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**Prepared By:** Hye rim Chun

**Approved By:** Andrew Anderson-sprecher

**Report Highlights:**

Domestic milk production is forecast to stay steady at just over 2 million tons in 2022. 2021 milk production is projected to drop to 2.03 million tons after reaching 2.88 million tons in 2020. Milk production in 2020 benefited from favorable weather and higher price expectations. At the same time, COVID-19 related school closures resulted in weaker fluid milk demand. The resulting imbalance fueled higher dried milk production and larger dried milk stocks.

## **Executive Summary:**

Korea's milk production is forecast to remain flat at 2.03 million tons in 2022. Unusually hot weather in 2021 caused milk production to fall 58,000 tons to 2.03 million tons. Milk consumption continues to decrease as Koreans have fewer children. However, sales of premium milk products are increasing as consumer demand for healthier and immune-boosting foods grew after the COVID outbreaks. Hypermarkets and supermarkets will continue to be a major distribution channels for fresh milk in multipacks.

Cheese consumption is forecast to hit a record 192,000 tons in 2022. Per capita cheese consumption has more than doubled in only ten years. Within the cheese market, processed cheese is showing fast growth. Cheese consumption continues to increase in both the consumer market and food processing industry. Cheese is a popular snack for both kids and adults. Cheese imports continue to increase mainly due to tariff reductions and tariff rate quota (TRQ) increases under international trade agreements, with cheese from major exporters entering duty-free by 2026, supporting further import growth.

Dried milk stocks reached 12,163 tons in March 2021, up 24% from March 2020 and the highest level in more than four years. Dairy product manufacturers, facing weak fluid milk and infant formula demand due to the country's low fertility rates, are working to diversify their business portfolios. COVID-19 related school closures also hurt milk demand. Processors are increasingly looking to target the adult and senior powdered milk market.

**Commodities:**

Dairy, Milk, Fluid

**Production:**

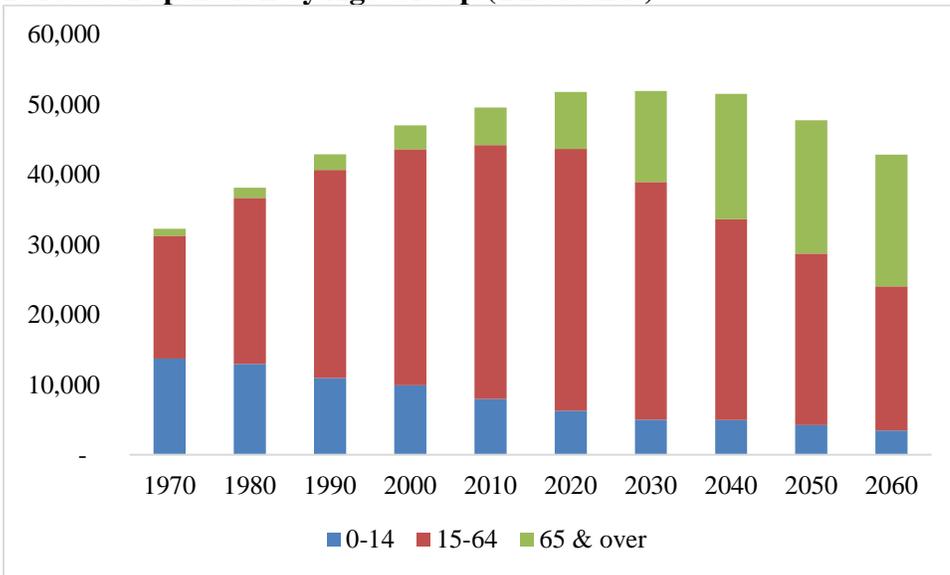
Domestic fluid milk production is forecast to remain stable in 2022 at about 2.03 million tons. The number of cows in production, while increasing slightly in 2021, has been on a general decline. Projected fluid milk production in 2021 fell to 2.03 million tons, down 58,000 tons from 2020. Lower average temperatures during winter and higher average temperatures and humidity during the summer led to a decrease in production. The tropical night weather pattern (which started 23 days earlier than normal) negatively impacted production as Holstein cows are vulnerable to heat stress. Estimated 2020 fluid milk production is raised 58,000 tons to 2.088 million tons based on statistics from Korea's Ministry of Agriculture, Food and Rural Affairs (MAFRA).

**Consumption:**

Korea's domestic milk consumption in 2022 is forecast at 2.03 million tons on flat demand. 2021 fluid milk consumption is forecast at 2.031 million tons, down 58,000 tons from 2020. Consumption fell in 2021 due to lower factory consumption as there was less excess milk to turn into milk powder. 2020 milk consumption is estimated at 2.089 million tons based on MAFRA statistics.

White milk consumption per capita in 2020 was 26.3kg, the lowest in twenty years. The white milk market continues to decrease in 2021. The market size decreased 4.5% by sales and 2.5% by volume. Low fertility rates are the primary force driving down milk consumption in Korea. In 2018, the fertility rate fell below one child per woman, and it decreased further to 0.84 children per woman in 2020. The number of children (age 0 to 14) dropped from 9.91 million in 2000 to 6.15 million in 2020. Statistics Korea forecasts that the population of children age 0 to 14 will drop to 3.45 million by 2060, reflecting accelerating demographic trends toward fewer or delayed marriages and rapidly declining birthrates. As children and teenagers are the main milk consumers in the Korean market, demand for fresh milk is expected to fall along with the drop in the number of children. Demand for processed milk in beverages targeting adults is expected to stay robust. As a result, sales of processed milk could exceed the sales of fresh milk in coming years.

### Forecast Population by Age Group (Thousands)



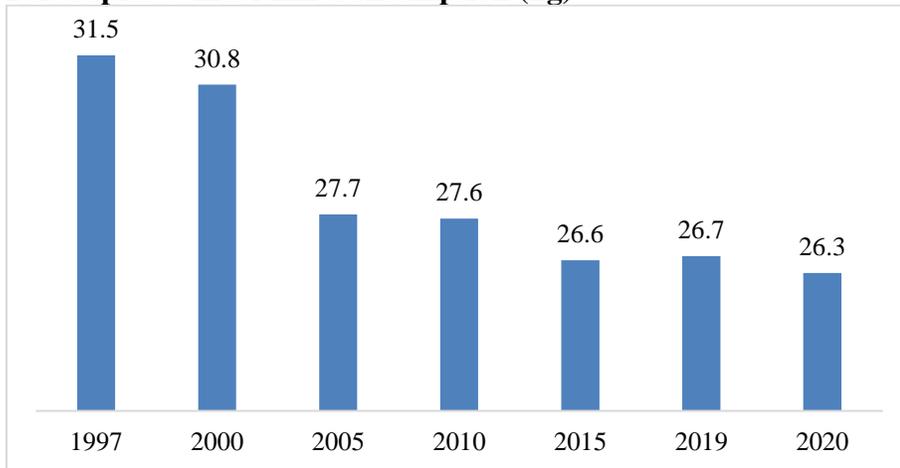
Source: Statistics Korea

### Fertility Rate (per woman)



Source: Statistics Korea

### Per Capita White Milk Consumption (kg)



Source: MAFRA

### Marketing:

Hypermarkets and supermarkets are the main distribution channels for fresh milk products. Fresh milk and flavored milk drinks are mainly sold in multipacks at hypermarkets and supermarkets, targeting families. Online retailers have become a growing sales channel for milk products. While consumers refrained from purchasing milk products online in the past, they can now be safely delivered to homes through quick delivery services offered by most retailers. Consumers can receive their purchases well packed in insulated packages within a few hours.

In Korea, milk sales to primary schools account for around 5.5 percent of domestic consumption. However, sales have dropped along with the falling birth rate. The share of fresh milk products sold through direct selling (home delivery) also declined, as fewer consumers drink milk on a daily basis. The share of fresh milk products sold at convenience stores and mixed retailers has increased.

With the rise in income and increased interest in health and environmental concerns, consumers continue to seek out premium products such as organic, antibiotic-free, and animal welfare approved milk products. The organic milk market reached 104 billion Korean Won (\$88 million) in 2020, up from only 5 billion Korean Won in 2008. Korean consumers are anxious about food safety issues and parents want to provide their children with the best products available, with a careful eye on health and safety issues. Regardless of the high price, premium products such as Dongwon F&B's "Denmark Alive Premium Milk" and S-Food's "Sulsung Milk" are popular among families with kids. Demand for healthier and premium products have grown even more since the outbreak of COVID-19. Along with this trend, manufacturers launched several new products. Seoul Milk launched its first organic milk product in September 2021, and Maeil Dairies launched two types of pasteurized antibiotic free organic milk.

**Policy:**

All U.S. dairy product exports to Korea intended for human consumption must now be certified by USDA's Agricultural Marketing Service (AMS). As such, all dairy products shipped to Korea on or after July 1, 2021 should be accompanied by the AMS Dairy Certificate. This includes dairy products containing eggs, such as ice cream. To meet Korea's new requirements, AMS launched a new dairy certificate that is available only in the Agriculture Trade Licensing & Attestation Solution (ATLAS) system. Exporters will need to create an ATLAS account with AMS if they are not already registered.

The new certificate requirements are summarized in an FAS GAIN report: [Update on New Korean Dairy Certificate](#). Exporters may find more information on the [AMS website](#). Any inquiries about ATLAS and the certification application process can be directed to [DairyExportsQuestions@usda.gov](mailto:DairyExportsQuestions@usda.gov).

For any new establishment of dairy products that wishes to export products to Korea, registration shall be made through the exporting government. For this registration, required documents should be submitted to FAS/Seoul ([agseoul@fas.usda.gov](mailto:agseoul@fas.usda.gov)). Details on registration requirements are also available in the [South Korea Food and Agricultural Import Regulations and Standards \(FAIRS\) country report, updated annually by FAS/Seoul](#).

**Commodities:**

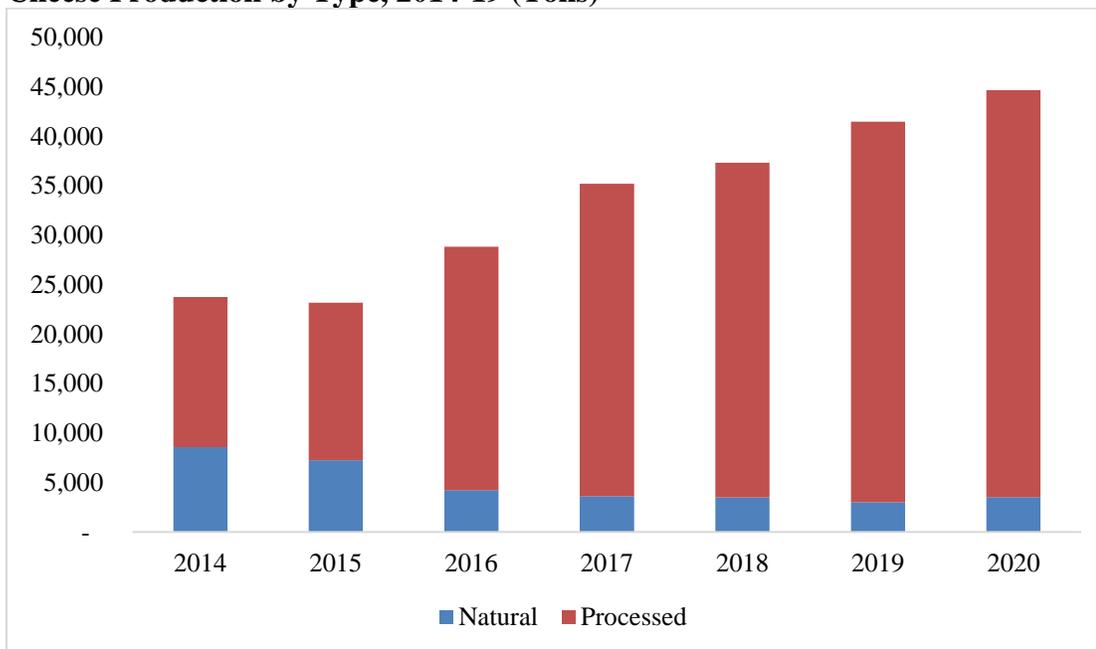
Dairy, Cheese

**Production:**

Domestic cheese production is forecast to increase 2,000 tons in 2022 to 47,000 tons as processed cheese production continues to grow. Projected 2021 cheese production is raised slightly to 45,000 tons as cheese demand growth remains strong. Cheese production for 2020 is raised to 44,671 tons based on dairy statistics from MAFRA. Very little cheese is made with domestic milk due to its cost, as raw milk prices in Korea are very high. The Korean Government sets milk prices based on the cost of production.

In contrast to fresh cheese production, processed cheese production has grown rapidly in recent years. Between 2010 and 2020, fresh cheese production dropped 56.4 percent while processed cheese production increased 116.5 percent. Domestic cheese manufacturers have been launching new products to boost sales. The Korean dairy sector is dominated by several large companies due to high initial investment costs. Major dairy companies include: Seoul Dairy Cooperative, Maeil Dairies, Namyang Dairy Products, and Dongwon F&B.

### Cheese Production by Type, 2014-19 (Tons)



Source: MAFRA

### Consumption:

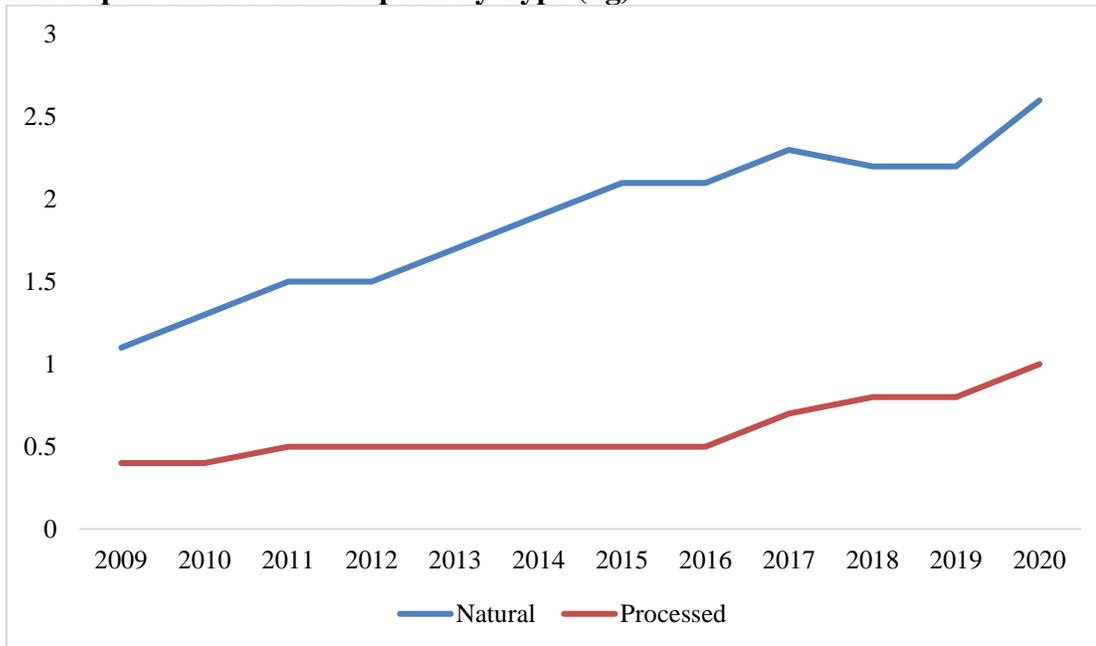
Cheese consumption is forecast to increase in 2022 to 192,000 tons. Per capita cheese consumption has doubled over the last ten years. Consumer tastes are becoming more westernized and more products using cheese are being introduced to the market. As a result, cheese consumption is expected to continue increasing both for direct consumption and in the food processing industry. Projected cheese consumption in 2021 is lowered 5,000 tons to 190,000 tons based on data for the first half of the year. Cheese consumption totaled 188,000 tons in 2020 according to MAFRA statistics, up 13.5 percent from 2019.

In the past, cheese consumption was limited to cheddar slices for sandwiches and hamburgers, or mozzarella for pizzas. Until 2010, sliced cheese accounted for around 50 percent of the products in the Korean cheese market. Since then, the appetite and culture have become more westernized. Cheese is now consumed in more diverse ways and a wider variety of cheeses have been introduced.

Cheese has become a popular snack for both kids and adults. It is increasingly considered a nutritious snack for children in Korea, and per capita cheese consumption is the highest among toddlers (age 1-2). Manufacturers are launching products targeted at kids. Cubed and portion cheese products are also a popular snack amongst adults to consume with alcohol. Soft cheese, ricotta, brie and other gourmet cheese have also increased in popularity.

Cheese is also commonly used in the food processing industry and in prepared foods. Packaged prepared meals are increasingly being sold in convenience stores, bakery stores, hypermarkets, and coffee shops, either for takeout or dine in. Food processors are launching hot and spicy packaged convenience food products with cheese ingredients.

### Per Capita Cheese Consumption by Type (kg)



Source: Korea Dairy Industries Association

### Trade:

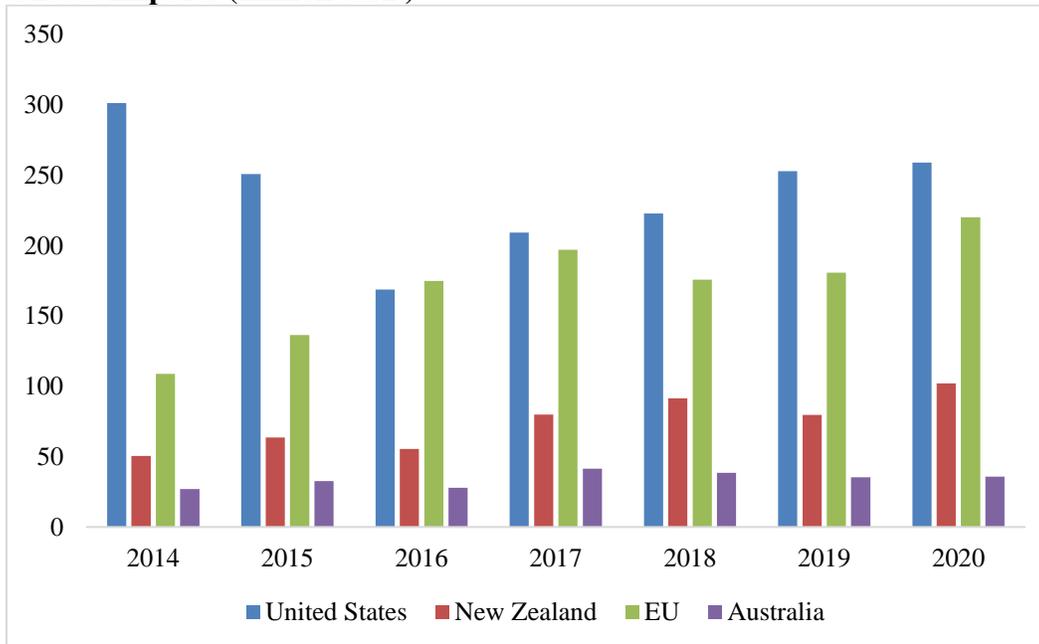
Cheese imports are forecast to grow 2,000 tons in 2022 to 152,000 tons based on growing demand. Estimated 2021 cheese imports are lowered 5,000 tons to 150,000 tons based on import trends. In 2020 Korea imported 148,000 tons of cheese according to trade statistics, up 12 percent from 2019. Cheese imports continue to increase due to tariff reductions, TRQ increases, consumption growth and limited domestic production.

The top cheese exporters to Korea by value are: the United States (41%), European Union (36%), New Zealand (16%), and Australia (6%). Korea has free trade agreements with all of these countries, reducing import duties and making imported cheese more affordable over the years.

Tariff reductions and TRQ increases under the U.S.-Korea Free Trade Agreement (KORUS FTA) have helped boost U.S. cheese exports significantly. Korea imported 61,821 tons (\$259.5 million) of cheese from the United States in 2020. However, the market is highly competitive. The European Union (EU) signed a free trade agreement with Korea in 2011, before the KORUS FTA was implemented in 2012, giving EU products an early advantage in the market. In addition, Korea became a target export market for the EU after Russia put restrictions on European agricultural exports. Korea implemented FTAs with New Zealand and Australia in 2016, resulting in more cheese imports from these countries as well.

The KORUS FTA created a zero-duty tariff-rate quota for cheeses covered under tariff lines 0406101000, 0406200000, 0406300000 and 0406900000. The in-quota amount was 9,133 tons in 2021, and all U.S. cheese will enter duty-free by 2026. The Korea Dairy Industries Association administers the TRQs and allocates the in-quota quantity to historical and new importers through a licensing system.

### Cheese Imports (million USD)



Source: Korea Customs Office 2016, HS 0406, Cheese and Curd

### Cheese Tariff Phase-Out Schedule under KORUS FTA (U.S.)

HS Code	Description	Base Rate	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
0406101000	Fresh Cheese	36.0%	33.6%	31.2%	28.8%	26.4%	24.0%	21.6%	19.2%	16.8%	14.4%	12.0%
0406102000	Curd	36.0%	32.4%	28.8%	25.2%	21.6%	22.8%	19.2%	15.6%	7.2%	3.6%	0%
0406200000	Grated or powdered cheese of all kinds	36.0%	33.6%	31.2%	28.8%	26.4%	24.0%	21.6%	19.2%	16.8%	14.4%	12.0%
0406300000	Processed cheese, not grated or powdered	36.0%	33.6%	31.2%	28.8%	26.4%	24.0%	21.6%	19.2%	16.8%	14.4%	12.0%
0406400000	Blue-veined cheese	36.0%	32.4%	29.0%	25.4%	21.8%	18.2%	19.2%	15.6%	7.2%	3.6%	0%
0406900000	Cheese, NES, including cheddar	36.0%	33.6%	31.2%	28.8%	26.4%	24.0%	21.6%	19.2%	16.8%	14.4%	12.0%
	TRQ Volume (MT)		7,000	7,210	7,426	7,649	7,878	8,115	8,358	8,609	8,867	9,133

### 2021 Tariff and TRQ Volume of Other Major Exporting Countries (EU, NZ, Australia)

HS Code	Description	EU	New Zealand	Australia
0406101000	Fresh Cheese	13.5%	15%	20%
0406102000	Curd	3.2%	19.2%	16.8%
0406200000	Grated or powdered cheese of all kinds	13.5%	19.2%	21.6%
0406300000	Processed cheese, not grated or powdered	13.5%	19.2%	20%
0406400000	Blue-veined cheese	3.2%	19.2%	16.8%
0406900000	Cheese, NES, including cheddar	13.5%	0%	21.6%
	TRQ Volume (MT)	5,776	5,669	5,694

**Commodities:**

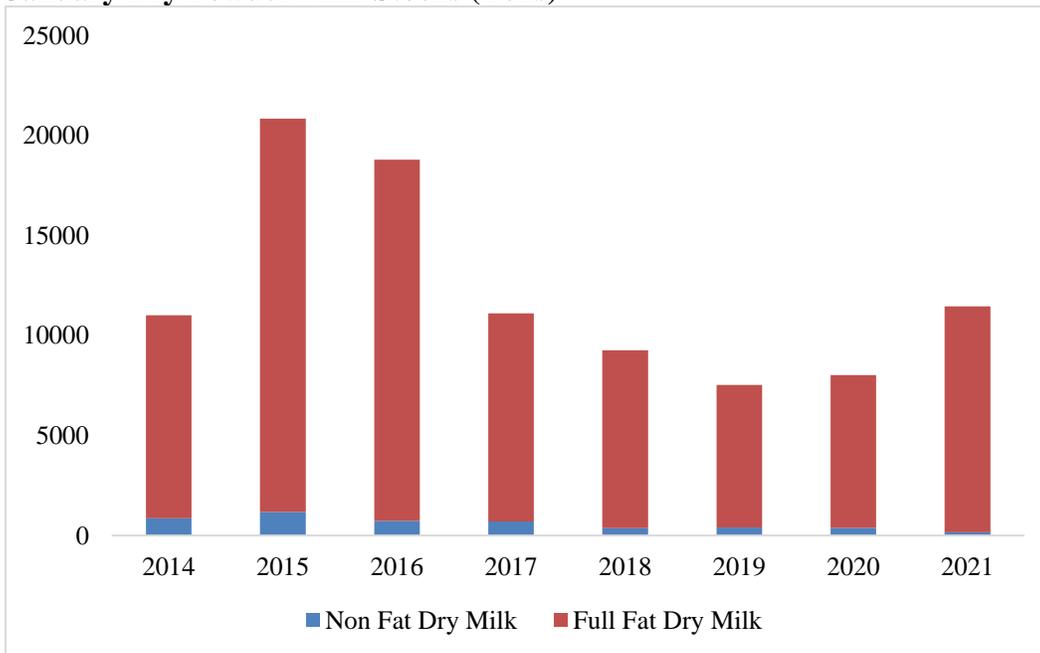
Dairy, Milk, Nonfat Dry

**Production:**

Local nonfat dry milk (NFDM) production is forecast to drop 1,000 tons to 9,000 tons in 2022, as there is expected to be less excess fluid milk production. NFDM production in 2021 is increased 1,000 tons to an estimated 10,000 tons based on projected fluid milk surpluses. Dried milk stocks started to increase again after decreasing for several years due to decreasing fluid milk consumption. Stocks reached 12,163 tons in March 2021, up 24 percent from March 2020 and the highest level in more than four years.

The Korean Government implemented a policy to increase milk production in 2010 after 30,000 milk cows were slaughtered due to an outbreak of foot and mouth disease. The policy resulted in excess milk production in 2014 and 2015. The excess milk was turned into dried milk, and dried milk stocks increased from 7,053 tons in 2013 to 17,532 tons in 2014. The government has sought to manage milk production and decrease dried milk stocks since 2014. As a result, dried milk production is expected to gradually decrease over the next several years. The industry is targeting 5,000 to 6,000 tons as a normal range for inventories.

**January Dry Powder Milk Stocks (Tons)**



Source: Korea Dairy Industries Association

**Consumption:**

Domestic consumption is forecast to rise slightly to 28,000 tons in 2022. Estimated 2021 NFDM consumption is raised to 26,000 tons as consumption is expected to remain steady. NFDM consumption is lowered 3,000 tons to 26,000 tons in 2020 based on dairy statistics published by MAFRA. Lower

demand for infant formula is driving down demand for NFDM. NFDM is primarily used in baked goods, infant formula, and as an ingredient in other dairy products.

Korea’s fertility rate has steadily declined. According to Statistics Korea, the number of births during the first half of 2021 was 149,269, down 3.4 percent compared to the same period in 2020. This was the lowest number of recorded births since 1981. Dairy product manufacturers, facing weak fluid milk and infant formula demand, are working to diversify their business portfolios.

Processors are looking to target the adult and senior powdered milk market. In 2018, Maeil Dairies was the first to enter the market by launching a brand for nutritional meals for adults called ‘Selects,’ and a powdered milk product for adults called ‘Core Protein.’ Namyang launched a powdered milk product for adults in 2019, and Lotte Food and Ildong Food also entered the market with similar products in 2020.

**Trade:**

NFDM imports are forecast to remain flat in 2022 at 18,000 tons. Estimated 2021 NFDM imports are raised 2,000 tons to 18,000 based on import trends. 2020 imports are unchanged at 17,000 tons based on import statistics.

**NFDM Tariff and TRQ Schedule on Korea-USFTA Implementation**

HS Code	Description	Base Rate	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
040210	In powder, fat content not exceeding 1.5%	176%	176%	176%	176%	176%	176%	176%	176%	176%	176%	176%
	Duty free quota (MT)*		5,000	5,150	5,304	5,463	5,628	5,797	5,971	6,150	6,334	6,524

\* Additional compound increase of 3% every year

Korea maintains a TRQ for NFDM. The TRQ is allocated through an Imports Rights Auction (IRA). The quasi-government Korea Agro Fisheries & Food Trade Corporation (also known as the “aT Center”) manages these auctions. The Korea Customs Service reimburses the 176 percent out-of-quota tariff to importers when they have reexported processed dairy-based products made from imported NFDM. Korean dairy manufacturing companies are looking forward to expanding market opportunities for exporting to China. Local food processors import NFDM for processing into infant formula, bakery use, and re-export.

<b>Dairy, Milk, Fluid</b>	<b>2020</b>		<b>2021</b>		<b>2022</b>	
<b>Market Year Begins</b>	<b>Jan 2020</b>		<b>Jan 2021</b>		<b>Jan 2022</b>	
<b>Korea, Republic of</b>	<b>USDA Official</b>	<b>New Post</b>	<b>USDA Official</b>	<b>New Post</b>	<b>USDA Official</b>	<b>New Post</b>
<b>Cows In Milk (1000 HEAD)</b>	203	202	204	204	0	203
<b>Cows Milk Production (1000 MT)</b>	2030	2088	2025	2030	0	2030
<b>Other Milk Production (1000 MT)</b>	0	0	0	0	0	0
<b>Total Production (1000 MT)</b>	2030	2088	2025	2030	0	2030
<b>Other Imports (1000 MT)</b>	11	11	12	11	0	10
<b>Total Imports (1000 MT)</b>	11	11	12	11	0	10
<b>Total Supply (1000 MT)</b>	2041	2099	2037	2041	0	2040
<b>Other Exports (1000 MT)</b>	11	10	9	10	0	10
<b>Total Exports (1000 MT)</b>	11	10	9	10	0	10
<b>Fluid Use Dom. Consum. (1000 MT)</b>	1580	1523	1585	1540	0	1550
<b>Factory Use Consum. (1000 MT)</b>	450	566	443	491	0	480
<b>Feed Use Dom. Consum. (1000 MT)</b>	0	0	0	0	0	0
<b>Total Dom. Consumption (1000 MT)</b>	2030	2089	2028	2031	0	2030
<b>Total Distribution (1000 MT)</b>	2041	2099	2037	2041	0	2040
(1000 HEAD) ,(1000 MT)						

<b>Dairy, Cheese</b>	<b>2020</b>		<b>2021</b>		<b>2022</b>	
<b>Market Year Begins</b>	<b>Jan 2020</b>		<b>Jan 2021</b>		<b>Jan 2022</b>	
<b>Korea, Republic of</b>	<b>USDA Official</b>	<b>New Post</b>	<b>USDA Official</b>	<b>New Post</b>	<b>USDA Official</b>	<b>New Post</b>
<b>Beginning Stocks (1000 MT)</b>	13	13	17	14	0	15
<b>Production (1000 MT)</b>	43	45	44	45	0	47
<b>Other Imports (1000 MT)</b>	148	148	155	150	0	152
<b>Total Imports (1000 MT)</b>	148	148	155	150	0	152
<b>Total Supply (1000 MT)</b>	204	206	216	212	0	219
<b>Other Exports (1000 MT)</b>	1	1	1	1	0	1
<b>Total Exports (1000 MT)</b>	1	1	1	1	0	1
<b>Human Dom. Consumption (1000 MT)</b>	186	188	195	190	0	192
<b>Other Use, Losses (1000 MT)</b>	0	0	0	0	0	0
<b>Total Dom. Consumption (1000 MT)</b>	186	188	195	190	0	192
<b>Total Use (1000 MT)</b>	187	189	196	191	0	193
<b>Ending Stocks (1000 MT)</b>	17	17	20	21	0	26
<b>Total Distribution (1000 MT)</b>	204	206	216	212	0	219
(1000 MT)						

Dairy, Milk, Nonfat Dry Market Year Begins	2020		2021		2022	
	Jan 2020		Jan 2021		Jan 2022	
Korea, Republic of	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks (1000 MT)	7	7	3	11	0	13
Production (1000 MT)	8	13	9	10	0	9
Other Imports (1000 MT)	17	17	16	18	0	18
Total Imports (1000 MT)	17	17	16	18	0	18
Total Supply (1000 MT)	32	37	28	39	0	40
Other Exports (1000 MT)	0	0	0	0	0	0
Total Exports (1000 MT)	0	0	0	0	0	0
Human Dom. Consumption (1000 MT)	29	26	22	26	0	28
Other Use, Losses (1000 MT)	0	0	0	0	0	0
Total Dom. Consumption (1000 MT)	29	26	22	26	0	28
Total Use (1000 MT)	29	26	22	26	0	28
Ending Stocks (1000 MT)	3	11	6	13	0	12
Total Distribution (1000 MT)	32	37	28	39	0	40
(1000 MT)						

### Korea's Key Dairy Product Imports (Metric Tons)

	2016		2017		2018		2019		2020	
	U.S.	Total								
<b>Cheese HS 0406</b>	39,966	109,621	49,012	125,002	53,359	123,850	61,432	131,354	61,821	148,002
<b>NFDM HS 0402.10</b>	5,882	20,610	7,473	23,187	8,061	24,775	7,293	23,765	4,561	17,469
<b>WFDM HS 0402.21</b>	235	3,498	292	4,625	157	5,282	460	5,207	456	5,515
<b>Mixed Milk HS 0404.90 HS 1901.90.20</b>	660	38,394	781	46,957	833	53,971	486	57,264	686	63,197 45,959
<b>Butter HS 0405.10</b>	43	28,429	737	34,917	4	41,192	3	43,952	18	17,247
<b>Whey Powder HS 0404.10</b>	617	9,965	44	12,040	829	12,779	483	13,312	668	11,282
<b>Ice Cream HS 2105</b>	537	5,189	624	5,119	976	6,807	1,364	9,791	1,096	9,229
<b>Total</b>	12,271	35,444	11,658	33,728	15,102	34,633	16,532	38,372	11,613	33,241
	1,146	6,308	1,332	7,409	1,477	7,917	1,903	7,513	3,066	9,229
	60,697 (28%)	215,981	71,172 (29%)	246,027	79,965 (30%)	264,492	89,470 (33%)	273,266	83,299 (29%)	287,935

Source: Korea Customs Office

### Attachments:

No Attachments