



PERSPECTIVE

April 2020

The latest insights into global dairy markets

Your regular global overview of the dairy industry along with trends in milk production, commodity prices and dairy trade.

Ingredients by



Dairy for life



Welcome back to Perspective!

April 2020

There is wide spread uncertainty across the globe at the moment, and people are looking to be reassured that essentials, such as food, will be available to them. The current New Zealand Government restrictions around COVID-19 mean all non-essential businesses have closed for a four-week period. As part of the food supply chain, Fonterra, is considered an essential service, which means we can continue to collect our farmers' milk and make our products.

We take our responsibility providing dairy nutrition during this challenging time seriously. We are taking precautions to ensure the health and wellbeing of our people, and the community during this time. We are available to answer customers questions, and provide guidance, for the latest information on how Fonterra are responding to COVID-19 please refer to the webpage [here](#).

It is even clearer now how important it is to produce nutrition sustainably, and in a way that protects the longevity of our environment and supply chain. This month we interview Sarah English, a Fonterra Sustainable Dairying Advisor, to tell our readers more about how she and her colleagues work with farmers to champion sustainability on-farm.

Four key movements for the month:



Production – Monthly New Zealand production flat and Australian production steadies. Increase in EU and US production.



Exports – Monthly exports from the US and EU grow. New Zealand, Australia monthly exports decline.



Imports – Latin America and Asia monthly imports down. December imports up for China and Middle East and Africa.



Prices – [GDT event 256](#) had mixed movements, resulting in the GDT price index dropping -3.9% to USD \$2,980/MT. The largest changes came from SMP, Lactose and WMP, moving -8.1%, +4.9% and -4.2% respectively.

If you have suggestions for topics you would like to read about in Perspective, or any other general feedback, we would love to hear from you. You can contact us at nzmpbrand@fonterra.com or through your account manager.

Kind Regards,

Gillian Munnik

Director of Sales and Marketing Services

In this issue

	Feature article	4
	Global production	8
	Fonterra milk collection	9
	Global exports	10
	Global imports	11
	Tracking the global dairy market	12
	Global indicators	13
	Commodity prices	14
	GDT results	15
	Industry commentary	16
	Glossary	20



Interview with a Fonterra Sustainable Dairying Advisor



Sarah English

Fonterra Sustainable Dairying Advisor (SDA)



Sarah English has been a Fonterra Sustainable Dairying Advisor since 2012. Sarah returned to New Zealand with her husband and 3 children from the Gold Coast, where she was teaching maths and science at high school. Sarah returned to New Zealand to support her parents into retirement from the family farm. And so, as well as being employed fulltime as an SDA with Fonterra, she also works on the stud beef breeding farm with her husband and mother. Sarah's upbringing on the family farm and love of the environment, complimented with tertiary study (BSc(Zoology) and GradDip ed) have provided a great base knowledge for the SDA role.

In New Zealand, the journey to sustainable dairy nutrition begins on the farm, led by passionate farmers that care about the land and the animals they are responsible for. That is why our parent company Fonterra, owned by 10,000 farming families, has prioritised providing their farmers with a team of Sustainable Dairying Advisors. The role of these Fonterra Sustainable Dairying Advisors (SDA) is so special and unique that we reached out to Sarah English, an SDA since 2012, to tell our readers more about how she and her colleagues work with farmers to champion sustainability on-farm.

What is a Fonterra Sustainable Dairying Advisor (SDA)?

Fonterra Sustainable Dairying Advisors are a source of specialised regional knowledge and expertise designed to support best practice farm management and empower farmers to achieve their sustainability goals. Our Sustainable Dairy Advisors (SDA's) are on hand with a free suite of tools and services to assist with a broad range of sustainability-related farm matters for Fonterra farmers.

A Fonterra SDA typically looks after an area that has around 400-500 farmers. It takes a unique person to be a Sustainable Dairying Advisor. Whilst we need to be familiar with different farm systems and technical concepts (such as nutrient management and greenhouse gas emissions), we also need to be able to communicate this in a way that engages farmers to make changes to their businesses. Environmental expectations are constantly evolving so SDA's tend to be naturally inquisitive in order to ensure that we are providing the best, most relevant service and guidance. We need to stay up-to-date with changing regulations (regionally and nationally), as well as relevant research and projects, to keep our farmers well informed and equipped to make decisions.



Q What are the key services and support SDAs provide farmers?

SDAs offer a full suite of services that aim to improve on-farm sustainability. Some of the services include:

- Effluent system management support.
- Riparian and waterways management advice.
- Nutrient management advice.
- Farm Environment Plans, which set targets and actions to improve sustainability performance.

Our goal is to support farmers in their sustainability journey, we work one-on-one with farmers to identify challenges and opportunities unique to their farm.

SDAs are also a conduit to other services and offerings. We have relationships with industry partners in New Zealand and can point the farmer in the right direction for specialist advice e.g.;

- Partnership with Wildlands consulting; who will develop and undertake the delivery of farm-specific planting initiatives and maintenance at market leading rates and guaranteeing plant survival rates.
- Through our Living Water Partnership (with Department of Conservation) we are able to utilise specialist knowledge to support our farmers biodiversity aspirations.

Q Describe the average week of an SDA?

There is some autonomy required as an SDA as no two weeks are the same. SDAs have to be agile and responsive to the immediate needs of farmers. At the same time, we can be booked up with farm visits for up to two months at a time, which gives farmers time to prepare and gather paperwork for our visits.

A farm visit to write a Farm Environment Plan (FEP) takes 4 to 5 hours on farm with the farmer, of which around the first hour is looking at paperwork and the remainder of the time is spent looking around the farm. Depending on the farm and number of actions that come from the visit, it takes a further one to two days to write up the plan into draft form. We then return a plan to a farmer and go through it to make changes, if required, before committing to a final action plan. So – we may do one or two FEP's a week, and also try to keep ourselves upskilled whenever possible by liaising with external stakeholders: industry bodies like DairyNZ, Regional Councils, hosting farm visits and attending conferences and tradeshow.

Q What is your favourite part about being an SDA?

I love seeing a farmer's pride when they've made meaningful change on farm. No two farmers or farms are the same, and I enjoy the variety this brings. Farmers ask provocative questions, and I enjoy the challenging discussions that ensue.



There has become such a focus on farming and environmental impact in the last 5 years, and I think it's great that Fonterra farmers have free access to someone in a role like mine to help guide their decision-making.

Farmers are so busy, and it can be hard to research every decision they need to make on farm (environmental or otherwise), and so to have access to me, to use my knowledge and apply it to their farm and specific needs, empowers them to enact sustainable practices and feel supported to do so.

I've been involved in a particularly rewarding programme called 'Living Water' which is a collaboration between Fonterra and the Department of Conservation to demonstrate how dairy farming and healthy ecosystems can co-exist. Also, I get to work outside when the weather is good – I'm so lucky that there are a lot of things to enjoy!!

Q How is a Farm Environment Plan (FEP) created, and how does it benefit the farmer?

A Farm Environment Plan is vital for the long-term planning of a sustainable farm and considers all aspects of the land management decisions on the farm such as:

- Pasture and crop management
- Waterways stock exclusion and riparian planting
- Effluent infrastructure systems and management
- Nutrient management decisions to optimise pasture production in order and minimise environmental losses.

To create an FEP we must spend time with the farmer looking over the farm, identifying potential sustainable improvement areas and discussing potential solutions tailored to that particular farm.

All this data is captured using cutting-edge geo-spatial mapping software.

Once we have helped the farmer decide how they want to tackle any identified areas for improvement, the SDA will write up an action plan – describing any challenge(s) and setting a plan and target date to resolve them. A draft plan is shared back with the farmer and changes made if required. Of course, as well as identifying areas for improvement, we also look at current good farm management practices – acknowledging them where they exist and encouraging more of these through actions in

the plan. An FEP helps a farmer to understand how their decisions and actions impact the environment in which they operate, improve awareness, ensure compliance to rules and prioritise actions to help protect and enhance the environment while maintaining productivity and profitability.

Q How do SDAs support Fonterra's sustainability goals?

Primarily, the work SDAs do with farmers greatly supports Fonterra's environmental sustainability goals. However sustainable actions stem beyond the environmental across all facets of a business for it to continue to be successful into the future.

One of the key Fonterra sustainability goals is for all Fonterra farmers to have an FEP by 2025 – which is wholly deliverable by the SDA team. This focuses on sustainability behind the farm gate by identifying opportunities for farmers to optimise milk production while minimising their environmental footprint – win/win! This requires us to be agile to ensure that solutions are tailored to farms, farm systems as well as to individual farmer aspirations.

We use a framework called "Co-operative Difference on Farm" (CODOF) to connect our farmers with our customer and community expectations.

This framework helps farmers to understand what is required now, what good looks like and what is likely to be required in the future. The FEP process is an ideal way to communicate this, and the current focus for our team is for all our farmers to have an FEP and clear understanding of what Good Farming

Practices (GFP) look like for their farm system and business. This allows farmers to apply strategies on farm to elevate them towards exemplary sustainable farming practices, which we recognise as part of the CODOF framework.

Q How often do Fonterra dairy farms get a visit from an SDA?

The majority of the farmers we interact with are proactively looking to build environmental resilience into their business model.

An SDA typically looks after an area that has around 400-500 farmers so it is not possible to get out to see them all every year, but we are always available on the phone and can arrange a visit to them if specifically requested. To further support Fonterra farmers and provide more regular contact, Fonterra has a larger team of Area Managers who have smaller groups of around 150-200 farmers each, so they see farmers more regularly than we can.

Q Why do you believe it's important for farmers to invest in sustainable farming practices?

With the increasing focus on the environment (water degradation, climate change) and the increasing global population, it is important that our food is produced in a sustainable manner. We will need to continue to use the land and natural resources and cannot afford to use them in such a way that we would deplete them. All farmers depend on the environment for the success of their business as well as for their own personal survival, so they have a vested interest in nurturing and protecting it.





Monthly New Zealand production flat and Australian production steadies. Increase in EU and US production

NEW ZEALAND

-1%_{.6}

Production change for the 12 months to February 2020

New Zealand milk production for the 12 months to February was 1.6% lower than last year.

New Zealand milk production¹ was flat on a litres basis in February (up 1.7% on milk solids basis compared to the same period last year).

Adjusting for the leap year, February 2020 production was down 3.4% (down 1.8% on a milk solids basis).

Drought conditions across the North Island and heavy rainfall in the lower South Island affected milk production in February.

AUSTRALIAN COLLECTION

-5%_{.6}

Production change for the 12 months to January 2020

Production for the 12 months to January was down 5.6% on the previous 12 months.

Australia milk production increased 0.5% in January compared to the same period last year.

Australian production has steadied in recent months, with rainfall in many regions offsetting the impact of dry conditions and helping to offset higher feed costs.

EUROPEAN UNION

+0%_{.6}

Production change for the 12 months to January 2020

EU milk production for the 12 months to January was up by 0.6% compared to the same period last year.

EU milk production increased by 1.1% in January compared to the same period last year.

The largest production growth can be seen in The Netherlands (up 2.8%), Poland (up 2.2%) followed by France (up 1.3%) and Germany (up 0.7%).

The increase in milk production is likely to translate into more cheese, especially from Poland where the growth has been sustained for the last six months.

UNITED STATES

+0%_{.8}

Production change for the 12 months to February 2020

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

US milk production increased by 5.3% in February compared to the same period last year. However, with February 2020 containing an extra day due to 'leap year', the adjusted increase is closer to 2% on a daily basis.

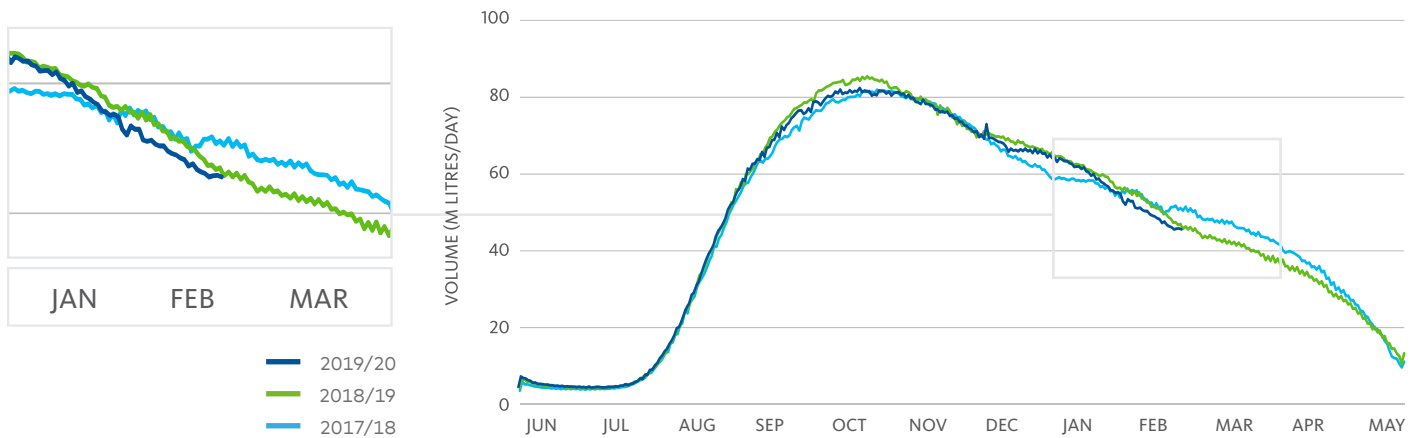
February's continued milk production growth is driven by steady increases in herd sizes and in milk per cow.

¹: New Zealand production is measured in litres.

* Source: Data from Global Trade Information Services and from government and industry websites, including USDA, Eurostat, High Ground Dairy, Dairy Australia and Dairy Companies Association of New Zealand



FONTERRA MILK COLLECTION 2019/20 SEASON



NEW ZEALAND COLLECTION

+0%.3

Change for February 2020 compared to February 2019

-0%.3

For the 2019/20 season compared to the previous season

Fonterra's New Zealand collection for the month ended 29 February was 133.5 million kgMS, up 0.3% on last February.

Season-to-date collection was 1,212.6 million kgMS, down 0.3% on last season.

February saw drought conditions across much of the North Island. These conditions notably impacted milk production in the North Island. South Island collections have held, with season-to-date collections marginally above last season.

The inclusion of off-GDT sales contributed 8 cents per kgMS to the Milk Price for the season to 31 January 2020.

AUSTRALIAN COLLECTION

-2%.7

Change for February 2020 compared to February 2019

-15%.0

Season to date 1 July to 29 February

Fonterra's Australia collection in February were 7.6 million kgMS, down 2.7% on February last season.

Average to above-average rainfall and mild summer conditions for much of Australia during February provided some month-on-month stability.

Season-to-date collections reached 77.3 million kgMS, down 15.0% on the same period last season.

Fonterra collections continue to be impacted by a highly competitive milk supply market which has seen losses primarily to milk brokers. Fonterra also decided to purchase less milk from third parties given the increased focus on higher-value products.





Monthly exports from the EU and US grow. New Zealand and Australia monthly exports decline

NEW ZEALAND

+3%
.7

Export change
for the 12 months to
February 2020

Exports for the 12 months to February were up 3.7%, or 124,552 MT, on the previous comparable period. This was primarily driven by WMP, fluid milk products, cheese and infant formula, up a combined 156,044 MT.

Total New Zealand dairy exports decreased by 6.1%, or 19,348 MT, in February compared to the same period last year. This was primarily driven by decreased demand for butter from Iran and for fluid milk products from China, down a combined 20,068 MT.

AUSTRALIA

-5%
.7

Export change
for the 12 months to
January 2020

Exports for the 12 months to January were down 5.7%, or 45,072 MT, on the previous comparable period.

Australia dairy exports decreased by 18.1%, or 11,683 MT, in January compared to the same period last year. This was primarily driven by SMP and infant formula, down a combined 12,410 MT.

Declines were recorded across a broad range of products with SMP, whey, cheese and WMP down a combined 76,126 MT partially offset by an increase in fluid milk products, up 37,635 MT.

EUROPEAN UNION

+7%
.6

Export change
for the 12 months to
December 2019

Exports for the 12 months to December were up 7.6%, or 408,870 MT, on the previous comparable period. SMP, fluid milk products, butter, cheese and lactose were the main drivers of this growth, up a combined 415,121 MT.

EU dairy exports increased by 3.0%, or 12,444 MT, in December compared to the same period last year. This was mainly driven by increases in butter, fluid milk products, cheese and WMP, up a combined 29,405 MT, and partially offset by a decrease in SMP exports of 18,349 MT.

UNITED STATES

-3%
.4

Export change
for the 12 months to
January 2020

Exports for the 12 months to January 2020 were down 3.4%, or 80,441 MT, on the previous comparable period. The decrease was driven by whey and AMF, down a combined 85,416 MT.

US dairy exports increased 18.8%, or 31,964 MT, in January compared to the same period last year marking the fourth consecutive month of growth. The increase was driven primarily by SMP, up 20,153 MT, and WPC and lactose, up a combined 9,849 MT. This increase is the result of higher demand from Indonesia, Philippines and Vietnam. Whey exports have started to grow and were up by 923 MT after months of sustained declines.



Latin America and Asia monthly imports down. December imports up for China and Middle East and Africa

LATIN AMERICA

-1%_{.0}

Import change for the 12 months to December 2019

Imports for the 12 months to December 2019 were down 1.0%, or 19,560 MT, compared to the same period the previous year. Decreases were driven primarily by infant formula, whey and cultured products, down a combined 61,711, largely offset by increases in WPC, fluid milk products and cheese, up by a combined 48,560 MT.

Latin America dairy import volumes¹ decreased 5.8%, or 9,125 MT, in December compared to the same period last year. This was driven by decreases in infant formula and SMP down a combined 9,130 MT.

ASIA

+1%_{.6}

Import change for the 12 months to December 2019

Imports for the 12 months to December were up 1.6%, or 78,919 MT, compared to the same period the previous year. Growth was recorded across SMP, cheese and butter, up a combined 70,998 MT.

Asia (excluding China) dairy import volumes¹ decreased 3.6%, or 14,740 MT, in December compared to the same period last year. Decreases were recorded in SMP and fluid products, down 27,622 MT, partially offset by increases in whey, cheese and butter, up a combined 10,186 MT.

MIDDLE EAST & AFRICA

-1%_{.8}

Import change for the 12 months to December 2019

Imports for the 12 months to December 2019 were down 1.8%, or 73,730 MT, compared to the prior comparable period. This was driven by large decreases in cheese and WMP, down a combined 112,017 MT, partly offset by a significant increase in infant formula of 69,071 MT.

Middle East and Africa dairy import volumes¹ increased 3.1%, or 10,497 MT, in December 2019 compared to the same period in 2018. Increases were recorded principally in SMP, WMP and butter, up a combined 21,856 MT, partly offset by a significant drop in infant formula, down 11,498 MT.

CHINA

+7%_{.5}

Import change for the 12 months to December 2019

Imports for the 12 months to December were up 11.2%, or 318,219 MT, compared to the same period last year.

China dairy import volumes continued to increase, up 13.8%, 33,326 MT, in December compared to the same period last year, primarily driven by increases in WMP from New Zealand and SMP, up a combined 32,220 MT.

The outbreak of COVID-19 will potentially impact import numbers beyond December 2019.

January import data has been delayed and should be made available with February data in April 2020.

RUSSIA

+3%_{.5}

Import change for the 12 months to January 2020

Imports for the 12 months to January 2020 were up +4.4% or +45,689 MT compared to the same period the previous year. This was mainly driven by AMF, Butter, Casein, Cheese, Ice cream, Whey and WMP being up a combined +75,530 MT. Offset by Fluid and Fresh Dairy, Infant Formula, Cultured Products, Lactose, SMP, MPC and WPC being down a combined -39,184 MT.

Russia import volumes were down -4.28% or -3,937 MT for January 2020 compared to the same month the previous year.

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

Sources: Data from Global Trade Information Services; EU Milk Market Observatory; FAO; Highground Trading Group



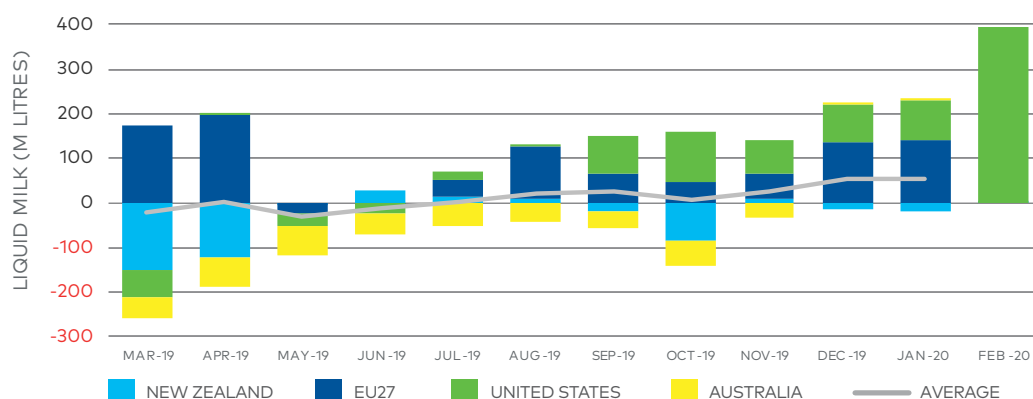
Global Dairy Market

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.

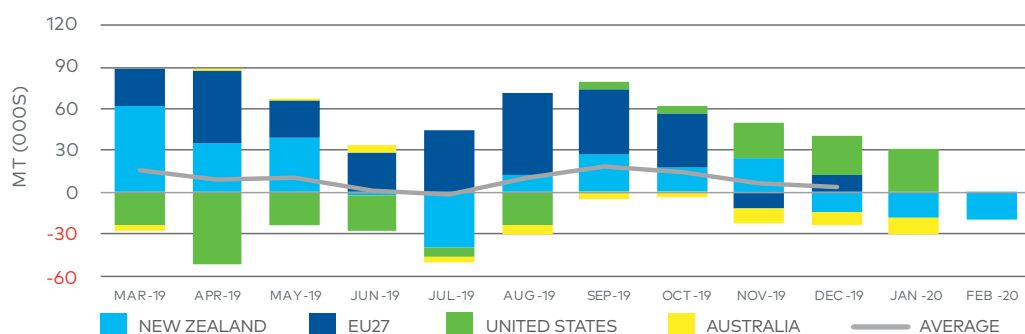
The absolute size of the bars represent the change in imports, exports or production, relative to the same period the previous year.

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

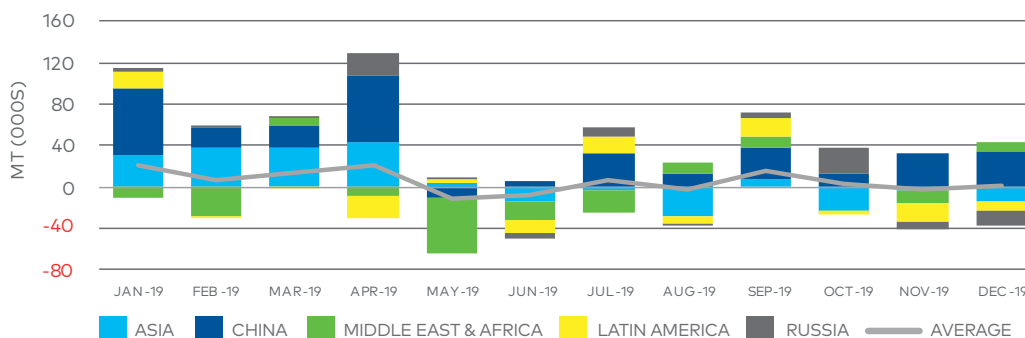
PRODUCTION



EXPORTS



IMPORTS





Food Price

The FAO Food Price Index (FFPI) averaged 172.2 points in March, down 4.3% from February, but still up 2.7% on March 2019. It represents the second month-on-month drop in the value of the FFPI. This fall is largely due to demand contractions in the wake of the coronavirus pandemic.

Meanwhile, the FAO Dairy Price Index averaged 203.5 points in March, down 3.0% on February. The decline comes after four months of continuous increases. Markets for milk powders were generally weaker, with skim milk powder (SMP) prices falling the most. Butter and cheese price quotations also eased in March.

Source: FAO



Economic

The release of the OECD composite leading indicators (CLIs) for March has been cancelled. CLI sub-components for many countries were not able to capture the effects of the fast-moving and widespread Covid-19 outbreak in time for the usual March announcement, so the next release will now be April 8, 2020.

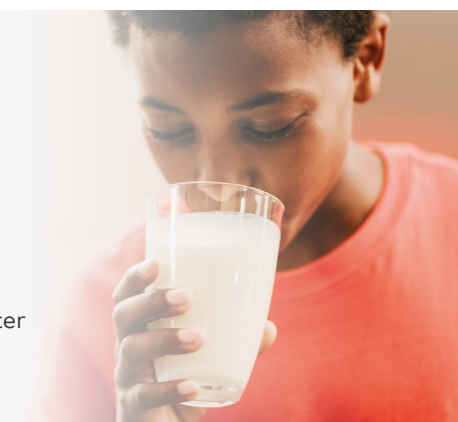
Source: OECD



Consumer

The Economist Intelligence Unit (EIU) has revised its forecasts for growth in light of the Covid-19 pandemic. They now believe global growth will stand at 1% this year, down from the 2.3% predicted before the outbreak began. The EIU expects at least five of the G7 countries (France, Germany, Japan, the UK and Italy) to experience a full-year recession in 2020 and that real GDP growth for the US will stand at 1%, down from 1.7%. China's growth is also now expected to drop to 2.1%, given the likely contraction in their first quarter output after severe quarantine measures.

Source: Economist Intelligence Unit



Weather

February was extremely dry across New Zealand's North Island, with rainfall levels well below normal for most regions. This was particularly the case in Northland and the central North Island, where they received less than 10% of their normal rainfall for the month. On the other hand, rainfall was above normal or well above normal for Southland, Otago and the lower West Coast.

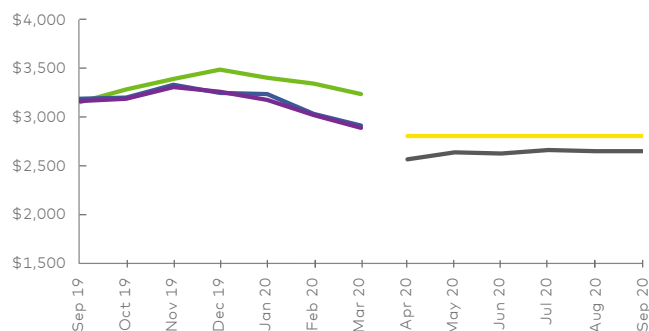
Meanwhile, soaking rain in February brought much-needed drought relief to eastern Australia. However, much more rain is needed to end the severe, long-term drought in the region. In Europe, above normal temperatures in February meant it was one of the continent's warmest winters on record. Northern and central Europe have abundant moisture supplies for spring growth. While drought crept into parts of Italy and the Balkans, the return of rain in early March eased dryness concerns there.

Source: World Agricultural Weather Highlights USDA oCOE, Fonterra Ingredients Australia





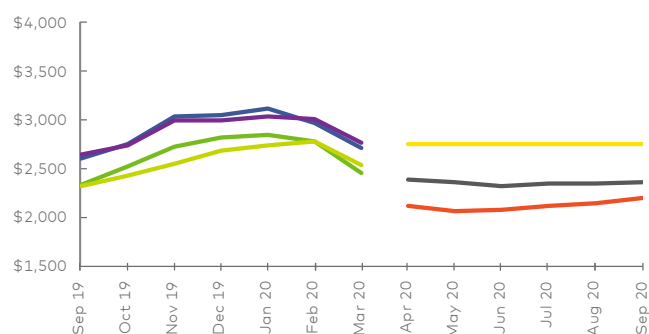
WMP



WMP prices dropped again across the board for March. The largest coming again from USDA Oceania & GDT down -4.4% and -3.9% respectively. Dutch Dairy Board also dropped -3.2% to USD \$3,225/MT.

Futures and forecasts for the next six-months have shown larger drops. Rabobank Oceania has dropped its average -11.8% to USD \$2,800/MT. NZX Futures has decreased theirs a further -8.5% from last perspective to an average USD \$2,622 /MT.

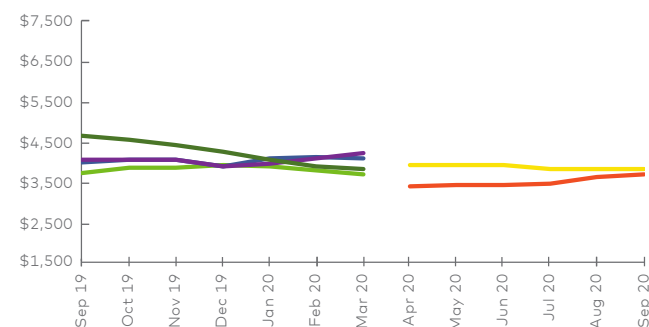
SMP



The turning tide continues for SMP prices as we see a second consecutive drop across the board. USDA NASS has dropped -8.7% to USD \$2,527/MT. USDA Oceania dropped -8.1% to USD \$2,763/MT and Dutch Dairy Board showed a -11.6% drop to USD \$2,457/MT. GDT showed a decline of -8.5% to USD \$2,703/MT.

This has resulted in the Forecast and futures being revised down with some large drops in average prices over the next 6 months. Rabobank Oceania has dropped -9.3% to USD \$2,750/MT. CME Futures has dropped its 6-month average -13.9% to USD \$2,122/MT. NZX Futures has dropped theirs -12% to USD \$2,349/MT.

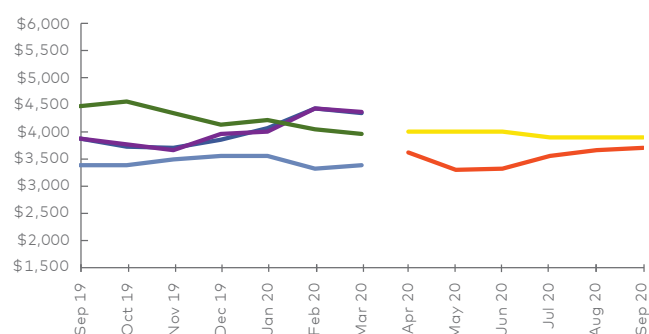
BUTTER



Results are mixed this month as butter prices start to loosen across the four key indexes in March. The only index to show an uplift was USDA Oceania which increased +3.0% to USD \$4,296/MT. Dutch Dairy Board dipped a further -2.9% to USD \$3,750/MT. CME Spot dropped a further -1.8% to USD \$3,878/MT. GDT slightly dropped -0.8% to USD \$4,168/MT.

Average futures and forecasts for the next six-month period are revised down as CME Futures drops their average another -16.4% to USD \$3,554/MT and Rabobank Oceania average prices drop -4.4% to USD \$3,950/MT.

CHEESE



February brings mixed results for cheddar cheese. GDT's 4 month climb comes to an end with a -1.8% drop to USD \$4,344/MT. USDA Oceania saw a drop of -1.7% to USD \$4,356/MT. CME Spot and saw a -2.3% decline to USD \$3,951/MT and EU commission saw the only increase this month with a +1.4% uplift to USD \$3,371/MT.

CME Futures 6-month average has dropped a further -8% to USD \$3,522/MT and Rabobank Oceania's average holds at USD \$3,950/MT.

Actuals

■ GDT Fonterra ■ Dutch Dairy Board ■ USDA Oceania
■ USDA NASS ■ CME Spot ■ EU Commission

Forecasts

■ NZX Futures ■ CME Futures
■ Rabobank Oceania



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GDT Results

TRADING EVENT 256

-3.9%

Change in GDT Price Index from previous event

USD 2,980

Average price (USD/MT, FAS)

WMP

-4.2%

\$2,797

AMF

+1.0%

\$4,331

SMP

-8.1%

\$2,527

BUTTER

+0.3%

\$4,144

RENNET CASEIN

+1.0%

\$9,987

CHEDDAR

-2.6%

\$4,398

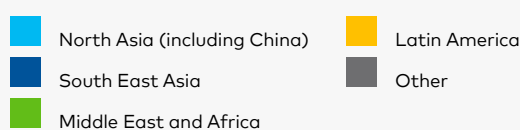
LACTOSE

+4.9%

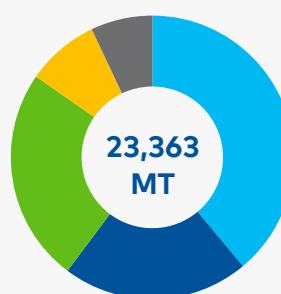
\$914

GDT SALES BY DESTINATION

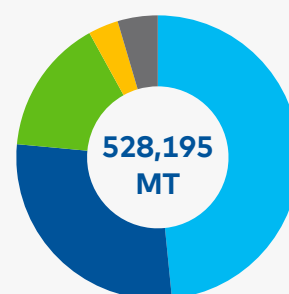
TRADING EVENT 256



Latest Auction



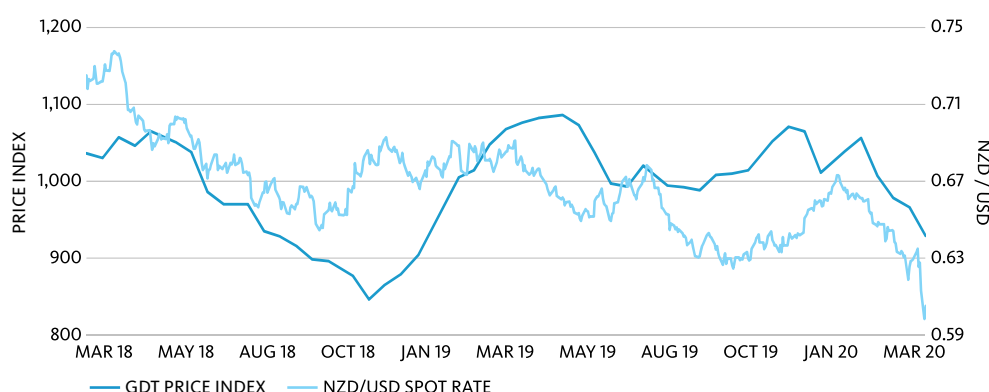
Financial Year to Date



The next trading event will be held on 7 April 2020.
Visit www.globaldairytrade.info for more information.

Dairy commodity prices and New Zealand dollar trend

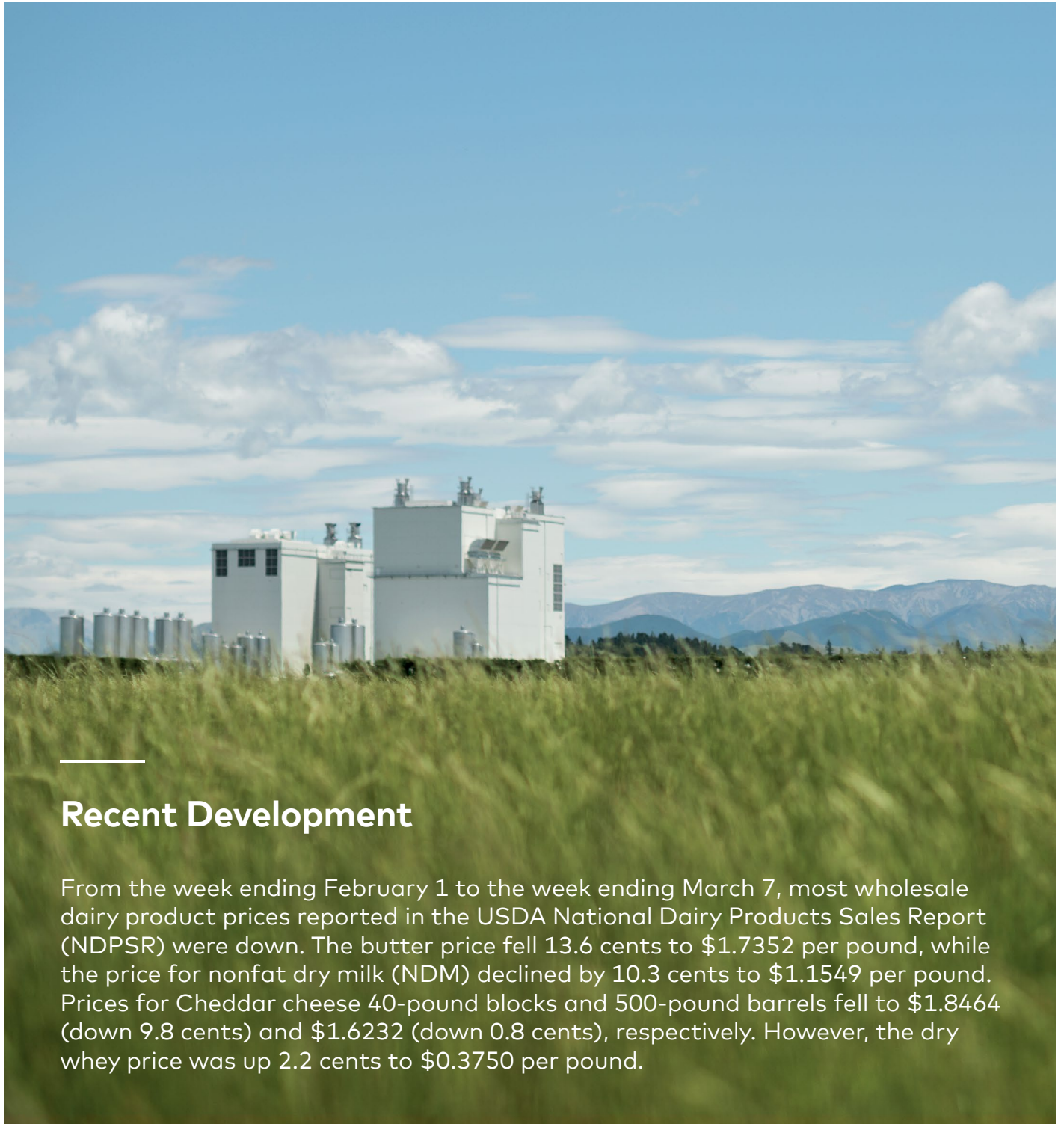
As the COVID-19 virus began to spread outside of China and the likely economic headwinds resulting from quarantine efforts came into focus, the NZ dollar declined from 65 US cents early in February to 62 US cents by the end of February and reduced significantly during March.





USDA, Dairy Outlook

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Recent Development

From the week ending February 1 to the week ending March 7, most wholesale dairy product prices reported in the USDA National Dairy Products Sales Report (NDPSR) were down. The butter price fell 13.6 cents to \$1.7352 per pound, while the price for nonfat dry milk (NDM) declined by 10.3 cents to \$1.1549 per pound. Prices for Cheddar cheese 40-pound blocks and 500-pound barrels fell to \$1.8464 (down 9.8 cents) and \$1.6232 (down 0.8 cents), respectively. However, the dry whey price was up 2.2 cents to \$0.3750 per pound.

The USDA National Agricultural Statistics Service (NASS) revised its estimates in the latest Milk Production report. The latest annual milk production estimate for 2019 is 218.382 billion pounds, up 60 million from January's estimate. Meanwhile, the most recent estimate of milk production for December 2019 is 18.365 billion pounds, an increase of 88 million. The average number of milk cows in December is now estimated at 9.343 million head, which represents an upward revision of 4,000. December's yield estimate is now 1,966 pounds per head, up 9 pounds on previous reports. For January 2020, milk production is estimated at 18.785 million pounds, up 0.9 percent on January 2019. The milk cow estimate is 9.348 million head, an increase of 5,000 on December. Milk per cow for January 2020 is now estimated at 2,010 pounds per head, up 20 pounds on January 2019.

In January, U.S. dairy exports on a skim-solids milk-equivalent basis totalled 3.806 billion pounds, up 87 million on December and 744 million on the same time last year. This represented a record high for January. However, January dairy exports on a milk-fat milk-equivalent basis were comparatively low, at 674 million pounds – down 21 million on December and 12 million on January 2019.

January nonfat dry milk and skim milk powder (NDM&SMP) exports totalled 153.3 million pounds, an increase of 0.8 million on December and 44.5 million on January 2019. NDM&SMP exports to Southeast Asia were particularly

strong, making up 41.1 percent of the month's total. U.S. exports of whey products and lactose in January were up on the same time last year, at 90.7 million pounds (+13.7 million) and 73.8 million pounds (+10.0 million), respectively. In contrast, January's butter exports were below January 2019 at 3.4 million pounds, down 0.8 million. Cheese exports totalled 61.7 million pounds in January, up 0.2 million on the same time last year.

In January, dairy imports on a milk-fat basis came in at 543 million pounds, up 64 million on January 2019. On a skim-solids basis, dairy imports totalled 476 million pounds, down 4 million on the same time last year. Notably, January imports of anhydrous milk fat and butteroil totalled 140.5 million pounds, representing an increase of 83.1 million on January 2019.

Uncertainties due to Covid-19

Two types of potential effects of the coronavirus on the US dairy industry have been identified – supply chain disruptions and lower global demand for dairy products. However, the extent of the effects is still unknown, given data around domestic and foreign supply and demand quantities is not yet available for February and March.





Dairy forecasts for 2020

The 2020 forecast for the number of milk cows has been raised to 9.345 million head, up 10,000 on last month's prediction. However milk per cow is now forecast at 23,780 pounds, down 5 pounds on previous estimates. With the higher projection for milk cows more than offsetting the lower projection for milk per cow, the milk production forecast has been raised 0.3 billion pounds to 222.3 billion.

The export forecast for 2020 has been lowered to 9.2 billion pounds, due to relatively low exports on a milk-fat basis in January. However, the forecast for 2020 dairy exports on a skim-solids basis has been raised to 43.9 billion pounds, up 0.3 billion on last month's forecast. Strong exports of NDM&SMP, whey products, and lactose are expected to continue. The higher forecast reflects improved access to China's markets and the impact of drought on New Zealand's dairy sector. However expectations for higher export forecasts have been tempered due to the potential effects of the Covid-19 pandemic.

The import forecast for 2020 on a milk-fat basis has been raised to 6.8 billion pounds, as higher imports of cheese and butterfat products are expected. On a skim solids basis, the forecast for 2020 has also been raised to 43.9 billion pounds.

The forecast for domestic commercial use has been raised to 218.2 billion pounds on a milk-fat basis (up 0.3 billion), but is unchanged at 182.7 billion pounds on a skim-solids basis. The forecast for ending stocks on a milk-fat basis has been raised to 14.1 billion pounds (up 0.7 billion) and to 10.4 billion pounds on a skim-solids basis (up 0.1 billion).

Meanwhile, the 2020 price forecasts for cheese, butter, and NDM have been lowered to \$1.755 (-3.5 cents), \$1.845 (-6.5 cents), and \$1.175 (-8.0 cents) per pound, respectively. But with recent strengthening in the dry whey price, its forecast has been raised to \$0.355 per pound (up 1.0 cent).

With the lower expected cheese price more than offsetting the higher expected dry whey price, the Class III milk price forecast has been lowered \$0.30 to \$16.65 per hundredweight (cwt). With lower expected prices for butter and NDM, the Class IV price forecast has also been lowered by \$0.95 to \$15.75 per cwt. The all-milk price forecast for 2020 is currently \$18.25 per cwt, down \$0.60 on last month's forecast.

Blimling, Forecast Update

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Blimling reports the producer margin picture looks less robust than it did just a few weeks earlier. USDA's Dairy Margin Coverage model estimated margins at \$9.55 per hundredweight by the end of February, representing a \$1.15 decline over the course of a month. It takes the margin estimate six cents below the previous year, with estimates showing that six months of 2020 could qualify for payments at the \$9.50 coverage level.

Blimling says falling milk prices are doing the damage (with Class III futures down nearly \$1.10 from the end of January and Class IV prices down by \$1.95). They add that further erosion seems possible due to the current uncertainty in the markets.

Meanwhile, Blimling says CME spot cheese prices will continue to move lower heading into spring, weighted down by expanding supplies and uncertainty around demand.

The lowest butter prices in five years are expected to entice value-shoppers and increase retail promotional activity, which should help to build support and some upward momentum in the coming months. Blimling also notes New Zealand production setbacks will limit the ability to deliver on late season export orders, while weaker US prices will help improve export opportunities.

NDP/SMP prices will move lower so long as US milk supplies are heavy and buyers uneasy. The coronavirus pandemic is expected to impact the magnitude and duration of that decline.

Finally, Blimling says dry whey prices will continue to chop around the 35-cent range, with weak export sales and increased US milk production capping upside.



Fonterra draws the information in this update from a variety of principally external sources listed below. Also included are defined acronyms for better understanding.

AMF Anhydrous Milk Fat

BMP Butter Milk Powder

CME Chicago Mercantile Exchange

DDB Dutch Dairy Board

EIU Economist Intelligence Unit

FAO United Nations Food and Agriculture Organisation

Farmgate Milk Price The price for milk supplied in New Zealand to Fonterra by farmer shareholders

Fluid and Fresh Dairy 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

FTA Free Trade Agreement

GDI Global Dairy Intelligence group, Fonterra Cooperative Group Limited. GDI provides insights to Fonterra management based on a model of the global dairy market developed by GDI and populated with publicly available data. The model outputs referenced in this report do not reflect Fonterra's non-public production or sales data

GDP Gross Domestic Product

GDT Global Dairy Trade auction platform

GDT Price Index is an index that provides a measure of the weighted average percentage change in the movement in price of all products sold on GDT. This provides a simple measure of changes in dairy price between trading events

IMF International Monetary Fund

Informa Informa Economics Inc., Dairy Group, Global Dairy Market Report

LME Liquid Milk Equivalent

MAT Moving Annual Total (this is data averaged across the 12 month period)

MEA Middle East and Africa

NDM Non-fat Dry Milk

NZX NZ Stock Exchange

OECD Organisation for Economic Co-operation and Development

Q[1] [First] Quarter

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

SEA South East Asia

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

TE GDT Trading Event

USDA NASS US Department of Agriculture National Agricultural Statistics Service

USDA Oceania US Department of Agriculture Agricultural marketing service price series for specific products in the Oceania region

WMP Whole Milk Powder

YOY Year-on-year

YTD Year to date



Tracking the global dairy market Production, Export and Import charts

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

The absolute size of the bars represents the change in production, exports or imports compared to the same month the previous year. The portion of the bar below zero represents a year-on-year decrease and the portion above the line shows the year increase for that country. Where countries are not shown this is likely due to the data not yet being available.

Weather Source (Page reference – 13)

Comments on weather are obtained from various government weather sites as well as independent reports including Martell Crop Projections. Global milk production data is sourced from government and industry websites including US Department of Agriculture (USDA), EuroStat, Dairy Australia, Dairy Companies Association of New Zealand (DCANZ) and others.



Important note: The information and commentary contained in this 'Perspective from NZMP' is based on publicly available official government statistics; industry association reports; other published industry reports together with data and insights developed by Fonterra's Global Dairy Intelligence group ('GDI'). These sources are identified as appropriate in this 'Perspective from NZMP'. GDI insights and data are derived from a global dairy market model populated by publicly available data. The model inputs and outputs do not reflect Fonterra's non-public production, pricing or sales data. Fonterra Co-operative Group Limited and its group members involved in the manufacture or sale of NZMP branded products ('Fonterra') has provided this 'Perspective from NZMP' for informational purposes only. It does not constitute recommendations or advice for the purposes of making financial decisions regarding trading in dairy products or commodities, or dealing in financial instruments relating to dairy commodities. Although every effort is made to ensure the accuracy of reproducing and interpreting such information, no warranty or representation of such is made and Fonterra shall have no liability in respect of any reliance placed on such information in the formulation of any business decision.