Required Report: Required - Public Distribution **Date:** October 02,2019

Report Number: NZ2019-0007

Report Name: Dairy and Products Annual

Country: New Zealand

Post: Wellington

Report Category: Dairy and Products

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Report Highlights:

The milk supply from New Zealand's dairy farms in 2020 is forecast to remain steady compared to 2019, at 21.86 million metric tons (MMT). This is 0.7 percent less than the record volume in 2018. It is forecast to be produced from 4.94 million (m) cows, also steady from 2019 and 58,000 head (about one percent) less than were milked in 2018. Exports are forecast to fall slightly in 2020, as 2019 exports were inflated as a result of strong inventory to begin the year. New Zealand dairy may be at a crossroads with negative influences seemingly outweighing the positive ones.

Executive Summary- New Zealand Dairy at a Crossroads

The milk supply from New Zealand's dairy farms in 2020[1] is forecast to remain steady compared to 2019, at 21.86 million metric tons (MMT). This is 0.7 percent less than the record volume in 2018. It is forecast to be produced from 4.94 million (m) cows, also steady from 2019 and 58,000 head (about one percent) less than were milked in 2018.

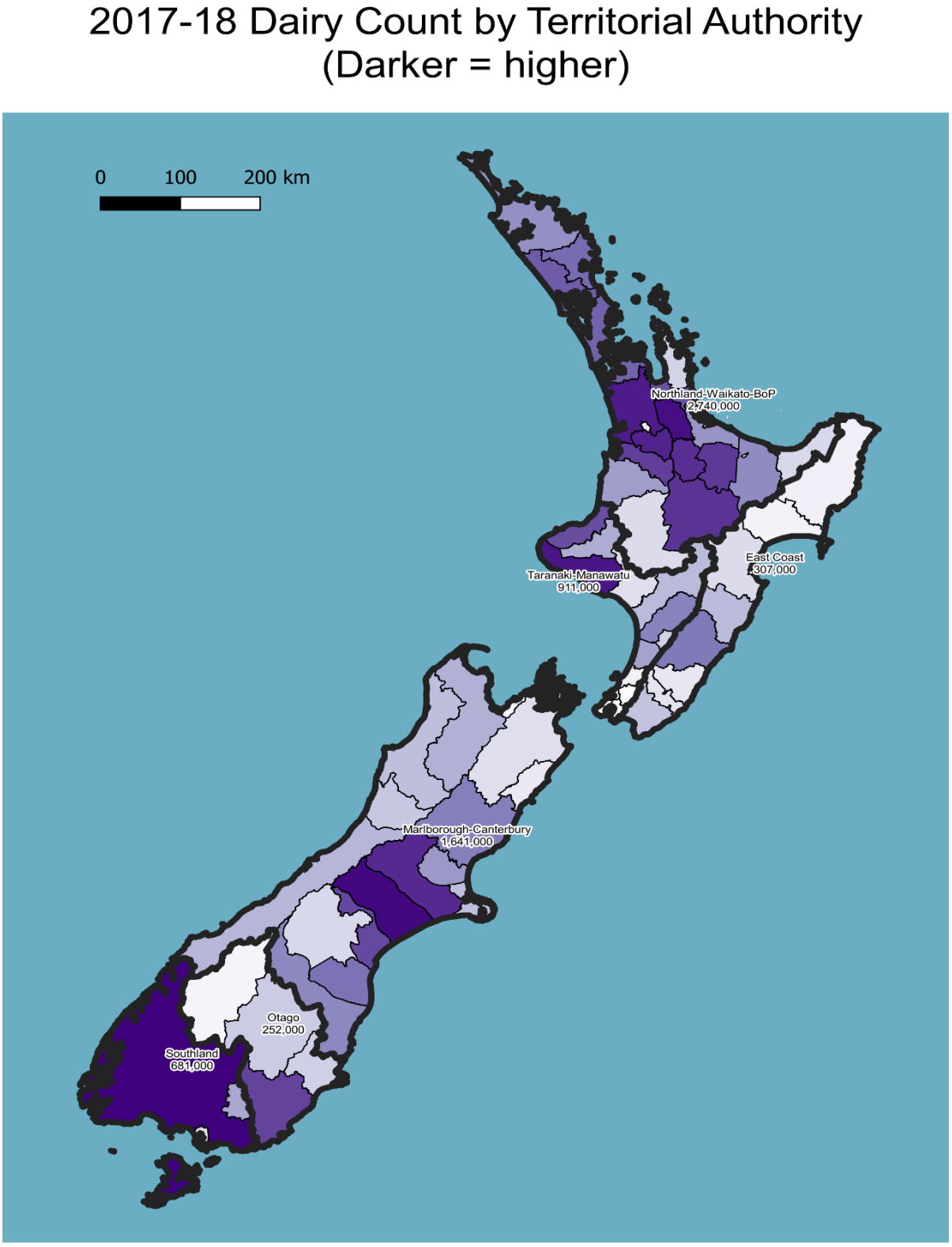
The sector is facing serious headwinds ranging from potentially significant constraints from new environmental regulations through to the risk of generally carrying too much debt. The general air of uncertainty is leading to a loss of confidence. It is fairly certain that "peak cows" have been reached and the sector is heading into a scenario of trying to maintain milk supply with fewer cows. At the same time there are still positives in the sector, which depending on timing may offset the negatives. For example, farm gate milk prices continue to be strong, there remains huge productive efficiency potential still untapped in the New Zealand cow herd, and interest rates are forecast to remain low at least for the next one to two years. How these influences balance out over the next five years will determine whether the milk supply is maintained, increases, or begins a downward trend.

Because the milk supply is forecast to be stable in 2020 compared to 2019 (assuming normal weather), overall dairy products production is also forecast to also be relatively stable at 3.24 MMT (up 0.6 percent). Overall exports, however, are forecast to fall slightly (0.8 percent) to 3.19 MMT after peaking in 2019 at 3.21 MMT (up seven percent from 2018). This decline is because of an expected inventory reduction during 2019. Positive weather and pasture growth in 2018 led to strong quarter four (Q4) milk supply and a buildup of inventory late in 2018 as the increased milk supply was processed to whole milk powder (WMP) and skim milk powder (SMP), much of which was then exported in 2019. As a result, WMP exports are estimated to peak in 2019 at 1.48 MMT (up eight percent from 2018), but are expected to see a reduction in 2020 to a forecast 1.42 MMT, down four percent.

Outside of the main commodities, UHT cream for the food service industry in Asia and Infant Milk Formula (IMF) exports are the significant movers. Cheese exports are remaining reasonably stable but are now driven by mozzarella and fresh cheese exports, which are estimated to comprise more than 50 percent of total cheese exports.

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

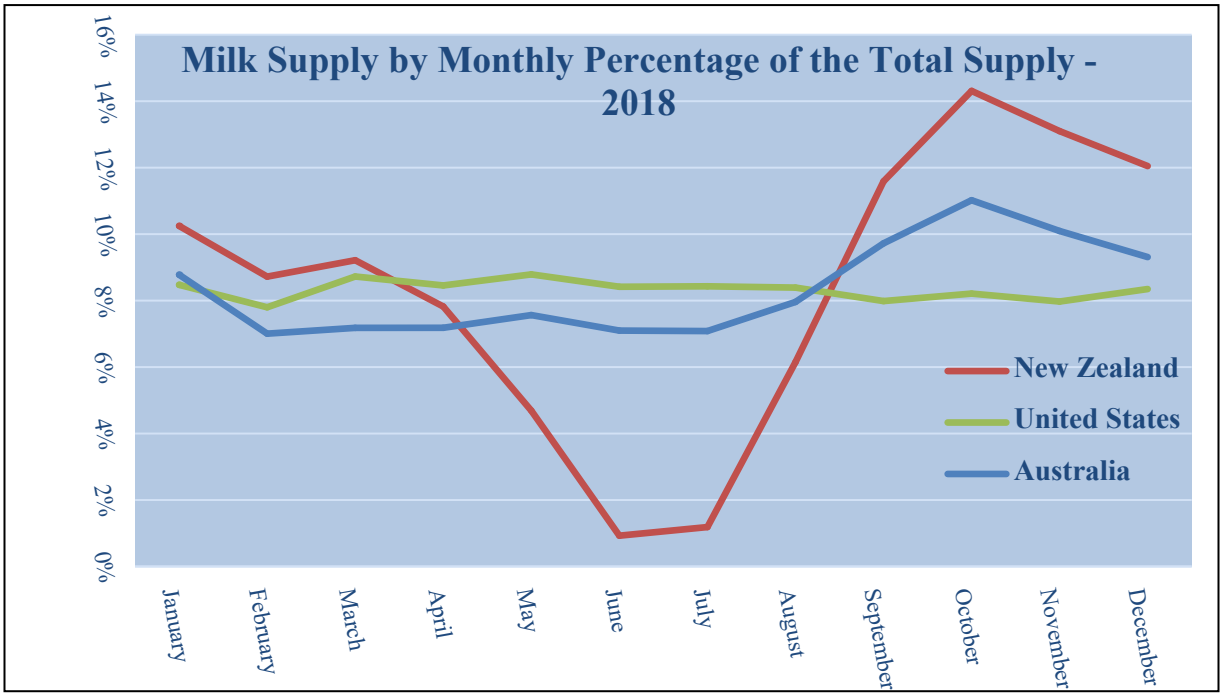
Total Dairy Cattle Numbers in New Zealand by Region



Graphic courtesy of Beef+LambNZ; Source: Beef+LambNZ, StatisticsNZ, LIC, DairyNZ

Dairy Industry Overview

Dairy is the largest sector in New Zealand and dominates New Zealand agriculture and became the largest merchandise export sector not just in agriculture but in the entire economy. Routinely, dairy exports contribute 25-30 percent of New Zealand's total exports. New Zealand's dairy industry is reasonably unique in the world because it is focused on exporting with around 95 percent of total production being exported. In addition, New Zealand's dairy industry is almost entirely pasture-based. New Zealand has a temperate climate and pasture grows all year round, though in winter growth is at only 10 to 20 percent of the rate in mid-spring. This has meant the industry has developed around an outdoor pasture grazing based feeding model. Because it is export focused primarily on producing milk powders, cheese, and butter, and does not have to satisfy a large domestic liquid milk demand, it has a highly seasonal milk production cycle where the vast majority of the national herd is calved in the spring (mid-July through mid-September) with lactations usually ceasing in May. This is very efficient from a milk production standpoint but does not help manufacturing factory throughput efficiency. The chart below shows the very strong seasonality of milk supply in New Zealand compared to the United States and even Australia. Because New Zealand dairy genetics have been selected for the milk protein and fat content, rather than total liquid yield, milk now produced in New Zealand contains approximately nine percent milk solids compared with most major milk producing countries at about 7.5 percent. This endows a manufacturing advantage on milk processors making powders in New Zealand.



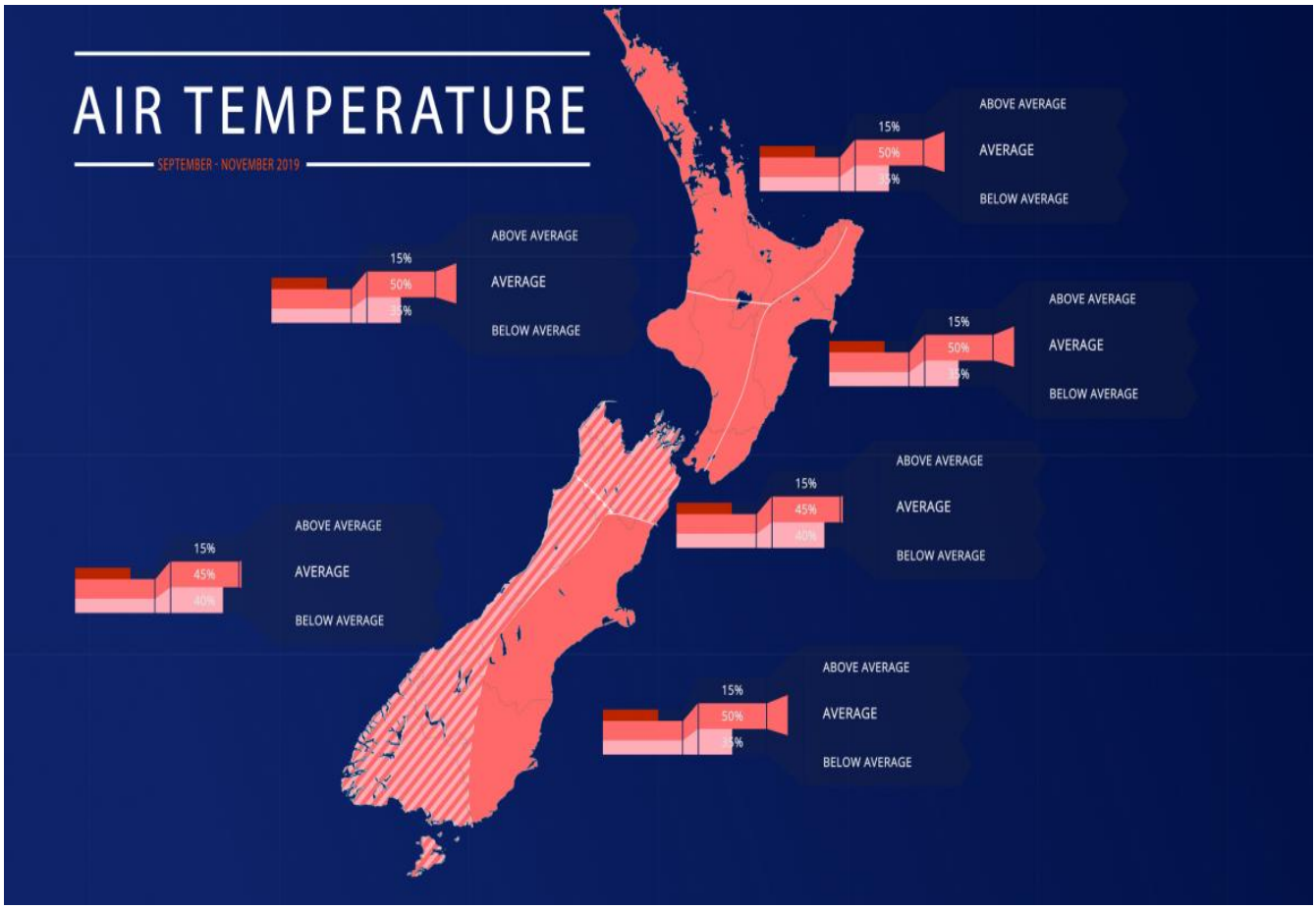
Source: DCANZ, Dairy Australia, USDA-NASS

The North Island is home to a bigger proportion of the dairy cattle herd, 3.96 million dairy cattle, while the South Island has 2.57 million dairy cattle.

Seasonal Pasture Production

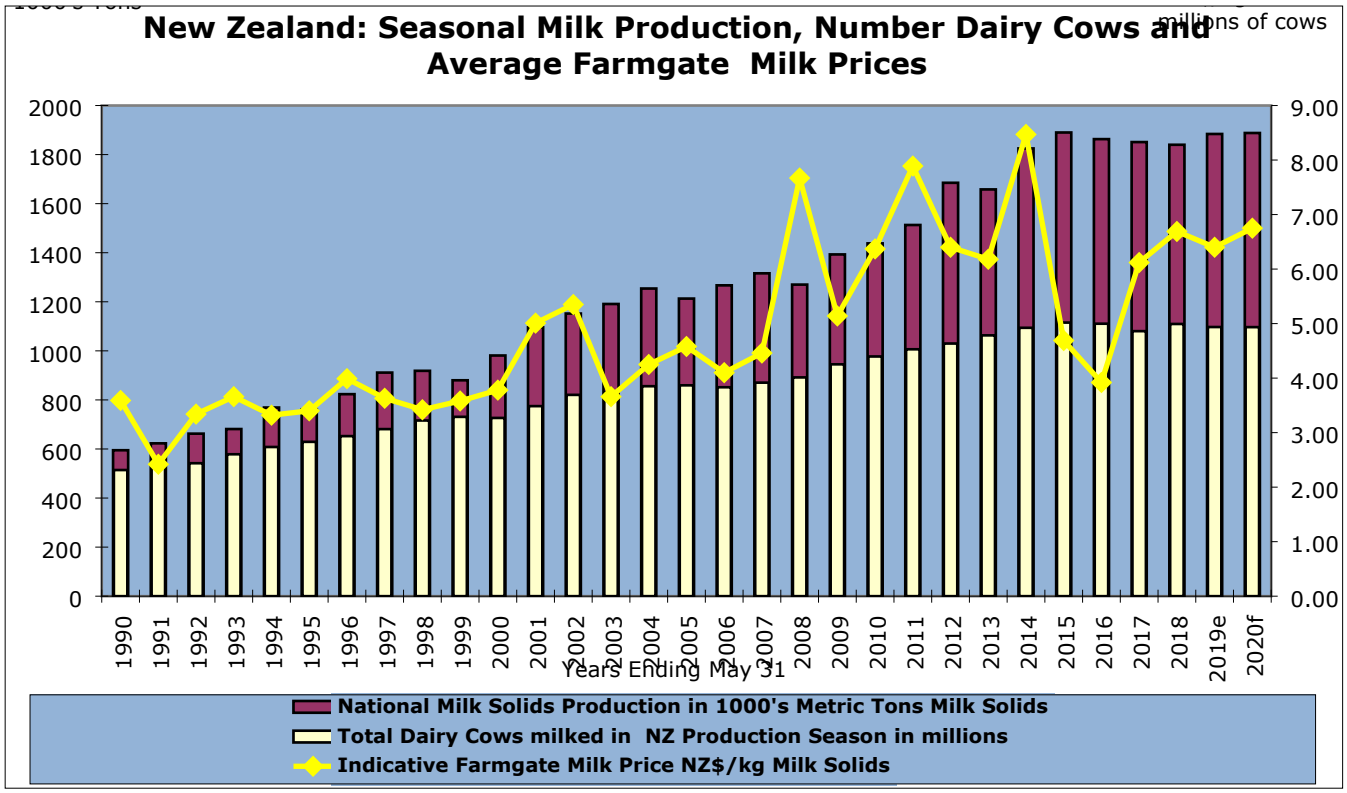
Even though drier than normal conditions persisted over much of the North Island during February through April 2019, the above average volumes of pasture and conserved hay and silage carried into that period on most farms saw them through the autumn satisfactorily. Plentiful rains later in the autumn stimulated pasture growth going into winter, which has meant most farms were well set up with high pasture volumes ahead of the leaner pasture growth months of June, July, and August. Anecdotal reporting suggests that generally cows have come through the winter in good condition and pasture volumes were at optimal levels for the onset of calving in late July and August.

The advent of "sudden stratospheric warming "(SSW) over the Antarctic region is likely to increase the likelihood of unseasonal cold snaps over most of New Zealand during spring (September-November) 2019 according to the National Institute for Water and Atmospheric Research (NIWA). While there has been a stretch of 31 straight months of temperatures above long term averages in New Zealand, NIWA scientists expect that during the spring period monthly temperatures for at least one month will drop to below average. NIWA are, however, expecting normal to above average rainfall in all dairying areas for spring 2019. This weather forecast is likely to only slightly depress daily pasture growth rates in spring below 2018 on the basis that pasture conditions were favorable entering the spring.



Source: NIWA NZ Seasonal Outlook September to November 2019

Milk Supply



Sources: MPI, LIC, DairyNZ, FAS Wellington's own estimates, StatsNZ

2020

Total milk production for 2020 is forecast at 21.86 MMT, the same as 2019. Because cow numbers are not expected to change materially, at a forecast 4.94 million head, and based on normal weather, it is expected a status quo situation will prevail. That is not to say there are not under currents which will force change on the sector over the medium term. However in the short term (next twelve months), it is unlikely any new environmental constraints (in addition to the nutrient discharge limits already in place) will have had time to be implemented at farm level. So farmers will make decisions based primarily on seasonal pasture growth, the cost of supplementary feed, and the forecast milk price. At this stage it is likely these conditions will lead to a situation where cow numbers do not change significantly and farmers continue to attempt to utilize pasture feed to the best of their ability.

Weighing negatively on many dairy farm businesses is the level of debt servicing now required as the banks start to enforce annual principal reductions. A significant minority of dairy businesses have such high debt that their net profit is small and do not have any possibility for expansion or growth. This combined with looming environmental constraints that are forecast to be implemented down to farm level over the next two to five years, are causing farmers to lose confidence at rates not seen since the 1980s.

2019

Total milk supply for 2019 is forecast at 21.86 MMT, down less than one percent on 2018. The volatile weather patterns of a small island nation located in southern windy latitudes is, as usual, expected to play a

major role in determining the final production level given farmers rely on pasture for the majority of their cows diets. In addition, the following factors are expected to play a part in influencing milk production:

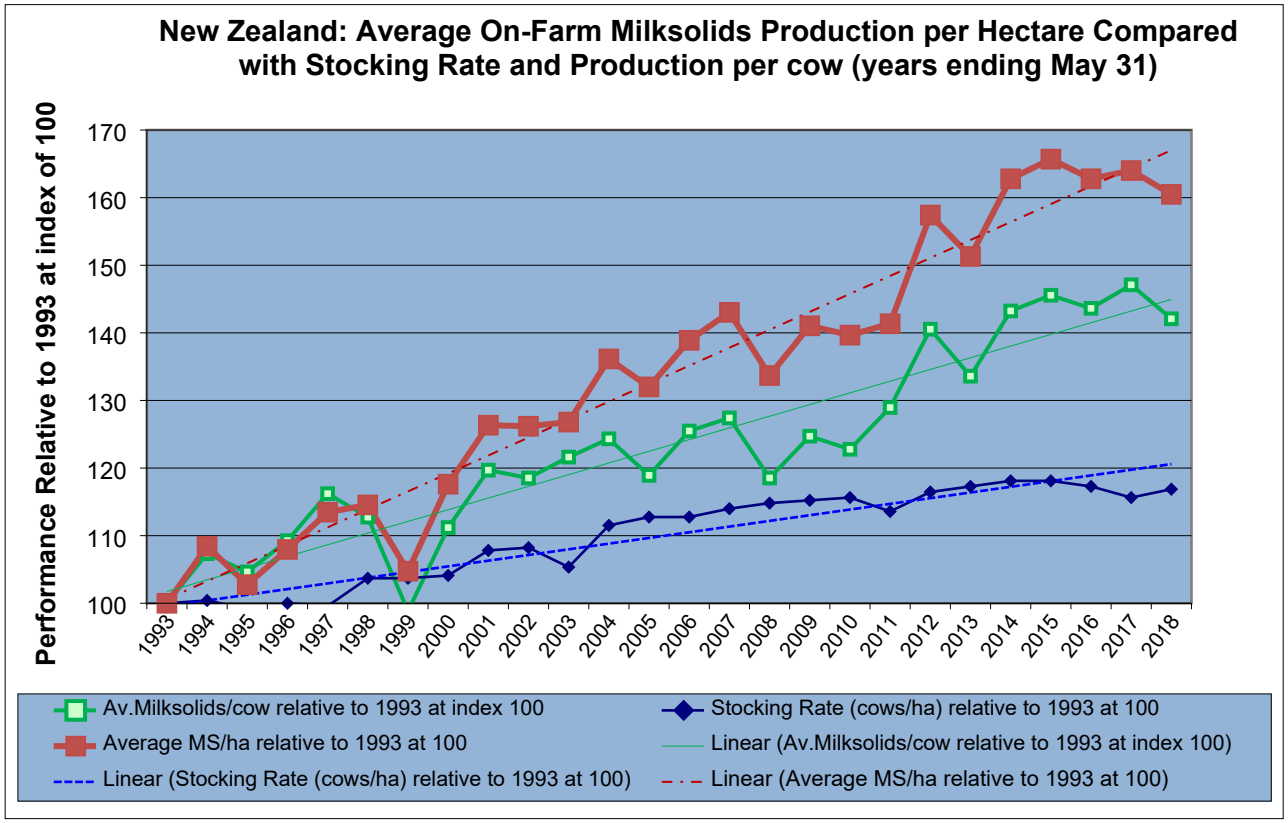
- Total numbers of cows being milked are estimated at 4.94 million head. This is approximately 56,000 head (1.1 percent) less than 2018.

- Farmers are expected to receive a milk price of around NZ$ 6.35/ kilogram milk solids (kg MS), (USD 4.10/kg MS), for the year ending May 2019. Milk prices for 2019/2020 are forecast at NZ$ 6.75/kg MS (USD 4.32/kg MS) the mid-point of NZ$ 1.00 wide guideline range, which should mean most farmers, will invest in supplementary feed if they face a pasture growth deficit in the second half of the year.

- The first half 2019 (January to June) milk supply was less than the prior comparative periods in 2017 and 2018, but still the third highest first half production ever.

- Winter milk production, June through July, was up 8.5 percent year-on-year in response to continued price incentives offered by processors.

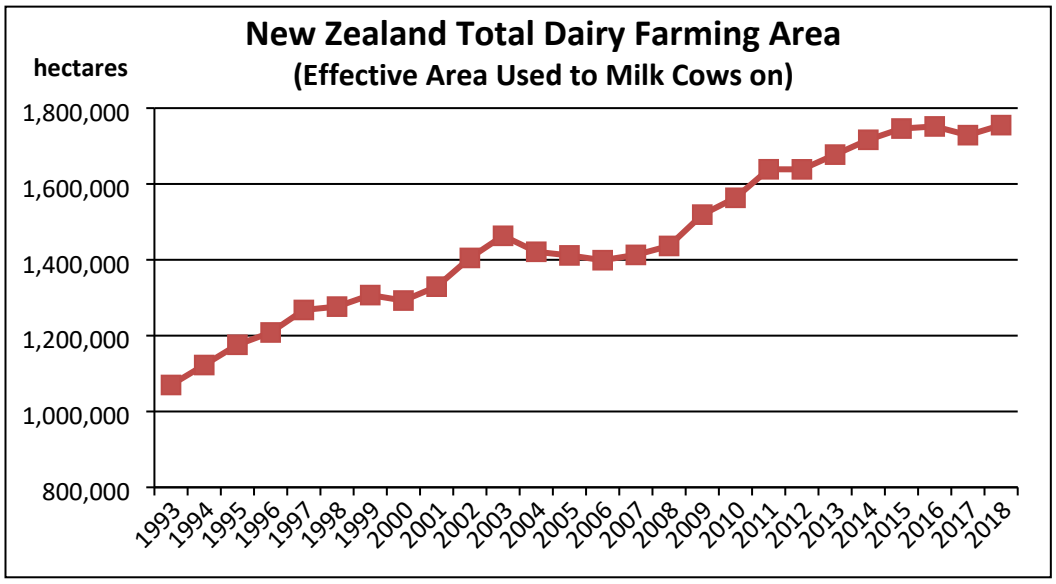
- Even though dairy farms were generally positioned very well in terms of pasture levels and cow conditions at the onset of calving, it will be a difficult ask to match the 2018 spring and early-summer (August through December) production level. This is because the NIWA forecast calls for at least 30 days in spring to experience cooler than average weather, which will act to depress pasture production and milk production.



Source: DairyNZ, & FAS Wellington Analysis

Longer Term Outlook

It certainly appears "peak cows" has been reached, but a key question facing the dairy industry is has it also reached "peak milk"? Between 1993 through 2015 there was a trend of land conversions to dairy farming. Dairy cow numbers milked peaked in 2015 at 5.02 million head. Dairy cattle numbers have generally trended down since 2015 in response to constrained net profitability after debt servicing, cost increases, and new environmental regulations being implemented.



Source: Dairy NZ/LIC

Over the longer term both cow numbers and milk production will be dependent on the balance and timing of how the following dynamics both negative and positive impact on the sector.

The negative influences:

- **Climate change:** The climate change response "zero carbon" bill in front of parliament now has an aspirational target of net carbon emissions at zero by 2050. It is proposed agriculture will be brought into the Emissions Trading Scheme and will effectively pay a carbon tax on five percent of its methane emissions (at NZ$25/ton CO2 equates to NZ$0.01c/kg milk solids produced). However this will be stepped up over time and it is proposed agriculture will have to reduce its methane emissions below 2017 levels by 24 to 47 percent by 2050.

- **Water Quality:** In addition to the rules currently being progressively implemented on a regional scale to limit nitrogen, phosphate, sediment, and pathogen discharges to waterways, the Government is proposing even higher standards for water quality and a tighter time frame to achieve them. The costs to mitigate on-farm effects to comply with the new laws will be ongoing, high, and may mean some farms may cease to operate as dairy farms.

- **Biosecurity:** There is a major review of the current biosecurity law, which could increase compliance costs and the burdens on farmers in the event of an incursion.

- **Debt:** Of all the agricultural sectors, the dairy sector is carrying more debt as a proportion of farm asset values than any other sector. A significant minority of farms are carrying so much debt that even with a small upward increase in interest rates they would no longer be viable.

- **Banks:** Not only are the banks starting to enforce principal reduction conditions on dairy farm loans, the Reserve Bank (NZ central bank) is proposing to significantly increase the ratio of equity required of the trading banks. This is likely to increase borrowing costs in the long run.

- **Confidence:** The growing level of uncertainty is causing farmers to lose confidence.

On the positive front:

- **Milk Prices:** There continues to be good offshore demand for dairy products at prices which under normal circumstances would be profitable for farmers. In addition, new avenues for higher priced products such as organics and A2 protein milk continue to open up.

- **Productivity:** Ongoing genetic gains continue to increase the productive potential of the national cow herd by 0.5 to one percent per year.

- **Cow nutrition:** Over the last few years many farmers have realized that they can reduce cow numbers and feed the remaining cows a lot better and maintain, if not increase, milk production. There is huge potential in the current cow herd to increase production with better nutrition. Some industry experts even estimate that with better feeding there could be a ten percent decrease in cow numbers and current production could be maintained or even exceeded.

- **Interest rates:** Current bank interest rates remain very low by historical standards.

Industry analysts believe that cow numbers have peaked and will at best be maintained around the 4.9 million head mark but will likely continue to trend downward. Horticultural enterprises are booming in New Zealand and can increasingly afford to pay more for land than dairy farmers.

Another factor impacting the industry is the proliferation of new processing facilities either being planned, currently being constructed, or having come on-line – especially in the Waikato region of the North Island. With milk supply largely static in New Zealand, there is increased competition between more players and processors for the same amount of milk supply.

Production Supply, and Demand – Liquid Milk

Dairy, Milk, Fluid	2018		2019		2020	
Market Begin Year	Jan 2018		Jan 2019		Jan 2020	
New Zealand	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Cows In Milk	4993	4993	5000	4937	0	4935
Cow's Milk Production	22012	22017	22300	21855	0	21855
Other Milk Production	0	0	0	0	0	0
Total Production	22012	22017	22300	21855	0	21855
Other Imports	3	3	3	4	0	4
Total Imports	3	3	3	4	0	4
Total Supply	22015	22020	22303	21859	0	21859
Other Exports	245	245	245	265	0	275
Total Exports	245	245	245	265	0	275
Fluid Use Dom. Consum.	500	515	500	520	0	525
Factory Use Consum.	21200	21190	21493	21009	0	20994
Feed Use Dom. Consum.	70	70	65	65	0	65
Total Dom. Consumption	21770	21775	22058	21594	0	21584
Total Distribution	22015	22020	22303	21859	0	21859
(1000 HEAD) ,(1000 MT)						

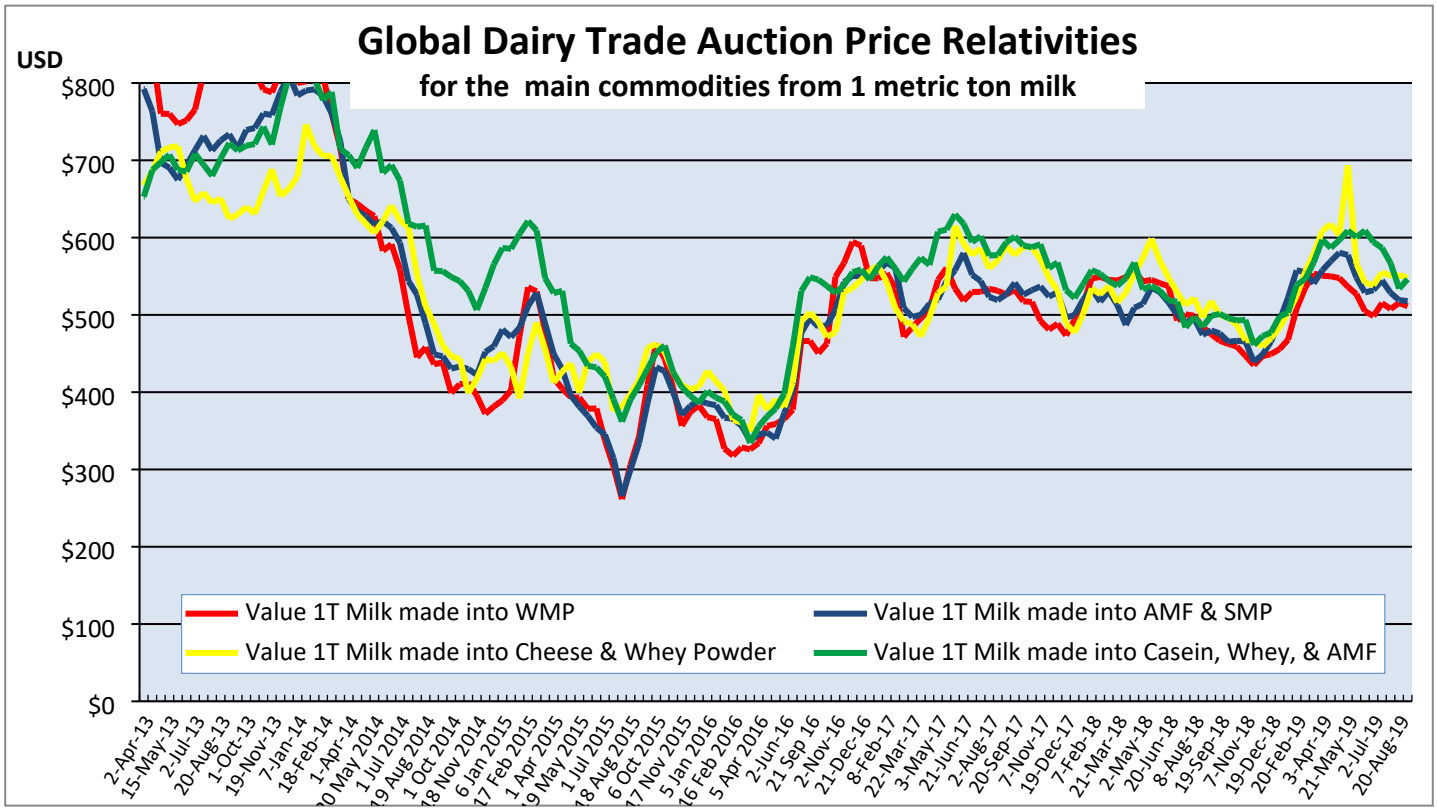
Not official USDA estimates

Production and Trade Overview

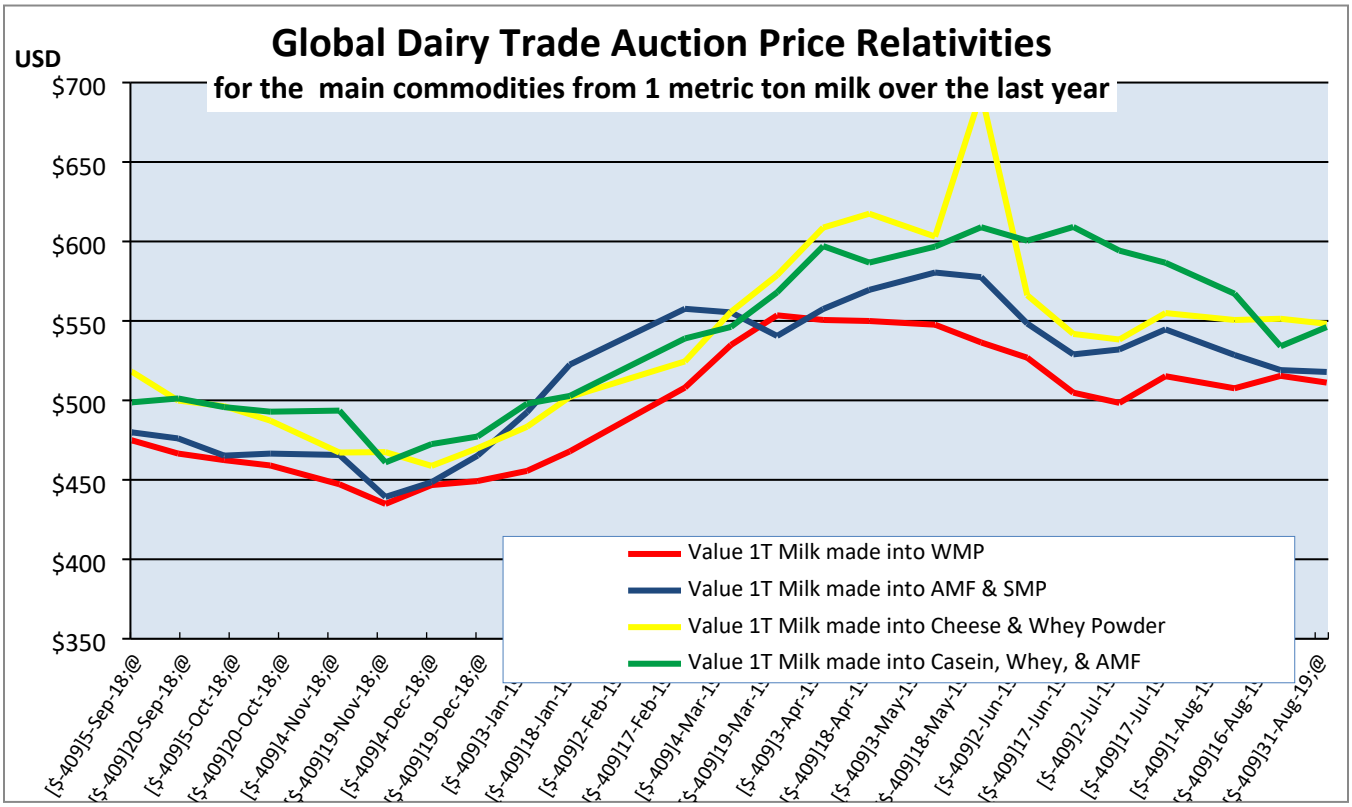
Dairy Production at a Glance

New Zealand Summary Table for Estimated Dairy Product Production					
Commodity Group	2018	2019		2020	
(1000s Metric Tons)	Firm Estimate	Estimate	% change from prev. year	New Forecast	% change from prev. year
WMP	1,450	1,445	-0.3%	1,435	-0.7%
SMP	410	385	-6.1%	385	0.0%
Butter/AMF	530	530	0.0%	530	0.0%
Cheese	355	360	1.4%	358	-0.6%
Sub-Total PSD Commodities	2,745	2,720	-0.9%	2,708	-0.4%
Casein & Caseinates	87	95	9.2%	95	0.0%
Whey Products	37	36	-2.7%	37	2.8%
Milk Protein Concentrates	79	79	0.0%	80	1.3%
Cream Products	97	115	18.6%	120	4.3%
Other Products	54	54	0.0%	56	3.7%
Infant Milk Formula	97	124	27.8%	145	16.9%
Sub-Total Rest of Dairy	451	503	11.5%	533	6.0%
Total Production	3,196	3,223	0.8%	3,241	0.6%

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



Source: GDT, Trade Data Monitor LLC, FAS Wellington estimates

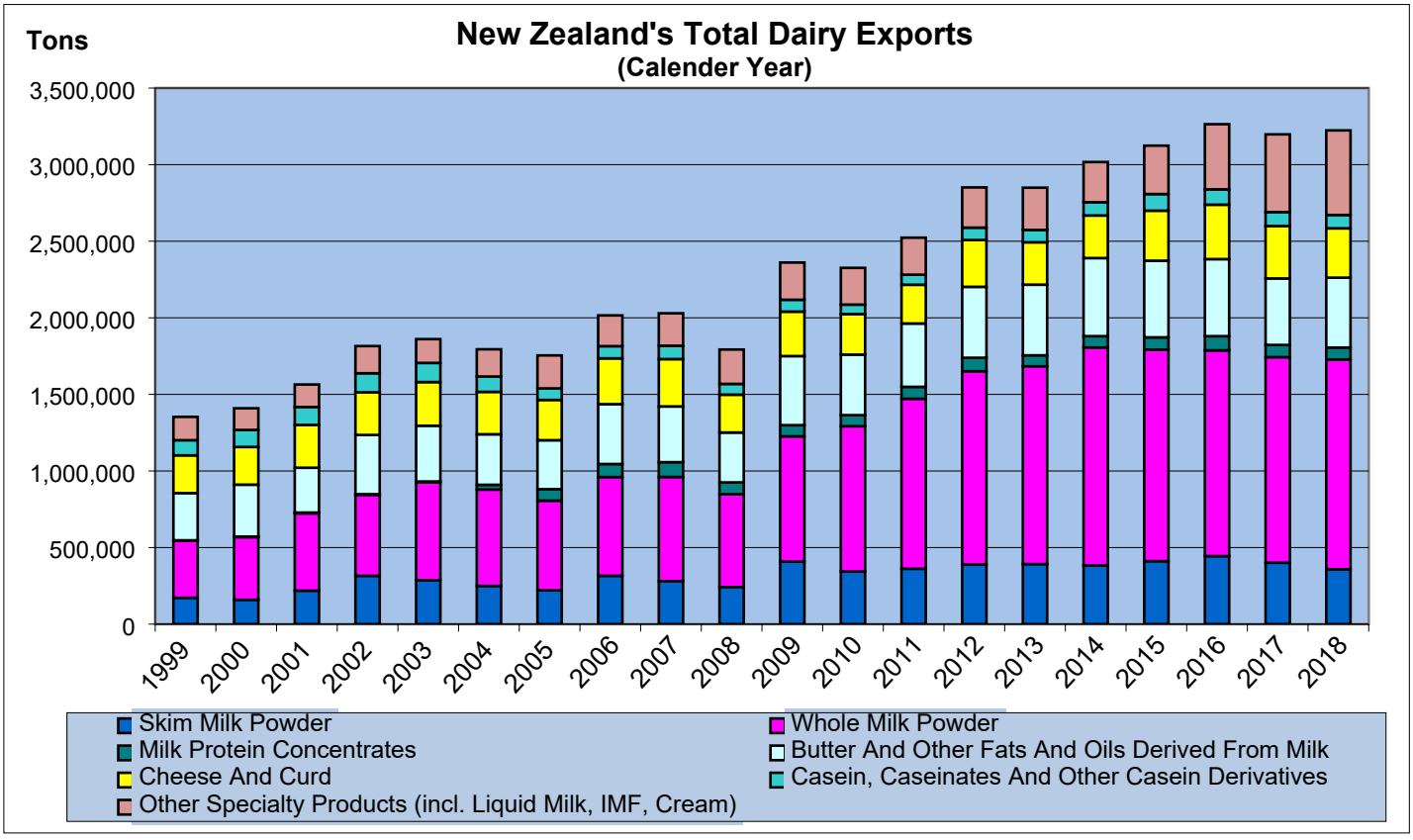


Source: GDT, Trade Data Monitor LLC, FAS Wellington estimates

Dairy Exports at a Glance

New Zealand Summary Table for Dairy Product Export Quantities					
Commodity Group (1000s Metric Tons)	2018	2019		2020	
	Actual	Estimates	% change from prev. year	New Forecast	% change from prev. year
WMP	1,369	1,475	7.7%	1,420	-3.7%
SMP	358	395	10.3%	395	0.0%
Butter/AMF	501	505	0.8%	505	0.0%
Cheese	322	335	4.0%	334	-0.3%
Sub-Total PSD Exports	2,550	2,710	6.3%	2,654	-2.1%
Casein	87	95	9.2%	95	0.0%
Whey Products	37	36	-2.7%	37	2.8%
Milk Protein Concentrates	79	79	0.0%	80	1.3%
Cream Products-Food Service	97	115	18.6%	120	4.3%
Other Products	54	54	0.0%	56	3.7%
Infant Milk Formula	97	124	27.8%	145	16.9%
Sub-Total Non PSD Exports	451	503	11.5%	533	6.0%
Total Exports	3,001	3,213	7.1%	3,187	-0.8%

Source: Trade Data Monitor LLC, FAS Wellington estimates. Note: Butter/AMF line has the AMF adjusted to butter equivalents



Source: Trade Data Monitor LLC

Product Specific Production and Trade

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

2020

For 2020, WMP production is forecast at 1.435 MMT, 0.7 percent below 2019. The milk supply is forecast to be stable but more milk is going to the production of liquid milk exports, infant milk formula (IMF), and UHT cream which are higher value and higher margin products. Despite this small decline, WMP exports will remain robust because of good margins. Even though the gross value per ton of milk made into WMP over the last year has been consistently below the other main commodities (See the GDT charts above) the cost to manufacture WMP in New Zealand is significantly lower than the other commodities, which often means the actual margin is better than for the other commodities.

Exports are forecast at 1.42 MMT for 2020, 3.7 percent less than 2019. It would be very unlikely for 2020 exports to match 2019 where it is estimated that a reduction in inventory built up at the end of 2018 allowed for the increased export volume.

2019

Production is now estimated for 2019 at l.445 MMT just 0.3 percent less than 2018. As milk supply is just marginally less than 2018 it is likely WMP production will follow suit.

However, exports are estimated at eight percent up on 2018 at 1.475 MMT. This is a result of the estimated build up in stocks at the end of 2018 that resulted from the increased Q4 2018 milk supply being processed to WMP, which is now being sold back down to normal levels during 2019. As opposed to global markets for other dairy commodities New Zealand sells, industry analysts feel that the WMP global market is deeper and able to absorb more product without dramatically impacting global pricing. As a result, New Zealand was able to boost WMP exports without causing a significant drop in prices.

New Zealand Export Statistics for Whole Milk Powder							
Year To Date: January - July							
Partner Country	Quantity (MT)			% Share			% Change
	2017	2018	2019	2017	2018	2019	19/18
China	235,158	210,035	287,552	29.76	26.47	31.79	36.91
Algeria	76,078	80,878	75,293	9.63	10.19	8.32	- 6.91
Bangladesh	34,789	44,823	56,580	4.40	5.65	6.26	26.23
United Arab Emirates	65,676	69,061	52,401	8.31	8.70	5.79	- 24.12
Sri Lanka	45,534	51,033	50,985	5.76	6.43	5.64	- 0.09
Thailand	33,190	31,569	39,788	4.20	3.98	4.40	26.03
Malaysia	37,526	33,395	36,726	4.75	4.21	4.06	9.97
Indonesia	19,177	24,952	32,968	2.43	3.14	3.64	32.12
Saudi Arabia	14,453	19,737	24,914	1.83	2.49	2.75	26.23
Vietnam	26,634	30,156	24,562	3.37	3.80	2.72	- 18.55
Rest of World	201,987	197,903	222,777	25.56	24.94	24.63	12.57
World Total	**790,202**	**793,542**	**904,546**	**100.00**	**100.00**	**100.00**	**13.99**
Av. FOB price USD/MT	$3,097	$3,137	$2,963				-5.53

Source: Trade Data Monitor LLC

New Zealand Export Statistics for Whole Milk Powder						
Annual Series: 2013 - 2018						
Partner Country	Quantity(MT)					
	2013	2014	2015	2016	2017	2018
China	622,133	587,631	354,291	389,079	467,620	506,707
Algeria	32,752	95,030	121,129	166,570	96,403	96,595
United Arab Emirates	76,635	112,579	125,488	96,769	108,503	91,979
Sri Lanka	45,339	47,154	57,764	67,137	85,027	83,893
Bangladesh	22,558	30,465	39,039	42,876	59,599	66,506
Thailand	31,609	38,799	44,921	42,522	43,082	49,874
Malaysia	36,829	59,448	82,358	51,111	57,798	49,748
Indonesia	24,086	33,371	32,242	36,392	35,768	42,856
Vietnam	23,758	33,571	49,340	38,708	37,248	40,585
Singapore	35,123	39,331	40,031	38,438	41,627	38,309
Rest of World	340,638	345,562	433,811	374,055	309,432	301,989
World Total	**1,291,460**	**1,422,941**	**1,380,414**	**1,343,657**	**1,342,107**	**1,369,041**
Av. FOB price USD/MT	$4,290	$4,255	$2,551	$2,361	$3,143	$3,096

Source: Trade Data Monitor LLC

Dairy, Dry Whole Milk Powder	2018		2019		2020	
Market Begin Year	Jan 2018		Jan 2019		Jan 2020	
New Zealand	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks	149	149	200	212	0	165
Production	1440	1450	1470	1445	0	1435
Other Imports	2	2	4	3	0	3
Total Imports	2	2	4	3	0	3
Total Supply	1591	1601	1674	1660	0	1603
Other Exports	1369	1369	1570	1475	0	1420
Total Exports	1369	1369	1570	1475	0	1420
Human Dom. Consumption	4	2	4	2	0	2
Other Use, Losses	18	18	20	18	0	18
Total Dom. Consumption	22	20	24	20	0	20
Total Use	1391	1389	1594	1495	0	1440
Ending Stocks	200	212	80	165	0	163
Total Distribution	1591	1601	1674	1660	0	1603
(1000 MT)						

Not official USDA PSD estimates

Production, Supply, and Demand – Cheese

2020

The production forecast for cheese in 2020 is 358,000 MT just 0.3 percent lower than 2019. Exports are forecast at 334,000 MT, essentially the same as 2019. Cheddar and Colby, the hard natural cheeses, are generally only produced in the peak milk months when all other processing capacity is at its limit. The last natural cheese plant was built in 2004. All new capacity built over the last decade has been for fresh cheese (including cream cheese and cottage cheese) or mozzarella. Mozzarella capacity for both conventional and Fonterra's proprietary C21 technology production is estimated at 110,000 MT per annum. The fresh cheese capacity is estimated between 70,000 to 80,000 MT per annum. Combined these two categories make up over 50 percent of New Zealand cheese production now. The natural cheese, namely Cheddar and Colby, export markets are limited for New Zealand at prices that are profitable either because of tariff quota restrictions or lack of cost competitiveness with Northern Hemisphere supply.

The development of fresh cheese and Mozzarella production over the last decade has taken advantage of growing demand in Asia mainly in food service supply chains. These products produce a higher margin for the processors and as demand has grown extra capacity has been built.

2019

Cheese production for 2019 is now estimated at 360,000 MT, 1.4 percent up on 2018. Cheese prices spiked in quarter two 2019 which may have stimulated a small production response.

The pace of exports for year-to-date 2019 would see an estimated 335,000 MT export volume in 2019, four percent up on 2018. Exports to Japan are up 12 percent for the year-to-date. Exports to China look set to resume the growth path exhibited since 2013 after a small hiccup in 2018.

New Zealand Cheese and Curd Export Statistics							
Year To Date: January - July							
Partner Country	Quantity			% Share			% Change
	2017	2018	2019	2017	2018	2019	19/18
Japan	37,264	38,696	43,334	17.44	19.01	20.69	11.99
China	35,830	30,990	39,393	16.77	15.22	18.81	27.11
Australia	40,904	33,471	29,392	19.15	16.44	14.03	- 12.19
Korea South	12,940	14,759	16,107	6.06	7.25	7.69	9.13
Indonesia	10,626	11,139	9,146	4.97	5.47	4.37	- 17.90
Saudi Arabia	6,570	7,809	8,786	3.08	3.84	4.19	12.52
Philippines	8,285	8,011	8,547	3.88	3.93	4.08	6.69
Taiwan	5,532	4,852	5,116	2.59	2.38	2.44	5.44
Malaysia	7,624	5,518	4,875	3.57	2.71	2.33	- 11.66
Trinidad & Tobago	4,102	4,315	4,062	1.92	2.12	1.94	- 5.86
Rest of the World	43,969	44,048	40,692	20.58	21.63	19.43	-7.62
World Total	**213,646**	**203,608**	**209,450**	**100.00**	**100.00**	**100.00**	**2.87**
Av. FOB price USD/MT	**$3,932**	**$4,068**	**$3,885**				-4.51

Source: Trade Data Monitor LLC

New Zealand Cheese and Curd Export Statistics							
Annual Series: 2013 - 2018							
Partner Country	Quantity (MT)						% Change
	2013	2014	2015	2016	2017	2018	18 over 17
Japan	64,296	57,515	55,045	61,345	63,552	64,630	1.7%
China	21,367	28,923	39,550	51,668	56,409	54,572	-3.3%
Australia	37,661	43,174	51,294	61,959	61,618	47,983	-22.1%
Korea South	21,728	12,110	14,929	19,730	18,957	19,402	2.3%
Indonesia	11,036	10,959	14,122	15,935	17,738	15,572	-12.2%
Philippines	11,729	12,335	15,654	15,805	13,807	13,410	-2.9%
Saudi Arabia	11,775	12,749	12,122	11,190	12,754	12,189	-4.4%
Chile	10,502	7,790	6,778	7,439	6,795	8,773	29.1%
Malaysia	6,098	6,750	9,044	8,607	12,389	8,745	-29.4%
Taiwan	7,464	8,069	8,883	9,208	9,551	7,950	-16.8%
Rest of the World	73,230	77,598	99,349	92,219	69,140	68,672	-0.7%
World Total	**276,886**	**277,972**	**326,770**	**355,105**	**342,710**	**321,898**	-6.1%
Av. FOB price USD/MT	**$4,179**	**$4,591**	**$3,563**	**$3,381**	**$4,027**	**$4,090**	1.6%

Source: Trade Data Monitor LLC

Dairy, Cheese	2018		2019		2020	
Market Begin Year	Jan 2018		Jan 2019		Jan 2020	
New Zealand	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks	40	40	67	49	0	50
Production	385	355	380	360	0	358
Other Imports	12	14	12	14	0	14
Total Imports	12	14	12	14	0	14
Total Supply	437	409	459	423	0	422
Other Exports	322	322	360	335	0	334
Total Exports	322	322	360	335	0	334
Human Dom. Consumption	48	38	49	38	0	38
Other Use, Losses	0	0	0	0	0	0
Total Dom. Consumption	48	38	49	38	0	38
Total Use	370	360	409	373	0	372
Ending Stocks	67	49	50	50	0	50
Total Distribution	437	409	459	423	0	422
(1000 MT)						

Not official USDA PSD estimates

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

2020

Production of SMP in 2020 is forecast at 385,000 MT, unchanged from 2019, based on milk supply being stable and the current pricing relativities being maintained through 2020. Production of SMP is a precursor to production of many other protein products such as IMF, casein and whey protein products, milk protein concentrate and FMCG such as yoghurt and ice cream. Where possible these products are manufactured to capture greater value. But volumes are limited at the demand levels that ensure the premium pricing.

Exports in 2020 are forecast at 395,000 MT, the same as 2019, which is likely to entail a further sell down of stocks built up in 2018. New Zealand processors concentrate on producing highly specified SMP for a set of customers who demand tighter or significantly different specifications from standard SMP. This usually earns a premium over Northern Hemisphere product.

New Zealand Skim Milk Powder Export Statistics							
Year To Date: January - July							
Partner Country	Quantity (MT)			% Share			% Change
	2017	2018	2019	2017	2018	2019	19/18
China	67459	55805	66723	29.14	26.78	28.84	19.56
Philippines	18167	17440	20841	7.85	8.37	9.01	19.50
Malaysia	20881	20268	19568	9.02	9.73	8.46	- 3.45
Thailand	16113	15416	16127	6.96	7.40	6.97	4.61
Singapore	12669	12459	14661	5.47	5.98	6.34	17.68
Taiwan	13496	11752	13007	5.83	5.64	5.62	10.68
Indonesia	13541	11651	12997	5.85	5.59	5.62	11.55
Vietnam	10607	8523	12630	4.58	4.09	5.46	48.18
United Arab Emirates	3122	3861	6918	1.35	1.85	2.99	79.19
Australia	2468	4347	4809	1.07	2.09	2.08	10.63
Rest of the World	52,963	46,850	43,064	22.88	22.48	18.61	-8.08
World Total	**231486**	**208372**	**231345**	**100.00**	**100.00**	**100.00**	**11.03**
Av. FOB price USD/MT	$2,335	$1,966	$2,284				16.21

Source: Trade Data Monitor LLC

2019

The marginally reduced milk supply in 2019 is likely to mean SMP production will be reduced to 385,000 MT, six percent less than 2018. In addition, increased production of the higher value products such as IMF and liquid milk is likely to cap any increases in SMP production. Exports of SMP in 2019 are estimated at 395,000 MT given the year-to-date rate of shipping. The inventory level is likely to be run down by 13,000 MT to achieve this volume.

New Zealand Skim Milk Powder Export Statistics						
Annual Series: 2012 - 2017						
	Quantity (MT)					
Partner Country	2013	2014	2015	2016	2017	2018
China	132,527	114,949	122,926	107,627	129,535	126,229
Malaysia	36,106	33,376	31,272	39,439	34,168	31,727
Philippines	34,958	30,591	32,668	41,247	26,208	25,590
Thailand	15,816	20,580	25,838	27,078	23,952	23,525
Indonesia	33,780	26,918	24,021	32,470	19,815	20,600
Singapore	23,575	29,049	35,266	24,038	23,975	19,405
Taiwan	14,841	18,674	20,655	18,476	18,658	17,612
Vietnam	10,496	7,901	18,483	19,373	22,582	12,520
Pakistan	4,770	4,212	7,465	8,822	11,031	10,027
Yemen	6,495	8,107	3,828	10,638	4,007	9,706
Rest of the World	78,605	88,613	88,892	114,849	87,071	61,271
World Total	**391,969**	**382,970**	**411,314**	**444,057**	**401,002**	**358,212**
Av. FOB price USD/MT	$4,149	$4,110	$2,337	$1,967	$2,234	$2,020

Source: Trade Data Monitor LLC

Dairy, Milk, Nonfat Dry	2018		2019		2020	
Market Begin Year	Jan 2018		Jan 2019		Jan 2020	
New Zealand	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks	67	67	117	116	0	103
Production	410	410	400	385	0	385
Other Imports	3	2	2	3	0	3
Total Imports	3	2	2	3	0	3
Total Supply	480	479	519	504	0	491
Other Exports	358	358	410	395	0	395
Total Exports	358	358	410	395	0	395
Human Dom. Consumption	5	5	5	6	0	6
Other Use, Losses	0	0	0	0	0	0
Total Dom. Consumption	5	5	5	6	0	6
Total Use	363	363	415	401	0	401
Ending Stocks	117	116	104	103	0	90
Total Distribution	480	479	519	504	0	491
(1000 MT)						

Not official USDA PSD estimates

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.

2020

The production forecast for 2020 for the total AMF and butter in butter equivalents is 530,000 MT, the same as 2019. Exports in butter equivalents are forecast at 505,000 MT, again the same as 2019. Production of butter and AMF is now being limited by UHT cream production forecast to reach 120,000 MT in 2020, up four percent on 2019. This is a higher value end-use for cream than butter or AMF and goes to food service in Asia, especially China.

Even though butter/AMF prices have been elevated for some time now, the value of a ton of milk made into butter/AMF must also account for the value of the protein component, which is typically processed to SMP. SMP has been trading at relatively low values for the past four years. This typically brings the value of that ton of milk made into butter/AMF and SMP much closer to WMP. Because of this, once higher priced orders for butter/AMF are satisfied, the lower cost of manufacturing of WMP will result in surplus milk going to WMP.

2019

Butter and AMF production for 2019 is forecast at 530,000 MT, the same as 2018. Exports are now forecast at 505,000 MT, about one per cent higher than the 2018 volume. UHT cream for food service in Asia is growing quickly in 2019 and is expected to experience a 19 percent lift in volume to 115,000 MT. This category has become a significant minority product for cream and is limiting the volume available for butter and AMF production.

New Zealand Export Statistics For Butter, Anhydrous MilkFat, & Dairy Spreads							
Year To Date: January - July							
	Quantity (MT) product weight basis			% Share			% Change
Partner Country	2017	2018	2019	2017	2018	2019	19/20
China	50,278	71,462	40,019	18.69	23.99	13.70	- 44.00
United States	2,580	2,431	23,761	0.96	0.82	8.13	877.47
Australia	16,759	20,619	19,953	6.23	6.92	6.83	- 3.23
Philippines	19,924	18,162	19,296	7.41	6.10	6.61	6.24
Mexico	15,228	11,098	13,699	5.66	3.73	4.69	23.43
Saudi Arabia	14,286	15,746	12,867	5.31	5.29	4.40	- 18.29
United Arab Emirates	11,307	11,531	11,818	4.20	3.87	4.05	2.49
Vietnam	10,005	9,967	11,590	3.72	3.35	3.97	16.28
Iran	8,961	15,528	9,797	3.33	5.21	3.35	- 36.91
Malaysia	8,608	8,922	9,585	3.20	3.00	3.28	7.43
Rest of world	111,033	112,401	119,714	41.28	37.74	40.98	6.51
World Total	268,969	297,867	292,099	100.00	100.00	100.00	- 1.94
Av. FOB price USD/MT	$5,008	$5,868	$4,970				-15.30

Source: Trade Data Monitor LLC

New Zealand Export Statistics For Butter, Anhydrous Milkfat, & Dairy Spreads						
Annual Series: 2013 - 2018						
	Quantity (MT) on a product weight basis					
Partner Country	2013	2014	2015	2016	2017	2018
China	52,508	67,905	67,831	67,750	81,889	97,694
Australia	18,675	19,696	19,328	28,076	28,608	35,409
Philippines	14,521	21,449	24,800	25,949	27,096	27,499
Saudi Arabia	17,394	27,153	21,052	24,322	20,819	20,458
Mexico	15,508	12,541	29,237	47,718	20,821	18,793
Egypt	32,111	34,556	39,314	36,830	15,300	17,849
United Arab Emirates	11,267	14,633	24,674	11,104	21,050	17,611
Iran	30,378	26,680	12,609	26,476	12,754	15,528
Malaysia	11,121	13,073	13,859	14,073	14,338	14,261
Taiwan	11,987	14,480	15,474	14,139	15,613	14,061
Rest of world	245,676	257,713	232,206	206,638	175,690	177,244
World Total	**461,146**	**509,879**	**500,384**	**503,075**	**433,978**	**456,407**
Av. FOB price USD/MT	$3,960	$4,214	$3,272	$3,404	$5,448	$5,714

Source: Trade Data Monitor LLC

Dairy, Butter	2018		2019		2020	
Market Begin Year	Jan 2018		Jan 2019		Jan 2020	
New Zealand	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks	84	84	86	86	0	84
Production	530	530	540	530	0	530
Other Imports	1	1	1	1	0	1
Total Imports	1	1	1	1	0	1
Total Supply	615	615	627	617	0	615
Other Exports	501	501	525	505	0	505
Total Exports	501	501	525	505	0	505
Domestic Consumption	28	28	29	28	0	28
Total Use	529	529	554	533	0	533
Ending Stocks	86	86	73	84	0	82
Total Distribution	615	615	627	617	0	615
(1000 MT)						

Note AMF product weight tonnages are multiplied by 1.25 to get butter equivalents; not official USDA estimates

Imports

New Zealand Import Statistics For All Dairy Products							
Calendar Years : 2016 - 2018							
Unit	Description	2016		2017		2018	
		USD	Quantity	USD	Quantity	USD	Quantity
T	Whey & Modified Whey Whet/Not Cncntrtd Cntg Add Sweetn	26,057,445	16,449	42,673,667	23,489	70,123,277	31,219
T	Lactose & Lactose Syrup Cont. 99% More Lactose By Wt.	50,922,641	74,692	87,851,467	90,470	62,593,843	85,916
T	Cheese, Nesoi, Including Cheddar And Colby	30,042,179	6,016	38,666,800	7,088	42,605,553	7,842
T	Ice Cream And Other Edible Ice, With Cocoa Or Not	14,162,847	4,301	17,684,669	4,976	26,257,968	7,817
T	Milk Albumin,Inc Concen Of 2 Or More Whey Proteins	6,669,188	1,407	1,253,093	166	15,343,264	2,530
T	Milk/Cream Cnctrd Not Swtn Pwd/Oth Solids Ov 1.5% Fa	14,734,234	3,799	9,295,116	1,690	9,012,579	1,551
T	Food Preparations; Of Flour, Meal, Starch, Malt Ex	8,262,191	1,000	8,013,182	1,099	8,736,733	1,193
T	Cheese (Unrpnd/Uncurd) Fresh Incl Whey Cheese Curd	9,186,972	2,410	9,776,074	2,250	8,618,186	1,819
T	Milk & Crm,Cntd,Swt,Powdr,Gran/Solids,Nov 1.5% Fat	6,010,227	2,730	6,286,398	1,992	8,511,268	2,704
T	Cheese, Processed, Not Grated Or Powdered	6,986,419	1,314	7,638,418	1,354	7,592,540	1,389
T	Products Of Natural Milk Constituents, Nesoi	3,538,983	3,468	6,316,921	3,037	7,454,341	4,614
T	Milk And Cream, Sweetened, Concen Or Not Nesoi	7,192,034	3,329	8,539,878	3,723	7,446,851	3,175
T	Milk & Cream Fat Cont Gt 10%, Not Concent Or Sweet	2,894,182	935	3,344,970	1,114	4,899,457	1,205
T	Cheese Of All Kinds, Grated Or Powdered	3,509,553	504	3,733,944	514	3,110,393	432
T	Fats And Oils Derived From Milk, N.E.S.O.I.	1,432,946	301	1,564,964	228	2,617,268	406
T	Cheese, Blue-Veined, Nesoi	2,557,205	221	2,775,158	222	2,517,795	201
T	Butter	9,149,943	1,877	4,252,169	578	2,006,299	311
L	Milk/Cream Nt Cnctrd/Swt, Fat Content Ov 1% Nov-6%	941,928	769,161	1,368,807	1,350,124	1,531,408	1,817,541
T	Lactose In Solid Form And Lactose Syrup, Nesoi	964,464	1,881	852,696	98	1,416,019	1,352
T	Buttermilk/Kephir/Curdled Fermntd Acidfd Mlk & Crm	268,846	107	769,767	310	1,349,531	481
L	Ice Cream And Other Edible Ice, With Cocoa Or Not	5,017	693	67,574	9,078	1,124,338	369,861
T	Mlk & Crm,Cntd,Swtnd,Powdr/Solids, Over 1.5% Fat	1,161,207	199	294,587	35	846,240	201
T	Yogurt, W/N Sweetened, Flavored Or Cntg Fruit/Coco	1,359,702	427	889,131	252	804,535	209
T	Milk And Cream, Concentrated, Not Sweetened, Nesoi	313,591	92	369,031	108	528,508	150
T	Rennet And Concentrates Thereof	173,041	11	309,053	27	335,739	14
T	Milk And Cream, Nt Concntrd, Nt Sweetd, Nov 1% Fat	351,421	271	279,811	205	250,023	200
T	Caseinates & Other Casein Derivatives; Casein Glue	381,470	38	121,628	10	204,098	21
T	Casein	105,123	1	58,441	1	173,850	4
L	Milk And Cream, Sweetened, Concen Or Not Nesoi	5,712	2,756	28,890	14,314	107,334	114,743
T	Dairy Spreads	48,970	16	16,380	2	22,470	4
T	Milk/Cream Nt Cnctrd/Swt, Fat Content Ov 1% Nov-6%	3,722	1	50,633	16	2,453	1
T	Milk & Cream Fat Cont 6-10% Not Concent Or Sweeten	1,639	0	0	0	0	0
	Total Dairy Products Food & Other Use Imports	**209,395,043**		**265,143,318**		**298,144,164**	

Source: Trade Data Monitor LLC

Attachments:

No Attachments