

**Required Report:** Required - Public Distribution

**Date:** October 15,2019

**Report Number:** CH2019-0127

**Report Name:** Dairy and Products Annual

**Country:** China - Peoples Republic of

**Post:** Beijing

**Report Category:** Dairy and Products

**Prepared By:** Abraham Inouye

**Approved By:** Michael Ward

**Report Highlights:**

Due to the additional tariffs placed on U.S.-origin dairy products, U.S. dairy exports have fallen sharply across all product categories. China's growing food processing and HRI sectors will fuel continued demand for imported dairy products. In 2020, large-scale dairy farms will continue to expand, accounting for a growing share of China's fluid milk production. This expansion will drive increased fluid milk production, supported by strong domestic milk prices.

## FLUID MILK

### PS&D table

Dairy, Milk, Fluid Market Begin Year  China	2018		2019		2020	
	Jan 2018		Jan 2019		Jan 2020	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Cows In Milk	6200	6200	6250	6100	0	6150
Cows Milk Production	30750	30750	31500	31000	0	31800
Other Milk Production	1500	1500	1500	1500	0	1500
Total Production	32250	32250	33000	32500	0	33300
Other Imports	673	673	750	750	0	860
Total Imports	673	673	750	750	0	860
Total Supply	32923	32923	33750	33250	0	34160
Other Exports	27	27	25	24	0	21
Total Exports	27	27	25	24	0	21
Fluid Use Dom. Consum.	12700	12700	13000	12800	0	13350
Factory Use Consum.	20196	20196	20725	20426	0	20789
Feed Use Dom. Consum.	0	0	0	0	0	0
Total Dom. Consumption	32896	32896	33725	33226	0	34139
Total Distribution	32923	32923	33750	33250	0	34160
(1000 HEAD) ,(1000 MT)						

### Production:

*Milk production will increase in 2020 due to continued expansion by large-scale farms*

Cow milk production is forecast to increase to 31.8 million metric tons (MMT) in 2020. This growth is primarily due to the continued expansion of large-scale farms. In China, a large-scale farm generally refers to a farm with over 100 dairy cows. According to a 2019 survey, the average per-animal count was 144 per farm, roughly a 10 percent increase from 2018.<sup>1</sup> These large-scale farms have generally adopted modern dairy production techniques and have greater per animal milk production than small-scale or backyard operations. The proportion of the industry composed of large-scale farms is quickly increasing, driving overall increases in milk production efficiency. In 2016, the large-scale farm's market share was 50 percent; by 2018, that number rose to 61.4 percent.

Small-scale and backyard farms continue to retreat from the market as they are less equipped to meet increasingly strict environmental regulations and lack the production efficiency of large-scale farms. Furthermore, China's concentrated dairy processing sector has increasingly refused to accept milk

<sup>1</sup> Note, Chinese dairy farms span a very wide range. Although large-scale farms averaged 144 animals per farm, some operations are very large and have over 200,000 dairy cows.

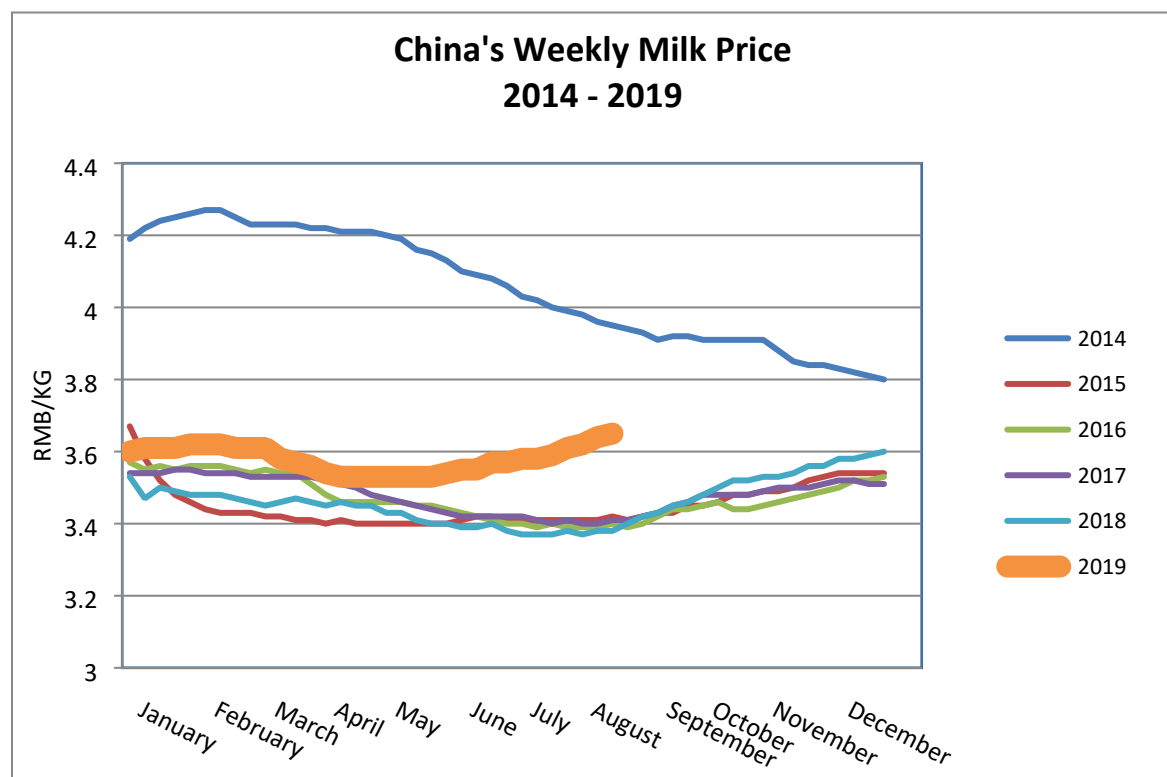
deliveries from smaller operations. Two of China's largest dairy processors will only accept deliveries from operations with a capacity of at least 5 MT per day, citing milk quality concerns.

#### *Large-scale farm expansion drives slight herd increase*

Post forecasts that China's dairy cattle herd will slowly recover in 2020, primarily due to large-scale farms expanding. Because most of these large-scale farms completely or partially use imported genetics, the continued expansion will require an increase of live cattle imports. As of July 2019, China's live dairy cattle imports from Australia and New Zealand increased by 31 and 28 percent compared to the same period in 2018, respectively. Together, these two countries accounted for 92 percent of China's live cattle imports in 2018.

#### *Higher milk prices result in increased profit margins for producers*

Throughout 2019, industry reported that feed costs remained stable and are not expected to change dramatically in 2020. While China levied additional tariffs of 25 percent on U.S. alfalfa products in June 2019, on September 11, 2019, China provided a tariff exclusion for U.S.-origin alfalfa. As a result of higher milk prices and stable input costs, the per head profit margin for dairy cattle nearly doubled from 1,591 RMB (~\$227 USD) in June 2018 to over 3,000 RMB (~\$420 USD) per head a year later.



Source: China's Ministry of Agriculture and Rural Affairs (MARA)

Another factor exerting upwards pressure on the milk price is industry competition. Milk production is highly concentrated in northern China. Production from Hebei, Inner Mongolia, Shandong, Heilongjiang, and Ningxia Provinces accounts for nearly two-thirds of total production. In this area, large dairy processing companies and dairy farms are competing for the limited dairy resources, putting upwards pressure on the milk price.

Post revised the 2019 cow milk production number down to 31 million tons, a decrease of 1.5 percent from the previous forecast. This downward revision is due to a reduced dairy cattle herd number released by MARA.

## **Consumption**

Milk consumption will continue to increase in 2020 due to increasing living standards, continued urbanization, and increasing number of health programs including milk. One of the primary obstacles to fresh milk consumption has always been the lack of a well-established cold chain in China. Through the urbanization process, access to refrigerated fluid milk has increased, allowing more Chinese consumers to add milk to their diet. In terms of institutional consumption of fluid milk, in 2018, China established a nationwide program to increase milk intake for primary school students (K-12). A portion of milk is now a mandatory part of the daily breakfast for participating institutions. In 2019, MARA took steps to further implement and expand the program to more schools.

Consumption of pasteurized fluid milk and yogurt has increased the most. Further development of the cold chain, coupled with the growing Chinese perspective that fresh milk and yogurt are a part of a healthy, balanced diet, has increased per capita consumption by nearly 4.3 percent from 2017 to 2018. However, the new generation of Chinese consumers (consumers born after 1995) will account for most of the growth moving forward. Furthermore, consumer demand for innovative and convenient products will lead the industry to further develop low temperature milk products and solid dairy products, such as cheese and butter.

## **Trade**

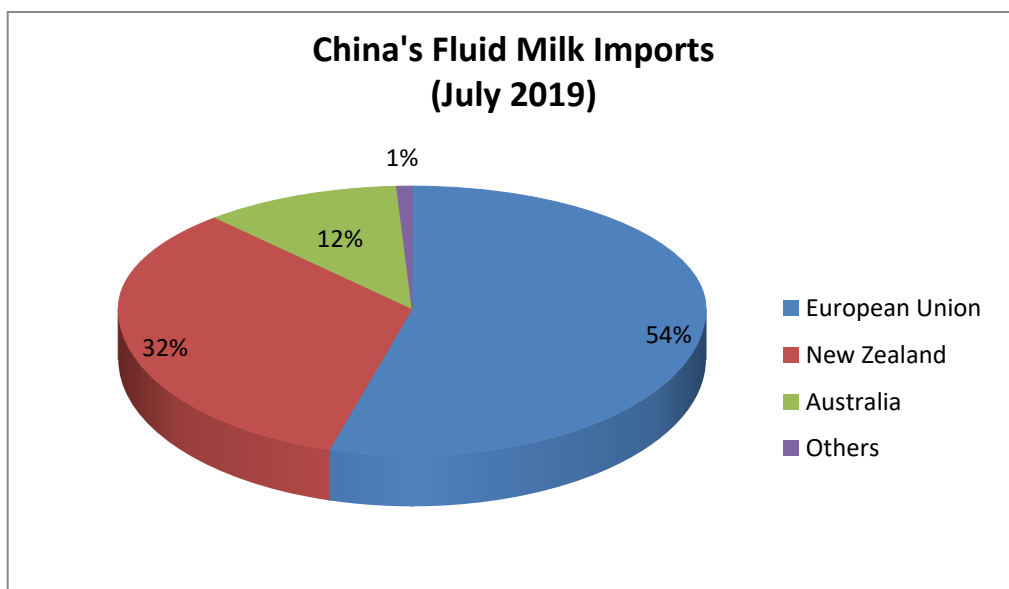
*Imports of fluid milk will continue to rise as China grants market access*

Post forecasts imports of fluid milk will increase to 860,000 MT in 2020, about 15 percent higher than 2019. China's primary fluid milk imports are retail-ready Ultra-High Temperature (UHT) milk from the European Union (EU) and New Zealand. As the domestic milk price continues to rise, the price gap between domestic and imported milk widens; on average, imported UHT milk is 20 to 30 percent cheaper than domestically produced UHT milk.

EU countries dominate China's import market for fluid milk. The market share for EU countries, led by Germany, continues to rise from 52 percent in 2018 to 54 percent in 2019 (as of July). Germany's market share alone increased from 26 percent to 28 percent in that same time period. New Zealand is the second largest single country exporter, followed by Australia.

In 2019, China granted new or increased market access for many dairy products. In July, China's General Administration of China Customs (GACC) approved 24 new dairy establishments from Brazil, covering dairy products such as milk powder, cheese, yogurt, and cream products. This is the first time China has granted dairy market access to Brazil.

In July 2019, Russian trucks delivered the initial loads of pasteurized milk to the northeast of China from Russia. This is the first time that China has imported bulk fluid milk by truck, creating an opportunity to significantly lower the shipping costs.



Source: TDM

## Import Policy

China maintains a strict dairy facility registration program laid out in Decree 145. While formerly managed by the China's Certification and Accreditation Administration (CNCA), following China's government reorganization in 2017, the authority for managing dairy facility registration now lies with GACC. For a listing of registered overseas facilities eligible to export to China, please visit the GACC website:

<http://www.customs.gov.cn/customs/jyjj/jckspaq/xxfw63/jkspjwscqyzcexx/jkrpjwscqyzcmd/index.html>

Notably, China has not updated the list of eligible U.S. dairy exporters since February 2018.

On June 1, 2019, China's State Council Tariff Commission (SCTC) levied an additional 25 percent tariffs on certain U.S. products, including dairy products. (See Table below.)

**Table of Additional Tariffs on U.S.-Origin Dairy Products**

HS Code (8-digit)	Product Description	MFN Rate	232	301	Add'l tariff	Total Applied Tariff
	Implementation Date	Jan 1, 2019	Apr 2, 2018	Jun 1, 2019	Sep 1, 2019	Current
04012000	Milk & Cream,1%	15%		25%	5%	45%
04014000	Milk & Cream,6%	15%		25%	5%	45%
04015000	Milk & Cream, Fat> 10%, Not Concentrated Or Sweetened	15%		25%	5%	45%
04021000	Milk & Cream In Solid Forms,Fat≤1.5%, Concentrated	10%		25%		35%
04022100	Milk & Cream In Solid Forms Of>1.5% Fat, Concentra	10%		25%		35%
04022900	Milk & Cream In Solid Forms Of>1.5% Fat, Concentra	10%		25%		35%
04029100	Milk & Cream Not In Solid Form, Concentrated, Unsw	10%		25%		35%
04029900	Milk & Cream Not In Solid Form, Concentrated, Sweetened	10%		25%		35%
04031000	Yogurt	10%		25%	5%	40%
04039000	Buttermilk, Curdled/Fermented/Acidified Milk & Cream	20%		25%	5%	50%
04041000	Whey And Modified Whey*	2%		25%		27%
04049000	Products Consisting Of Natural Milk Constituents,	20%		25%		45%
04051000	Butter	10%		25%		35%
04052000	Dairy Spreads	10%		25%		35%
04059000	Other Fats & Oils Derived From Milk	10%		25%		35%
04061000	Fresh Cheese, Incl. Whey Cheese, Curd	12%		25%	5%	42%
04062000	Grated Or Powdered Cheese	8%		25%	5%	38%
04063000	Processed Cheese, Not Grated Or Powdered	8%		25%	5%	38%
04064000	Blue-Veined Cheese, Other-Veined Cheese Prod. By P	8%		25%	5%	38%
04069000	Cheese, Nes	8%		25%	5%	38%

\*Note: SCTC announced a tariff exclusion for Whey for Feed Use (HS Code 0404100) effective September 17, 2019 to September 16, 2020. See GAIN Report CH19061 for more information.

## CHEESE

### PS&D table

Dairy, Cheese Market Begin Year China	2018		2019		2020	
	Jan 2018		Jan 2019		Jan 2020	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks	0	0	0	0	0	0
Production	0	0	0	40	0	42
Other Imports	0	0	0	119	0	130
Total Imports	0	0	0	119	0	130
Total Supply	0	0	0	159	0	172
Other Exports	0	0	0	0	0	0
Total Exports	0	0	0	0	0	0
Human Dom. Consumption	0	0	0	159	0	172
Other Use, Losses	0	0	0	0	0	0
Total Dom. Consumption	0	0	0	159	0	172
Total Use	0	0	0	159	0	172
Ending Stocks	0	0	0	0	0	0
Total Distribution	0	0	0	159	0	172
(1000 MT)						

### Production and consumption

*Processed cheese production to increase, but natural cheese production will likely fall*

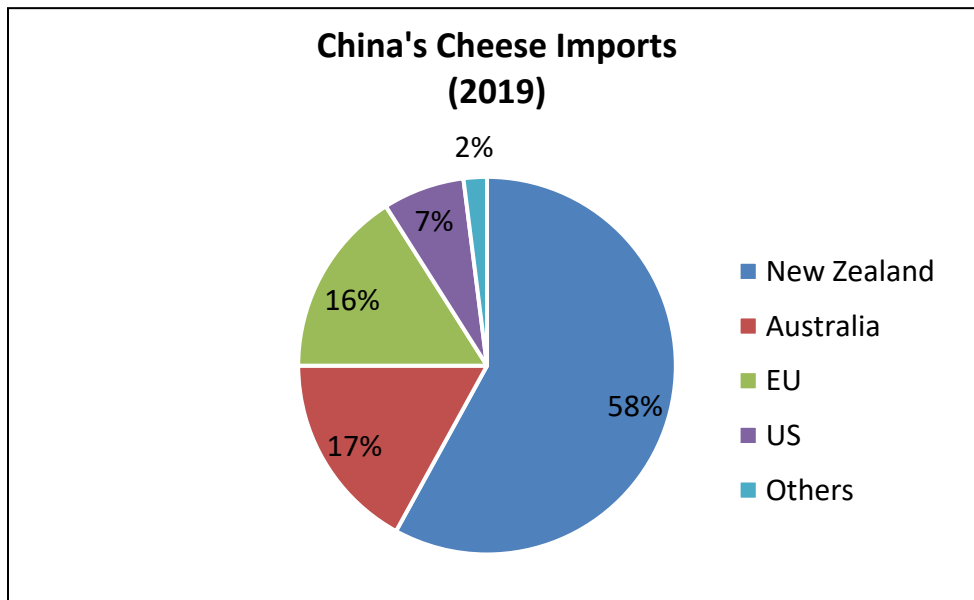
Post forecasts cheese production will reach 42,000 tons in 2020, representing a 5 percent increase over 2019. China's cheese production falls into two categories: natural cheese and reprocessed cheese. China's production of natural cheese is very small and is expected to fall to 2,000 tons in 2020 due to the rising fluid milk price. In China, reprocessed cheese must contain at least 15 percent natural cheese and consumption is expected to continue growing.

The HRI sector is the main consumption channel for cheese, which occupies 80 percent of cheese consumption. Retail is the other main consumption channel for cheese. Chinese consumers mainly favor three types of cheese: mozzarella, cheddar, and cream cheese. In recent years, large dairy processing companies have developed processed cheese products targeting children and the elderly.

### Trade

Post forecasts 2020 imports will increase to 130,000 tons. China mainly imports cheese from New Zealand and Australia, which together occupy 75 percent of the market. Cheese imports from New Zealand are subject to the terms of the free trade agreement signed in 2008. Within a certain safeguard quota, cheese enters duty free. Once that quota is filled, the remaining imports are assessed the MFN rate of 12 percent for natural cheeses and 8 percent for other types.

U.S.-origin cheese imports were assessed an additional 25 percent tariff in June 2019 and some cheeses were assessed a further 5 percent in September 2019. These additional tariffs have caused U.S.-origin cheese imports to decrease by half. Imports from New Zealand and the EU have increased to fill the gap.



Source: TDM



## BUTTER

### PS&D table

Dairy, Butter Market Begin Year	2019		2020	
	Jan 2019		Jan 2020	
	USDA Official	New Post	USDA Official	New Post
China				
Beginning Stocks	0	0	0	0
Production	0	10	0	5
Other Imports	0	70	0	80
Total Imports	0	70	0	80
Total Supply	0	80	0	85
Other Exports	0	1	0	1
Total Exports	0	1	0	1
Domestic Consumption	0	79	0	84
Total Use	0	80	0	85
Ending Stocks	0	0	0	0
Total Distribution	0	80	0	85
(1000 MT)				

*Butter production will decrease because of high fluid milk prices*

China currently produces very little butter. Butter production is not consistent in China and processors will opportunistically produce butter when the milk fat content is above average.

Post forecasts butter consumption to increase by 6.3 percent in 2020 to 84,000 metric tons. This increase is driven by the growing baking industry, which is the largest consumer of butter in China. Industry estimates that the bakery industry is growing at roughly 20 percent annually due to continued urbanization and increasing middle class wealth.

### Trade

China imports nearly all its butter. With growing consumption in the bakery industry, Post forecasts 2020 imports will increase 14 percent to 80,000 metric tons. New Zealand is the largest supplier, accounting for 87 percent of butter imports in 2018. EU countries account for another 10 percent.

## WHOLE MILK POWDER

### PS&D table

Dairy, Dry Whole Milk Powder	2018		2019		2020	
Market Begin Year	Jan 2018		Jan 2019		Jan 2020	
China	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks	100	100	50	50	0	50
Production	1080	970	965	915	0	865
Other Imports	521	521	550	650	0	700
Total Imports	521	521	550	650	0	700
Total Supply	1701	1591	1565	1615	0	1615
Other Exports	2	2	2	2	0	2
Total Exports	2	2	2	2	0	2
Human Dom. Consumption	1649	1539	1513	1563	0	1613
Other Use, Losses	0	0	0	0	0	0
Total Dom. Consumption	1649	1539	1513	1563	0	1613
Total Use	1651	1541	1515	1565	0	1615
Ending Stocks	50	50	50	50	0	0
Total Distribution	1701	1591	1565	1615	0	1615
(1000 MT)						

### Production

*Greater fluid milk demand to result in less WMP production*

China's milk production is counter-cyclical to consumption demand, resulting in large fluid milk surpluses during the peak production period. Since China has very little butter and cheese production, this surplus fluid milk is largely converted to whole milk powder (WMP) and stored. Generally, this is a profit-losing exercise due to the high production costs of fluid milk and the abundance of cheaper imported WMP. Post forecasts WMP production in 2020 will decrease to 865,000 metric tons because greater fluid milk demand will result in a smaller fluid milk surplus.

In addition, as large-scale farms account for a greater portion of domestic fluid milk production, their ability to better control milk production has resulted in a shrinking fluid milk surplus. Winter is typically when the surplus is the largest and large-scale farms have improved their feeding techniques to reduce milk production during this time.

Post adjusted 2019 WMP production downward to 965,000 MT due to a downward revision of 2019 domestic fluid milk production.

## Consumption

### *Growth in the food processing sector driving WMP demand*

Post forecasts WMP consumption in 2020 will increase to 1.6 MMT, representing 3.1 percent year-on-year growth. China's domestic fluid milk production is primarily used to produce middle to high-end dairy products. In order to meet demand from a growing number of Chinese consumers, China uses WMP and skim milk powder (SMP) to supplement fluid milk. Sometimes, WMP is reconstituted back to fluid milk and sold as a refrigerated product. More often, WMP is used to produce yogurt, dairy flavored beverages, infant formula, and bakery products. All these processed food categories are expected to continue growing in China, driving China's demand for continued WMP consumption.

## Trade

### *Imports of WMP to rise due to growing demand and decreased domestic production*

Post forecasts imports will increase again in 2020, representing a nearly 8 percent increase over 2019. The limited domestic WMP production and the growing demand for WMP utilization will likely drive imports.

New Zealand accounted for over 90 percent of all WMP imports to China in 2019. Under a free trade agreement between New Zealand and China, tariffs on dairy imports from New Zealand were slated to be phased out entirely. However, the agreement also contained certain "safeguards" that apply normal MFN tariffs to certain dairy products after reaching set quota amounts. New Zealand imports of WMP under the zero-tariff level reach these safeguard levels in less than one month, with the remaining product entering under MFN duty levels. It is likely these safeguards will continue until at least the year 2024. Nevertheless, New Zealand has increased its import market share for WMP in recent years in large part due to Chinese investment in New Zealand's dairy processing sector. For example, this year, one of China's largest dairy companies, Yili, acquired New Zealand's Westland Dairy for NZ \$588 million (~\$400 million USD). This followed an earlier purchase of Oceania Dairy for NZ \$650 million (~\$500 million USD) in 2013. The majority of WMP produced at these facilities is exported to China.

Australia is also a large WMP supplier and signed a free trade agreement with China in 2015. Like New Zealand, Australian WMP exporters also face safeguard quotas that are indexed to increase annually. However, Australia's WMP supply may be limited in 2020 due to reported drought conditions affecting Australia's dairy herd.

WMP exports from South America are expected to experience significant growth. Brazil gained new market access for 24 facilities, creating an opportunity for increased South American exports.

Exports of WMP from the United States dropped due to additional tariffs levied on many U.S.-origin products. From January to July, imports dropped from 6,708 tons in 2018 to 137 tons in 2019. For details on the additional tariffs, please refer to the Policy section below.

## **Exports**

China exports a negligible amount of WMP, mainly to North Korea, Myanmar, and Hong Kong. Post forecasts exports to shrink to 1,500 MMT due to tight domestic supplies in 2020.

## **Policy**

On June 1, 2019, China's State Council Tariff Commission (SCTC) levied an additional 25 percent tariffs on certain U.S. products, including dairy products. Under the harmonized schedule, WMP (and SMP) are classified as Milk & Cream in Solid Forms (HS 04022100).

## NONFAT DRY MILK (SKIM MILK POWDER)

### PS&D table

Dairy, Milk, Nonfat Dry Market Begin Year	2018		2019		2020	
	Jan 2018		Jan 2019		Jan 2020	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
China						
Beginning Stocks	0	0	0	0	0	0
Production	20	20	15	15	0	10
Other Imports	280	280	325	305	0	315
Total Imports	280	280	325	305	0	315
Total Supply	300	300	340	320	0	325
Other Exports	0	1	0	0	0	0
Total Exports	0	1	0	0	0	0
Human Dom. Consumption	300	299	340	320	0	325
Other Use, Losses	0	0	0	0	0	0
Total Dom. Consumption	300	299	340	320	0	325
Total Use	300	300	340	320	0	325
Ending Stocks	0	0	0	0	0	0
Total Distribution	300	300	340	320	0	325
(1000 MT)						

### Production

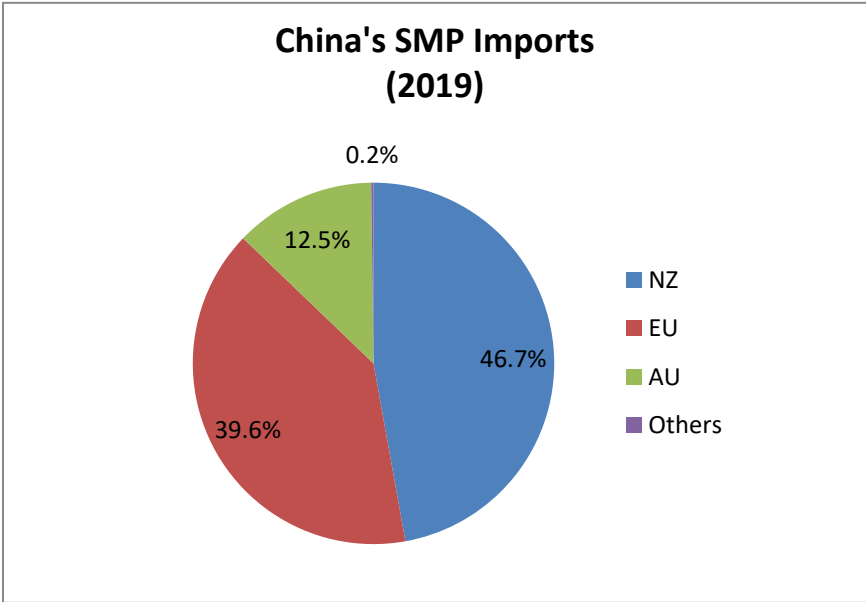
China produces very little butter and cheese, of which SMP is a by-product. Therefore, China produces very little SMP. Post forecasts 2020 production will be 33 percent down to 10,000 MMT due to the rising domestic fluid milk price.

### Consumption

Post forecasts 2020 consumption will increase by 1.6 percent to 325,000 MMT. SMP and WMP are substitutable products when used for food processing and infant formula manufacturing in China. Like WMP, the food processing sector in China continues to grow, driving growing utilization of SMP in milk beverages, yogurt, and bakery products.

### Trade

Post forecasts imports will increase by 3.2 percent in 2020 to reach 315,000 MMT. China has very little domestic SMP production and relies on imports to meet demand in the food processing and infant formula sectors. New Zealand is the largest exporter to China, accounting for nearly half of all SMP imports. In 2019, the EU surpassed Australia and the United States to become the second largest exporter. While the United States was previously the third largest supplier of SMP to China, after China levied additional tariffs of 25 percent, U.S.-origin SMP dropped by 92 percent.



Source: TDM

**Attachments:**

No Attachments