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## **New Zealand**

### **Dairy and Products Annual**

#### **New Zealand Annual Dairy and Milk Supply Report 2015**

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**Report Highlights:**

**The second successive year of low dairy prices is taking its toll on New Zealand dairy farmers both financially and on herd numbers. Forecast milk supply is set to drop by two percent to 21.4 million metric tons in 2015. This is likely to be followed by a further fall in 2016 of three percent to 20.8 million metric tons. Both dairy production and exports will follow the same direction.**

## Executive Summary

*Note: the Marketing Year (MY) is the same as the calendar year (CY). For example in the report "2015" is used which means the marketing year.*

Low farmgate milk prices are now affecting New Zealand's milk production. Even though, in the absence of widespread drought, there was a stronger first half (H1) production for the 2015 year (1.1% above H1 2014) this will not be enough to prevent milk production for the whole year decreasing to an estimated 21.39 million(m) metric tons(MT). This will represent a 2.3% reduction on the production in the previous year, 2014. Cow numbers are declining and are estimated in October 2015 to be 75,000 head below the same time in 2014. The winter and early spring (June to mid-September) for 2015 has been colder than the last two years. This has negatively affected pasture growth. In order to minimize on-farm costs farmers are minimizing the rates of supplementary feeding which is likely to impact on production for the second half of 2015 now forecast to be 5% back on the same period in 2014.

Milk production in 2016 will continue to falter and is forecast at 20.75m MT, three percent below the 2015 estimate. Low forecast milk prices; reduced cow numbers; and the prospect of an El Nino drought are the dynamics at play.

Total dairy commodity and consumer goods production for New Zealand in 2015 is forecast to be 2.93m MT compared with 2014 at 3.05m MT. This amounts to a four percent reduction, which reflects the forecast reduction in 2015 milk supply. Continuing this trend in 2016 it is forecast total dairy production will reduce a further three percent to 2.86m MT. Total export volumes, although buffered to some extent by ending stock reductions, will reflect the production drops by reducing to 3.03m MT (-0.5%) in 2015 and further in 2016 to 3.01m MT (-0.7%).

Less milk supply for 2015 through 2016; and the increased processing capacity now in operation gives the dairy processors better product optionality. It will allow an increased volume of milk at the margin to be switched from one product to another. This has already been evident in 2015 as Cheese, liquid UHT milk, Casein, Whey products, and Milk Protein Concentrates have already recorded increased export shipments. It will have even more of an effect potentially at peak milk flow in October through early December in 2015 and 2016.

New Zealand's key commodity produced is Whole Milk Powder (WMP) but at an estimated 1.38m MT in 2015 this will be six percent below the 2014 total. As a direct consequence it is likely WMP exports will also be down. They are now estimated at 1.36m MT for 2015, which would be 4.4% below 2014. This slide is forecast to be halted in 2016 with both production and exports of WMP to be essentially the same as 2015.

The other big mover in the main commodities is cheese. Production for 2015 is now estimated at 347,000MT, seven percent up on 2014. Year-to-date export data, shows cheese exports are 20% ahead of the same period in 2014 and cheese prices during 2015 have been at enough of a premium over WMP to justify extra production. Total cheese exports for 2015 are forecast at 319,000MT. This situation is likely to reverse in 2016 as the price relativity between WMP and cheese starts to favour WMP again. For 2016, cheese production is forecast at 310,000MT and exports back to 2014 levels at 278,000MT.

## Milk Supply

## 2015

Stronger milk production in the first half of the year (1.1% above H1 2014) in the absence of widespread drought combined with forecasts for the second half of 2015, which are lower than previous estimates, will result in an estimate for milk production of 21.39 million MT. This is virtually the same as the previous estimate for 2015 but represents a 2.3% reduction on the production for 2014. The key factors which are driving production now are:

- A second successive NZ production season of low farmgate milk prices. Fonterra, the farmer owned Cooperative which collects approximately 85% of the milk has just improved its forecast farmgate price for the June 2015 to May 2016 production season from NZ\$3.85/kg Milk Solids up to NZ\$4.60. Only Tatua, the smallest Cooperative is breaking with general price forecasts in the NZ\$4 to NZ\$5.00 bracket with a NZ\$6.00 estimate. The low prices are driving farmers to cut costs especially for supplementary feeding and off-farm agistment of replacement heifers and cows between lactations. This will have a negative impact on milk supply.
- Cow numbers are declining. Even though a June 30, 2015 survey of in-calf dairy cows suggested that numbers were 25,000 head above the number in 2014 the cow kill for 2015 is estimated to be 100,000 head or ten percent greater than 2014. The 2014 slaughter total was historically high but within a range where herd numbers could be maintained. Since June the cow kill has continued to be elevated and it is estimated that by October 2015 the number of cows actually being milked will be 75,000 head less than 2014.
- The winter and early spring (June to mid-September) for 2015 has been colder than the last two years. This has negatively affected pasture growth. In the absence of increased rates of supplementary feeding it is highly unlikely milk production in the spring of 2015 will reach the same levels as 2014. It is forecast that production for the 2<sup>nd</sup> half of 2015 will be five percent back on the same period in 2014

## 2016

Milk production in 2016 will continue to falter and is forecast at 20.75m MT, three percent below the 2015 estimate. The factors mentioned for 2015 will continue to drive milk production in 2016 with one addition:

- Drought: most meteorological services are predicting a strong El Nino weather pattern over the next six months. For New Zealand this often means drought conditions on the east coasts of both islands and may mean drought in the Waikato which still produces approximately 30% of the country's milk. At this stage assumptions for milk supply in the first half of 2016 allow for a medium level drought event but not generalized drought conditions over the whole country.

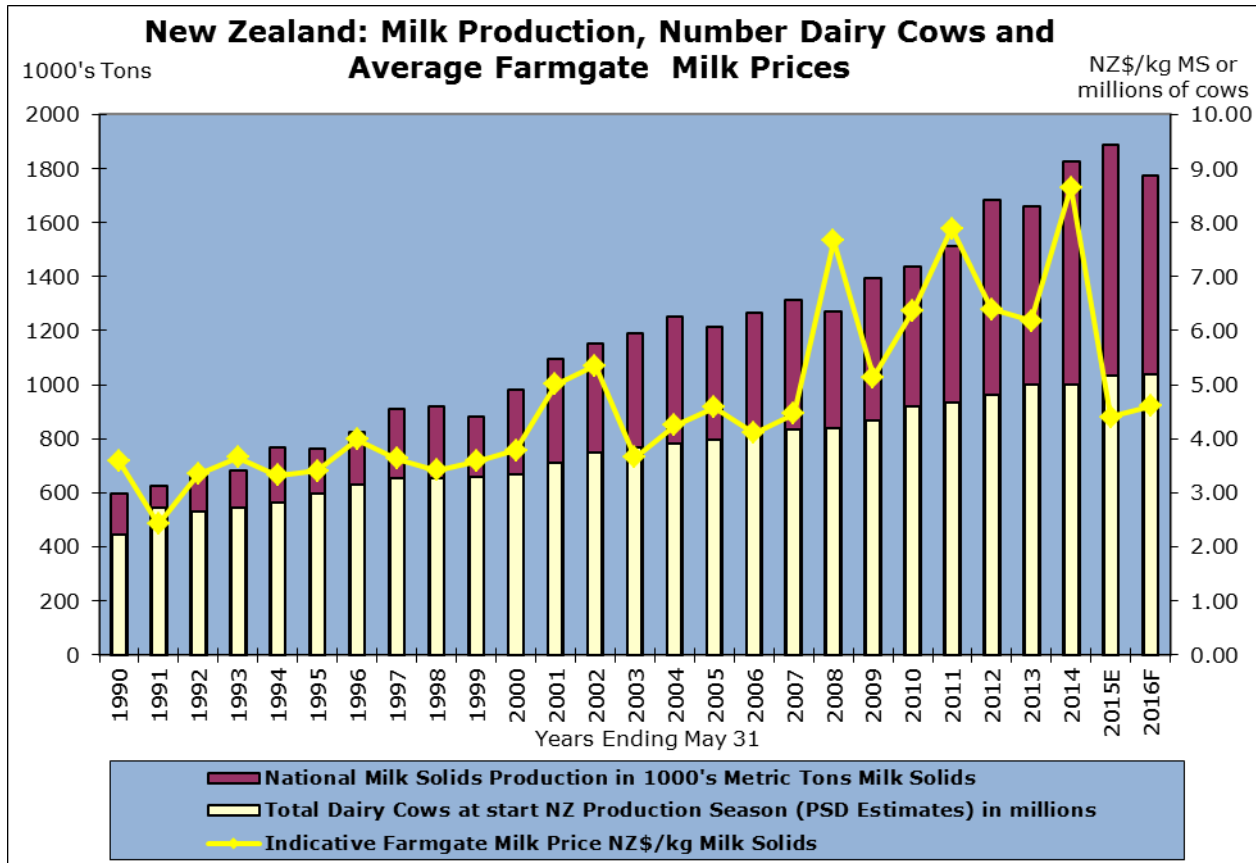
The continuing themes from the 2015 will be likely to play out in the following ways:

- Reduced cow numbers: The full extent of reductions to the dairy herd won't be completely felt until the second half of 2016. It is forecast that dairy cow numbers will be reduced by

100,000 head to 5.10m head at June 30, 2016.

- Milk prices: Unless farmers get plenty of warning of a significant milk price increase (to somewhere around NZ\$6.50/kg MS) for the 2016/17 production season the combination of reduced cow numbers and continued minimization of spending on supplementary feed is likely to mean production in the second half of 2016 will be similar to the same period in 2015 if not less.

### Milk, Cow, Milk Price Trend Chart



Source:

Post Estimates, DairyNZ

## PSD Milk

Dairy, Milk, Fluid (1000HD, 1000MT)	2014			2015			2016	
	Market Year Begin: Jan 2014			Market Year Begin: Jan 2015			Market Year Begin: Jan 2016	
New Zealand	Official	Old Post	New Post	Official	Old Post	New Post	Official	New Post
Cows In Milk	5264	5264	5175	5200	5214	5200		5100
Cow's Milk Production	21893	21893	21893	21675	21410	21391		20745
Other Milk Production	0	0	0	0	0	0		0
Total Production	21893	21893	21893	21675	21410	21391		20745
Other Imports	2	2	2	2	2	2		2
Total Imports	2	2	2	2	2	2		2
Total Supply	21895	21895	21895	21677	21412	21393		20747
Other Exports	136	136	136	160	160	165		200
Total Exports	136	136	136	160	160	165		200
Fluid Use Dom. Consum.	495	495	495	495	495	497		497
Factory Use Consum.	21214	21214	21214	20972	20707	20681		20000
Feed Use Dom. Consum.	50	50	50	50	50	50		50
Total Dom. Consumption	21759	21759	21759	21517	21252	21228		20547
Total Distribution	21895	21895	21895	21677	21412	21393		20747
CY Imp. from U.S.	0	0	0	0	0	0		0
CY. Exp. to U.S.	0	0	0	0	0	0		0
TS=TD	0	0	0	0	0	0		0

Not official USDA estimates

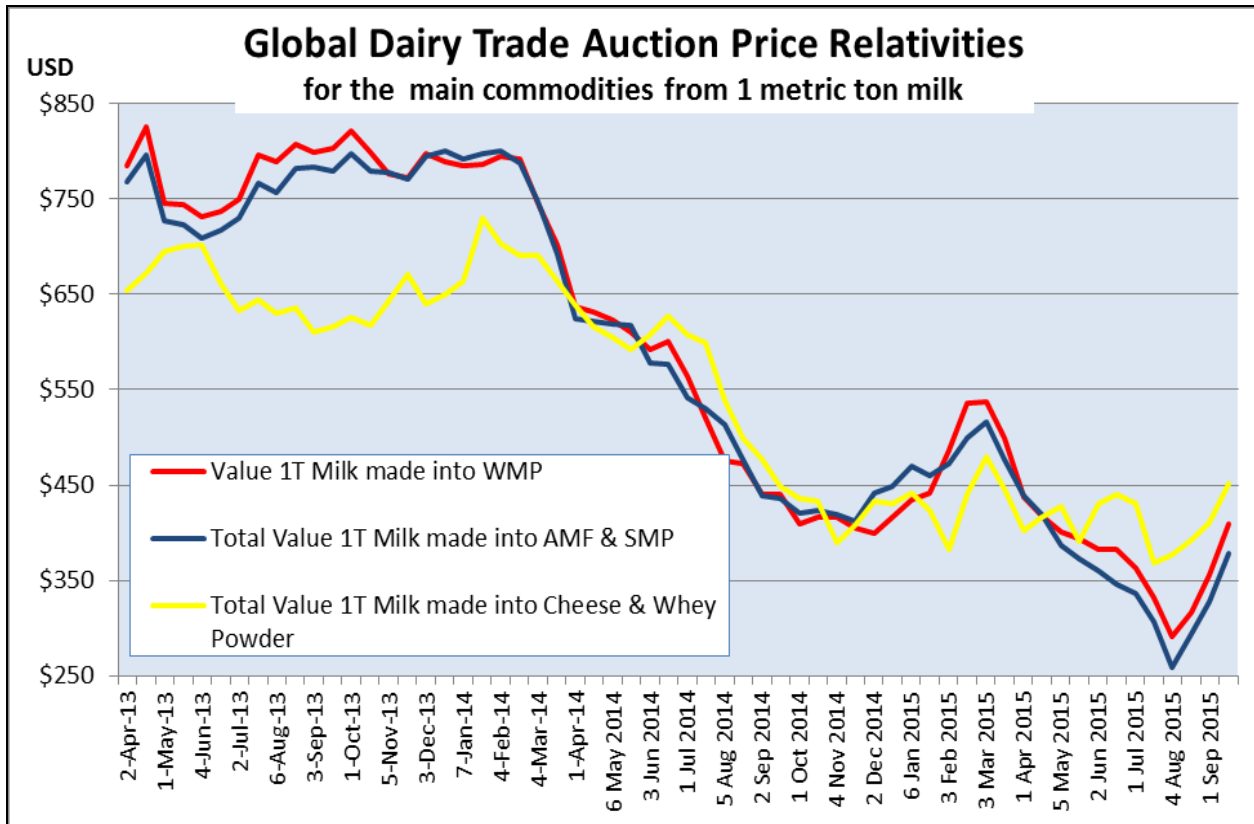
## Dairy Production and Inventories

### General Overview

Total dairy commodity and consumer goods production for New Zealand in 2015 is forecast to be 2.93m MT compared with 2014 at 3.05m MT. This amounts to a four percent reduction, which reflects the forecast reduction in 2015 milk supply. Continuing this trend in 2016 it is forecast total dairy production will reduce a further three percent to 2.86m MT.

For New Zealand trends in dairy production are driven by two factors: the existing productive capacity for each product and the export pricing for each commodity both current and expected outlook.

Less milk supply for 2015 through 2016 and the increased processing capacity now in operation gives the dairy processors better product optionality. It will allow an increased volume of milk at the margin to be switched from one product to another. This in-turn will mean the companies can be more responsive to changes in relative product price. This has already been evident in 2015 as: Cheese; liquid UHT milk; Casein; Whey products; and Milk Protein Concentrates (MPC) have already recorded increased export shipments. It will have even more of an effect potentially at peak milk flow in October through early December in 2015 and 2016.



Source: GDT, GTA, Post estimates

## Dairy Production at a Glance

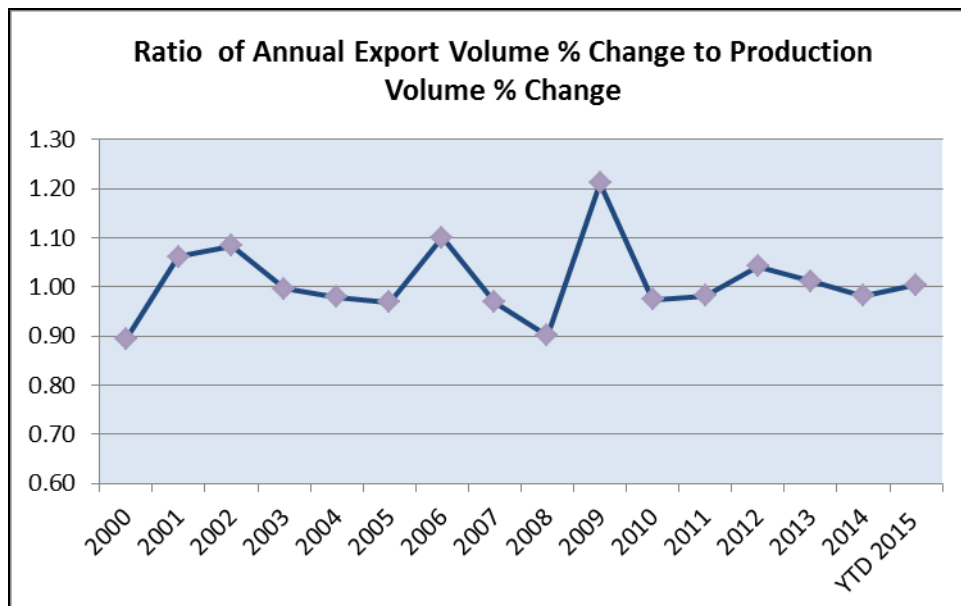
New Zealand Summary Table for Estimated Dairy Production					
Commodity Group (1000s Metric Tons)	2014	2015		2016	
	Firm Estimate	Estimate	% change from prev. year	New Forecast	% change from prev. year
<b>WMP</b>	<b>1,460</b>	<b>1,375</b>	-5.8%	<b>1,375</b>	0.0%
<b>SMP</b>	<b>415</b>	<b>360</b>	-13.3%	<b>360</b>	0.0%
<b>Butter/AMF</b>	<b>580</b>	<b>570</b>	-1.7%	<b>550</b>	-3.5%
<b>Cheese</b>	<b>325</b>	<b>347</b>	6.8%	<b>310</b>	-10.7%
<b>Sub-Total PSD Commodities</b>	<b>2,780</b>	<b>2,652</b>	-4.6%	<b>2,595</b>	-2.1%
<b>Casein &amp; Caseinates</b>	<b>81</b>	<b>90</b>	11.5%	<b>75</b>	-16.7%
<b>Whey Products</b>	<b>24</b>	<b>28</b>	16.6%	<b>28</b>	0.0%
<b>Milk Protein Concentrates</b>	<b>72</b>	<b>84</b>	17.1%	<b>75</b>	-10.7%
<b>Other Products</b>	<b>52</b>	<b>48</b>	-7.6%	<b>48</b>	0.0%
<b>Infant Milk Formula</b>	<b>42</b>	<b>31</b>	-26.2%	<b>36</b>	16.1%
<b>Subtotal Rest of Dairy</b>	<b>270</b>	<b>281</b>	3.9%	<b>262</b>	-6.8%
<b>Total Production</b>	<b>3,050</b>	<b>2,933</b>	-3.9%	<b>2,857</b>	-2.6%

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

## A Guide to Inventory levels

It is estimated the ending stock level of the main commodities WMP, SMP, AMF/Butter, and cheese will remain stable from 2014 to 2015 at 415,000MT. Then by the end of 2016 be reduced by 25,000MT, or six percent. Some commentators have suggested stocks in New Zealand have risen to high levels, however industry participants disagree and argue inventory levels are within a close range around 15% of exports which is considered normal, as shown by Posts estimates.

The chart below is an attempt to determine if stocks are rising abnormally. By looking at the percentage each year's exports is of the preceding year and calculating the same for each year's milk production then charting the ratio of export change each year over the production change it is a guide to whether stocks are building up or dropping. A ratio of one would mean stocks are roughly in balance. A ratio of greater than one would mean that export growth was leading production and stocks would be run down. Whereas a ratio of less than one would mean exports had slowed in relation to production and stocks would likely to be rising. The chart shows that since 2010 the dairy companies are matching export growth very closely to production growth and it is very unlikely there is any abnormal buildup of stocks.



Source: PSD milk supply estimates, DCANZ data on milk supply, GTA export data

## Whole Milk Powder (WMP)

At 1.38m MT, production of WMP in 2015 is likely to be six percent down on the previous year. Exports are already 40,000MT behind for the year-to-date (YTD) July compared with 2014 and it is very unlikely that stocks were building up by mid-year. It is envisaged that production through the 2<sup>nd</sup> half of 2015 will be similar or less than the same period last year. With prices for WMP starting to move up there will no great rush to sell WMP at this stage. The increased product optionality available to the processors in the 2<sup>nd</sup> half of 2015 will mean that WMP production can be kept to a manageable level to suit the market.

For 2016 WMP production is likely to hold at 1.38m MT as profitability returns to WMP manufacturing, even though overall milk supply is decreasing. The product optionality now available would mean that WMP production could be ramped up quickly if price relativities warrant it.

## PSD

Dairy, Dry Whole Milk Powder New Zealand	2014			2015			2016	
	Market Year Begin: Jan 2014			Market Year Begin: Jan 2015			Market Year Begin: Jan 2016	
	USDA Official	Old Post	New Post	USDA Official	Old Post	New Post	USDA Official	New Post
Beginning Stocks	157	157	157	181	181	180		180
Production	1,460	1,460	1,460	1,365	1,440	1,375		1,375
Other Imports	2	2	1	2	2	3		3
Total Imports	2	2	1	2	2	3		3
Total Supply	1,619	1,619	1,618	1,548	1,623	1,558		1,558
Other Exports	1,423	1,423	1,423	1,350	1,425	1,360		1,359
Total Exports	1,423	1,423	1,423	1,350	1,425	1,360		1,359
Human Dom. Cons.	2	2	2	2	2	3		4
Other Use, Losses	13	13	13	15	15	15		15
Total Dom. Cons.	15	15	15	17	17	18		19
Total Use	1,438	1,438	1,438	1,367	1,442	1,378		1,378
Ending Stocks	181	181	180	181	181	180		180
Total Distribution	1,619	1,619	1,618	1,548	1,623	1,558		1,558
CY Imp. from U.S.	0	0	0	0	0	0		0
CY. Exp. to U.S.	0	3	3	0	2	3		2
TS=TD	0	0	0	0	0	0	0	0

Not official USDA estimates

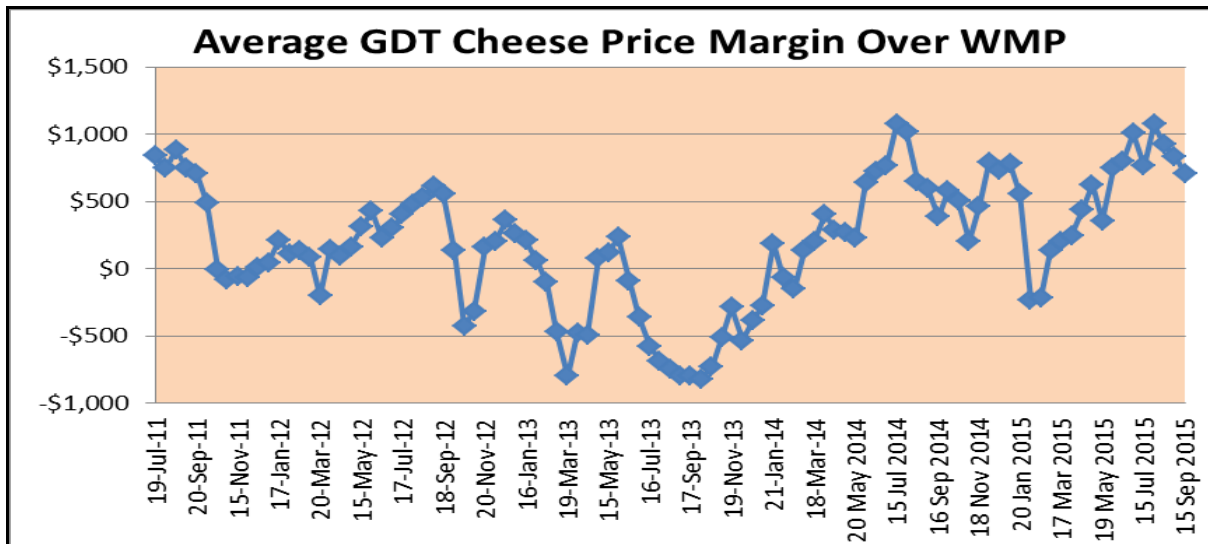
## Cheese

Cheese production for 2015 is now estimated at 347,000MT, seven percent up on 2014. Production for 2014 has now been adjusted upward in response to the rate of export shipping in the first quarter of 2015 which would have been enabled by a run up in cheese stocks at year end 2014. The run of increased cheese production is not expected to last. The slow down in milk supply in 2016 and the likelihood other commodity price relativities will catch up with cheese is likely to mean production in 2016 will be reduced to 310,000MT. This would represent an eleven percent reduction over 2015.

Since May 2015 the GDT auction prices have favoured cheese production. A general rule of thumb suggests that cheese manufacture becomes more profitable than WMP when the cheese price in USD exceeds the WMP price by more than USD500/MT. The chart below shows that since May



2015 the cheese price has consistently exceeded the WMP price by more than USD500/MT. Export markets for cheese open to New Zealand are finite which means changes will be marginal rather than a significant diversion of the milk supply to cheese.



Source: GDT Auction data

## PSD

Dairy, Cheese New Zealand  (1000 MT)	2014 Market Year Begin: Jan 2014			2015 Market Year Begin: Jan 2015			2016 Market Year Begin: Jan 2016	
	USDA Official	Old Post	New Post	USDA Official	Old Post	New Post	USDA Official	New Post
Beginning Stocks	50	50	50	55	55	64		60
Production	316	316	325	338	308	347		310
Other Imports	7	7	7	6	7	8		8
Total Imports	7	7	7	6	7	8		8
Total Supply	373	373	382	399	370	419		378
Other Exports	278	278	278	320	275	319		278
Total Exports	278	278	278	320	275	319		278
Human Dom. Cons.	40	40	40	39	40	40		40
Other Use, Losses	0	0	0	0	0	0		0
Total Dom. Cons.	40	40	40	39	40	40		40
Total Use	318	318	318	359	315	359		318
Ending Stocks	55	55	64	40	55	60		60
Total Distribution	373	373	382	399	370	419		378
CY Imp. from U.S.	0	1	1	0	1	1		1
CY. Exp. to U.S.	1	7	7	0	6	14		7
TS=TD	0	0	0	0	0	0	0	0

Not official USDA estimates

## Skim Milk Powder (SMP)

SMP prices are very low now both absolutely and relative to WMP and Cheese. The only reason the value of the manufacturing combination of SMP and AMF/Butter hasn't sunk lower relative to WMP and Cheese is the strength of butter and AMF prices. SMP production in 2014 has been amended upward to 415,000MT to show an increased ending stock number of 113,000MT which has fueled a higher rate of export shipping in the first half of 2015 than was expected. However it is expected that SMP production will be reduced by 13% in 2015 to be 360,000MT. The protein side of cream/fat production is being further processed to Casein, Whey and Milk Protein Concentrate production in 2015. This isn't likely to be the case in 2016 but it is not expected that SMP production will improve and it is forecast to sit at 360,000MT again.

## PSD

Dairy, Milk, Nonfat Dry New Zealand  (1000 MT)	2014 Market Year Begin: Jan 2014			2015 Market Year Begin: Jan 2015			2016 Market Year Begin: Jan 2016	
	USDA Official	Old Post	New Post	USDA Official	Old Post	New Post	USDA Official	New Post
Beginning Stocks	83	83	83	93	93	113		91
Production	395	395	415	385	375	360		360
Other Imports	2	2	4	2	2	5		4
Total Imports	2	2	4	2	2	5		4
Total Supply	480	480	502	480	470	478		455
Other Exports	383	383	383	405	375	380		364
Total Exports	383	383	383	405	375	380		364
Human Dom. Cons.	4	4	6	4	4	7		7
Other Use, Losses	0	0	0	0	0	0		0
Total Dom. Cons.	4	4	6	4	4	7		7
Total Use	387	387	389	409	379	387		371
Ending Stocks	93	93	113	71	91	91		84
Total Distribution	480	480	502	480	470	478		455
CY Imp. from U.S.	0	0	1	0	0	0		0
CY. Exp. to U.S.	0	0	0	0	0	0		0
TS=TD	0	0	0	0	0	0	0	0

Not official USDA estimates

## Butter and Anhydrous Milk fat (AMF)

It is envisaged that 2015 butter and AMF production will dip slightly below previous forecasts as milk production slows to be 570,000MT (butter equivalents), which represents a 1.7% reduction year-on-year. The export shipping rate for the year-to-date (YTD) has slowed significantly compared to 2014 and isn't expected to regain lost ground in the second half of the year. This will allow a buildup of inventory to maintain consistency of supply to the growing number of food service customers.

Butter and AMF products are manufactured from the cream separated from the SMP powder stream and from surplus fat in the WMP manufacturing process.

## PSD

Dairy, Butter New Zealand  (1000 MT)	2014 Market Year Begin: Jan 2014			2015 Market Year Begin: Jan 2015			2016 Market Year Begin: Jan 2016	
	USDA Official	Old Post	New Post	USDA Official	Old Post	New Post	USDA Official	New Post
Beginning Stocks	54	57	54	53	60	57		81
Production	580	580	580	565	580	570		550
Other Imports	1	1	1	1	1	1		1
Total Imports	1	1	1	1	1	1		1
Total Supply	635	638	635	619	641	628		632
Other Exports	560	556	556	540	559	525		545
Total Exports	560	556	556	540	559	525		545
Domestic Cons.	22	22	22	22	22	22		22
Total Use	582	578	578	562	581	547		567
Ending Stocks	53	60	57	57	60	81		65
Total Distribution	635	638	635	619	641	628		632
CY Imp. from U.S.	0	0	0	0	0	0		0
CY. Exp. to U.S.	30	31	31	30	30	30		30
TS=TD	0	0	0	0	0	0		0

Note AMF product weight tonnages are multiplied by 1.22 to get butter equivalents; not official USDA estimates

## Dairy Exports

### Dairy Exports at a Glance

New Zealand Summary Table for Dairy Product Export Quantities					
Commodity Group  (1000s Metric Tons)	2014	2015		2016	
	Actual	Estimated	% change from prev. year	New Forecast	% change from prev. year
<b>WMP</b>	<b>1,423</b>	<b>1,360</b>	-4.4%	<b>1,359</b>	-0.1%
<b>SMP</b>	<b>383</b>	<b>380</b>	-0.8%	<b>364</b>	-4.2%
<b>Butter/AMF</b>	<b>556</b>	<b>525</b>	-5.6%	<b>545</b>	3.8%
<b>Cheese</b>	<b>278</b>	<b>319</b>	14.7%	<b>278</b>	-12.9%
<b>Liquid Milk</b>	<b>136</b>	<b>165</b>	21.3%	<b>200</b>	21.2%
<b>Sub-Total PSD Exports</b>	<b>2,776</b>	<b>2,749</b>	-1.0%	<b>2,746</b>	-0.1%
<b>Casein</b>	<b>81</b>	<b>90</b>	11.5%	<b>75</b>	-16.7%
<b>Whey Products</b>	<b>24</b>	<b>28</b>	16.6%	<b>28</b>	0.0%
<b>Milk Protein Concentrates</b>	<b>72</b>	<b>84</b>	17.1%	<b>75</b>	-10.7%
<b>Other Products</b>	<b>52</b>	<b>48</b>	-7.6%	<b>48</b>	0.0%

<b>Infant Milk Formula</b>	<b>42</b>	<b>31</b>	<b>-26.2%</b>	<b>36</b>	<b>16.1%</b>
<b>Total Exports</b>	<b>3,046</b>	<b>3,030</b>	<b>-0.5%</b>	<b>3,008</b>	<b>-0.7%</b>

Source: GTA, Post estimates. Note: Butter/AMF line has the AMF adjusted to butter equivalents

Exports broadly follow production. Domestic consumption, which is expected to be stable, is such a small component of the overall production, supply, and demand mix for New Zealand is doesn't really influence the direct relationship between production and exports. The overall export volume is expected to be stable at just over 3m MT in both 2015 and 2016.

## Whole Milk Powder

WMP exports in 2015 are expected to be down by 4.5% on 2014 at 1.36m MT. By July 2015 YTD exports were five percent behind the same period in 2014. With the lower spring (September-November) milk production peak and the increased optionality for product mix it is unlikely that this gap will be recovered. Exports of WMP in 2016 are expected to remain at 1.36m MT. Milk supply may be decreasing but the likely recovery in demand/market price for WMP will probably mean WMP consumes a greater share of the milk supply in 2016.

<b>New Zealand Export Statistics for Whole Milk Powder</b>									
<b>Year To Date: January - July</b>									
<b>Partner Country</b>	<b>2013</b>			<b>2014</b>			<b>2015</b>		
	<b>Value millions USD</b>	<b>Quantity (metric tons)</b>	<b>FOB Price USD/T</b>	<b>Value millions USD</b>	<b>Quantity (metric tons)</b>	<b>FOB Price USD/T</b>	<b>Value millions USD</b>	<b>Quantity (metric tons)</b>	<b>FOB Price USD/T</b>
China	976.1	266,248	\$3,666	2,017.9	405,762	\$4,973	405.3	158,561	\$2,556
Algeria	92.3	26,066	\$3,540	190.6	39,515	\$4,824	226.5	85,136	\$2,660
UAE	180.0	50,209	\$3,584	328.7	67,242	\$4,889	214.6	78,364	\$2,739
Venezuela	125.2	31,361	\$3,993	25.3	4,805	\$5,276	183.2	39,844	\$4,598
Malaysia	83.7	23,701	\$3,532	129.0	25,922	\$4,975	138.4	52,412	\$2,641
Vietnam	47.2	13,945	\$3,382	82.4	16,370	\$5,036	83.7	31,146	\$2,688
Nigeria	70.1	18,477	\$3,795	103.1	20,432	\$5,047	80.7	29,725	\$2,714
Sri Lanka	96.1	29,805	\$3,224	138.6	27,904	\$4,967	77.6	30,528	\$2,542
Thailand	59.3	16,096	\$3,687	120.0	24,748	\$4,849	74.6	27,493	\$2,713
Saudi Arabia	56.9	16,640	\$3,420	127.1	25,984	\$4,893	63.7	24,403	\$2,609
Rest of World	816.9	213,49	\$3,82	910.5	184,89	\$4,92	666.9	246,34	\$2,70

		1	7		5	4		9	7
<b>World</b>	<b>2,603.8</b>	<b>706,039</b>	<b>\$3,688</b>	<b>4,173.3</b>	<b>843,579</b>	<b>\$4,947</b>	<b>2,215.2</b>	<b>803,961</b>	<b>\$2,755</b>

Source: GTA

<b>New Zealand Export Statistics for Whole Milk Powder</b>						
<b>Calendar Year: 2012 - 2014</b>						
<b>Partner Country</b>	<b>2012</b>		<b>2013</b>		<b>2014</b>	
	<b>Quantity (metric tons)</b>	<b>FOB Price USD/T</b>	<b>Quantity (metric tons)</b>	<b>FOB Price USD/T</b>	<b>Quantity (metric tons)</b>	<b>FOB Price USD/T</b>
China	423,435	\$3,238	622,133	\$4,435	587,631	\$4,363
United Arab Emirates	91,893	\$3,442	76,635	\$4,067	112,579	\$4,338
Algeria	75,426	\$3,319	32,752	\$3,882	95,030	\$3,750
Malaysia	41,703	\$3,467	36,829	\$4,030	59,448	\$4,035
Sri Lanka	56,927	\$3,438	45,339	\$3,789	47,154	\$4,466
Saudi Arabia	42,512	\$3,295	27,548	\$4,075	45,485	\$4,259
Thailand	30,132	\$3,178	31,609	\$4,302	38,799	\$4,370
Nigeria	30,777	\$3,433	27,123	\$4,254	35,094	\$4,293
Indonesia	32,690	\$3,379	24,086	\$4,219	33,371	\$4,258
Singapore	30,635	\$2,884	35,123	\$3,686	39,331	\$3,579
Rest of World	405,148	\$3,639	332,283	\$4,296	329,019	\$4,252
<b>World Total</b>	<b>1,261,278</b>	<b>\$3,404</b>	<b>1,291,460</b>	<b>\$4,290</b>	<b>1,422,941</b>	<b>\$4,255</b>

Source: GTA

## **Cheese**

It is now estimated for 2015 total cheese exports will reach 319,000MT which would equate to a 16% turn up from earlier estimates. Oceania cheese has been priced competitively over the last six months and the margins above WMP prices have been enough to warrant extra production of cheese. For 2015 YTD exports from New Zealand are nearly 20% greater than the same period in 2014. The two companies which manufacture the greatest amount of cheese are both saying they are emphasizing cheese production.

With less milk supply in 2016 and the likelihood of increased WMP pricing it is expected cheese exports will reduce broadly in line with production decreases. It is forecast exports will be 278,000MT, a 13% reduction on 2015.

Cheese as a food service ingredient is becoming significant now. Fonterra announced in mid-July 2015 it was commissioning additions to its mozzarella plant at its Clandeboye facility in the South Island which would double its capacity. Fonterra's process to make mozzarella vastly reduces the time required and reputedly is very much more profitable than making cheddar. The main markets are China and S.E.Asia for pizza toppings.

<b>New Zealand Cheese and Curd Export Statistics</b>									
<b>Year To Date: January - July</b>									
<b>Partner Country</b>	<b>2013</b>			<b>2014</b>			<b>2015</b>		
	<b>Value USD</b>	<b>Quantity (metric tons)</b>	<b>FOB Price USD /T</b>	<b>Value USD</b>	<b>Quantity (metric tons)</b>	<b>FOB Price USD /T</b>	<b>Value USD</b>	<b>Quantity (metric tons)</b>	<b>FOB Price USD /T</b>
Australia	97,837,881	22,998	4,254	136,844,145	27,452	4,985	112,153,731	29,917	3,749
Japan	149,808,425	38,245	3,917	142,668,520	30,101	4,740	111,995,670	31,138	3,597
China	47,219,591	10,818	4,365	76,249,439	15,326	4,975	87,577,559	20,366	4,300
Korea South	63,184,952	15,258	4,141	29,183,177	5,925	4,925	32,916,017	8,255	3,987
Philippines	28,502,887	7,607	3,747	29,857,965	6,778	4,405	32,422,263	9,538	3,399
Saudi Arabia	30,960,633	8,234	3,760	32,397,030	7,057	4,591	30,807,097	8,726	3,530
Indonesia	28,424,576	7,382	3,851	28,496,374	6,235	4,570	29,882,214	8,679	3,443
United States	2,349,642	476	4,936	4,331,240	674	6,426	24,297,109	7,517	3,232
Egypt	18,890,912	5,228	3,613	27,189,641	5,838	4,657	24,235,044	7,833	3,094
Malaysia	14,407,314	3,629	3,970	19,309,163	4,161	4,641	19,673,969	4,922	3,997
Rest of the World	206,794,019	52,420	3,945	235,258,110	49,145	4,787	189,154,869	52,929	3,574
<b>World</b>	<b>688,380,</b>	<b>172,29</b>	<b>3,99</b>	<b>761,784,</b>	<b>158,69</b>	<b>4,80</b>	<b>695,115,</b>	<b>189,81</b>	<b>3,66</b>

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Source: GTA

### New Zealand Export Statistics for Cheese by Type Year To Date: January - July

Commodity HS Code	Description	2013		2014		2015	
		Quantity (metric tons)	FOB Price USD/T	Quantity (metric tons)	FOB Price USD/T	Quantity (metric tons)	FOB Price USD/T
0406	Cheese And Curd	172,296	\$3,995	158,690	\$4,800	189,816	\$3,662
040690	Cheese, Nesoi, Including Cheddar And Colby	113,258	\$3,972	99,837	\$4,896	124,972	\$3,488
040610	Cheese (Unrpd/Uncurd) Frsh Incl Whey Cheese Curd	29,112	\$3,925	27,846	\$4,469	31,404	\$3,685
040620	Cheese Of All Kinds, Grated Or Powdered	17,283	\$3,915	18,010	\$4,644	20,011	\$4,387
040630	Cheese, Processed, Not Grated Or Powdered	12,552	\$4,386	12,907	\$4,929	13,364	\$4,113
040640	Cheese, Blue- Veined, Nesoi	92	\$17,381	90	\$14,402	65	\$11,701

Source: GTA

### New Zealand Export Statistics for Cheese by Destination Calendar Year: 2012 - 2014

Partner Country	2012		2013		2014	
	Quantity (metric tons)	FOB Price USD/T	Quantity (metric tons)	FOB Price USD/T	Quantity (metric tons)	FOB Price USD/T
Japan	64,754	\$3,874	64,296	\$4,092	57,515	\$4,526
Australia	45,619	\$4,019	37,661	\$4,420	43,174	\$4,764
China	17,852	\$4,284	21,367	\$4,533	28,923	\$4,877

Korea South	25,457	\$3,958	21,728	\$4,259	12,110	\$4,688
Saudi Arabia	18,862	\$3,515	11,775	\$3,914	12,749	\$4,311
Philippines	12,545	\$3,650	11,729	\$3,935	12,335	\$4,169
Indonesia	13,352	\$3,697	11,036	\$4,037	10,959	\$4,442
Egypt	10,361	\$3,471	7,527	\$3,852	8,876	\$4,364
Taiwan	5,936	\$3,822	7,464	\$3,980	8,069	\$4,354
Chile	5,054	\$3,492	10,502	\$3,880	7,790	\$4,409
Rest of World	85,855	\$3,831	71,801	\$4,204	75,472	\$4,625
<b>World Total</b>	<b>305,647</b>	<b>\$3,855</b>	<b>276,886</b>	<b>\$4,179</b>	<b>277,972</b>	<b>\$4,591</b>

Source: GTA

New Zealand Export Statistics for Cheese by Type							
Calendar Year: 2012 - 2014							
Commodity HS Code	Description	2012		2013		2014	
		Quantity (metric tons)	FOB Price USD/T	Quantity (metric tons)	FOB Price USD/T	Quantity (metric tons)	FOB Price USD/T
<b>0406</b>	<b>Cheese And Curd Total</b>	<b>305,647</b>	<b>\$3,855</b>	<b>276,886</b>	<b>\$4,179</b>	<b>277,972</b>	<b>\$4,591</b>
040690	Cheese, Nesoi, Including Cheddar And Colby	213,058	\$3,773	174,406	\$4,181	172,191	\$4,625
040610	Cheese (Unrpnd/Uncurd) Fresh Incl Whey Cheese Curd	48,194	\$3,861	51,683	\$4,061	51,709	\$4,333
040620	Cheese Of All Kinds, Grated Or Powdered	23,893	\$4,092	29,359	\$4,117	31,594	\$4,625
040630	Cheese, Processed, Not Grated Or Powdered	20,364	\$4,328	21,284	\$4,439	22,331	\$4,818
040640	Cheese, Blue- Veined, Nesoi	138	\$16,278	155	\$17,450	147	\$13,975

Source: GTA

### Skim Milk Powder (SMP)

Exports for 2015 are estimated to be 380,000MT just under one percent down on 2014. The extra inventory taken into 2015 has facilitated extra shipments of SMP in the first half of 2015 which are up 13% for the 2015 YTD July over the same period in 2014. However by all accounts the world is fully supplied with SMP at present and forward into next year with pricing very shaky at the moment. New Zealand processors are likely to minimize the amount of SMP being produced in favor of producing increased quantities of Milk Protein Concentrates; Casein and Caseinates; and Whey products from the protein stream when cream is separated off for butter and AMF.

The forecast for SMP exports in 2016 reduces the volume to 364,000MT. This is a four percent reduction but inventories would be reduced eight percent to achieve it. It is unlikely to be much



lower than this level as New Zealand exporters have a core group of customers through Asia and the Middle East that they would aim to maintain supply to.

<b>New Zealand Export Statistics for Skim Milk Powder</b>						
<b>Calendar Year: 2012 - 2014</b>						
<b>Destination Country</b>	<b>2012</b>		<b>2013</b>		<b>2014</b>	
	<b>Qty (MT)</b>	<b>Av. FOB Price/MT</b>	<b>Qty (MT)</b>	<b>Av. FOB Price/MT</b>	<b>Qty (MT)</b>	<b>Av. FOB Price/MT</b>
China	100,851	\$3,224	132,527	\$4,251	114,949	\$4,051
Malaysia	34,593	\$3,472	36,106	\$4,195	33,376	\$4,280
Philippines	30,738	\$3,229	34,958	\$4,179	30,591	\$4,273
Indonesia	37,413	\$3,180	33,780	\$4,083	26,918	\$4,321
Singapore	21,269	\$3,169	23,575	\$3,920	29,049	\$3,873
Thailand	22,545	\$2,995	15,816	\$4,086	20,580	\$4,044
Saudi Arabia	23,761	\$3,192	10,112	\$4,201	17,768	\$4,432
Taiwan	12,055	\$3,246	14,841	\$4,216	18,674	\$4,215
Japan	5,929	\$3,549	7,251	\$3,958	16,480	\$3,883
UAE	3,900	\$3,143	6,322	\$4,196	9,710	\$3,992
Rest of world	96,570	\$3,285	76,681	\$4,045	64,875	\$4,049
<b>World Total</b>	<b>389,624</b>	<b>\$3,244</b>	<b>391,969</b>	<b>\$4,149</b>	<b>382,970</b>	<b>\$4,110</b>

Source: GTA

## **Butter and Anhydrous Milkfat (AMF) Exports**

Current year exports to date (July) are running 9.5% behind the same period in 2014. It is not envisaged that they will lose any more ground in the second half of 2015 and will finish at 525,000MT (butter equivalents) which would be six percent down on 2014.

Exports in 2016 are expected to bounce back to 550,000MT by running down inventories, even though production is expected to drop in-sync with less milk production. Decreases in shipments to China seem to be the major reason why exports are reduced in the first half of 2015. It is expected that Chinese end users for butter and AMF will have reduced their inventories by the first half of 2016 and will look to secure additional supply then. Fonterra has put out several press statements over the recent past highlighting its drive to increase its foodservice ingredients sales especially in Asia, in which fat products such as butter and AMF form a major share.

<b>New Zealand Export Statistics For Butter, Anhydrous MilkFat, &amp; Dairy Spreads</b>			
<b>Calendar Year: 2012 - 2014</b>			
<b>Partner Country</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>

	Qty (MT)	Av. FOB Price/MT	Qty (MT)	Av. FOB Price/MT	Qty (MT)	Av. FOB Price/MT
China	43,349	\$3,683	52,508	\$4,186	67,905	\$4,275
Egypt	37,746	\$3,329	32,111	\$3,765	34,556	\$4,132
Iran	40,791	\$3,593	30,378	\$4,071	26,680	\$4,404
Saudi Arabia	21,720	\$3,513	17,394	\$3,769	27,153	\$4,142
United States	26,862	\$3,377	16,474	\$3,792	25,880	\$4,099
Philippines	15,482	\$3,589	14,521	\$4,218	21,449	\$4,606
Azerbaijan	17,509	\$3,431	13,247	\$3,966	21,876	\$4,152
Russia	23,672	\$3,145	22,270	\$3,857	16,479	\$4,789
Australia	18,957	\$3,574	18,675	\$3,895	19,696	\$3,955
Algeria	9,120	\$3,677	14,278	\$4,218	15,911	\$4,893
Rest of world	207,870	\$3,483	229,290	\$3,931	232,294	\$4,112
<b>World Total</b>	<b>463,078</b>	<b>\$3,486</b>	<b>461,146</b>	<b>\$3,960</b>	<b>509,879</b>	<b>\$4,214</b>

Source: GTA; Note: all quantities are by actual product weight

## Imports

### Lactose

Used to standardize WMP production, lactose imports have grown from 76,477MT in 2012 to 102,567 MT in 2014. This includes MPC from USA which is actually lactose made as a by-product from the MPC manufacture process. Forty one percent or 42,213 MT of the total volume in 2014 was sourced from the U.S. Lactose makes up approximately ten percent of the volume of WMP. So the amount imported standardizes approximately one million metric tons of the total WMP produced. There is still some WMP produced un-standardized as the amount of lactose available domestically would not cover the balance of WMP production.

One of the by-products of the new MPC facility Fonterra has built in the South Island is lactose. This facility was commissioned in mid-2015. In July 2015 at Heerenveen in the Netherlands Fonterra opened a whey and lactose processing site, which sources the raw materials from a cheese factory alongside the site. The cheese factory is operated by Dutch dairy processor Royal A-ware. The facility will produce 5,000MT of whey protein and 25,000MT of lactose annually. This lactose may be imported into NZ to be used in WMP manufacture and could compete with US imports especially while WMP production is reduced over the next 18 months.

However so far in 2015 there has been no letup in the rate of lactose being imported. Up to July 2015 41,609MT had entered which was two percent up on the same period in 2014. The US supplied 63% of the volume.