

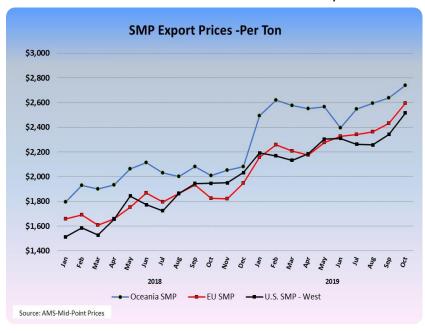
Foreign Agricultural Service

December 2019

# Dairy: World Markets and Trade

Prospects for U.S. dairy exporters have improved markedly as 2020 exports of skimmed milk powder (SMP) are expected to grow by 5 percent to reach 718,000 tons. Further, the fiscal year trade forecast is raised by \$300 million to \$5.8 billion largely as a result of higher export volumes and prices for skimmed milk products such as SMP and whey. So far this year, although the volume shipped has lagged last year's pace, the value of U.S. exports of SMP are up 12 percent year-over-year (YOY) through September 2019 and accounted for about 25 percent of the total value of U.S. dairy exports.

A key factor for higher values has been the persistent rise in the price of SMP both in the United States and international markets since early 2018. From January 2018 to Oct 2019 the



price of U.S. SMP has increased by about two thirds averaging around 2 percent growth per month to reach over \$2,500 per ton FOB West in November. EU prices have also moved up despite the sell-off of some of some 380,000 tons of surplus SMP intervention stocks held by the European Union (EU) during the latter half of 2018 and early 2019. Given that this SMP was sold at below feed prices, it is likely most of this product was used for animal feed. Some, however,

appears to have entered export channels, although any price depressing impact seems to have been temporary.

Several factors appear to have supported the rise in SMP prices. First, there has been an upswing in global import demand for SMP as YOY imports through September are up from 15 to 30 percent for key markets as China, Indonesia, and Philippines. Second, milk output in 2019 among the major exporters was less than anticipated and likely to be only slightly ahead of last year. Finally, SMP stocks are low in both in the EU and the United States. For 2020, most of the additional milk production among major exporters is forecast to grow in the EU and the United States; however, the U.S. is the only exporter expected to have substantial additional supplies of SMP for the international market.

### Dairy Production and Trade Developments

# Milk Production Summary for Major Exporters (Million Tons)

	2018	2019 Estimated	2020 Forecast	2019-2020 Change
Argentina	10.8	10.6	10.8	2%
Australia	9.5	8.8	8.6	-2%
EU-28	154.6	155.3	155.9	0%
New Zealand	22.0	21.9	22.0	0%
United States	98.7	99.2	100.9	2%
Major Exporter Total	295.6	295.8	298.2	1%

Note: Data is rounded.

#### Fluid Milk:

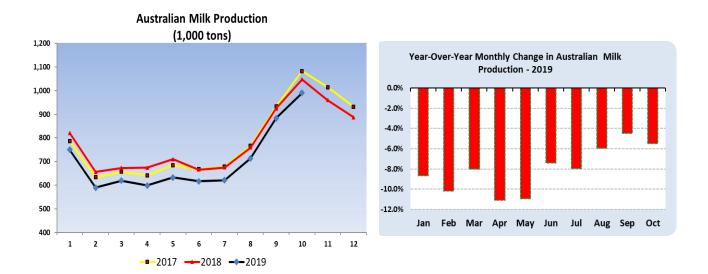
 Mid-year milk production in <u>Argentina</u> trailed last year's pace by about 6 percent due to higher than average temperatures stressing lactating cows. Although, improved margins and ample feed have improved prospects, the milk output forecast for 2019 is revised down 1 percent to 10.64 million tons – 160,000 tons lower than previously forecast.

The outlook for 2020 reflects policies in place as of the end of November 2019. Dairy farmers are currently expected to maintain margins and milk output is forecast to grow by 1.5 percent to 10.8 million tons due to an expansion of the herd and higher milk per cow yields.

• The 2019 milk output forecast for <u>Australia</u> is revised down by 2 percent to 8.8 million tons due to drought conditions that particularly affected the key dairy producing state of Victoria. In addition, with the prospect of poor pasture conditions and high feed prices, farmers culled cows and the herd is expected to contract by 3 percent from last year. Recently, abundant rains have improved pasture conditions and coupled with record high milk prices have to some extent arrested the decline in milk production.

For 2020, pasture conditions are expected to improve as more rainfall is expected to ameliorate pasture conditions in the South-Eastern regions. However, significantly more rainfall will be needed in early 2020 to recover from the current rainfall deficit. Farmers are expected to continue to receive higher milk prices although this may be partly offset by increased feed prices. However, given biological lags, the dairy herd is expected to be

smaller in 2020. With a smaller herd, milk production is expected to drop by 2 percent to 8.6 million tons.



• Summer drought in the <u>European Union</u> caused poor pasture conditions and led to forage shortages in major producing Member States resulted in a shrinking herd. As a result, growth in milk production was slower than anticipated. Milk output this year through September was marginally ahead - 0.4 percent - of the comparable period last year. Although conditions are reported to have improved during the Fall season, the production forecast is cut by 700,000 tons to 155.3 million tons. This still represents a YOY rise in milk production of one half of one percent.

Looking ahead to 2020, drought related forage shortages are expected to slow the recovery in milk production in the first half of the year. However, as feed stocks and pasture conditions return to normal, milk output is expected to accelerate and total production for the year is expected to grow by 0.4 percent to reach 155.9 million tons. The milk herd is estimated to shrink but improved management and genetics are likely to offset the decline in herd size as milk per cow yields are anticipated to rise. As in past years, most of the additional milk will be channeled into the production of cheese.

• The 2019 milk production forecast for <a href="New Zealand">New Zealand</a> is revised down 2 percent due to a cold wet spring that negatively impacted milk per cow yields. Output in September and October was down by 1 percent and 3 percent, respectively, in comparison to year-ago monthly production. For the year, milk output is expected to drop by 1 percent over 2018 as weather predictions by the National Institute for Water and Atmospheric Research for December and early 2020 point to normal or above normal summer rainfall and temperatures which should support a recovery in production. Farmers also will have a strong incentive to maximize milk per cow yields as farmgate milk prices are relatively strong.

In 2020, the herd size is expected to remain virtually unchanged from 2019, but milk production is forecast to grow by slightly under less than one-half of one percent. A key factor has been the recent rise in the 2019/2020 (July/June) forecast farmgate milk price that has been increased from a median price of NZ\$6.75 to NZ\$7.05 (mid-point price of US\$4.60) per kg milk solids basis, reflecting an improvement in global prices. Higher prices will promote the supplementary feeding of cows to raise milk per cow yields.

#### **CHEESE:**

# Cheese Exports Summary for Major Exporters (1,000 Tons)

	2018	2019 Estimated	2020 Forecast	2019-2020 Change
Australia	172	165	170	3%
Belarus	211	240	260	8%
EU-28	832	870	880	1%
New Zealand	322	340	350	3%
United States	349	355	365	3%
Major Exporter Total	1,886	1,970	2,025	3%

Note: Data is rounded.

• The <u>European Union</u> remains the largest global exporter of cheese with about a quarter of its exports shipped to the United States and Japan. The trade forecast for 2019 is revised up by 5 percent on the current pace of exports. Looking ahead to 2020, exports are expected to grow by 1 percent due to an expansion in domestic milk output that is expected to be used mostly in the production of cheese. With about three quarters of the additional volume of cheese consumed in the domestic market the balance will be exported.

The recent imposition of U.S. tariffs on cheese and butter from the European Union are expected to reduce exports but the impact is expected to be somewhat limited since demand for imported high-end cheeses is assumed to be relatively inelastic.

Exports of cheese from <u>Belarus</u> have been steadily rising averaging about 6 percent annual growth between 2014 and 2018. This year, about 95 percent of exports by Belarus through September were shipped to Russia and this pattern is likely to persist in 2020. Russia is a major market for Belarusian cheese particularly since imports of EU and U.S. cheese were banned in 2014. This ban remains in place and has been extended through 2020. For 2020, exports of cheese are forecast to grow by 8 percent to 260,000 tons;

however, while Russia will remain the dominant destination, sales to other neighboring countries such as Kazakhstan and Kyrgyzstan are expected to grow.

- The <u>New Zealand</u> forecast for 2019 is revised down to 340,000 tons but still represents a gain of almost 6 percent over 2018. For 2020, reflecting the modest gain in forecast milk output, cheese production is anticipated to grow by 1 percent while exports are expected to expand by 3 percent to reach 350,000 tons. So far in 2019, about 55 percent of this cheese has been shipped to Japan, China, and Australia. This is not likely to change significantly in 2020, although, based on the current pace of shipments, China is likely to eclipse Japan to become the leading destination for New Zealand cheese.
- Imports of cheese by <u>China</u> between 2014 and 2018 grew at an average pace of over 13 percent annually. In 2019, this rate is expected to slow to 6 percent, but in 2020 imports are forecast to increase by over 10 percent to reach 130,000 tons. The bulk of the cheese is supplied by Australia and New Zealand which benefit from free trade agreements allowing for the importation of cheese at duty-free rates (New Zealand) or reduced rates relative to MFN rates (Australia).

#### **BUTTER (Includes Butteroil/AMF):**

# Butter Exports Summary for Major Exporters (1,000 Butter Equivalent Tons)

	2018	2019 Estimated	2020 Forecast	2019-2020 Change
Belarus	78	69	65	-6%
EU-28	161	210	195	-7%
New Zealand	501	495	500	1%
United States	49	26	25	-4%
Major Exporter Total	789	800	785	-2%

Note: Data is rounded.

• <u>European Union</u> butter exports for 2019 are expected to rise by 30 percent on the strength of sales through September to the United States, Japan, and the United Arab Emirates. Consequently, the export forecast is raised by 35 percent to 210,000 tons.

For 2020, butter production in the EU is expected to contract slightly, but domestic consumption is expected to grow, constraining exports. In 2018, about 20 percent of EU exports were destined for the U.S. market, however, with the imposition of a 25 percent import tariff by the United States, sales of butter to the U.S. market are expected decline

in 2020. However, the impact of the tariff is expected to be limited as this butter is marketed as a high-value product and consumer demand is likely relatively inelastic and less affected by price.

 The <u>New Zealand</u> export forecast for 2019 is cut by 6 percent as sales through September have lagged last year's pace. Notably, shipments to China are down about 40 percent YOY.

For 2020, butter output is forecast to decline as expanded milk production will be used to produce WMP and cheese. Nevertheless, exports are forecast to grow by 1 percent as stocks are drawn down.

#### **SKIMMED MILK POWDER (SMP):**

# SMP Exports Summary for Major Exporters (1,000 Tons)

	2018	2019	2020 Forecast	2019-2020
		Estimated		Change
Australia	155	130	120	-8%
Belarus	121	145	158	9%
EU-28	821	1,010	925	-8%
New Zealand	410	385	370	-4%
United States	712	684	718	5%
Major Exporter Total	2,219	2,354	2,291	-3%

Note: Data is rounded.

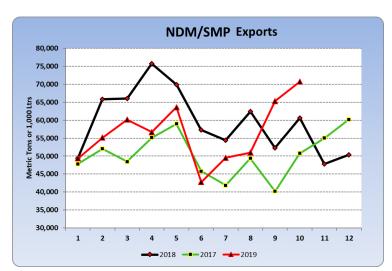
• <u>European Union</u> exports of SMP through September are running ahead 28 percent YOY and on track to reach over 1 million tons this year. As a result, the 2019 forecast is revised up by 6 percent to 1.01 million tons – an increase of 23 percent over 2018. The greatest gains have been in Asia particularly in countries such as China and Indonesia where shipments have risen by over 50 percent YOY.

In 2020, EU SMP production is expected to grow slightly under 1 percent. However, without any intervention stocks of SMP there will be less exportable supplies. Consequently, exports are forecast to decline by 8 percent to 925,000 tons.

• New Zealand's production of SMP for 2019 is revised down as anticipated milk production is cut by 2 percent. Although, milk production in 2020 is expected to expand, most of the

additional milk will likely be used to produce whole milk powder (WMP) and to a lesser extent, cheese. As a result, SMP output is forecast to drop by 4 percent. However, given the outlook for rising global demand, exports of SMP are forecast to grow by 5 percent as stocks are drawn down.

• This year, exports of SMP from the <u>United States</u> faced strong competition in the global market that coupled with retaliatory tariffs imposed by several major importing countries undercut shipments. Nevertheless, there are some positive signs as shipments during the past 3 months have been rising rapidly reaching 71,000 tons in October. For 2019, the



export forecast at 684,000 tons remains largely unchanged from the July forecast.

For 2020 domestic milk production is pegged to expand by 2 percent providing more skim milk to raise the output of SMP. With the increased availability of exportable supplies, shipments of SMP are anticipated to rebound by 5 percent to reach a record 718,000 tons.

• Mexico's imports of SMP through September 2019 are running at an even pace compared to last year and as a result the import forecast is revised down to match last year's level. For 2020, Mexico's imports of SMP are expected to resume growing as domestic consumption for a broad range of dairy products remains strong and imports of SMP are slated to grow by 6 percent to reach 380,000 tons. About 70 percent of imports are used to produce dairy goods such as cheese and yogurt while the balance is used in the food processing sector for such products as bakery items, chocolates, etc.

The United States maintains a strong presence in this market and enjoys a logistical advantage, but the modernization of the EU-Mexico FTA in 2018 appears to be having an impact. One element of this FTA provides for a duty-free quota of EU milk powder starting at 30,000 tons and growing to 50,000 tons after a 5-year phase-in period. In 2018, Mexico imported 5,000 tons of SMP from the EU. Through September 2019, Mexico imported 26,000 tons of EU SMP while imports from the United States dropped by 10 percent to 238,000 tons.

#### WHOLE MILK POWDER (WMP):

# WMP Exports Summary for Major Exporters (1,000 Tons)

	2018	2019 Estimated	2020 Forecast	2019-2020 Change
Argentina	135	96	115	20%
Australia	55	40	40	0%
EU-28	334	290	300	3%
New Zealand	1,369	1,550	1,540	-1%
Major Exporter Total	1,893	1,976	1,995	1%

• <u>China</u> is the largest importer of WMP in the world and following a sharp decline in 2014, imports of WMP between 2015 through 2018 have been growing at an annual average rate of 15 percent. In 2019, imports through October are up 23 percent YOY. Consequently, the forecast is revised up substantially to 640,000 tons – the highest since 2014.

This growth is expected to continue in 2020 but at a more moderate pace as imports are forecast to rise by 9 percent to reach 695,000 tons. China mainly imports from New Zealand which in recent years has supplied around 90 percent of all WMP imports.

• New Zealand exports of WMP are on track to hit a record 1.6 million tons in 2019 with the bulk of the product being shipped to China. In 2020, exports of WMP are expected to remain virtually unchanged. However, growth in WMP production is expected to be constrained as milk production is forecast to grow only marginally and consequently, the expected pace in exports will likely have to be supported by a further draw-down in stocks.

#### **U.S. Dairy Export Forecasts:**

U.S. Dairy Products Export Forecast - Calendar Year 2019-2020

	Milk Equivalent (Bil. Lbs.)				Milk Equivale	nt /Dil I bo\
	2019 (For)	Fat	Skims	2020 (For)	Fat	Skims
	, ,			,		
NON-FAT DRY AND SKIM MILK PWDR	683,606 MT	0.3	16.0	717,750 MT	0.3	16.8
MILK POWDER > 1.5% MILK FAT	33,850 MT	0.5	0.5	37,500 MT	0.5	0.6
BUTTER/MILKFAT/SPREADS	25,273 MT	1.2	0.0	23,900 MT	1.2	0.0
CHEESE AND CURD	355,087 MT	5.4	2.8	364,700 MT	5.6	2.9
FLUID PRODUCTS 4/	177,416 Liters	0.4	0.4	153,200 Liters	0.5	0.3
DRIED WHEY PRODUCTS	428,556 MT	0.5	9.9	460,000 MT	0.6	10.6
LACTOSE	381,186 MT	0.0	9.3	403,000 MT	0.0	9.9
OTHER DAIRY PRODUCTS	185,694 MT	0.6	1.8	190,700 MT	0.6	1.9
TOTAL - Billion Pounds		9.0	40.9		9.3	43.1

Note: 1) CY 2019 includes actual exports through October 2019

#### **Exports Through October 2019**

2019	
1,874	24%
929	12%
679	9%
590	8%
333	4%
260	3%
3,069	40%
7,733	
	1,874 929 679 590 333 260 3,069

Top DestM.E. Skim Basis (Mill. lbs)	2019
MEXICO	9,900 2
CHINA (MAINLAND)	<b>3,547</b> 10
PHILIPPINES	2,434 7
INDONESIA	2,109 6
JAPAN	1,688 5
VIETNAM	<b>1,670</b> 59
Other	<b>12,823</b> 38
TOTAL	34,170

<sup>2)</sup> 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

#### **Additional Resources:**

For additional information, please contact Paul Kiendl at 202-720-8870 or <a href="mailto:Paul.Kiendl@usda.gov">Paul.Kiendl@usda.gov</a> or Lindsay Kuberka at 202-644-4650 or <a href="mailto:Lindsay.Kuberka@usda.gov">Lindsay.Kuberka@usda.gov</a>

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Individual FAS country reports covering dairy are available at: https://gain.fas.usda.gov/#/

The USDA Production, Supply and Demand database is available at: <a href="https://apps.fas.usda.gov/psdonline/app/index.html#/app/home">https://apps.fas.usda.gov/psdonline/app/index.html#/app/home</a>

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): <a href="https://apps.fas.usda.gov/gats/default.aspx">https://apps.fas.usda.gov/gats/default.aspx</a>

The next publication of this circular will be on Jul 21, 2020.

#### **Circular Notes:**

- Fluid milk in liters are converted to kilograms using a 1.03 conversion factor.
- U.S. cheese imports only include cow's milk cheeses.
- The Butter PS&D's include butter, anhydrous milk fat (AMF), and butteroil. The AMF and butteroil are converted to a butter equivalent basis by multiplying by 1.25.

# Cows Milk Production and Consumption: Summary For Selected Countries 1,000 Metric Tons

		1,000 Metri	C 10113			
	2015	2016	2017	2018	2019	202 De
Cows Milk Production						
Argentina	11,552	10,191	10,090	10,837	10,640	10,80
Australia	10,091	9,486	9,462	9,451	8,750	8,55
Belarus	7,047	7,140	7,321	7,345	7,385	7,42
Brazil	24,770	22,726	23,624	23,745	24,450	25,25
Canada	8,773	9,081	9,675	9,944	9,995	10,0
China	31,798	30,640	30,386	30,750	31,000	31,8
European Union	150,200	151,000	153,400	154,575	155,300	155,9
India	73,645	78,099	83,634	87,800	91,300	95,2
Japan	7,379	7,394	7,281	7,289	7,305	7,3
Korea, South	2,169	2,070	2,081	2,041	2,035	2,0
Mexico	11,736	11,956	12,121	12,368	12,615	12,8
New Zealand	21,587	21,224	21,530	22,017	21,855	21,9
Russia	30,548	30,510	30,934	30,398	30,560	31,0
Taiwan	374	380	380	385	419	4
Ukraine	10,584	10,375	10,275	10,070	9,900	9,6
Others	13	14	15	16	17	
Subtotal	402,266	402,286	412,209	419,031	423,526	430,3
United States	94,578	96,366	97,761	98,690	99,155	100,8
Total	496,844	498,652	509,970	517,721	522,681	531,2
luid Use Dom. Consum.						
Argentina	2,095	1,718	1,681	1,771	1,645	1,7
Australia	2,700	2,550	2,530	2,620	2,600	2,6
Belarus	1,065	1,050	1,065	1,050	1,055	1,0
Brazil	9,573	9,600	9,993	10,762	11,040	11,2
Canada	2,923	2,917	2,884	2,832	2,800	2,7
China	13,130	12,555	12,810	12,700	12,800	13,3
European Union	33,800	33,600	33,550	33,500	33,400	33,2
India	63,750	67,700	72,185	76,180	77,680	80,8
Japan	3,932	3,988	3,974	3,995	3,969	3,9
Korea, South	1,529	1,500	1,561	1,566	1,575	1,5
Mexico	4,185	4,183	4,174	4,183	4,190	4,2
New Zealand	497	497	497	500	500	5
Russia	9,500	8,960	8,555	7,318	7,215	7,2
Taiwan	384	397	408	420	449	4
Ukraine	5,385	5,241	4,998	4,862	4,800	4,8
Others	62	81	86	96	117	1
Subtotal	154,510	156,537	160,951	164,355	165,835	169,8
United States	23,378	23,220	22,719	22,220	21,780	21,4
Total	177,888	179,757	183,670	186,575	187,615	191,2

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

1,000 Head						
	2015	2016	2017	2018	2019	2020 Dec
						<b>D</b> CC
Cows In Milk						
Argentina	1,786	1,720	1,672	1,640	1,598	1,620
Australia	1,689	1,562	1,512	1,525	1,475	1,450
Belarus	1,533	1,512	1,502	1,500	1,498	1,495
Brazil	17,426	17,430	16,262	16,300	16,500	16,800
Canada	954	945	945	970	969	968
China	8,400	8,000	7,000	6,200	6,100	6,150
European Union	23,559	23,548	23,525	23,311	22,909	22,820
India	52,500	54,500	56,500	58,500	60,600	62,400
Japan	750	752	735	731	730	735
Korea, South	197	194	198	205	204	203
Mexico	6,400	6,450	6,550	6,550	6,500	6,550
New Zealand	5,056	4,998	4,861	4,993	4,937	4,935
Philippines	10	11	12	11	11	11
Russia	7,750	7,235	7,080	6,815	6,655	6,580
Taiwan	62	61	61	62	62	63
Ukraine	2,322	2,226	2,170	2,078	2,000	1,900
Subtotal	130,394	131,144	130,585	131,391	132,748	134,680
United States	9,320	9,334	9,406	9,399	9,330	9,335
Total	139,714	140,478	139,991	140,790	142,078	144,015

### Cheese Production and Consumption: Summary For Selected Countries 1,000 Metric Tons

		1,000 Metri	CIONS			
	2015	2016	2017	2018	2019	2020 De
roduction						
Algeria	0	0	0	0	0	
Argentina	566	552	514	444	439	45
Australia	343	344	348	367	370	37
Belarus	241	275	260	275	300	32
Brazil	754	745	771	760	780	79
Canada	419	445	497	510	519	5
China	255	256	262	272	281	2
European Union	9,740	9,810	10,050	10,160	10,275	10,3
Japan	46	47	46	45	45	
Korea, South	23	25	35	37	40	
Mexico	363	375	396	419	436	4
New Zealand	355	360	386	355	360	3
Philippines	2	2	2	2	2	
Russia	861	865	951	970	970	9
Ukraine	190	186	190	192	195	1
Others	0	0	0	0	0	
Total Foreign	14,158	14,287	14,708	14,808	15,012	15,1
United States	5,367	5,525	5,733	5,908	5,950	6,1
Total	19,525	19,812	20,441	20,716	20,962	21,2
otal Dom. Consumption						
Argentina	524	508	485	381	380	3
Australia	270	275	291	294	305	3
Belarus	69	71	72	72	73	
Brazil	773	785	799	785	805	8
Canada	415	458	504	537	542	5
China	331	353	370	380	396	4
European Union	9,087	9,094	9,297	9,387	9,458	9,5
Japan	294	304	324	329	354	3
Korea, South	137	136	159	155	166	1
Mexico	475	496	511	526	548	5
New Zealand	41	42	40	40	38	
Philippines	29	32	40	40	38	
Russia	1,052	1,076	1,141	1,213	1,217	1,2
Taiwan	29	32	32	32	30	
Ukraine	184	187	188	198	208	2
Others	0	0	0	0	0	
Total Foreign	13,710	13,849	14,253	14,369	14,558	14,7
United States	5,149	5,379	5,494	5,668	5,744	5,8!
Total	18,859	19,228	19,747	20,037	20,302	20,61

### Cheese Trade: Summary For Selected Countries 1,000 Metric Tons

1,000 Metric Tons						
	2015	2016	2017	2018	2019	2020
						Dec
Total Exports						
Argentina	43	53	44	61	60	65
Australia	171	167	171	172	165	170
Belarus	183	205	189	211	240	260
European Union	719	799	828	832	880	900
New Zealand	327	355	343	322	340	350
Others	55	55	59	63	56	60
Total Foreign	1,498	1,634	1,634	1,661	1,741	1,805
United States	317	287	340	349	355	365
Total	1,815	1,921	1,974	2,010	2,096	2,170
Total Imports						
China	76	97	108	108	115	130
Japan	249	258	273	286	310	32!
Korea, South	112	110	125	124	131	13!
Mexico	116	126	122	123	120	12
Russia	220	230	226	263	275	290
Others	277	328	337	324	335	356
Total Foreign	1,050	1,149	1,191	1,228	1,286	1,363
United States	157	165	138	138	145	124
Total	1,207	1,314	1,329	1,366	1,431	1,487

# Butter Production and Consumption: Summary For Selected Countries 1,000 Metric Tons

	1,000 Hearle Tolls					
	2015	2016	2017	2018	2019	2020 Dec
Production						
Algeria	0	0	0	0	0	
Argentina	46	37	30	33	30	3
Australia	120	110	103	93	65	6
Belarus	114	118	120	115	110	10
Brazil	83	82	83	85	86	8
Canada	91	93	109	116	112	11
China	98	98	96	99	102	10
European Union	2,335	2,345	2,340	2,345	2,425	2,41
India	5,035	5,200	5,400	5,600	5,850	6,10
Japan	65	66	60	60	61	$\epsilon$
Mexico	216	217	223	228	231	23
New Zealand	594	570	525	530	530	52
Russia	260	246	270	256	254	25
Taiwan	0	0	0	0	0	
Ukraine	103	103	109	106	103	g
Total Foreign	9,160	9,285	9,468	9,666	9,959	10,17
United States	839	834	838	858	861	
Total	9,999	10,119	10,306	10,524	10,820	11,06
Domestic Consumption						
Algeria	0	0	0	0	0	
Argentina	37	32	28	21	16	1
Australia	94	102	115	117	115	11
Belarus	44	41	47	37	41	4
Brazil	84	89	88	91	92	g
Canada	106	117	121	124	131	13
China	172	184	192	217	180	19
European Union	2,150	2,182	2,207	2,206	2,235	2,24
India	5,032	5,196	5,387	5,577	5,800	6,05
Japan	77	72	72	78	81	8
Mexico	249	267	264	250	279	25
New Zealand	24	28	28	28	29	3
Russia	350	353	357	343	367	36
Taiwan	25	24	24	23	23	2
Ukraine	97	93	82	76	83	7
Total Foreign	8,541	8,780	9,012	9,188	9,472	, 9,72
United States	832	849	848	864	902	92
Total	9,373	9,629	9,860	10,052	10,374	10,64

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

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

		1,000 Metric	ions			
	2015	2016	2017	2018	2019	2020 Dec
otal Imports						
Russia	90	106	99	86	115	11
China	75	87	98	120	80	9
Australia	22	30	35	42	40	4
Mexico	43	65	49	33	60	3
Canada	17	27	22	22	25	2
European Union	27	23	16	22	20	2
Taiwan	25	24	24	23	23	2
Japan	16	13	8	16	22	2
Brazil	2	7	5	6	6	
New Zealand	1	2	1	1	1	
Ukraine	1	1	1	1	0	
Algeria	0	0	0	0	0	
Argentina	0	0	1	0	0	
Belarus	0	0	0	0	0	
India	6	6	2	1	0	
Total Foreign	325	391	361	373	392	38
United States	38	47	41	59	66	(
Total	363	438	402	432	458	44
otal Exports						
New Zealand	552	554	476	501	495	50
European Union	183	212	174	161	210	19
Belarus	70	77	73	78	69	6
India	9	9	15	33	50	4
Australia	35	30	16	17	20	2
Ukraine	11	9	28	29	20	:
Argentina	9	6	4	11	16	1
Mexico	10	15	8	11	12	1
Canada	1	1	1	2	2	
China	1	1	2	2	2	
Russia	3	4	3	4	2	
Algeria	0	0	0	0	0	
Brazil	1	0	0	0	0	
Japan	0	0	0	0	0	
Taiwan	0	0	0	0	0	
Total Foreign	885	918	800	849	898	86
United States	23	27	29	49	26	2
Total	908	945	829	898	924	89

# Nonfat Dry Milk Production and Consumption: Summary For Selected Countries 1,000 Metric Tons

	1,000 Fiether rolls						
	2015	2016	2017	2018	2019	2020 Dec	
Production							
Belarus	123	113	110	122	147	160	
Brazil	155	153	158	155	158	161	
European Union	1,715	1,735	1,725	1,735	1,760	1,775	
India	540	540	570	600	635	670	
New Zealand	410	405	402	410	385	370	
Others	788	745	690	671	617	610	
Total Foreign	3,731	3,691	3,655	3,693	3,702	3,746	
United States	1,029	1,049	1,073	1,061	1,057	1,090	
Total	4,760	4,740	4,728	4,754	4,759	4,836	
Total Dom. Consumption							
Brazil	190	188	189	184	179	190	
China	244	223	276	299	355	365	
European Union	978	804	985	1,122	931	855	
India	492	531	576	572	610	640	
Mexico	301	325	351	347	404	425	
Others	1,026	1,092	1,053	1,054	1,074	1,114	
Total Foreign	3,231	3,163	3,430	3,578	3,553	3,589	
United States	489	447	425	371	409	495	
Total	3,720	3,610	3,855	3,949	3,962	4,084	

# Nonfat Dry Milk Trade: Summary For Selected Countries 1,000 Metric Tons

	2015	2016	2017	2018	2019	202 De
tal Imports						
Mexico	259	286	331	360	360	3
China	200	184	247	280	340	3
Philippines	101	185	154	159	180	1
Indonesia	151	173	147	162	180	
Algeria	136	119	162	167	120	:
Russia	120	129	126	87	95	
Japan	53	34	59	52	45	
Brazil	35	35	31	29	21	
Korea, South	21	21	23	25	23	
Taiwan	25	23	24	23	23	
Chile	10	12	15	13	14	
Australia	10	6	8	13	15	
Canada	3	4	4	4	4	
European Union	3	4	2	3	6	
New Zealand	5	3	2	3	3	
Ukraine	0	0	0	1	0	
Argentina	0	0	0	0	0	
Belarus	0	1	0	0	0	
India	0	0	1	0	0	
Total Foreign	1,132	1,219	1,336	1,381	1,429	1,
United States	2	1,219	1,550	2	1,429	Ι,
Total						1
lotai	1,134	1,220	1,337	1,383	1,430	1,
tal Exports						
European Union	695	579	780	821	1,010	
New Zealand	411	444	401	358	370	
Belarus	122	111	109	121	145	
Australia	201	163	157	155	130	
Canada	14	24	72	66	45	
Argentina	24	26	20	23	20	
Jkraine	35	34	29	23	24	
India	18	19	10	43	10	
Chile	1	2	1	1	1	
Indonesia	0	1	1	1	1	
Russia	2	1	2	1	1	
Algeria	0	0	0	0	0	
Brazil	0	0	0	0	0	
China	1	1	1	1	0	
Japan	0	0	0	0	0	
Korea, South	0	0	0	0	0	
Mexico	0	3	29	56	0	
Philippines	0	0	0	0	0	
Taiwan	0	0	0	0	0	
Total Foreign	1,524	1,408	1,612	1,670	1,757	1,
United States	558	594	606	712	684	-,
Jinted States	2,082	2,002	2,218	2,382	2,441	2,

### Whole Milk Powder Production And Consumption: Summary For Selected Countries 1,000 Metric Tons

	2015	2016	2017	2018	2019	2020 Dec
Production						
Argentina	252	180	170	192	185	200
Brazil	610	550	596	585	598	615
China	1,617	1,375	1,420	1,430	1,450	1,465
European Union	710	720	760	730	730	725
New Zealand	1,380	1,320	1,380	1,450	1,460	1,525
Others	481	445	497	466	445	433
Total Foreign	5,050	4,590	4,823	4,853	4,868	4,963
United States	49	45	56	65	72	76
Total	5,099	4,635	4,879	4,918	4,940	5,039
Total Dom. Consumption						
Algeria	214	222	235	245	245	250
Brazil	628	662	664	652	659	677
China	1,910	1,992	1,938	1,999	2,089	2,184
European Union	313	344	369	398	442	426
Indonesia	113	120	128	142	136	146
Others	729	594	524	496	530	500
Total Foreign	3,907	3,934	3,858	3,932	4,101	4,183
United States	49	40	51	51	69	66
Total	3,956	3,974	3,909	3,983	4,170	4,249

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

	2015	2016	2017	2018	2019	20
	2015	2016	2017	2018	2019	202 De
otal Imports						
Afghanistan	0	0	0	0	0	
Algeria	224	224	262	271	235	2
Argentina	0	0	0	1	2	
Australia	11	16	28	28	35	
Belarus	0	0	0	0	0	
Brazil	59	126	73	68	62	
Chile	7	7	12	8	3	
China	347	420	470	521	640	(
European Union	4	6	2	2	2	
Indonesia	44	52	47	59	55	
Mexico	7	12	4	7	5	
New Zealand	7	4	2	2	3	
Philippines	19	17	17	19	25	
Russia	38	48	49	26	40	
Taiwan	34	30	32	34	34	
Others	195	58	20	10	10	
Total Foreign	996	1,020	1,018	1,056	1,151	1,
United States	9	15	21	7	8	-,
Total	1,005	1,035	1,039	1,063	1,159	1,
otal Exports						
Afghanistan	0	0	0	0	0	
Algeria	0	0	0	0	0	
Argentina	138	110	71	135	96	
Australia	65	70	55	55	40	
Belarus	38	29	29	33	22	
Brazil	41	14	5	1	1	
Chile	6	7	4	4	3	
China	4	3	2	2	1	
	401	3 382	393	334	290	
European Union						
Indonesia	3	2	0	0	1	
Mexico	11	20	33	23	18	
New Zealand	1,380	1,344	1,342	1,369	1,550	1,
Philippines	0	0	0	0	0	
Russia	2	1	1	0	0	
Ukraine	2	2	4	4	9	
Others	0	0	0	0	0	
Total Foreign	2,091	1,984	1,939	1,960	2,031	2,
United States	15	19	18	28	10	
Total	2,106	2,003	1,957	1,988	2,041	2,0