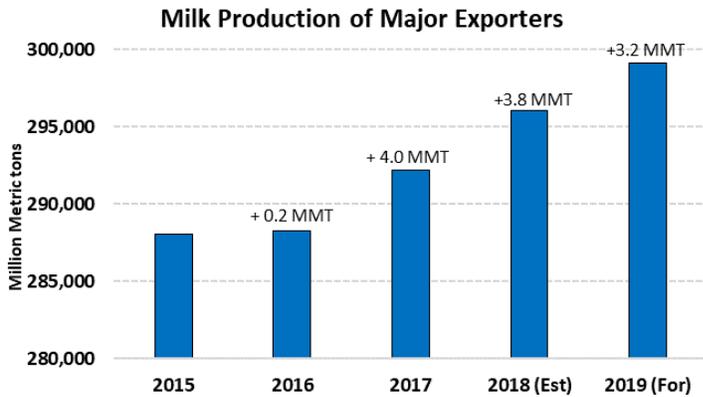




Dairy: World Markets and Trade

The rate of growth in milk production among major exporters – Argentina, Australia, the European Union, New Zealand, and the United States – is forecast to remain slow in 2019 as the



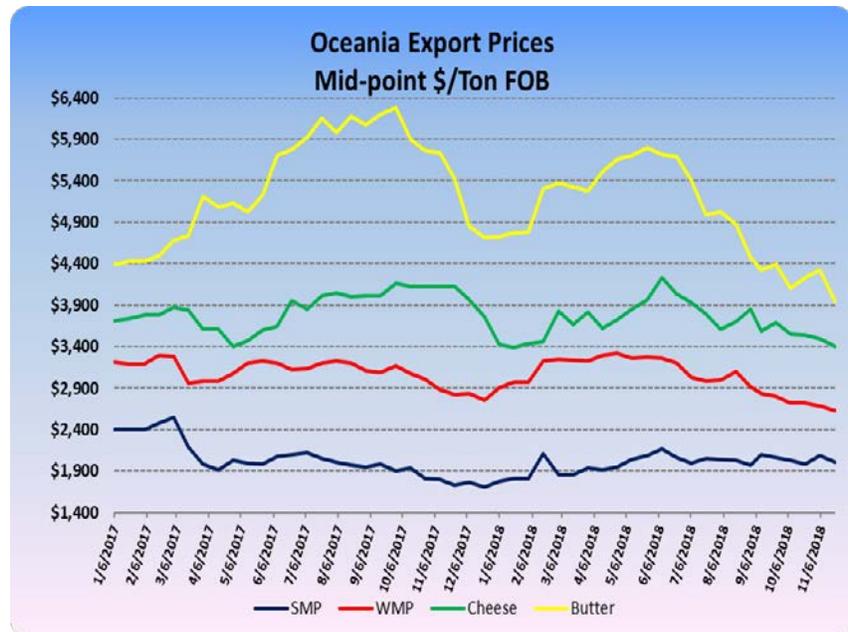
impact of current drought in Australia and lower global prices are expected to lead to lower returns to farmers. Nevertheless, milk production among major exporters in 2019 is still expected to expand by 1 percent or about 3.2 million tons with the biggest gains in volume forecast to occur in the European Union and the United States. This slight reduction in

growth is unlikely to reverse the recent downtrend in global prices for most dairy products.

Although global dairy prices showed signs of recovering during the first half of 2018, they subsequently reversed course and started to decline during the second half of the year as the threat of drought in New Zealand and subsequently, the European Union, receded. Skimmed milk powder (SMP) peaked at a mid-point price of \$2,125 per ton FOB Oceania in late June and then dropped to around \$2,000 per ton by late November 2018. However, the slide in prices

has been particularly pronounced for butter.

Over the same time span, butter prices peaked at around \$5,900 per ton and then dropped by about one third to \$3,940 per ton FOB in Oceania. In Europe, although export prices are higher, they have followed a similar trajectory despite the threat of a severe drought reducing milk production. This did not materialize, and EU milk output is expected to grow 1 percent annually in 2018 and 2019.



Dairy Production and Trade Developments

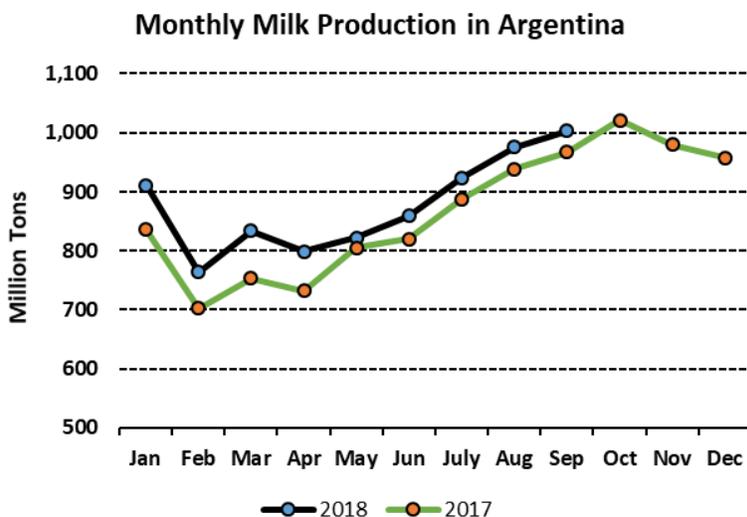
Milk Production Summary for Major Exporters (Million Tons)

	2017	2018 Estimated	2019 Forecast	2018-2019 Change
Argentina	10.1	10.8	11.4	+5%
Australia	9.5	9.4	9.3	-1%
EU-28	153.4	154.8	156.2	+1%
New Zealand	21.5	22.2	22.2	0%
United States	97.7	98.8	100.1	+1%
Major Exporter Total	292.2	296.0	299.2	+1%

Note: Data is rounded.

Fluid Milk:

- Despite the drought conditions experienced early in the year and a challenging economic environment, milk production in **Argentina** this year is set to rebound by 7



percent to reach 10.8 million tons – a slight upward revision from the previous forecast. Milk output through September was already up 6 percent year-over-year (YOY). In addition, the seasonal production cycle peaks in the last quarter which accounts for nearly 30 percent of total milk output for the year.

In 2016 and 2017, the dairy sector experienced significant and damaging floods that coupled with low milk prices

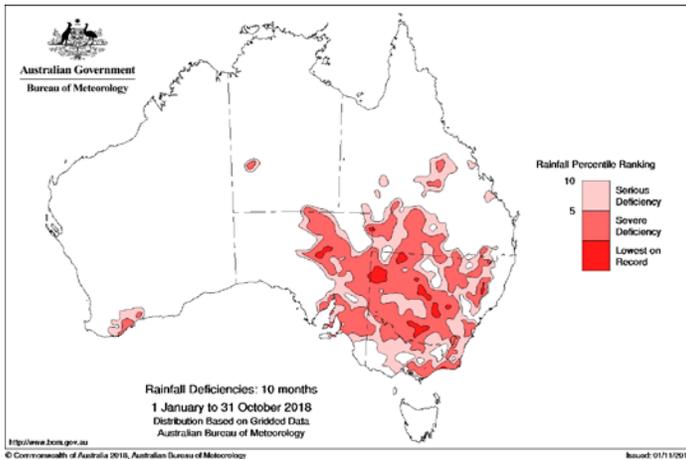
led to sharp declines in milk production; output dropped by 1.5 million tons over a 2-year span. This year, improved farm gate prices have brought relief to farmers,

Source: Secretaria de Agroindustria, Argentina

however, this has been somewhat offset by the sharp devaluation of the Argentine peso which has contributed to an inflation rate of over 45 percent annually and forced the Government to raise interest rates to over 70 percent. Sources estimate that earlier this year dairy farmers have been receiving about US\$8.80 per cwt of milk while the break-even milk price has been around US\$12.30 per cwt.

For 2019, the outlook is positive as milk production is expected to grow by 5 percent to reach 11.4 million tons based on higher prices, lower feed costs, and improved productivity. Since 2012, the herd size in Argentina has been declining as smaller and less efficient operations exit. This trend is expected to continue in 2019 as the herd shrinks by 3 percent. However, this is offset by higher yields per cow which are forecast to increase by 8 percent to 7,120 kg per cow.

- **Australia**, had a strong start with monthly YOY gains in milk production from January through May averaging over 2 percent. However, the onset of drought – particularly in the Southeast where the main production areas are located – has taken a toll on milk output.

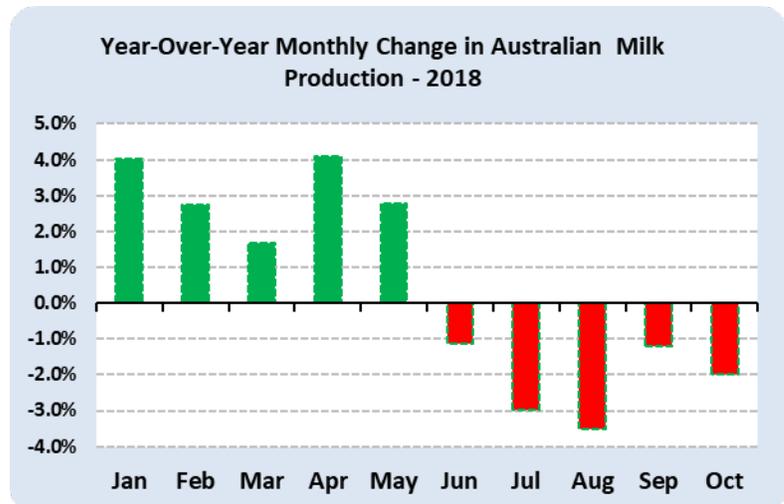


Australia’s rainfall amount in September was the lowest ever recorded. As a result, cumulative milk production for the year through October is lagging last year’s pace and the 2018 milk production forecast is lowered to

9.4 million tons, down marginally from 2017.

While there have been some beneficial rains in October and November, the Southeastern part of Australia suffers from a rainfall deficiency and low water storage levels. The Australian Bureau of Meteorology is forecasting temperatures above normal for the summer through February 2019. They also note that while rainfall predictions remain neutral, higher temperatures will raise soil evaporation rates.

For 2019, due to the impact of drought on the herd plus



the associated rise in feed and water costs, milk output is forecast to decline by 1.5 percent to 9.3 million tons while the herd size is expected to decline fractionally.

Australian exports of fluid milk have been growing rapidly – averaging 18 percent annually between 2013-2017 – but have recently been slowing. For this reason, the 2018 forecast is revised down by 10,000 tons to 235,000 tons which is 10 percent above 2017. For 2019, exports are expected to continue expanding to reach 250,000 tons and import demand from the principal market – China – is expected to remain strong.

- Milk production in **Belarus** is expected to stabilize in 2019 at 7.4 million tons. Production has grown steadily over the past 5 years to supply Belarusian dairy products to Russia. However, demand has cooled from Russia and several products now face import restrictions imposed during mid-2018. Milk prices have fallen in Belarus, lowering incentives to increase production. Belarus's dairy industry remains export-oriented, with three-quarters of cheese and over 60 percent of butter production exported, mostly to Russia. Producers are expected to cut cow numbers by nearly 1 percent, but the decline will be largely offset by growth in milk per cow. Processors will shift more milk into butter and powder streams which are likely to provide better margins than cheese due to high cheese stocks.
- The milk production statistics for **China** are being revised down for the period 2007-2017 due to new data published by China's National Bureau of Statistics. In almost all years, milk output is being reduced by about 15 percent from previously published data.

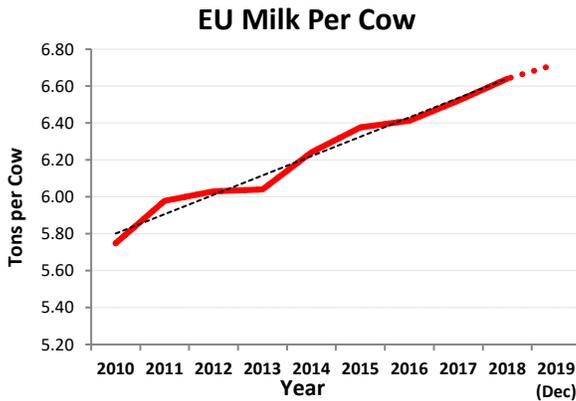
For 2018, the milk production forecast is revised down by 7.5 million tons which represents a 2 percent decline over 2017. This decline is largely due to the continuing sectoral consolidation as small farms exit due to rising feed costs, stricter environmental regulations and low milk prices. Although mid-sized and larger-scale dairy farms are expanding they are unable to offset the production declines engendered by the departure of the small farms.

For 2019, the dairy is expected to continue consolidating with the herd shrinking by about 4 percent and milk production declining by 1 percent to 29.6 million tons. Domestic demand, however, is expected to increase and as a result imports of fluid milk are forecast to grow by 10 percent to a record 750,000 tons.

- The **European Union** milk production forecast for 2018 is revised down 750,000 tons to 154.8 million tons largely because of drought in the northern and eastern regions of Europe. Although cumulative milk production through September is up slightly above 1 percent YOY, the early-spring through summer drought led to shortages of feed supplies which are expected to impact negatively on milk output in the last quarter of 2018 and early 2019. In addition, although EU weighted average milk prices were ahead of last

years' level during the first quarter they have since been trailing with September prices 5 percent below last year. This is expected to persist throughout the balance of the year and slow milk production growth below 1 percent.

The EU herd is forecast to shrink slightly in 2019 but rising milk yields per cow will lead to a 1 percent growth in milk output – similar to the growth rate experienced in 2018.

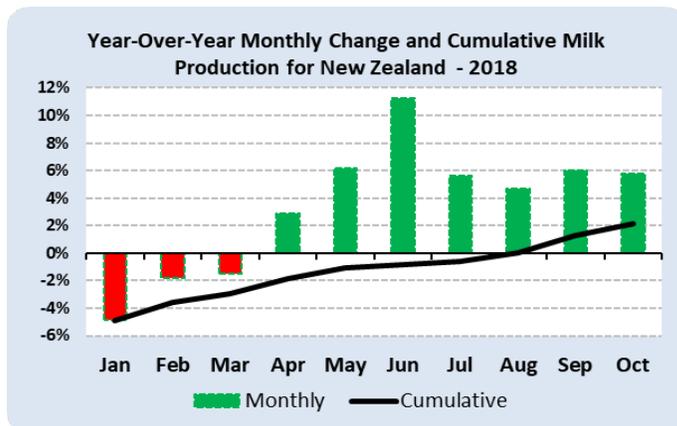


In 2018, the herd was reduced by 1 percent particularly since Dutch dairy farmers were required to cull their herds to comply with new EU phosphate emission standards implemented in 2017. However, it appears that most of the culled cows were also the least productive.

The 2018 export forecast for fluid milk – largely in the form of Ultra High Temperature (UHT) milk - is cut by 10 percent from the previous forecast largely due to a sharp drop-off in sales to China. Sales of milk to China through September are down 15 percent in comparison to the same period last year. In 2019, shipments of milk are expected to grow by 3 percent to reach 790,000 tons.

The 2018 export forecast for fluid milk – largely in the form of Ultra High Temperature (UHT) milk - is cut by 10 percent from the previous forecast largely due to a sharp drop-off in sales to China.

- **Mexico's** milk production is forecast up 1 percent in 2019, as higher productivity offsets a small decline in the dairy herd. Mexico continues to expand milk production as consumer demand rises for processed dairy products. However, milk prices remain relatively low compared to production costs, stifling further investments in the sector. Strong demand for cheese, yogurt and other products will boost processing use, but also encourage higher imports of processed dairy products.
- The 2018 **New Zealand** milk production forecast is raised by 2 percent from July to 22.2 million tons as milk output has rebounded following a poor start early in the year due to drought. Milk production by the end of the first quarter lagged last year's pace by 3 percent. However, this was followed by plentiful rain and ideal conditions for pasture growth which boosted milk output. These conditions carried through to the beginning of the peak seasonal production period and monthly milk production in September and October was up 6 percent YOY. As a result, the early deficit was erased as



Milk production by the end of the first quarter lagged last year's pace by 3 percent. However, this was followed by plentiful rain and ideal conditions for pasture growth which boosted milk output. These conditions carried through to the beginning of the peak seasonal production period and monthly milk production in September and October was up 6 percent YOY. As a result, the early deficit was erased as

cumulative milk production for the year through end of October was up 2 percent YOY.

Although there had been concerns over the impact of the detection of *Mycoplasma bovis* in the herd, it appears that the initial fears of a potential cull of 150,000 head has receded. To date, 43,000 cows have been slaughtered from 36 infected farms leaving an additional 38 farms to be destocked. So far this spring only 3 additional farms have been identified as being infected.

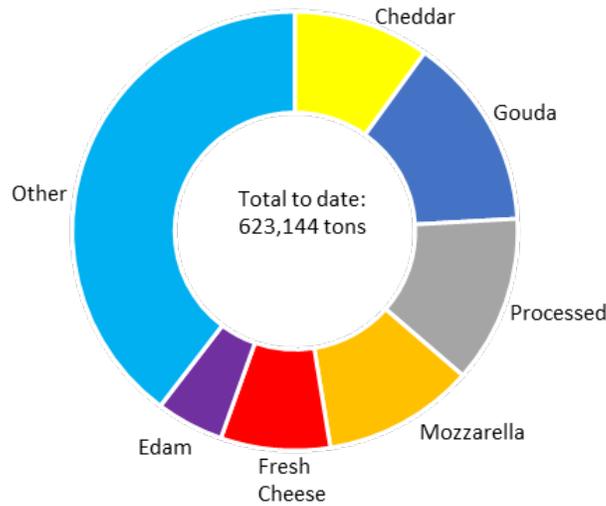
The outlook for 2019 is for a slight contraction in the herd as farmers cut back on cows due to lower forecast milk prices. During the 2017/18 (June-May) season most farmers received a payout from Fonterra of NZ\$6.70/kilogram milk solids; however, in the 2018/19 season this is expected to drop to between NZ\$6.00 – NZ\$6.30/kilogram milk solids (US\$4.10-US\$4.30) due to lower global dairy product prices. Nevertheless, milk per cow yields are expected to rise slightly from 4.56 tons/cow to 4.58 tons/cow leading to a marginal expansion in total milk output.

- **Russia's** milk production is forecast 1 percent higher in 2019 to 31.9 million tons on small gains in milk per cow. The dairy herd will contract modestly, continuing a long-term declining trend. Lower milk prices are causing small farms to shutter while commercial dairies trim cow numbers. Producers are expected to cut costs by culling lower-yielding animals and coupled with genetic improvements, milk yields will be higher boosting overall production. A ban on imports from most dairy exporting countries continues to stimulate modest growth in domestic demand for milk and products. However, a sluggish economy limits stronger gains in dairy product consumption.
- **Ukraine's** dairy sector continues to contract, with milk production forecast 2-percent lower in 2019. Although the economy has expanded for 3 consecutive years, domestic demand for dairy products is relatively weak and export opportunities are limited. Cows in milk are expected to fall 4-percent, offset somewhat by growth in milk per cow. Nearly three-quarters of milk is produced by household farms where efficiency remains low. However, the exit of the least productive farms and improvements in genetics and farm management on remaining operations will contribute to growth in milk yields.

CHEESE:

- The 2018 cheese production forecast for the **European Union** is cut back to 10.2 million tons which represents an expansion of 1 percent over 2017. Domestic demand for cheese grew at an average rate of 2 percent from 2010-17. For 2018 domestic consumption is expected to be below average expanding by 1 percent.

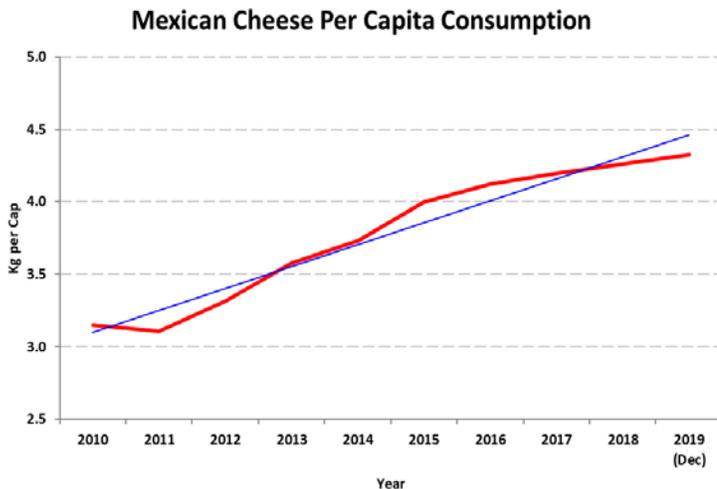
EU Exports of Major Cheese Categories Through September 2018



Exports in 2018 are expected to be at last year's level as shipments through September lag last year's pace due to slower sales to the United States and South Korea, down 7 percent and 24 percent, respectively. The major individual types of cheese exported by the EU comprise Gouda, Mozzarella, Cheddar, and Edam, overall accounting for about 40 percent of exports.

Cheese production in 2019 is forecast to grow by 1 percent with most of the additional cheese being channeled into the domestic market. Exports are forecast to grow by 1 percent to reach 840,000 tons with the added cheese expected to be shipped to the Japanese, North African and Middle Eastern markets. Cheese consumption in 2019 is expected to increase, but growth at just under 1 percent will remain below the recent trend.

- Imports of cheese by **Mexico** through September 2018 are up fractionally in comparison to the same period last year and total cheese imports for the year are forecast to remain flat at last year's level.



Imports from the United States through September are up 5 percent YOY. However, retaliatory tariff import tariffs were imposed by Mexico in July 2018 and monthly imports of U.S. cheese in August and September were below 2017.

For 2019, although domestic production is slated to grow by 3 percent, imports are forecast to rise to 125,000 tons. Domestic demand remains robust and has been growing steadily for the past several years.

- The **New Zealand** export forecast for 2018 is revised down 6 percent from July to 320,000 tons due to the sluggish pace of sales this year. This would represent a 7 percent decline from 2017. Shipments of cheese this year through October are up YOY to such markets as Japan and South Korea but have been more than offset by lower shipments to Australia and China. Although the Chinese import market has been expanding rapidly in the last few years, reported cumulative exports of cheese by major countries to China for this year through September are down 11 percent. In 2017, exporting nations shipped a total of 115,000 tons of cheese to China with New Zealand supplying nearly half of the market.

For 2019, cheese production in New Zealand is forecast to expand by 1 percent to 384,000 tons. On a milk-fat-equivalent basis this will account for about 13 percent of the milk supply. Exports are also expected to grow by 9 percent with the bulk of the cheese expected to go the current top three markets, Japan, Australia, and China, as well as other Asian countries. The increase in exports is expected to result in lower ending stocks.

- Cheese production in **Russia** is forecast 1 percent lower in 2019 as high stocks are expected to weigh on wholesale cheese prices. Abundant and low-priced fluid milk and milk powder supplies drove an uptick in 2018 cheese production as processors sought to convert perishable milk and powder supplies into cheeses with longer shelf life. Consumer demand is growing for higher-quality hard cheeses but has been unable to fully absorb the growth in production, driving end-year stocks higher. As a result, imports are forecast to decline by 2 percent in 2019.
- Despite the challenges facing **U.S.** exports of cheese, the forecast for 2018 is revised up by 4 percent to 347,000 tons. This would represent a 2 percent annual increase over 2017. Mexico, which accounts for nearly 30 percent of total U.S. exports of cheese through October, imposed retaliatory import tariffs in early July that slowed imports of U.S. cheese during the third quarter. However, cheese shipments to Mexico in October rebounded and the year-to-date pace is currently equal with last year's pace. In addition, U.S. cheese remains competitive in the world market and has posted gains in key Asian markets such as South Korea and Japan.

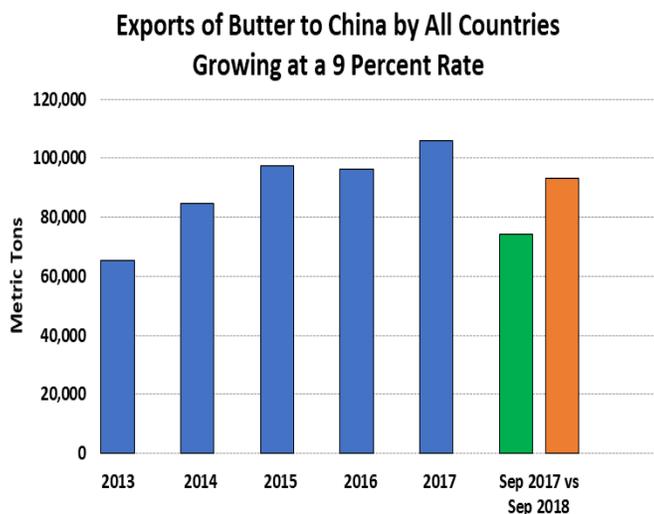
The outlook for 2019 is for a more competitive market environment as global cheese prices are expected to continue to slide and there will likely be increased exportable supplies from the EU and New Zealand. Consequently, the U.S. cheese forecast is set at 334,000 tons or about 4 percent below 2018.

BUTTER:

- Butter production in the **European Union** through September is up 1.5 percent YOY; however, this was lower than anticipated and appears to be due to a reduction in the available milk supply following drought in the spring and summer. As a result, the butter production forecast for 2018 is scaled back slightly to 2.4 million tons. With lower available supplies of butter, exports through September have been trailing last year's pace for the comparable period by 11 percent. Although shipments to the U.S. market are up, this has been offset by lower sales to Saudi Arabia, China, Iran, and Mexico. Consequently, the export forecast is cut back by 20,000 tons to 155,000 tons.

For 2019, EU milk supplies are set to increase and with greater cream availability butter output is set to rise by 1.5 percent. While most of the additional supply will be channeled into the domestic market, exports are expected grow by 7 percent to 165,000 tons.

- Although **New Zealand** shipments of butter through October are up 9 percent YOY, the forecast is trimmed by 4 percent from July to 505,000 tons. Nevertheless, this is still a gain of 6 percent over 2017. New Zealand is particularly benefitting from the inroads it has made into the Chinese market with shipments growing by an average of 11 percent annually over the past 5 years. It appears that these shipments are accelerating as New Zealand butter exports to China through October are up over one third in comparison to the same period last year. This market is likely to become more important in the future as total butter exports by all countries to China have been expanding at an average rate of 9 percent annually.



For 2019, butter output is forecast to remain flat at 530,000 tons. However, exports are expected to grow by 1 percent with stocks forecast to be drawn down to sustain shipments.

- After several years of lackluster exports, shipments of **U.S.** butter (equivalent, i.e., including butteroil/anhydrous milk fat) are expected to reach 52,000 tons for this year—up 21 percent from the previous forecast. If realized, this will represent a near 80–percent rise in butter exports over 2017. About 70 percent of the shipments through

October have been equally destined for Mexico and Canada. However, Mexico has become a major market for U.S. butteroil/anhydrous milk fat, accounting for nearly 80 percent of the total butteroil/AMF shipped during this period. In contrast, most of the shipments to Canada were in the form of butter and accounted for nearly 50 percent of the U.S. butter exported through October.

In 2019, exports of U.S. butter (equivalent) are expected to decline by 14 percent to 45,000 tons due to greater global competition and lower sales of butter to Canada. Canadian imports of butter from all sources are expected to drop by 50 percent due to higher domestic milk production and greater availability of milk fat.

U.S. imports of butter are forecast to climb by 12 percent to reach 54,000 tons with about 60 percent comprising butter and the balance as butteroil/AMF (butter equivalent). About 80 percent of the butter imported this year through October appears to be premium butter originating from Ireland. For 2019, imports of butter are anticipated to be flat from 2018.

SKIMMED MILK POWDER (SMP):

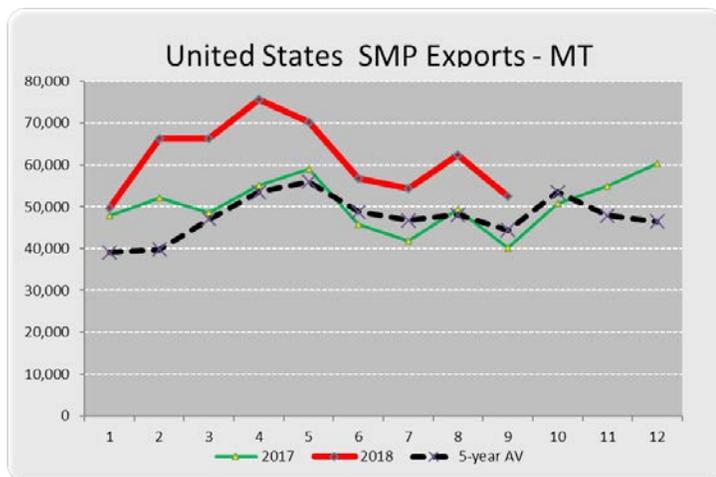
- The 2018 forecast for SMP production in the **European Union** is revised down fractionally from the July forecast but is expected to rise by 4 percent in 2019 to reach 1.9 million tons. On the trade side, the 2018 export forecast is cut by 22,000 tons to 828,000 tons which nevertheless represents a 6 percent gain over the exceptionally strong sales recorded in 2017. For 2019, shipments of SMP are expected to decline fractionally from 2018.

The EU has been grappling for the past several years (starting in 2016) with the substantial accumulation of SMP intervention stocks which peaked at 378,000 tons at the end of 2017. To restrict a build-up of stocks, the EU Commission effectively stopped purchases by implementing a temporary policy setting the buying-in price of SMP at zero during the open intervention period, i.e., March 1 to September 30. Normally the buying-in or market support price is set at €1,698 per ton (\$1,935 per ton). The EU has also been aggressively selling old stocks to reduce the volumes overhanging the market. Since the beginning of this year, the EU Commission has sold some 125,000 tons of intervention SMP, leaving a balance of 253,000 tons at the end of October. The EU plans to continue to offer these surplus volumes via tenders while trying to limit any price impact on the domestic market.

- **Mexico's** imports of SMP have accelerated during 2018 and are forecast 7 percent higher due to low global prices and strong demand by domestic dairy processors. Consumption of processed dairy products continues to rise in Mexico, boosting use of SMP in cheese, yogurt, and reconstituted fluid milk production. Domestic production of

SMP remains limited by modest growth in domestic milk supplies and competitive prices of imported SMP. With global prices expected to remain low in 2019, imports are forecast 6 percent higher at 375,000 metric tons.

- The 2018 U.S. export forecast for SMP is set at 729,000 tons, up slightly – 9,000 tons – from the previous forecast. This represents a significant rebound – about 20 percent – over 2017 when U.S. SMP faced intense competition in global markets particularly from



the EU. Shipment data through October 2018, indicate that Mexico remains a key market accounting for nearly 50 percent of total SMP exported. However, over this period, there have also been significant gains in other such critical markets as the Philippines, Indonesia, Malaysia, and Vietnam. There has also been some loss of market share in China where

the retaliatory tariffs likely have contributed to a sharp drop in shipped volumes to that market– down over a third in comparison to last year.

For 2019, U.S. exports of SMP are projected to drop slightly by 5 percent to 695,000 tons as global prices are expected to remain at relatively low levels and international competition intensifies. The retaliatory import tariffs imposed by China are expected to dampen export prospects. Sales of U.S. SMP during the past 5 years to China have averaged 38,000 tons annually.

- New Zealand's shipments of SMP through October 2018 have been surprisingly low – down 14 percent over the comparable period last year. It appears that much of the flagging pace was due to lower sales to China, its principal market. Additionally, shipments to other key markets particularly in Asia were all lower in comparison to last year. Consequently, the export forecast was lowered by 17 percent from July to 340,000 tons.

Exports of SMP are expected to rebound in 2019 growing by 12 percent to reach 380,000 tons. Although SMP production is forecast to decline slightly, a high volume of stocks is expected to supply ample exportable supplies.

WHOLE MILK POWDER (WMP):

- Imports of WMP by **China** in 2018 are expected to be 2 percent lower than last year as domestic demand is slowing, and domestic stocks are drawn down. Further, there are indications that high-end consumers are switching their preference from reconstituted dairy products produced with imported ingredients to fresh milk products.

For 2019, China's imports of WMP are forecast to grow by about 9 percent to 500,000 tons as the domestic production of WMP is not expected to meet domestic needs. New Zealand has been the major supplier to this market accounting for 90 percent of the WMP imported by China in 2017. New Zealand also benefits from the New Zealand-China Free Trade Agreement which allows New Zealand WMP to be imported into China in 2019 at a duty-free rate for up to 162,482 tons. Other nations face a 10-percent tariff.

- During the first 10 months of this year, **New Zealand** exports of WMP have been lower than anticipated and the forecast is revised down by 7 percent to 1.3 million tons. These lower sales have been particularly evident with shipments to its principal market, China, down 9 percent relative to last year. This is expected to lead to a substantial rise in ending stocks for this year.

In 2019, WMP exports are forecast to rebound by 6 percent to 1.38 million tons particularly as China's imports of WMP are expected to grow. Further, the recent downward trend in WMP prices is likely to extend into 2019 and stimulate global import demand.

U.S. Dairy Export Forecasts:

U.S. Dairy Products Export Forecast - Calendar Year 2017-2018

	2018 (For)	Milk Equivalent (Bil. Lbs.)		2019 (For)	Milk Equivalent (Bil. Lbs.)	
		Fat	Skims		Fat	Skims
NON-FAT DRY AND SKIM MILK PWDR	729,160 MT	0.3	17.2	694,800 MT	0.3	16.4
MILK POWDER > 1.5% MILK FAT	50,022 MT	0.7	0.8	39,000 MT	0.5	0.6
BUTTER/MILKFAT/SPREADS	47,356 MT	2.4	0.0	41,405 MT	2.1	0.0
CHEESE AND CURD	346,785 MT	5.4	2.8	334,200 MT	5.2	2.7
FLUID PRODUCTS 4/	153,133 Liters	0.4	0.3	145,700 Liters	0.5	0.3
DRIED WHEY PRODUCTS	543,194 MT	0.7	12.6	537,750 MT	0.7	12.4
LACTOSE	395,965 MT	0.0	9.7	395,000 MT	0.0	9.7
OTHER DAIRY PRODUCTS	187,252 MT	0.7	1.8	195,350 MT	0.7	1.9
TOTAL - Billion Pounds		10.6	45.2		10.0	44.1

Note: 1) CY 2018 includes actual exports through October 2018
 2) Milk Equivalent figures are rounded and totals may not add up.
 3) Forecasts assume current policy
 4/ Includes milk based drinks, fluid whey, cream and fluid milk

Exports Through October 2018

Top Destinations-M.E. Milkfat Basis (Mill)	2018
MEXICO	2,542
CANADA	890
SOUTH KOREA	813
CHINA (MAINLAND)	582
JAPAN	569
AUSTRALIA	414
Other	3,151
TOTAL	8,962

Top Destinations-M.E. Skim Basis (Mill. lb)	2018
MEXICO	10,033
CHINA (MAINLAND)	7,016
PHILIPPINES	2,799
JAPAN	2,043
INDONESIA	1,968
VIETNAM	1,825
Other	12,745
TOTAL	38,428

Additional Resources:

For additional information, please contact Paul Kiendl at 202-720-8870 or Paul.Kiendl@fas.usda.gov or Lindsay Kuberka at 202-644-4650 or Lindsay.Kuberka@fas.usda.gov

Subscription services for FAS circulars can be obtained at:
<https://public.govdelivery.com/accounts/USDAFAS/subscriber/new>

Individual FAS country reports covering dairy are available at:
<http://gain.fas.usda.gov/Pages/Default.aspx>

The USDA Production, Supply and Demand database is available at:
<http://www.fas.usda.gov/psdonline>

A monthly “Livestock, Dairy, and Poultry Outlook” for the United States published by the Economic Research Service is available at: <https://www.ers.usda.gov/publications/>

U.S. trade data is available on the Global Agricultural Trade System (GATS):
<http://apps.fas.usda.gov/gats/default.aspx>

The next publication of this circular will be on July 18, 2019.

Cows Milk Production and Consumption: Summary For Selected Countries

1,000 Metric Tons

	2014	2015	2016	2017	2018	2019 Dec
Cows Milk Production						
Argentina	11,326	11,552	10,191	10,090	10,837	11,380
Australia	9,798	10,091	9,486	9,462	9,440	9,300
Belarus	6,705	7,044	7,140	7,320	7,350	7,350
Brazil	25,489	24,770	22,726	23,624	22,659	23,150
Canada	8,437	8,773	9,081	9,675	9,940	10,115
China	31,599	31,798	30,640	30,386	29,750	29,600
European Union	146,500	150,200	151,000	153,400	154,800	156,200
India	60,500	64,000	68,000	72,000	76,000	80,000
Japan	7,334	7,379	7,394	7,281	7,230	7,275
Korea, South	2,214	2,169	2,070	2,081	2,045	2,030
Mexico	11,464	11,736	11,956	12,121	12,281	12,380
New Zealand	21,893	21,587	21,224	21,510	22,155	22,200
Russia	30,499	30,548	30,510	30,934	31,450	31,875
Taiwan	363	374	380	380	385	385
Ukraine	11,152	10,584	10,375	10,275	10,070	9,900
Others	20	13	14	15	16	17
Subtotal	385,293	392,618	392,187	400,554	406,408	413,157
United States	93,465	94,618	96,345	97,734	98,792	100,063
Total	478,758	487,236	488,532	498,288	505,200	513,220
Fluid Use Dom. Consum.						
Argentina	2,044	2,084	1,708	1,681	1,762	1,782
Australia	2,600	2,700	2,550	2,530	2,500	2,470
Belarus	1,054	1,065	1,050	1,065	1,050	1,055
Brazil	9,660	9,573	9,600	9,993	9,749	10,050
Canada	2,946	2,923	2,917	2,884	2,820	2,800
China	12,970	13,130	12,555	12,810	12,700	12,270
European Union	34,066	33,800	33,600	33,550	33,300	33,150
India	57,000	59,750	62,750	65,200	66,800	69,800
Japan	3,911	3,935	3,992	3,979	3,980	3,980
Korea, South	1,540	1,529	1,500	1,561	1,575	1,580
Mexico	4,180	4,185	4,183	4,174	4,183	4,185
New Zealand	495	497	497	497	500	500
Russia	9,859	9,500	8,960	8,555	8,300	7,955
Taiwan	369	384	397	408	420	421
Ukraine	5,538	5,385	5,241	4,998	4,855	4,800
Others	62	57	85	76	80	83
Subtotal	148,294	150,497	151,585	153,961	154,574	156,881
United States	23,721	23,378	23,220	22,719	22,220	21,780
Total	172,015	173,875	174,805	176,680	176,794	178,661

Fluid Milk - Cow Numbers: Summary For Selected Countries
1,000 Head

	2014	2015	2016	2017	2018	2019 Dec
Cows In Milk						
Argentina	1,826	1,786	1,720	1,672	1,645	1,598
Australia	1,647	1,689	1,562	1,512	1,525	1,520
Belarus	1,525	1,533	1,512	1,520	1,515	1,505
Brazil	16,825	17,426	17,430	16,262	16,215	16,300
Canada	955	954	945	945	965	960
China	8,400	8,400	8,000	7,600	7,200	6,900
European Union	23,468	23,559	23,548	23,525	23,311	23,250
India	50,500	52,500	54,500	56,500	58,500	60,600
Japan	773	750	752	735	731	735
Korea, South	208	197	194	198	205	200
Mexico	6,350	6,400	6,450	6,550	6,550	6,500
New Zealand	5,176	5,056	4,998	4,861	4,860	4,850
Philippines	18	10	11	12	12	12
Russia	8,050	7,750	7,235	7,080	7,000	6,900
Taiwan	60	62	61	61	62	62
Ukraine	2,509	2,322	2,226	2,170	2,078	2,000
Subtotal	128,290	130,394	131,144	131,203	132,374	133,892
United States	9,257	9,314	9,325	9,392	9,385	9,365
Total	137,547	139,708	140,469	140,595	141,759	143,257

Cheese Production and Consumption: Summary For Selected Countries

1,000 Metric Tons

	2014	2015	2016	2017	2018	2019 Dec
Production						
Algeria	0	0	0	0	0	0
Argentina	562	566	552	514	555	585
Australia	328	343	344	348	360	355
Belarus	226	241	275	260	275	270
Brazil	736	754	745	771	755	770
Canada	396	419	445	497	510	515
European Union	9,560	9,740	9,810	10,050	10,160	10,235
Japan	46	46	47	46	45	46
Korea, South	24	23	25	35	43	45
Mexico	343	363	375	396	410	422
New Zealand	325	355	360	378	380	384
Philippines	2	2	2	2	0	0
Russia	760	861	865	951	975	965
Taiwan	0	0	0	0	0	0
Ukraine	203	190	186	190	192	195
Total Foreign	13,511	13,903	14,031	14,438	14,660	14,787
United States	5,222	5,367	5,525	5,742	5,878	5,992
Total	18,733	19,270	19,556	20,180	20,538	20,779
Total Dom. Consumption						
Algeria	0	0	0	0	0	0
Argentina	508	524	508	485	510	522
Australia	265	270	275	291	296	305
Belarus	67	69	71	72	74	75
Brazil	754	773	785	799	781	797
Canada	407	415	458	504	530	550
European Union	8,884	9,087	9,093	9,295	9,390	9,455
Japan	278	295	305	325	331	340
Korea, South	118	137	136	159	163	169
Mexico	438	475	496	511	525	539
New Zealand	40	41	42	46	48	50
Philippines	20	21	23	25	0	0
Russia	1,072	1,052	1,076	1,141	1,170	1,188
Taiwan	26	29	32	32	31	33
Ukraine	197	184	187	188	197	202
Total Foreign	13,074	13,372	13,487	13,873	14,046	14,225
United States	4,977	5,149	5,379	5,501	5,630	5,831
Total	18,051	18,521	18,866	19,374	19,676	20,056

Cheese Trade: Summary For Selected Countries

1,000 Metric Tons

	2014	2015	2016	2017	2018	2019 Dec
Total Exports						
Argentina	56	43	53	44	40	55
Australia	151	171	167	171	175	175
Belarus	167	183	205	189	205	205
European Union	721	719	800	830	830	840
New Zealand	278	327	355	343	320	350
Others	68	55	55	59	52	55
Total Foreign	1,441	1,498	1,635	1,636	1,622	1,680
United States	368	317	287	341	347	334
Total	1,809	1,815	1,922	1,977	1,969	2,014
Total Imports						
Australia	80	89	99	116	105	115
Japan	232	249	258	273	287	295
Korea, South	97	112	110	125	121	130
Mexico	99	116	126	122	122	125
Russia	349	220	230	226	235	230
Others	202	181	221	207	185	197
Total Foreign	1,059	967	1,044	1,069	1,055	1,092
United States	127	157	165	137	141	146
Total	1,186	1,124	1,209	1,206	1,196	1,238

Butter Production and Consumption: Summary For Selected Countries

1,000 Metric Tons

	2014	2015	2016	2017	2018	2019 Dec
Production						
Algeria	0	0	0	0	0	0
Argentina	52	50	47	46	50	53
Australia	125	120	110	103	100	100
Belarus	107	113	118	120	116	118
Brazil	85	83	82	83	85	86
Canada	88	91	93	109	123	125
European Union	2,250	2,335	2,345	2,340	2,375	2,410
India	4,887	5,035	5,200	5,400	5,600	5,850
Japan	61	65	66	60	60	61
Mexico	207	216	217	223	226	229
New Zealand	580	594	570	525	530	530
Russia	252	260	246	270	263	275
Taiwan	0	0	0	0	0	0
Ukraine	115	103	103	109	106	103
Total Foreign	8,809	9,065	9,197	9,388	9,634	9,940
United States	842	839	834	838	860	870
Total	9,651	9,904	10,031	10,226	10,494	10,810
Domestic Consumption						
Algeria	0	0	0	0	0	0
Argentina	38	41	42	43	46	48
Australia	89	94	102	115	122	130
Belarus	53	43	41	48	43	45
Brazil	80	84	89	88	90	91
Canada	99	106	117	121	126	128
European Union	2,162	2,150	2,181	2,207	2,240	2,260
India	4,876	5,032	5,196	5,387	5,580	5,816
Japan	75	77	72	72	72	75
Mexico	236	249	267	264	246	254
New Zealand	22	24	28	28	29	29
Russia	376	350	350	357	345	345
Taiwan	22	25	24	24	25	26
Ukraine	116	97	93	82	75	76
Total Foreign	8,244	8,372	8,602	8,836	9,039	9,323
United States	793	830	849	849	851	871
Total	9,037	9,202	9,451	9,685	9,890	10,194

Note: Butter includes butter, butteroil and anhydrous milk fat on a butter equivalent basis.

Butter Trade: Summary For Selected Countries
1,000 Metric Tons

	2014	2015	2016	2017	2018	2019 Dec
Total Imports						
Russia	137	90	103	99	75	75
Australia	23	22	30	35	40	40
Mexico	37	43	65	49	30	30
Taiwan	22	25	24	24	25	26
European Union	52	27	23	16	20	15
Japan	11	16	13	8	13	14
Canada	11	17	27	22	20	10
Brazil	1	2	7	5	5	5
India	1	6	6	2	1	1
New Zealand	1	1	2	1	1	1
Ukraine	11	1	1	1	1	1
Algeria	0	0	0	0	0	0
Argentina	0	0	0	1	0	0
Belarus	1	0	0	0	0	0
Total Foreign	308	250	301	263	231	218
United States	21	37	47	41	46	46
Total	329	287	348	304	277	264
Total Exports						
New Zealand	560	552	554	476	505	510
European Union	142	183	213	174	155	165
Belarus	55	70	77	72	73	73
India	10	9	9	15	30	35
Ukraine	5	11	9	28	30	28
Australia	44	35	30	16	16	14
Argentina	14	9	6	4	4	5
Mexico	8	10	15	8	10	5
Russia	4	3	4	3	3	3
Canada	2	1	1	1	3	2
Algeria	0	0	0	0	0	0
Brazil	6	1	0	0	0	0
Japan	0	0	0	0	0	0
Taiwan	0	0	0	0	0	0
Total Foreign	850	884	918	797	829	840
United States	74	23	27	29	52	45
Total	924	907	945	826	881	885

Nonfat Dry Milk Production and Consumption: Summary For Selected Countries

1,000 Metric Tons

	2014	2015	2016	2017	2018	2019 Dec
Production						
Australia	228	266	238	224	205	200
Brazil	154	155	153	158	155	158
European Union	1,550	1,715	1,735	1,725	1,795	1,865
India	520	540	540	570	600	630
New Zealand	415	410	405	402	390	380
Others	610	645	620	613	570	603
Total Foreign	3,477	3,731	3,691	3,692	3,715	3,836
United States	1,047	1,029	1,049	1,073	1,050	1,049
Total	4,524	4,760	4,740	4,765	4,765	4,885
Total Dom. Consumption						
Algeria	135	136	140	145	175	185
China	300	244	223	276	275	295
European Union	887	978	803	984	1,125	1,142
India	446	492	531	576	595	615
Mexico	247	301	325	351	333	345
Others	1,045	1,079	1,148	1,130	1,134	1,129
Total Foreign	3,060	3,230	3,170	3,462	3,637	3,711
United States	457	489	447	425	337	383
Total	3,517	3,719	3,617	3,887	3,974	4,094

Nonfat Dry Milk Trade: Summary For Selected Countries

1,000 Metric Tons

	2014	2015	2016	2017	2018	2019 Dec
Total Imports						
Mexico	203	259	286	331	355	375
China	253	200	184	247	255	280
Algeria	168	136	119	161	185	175
Philippines	95	100	185	154	160	165
Indonesia	152	151	173	149	150	155
Russia	103	120	129	125	88	70
Japan	43	53	34	59	55	55
Korea, South	21	21	21	23	27	27
Brazil	23	35	35	31	25	26
Taiwan	23	25	23	24	21	23
Australia	6	10	6	8	10	15
Chile	5	10	12	15	15	15
Canada	6	3	4	4	5	5
European Union	2	3	4	2	3	2
New Zealand	4	5	3	2	2	2
Argentina	0	0	0	0	0	0
Belarus	3	0	1	0	0	0
India	1	0	0	1	0	0
Ukraine	1	0	0	0	1	0
Total Foreign	1,112	1,131	1,219	1,336	1,357	1,390
United States	3	2	1	1	2	1
Total	1,115	1,133	1,220	1,337	1,359	1,391
Total Exports						
European Union	648	695	580	781	828	825
New Zealand	383	411	444	401	340	380
Australia	164	201	163	157	155	150
Belarus	92	122	111	109	100	95
Canada	13	14	24	72	65	75
Mexico	0	0	3	29	65	75
Ukraine	28	35	34	29	22	22
Argentina	22	24	26	20	15	20
India	61	18	19	10	20	20
Chile	2	1	2	1	2	1
Russia	3	2	1	1	1	1
Algeria	0	0	0	0	0	0
Brazil	0	0	0	0	0	0
China	2	1	1	1	0	0
Indonesia	0	0	0	0	0	0
Japan	0	0	0	0	0	0
Korea, South	0	0	0	0	0	0
Philippines	5	0	0	0	0	0
Taiwan	0	0	0	0	0	0
Total Foreign	1,423	1,524	1,408	1,611	1,613	1,664
United States	545	558	594	606	729	695
Total	1,968	2,082	2,002	2,217	2,342	2,359

Whole Milk Powder Production And Consumption: Summary For Selected Countries

1,000 Metric Tons

	2014	2015	2016	2017	2018	2019 Dec
Production						
Argentina	258	252	180	170	185	198
Brazil	612	610	550	596	585	596
China	1,350	1,617	1,375	1,350	1,300	1,335
European Union	720	710	720	760	730	740
New Zealand	1,460	1,380	1,320	1,380	1,420	1,400
Others	514	479	436	492	493	503
Total Foreign	4,914	5,048	4,581	4,748	4,713	4,772
United States	47	49	45	56	75	54
Total	4,961	5,097	4,626	4,804	4,788	4,826
Total Dom. Consumption						
Algeria	180	214	222	235	265	275
Brazil	603	628	662	664	643	656
China	1,845	1,910	1,992	1,918	1,808	1,833
European Union	331	313	344	368	391	371
Indonesia	123	116	122	128	133	135
Others	653	718	572	508	510	516
Total Foreign	3,735	3,899	3,914	3,821	3,750	3,786
United States	28	49	40	50	66	48
Total	3,763	3,948	3,954	3,871	3,816	3,834

Whole Milk Powder Trade: Summary For Selected Countries
1,000 Metric Tons

	2014	2015	2016	2017	2018	2019 Dec
Total Imports						
Afghanistan	0	0	0	0	0	0
Algeria	204	224	224	262	270	280
Argentina	0	0	0	1	0	0
Australia	9	11	16	28	30	30
Brazil	30	59	126	73	60	65
Chile	4	7	7	12	9	10
China	671	347	420	470	460	500
European Union	1	4	6	2	1	1
Indonesia	50	44	52	47	50	50
Mexico	7	7	12	4	6	7
New Zealand	1	7	4	4	4	4
Philippines	20	17	22	20	22	25
Russia	36	38	48	49	30	20
Taiwan	33	34	30	32	34	34
Venezuela	134	195	58	20	10	10
Others	0	0	0	0	0	0
Total Foreign	1,200	994	1,025	1,024	986	1,036
United States	7	9	15	21	7	6
Total	1,207	1,003	1,040	1,045	993	1,042
Total Exports						
Afghanistan	0	0	0	0	0	0
Algeria	0	0	0	0	0	0
Argentina	144	138	110	71	100	135
Australia	81	65	70	55	60	55
Belarus	31	38	29	29	33	38
Brazil	39	41	14	5	2	5
Chile	21	6	7	4	4	4
China	6	4	3	2	2	2
European Union	390	401	382	394	340	370
Indonesia	0	0	0	0	0	0
Mexico	6	11	20	33	23	25
New Zealand	1,423	1,380	1,344	1,342	1,300	1,375
Philippines	8	21	27	1	4	5
Russia	1	2	1	1	1	1
Ukraine	2	2	2	4	4	4
Others	0	0	0	0	0	0
Total Foreign	2,152	2,109	2,009	1,941	1,873	2,019
United States	18	15	19	19	20	12
Total	2,170	2,124	2,028	1,960	1,893	2,031