Fresh cutting supply contracts. Lack of demand from Asia for UHT milk was cited as the main problem. Spring milk was trucked to Darwin and Adelaide to manage oversupply. Farm gate milk price has historically averaged around 45c/L, a figure which is now unviable for some dairy farmers.



Data: Dairy Australia

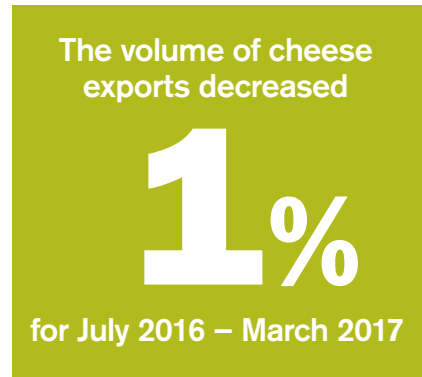
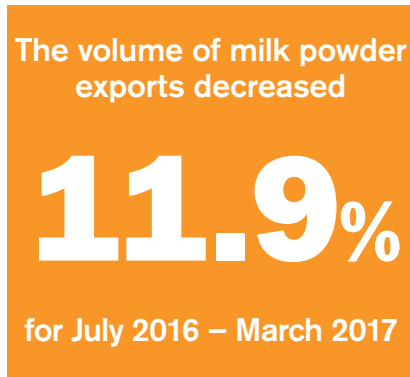


Data: Dairy Australia

Outlook

Queensland dairy farmers supply the domestic market and are mostly immune to movements on the global market, a drop in price is hard to justify. Southern state opening price for 2017/18 will be between \$5.20-5.50/kg MS, closing price is likely to be around \$5.80/kg MS. MG were at significant risk of losing supply at their initial opening price of \$4.70/kg MS and have since revised upwards to \$5.20/kg MS. Loyalty remains an unknown for MG. Fonterra is looking to capitalise on MG's situation through contracted incentives, although this limits flexibility it will likely appeal to those producers needing a higher price to remain profitable. Short 6 month contracts for WA dairy farmers adds an element of risk as the industry tries to work its way through a period of lower demand.

DEMAND

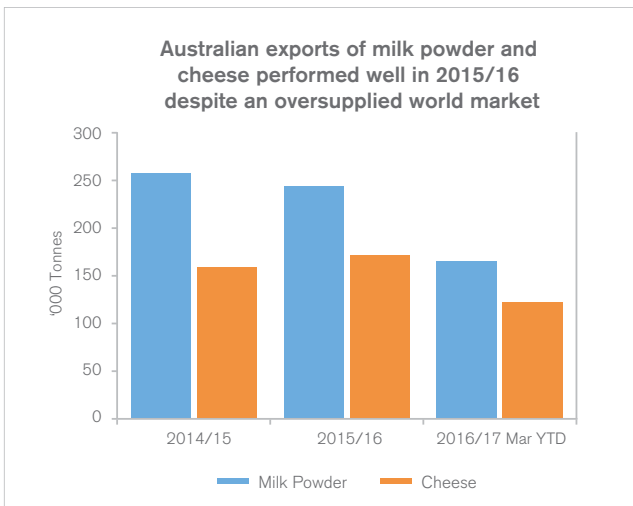


Global dairy demand is growing slowly after a period of decline between February 2014 and March 2016. The decline in demand was a function of increased supply and high inventory stocks in key importing countries such as China. In 2015/16 Australia exported 244,062 tonnes of milk powder which was 5.4% lower than 2014/15. In 2016/17 Australia has exported 165,966 tonnes of milk powder for the July to March 2017 period which is 11.9% lower than 2015/16. By volume Indonesia was Australia's largest export market for milk powder in 2015/16 equating to 17% of total export volume. Milk powder exports to China increased 46% in 2015/16 on the back of a low export volume year in 2014/15. Singapore continued to import less milk powder in 2015/16 down 22%. Cheese exports were up 8.3% in 2015/16 totalling 171,938 tonnes. For July 2016 – March 2017 cheese exports totalled

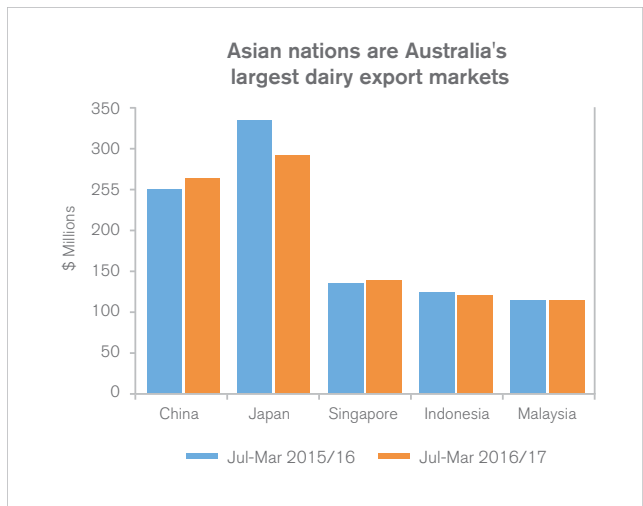
123,872 tonnes which is a 1.0% down on the same period in 2015/16. Cheese exports to Japan for July 2016 to March 2017 were 9.3% tonnes lower than 2015/16. Cheese exports to China for July 2016 to March 2017 increased 38.3%.

Genetics also form part of the dairy industries exports. Dairy breeding cattle are primarily exported to China. The export price per head fell in 2016 from \$2,000/ head in January to \$1,750/ head in December. In 2017 prices have fallen to \$1,535/ head as at March.

Domestic demand for drinking milk in Australia increased 1.2% in 2015/16 to 2,516 billion litres. For 2016/17 February year to date sales are down 0.8%. Sales have increased in Victoria and South Australia during 2016/17 up 1% and 2.8% year to date respectively.



Data: Dairy Australia

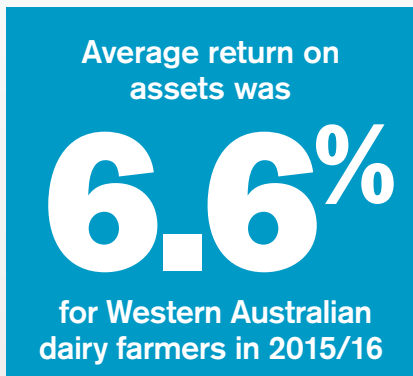


Data: GTIS

Outlook

Domestic demand is unlikely to change dramatically in 2017 due to the size and growth of Australia's population. Export demand for milk powder is likely to grow in 2017 led by China and Vietnam, Australia's fastest growing milk powder market. In 2012 Vietnam imported 4,905 tonnes of Australian milk powder rising to 20,080 tonnes in 2016. Monthly volume is generally greater from November to February. In November and December 2016 Vietnam imported its largest volume of milk powder from Australia in a two month period which suggest demand is growing. Demand for cheese is likely to increase in 2017 as China continues to import higher volumes. The key months to look for will be May to July as this is when China imports most of its yearly volume from Australia.

FINANCIAL PERFORMANCE



In 2015/16 Victorian dairy farmers average farm gate milk price declined by around 11%. This translated to a 70% fall in average earnings before interest and tax (EBIT) to \$70,804. Average return on assets fell to 0.6% from 5.3% in 2014/15.

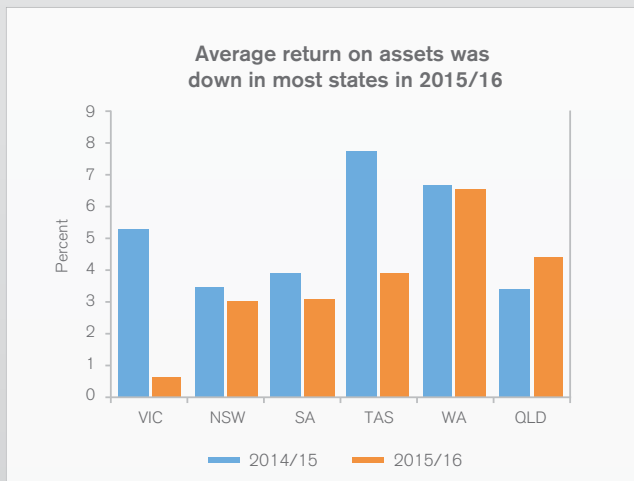
New South Wales dairy farmers had a favourable spring in 2015, followed by an average summer and a very dry autumn. Average farm gate milk price was down 2% on 2014/15. EBIT fell slightly as a result of lower milk prices going from \$264,888 in 2014/15 to \$250,775. Average return on assets was 3% in 2015/16 down from 3.5%.

South Australian dairy farmers faced similar climate challenges to Victoria. Average farm gate milk price fell 3.1%. EBIT decreased 25% to \$217,956. Average return on assets was 3.1% in 2015/16 compared to 3.9% in 2014/15.

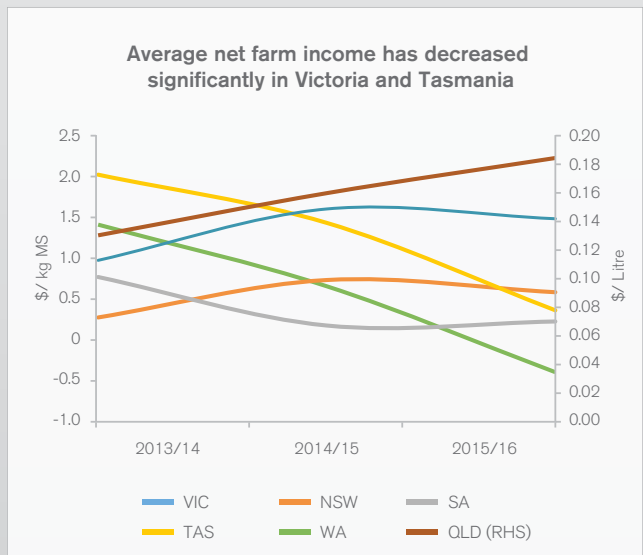
Average farm gate milk price in Tasmania decreased 10% resulting in a 12% fall in gross income. EBIT decreased 48% to \$246,639. Average return on assets in 2015/16 was 3.9% down from 7.8%.

Western Australian dairy farmers had a reasonable year in 2015/16. Average farm gate milk price increased 2%. EBIT decreased slightly to \$617,059 from \$641,083. Average return on assets was 6.6% down from 6.7%.

Queensland dairy farmers had favourable conditions in 2015/16. Average milk receipts increased 1.9%, farm working expenses decreased 2% and return on assets increased to 4.4% from 3.4% in 2014/15.



Data: Dairy Australia



Data: Dairy Australia

Outlook

The first half of 2016/17 has been more positive from a feeding perspective with low grain and hay prices as well as rain falling over most dairy regions. Production is currently lower than 2015/16 in every state except Queensland which will lower gross income. Costs may be reduced by lower feed prices and available pasture. Cost efficiency may fall due to lower herd numbers but the same overhead costs as 2015/16. This may result in a lower EBIT and lower return on assets than 2015/16. Global milk supply has eased in some countries but increased in others which may not allow dairy prices to increase quickly something that could reduce the incentive to build herd numbers in the short term.

PRICES – STATE DETAIL

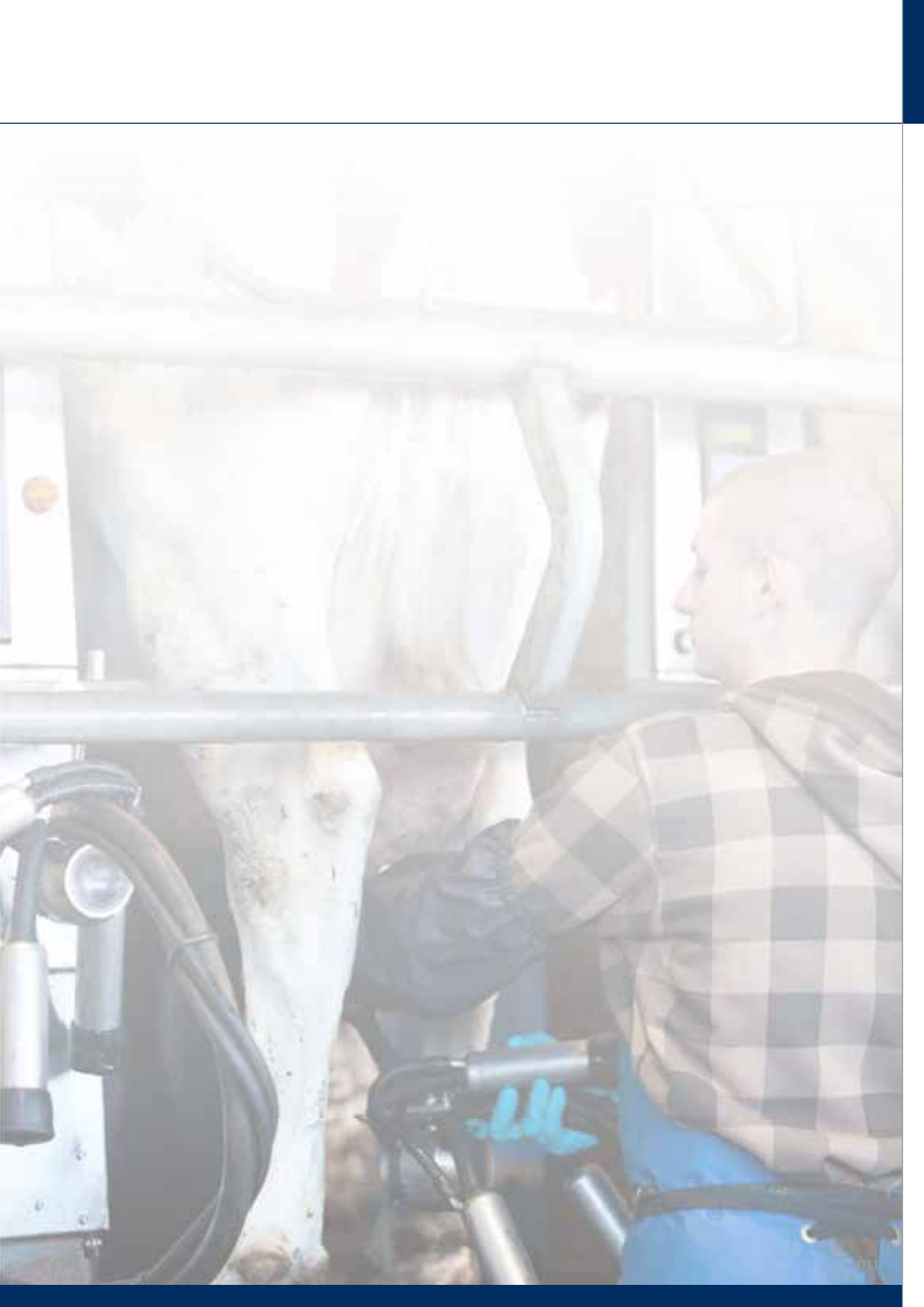
	Current (June)	June 2016	5 year average	80th percentile	20th percentile
Farm gate milk price (\$/kg MS)					
Southern states*	5	5.78	5.95	6.82	5.26
NSW	6.48	7.06	6.91	7.27	6.48
WA	7.02	7.32	6.69	7.29	6.05
QLD	8.11	7.99	7.57	7.96	7.33
Over the hooks indicators for dairy cows (c/kg cwt)					
Southern states*	443	406	356	423	222
NSW	458	400	360	452	251
WA	423	420	318	392	236
QLD	418	397	340	446	235
Feed wheat prices \$/tonne **					
VIC	159	228	204	227	173
NSW	240	246	208	232	180
TAS**	160	229	206	230	174
SA	207	238	205	223	181
WA	220	234	217	234	199
QLD	240	256	226	255	186
Pasture Hay prices \$/tonne					
Southern states*	173	194	173	211	146
NSW	213	272	n/a	n/a	n/a
WA	200	225	n/a	n/a	n/a
QLD	250	335	n/a	n/a	n/a
Export prices					
SMP (\$/t)	2688	2264	3371	4287	2575
Cheese (\$/t)	5012	3678	4117	4768	3443
Heifers (\$/head)	1535	2166	2155	2461	1898
Input prices					
Fertiliser DAP (\$/t)***	486	468	514	557	467
Australian dollar					
AUD/USD	0.74	0.73	0.86	0.96	0.75

Data: Dairy Australia, MLA, RBA, AFIA, Index Mundi, GTIS, GDT, Profarmer

*Southern states includes VIC, SA and TAS.

**Melbourne contract FED1 12 months of data from September 2015.

***World indicator price



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