

SEPTEMBER 2020

Global Dairy UPDATE



- Favourable start to the New Zealand season. Beginning of new season in Australia. EU and US production improves.



- Strong increase in US and EU monthly exports. New Zealand and Australia monthly exports decrease.



- China, Latin America and Asia show strong increase in monthly imports.



- Fonterra's New Zealand milk collection for the third month of the new season was 100.7 million kgMS, up 3.2% on prior season.
- Fonterra's Australia milk collection has had a favourable start to its new season with the first two months ahead of last season.

- Exploring consumer trends in China
- Fonterra's Te Awamutu site fires up on pellet power
- On 18 September Fonterra announced its Annual Results.

[For further details, view our website –](#)



- Fonterra targets community support where it's needed most.
- Helping to get a COVID-19 vaccine.

Key Dates



5 November 2020

Fonterra Co-operative Group
Annual Meeting

9 November 2020

Fonterra Shareholders' Fund
Annual Meeting

December 2020

FY21 Q1 Business Update

20 April 2021

Compliance Date for
2020/21 Season



To view a chart that illustrates year-on-year changes in production –

Favourable start to the New Zealand season. Beginning of new season in Australia. EU and US production improve

NEW ZEALAND

5.3%↑

Change for August 2020 compared to August 2019

0.2%↓

Change for the 12 months to August 2020

New Zealand milk production¹ was up 5.3% on a litres basis in August compared to August last year.

Mild conditions have contributed to the favourable start of the season's production. However, it is still early in the season and season-to-date production represents only around 9% of full year production.

New Zealand milk production for the 12 months to August was 0.2% lower than last year.

Fonterra collections are reported for August, see page 5 for details.

AUSTRALIA

2.9%↑

Change for July 2020 compared to July 2019

0.6%↑

Change for the 12 months to July 2020

Australia milk production increased 2.9% in July compared to July last year.

A mild winter for much of Australia and across key dairy regions in Victoria and Tasmania have improved the milk production outlook for FY21. Dairy Australia has forecast a 1% to 3% increase in production for the 2020/21 season.

Australia milk production for the 12 months to July was 0.6% higher than last year.

Fonterra collections in Australia are reported for August, see page 5 for details.

EUROPEAN UNION/UK

1.5%↑

Change for July 2020 compared to July 2019

0.2%↓

Change for the 12 months to July 2020

EU (including UK) milk production increased by 1.5% in July compared to the same period last year.

The increase in production was led by France (up 2.7%) and Ireland (4.4%) and partially offset by continuing declines from Italy.

EU milk production for the 12 months to July was down by 0.2% compared to the same period last year.

USA

1.8%↑

Change for August 2020 compared to August 2019

1.6%↑

Change for the 12 months to August 2020

US milk production increased by 1.8% in August, compared to the same period last year.

Increasing herd size and milk per cow gains are contributing to the year-on-year improved US milk production in August.

Milk production for the 12 months to August was 1.6% higher compared to the same period last year.

¹ New Zealand production is measured in litres.

Note: 2020 production numbers include one extra day of production in February as 2020 is a leap year.



Strong increase in US and EU monthly exports. New Zealand and Australia monthly exports decrease

To view a chart that illustrates year-on-year changes in exports –

NEW ZEALAND

6.1%↓

Change for July 2020 compared to July 2019

1.3%↓

Change for the 12 months to July 2020

Total New Zealand dairy exports decreased by 6.1%, or 16,413 MT, in July compared to the same period last year.

This decrease in exports was spread across most product categories and regions except for increased volumes of WMP (up 9,479 MT) to China and South East Asia.

Exports for the 12 months to July were down by 1.3%, or 45,866 MT, on the previous comparable period. This was primarily driven by SMP, AMF, fluid milk products and cheese.

AUSTRALIA

1.4%↓

Change for July 2020 compared to July 2019

8.4%↓

Change for the 12 months to July 2020

Australia dairy exports decreased by 1.4%, or 836 MT, in July compared to the same period last year.

This was primarily driven by infant formula, SMP and WMP, down a combined 3,248 MT, and partially offset by fluid milk products, up a combined 1,422 MT.

Exports for the 12 months to July were down 8.4%, or 66,391 MT, on the previous comparable period.

Declines were recorded across a broad range of products with SMP, infant formula, cheese, WMP, whey, and butter, down a combined 64,594 MT and partially offset by fluid milk products, up 11,170 MT.

EUROPEAN UNION/UK

17.8%↑

Change for June 2020 compared to June 2019

5.9%↑

Change for the 12 months to June 2020

EU (including UK) dairy exports increased by 17.8%, or 80,757 MT, in June compared to the same period last year.

This was driven by increases across most product categories but more specifically in lactose (up 59%), butter (73.8%), fluid milk products (25%) and cheese (15.9%).

Exports for the 12 months to June were up 5.9%, or 323,745 MT, on the previous comparable period. Butter, cheese, fluid milk products and whey were the main drivers of this growth, up a combined 292,954 MT. It was partially offset by a decline in SMP of 61,324 MT.

USA

21.5%↑

Change for July 2020 compared to July 2019

9.8%↑

Change for the 12 months to July 2020

US dairy exports increased 21.5%, or 38,845 MT, in July compared to the same period last year.

Growth in exports volumes were driven by increased shipment of SMP to South East Asia (up 52.8%), and whey to China (up 25.8%).

Exports for the 12 months to July 2020 were up 9.8%, or 220,143 MT on the previous comparable period, driven by SMP, WPC and lactose, up a combined 205,435 MT.



China, Latin America and Asia show strong increase in monthly imports

To view a chart that illustrates year-on-year changes in imports –

LATIN AMERICA

20.4%↑

Change for June 2020 compared to June 2019

1.6%↓

Change for the 12 months to June 2020

Latin America dairy import volumes¹ increased 20.4%, or 27,568 MT, in June compared to the same period last year. This was driven by higher volumes of cheese and fluid milk products to Mexico and Chile, SMP to Cuba and Columbia, and WMP to Chile, up a combined 22,435 MT.

Imports for the 12 months to June 2020 were down 1.6%, or 28,272 MT, compared to the same period the previous year.

Decreases were driven primarily by infant formula, WMP and butter, down a combined 49,224 MT but partially offset by increases in SMP, up 25,783 MT.

ASIA

13.7%↑

Change for June 2020 compared to June 2019

3.7%↓

Change for the 12 months to June 2020

Asia (excluding China) dairy import volumes¹ increased 13.7% or 53,032 MT, in June compared to the same period last year. Increases were recorded primarily in SMP to South East Asia, lactose to South East Asia and Pakistan and WPC to Malaysia, up a combined 50,358 MT.

Imports for the 12 months to June were down 3.7%, or 185,372 MT, compared to the same period the previous year.

Decreases were recorded across WMP, SMP and fluid milk products, down a combined 234,188 MT and offset partially by increased volumes of lactose, up 33,973 MT.

MIDDLE EAST & AFRICA

1.4%↑

Change for June 2020 compared to June 2019

8.8%↓

Change for the 12 months to June 2020

Middle East and Africa dairy import volumes¹ increased 1.4%, or 4,562 MT, in June 2020 compared to the same period last year. Increases were driven principally by increased volumes of WMP and SMP to Algeria and Nigeria, up a combined 39,561 MT and largely offset by lower volumes of fluid milk products and infant formula.

Imports for the 12 months to June 2020 were down 8.8%, or 357,763 MT, compared to June last year, driven by decreases in fluid milk products, infant formula and cheese, down a combined 378,555 MT and offset by increases in SMP.

CHINA

17.6%↑

Change for July 2020 compared to July 2019

8.0%↑

Change for the 12 months to July 2020

China dairy import volumes increased by 17.6%, or 46,993 MT, in July compared to the same period last year.

The increase was the result of higher volumes of whey, fluid milk products and cheese, up a combined 41,184 MT. China is rebuilding its stocks of whey following the impact of last year's African Swine Flu on whey consumption as animal feed.

Imports for the 12 months to July were up 8.0% driven by fluid milk products, whey and WMP.

¹ Estimates are included for those countries that have not reported data.

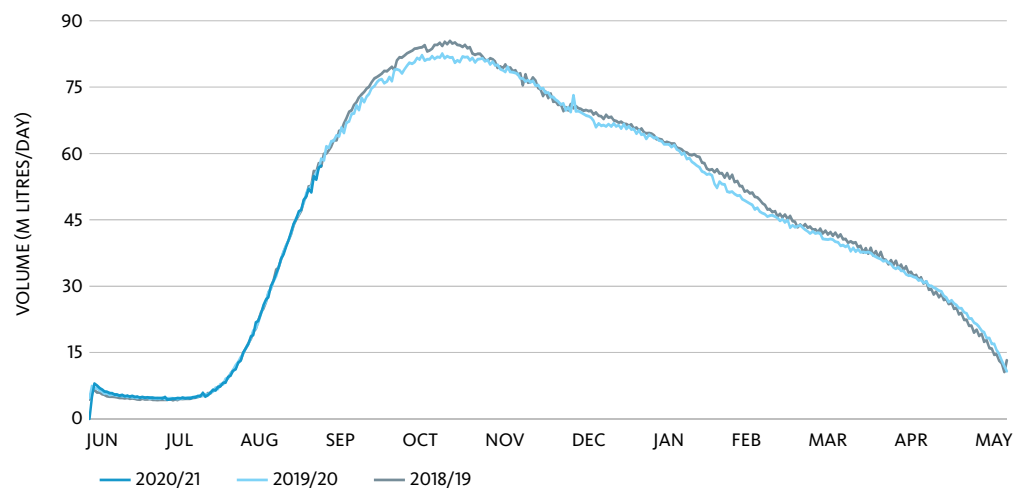
OUR MARKETS

Fonterra Milk Collection



To view a table that shows our detailed milk collection in New Zealand and Australia compared to the previous season –

New Zealand Milk Collection



NEW ZEALAND

3.2%↑

Change for August 2020 compared to August 2019

3.3%↑

Season to date 1 June to 31 August

Fonterra's New Zealand collection for August was 100.7 million kgMS, 3.2% ahead of the same month last season.

Season-to-date collection was 134.6 million kgMS, up 3.3% on the same point last season. These volumes are small in the context of the full season, as is usual at this time of the year.

Generally mild conditions continued across the country through August, with New Zealand experiencing its warmest winter on record.

Combined with a useful amount of rain towards the end of the month, this allowed good pasture growth and condition, and supported good collections for August.

NORTH ISLAND

3.2%↑

Change for August 2020 compared to August 2019

2.9%↑

Season to date 1 June to 31 August

North Island milk collection in August was 73.5 million kgMS, up 3.2% on August last season.

Season-to-date collection was 101.6 million kgMS, ahead 2.9% on last season

SOUTH ISLAND

3.2%↑

Change for August 2020 compared to August 2019

4.5%↑

Season to date 1 June to 31 August

South Island milk collection in August was 27.2 million kgMS, up 3.2% on August last season.

Season-to-date collection was 33 million kgMS, up 4.5% on last season.

AUSTRALIA

4.1%↑

Change for August 2020 compared to August 2019

0.5%↓

Season to date 1 July to 31 August

Fonterra's Australia collection in August, the second month of the 2020/21 season, was 7.3 million kgMS, a 4.1% increase on August last year.

After a dry start to winter, the La Niña system developing for August and into spring has contributed to the favourable start to the season.

OUR MARKETS

Fonterra Global Dairy Trade Results



Fonterra GDT results at
last trading event
15 September 2020:

4.5%↑

Change in Fonterra's
weighted average product
price from previous event

USD 3,111

Fonterra's weighted
average product price
(USD/MT)

33.1⁰⁰⁰ MT

Fonterra product quantity
sold on GDT

SMP

9.2%↑

USD 2,918/MT

CHEDDAR

7.2%↑

USD 3,674/MT

WMP

3.5%↑

USD 2,985/MT

AMF

1.5%↑

USD 3,910/MT

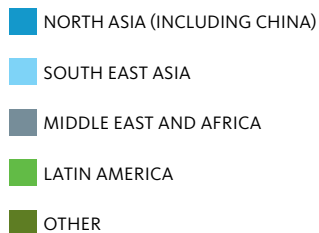
BUTTER

1.5%↓

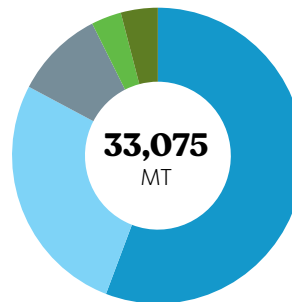
USD 3,282/MT

Fonterra GDT sales
by destination:

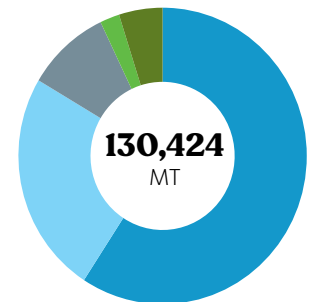
To view more information,
including a snapshot of the
rolling year-to-date results –



LATEST AUCTION



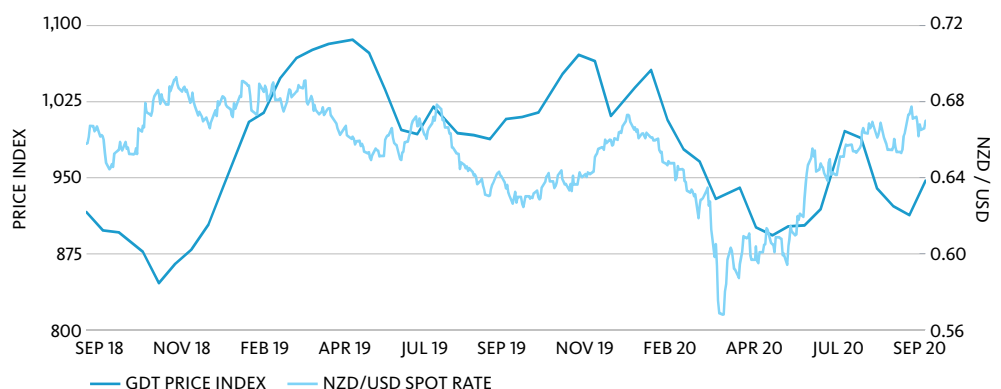
**FINANCIAL
YEAR-TO-DATE**



► The next trading event will be held on 6 October 2020. Visit www.globaldairytrade.info for more information.

Dairy commodity prices and New Zealand dollar trend

Ongoing fiscal support,
combined with accommodative
monetary policies have
provided an environment
supportive of growth. Globally,
financial markets stabilised
further, including currencies,
resulting in the NZD to trading
in a relatively narrow band of
between 66 and 68 US cents.



Our Performance



Exploring consumer trends in China

Fonterra's quest to keep up with the fast-paced consumer market in China has received a boost, with the opening of its refurbished innovation centre in Shanghai, dedicated to developing innovative products suited to the Chinese market.

It's a collaboration with certification and analysis test centre Anchor Centre for Certification (ACC) and will be known as the Fonterra-ACC Shanghai Innovation Centre.

It includes a number of laboratories, complete with research and development (R&D) capabilities, and an analysis and testing centre. ACC is involved mainly in food and agricultural research and development/product testing and certifications, following international food safety standards.

The Co-operative's team will work on product development for all Fonterra Greater China's key dairy product categories (e.g. cream, yoghurt, soft serve, process cheese, liquid dairy, milk powder). Their work will include product development, sensory testing, consumer

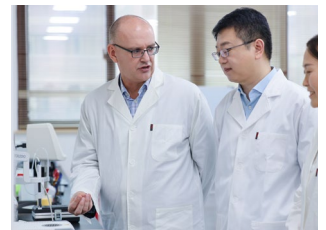


science, nutrition science and packaging.

Fonterra has been in the Chinese market for more than 40 years and working with ACC to develop this centre demonstrates the Co-op's ongoing commitment to Chinese customers and consumers, which is already extensive.

Fonterra's ingredients business NZ Milk Products (NZMP) provides dairy products to more than 100 food manufacturers and its Foodservice business services 20,000 customers with more than 400,000 stores in 350 cities across China.

CEO of Fonterra Greater China Teh-han Chow says now with an innovation centre located within the country, the Co-operative's bringing innovation closer



Fonterra's CFO of Greater China Paul Washer leading a tour of the facility

than ever to Chinese customers and consumers.

"China is one of the fastest-growing food and beverage markets in the world. The Fonterra-ACC Shanghai Innovation Centre can further help our business be closer to the changes and preferences of China's consumer market, so that we can develop new products which meet market needs more quickly and efficiently," says Mr Chow.

Our Performance



Fonterra's Te Awamutu site fires up on pellet power

It's full steam ahead on wood pellets at Fonterra's Te Awamutu site, with commissioning underway, as the site takes the next step in its transition away from coal.

The Co-operative announced the Te Awamutu site's move to renewable energy at the beginning of the year, with the site previously using a mix of coal, gas and electricity to process milk.

Fonterra Chief Operating Officer Fraser Whineray says sustainability is core to the Co-operative's long-term strategy and while COVID-19 has presented some challenges, they've still managed to complete the decarbonisation project at Te Awamutu before the spring milk arrived.

"We did have some delivery delays with certain offshore components, and I'm pleased with the outcome thanks to our team and suppliers.

"It's really important sustainability investments like this are maintained despite the pandemic challenges."



The move away from coal at Te Awamutu is part of Fonterra's plans to have net zero emissions at its manufacturing sites by 2050. Once completed, the transition at Te Awamutu will reduce the Co-operative's national coal consumption by almost 10 per cent, saving more than 84,000 tonnes of carbon emissions per year – the same as taking 32,000 cars off the road.

"It's a positive step towards meeting our interim target of achieving a 30 per cent reduction in emissions by 2030 and shows us what can be achieved by using wood biomass to decarbonise our manufacturing sites."

Fraser says partnering has been important in reaching this sustainability milestone.

"We value our partnerships with Natures Flame and Energy Efficiency Conservation Authority (EECA) – they are integral to major projects like this."

Natures Flame, who produce the wood pellets, say they are delighted to have partnered with Fonterra to make the change to sustainable wood pellets as smooth as possible.

"It's a great environmental story on all fronts. Our

pellets are made from renewable, plantation-based fibre residues from local sawmills in the form of sawdust and shavings. We use renewable geothermal energy to transform the residues into a premium and reliable fuel, which customers like Fonterra can then use to reduce their greenhouse emissions.

"We welcome Fonterra as a customer and look forward to working together on this and other future opportunities", says John Goodwin, Operations Manager, Natures Flame.

EECA CEO Andrew Caseley says industrial process heat makes up a little over a quarter of the country's energy-related emissions. "There's enormous potential in New Zealand to bring those emissions down significantly by moving away from coal, as Fonterra is doing.

"This is the largest boiler conversion project to biofuels to date, so our funding via the technology demonstration programme will help to derisk it. It also has the added benefit of establishing a more viable and large-scale wood pellet supply chain."



Fonterra targets community support where it's needed most

Fonterra targets community support where it's needed most. Fonterra is taking a new approach to how it provides nutrition to communities, to better reach those most in need across New Zealand.

CEO Miles Hurrell says, as a New Zealand farmer owned co-op, with employees spread right across regional New Zealand, Fonterra is part of many communities.

"We've taken a good look at what the country is facing into, particularly in the context of COVID-19, and asked if our current way of doing things is supporting the people who need it most.

"We can see there's a need for us to expand our thinking and take a more holistic approach that reaches more people – which is why we're making these changes," says Mr Hurrell.

As part of its new approach, Fonterra's growing KickStart Breakfast alongside partners Sanitarium and the Ministry of Social Development.

There are already more than 1,000 schools in KickStart Breakfast, and one of Fonterra's immediate goals is to work with partners to have all decile 1 to 5 schools across the country in KickStart Breakfast – reaching another 200 schools – where coming together over breakfast at the start of the school day really makes a difference.

The Co-op's also extending supply of dairy nutrition further into communities by partnering with NZ Food Network to distribute dairy products to charities, foodbanks and community partners.



That's because it's not just in schools where Fonterra can play a role. The Co-op saw this first-hand during lockdown earlier this year, when it redirected close to one million serves of Fonterra Milk for Schools product into communities through food banks, charities and other partners. Coming together with NZ Food Network allows this work to continue.

NZ Food Network CEO Gavin Findlay says "NZFN is delighted to partner with Fonterra to deliver much needed goodness into the communities of Aotearoa New Zealand. This complements our own desire of 'getting food to where it's needed most'. Working together, we will strive to ensure everyone has access to healthy, nutritious food."

This refreshed approach means Fonterra Milk for Schools, which is for primary school aged children, will wrap-up at the end of this year. It's something the Co-op's loved being a part of, but Fonterra knows it can provide more kids access to dairy nutrition by growing KickStart Breakfast which is open to all schools, of all ages and deciles, across the country.

"We've got a lot of affection for Fonterra Milk for Schools, but we have to recognise through this refresh there's a much more efficient, environmentally focused and impactful way to get milk to more kids each day.

"It will be an end of an era and we're proud of what Fonterra Milk for Schools has achieved but times have changed and so will we, to ensure we're always doing our best for those who need it the most," says Mr Hurrell.

Papatoetoe North School principal Stan Tiatia says "our school community makes high use of the KickStart Breakfast programme and for us it is a time for whanau, staff and children to connect and start the day in a positive state. The programme helps to build community and in times affected by anxiety and isolation the KickStart breakfast time provides an opportunity for connection and care. We are grateful for the work by the KickStart team and know that our community is strengthened by their efforts."

"These changes reflect our co-operative heart – good things happen when people come together," says Mr Hurrell.

Helping to get a COVID vaccine

When COVID-19 first hit New Zealand's shores Fonterra stepped up to help make hand sanitiser and some of its employees volunteered their time to make face masks. Now the Co-op's offering another hand – this time to help develop a vaccine.

Fonterra's doing that by lending a crucial piece of equipment – a small homogeniser – to the Covid-19 Vaccine Corporation (CVC) to help speed up the company's efforts towards producing a vaccine in New Zealand.

Fonterra Director of Category, Strategy and Innovation, Mark Piper, says it's good to be able to assist in such an important cause.

"We always like to help out where we can, so when the team came and asked if they could borrow a homogeniser from the Fonterra Research and Development Centre, we quickly worked to free up the equipment for CVC. This could be good not just for CVC but good for New Zealand and the rest of the world."

CVC Chief Executive Dr Robert Feldman says the process of developing a vaccine requires "the use of many types of specialised equipment, some of which can be challenging to get access to. We are therefore very pleased to be able to access Fonterra's resources and apply sophisticated equipment to the manufacture of our vaccine candidate."



Developing a vaccine is a technical process that involves the production of tiny biobeads that're coated in protein or polypeptide. CVC is coating these biobeads in carefully chosen components from the SARS-Cov-2 virus. The biobeads and coating are simultaneously manufactured inside bacteria which is an efficient method of production.

Fonterra's equipment is being used to break open the bacteria in which CVC's vaccine biobeads are made. "Once the biobeads are released, we remove contaminating bacterial residues and end up with a pure vaccine preparation ready for injection," says CVC Chief Operating Officer Dr Andy Herbert.

The partnership between Fonterra and CVC follows the Government's announcement that it's contributing hundreds of millions of dollars to onshore and offshore efforts to produce and obtain a COVID-19 vaccine for New Zealanders and their Pacific partners.



Dr Robert Feldman says CVC's vaccine "uses an approach that is different from other candidates being developed around the world." He adds, CVC believes it "will generate a strong and broad immune response while being efficient to manufacture."

The company estimates its first clinical trials would take place at the start of 2022 and would cost around \$8 million to complete. It's already in partnership with the University of Auckland, Callaghan Innovation, and Ardigen. And by getting a helping hand from Fonterra, there's a better chance they'll keep that ambitious schedule to help New Zealanders against COVID-19.

Supplementary Information

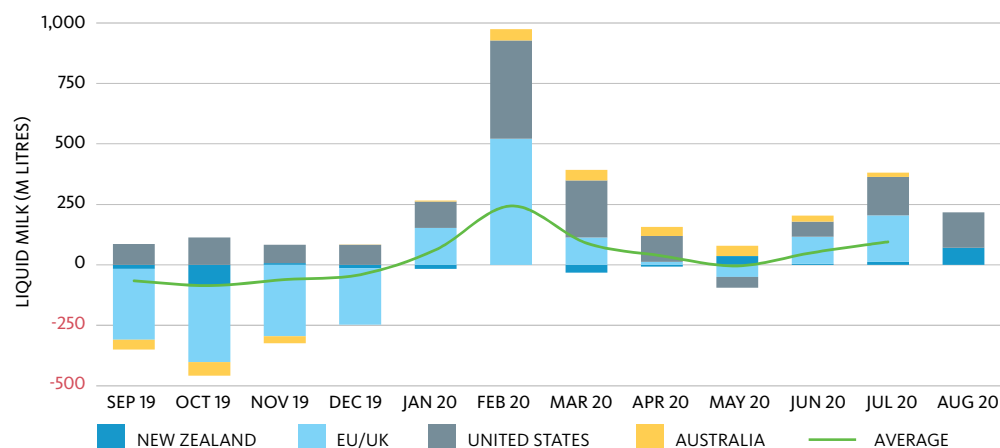
Global Dairy Market

The charts on the right illustrate the year-on-year changes in imports, exports and production for a range of countries that are important players in global dairy trade.

The absolute size of the bars represents the change in imports, exports or production, relative to the same period the previous year.

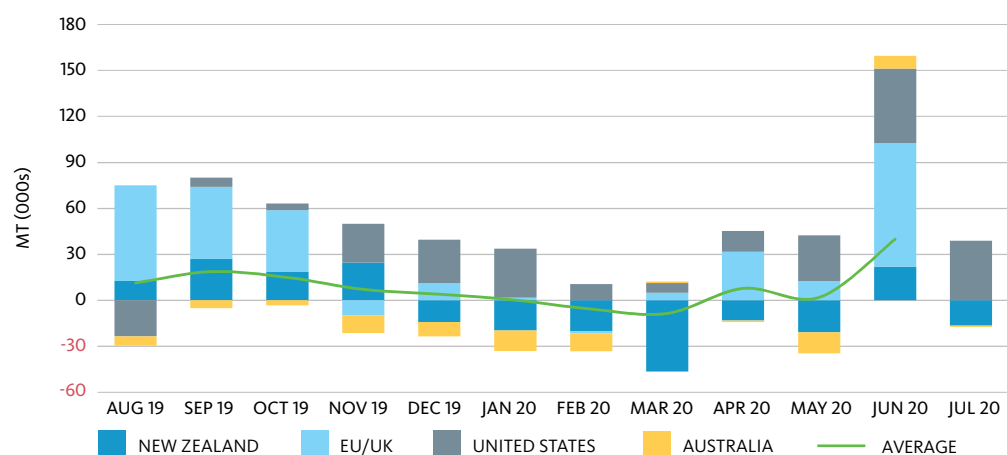
Averages are shown where data is complete for the regions presented.

PRODUCTION



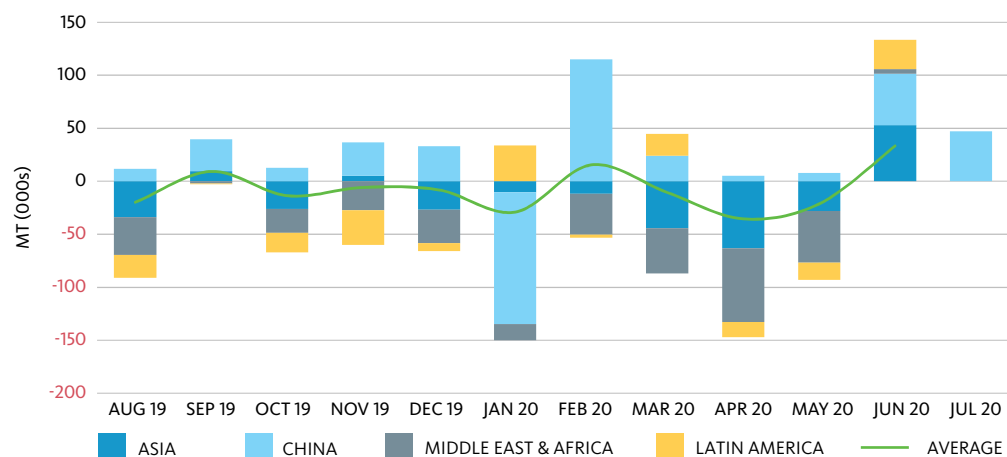
NOTE: Data for EU/UK and Australia to July; New Zealand and US to August.

EXPORTS



NOTE: Data for EU/UK to June; New Zealand, Australia and US to July.

IMPORTS



NOTE: Data for Asia, Middle East & Africa and Latin America to June; China to July.

SOURCE: Government milk production statistics/GTIS trade data/Fonterra analysis.

Supplementary Information

Fonterra milk production

The table on the right shows Fonterra milk solids collected in New Zealand and Australia compared to the previous season.

MILK COLLECTION (MILLION KGMS)	AUGUST 2020	AUGUST 2019	MONTHLY CHANGE	SEASON- TO-DATE 2020/21	SEASON- TO-DATE 2019/20	SEASON- TO-DATE CHANGE
Total Fonterra New Zealand	100.7	97.6	3.2%	134.6	130.3	3.3%
North Island	73.5	71.2	3.2%	101.6	98.7	2.9%
South Island	27.2	26.4	3.2%	33.0	31.6	4.5%
Australia	7.3	7.0	4.1%	12.3	12.4	(0.5%)

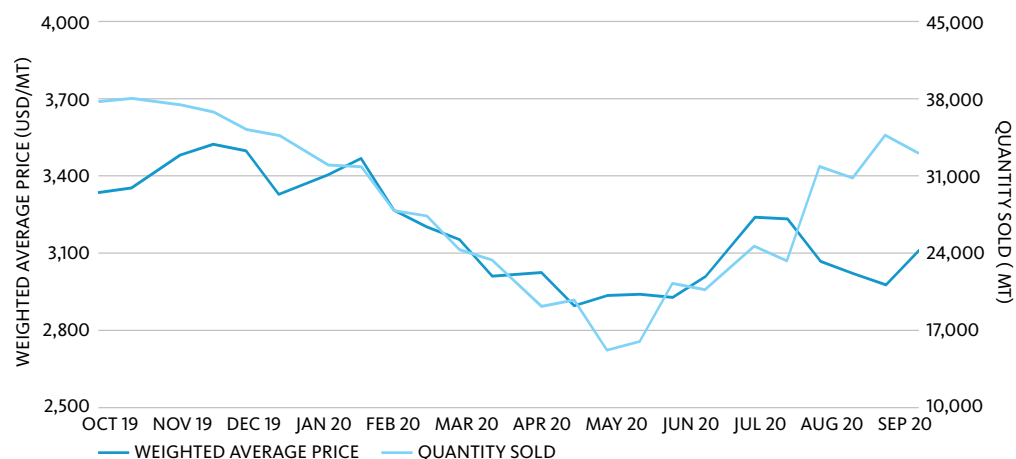
Fonterra GDT results

This table provides more information on the latest results, including a snapshot of the year-to-date results.

	LAST TRADING EVENT (15 SEPTEMBER 2020)	YEAR-TO-DATE (FROM 1 AUGUST 2020)
Quantity Sold on GDT (Winning MT)	33,075	130,424
Change in Quantity Sold on GDT over same period last year	(9.8%)	(7.9%)
Weighted Average Product Price (USD/MT)	3,111	3,043
Change in Weighted Average Product Price over same period last year	(6.5%)	(7.6%)
Change in Weighted Average Product Price from previous event	4.5%	–

Fonterra GDT results

This chart shows Fonterra GDT prices and volumes over the past 12 months.



Glossary

AMF

Anhydrous Milk Fat.

BMP

Butter Milk Powder.

DIRA

Dairy Industry Restructuring Act 2001 (New Zealand).

Farmgate Milk Price

The price for milk supplied in New Zealand to Fonterra by farmer shareholders.

Fluid Products

The Fonterra grouping of fluid milk products (skim milk, whole milk and cream – pasteurised or UHT processed), concentrated milk products (evaporated milk and sweetened condensed milk) and yoghurt.

GDT

Global Dairy Trade, the online provider of the twice monthly global auctions of dairy ingredients.

kgMS

Kilogram of milk solids, the measure of the amount of fat and protein in the milk supplied to Fonterra.

MENA

Middle East – North Africa.

MPC

Milk Protein Concentrate.

Non-Reference Products

All dairy products, except for Reference Products, produced by the NZ Ingredients business.

NZMP

New Zealand Milk Products.

Reference Products

The dairy products used in the calculation of the Farmgate Milk Price, which are currently WMP, SMP, BMP, butter and AMF.

Season

New Zealand: A period of 12 months to 31 May in each year.

Australia: A period of 12 months to 30 June in each year.

SMP

Skim Milk Powder.

WMP

Whole Milk Powder.

WPC

Whey Protein Concentrate