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# **New Zealand**

# **Dairy and Products Semi-annual**

# New Zealand Semi-Annual Dairy and Milk Supply Report 2016

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#### **Report Highlights:**

Dairy Farmers are now in the second year of below breakeven farmgate milk prices and have cut the national dairy cow herd number over the last eighteen months by five percent to 4.9 million head. Milk supply which is now forecast at 20.9 million metric tons for 2016 is down 4.5% from the peak in 2014.

### **Executive Summary**

For the second year in a row, New Zealand dairy farmers will have to endure a low farmgate milk price which will mean most dairy farms will not achieve a breakeven financial outcome for the Financial Year (FY) 2016. Very low farmgate milk prices (NZ\$4.00/kg MS to NZ\$5.00/kg MS) are likely to continue into FY2017 and could even stretch into FY2018, according to some industry participants. Very simplistically for many farmers the marginal costs of the last 5% to 15% of their cows are now very much greater than the marginal return. So for many reducing cow numbers is beneficial to their financial situation. Unless the farmgate price signals for the 2016/2017 production season very quickly indicate approximately NZ\$6.00/kg MS then this right-sizing is likely to continue into 2017.

Over the two years 2014 to 2016 dairy farmers are estimated to have collectively reduced the national dairy cow herd size by 5% to 4.93 million (m) head. This combined with continued cost minimization is now having an effect on national milk supply. The 2016 milk production total is now forecast at 20.92m metric tons (MT), which amounts to a 4.5% reduction since 2014. This is a slightly better result than had been previously forecast, up 1% on the November 2015 forecast because milk production in the first quarter 2016 surpassed expectations and it is anticipated per cow yields in the fourth quarter 2016 will be up.

In turn New Zealand dairy production is reducing. Now total production of all dairy products (excluding liquid milk) is forecast to be 2.948m MT in 2016 which will be 2.2% down from the 3.014m MT estimated for 2015. However this revision for 2016 is 2% up on the previous forecast reflecting the upward revision for milk supply in 2016.

The move in 2015 to emphasize cheese, casein, and milk protein concentrate (MPC) manufacture is likely to continue into 2016. In addition the scaling up of liquid UHT milk manufacture for export will continue in 2016.

Total Dairy exports for all products including liquid milk are now forecast to reach 3.096m MT in 2016 which is a three percent upward revision on the previous forecast. Generally the slightly greater milk supply, than had been expected, in this revision is behind the export increase. In 2015 exports totaled 3.141m MT, a 3.7% upward revision, reflecting the better than expected milk supply in 2015 and an estimated 22,000 MT run down in ending stocks.

The major changes to the export line-up for this revision of the 2016 forecast are: Whole Milk Powder (WMP) down 19,000 MT (-1.4%); Skim Milk Powder (SMP) up 16,000MT (+4.4%); cheese up 40,000 MT (+14%); and casein up 25,000 MT (+33%).

Note: the Marketing Year (MY) is the same as the calendar year (CY). For example in the report "2016" is used which means the marketing year.

# Milk Supply

#### 2016

Milk production for first quarter of 2016 has been above expectations, which has contributed to a small upward adjustment for milk supply for 2016 to 20.92 million (m) metric tons (MT) from 20.75m MT previously, a 0.5% improvement. The factors which are dominant in determining this year's production are:

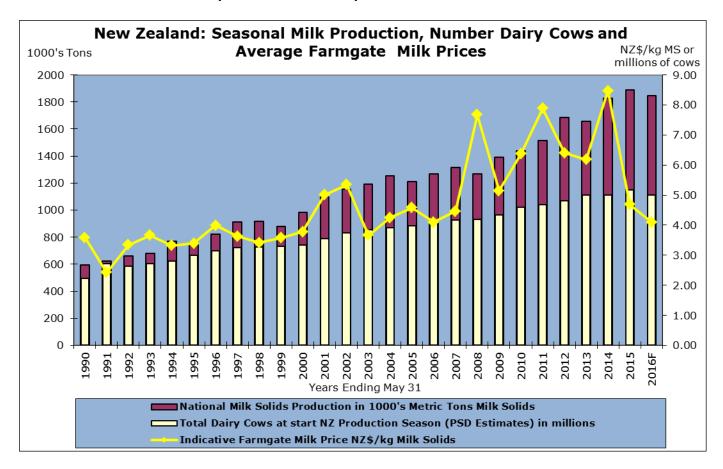
- > The weather for the first quarter (Q1) in 2016 generally over the country, apart from a couple of dry areas (some districts in the Waikato, and the Manawatu), was favorable so pasture production was ahead of expectations hence the better milk production in Q1. El Nino weather patterns which were forecast did not eventuate.
- Milk production in the second quarter (Q2) is now falling behind the similar period in 2015.
- > With the farmgate milk price so low farmers are minimizing spending on feed supplements. As the rate of pasture growth is slowing down during the autumn (April-May) the herds are being progressively dried off rather than being fed supplements to extend the lactation.
- > Based on the cow kill so far this year and anecdotal reportage of farmers' plans for herd numbers in the spring it is forecast the national herd will be down a further 75,000 head, which would put it at 4.93m head a 3.4% downward revision and a 1.5% year-on-year reduction.
- > Reportedly cow condition across the country is generally good and pasture levels going into winter have been managed to optimum levels.
- > The effect of the reduced cow numbers will be felt in the spring (August-October) however it is likely to be muted as long as spring weather conditions are close to normal because the remaining cows will have a greater pasture allowance on a per head basis.

#### 2015

Final actual milk supply data is now available which shows that for 2015 total New Zealand milk production was 21.58m MT, which is a one percent upward revision. The actual total was 1.4% less than the 2014 production. The improvement came about because the spring and early summer (August through December) milk production was better than expected. The following dynamics were at play:

- > Dairy farmers made late culling decisions to their cow numbers just before calving (August) which meant cow numbers were reduced by 197,000 head (3.8%).
- However having fewer cows with approximately normal pasture supplies gave the remaining cows a slightly greater daily pasture allowance, which flowed through to better daily per cow milk production in October, November, and December.

#### Milk Solids Production, Cow Numbers, Milk Price Trend Chart

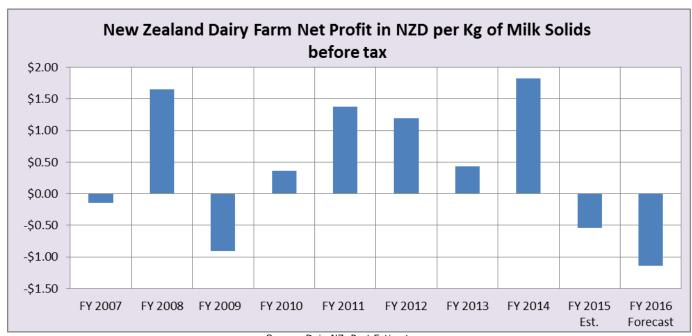


Source: Post Estimates, DairyNZ

### **Dairy Farm Profitability**

For the second year in a row, New Zealand dairy farmers will have to endure a low farmgate milk price which will mean most dairy farms will not achieve a breakeven financial outcome for the Financial Year (FY) 2016. Very low farmgate milk prices (NZ\$4.00/kg MS to NZ\$5.00/kg milk solids (MS)) are likely to continue into FY2017 and could even stretch into FY2018, according to some industry participants.

Farmers are scrambling to eliminate unnecessary spending. They are examining every part of their businesses from staffing levels to general overheads such as debt servicing and rent to find efficiencies that will reduce inputs and expenses while still maintaining production. Most farms are struggling to find a profitable business model which at revenue equating to NZ\$4.50/kg MS to NZ\$5.00/kg MS will cover all expenses including debt servicing and leaves a profit. Very simplistically for many farmers the marginal costs of the last 5% to 15% of their cows are now very much greater than the marginal return. So for many reducing cow numbers is beneficial to their financial situation. Unless the farmgate price signals for the 2016/2017 production season very quickly indicate approximately NZ\$6.00/kg MS then this right-sizing is likely to continue into 2017.



Source: DairyNZ, Post Estimates

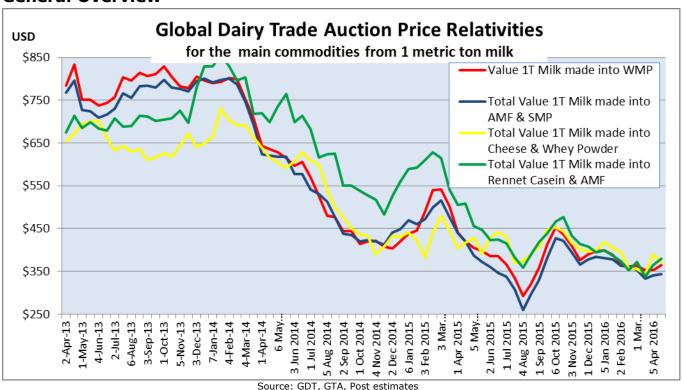
### **PSD Milk**

Dairy, Milk,		2014			2015			2016		
Fluid (1000HD, 1000MT)	Market Y	'ear Begin: Ja	an 2014	Market Y	ear Begin: Ja	an 2015	Market Y	'ear Begin: Ja	an 2016	
New Zealand	Official	Old Post	New Post	Official	Old Post	New Post	Official	Old Post	New Post	
Cows In Milk	5175	5175	5176	5200	5200	5003	5100	5100	4928	
Cow's Milk Production	21893	21893	21893	21391	21391	21582	20745	20745	20921	
Other Milk Production	0	0	0	0	0	0	0	0	0	
Total Production	21893	21893	21893	21391	21391	21582	20745	20745	20921	
Other Imports	2	2	2	2	2	2	2	2	2	
Total Imports	2	2	2	2	2	2	2	2	2	
Total Supply	21895	21895	21895	21393	21393	21584	20747	20747	20923	
Other Exports	136	136	136	165	165	171	200	200	210	
Total Exports	136	136	136	165	165	171	200	200	210	
Fluid Use Dom. Consum.	495	495	495	497	497	497	497	497	497	
Factory Use Consum.	21214	21214	21214	20681	20681	20866	20000	20000	20166	
Feed Use Dom. Consum.	50	50	50	50	50	50	50	50	50	
Total Dom. Consumption	21759	21759	21759	21228	21228	21413	20547	20547	20713	
Total Distribution	21895	21895	21895	21393	21393	21584	20747	20747	20923	
CY Imp. from U.S.	0	0	0	0	0	0	0	0	0	
CY. Exp. to U.S.	0	0	0	0	0	0	0	0	0	
TS=TD	0	0	0	0	0	0	0	0	0	
(1000 Hd, 1000MT)										

Not official USDA estimates

### **Dairy Production and Inventories**

#### **General Overview**



Source: GDT, GTA, Post estimates

After the rather dismal dairy commodity price plunge in August 2015 prices recovered and seem to be bumping along something of a floor at present. Whether this is a cause for optimism about price increases over the next six months is still very much open to conjecture though.

During 2015 the relative pricing for cheese and casein was quite often at a premium to the powders (see chart above). In addition during 2015 fat (butter, and AMF) prices were relatively good. Consequently cheese production was emphasized along with the products which could utilize the Skim Milk Powder (SMP) side of the Skim/Fat manufacturing stream such as casein and milk protein concentrates (MPC). Because whole milk powder (WMP) prices have been relatively lower than cheese and casein prices for much of 2015 WMP production is down and it lost some of its share of the milk supply pool.

However as 2016 has got underway the price relativities between the different product streams has tightened up considerably. Bearing in mind that the GDT chart shows average price relativities' at each auction for product delivery dates one to six months into the future, the April auction prices mean some product to be produced in September/October is already priced. Barring any rapid changes to the price relativities in the spring of 2016 it would seem that the production levels for the various manufacturing streams established in 2015 and the start of 2016 will continue for the

rest of 2016. Alternative protein products to SMP (Casein and MPC) will again be emphasized; cheese will hold its own, and WMP will be down slightly in line with milk supply reductions.

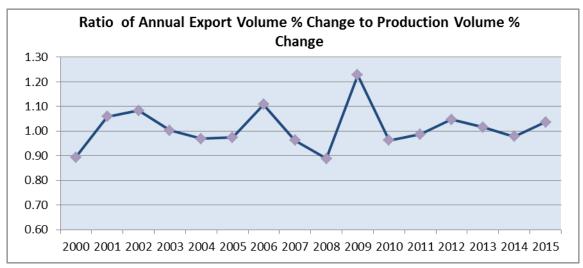
### **Dairy Production at a Glance**

New Zealand	Summary Ta	ble for Est	imated Dairy F	roduction	
Commodity Group	2014	2	015	20	)16
(1000s Metric Tons)	Firm Estimate	Estimate	% change from prev. year	New Forecast	% change from prev. year
WMP	1,460	1,390	-4.8%	1,350	-2.9%
SMP	415	390	-6.0%	380	-2.6%
Butter/AMF	580	575	-0.9%	570	-0.9%
Cheese	325	355	9.2%	350	-1.4%
Sub-Total PSD Commodities	2,780	2,710	-2.5%	2,650	-2.2%
Casein & Caseinates	86	109	26.7%	100	-8.3%
Whey Products	28	32	14.3%	32	0.0%
Milk Protein Concentrates	74	81	9.5%	80	-1.2%
Other Products	48	48	-0.7%	48	0.0%
Infant Milk Formula	31	34	9.7%	38	11.8%
Subtotal Rest of Dairy	267	304	13.7%	298	-2.0%
Total Production	3,047	3,014	-1.1%	2,948	-2.2%

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 have reduced from 2014 to 2015 by 22,000MT and were estimated at 392,000MT at end 2015 (five percent down). The chart below shows the ratio of export change in 2015 over the production change was 1.04 which suggests export growth was leading production growth and stocks were being run down to some extent.



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

By the end of 2016 it is forecast another 8,000MT will be shaved off the inventory total, or two percent.

#### Whole Milk Powder (WMP)

WMP production is forecast to reduce again in 2016 to be 1.35m MT down two percent on the previous forecast. This reduction is in line with reductions to the milk supply. The 2015 production is now estimated at 1.39m MT based on the greater than expected export volume.

There are commentators who think WMP prices will be the quickest to recover since there are no great stockpiles anywhere and New Zealand, the largest exporter of WMP, is reducing its production of WMP. However the commodities pricing from the GDT auctions suggest that price increases won't happen until the last quarter in 2016 at the very earliest but more likely sometime in 2017. Additionally the very low prices for SMP are likely to put a ceiling on how high WMP prices can go before some dairy product manufacturers substitute SMP and an alternative fat ingredient for WMP. For these reasons it is thought WMP production will not be emphasized in 2016 but continue on the downward trend established in 2015.

#### **PSD**

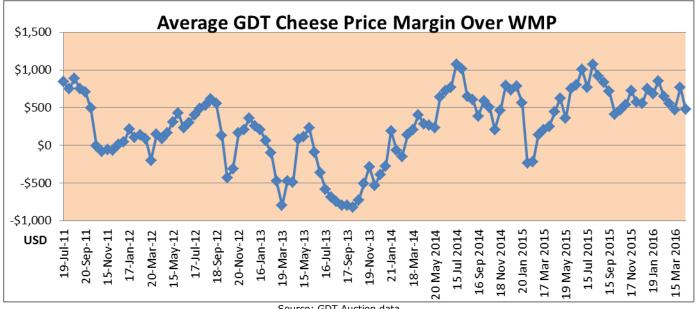
Dairy, Dry		2014			2015			3     180     179       5     1,375     1,350       1     3     5       1     3     5	
Whole Milk Powder		ear Begin 2014	: Jan	Market Y	ear Begin 2015	: Jan	Market Y		: Jan
New Zealand	USDA Official	Old Post	New Post	USDA Official	Old Post	New Post	USDA Official		
Beginning Stocks	157	157	157	180	180	180	183	180	179
Production	1,460	1,460	1,460	1,375	1,375	1,390	1,375	1,375	1,350
Other Imports	1	1	1	6	3	7	1	3	5
Total Imports	1	1	1	6	3	7	1	3	5
Total Supply	1,618	1,618	1,618	1,561	1,558	1,577	1,559	1,558	1,534
Other Exports	1,423	1,423	1,423	1,360	1,360	1,380	1,359	1,359	1,340
Total Exports	1,423	1,423	1,423	1,360	1,360	1,380	1,359	1,359	1,340
Human Dom. Cons.	2	2	2	3	3	3	4	4	4
Other Use, Losses	13	13	13	15	15	15	15	15	15
Total Dom. Cons.	15	15	15	18	18	18	19	19	19
Total Use	1,438	1,438	1,438	1,378	1,378	1,398	1,378	1,378	1,359
Ending Stocks	180	180	180	183	180	179	181	180	175
Total Distribution	1,618	1,618	1,618	1,561	1,558	1,577	1,559	1,558	1,534
CY Imp. from U.S.	0	0	0	0	0	0	0	0	0
CY. Exp. to	0	3	3	0	3	3	0	2	2

U.S.									
TS=TD	0	0	0	0	0	0	0	0	0
(1000 MT)									

Not official USDA estimates

#### Cheese

In 2016 Cheese production is forecast to be 350,000MT just 5,000MT less than the 2015 total, but a 13% upward revision on the previous forecast. For the last twelve months cheese prices in the GDT auction have almost consistently been USD500 greater than the WMP prices indicating it is more profitable to produce cheese. This explains why cheese production has been emphasized over the last twelve months. Relatively speaking though the value of milk going into the cheese stream versus the WMP stream has tightened up considerably over the last few months. It is still likely cheese production will continue at current levels given the competitive outlook and the factor that by utilising milk in cheese this reduces volume of milk available for WMP production which will help the process of shortening up the supply of WMP and ultimately achieving WMP price increases. In addition cheese production is continuing to be diversified into fresh cheese production such as mozzarella and further processing for food service by grating or slicing.



Source: GDT Auction data

#### **PSD**

Dairy, Cheese	;	2014			2015			2016		
New Zealand	Market Yea	r Begin: Ja	n 2014	Market Yea	r Begin: Ja	n 2015	Market Yea	r Begin: Ja	n 2016	
(1000 MT)	USDA Official	Old Post	New Post	USDA Official	Old Post	New Post	USDA Official	Old Post	New Post	
Beginning Stocks	50	50	50	64	64	64	54	60	60	
Production	325	325	325	347	347	355	310	310	350	
Other Imports	7	7	7	8	8	8	8	8	8	
Total Imports	7	7	7	8	8	8	8	8	8	
Total Supply	382	382	382	419	419	427	372	378	418	

Other Exports	278	278	278	325	319	327	285	278	318
Total Exports	278	278	278	325	319	327	285	278	318
Human Dom. Cons.	40	40	40	40	40	40	40	40	40
Other Use, Losses	0	0	0	0	0	0	0	0	0
Total Dom. Cons.	40	40	40	40	40	40	40	40	40
Total Use	318	318	318	365	359	367	325	318	358
Ending Stocks	64	64	64	54	60	60	47	60	60
Total Distribution	382	382	382	419	419	427	372	378	418
CY Imp. from U.S.	0	1	1	0	1	1	0	1	1
CY. Exp. to U.S.	1	7	7	0	14	14	0	7	7
TS=TD	0	0	0	0	0	0	0	0	0

Not official USDA estimates

#### Skim Milk Powder (SMP)

It is forecast SMP production in 2016 will be 380,000MT, up six percent from the previous forecast. While SMP prices are at extremely low levels and there is a historically large spread between SMP and WMP prices recent history would suggest New Zealnd will continue to produce SMP at a level between 380,000MT and 420,000MT per annum. The processors have long term customers to supply and Fonterra in particular has its own off-shore further processing which utilises SMP as an ingredient. It is thought that SMP production will be limited to those needs in 2016. Now it is estimated that the 2015 production level was 390,000MT, a six percent upward revision, based on the actual export level being well above previous expectations

#### **PSD**

Dairy, Milk, Nonfat Dry		2014		:	2015		2016			
New Zealand	Market Yea	r Begin: Ja	n 2014	Market Yea	r Begin: Ja	n 2015	Market Yea	r Begin: Ja	n 2016	
(1000 MT)	USDA Official	Old Post	New Post	USDA Official	Old Post	New Post	USDA Official	Old Post	New Post	
Beginning Stocks	83	83	83	113	113	113	71	91	90	
Production	415	415	415	370	360	390	370	360	380	
Other Imports	4	4	4	5	5	5	4	4	4	
Total Imports	4	4	4	5	5	5	4	4	4	
Total Supply	502	502	502	488	478	508	445	455	474	
Other Exports	383	383	383	410	380	411	385	364	380	
Total Exports	383	383	383	410	380	411	385	364	380	
Human Dom. Cons.	6	6	6	7	7	7	7	7	7	
Other Use, Losses	0	0	0	0	0	0	0	0	0	
Total Dom. Cons.	6	6	6	7	7	7	7	7	7	
Total Use	389	389	389	417	387	418	392	371	387	
Ending Stocks	113	113	113	71	91	90	53	84	87	
Total Distribution	502	502	502	488	478	508	445	455	474	
CY Imp. from U.S.	0	0	1	0	0	0	0	0	0	
CY. Exp. to U.S.	0	0	0	0	0	0	0	0	0	
TS=TD	0	0	0	0	0	0	0	0	0	

### **Butter and Anhydrous Milk fat (AMF)**

Butter and AMF production for 2016 is now forecast to be similar to 2015 at 570,000MT (butter equivalents) just 5,000MT or one percent less than 2015. This change amounts to a four percent upward revision. This revision brings the forecast into line with the current thinking that production volumes will be similar to last year since the outlook for the fat products is to continue to experience solid demand.

#### **PSD**

Dairy, Butter New Zealand	Market Y	2014 ear Begin 2014	: Jan	Market Y	t Year Begin: Jan Market Year			2016 ear Begir 2016	n: Jan
(1000 MT)	USDA Official	Old Post	New Post	USDA Official	Old Post	New Post	USDA Official	Old Post	New Post
Beginning Stocks	54	54	54	53	57	57	72	81	63
Production	580	580	580	570	570	575	550	550	570
Other Imports	1	1	1	1	1	1	1	1	1
Total Imports	1	1	1	1	1	1	1	1	1
Total Supply	635	635	635	624	628	633	623	632	634
Other Exports	560	556	556	530	525	548	530	545	550
Total Exports	560	556	556	530	525	548	530	545	550
Domestic Cons.	22	22	22	22	22	22	0	22	22
Total Use	582	578	578	552	547	570	530	567	572
Ending Stocks	53	57	57	72	81	63	93	65	62
Total Distribution	635	635	635	624	628	633	623	632	634
CY Imp. from U.S.	0	0	0	0	0	0	0	0	0
CY. Exp. to U.S.	30	31	31	0	30	20	0	30	25
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	New Zealand Summary Table for Dairy Product Export Quantities										
Commodity Group	2014		2015	2	2016						
(1000s Metric Tons)	Actual	Actual	% change from prev. year	New Forecast	% change from prev. year						
WMP	1,423	1,380	-3.0%	1,340	-2.9%						
SMP	383	411	7.3%	380	-7.5%						
Butter/AMF	556	548	-1.4%	550	0.4%						

Cheese	278	327	17.6%	318	-2.8%
Liquid Milk	136	171	25.7%	210	22.8%
Sub-Total PSD Exports	2,776	2,837	2.2%	2,798	-1.4%
Casein	86	109	26.7%	100	-8.3%
Whey Products	28	32	14.3%	32	0.0%
Milk Protein Concentrates	74	81	9.5%	80	-1.2%
Other Products	48	48	-0.7%	48	0.0%
Infant Milk Formula	31	34	9.7%	38	11.8%
Total Exports	3,043	3,141	3.2%	3,096	-1.4%

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

In general because domestic consumption is such a small proportion of production (only three to four percent) exports follow the same trends as production. This is only complicated in a minor way by inventory changes. The comments made on directions being taken with production are valid for export trends as well.

#### **Whole Milk Powder**

Exports of WMP in 2016 are now forecast to be 1.34m MT, a 1.4% downward revision based on reduced production volumes. The 2015 actual volume exported was 1.38m MT, 1.5% better than had been expected. While demand from China shrunk again 2015, New Zealand exporters have diversified away from China to many third tier markets evidenced by the rest of the world total volume outside the top ten destinations increasing by 16% in 2015.

	New	zealand	Export S	Statistics	for Whol	le Milk F	owder		
			Calend	ar Year: 2	013 - 2015				
		2013			2014			2015	
Partner Country	Value million s USD	Quantit y (metric tons)	FOB Price USD/ T	Value millions USD	Quantit y (metric tons)	FOB Price USD/ T	Value millions USD	Quantit y (metric tons)	FOB Price USD/ T
	2759.		\$4,43	2,563.		\$4,36			\$2,42
China	2	622,133	5	9	587,631	3	858.2	354,291	2
United Arab			\$4,06			\$4,33			\$2,56
Emirates	311.7	76,635	7	488.3	112,579	8	321.6	125,488	3
			\$3,88			\$3,75			\$2,48
Algeria	127.1	32,752	2	356.4	95,030	0	300.7	121,129	2
Venezuela	307.6	67,312	\$4,57 0	82.6	17,368	\$4,75 7	212.5	47,286	\$4,49 4
			\$4,03			\$4,03			\$2,49
Malaysia	148.4	36,829	0	239.9	59,448	5	205.3	82,358	3
			\$3,78			\$4,46			\$2,41
Sri Lanka	171.8	45,339	9	210.6	47,154	6	139.2	57,764	0
			\$4,01			\$4,08			\$2,35
Vietnam	95.4	23,758	4	137.1	33,571	3	115.9	49,340	0
Thailand	136.0	31,609	\$4,30	169.5	38,799	\$4,37	113.3	44,921	\$2,52

			2			0			3
			\$4,25			\$4,29			\$2,59
Nigeria	115.4	27,123	4	150.6	35,094	3	113.3	43,644	5
			\$4,07			\$4,25			\$2,40
Saudi Arabia	112.3	27,548	5	193.7	45,485	9	108.3	45,073	2
	1255.		\$4,18	1,462.		\$4,16	1,033.		\$2,52
Rest of World	7	300,422	0	0	350,782	8	1	409,120	5
	5540.	1,291,4	\$4,29	6,054.	1,422,9	\$4,25	3,521.	1,380,4	\$2,55
<b>World Total</b>	5	60	0	8	41	5	4	14	1

Source: GTA

#### Cheese

It is now forecast cheese exports in 2016, at 318,000MT, will fall just short of the total shipped in 2015 of 327,000MT. However the 2016 revised forecast will still be 11% greater than had been previously forecast because the pricing outlook for cheese still looks attractive enough to maintain production at similar levels to 2015.

	New Zealand Export Statistics for Cheese										
		(	Calendar	Year: 2	013 - 201	5					
	2013				2014			2015			
Partner Country	Value millions USD	Quantit y (metric tons)	FOB Price USD/ T	Value millions USD	Quantit y (metric tons)	FOB Price USD/ T	Value millions USD	Quantit y (metric tons)	FOB Price USD/ T		
			\$4,09			\$4,52			\$3,47		
Japan	263.1	64,296	2	260.3	57,515	6	191.4	55,045	7		
			\$4,42			\$4,76			\$3,60		
Australia	166.5	37,661	0	205.7	43,174	4	185.0	51,294	6		
			\$4,53			\$4,87			\$4,13		
China	96.9	21,367	3	141.1	28,923	7	163.5	39,550	5		
			\$5,00			\$3,90			\$3,39		
United States	4.7	945	2	27.0	6,926	1	57.5	16,915	7		
			\$4,25			\$4,68			\$3,68		
Korea South	92.5	21,728	9	56.8	12,110	8	54.9	14,929	0		
			\$3,93			\$4,16			\$3,35		
Philippines	46.1	11,729	5	51.4	12,335	9	52.5	15,654	5		
			\$4,03			\$4,44			\$3,40		
Indonesia	44.6	11,036	7	48.7	10,959	2	48.0	14,122	2		
			\$3,91			\$4,31			\$3,43		
Saudi Arabia	46.1	11,775	4	55.0	12,749	1	41.6	12,122	0		
			\$4,09			\$4,50			\$3,88		
Malaysia	25.0	6,098	2	30.4	6,750	3	35.1	9,044	2		
			\$3,85			\$4,36			\$3,08		
Egypt	29.0	7,527	2	38.7	8,876	4	33.9	10,975	5		

<b>World Total</b>	0	6	9	2	2	1	4	0	3
	1,157.	276,88	\$4,17	1,276.	277,97	\$4,59	1,164.	326,77	\$3,56
Rest of World	342.6	82,724	2	361.1	77,655	0	301	87,120	5
			\$4,14			\$4,65			\$3,45

Source: GTA

	New Zealand Export Statistics for Cheese by Type										
	Calendar Year: 2013 - 2015										
Commodity		2013		201	4	2015					
	Description	Quantity (metric tons)	FOB Price USD/T	Quantity (metric tons)	FOB Price USD/T	Quantity (metric tons)	FOB Price USD/T				
040690	Cheese, Nesoi, Including Cheddar And Colby	174,406	\$4,181	172,191	\$4,625	208,804	\$3,388				
040610	Cheese (Unrpnd/Uncurd) Fresh Incl Whey Cheese Curd	51,683	\$4,061	51,709	\$4,333	57,333	\$3,579				
040620	Cheese Of All Kinds, Grated Or Powdered	29,359	\$4,117	31,594	\$4,625	37,238	\$4,202				
040630	Cheese, Processed, Not Grated Or Powdered	21,284	\$4,439	22,331	\$4,818	23,278	\$4,032				
040640	Cheese, Blue- Veined, Nesoi	155	\$17,450	147	\$13,975	118	\$11,344				
0406	Total Cheese And Curd	276,886	\$4,179	277,972	\$4,591	326,770	\$3,563				

Source: GTA

#### Skim Milk Powder (SMP)

SMP exports in 2016 are now forecast at 380,000MT which is a four percent upward revision based on historical trends coupled with the pessimistic outlook for SMP pricing. The 2015 actual exports at 411,000MT were eight percent above previous expectations. This level is estimated to incorporate a 23,000MT run-down in inventories built up in 2014 when the milk supply peak was at record levels which necessitated speedy manufacture to get through the daily intake volumes.

	New Zealand Export Statistics for Skim Milk Powder										
	Calendar Year: 2013 - 2015										
	2013				2014		2015				
Partner Country	Valu e USD mil.	Qty (MT)	Av. FOB Price/ MT	Value USD mil.	Qty (MT)	Av. FOB Price/ MT	Valu e USD mil.	Qty (MT)	Av. FOB Price/ MT		
		132,52			114,94		299.	122,92			
China	563.4	7	\$4,251	465.7	9	\$4,051	5	6	\$2,437		

<b>World Total</b>	3	69	\$4,149	1,574.2	70	\$4,110	3	14	\$2,337
	1626.	391,9			382,9		961.	411,3	
Rest of world	297.3	72506	\$4,100	271.5	66,684	\$4,072	8	74,976	\$2,318
							173.		
Japan	28.7	7,251	\$3,958	64.0	16,480	\$3,883	26.9	10,473	\$2,569
Vietnam	39.4	10,496	\$3,753	29.9	7,901	\$3,787	33.2	18,483	\$1,798
Saudi Arabia	42.5	10,112	\$4,201	78.8	17,768	\$4,432	33.6	14,738	\$2,279
Taiwan	62.6	14,841	\$4,216	78.7	18,674	\$4,215	49.7	20,655	\$2,407
Indonesia	137.9	33,780	\$4,083	116.3	26,918	\$4,321	58.2	24,021	\$2,421
Thailand	64.6	15,816	\$4,086	83.2	20,580	\$4,044	58.6	25,838	\$2,267
Singapore	92.4	23,575	\$3,920	112.5	29,049	\$3,873	73.4	35,266	\$2,082
Malaysia	151.5	36,106	\$4,195	142.8	33,376	\$4,280	76.0	31,272	\$2,431
Philippines	146.1	34,958	\$4,179	130.7	30,591	\$4,273	78.3	32,668	\$2,397

Source: GTA

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

Calendar Year: 2013 - 2015										
		2013		2014 2019						
Partner Country	Value		Av. FOB Price/ MT	Value USD mil.	Qty Produ ct weigh t (MT)	Av. FOB Price/ MT	Value USD mil.	Qty Produ ct weigh t (MT)	Av. FOB Price/ MT	
China	219.8	52,508	\$4,186	290.3	67,905	\$4,275	224.7	67,831	\$3,312	
Egypt	120.9	32,111	\$3,765	142.8	34,556	\$4,132	129.4	39,314	\$3,292	
Mexico	59.5	15,508	\$3,835	51.4	12,541	\$4,101	98.3	29,237	\$3,363	
Philippines	61.2	14,521	\$4,218	98.8	21,449	\$4,606	90.5	24,800	\$3,649	
United Arab Emirates	45.2	11,267	\$4,009	62.1	14,633	\$4,245	79.7	24,674	\$3,232	
Saudi Arabia	65.6	17,394	\$3,769	112.5	27,153	\$4,142	71.2	21,052	\$3,381	
Australia	72.7	18,675	\$3,895	77.9	19,696	\$3,955	60.9	19,328	\$3,152	
Azerbaijan	52.5	13,247	\$3,966	90.8	21,876	\$4,152	57.0	17,426	\$3,272	
United States	62.5	16,474	\$3,792	106.1	25,880	\$4,099	55.4	16,796	\$3,296	
Indonesia	63.2	14,993	\$4,212	70.3	16,212	\$4,338	54.2	16,388	\$3,304	
		254,44			247,97			223,53		
Rest of world	1,003	8	\$3,943	1,045	8	\$4,216	716	8	\$3,202	
World	1,826. 3	461,1 46	\$3,960	2,148. 5	509,8 79	\$4,214	1,637. 1	500,3 84	\$3,272	

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

It is envisaged that given the market outlook for the fat products is favorable that exports in 2016 at 550,000MT (butter equivalents) will be very similar to 2015 where the actual tonnage shipped was 548,000MT (butter equivalents).

## **Imports**

#### Lactose

Estimated lactose imports peaked in 2014 at 102,567MT but by the end of 2015 imports of lactose had dropped to 88,707MT (14% reduction). Imported lactose is used as an ingredient in WMP to standardize the protein content. As WMP has reduced, the need for as much lactose has also reduced. In 2014 the US supplied an estimated 67,601MT or 66% of New Zealand's total imports and in 2015 the tonnage was 66,029MT but was 74% of the total.