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Report Highlights:

Despite a declining national dairy herd, New Zealand milk production continues to rise and is forecast to reach a record in 2021. Total milk production is forecast at 22.2 million metric tons (MMT), 1.2 percent above the 21.98 MMT produced in 2020. While the COVID-19 pandemic has caused disruptions to export supply chains, whole milk powder (WMP) remains in demand at prices which are profitable for both processors and farmers. WMP powder exports for 2021 are forecast at 1.54 MMT, up slightly from the 1.53 MMT shipped in 2020.

Executive Summary

In New Zealand, even though dairy cow numbers continue to drift downwards, milk production is edging upward. At 22.2 million metric tons (MMT), the forecast for 2021 total milk production would be a calendar year record and 1.2 percent above the 21.98 MMT actually produced in 2020. There are an estimated 4.9 million (m) cows being milked going into 2021, only down 0.44 percent from the final number of 4.92m head being milked at the start of 2020. Farmers were well prepared for the second half of the New Zealand production season (first half of calendar year 2021) as pasture supplies were high and there were normal to above-normal levels of conserved feed. In addition, the cows were generally in good condition. Even though it has been a non-traditional La Niña weather pattern over the summer, with unexpected dry conditions on the east coast of both islands, there was enough rainfall in the main dairying regions of Waikato and Taranaki to ensure that production during the first half of the year should significantly surpass production during the same period last year.

An improvement in the milk price forecast of the major New Zealand processor, up over 25 percent since the beginning of the 2020/2021 production season, has also encouraged more confidence among farmers to purchase supplemental feed to support production.

The advent of the COVID-19 pandemic and the Government's response has not impacted on milk supply nor did it hinder milk processing, despite very strict rules the processors themselves have on visiting the manufacturing sites. The COVID-19 pandemic has, though, caused disruption to export supply chains into destination countries, especially for food service products and ingredients. However, the dominant destination - China - has recovered well and reportedly food service channels are just about back to normal. Shipping delays and logistical problems have come to dominate nearly all international trade over the last twelve months. Many dairy sector exporters anticipate shipping delays will be shortened or be eliminated by the fourth quarter of 2021.

The revised higher milk supply forecast for 2021 is likely to favor increased production of whole and skim milk powders along with more cheese. Whole milk powder (WMP) production is now forecast at 1.56 MMT and would be nearly one percent up on the estimated 2020 production of 1.55 MMT. WMP exports are forecast at 1.54 MMT, up 0.5 percent on 2020. Cheese production is expected to remain firm at 370,000 MT, nearly six percent greater than 2020. Cheese exports are forecast to total 337,000 MT, an estimated three-percent increase over 2020.

Skim milk powder (SMP) production is likely to bounce back in 2021 to 385,000 MT, a four-percent increase on 2020 following the near five-percent drop in 2020. An anticipated decrease in Infant Milk Formula production will help support this increased SMP production. Butter and anhydrous milk fat (AMF) production and exports are likely to only remain stable because of the rapid growth of UHT cream exports. These exports are forecast for 2021 at 150,000 MT, up 11 percent from the 135,000 MT exported in 2020, which was already seven percent up on the 2019 total.

1/ Note: The GAIN Dairy Marketing Year (MY) is the same as the calendar year (CY), January 1 to December 31.

Seasonal Weather and Pasture Production

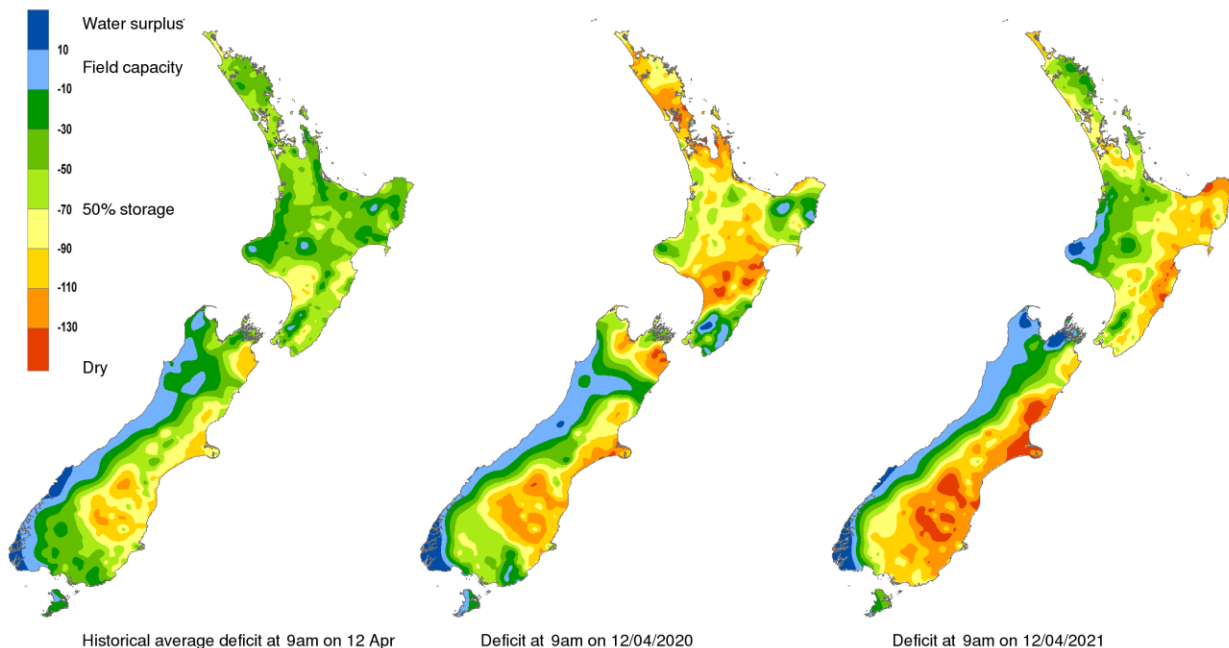
La Niña conditions continued into the first quarter of 2021 but were termed “non-traditional” by the National Institute of Water and Atmospheric Research (NIWA). This is because of drought conditions down the east coast of both islands, which are not traditionally expected in a La Niña year. Over March/April dry conditions even extended into the usually wetter region of Southland at the bottom of the South Island. This will be having some effect on the tail end of the seasonal milk production in Southland and will hasten farmers decisions to dry-off their herds and hunker down for the winter.

For the Canterbury region, the other main South Island dairying area, the level of rainfall is not so much of an issue as most farms have irrigation. The key improvement this year in rainfall is in the Waikato and South Auckland regions in the North Island, where in contrast to 2020 these regions are enjoying a more normal Autumn pasture growth period and milk production is generally up on 2020.

NIWA is forecasting near average to above-average air temperatures through until June. This is positive for pasture growth and should help farmers set their farms up well for winter. There is also likely to be good volumes of conserved supplementary feed (corn and pasture silage and hay) stored on farm. At this stage NIWA’s forecasts only extend out to June 2021.

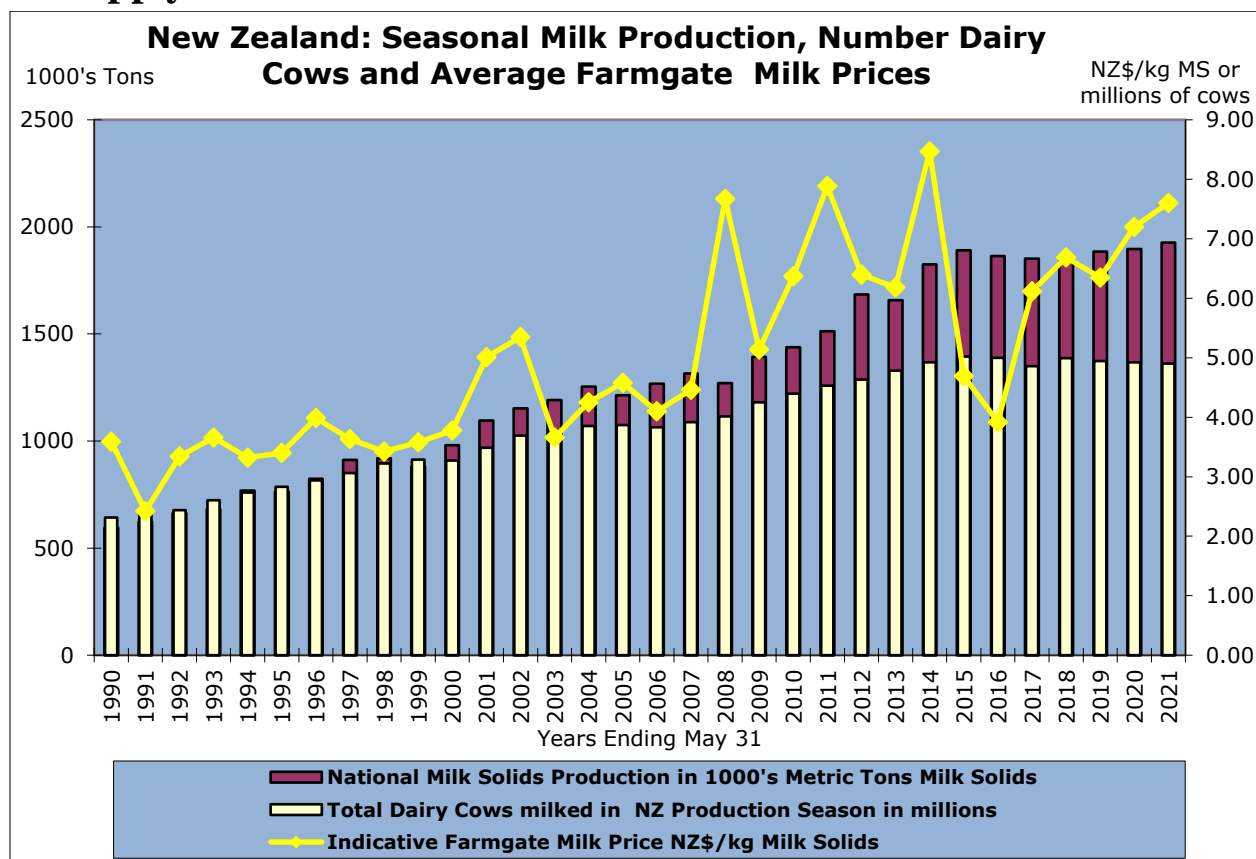
Soil Moisture April 12th – Historical Average, 2020 and 2021

Soil moisture deficit (mm) at 9am on 12/04/2021



Source: NIWA NZ Soil Moisture Deficit

Milk Supply



2021

The revised forecast for total milk production for 2021 is now 22.2 million metric tons (MMT), which would be 1.2 percent above the near-record production achieved in 2020. Production in the first half of 2021 is expected to be extremely strong and a record for that period. However, volumes in the second half are anticipated to return to more normal levels.

In the first half of 2021 milk production is forecast to be 3.3 percent above the same period in 2020 because of these key factors:

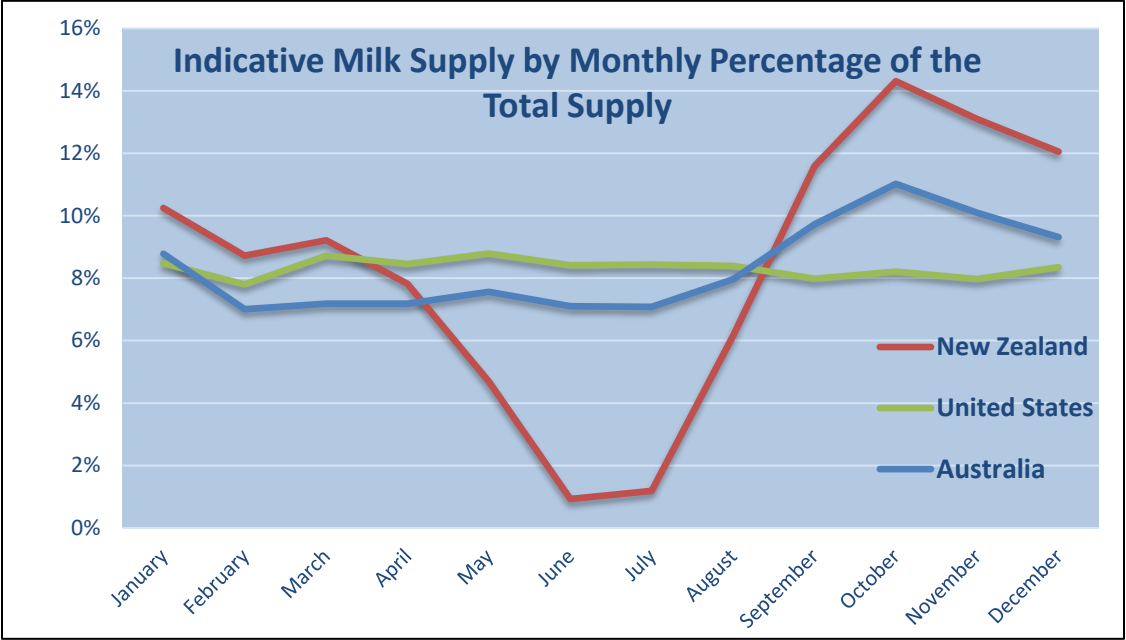
- Dairy farms went into 2021 with good pasture volumes, normal to above normal levels of conserved feed, and cows in good condition.
- Even though it has been a non-traditional La Niña weather pattern over the summer with unexpected dry conditions on the east coast of both islands, there was enough rainfall in the main dairying regions of Waikato and Taranaki to safely ensure they should significantly surpass last year's production during the January-June period.

- With new data on cow numbers for the 2019/2020 NZ production season, there has been an upward revision - by an estimated 50,000 cows - on the previous forecast for the number of cows being milked going into 2021. This would put total cow numbers at 4.9m head, which is only an estimated 0.4 percent reduction from the previous year.
- An improvement in the milk price forecast of the major New Zealand processor, up over 25 percent since the beginning of the 2020/2021 production season, has also encouraged more confidence among farmers to purchase supplemental feed to support production.

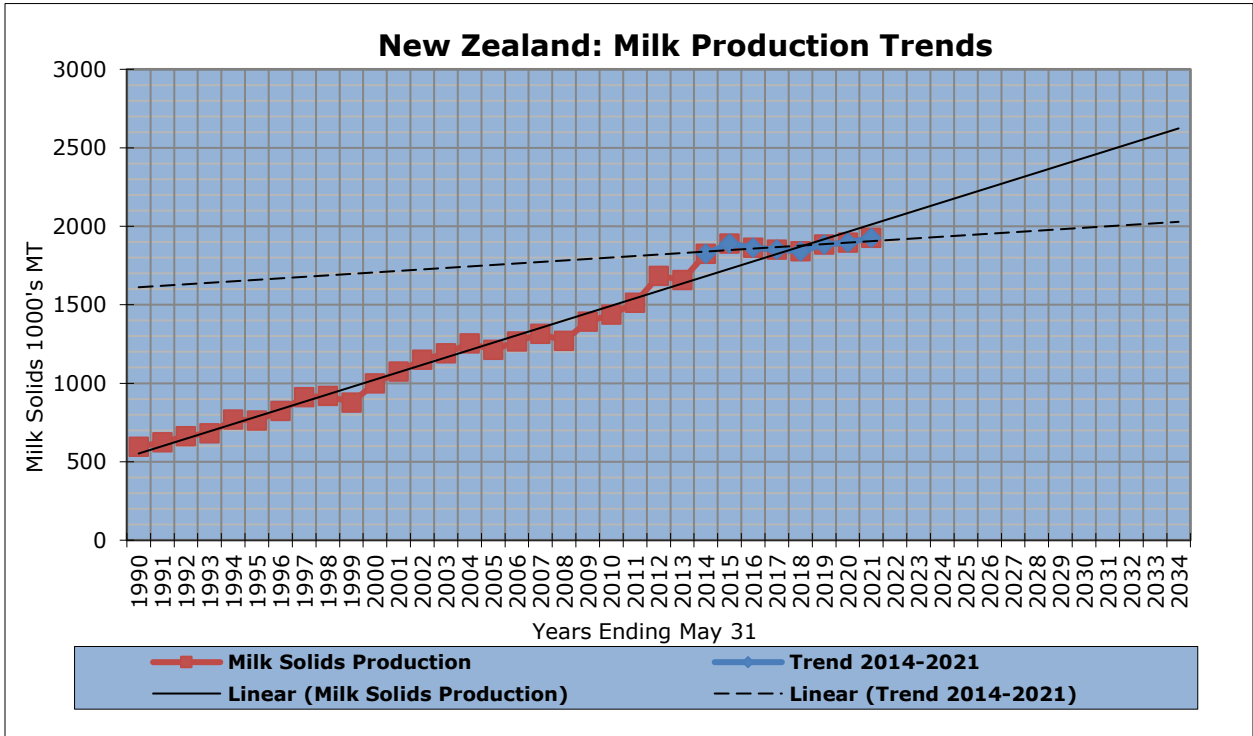
For the second half of 2021, it is forecast that production will just match the strong 2020 spring production but is unlikely to surpass it for a number of reasons:

- Cow numbers are forecast to reduce slightly by 25,000 head to 4.88m going into the 2021 spring. Cow numbers are continuing to drift downwards as farmers continue to adjust to the new freshwater environmental protection regulations and the looming climate change regulations. At this rate of decline, though, farmers can feed their remaining cows better and negate potential production losses.
- Initial forecasts for the farmgate milk price for New Zealand 2021/2022 production are lower than 2020/21. However, they are still expected to remain strong, which will support farmers in making spending decisions on supplementary feed if the need arises.
- In general, in the absence of any other significant driver, spring milk production is highly dependent on the week-to-week weather patterns. New Zealand is a temperate, island country so the weather can be highly variable in any season. It only takes two or three weeks of overcast cooler weather in October to wipe one to three percent off the monthly production total. These variable periods of inclement weather are difficult to predict so forecasts for milk production rely on recent historical averages.

Note: New Zealand milk production is highly seasonal, based essentially around the annual cycle of pasture growth with production spiking during the last four months of the year after the majority of cows are calved in spring (July, August, and into September). Pasture growth peaks in October and November.



Source: DCANZ, Dairy Australia, USDA-NASS

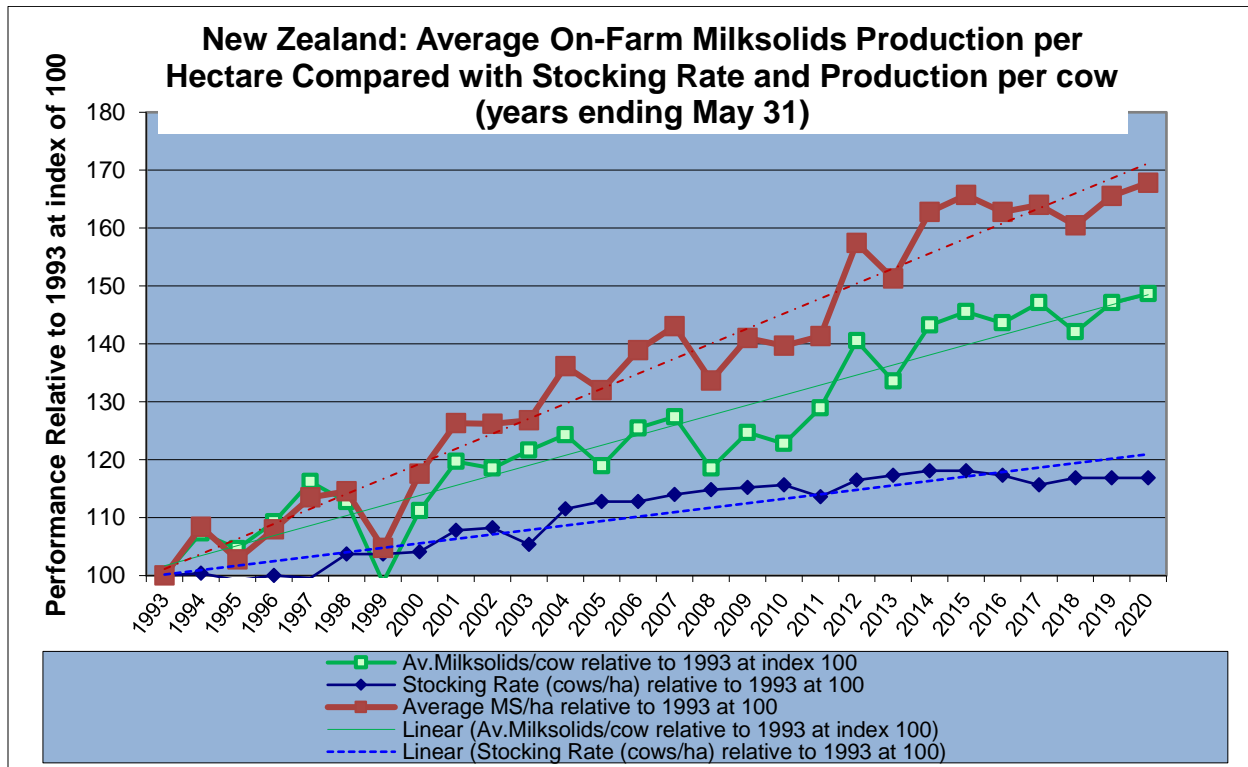


Source: DCANZ/DairyNZ/FAS/Wellington estimates

Note that milk production compounded average growth rate per annum from 1990 to 2014/15 was 4.7 to 4.8 percent. Since 2014/15 this rate has slowed to between 0.3 to 0.8 percent per annum. Since 2015 there have been essentially no conversion of farms to dairy.

2020

Actual 2020 milk production amounted to 21.98 million metric tons (MMT), which is 0.4 percent greater than 2019 production and second only to 2018 in calendar year production. Interestingly, on a milk solids basis (protein plus fat) 2020 was a record production year because of the highest ever solids proportion of total milk volume. The advent of the COVID-19 pandemic and the Government's response has not impacted on milk supply nor did it hinder milk processing, and there have been very strict rules for the processors on visiting the manufacturing sites.



Sources: DairyNZ, FAS/Wellington analysis

Despite the drought conditions that impacted heavily on the North Island during February through May 2020, milk production for the first half of the year (H1) was still the third highest on record for an H1 period on a milk solids basis, and the fourth highest on a volume basis. South Island production, led by the Canterbury region farms, was a record for the period and cushioned the impact nationally from the reduced production in the North Island. Farmers in the North Island were fortunate that they started 2020 with high pasture volumes and very high volumes of conserved feed.

Pasture growth during the winter months of June, July and on into August 2020, was exceptional. This had three main effects: cow conditions improved, winter use of feed supplements was minimized, and farms became well set up from a pasture perspective for the onset of spring and calving. Pasture conservation into silage started in late August, four to six weeks earlier than is normal for the North Island. This set the scene for record production for August and September 2020. However, the rapid

pasture growth in early spring meant many farms were not able to control pasture quality as well as would have been desired and milk production for October and November 2020 did not quite match the levels achieved in 2018 and 2014.

Cow numbers have continued to drift downwards. At the start of 2020 new data puts the dairy herd being milked at 4.92m head, 24,000 head or just 0.4 percent less than 2019. This is now a direct result of the pressure coming from newly enacted environmental regulations. Those have helped to halt any new conversions of farms to dairy, hastened some farms changing to an alternative land-use, and caused many farmers to rethink what the optimum stocking rate on their farms should be.

Liquid Milk Exports

Liquid milk export volumes in 2020 initially reacted negatively to the advent of COVID-19, having dropped 13 percent against 2019 for the period January to August. However, consumer demand and logistical disruptions recovered for the main destinations in Asia so the final total exported, at 250,000 MT, was only seven percent less than 2019. For 2021, exports are forecast to continue to recover and rise four percent to 260,000 MT.

Liquid Milk Domestic Consumption

Domestic consumption of liquid milk is relatively stable at a 525,000 MT per annum. This amount only accounts for 2.4 percent of the total milk supply.

Production Supply, and Demand – Liquid Milk

Dairy, Milk, Fluid Market Year Begins New Zealand	2019		2020		2021	
	Jan 2019		Jan 2020		Jan 2021	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Cows In Milk (1000 HEAD)	4946	4946	4815	4922	4800	4850
Cow's Milk Production (1000 MT)	21896	21896	22000	21980	22200	22241
Other Milk Production (1000 MT)	0	0	0	0	0	0
Total Production (1000 MT)	21896	21896	22000	21980	22200	22241
Other Imports (1000 MT)	4	4	5	5	5	5
Total Imports (1000 MT)	4	4	5	5	5	5
Total Supply (1000 MT)	21900	21900	22005	21985	22205	22246
Other Exports (1000 MT)	269	269	245	250	255	260
Total Exports (1000 MT)	269	269	245	250	255	260
Fluid Use Dom. Consum. (1000 MT)	520	520	525	525	525	525
Factory Use Consum. (1000 MT)	21002	21002	21125	21101	21316	21350
Feed Use Dom. Consum. (1000 MT)	109	109	110	109	109	111
Total Dom. Consumption (1000 MT)	21631	21631	21760	21735	21950	21986
Total Distribution (1000 MT)	21900	21900	22005	21985	22205	22246
(1000 HEAD) ,(1000 MT)						

Not official USDA estimates

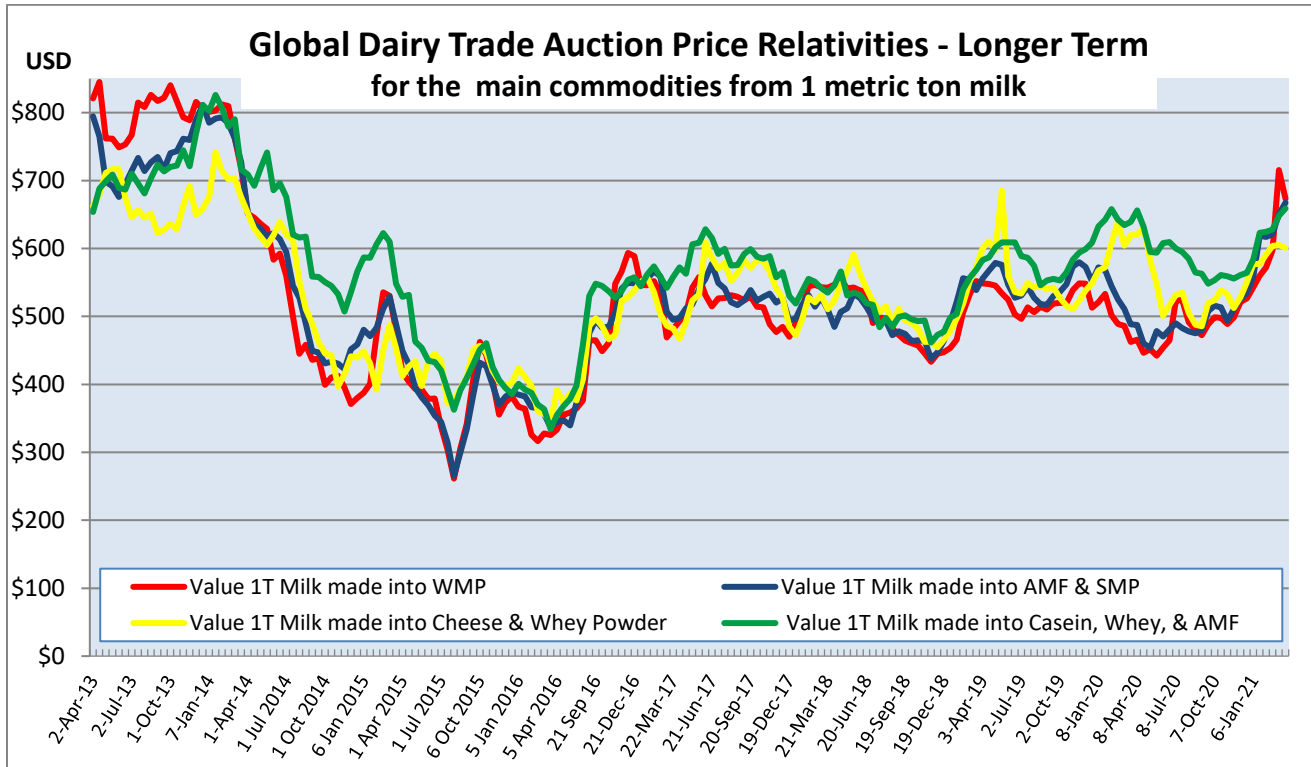
Production and Trade Overview

Normal trade supply and demand influences were disrupted by the onset of the COVID-19 pandemic so that there was a new array of influences on demand, the ability to supply, and on pricing. Export volumes and pricing for the major commodities, especially whole milk powder (WMP), have held up well during the COVID-19 pandemic and the global response. The response to COVID-19 by Governments disrupted foodservice through the world. New Zealand exporters were fortunate that much of the foodservice and consumer products shipped goes to Asia, especially China, where food service has recovered relatively quickly. Despite this recovery in demand for foodservice products in Asia, logistics and shipping delays have become a major disruptor to trade. Many dairy sector exporters are thinking the shipping delays will be shortened or be eliminated by the fourth quarter in 2021.

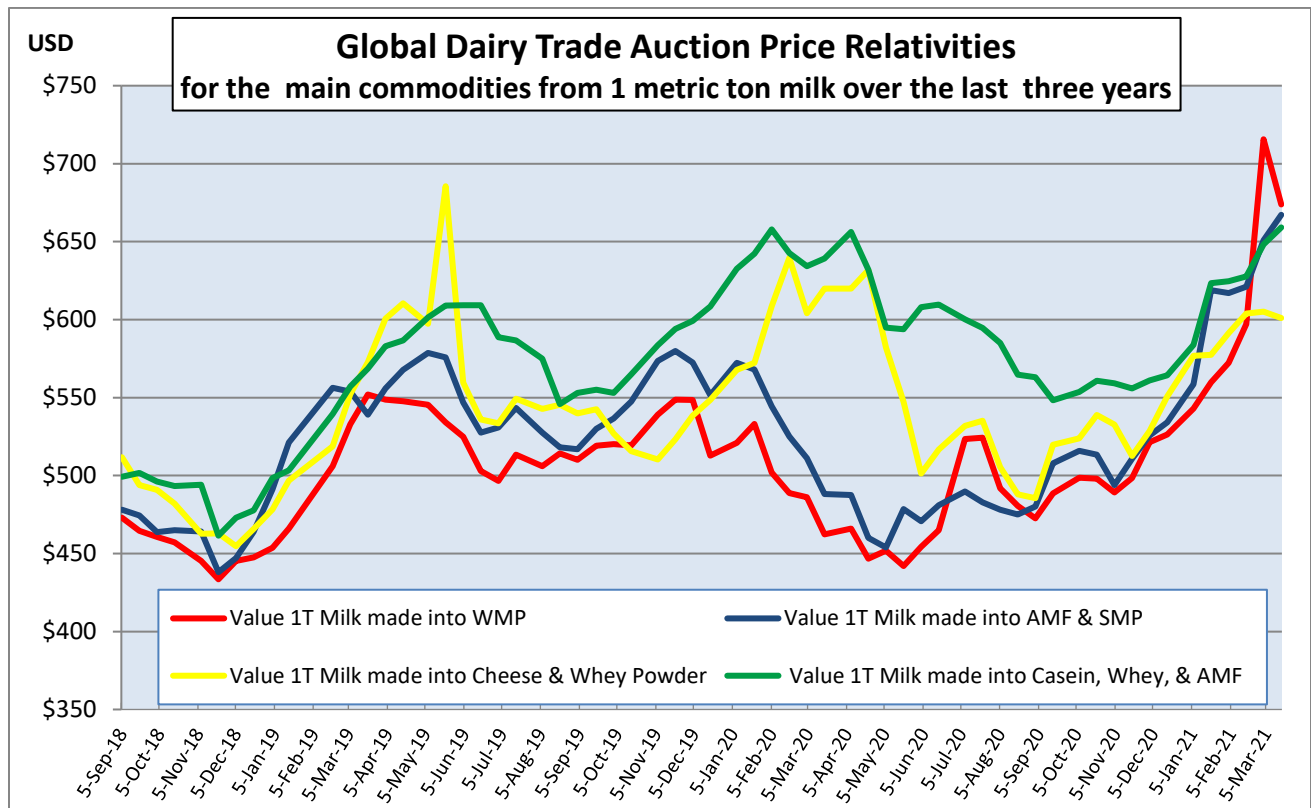
Dairy Production at a Glance

New Zealand Summary Table for Estimated Dairy Product Production					
Commodity Group (1000s Metric Tons)	2019	2020		2021	
	Firm Estimate	Estimate	% change from prev. year	New Forecast	% change from prev. year
WMP	1,490	1,549	4.0%	1,560	0.7%
SMP	375	370	-1.3%	385	4.1%
Butter/AMF	525	500	-4.8%	500	0.0%
Cheese	365	350	-4.1%	370	5.7%
Sub-Total PSD Commodities	2,755	2,769	0.5%	2,815	1.7%
Casein & Caseinates	88	86	-2.3%	85	-1.2%
Whey Products	32	37	15.6%	38	2.7%
Milk Protein Concentrates	78	72	-7.7%	70	-2.8%
Cream Products	126	135	7.1%	150	11.1%
Other Products	224	226	0.9%	231	2.2%
Infant Milk Formula	117	101	-13.7%	90	-10.9%
Sub-Total Rest of Dairy	665	657	-1.2%	664	1.1%
Total Production	3,420	3,426	0.2%	3,479	1.5%

Source: FAS/Wellington estimates Note: Butter/AMF line has the AMF adjusted to butter equivalents



Source: GDT, TDM LLB, FAS/Wellington estimates

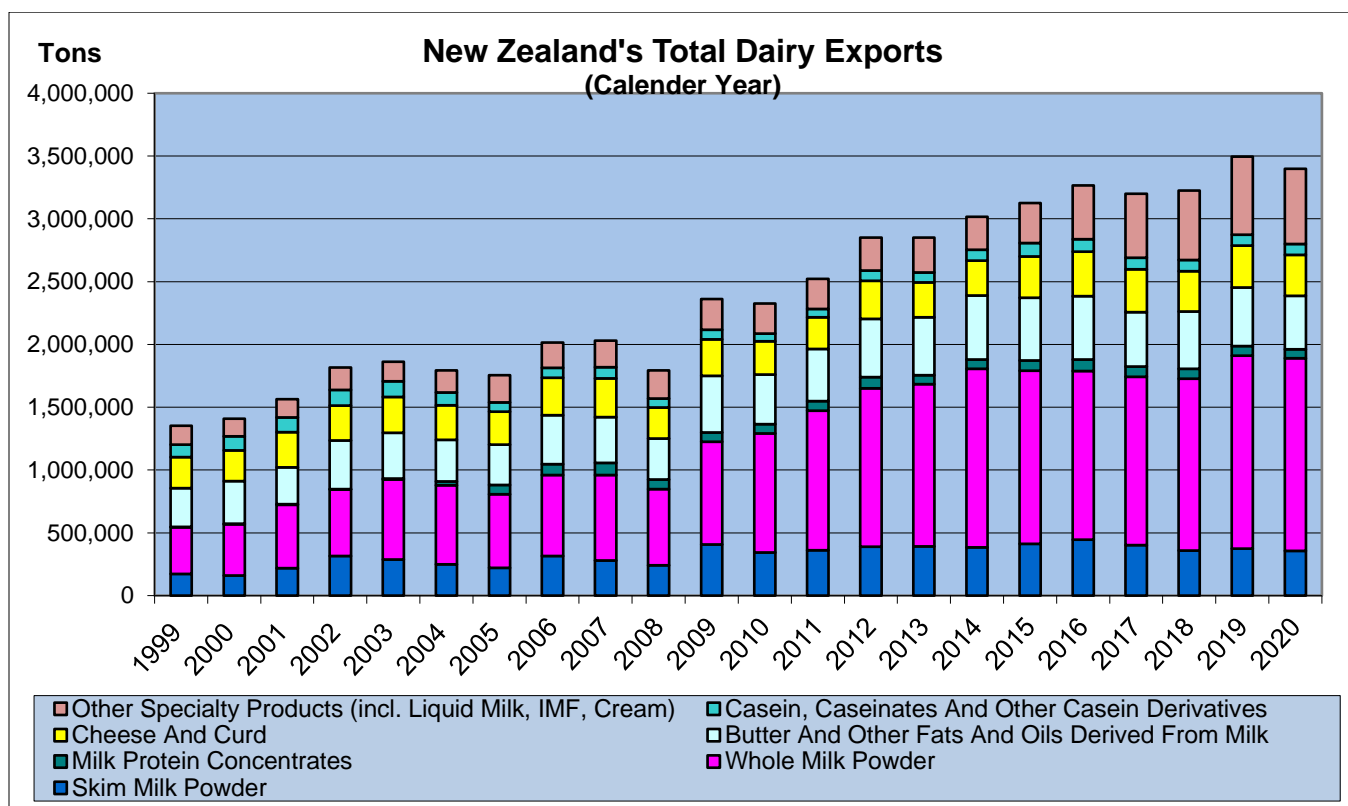


Source: GDT, TDM LLB, FAS/Wellington estimates

Dairy Exports at a Glance

New Zealand Summary Table for Dairy Product Export Quantities					
Commodity Group (1000s Metric Tons)	2019	2020		2021	
	Actual	Actual	% change from prev. year	New Forecast	% change from prev. year
WMP	1,536	1,533	-0.2%	1,540	0.5%
SMP	373	356	-4.6%	370	3.9%
Butter/AMF	509	471	-7.5%	474	0.6%
Cheese	335	327	-2.4%	337	3.1%
Sub-Total PSD Exports	2,753	2,687	-2.4%	2,721	1.3%
Casein	88	86	-2.3%	85	-1.2%
Whey Products	32	37	15.6%	38	2.7%
Milk Protein Concentrates	78	72	-7.7%	70	-2.8%
Cream Products-Food Service	126	135	7.1%	150	11.1%
Other Products	54	51	-5.6%	56	9.8%
Infant Milk Formula	117	101	-13.7%	90	-10.9%
Sub-Total Non PSD Exports	495	482	-2.6%	489	1.5%
Total Exports	3,248	3,169	-2.4%	3,210	1.3%

Source: TDM LLB, FAS/Wellington estimates. Note: Butter/AMF line has the AMF adjusted to butter equivalents



Source: TDM LLB

New Zealand Dairy Product Export Destinations by Value (USD)						
Partner Country	Annual Total Value (1000's USD) for Calendar Year					
	2015	2016	2017	2018	2019	2020
China	1,900,092	2,108,384	3,312,051	3,451,463	4,096,292	4,511,655
Australia	427,959	571,573	740,883	841,585	832,348	760,083
United States	797,433	663,642	583,773	485,885	568,208	560,016
Japan	440,304	399,512	497,608	521,294	517,014	510,465
Indonesia	282,525	300,251	374,890	357,663	379,777	419,602
Malaysia	403,756	310,469	452,835	422,381	424,818	415,542
Philippines	334,335	316,811	377,226	393,330	420,355	361,355
Saudi Arabia	273,605	251,298	284,254	281,289	309,499	346,512
Thailand	280,683	242,971	311,810	321,797	331,159	333,783
UAE	438,488	287,003	474,237	403,179	359,559	322,421
Rest of World	3,928,903	3,747,462	4,158,879	4,157,238	4,162,369	3,906,982
World Total	9,508,086	9,199,375	11,568,446	11,637,102	12,401,397	12,448,415

Source: TDM LLB

Product Specific Production and Trade

Production, Supply, and Demand –Whole Milk Powder (WMP)

2021

Following the recent spike in WMP prices (see the GDT Auction charts above) and the generally higher level of pricing in the short term, it is likely WMP production will be emphasized in 2021 as far as it can be without creating an oversupply on world markets. The revised forecast for 2021 production is set at 1.56 MMT, which would be 0.7 percent greater than 2020. The increased forecast is in response to the better profitability of WMP currently, slightly more milk to process, and reduced demand for Infant Formula.

Total processing capacity remains in excess of 1.5 MMT per annum. There is no new capacity about to be commissioned and one new processor with plans to build a plant.

Exports are forecast at 1.54 MMT for 2021, which would be 0.5 percent greater than 2020. Exports to China are expected to remain strong. COVID-19 induced logistical delays are still prevalent

Around two-thirds of WMP is used for either direct recombining for the drinking milk sector, cultured and blended products, or the bakery trade. The balance remains as powder and is repacked into low-volume sachets for consumer use. Predominantly, WMP is exported to countries who are domestically in deficit of milk supplies.

2020

The revised total production for 2020 is estimated at 1.55 MMT, nearly four percent greater than 2019. WMP remained in demand despite the onset of the COVID-19 pandemic. Production was boosted by an increased milk supply in the second half of the year and the rapidly escalating forward pricing for WMP. With WMP being the most cost-efficient product to manufacture, New Zealand processors were quick to emphasize WMP manufacturing during the spring milk flush from September to December.

Despite exports being behind 2019 right through until August 2020, exports shot up during the last four months of the year to reach to reach 1.53 MMT, just 3,000 MT less than 2019.

There is no doubt the COVID-19 pandemic and the country by country response to it has disrupted trade. Even though WMP prices dropped in the first four months after the onset of the pandemic, prices recovered completely over the next five to six months. Shipping delays caused by the pandemic have been problematic but New Zealand's relative closeness to Asia compared with other major exporters has helped minimize these issues.



Source: TDM LLB

New Zealand Whole Milk Powder Export Destinations by Quantity (MT)						
Destination Country	Annual Total Quantity (MT) for Calendar Year					
	2015	2016	2017	2018	2019	2020
China	354,291	389,079	467,620	506,707	632,131	652,914
United Arab Emirates	125,488	96,769	108,503	91,979	84,624	87,339
Sri Lanka	57,764	67,137	85,027	83,893	84,831	84,760
Algeria	121,129	166,570	96,403	96,595	91,419	73,405
Bangladesh	39,039	42,876	59,599	66,506	76,153	60,031
Thailand	44,921	42,522	43,082	49,874	52,526	48,250
Indonesia	32,242	36,392	35,768	42,856	52,526	47,122
Malaysia	82,358	51,111	57,798	49,748	50,383	46,968
Australia	8,215	10,341	24,468	24,907	36,928	43,669
Saudi Arabia	45,073	42,190	32,997	30,473	35,598	42,531
Rest of World	469,894	398,670	330,842	325,503	338,590	345,787
Total for World	1,380,414	1,343,657	1,342,107	1,369,041	1,535,709	1,532,776
Av. FOB price US\$/T	\$2,551	\$2,361	\$3,143	\$3,096	\$3,081	\$3,157

Source: TDM LLB

Dairy, Dry Whole Milk Powder Market Year Begins New Zealand	2019		2020		2021	
	Jan 2019		Jan 2020		Jan 2021	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks (1000 MT)	212	212	150	150	114	150
Production (1000 MT)	1490	1490	1500	1549	1535	1560
Other Imports (1000 MT)	4	4	2	2	3	2
Total Imports (1000 MT)	4	4	2	2	3	2
Total Supply (1000 MT)	1706	1706	1652	1701	1652	1712
Other Exports (1000 MT)	1536	1536	1520	1533	1535	1540
Total Exports (1000 MT)	1536	1536	1520	1533	1535	1540
Human Dom. Consumption (1000 MT)	2	2	2	2	2	2
Other Use, Losses (1000 MT)	18	18	16	16	18	18
Total Dom. Consumption (1000 MT)	20	20	18	18	20	20
Total Use (1000 MT)	1556	1556	1538	1551	1555	1560
Ending Stocks (1000 MT)	150	150	114	150	97	152
Total Distribution (1000 MT)	1706	1706	1652	1701	1652	1712
(1000 MT)						

Not official USDA PSD estimates

Production, Supply, and Demand – Cheese

2021

Total production of cheese for 2021 is now forecast at 370,000 MT, nearly six percent up on 2020. The outlook for all categories of cheeses is good and with the slightly increased milk supply, this will encourage an increase in cheese manufacturing. The food service trade for fresh cheeses such as mozzarella and cream cheese into Asia has recovered, especially into China. This will mean production in New Zealand will likely revert to longer-term trends. Fresh cheese production is expected to continue

its trend of increasing production, offsetting gradually declining hard natural cheese production. Another processor has set up a mozzarella plant which will increase New Zealand's capacity by approximately 20,000 MT per annum, which would put total manufacturing capacity up to approximately 130,000 MT. Additionally, increased whey pricing (whey being a by-product from cheese manufacturing) since September 2020 is supporting the profitability of cheese production.

Cheese exports are now forecast for a moderate increase in 2021 to reach 337,000 MT, three percent up on 2020, in response to recovering food service and consumer demand in Asia. Innovative cheese products such as cheese sticks and lollipop cheeses, that are slightly sweeter, are being developed in China to attract consumers and increase demand.

New Zealand's market access advantage in China will be enhanced on January 1, 2022 when tariffs for all categories of cheese will be reduced to zero. This is likely to not only maintain New Zealand exporters market share in China but possibly increase it in the medium term until other countries, such as Australia, also have tariffs eliminated as part of their FTAs.

Both domestic cheese demand and ending stocks are forecast to be up slightly.

New Zealand Cheese Export Destinations by Quantity (MT)						
Destination Country	Annual Total Quantity (MT) for Calendar Year					
	2015	2016	2017	2018	2019	2020
China	39,550	51,668	56,409	54,572	71,702	75,129
Japan	55,045	61,345	63,552	64,630	66,087	62,384
Australia	51,294	61,959	61,618	47,983	47,805	42,786
South Korea	14,929	19,730	18,957	19,402	22,871	27,451
Philippines	15,654	15,805	13,807	13,410	13,834	13,249
Indonesia	14,122	15,935	17,738	15,572	13,368	13,029
Saudi Arabia	12,122	11,190	12,754	12,189	14,741	11,887
Taiwan	8,883	9,208	9,551	7,950	8,719	9,679
Malaysia	9,044	8,607	12,389	8,745	7,949	9,526
Chile	6,778	7,439	6,795	8,773	3,865	7,564
Rest of World	99,349	92,219	69,140	68,672	63,957	54,283
World Total	326,770	355,105	342,710	321,898	334,898	326,967
Av. FOB price US\$/T	\$3,563	\$3,381	\$4,027	\$4,090	\$3,961	\$4,038

Source: TDM LLB

2020

Estimated cheese production for 2020 continues to be set at 350,000 MT, four percent lower than 2019. Natural hard cheese is primarily only produced during the peak milk supply months (October to December) when all other processing is at full capacity.

New Zealand cheese production is significantly exposed to the food service trade and the disruptions caused by the COVID-19 pandemic to food service did affect orders for New Zealand products and impacted on production during the first half of the year.

Exports in 2020 reached 327,000 MT, two percent less than 2019. Exports for the period January to August 2020 ran at six percent less than the same period in 2019. However, the food service trade recovered well in China - where a significant proportion of the fresh cheese manufactured is destined - in the latter part of the year. In addition, the Global Dairy Trade (GDT) auction prices for cheddar were relatively high compared with milk powders during the first half of the year, which would have stimulated production during the second half of the year to meet supply contract deadlines.

Dairy, Cheese Market Year Begins New Zealand	2019		2020		2021	
	Jan 2019		Jan 2020		Jan 2021	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks (1000 MT)	68	68	73	73	79	68
Production (1000 MT)	365	365	350	350	365	370
Other Imports (1000 MT)	13	13	10	10	13	12
Total Imports (1000 MT)	13	13	10	10	13	12
Total Supply (1000 MT)	446	446	433	433	457	450
Other Exports (1000 MT)	335	335	316	327	345	337
Total Exports (1000 MT)	335	335	316	327	345	337
Human Dom. Consumption (1000 MT)	38	38	38	38	38	40
Other Use, Losses (1000 MT)	0	0	0	0	0	0
Total Dom. Consumption (1000 MT)	38	38	38	38	38	40
Total Use (1000 MT)	373	373	354	365	383	377
Ending Stocks (1000 MT)	73	73	79	68	74	73
Total Distribution (1000 MT)	446	446	433	433	457	450
(1000 MT)						

Not official USDA PSD estimates

Production, Supply, and Demand – Skim Milk Powder (SMP)

2021

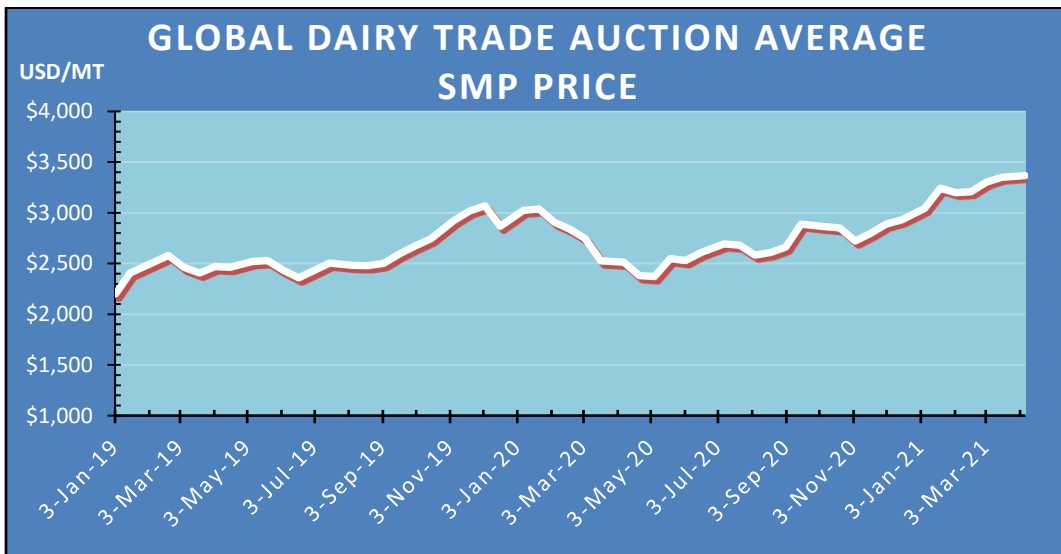
SMP production in 2021 continues to be forecast to reach 385,000 MT, which would constitute a four-percent increase on the revised estimate for 2020. Because SMP is produced in conjunction with butter or AMF, the combined relative pricing determines the profitability compared with the other major products. Along with WMP, SMP prices raced up during the last two months of 2020 and for the first three months of 2021. Butter and AMF prices have also strengthened since September 2020 which supports the manufacture of the SMP/fat stream.

New Zealand SMP has been commanding a US\$300-400 per MT premium over U.S. or EU product up from the traditional US\$100-200/MT premium. This is put down to the supply chain from New Zealand to market being quicker due to the reduced distance to Asian markets; reduced supply during 2020 initially boosting price; and the New Zealand medium heat product having some better functional properties for the purchaser when compared with competing products. Reportedly, New Zealand

processors will manage the balance between SMP/fat and WMP production to optimize WMP supply to match demand.

In addition, during 2021 it is forecast IMF production will be reduced and the protein formerly used for this manufacture will be left and sold as SMP. SMP is the precursor for most IMF base powder.

Exports are forecast to reach 370,000 MT, up nearly four percent on 2020, based on the expectation that all of the increased production will be sold overseas.



Source GDТА

2020

Production of SMP in 2020 has now been revised back to 370,000 MT, 1.3 percent less than the 2019 estimate. Even though stronger pricing for SMP was evident by the fourth quarter in 2020 actual exports for the year at 356,000 MT (down 4.6 percent on 2019) would suggest that production was not as high as had been forecast previously. Bearing in mind New Zealand processors aim to carry the least inventory possible, FAS/Wellington still estimates that ending stocks in 2020 could have increased in the order of 8,000 to 10,000 MT.

Even though SMP is used extensively for protein fortification in consumer products and not quite so much in food service, the COVID-19 pandemic still disrupted trade during the second and third quarters of 2020.

New Zealand Skim Milk Powder Export Destinations						
Destination Country	Annual Total Quantity (MT) for Calendar Year					
	2015	2016	2017	2018	2019	2020
China	122,926	107,627	129,535	126,229	131,410	127,765
Indonesia	24,021	32,470	19,815	20,600	19,977	33,896
Malaysia	31,272	39,439	34,168	31,727	29,547	23,974
Thailand	25,838	27,078	23,952	23,525	24,009	23,178
Philippines	32,668	41,247	26,208	25,590	28,516	22,464
Taiwan	20,655	18,476	18,658	17,612	20,755	20,121
Singapore	35,266	24,038	23,975	19,405	22,256	19,630
Vietnam	18,483	19,373	22,582	12,520	14,864	15,688
Saudi Arabia	14,738	12,885	3,315	2,491	7,309	10,095
Kuwait	3,879	2,324	6,798	1,579	4,123	8,379
Rest of World	81,568	119,100	91,996	76,934	70,143	51,146
World Total	411,314	444,057	401,002	358,212	372,909	356,336
Av. FOB price US\$/MT	\$2,337	\$1,967	\$2,234	\$2,020	\$2,427	\$2,875

Source: TDM LLB

Dairy, Milk, Nonfat Dry Market Year Begins New Zealand	2019		2020		2021	
	Jan 2019		Jan 2020		Jan 2021	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks (1000 MT)	117	117	116	116	155	124
Production (1000 MT)	375	375	400	370	385	385
Other Imports (1000 MT)	4	4	5	8	4	5
Total Imports (1000 MT)	4	4	5	8	4	5
Total Supply (1000 MT)	496	496	521	494	544	514
Other Exports (1000 MT)	373	373	355	356	390	370
Total Exports (1000 MT)	373	373	355	356	390	370
Human Dom. Consumption (1000 MT)	7	7	11	14	10	15
Other Use, Losses (1000 MT)	0	0	0	0	0	0
Total Dom. Consumption (1000 MT)	7	7	11	14	10	15
Total Use (1000 MT)	380	380	366	370	400	385
Ending Stocks (1000 MT)	116	116	155	124	144	129
Total Distribution (1000 MT)	496	496	521	494	544	514
(1000 MT)						

Not official USDA PSD estimates

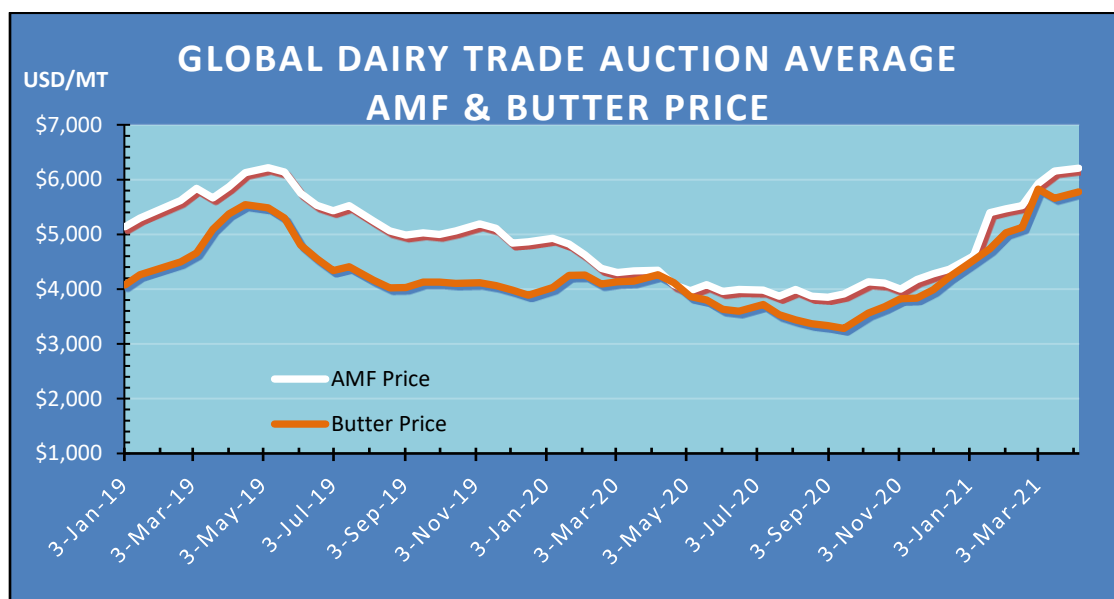
(Note: FAS/Wellington bases its forecasting on the SMP produced being the final step and sold at that point. SMP is also the intermediary product in processes that produce many other protein products. SMP that is intermediate to other protein products made in New Zealand is not included in the SMP total here.)

Production, Supply, and Demand – Butter and Anhydrous Milk Fat (AMF)

Note: All the tonnages in the PSD table and the narrative below are expressed in butter equivalents.

2021

The forecast for 2021 butter and AMF production is now 500,000 MT, which would be the same as the revised total for 2020. Butter and AMF prices strengthened during late 2020 and into the first quarter 2021, which was thought to support increasing butter and AMF production. However, the burgeoning production and export of UHT cream for food service production is now limiting butter and AMF production.



Source: GDTA

Westland Milk Products (formerly a farmer-owned cooperative now owned by Chinese group Yili) has announced it is going to increase its butter capacity by 21,000 MT, to be commissioned around September 2021. This production will be aimed at consumer-ready packs.

Total exports for 2021 are forecast at a similar level to the actual 2020 volume at 474,000 MT (butter equivalents), 0.6 percent above 2020.

Even though world butter and AMF prices came off the peak reached during 2019 as the Northern hemisphere processors geared up butter and AMF production and exports, the bottom of the price trough was reached in mid-2020 exacerbated by COVID-19. Since then prices have risen steadily and are now matching the peak in 2019.

UHT cream exports are forecast to reach 150,000 MT, which would amount to an 11-percent increase. The current rate of shipping suggests the total could go even higher. This would equate approximately 72,000 MT of butter.

2020

The production estimate for 2020 for total AMF and butter has been revised down to 500,000 MT, which would be 4.75 percent less than 2019. Actual exports came in less than previously expected at 471,000 MT (7.5 percent less than 2019), which would suggest production was also less than had been expected. While there was a larger milk supply available more milk was partitioned into WMP production.

In addition, UHT cream production and exports (being essentially a product for the food service sector) suffered during the Chinese COVID-19 lockdown, however exports bounced back very quickly later in 2020 and total UHT cream exports reached 135,000 MT, seven percent greater than 2019. This would equate to approximately 65,000 MT of butter.

New Zealand Butter & AMF Export Destinations by Quantity (MT Butter Equivalents)						
Destination Country	Annual Total Quantity (MT Butter Eq.) for Calendar Year					
	2015	2016	2017	2018	2019	2020
China	71,886	72,056	87,849	104,584	89,671	97,635
Australia	20,370	29,443	30,017	36,940	36,050	36,110
Philippines	30,334	31,589	33,031	33,529	36,314	32,851
Russia	8,766	22,971	15,018	8,926	26,171	28,880
Saudi Arabia	23,760	26,837	23,058	22,766	22,568	27,104
United States	20,122	12,111	7,287	14,324	32,668	23,596
Mexico	36,271	59,482	25,757	23,191	26,214	21,779
Egypt	42,853	40,050	16,254	19,642	19,095	19,552
Malaysia	16,079	16,509	16,581	16,352	17,500	17,662
Vietnam	16,570	14,803	18,039	16,515	20,587	16,623
Rest of World	264,862	228,586	203,026	204,118	182,005	148,916
World Total	551,873	554,437	475,917	500,887	508,843	470,708
Av. FOB price US\$/T BEQ	\$2,953	\$3,078	\$4,953	\$5,175	\$4,510	\$3,993

Source: TDM LLB

Dairy, Butter	2019		2020		2021	
	Jan 2019		Jan 2020		Jan 2021	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Market Year Begins						
New Zealand						
Beginning Stocks (1000 MT)	105	105	93	93	119	93
Production (1000 MT)	525	525	525	500	520	500
Other Imports (1000 MT)	1	1	1	1	1	1
Total Imports (1000 MT)	1	1	1	1	1	1
Total Supply (1000 MT)	631	631	619	594	640	594
Other Exports (1000 MT)	509	509	470	471	495	474
Total Exports (1000 MT)	509	509	470	471	495	474
Domestic Consumption (1000 MT)	29	29	30	30	30	30
Total Use (1000 MT)	538	538	500	501	525	504
Ending Stocks (1000 MT)	93	93	119	93	115	90
Total Distribution (1000 MT)	631	631	619	594	640	594
(1000 MT)						

Not official USDA PSD estimate

Other Products

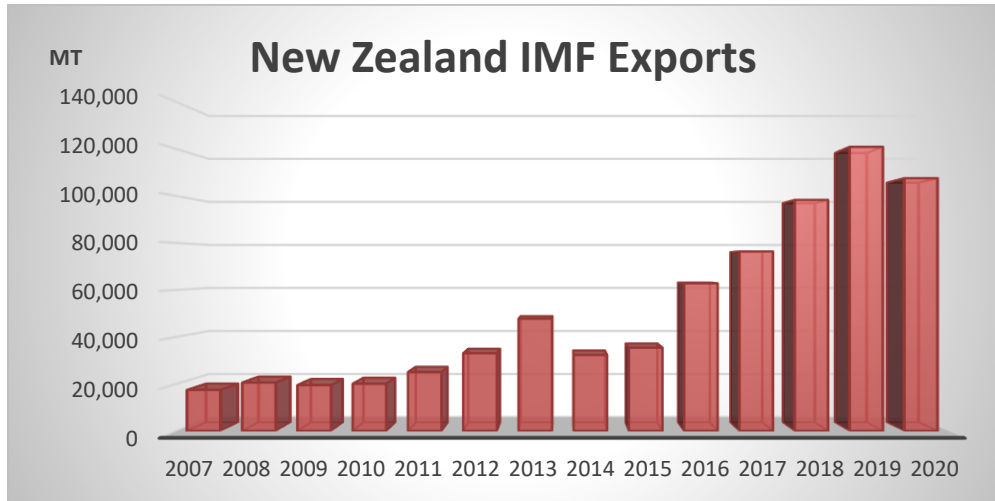
Infant Milk Formula (IMF)

IMF exports have been a real success story for New Zealand dairy processors. In 2019, although IMF volume was only approximately three percent of total dairy production, over nine percent of total dairy export receipts were attributable to IMF sales. For 2020, the export volume was reduced to 107,525 MT, 11 percent less than 2019. However, the price per MT was 19 percent up on 2019 which meant in U.S. Dollar terms total export value was nearly six percent up on 2019. IMF maintained its place supplying just over three percent of exports by volume but nearly ten percent of exports by value.

New Zealand Export Statistics for Infant Milk Formula Products									
Partner Country	January - December 2018			January - December 2019			January - December 2020		
	Value USD	Quantity (MT)	Unit Value USD/MT	Value USD	Quantity (MT)	Unit Value USD/MT	Value USD	Quantity (MT)	Unit Value USD/MT
China	325,193,824	27,182	\$11,964	482,069,468	39,356	\$12,249	692,243,955	51,625	\$13,409
Australia	303,313,318	40,023	\$7,578	288,571,131	44,054	\$6,550	220,822,373	32,807	\$6,731
Hong Kong	198,406,752	19,160	\$10,355	270,887,269	23,335	\$11,608	198,932,778	10,559	\$18,840
Thailand	16,422,486	2,322	\$7,071	17,016,599	4,165	\$4,085	19,638,568	4,332	\$4,534
Taiwan	17,065,968	1,824	\$9,358	17,695,534	1,690	\$10,473	15,447,604	1,510	\$10,231
South Korea	18,389,561	1,265	\$14,543	12,267,582	780	\$15,733	14,739,731	902	\$16,339
Malaysia	15,691,515	2,006	\$7,822	16,753,434	1,536	\$10,908	11,112,758	1,003	\$11,080
Russia	7,774,266	644	\$12,076	9,136,527	766	\$11,924	7,199,709	571	\$12,610
Indonesia	779,596	218	\$3,570	3,472,354	1,122	\$3,096	4,164,969	1,337	\$3,115
UK	3,943,720	425	\$9,281	3,743,117	391	\$9,576	4,137,295	400	\$10,353
Rest of World	21,248,076	3,235	\$6,568	23,314,015	3,652	\$6,384	22,857,483	2,479	\$9,220
World Total	928,229,082	98,304	\$9,442	1,144,927,030	120,847	\$9,474	1,211,297,223	107,525	\$11,265

Source: TDM LLB, Note that the charts & table include all HS codes which relate to IMF

The future for IMF exports does not seem as rosy as it did pre COVID-19. Reportedly, the market in China for imported IMF has not recovered after the Chinese COVID-19 lockdown as quickly as it had been expected to. FAS/Wellington is forecasting exports will be in the region of 90,000 to 95,000 MT for 2021.



Source: TDM LLB, Note that the charts & table include all HS codes which relate to IMF

A feature of exports over the last four years has been the big growth of shipments to Australia. Some of the IMF product shipped is further processed in Australia to a final formulation and packaging. A significant volume was re-exported from Australia through informal channels (daigou pathway) to China mainly. Since the onset of the pandemic the daigou channel has completely shut down. In addition, there are reports that the high cost of imported IMF has encouraged some purchasers in China to shift back to domestic IMF. This factor, combined with a lower number of infants to feed, is changing perceptions of the Chinese markets from a growth market to a more mature market for IMF.

There are now eight processors involved in manufacturing IMF and exporting it. Only manufacturers with complete supply chain control and ingredient traceability can be approved for IMF manufacture and export into China. New Zealand processors now have a large capacity for IMF production well in excess of current levels of production.

Imports

New Zealand imported a total of US\$408 million worth of dairy products in 2020, approximately one percent less than 2019. The leading import was again lactose used in the manufacture of WMP. The lactose volume imported reached 121,750 MT, up three percent from 2019.

Attachments:

No Attachments