



APRIL 2022

Global Dairy UPDATE



- New Zealand, Australia and US monthly production continue to decline. EU monthly production flat.

- Fonterra's Research and Development Centre celebrates 95 years.



- New Zealand monthly exports flat, Australia and US exports up. EU monthly exports decline.



- Sharp decline in China monthly imports. Middle East & Africa and Asia up. Latin America monthly imports down.

- World Water Day: Prioritising water initiatives.



- Fonterra New Zealand milk collections for the season-to-date were 1,296.4 million kgMS, down 3.7% on the prior season.
- Fonterra Australia milk collections for March were 7.9 million kgMS, down 2.3% on March last season.

Key Dates



26 May 2022
FY22 Q3 Business Update

1 June 2022
Start of the 2022/23 Season

31 July 2022
End of FY22 Financial Year



New Zealand, Australia and US monthly production continue to decline, EU monthly production flat

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

NEW ZEALAND

1.9%↓

Change for March 2022 compared to March 2021

2.6%↓

Change for the 12 months to March 2022

New Zealand milk production¹ decreased 1.9% on a litres basis, (down 1.5% on a milk solids basis) in March compared to March the year prior.

Warm and dry conditions early in the month were replaced by significant rainfall in the North Island, benefiting pastures and production, while the South Island experienced dry and more unfavourable growing conditions.

New Zealand milk production for the 12 months to March was down 2.6% on the year prior.

Fonterra New Zealand collections are reported for March, see page 5 for details.

AUSTRALIA

6.1%↓

Change for February 2022 compared to February 2021

2.1%↓

Change for the 12 months to February 2022

Australia milk production decreased 6.1% in February compared to February the year prior. Production continued to decline year on year, impacted by below average rainfall and higher input prices.

Australia milk production for the 12 months to February was 2.1% lower than the year prior.

Both Dairy Australia and Rabobank have revised their FY22 forecasts down; Rabobank to -1.8% and Dairy Australia to -1% to -3%.

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

EUROPEAN UNION

0.0%

Change for January 2022 compared to January 2021

0.1%↓

Change for the 12 months to January 2022

EU milk production² was flat in January compared to the same period the year prior. Rising input costs, low-quality silage and a focus on animal welfare in Germany, as well as incentives from the Dutch Government to livestock farmers to relocate or exit the business to reduce carbon footprint, are impacting total EU production. This was offset by an increase in Italy, Poland and Austria's production.

EU milk production for the 12 months to January was down 0.1% compared to the same period the year prior, driven by declines in Germany, Netherlands and France and offset by increases in Italy and Ireland.

USA

0.5%↓

Change for March 2022 compared to March 2021

0.8%↑

Change for the 12 months to March 2022

US milk production decreased by 0.5% in March, compared to the same period the year prior.

Average herd sizes remain small but have started growing again for the second consecutive month. Cost saving initiatives in response to high feed costs are limiting milk yield per cow growth.

Milk production for the 12 months to March was 0.8% higher compared to the same period the year prior.

1 New Zealand production is measured in litres.

2 Excludes UK.



New Zealand monthly exports flat, Australia and US exports up. EU monthly exports decline

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

NEW ZEALAND

0.0%

Change for February 2022 compared to February 2021

2.1%↑

Change for the 12 months to February 2022

Total New Zealand dairy exports were flat in February compared to the same period the year prior.

Stronger shipments of SMP to South East Asia and Libya, and butter and fluid milk products to China, were observed year-on-year, but offset by lower shipments of WMP to China.

Exports for the 12 months to February were up by 2.1%, or 72,964 MT, compared to the same period the year prior. This was primarily driven by increases in fluid milk product, WMP, and cheese but partially offset by declines in AMF and infant formula.

AUSTRALIA

29.9%↑

Change for February 2022 compared to February 2021

21.1%↑

Change for the 12 months to February 2022

Australia dairy exports increased 29.9%, or 20,941 MT, in February compared to the same period the year prior.

February exports continue to be high year-on-year, driven by strong demand from China for fluid milk products, up 18,903 MT. Increases in exports of SMP and other powders were also observed.

Exports for the 12 months to February were up 21.1%, or 163,075 MT, on the previous comparable period.

This was predominantly driven by increases in fluid milk products, SMP and WMP.

EUROPEAN UNION

5.6%↓

Change for January 2022 compared to January 2021

1.2%↓

Change for the 12 months to January 2022

EU dairy exports decreased 5.6%, or 30,532 MT, in January compared to the same period the year prior.

Lower exports of fluid milk products, SMP and whey to China, were partially offset by an increase in cultured products.

Exports for the 12 months to January were down 1.2%, or 88,467 MT, on the previous comparable period, driven by declines in infant formula, cultured products, WMP, SMP and butter and partially offset by increases in fluid milk products and ice cream.

USA

0.1%↑

Change for February 2022 compared to February 2021

9.2%↑

Change for the 12 months to February 2022

US dairy exports increased 0.1%, or 211 MT, in February compared to the same period the year prior, which was a record exporting month.

February saw an increase in demand for lactose to China and Pakistan, cheese to Mexico and Japan and butter to Canada. This was largely offset by lower shipments of SMP due to port congestion and shipping challenges from California and smaller volumes of whey to China.

Exports for the 12 months to February were up 9.2%, or 233,638 MT on the previous comparable period, driven by cheese, SMP, whey, lactose, and fluid milk products.



Sharp decline in China monthly imports. Middle East and Africa and Asia up. Latin America monthly imports down

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

LATIN AMERICA

3.7% ↓

Change for January 2022 compared to January 2021

3.5% ↑

Change for the 12 months to January 2022

Latin America dairy import volumes¹ decreased 3.7%, or 6,246 MT, in January compared to the same period the year prior.

The decrease was driven by lower demand for SMP to Columbia, Mexico and Brazil, and WMP to Brazil.

Imports for the 12 months to January were up 3.5% compared to the same period the year prior, driven by higher volumes of cheese, SMP, whey and butter and partially offset by declines in WMP.

ASIA

15.3% ↑

Change for January 2022 compared to January 2021

1.8% ↑

Change for the 12 months to January 2022

Asia (excluding China) dairy import volumes¹ increased 15.3%, or 56,983 MT, in January compared to the same period the year prior.

The increase was driven by higher demand for SMP to the Philippines and Vietnam and whey to Vietnam.

Imports for the 12 months to January were up 1.8%, or 85,960 MT, compared to the same period the year prior, driven by higher volumes of whey, cheese, WPC and WPI and fluid milk products and partially offset by a decrease in WMP.

MIDDLE EAST & AFRICA

42.8% ↑

Change for January 2022 compared to January 2021

6.9% ↑

Change for the 12 months to January 2022

Middle East and Africa dairy import volumes¹ increased 42.8% or 152,195 MT in January compared to January 2021, which was an unusually low import month.

The increase was driven by higher volumes across most product categories, but most specifically of SMP to Egypt and Algeria, cheese to Iraq and Libya and fluid milk products to United Arab Emirates and Iraq.

Imports for the 12 months to January were up 6.9%, or 333,521 MT, compared to January the year prior, driven by increases in fluid milk products, cheese and cultured products.

CHINA

29.1% ↓

Change for March 2022 compared to March 2021

5.3% ↑

Change for the 12 months to March 2022

China dairy import volumes¹ decreased by 29.1%, or 115,101 MT, in March compared to March 2021.

Compared to record import volumes in March last year, lower volumes were observed across most products. Covid-related port congestions and supply chain delays were a key driver of the decline. Whey imports decreased sharply as lower quality feed for hog herds is being used as a cheaper alternative. Fluid milk products, WMP and SMP imports also decreased.

Imports for the 12 months to March were up 5.3%, or 199,755 MT, driven by WMP, fluid milk products and SMP, partially offset by decreases in whey and infant formula.

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

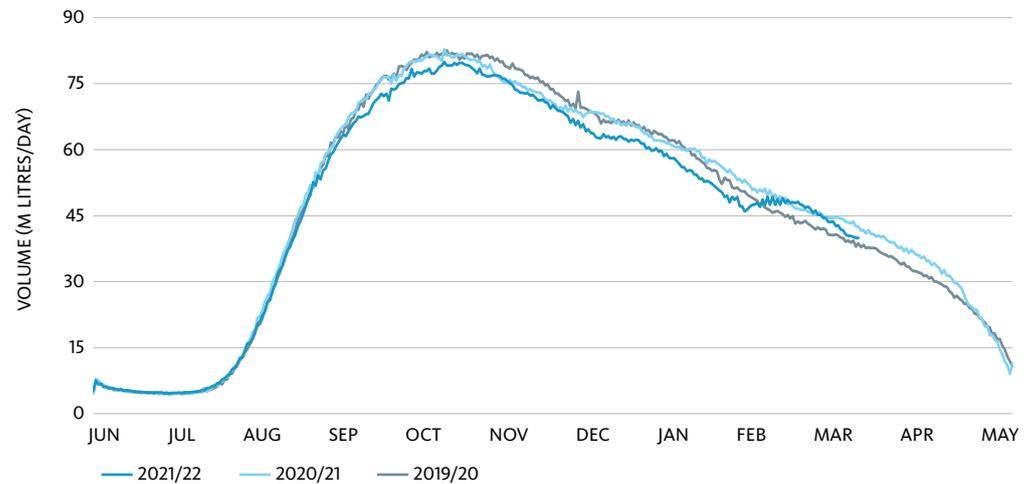
OUR MARKETS

Fonterra Milk Collections



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

New Zealand Milk Collections



NEW ZEALAND

1.0%↓

Change for March 2022 compared to March 2021

3.7%↓

Season-to-date 1 June to 31 March

Fonterra's New Zealand collections for March were 136.8 million kgMS, 1.0% lower than last March.

Season-to-date collections were 1,296.4 million kgMS, 3.7% behind last season.

March saw hot, dry conditions continue, although February's rain did set up strong growing conditions for March for much of the North Island. Further rain in the second half of March for the North Island contributed to the ongoing strong production. Conversely, the South Island struggled with a lack of rain and more challenging growing conditions.

NORTH ISLAND

0.1%↑

Change for March 2022 compared to March 2021

4.1%↓

Season-to-date 1 June to 31 March

North Island milk collections in March were 74.8 million kgMS, a slight increase on March last season.

Season-to-date collections were 772.1 million kgMS, 4.1% behind last season.

North Island milk collections have been strong throughout March, recovering after the February rain and supported by further rain later in the month.

SOUTH ISLAND

2.3%↓

Change for March 2022 compared to March 2021

3.0%↓

Season-to-date 1 June to 31 March

South Island milk collections in March were 62.0 million kgMS, 2.3% lower than last March.

Season-to-date collections were 524.3 million kgMS, 3.0% behind last season.

The South Island's hot and dry conditions continued, impacting milk production. The lack of rain in the Lower South and low sunshine hours in the Central South reduced grass growth and, in turn, milk production.

AUSTRALIA

2.3%↓

Change for March 2022 compared to March 2021

1.2%↓

Season-to-date 1 July to 31 March

Fonterra's Australia collections for March were 7.9 million kgMS, a 2.3% decrease on March last season.

Third party volumes decreased, and farm collections increased year-on-year due to new suppliers who have joined this season.

Fonterra collections across Australia for the nine months for the season-to-date are 83.1 kgMS, a 1.2% decline on last season.

OUR MARKETS

Fonterra Global Dairy Trade Results



Fonterra GDT results at last trading event
19 April 2022:



AMF



BUTTER



SMP



CHEDDAR

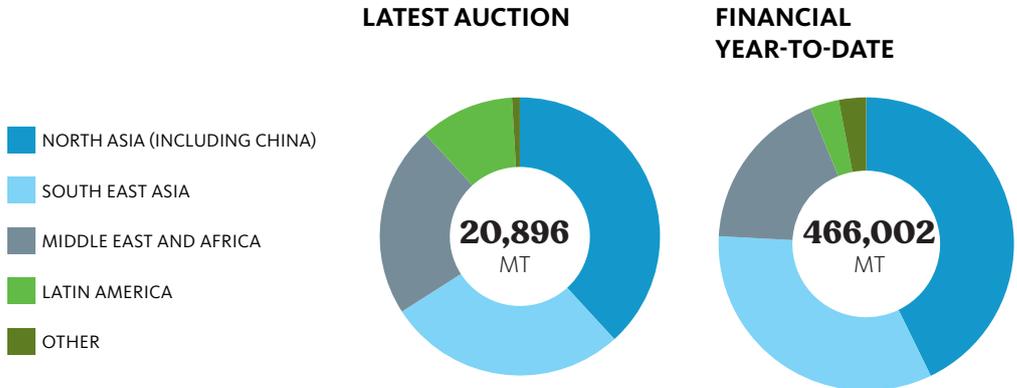


WMP



Fonterra GDT sales by destination:

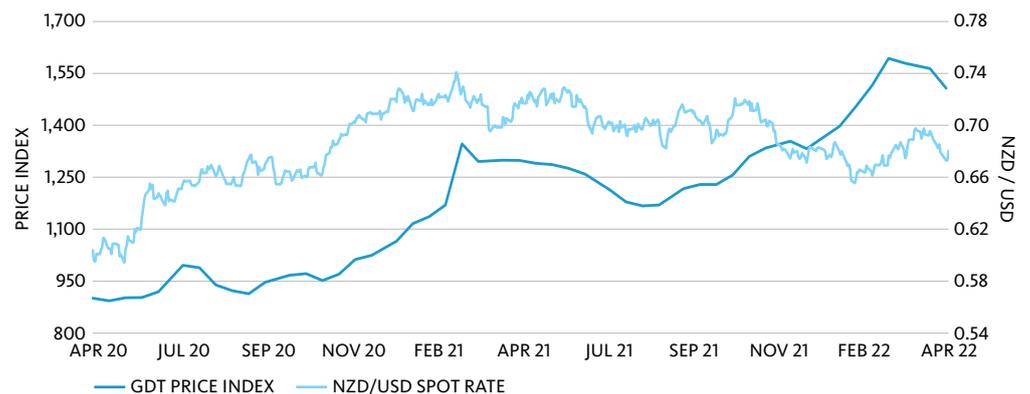
To view more information, including a snapshot of the rolling year-to-date results –



► The next trading event will be held on 3 May 2022. Visit www.globaldairytrade.info for more information.

Dairy commodity prices and New Zealand dollar trend

The NZD weakened to below 68 US cents; the USD's strength supported by expectations that the US Federal Reserve will act more quickly and by a larger magnitude when raising interest rates to combat inflation and, as hopes for a quick and peaceful resolution to the war in Ukraine faded, demand for USDs emerged.



Our Performance



Fonterra's Research and Development Centre celebrates 95 years

The year 1927 was full of innovations and ideas that created history – the electric television, the first transatlantic telephone call, and the Ford Motor Company introduced its new Model A Ford.

Fittingly, it was also when the Fonterra Research and Development centre (FRDC) was first formed, although back then it was known as 'The Dairy Research Institute'.

The dairy industry was much different back then; milk was delivered to the factory by horse and cart and milk quality judged by smell. We've come a long way since.

The Dairy Research Institute started on the Massey University site, but moved to its own site a few years later and was renamed and became FRDC when Fonterra was formed in 2001.

This month FRDC celebrates its 95th birthday, and much like the pioneers of the 1920s, it also lays claims to many world firsts.

FRDC is a really special part of Fonterra and the New Zealand dairy industry, says Mark Piper, Fonterra Director Category, Strategy and Innovation

"It's where we've developed everything from spreadable butter, to extra stretch mozzarella and more recently, Kowbucha, which is a really exciting probiotic that we're working on to try and reduce methane from cows.

"All of our products that you see on the shelf, from our delicious cheeses through to our huge range of specialty products globally, have come through our FRDC innovation centre. It really is integral to our Co-op's continued success.

"Ultimately, the secret of FRDC's success comes down to its people. I know everyone says this, but we're so fortunate with the range of skill sets, knowledge, backgrounds and even personalities, that we have on-site.

"We've got people who have been involved in the industry for two weeks, to over 50 years. If you add up all those years of dairy experience that we've got - there's over 4,000 years of collective experience.

"This diverse range of people, along with Fonterra's global partners, really drive FRDC's innovation and creative problem-solving.

"For me, that's what's going to keep us at the forefront of dairy innovation for another 95 years.

"We're building on great foundations and we have a very long track record of creating value from our milk through innovation and producing sustainable and nutritious dairy products. Pace is so important as we look to stay ahead of new trends to lead the game.

"We're constantly looking at consumer trends, what's happening in the world and how Fonterra and dairy can play a part in this. We're facing a future where milk



5 things you should know about the Fonterra Research and Development Centre:

1. Lays claims to many world 'first' including:
 - Best performing instant whole milk powder,
 - Functional proteins used in yoghurts, aging, sports, and medical nutrition products,
 - Extending whole milk powder shelf life to 24 months through improvements in quality and gas flushing, and
 - Specialised creams for chefs and bakers.
2. FRDC has filed more than 400 patents and 1,000s of papers have been published by the team.
3. Is researching complex lipids in milk that may help brain development and function.
4. Is home to one of the largest dairy culture libraries in the world, containing more than 40,000 strains.
5. Invented mozzarella that matures in just a few hours rather than the normal four months.

supply is likely to decline, or be flat at best. This gives us an opportunity to be selective about what we do with the milk so we can increase the value we generate.

"It also gives us an opportunity to discover all the fun things we can do with milk – from mozzarella on dumplings, to tea with a creamy cheese topping.

"As part of our long-term strategy, Fonterra is aiming to increase its current total annual research and development investment by over 50% to around \$160 million per annum by 2030, with about \$60 million per annum specifically targeted at growth in Active Living, as we continue to develop new innovative products to support our value growth plans.



World Water Day: Prioritising water initiatives

March 22 2022 marked World Water Day, a day which highlights the importance of fresh water and the sustainable management of freshwater resources.

This year's theme is 'Groundwater – making the invisible visible'. Groundwater is significant for many industries, ecosystems, agriculture, and water and sanitation systems, and is an important focus for Fonterra in achieving our sustainability targets.

"At Fonterra we care about the environment and the communities in which we operate and we're always looking for ways to improve - one area that's always a focus for us is water," says Lee Stewart, Fonterra's Head of Corporate Sustainability.

Around a third of New Zealand's water is underground in layers of water-soaked rock or gravel, and comes from different sources, including rainfall, lakes, rivers, and streams.

Groundwater pollution is a significant global problem, which can take decades or even centuries to recover from, so we need to ensure we protect this resource for future generations.

The following is a snapshot of just some of the work we're doing to protect this precious resource.

Wastewater

As well as the good work farmers are putting in on-farm, we're investing in water-saving initiatives across our 28 factories across New Zealand. Our factories depend on water, and we want to ensure our water use is as efficient as possible.

All our manufacturing sites are prioritising the reduction, or re-use of water, taking steps to make sure our plants are operating as efficiently and effectively as possible while limiting their impact on the environment.

Our Hautapu site, located in the heart of Waikato, is a leader in eco-efficiency and sustainability. Like many of our sites across the country, wastewater is treated and then returned to the natural environment through irrigation on our nutrient management farms.

We've recently been granted a consent for a new wastewater treatment facility that will create better sustainability outcomes for the site and the community.

[To read more on our proposed facility –](#)

Northland Kaipara Harbour Group

We've recently partnered with the Kaipara Moana Remediation Programme in a decade-long project to help restore the health and mauri of Kaipara Moana.

Kaipara Harbour is New Zealand's largest harbour and the largest in the Southern Hemisphere. Its waters, associated catchments and ecosystems covers over 6,020km² – one-third of the Northland region.

A remediation programme of this size and scale is a New Zealand first, providing an exciting opportunity to support a shifting generational change to restore the Harbour for our future.

The biggest threat to the wonderful taonga of the Kaipara Harbour is the soil. Seven thousand tonnes worth of soil pours into the harbour each year. The project aims to reduce any ongoing environmental degradation by halving sediment loss from land to sea, benefitting the harbour in improving freshwater quality and increasing biodiversity.

We will support Northland dairy farmers through the partnership by accelerating on-farm projects and developing our Farm Environmental Plans to deliver sustainable results.

[To learn more on the programme –](#)

Living Water Partnership with Landscape DNA

A new project supported by Fonterra's Living Water partnership with the Department of Conservation will help farmers to make the best decisions for the environment based on better landscape information.

Living Water and Land & Water Science have recently launched a new web-based map LandscapeDNA tool, which integrates landscape properties and cutting-edge science to understand why water quality varies

LandscapeDNA brings next generation spatial landscape data into one platform, putting landscape information in the hands of our Fonterra farmers, land users, catchment groups and rural professionals, empowering them to manage their land, while minimising the risk of pollution and maximising production.

The LandscapeDNA tool will be accessible to our Sustainable Dairy Advisers, who work with farmers to make the best decisions for the environment. The next phase of the project is currently underway, curating a dashboard which serves as a one-stop-shop. The update looks to integrate accurate landscape information and farm financials, further assisting in effectively mitigating land-use impacts on water quality.

[For more information on the LandscapeDNA tool –](#)

Supplementary Information

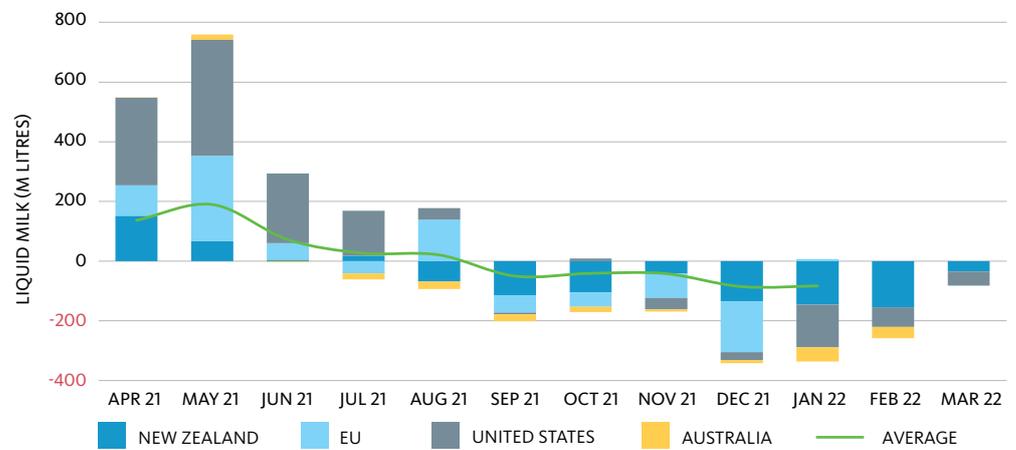
Global Dairy Market

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.

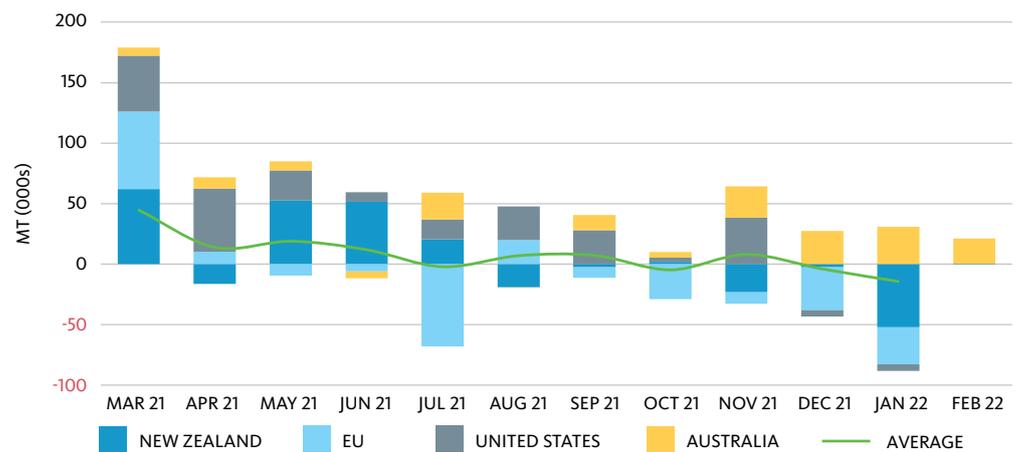
Averages are shown where data is complete for the regions presented.

PRODUCTION



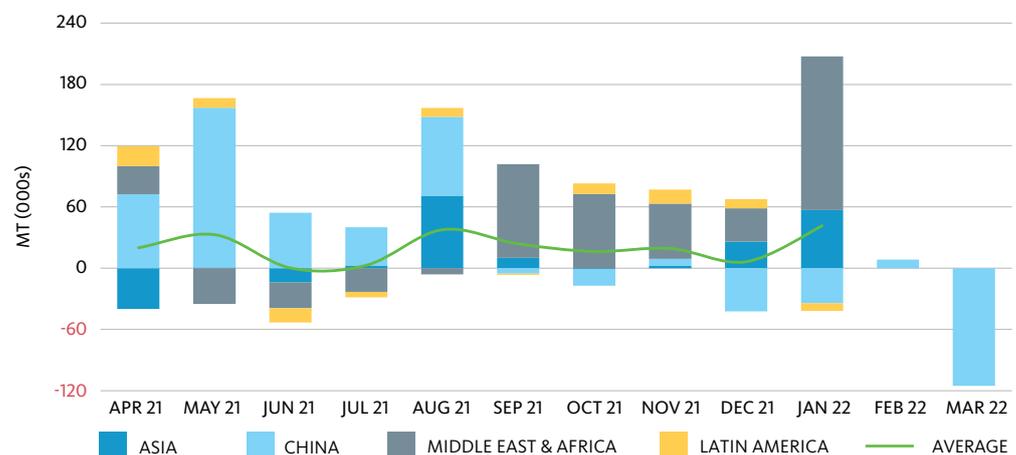
NOTE: Data for EU to January; Australia to February; New Zealand and US to March.

EXPORTS



NOTE: Data for EU to January; New Zealand, US and Australia to February.

IMPORTS



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

SOURCES: Government milk production statistics (DCANZ, Dairy Australia, Eurostat, USDA)/GTA 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)	MARCH 2022	MARCH 2021	MONTHLY CHANGE	SEASON-TO-DATE 2021/22	SEASON-TO-DATE 2020/21	SEASON-TO-DATE CHANGE
Total Fonterra New Zealand	136.8	138.2	(1.0%)	1,296.4	1,345.8	(3.7%)
North Island	74.8	74.7	0.1%	772.1	805.5	(4.1%)
South Island	62.0	63.4	(2.3%)	524.3	540.4	(3.0%)
Australia	7.9	8.1	(2.3%)	83.1	84.1	(1.2%)

Fonterra GDT results

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

	LAST TRADING EVENT (19 APRIL 2022)	YEAR-TO-DATE (FROM 1 AUGUST 2021)
Quantity Sold on GDT (Winning MT)	20,896	466,002
Change in Quantity Sold on GDT over same period last year	(13.4%)	(13.5%)
Weighted Average Product Price (USD/MT)	4,911	4,399
Change in Weighted Average Product Price over same period last year	18.0%	28.2%
Change in Weighted Average Product Price from previous event	(2.9%)	-

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.

Cultured Products

Fermented milks that are prepared by using starter cultures and controlled fermentation including yoghurt, yoghurt drinks, sour cream, crème fraîche.

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.

MPC

Milk Protein Concentrate.

Non-Reference Products

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

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.

WPI

Whey Protein Isolate.