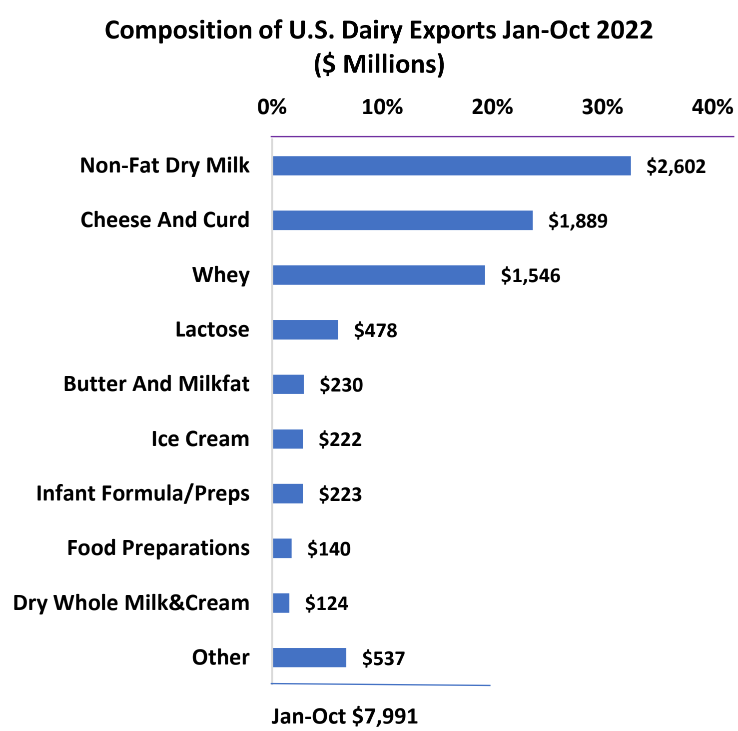
United States
Department of
Agriculture

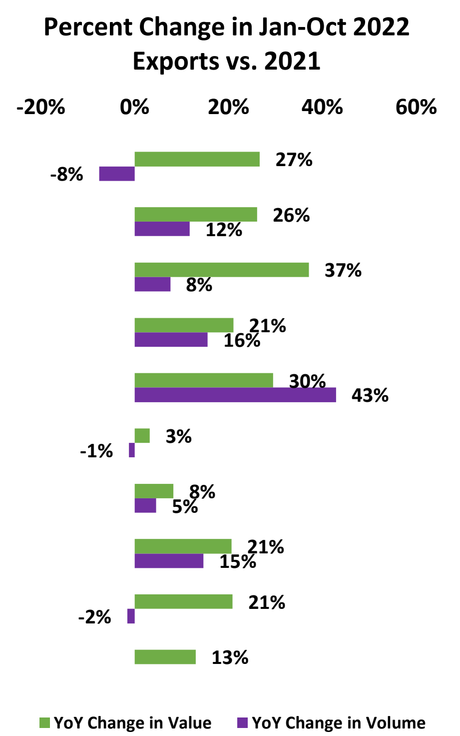
Foreign
Agricultural
Service

December 2022

Dairy: World Markets and Trade

Thus far in 2022 record exports- on a value basis- are being set across all dairy commodities, driven by strong international dairy product prices. Through October, dairy export values are up 25 percent, with robust growth across the major product groups including skim milk powder (NDM/SMP), whey, lactose, cheese, and butter; however, from a volume perspective, average export growth across commodities is a more modest 5 percent. Nowhere is this dichotomy more prevalent than with NDM, where export quantities have fallen 8 percent over this period while export values have increased 27 percent. For the current year, NDM exports are forecast to fall about 8 percent to 819,000 tons due to slowing shipments to China where consumption of SMP has shifted to whole milk powder (WMP) in response to higher prices and higher domestic WMP production. NDM/SMP exports are expected to rebound in 2023 to 836,000 tons as higher milk production drives production higher for a number of dairy products.





Note: Given "Other" is a mix of different units of measurement, volume change is unavailable

Through October, whey and cheese exports saw similar activity with volume growth of 7 percent and 13 percent, respectively, while values grew 38 percent and 26 percent, respectively. Butter was the one major dairy product where export volume growth has outpaced export value growth, reflecting significantly lower unit values to Mexico and Canada.

Dairy Production and Trade Developments

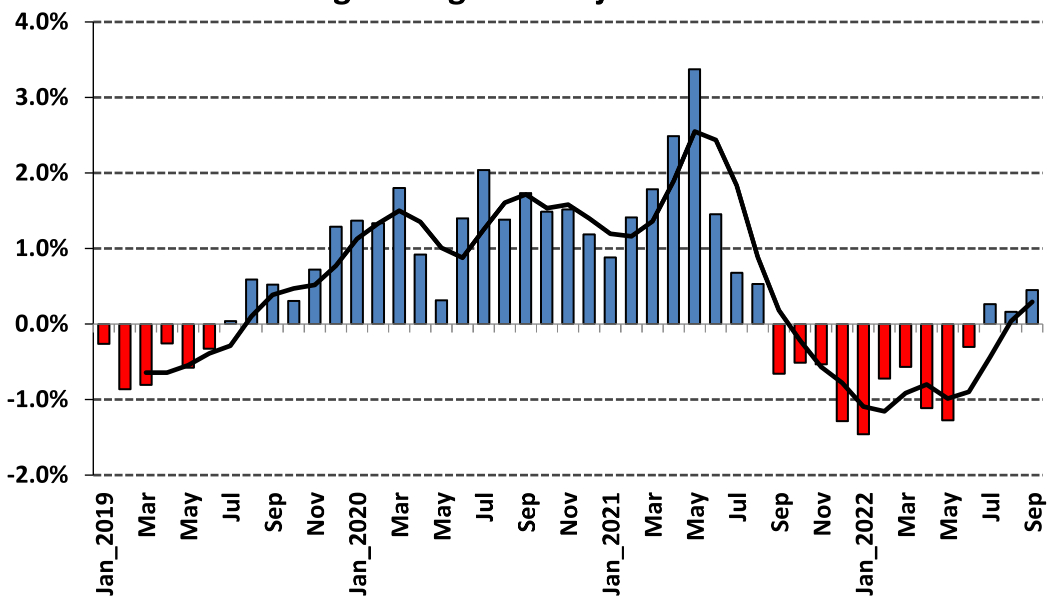
FLUID MILK:

Cow Milk Production Summary for Major Exporter (Million Tons)

	2021	2022 Forecast	2023 Forecast	2022-2023 Change
Argentina	11.9	11.9	12.0	**1%**
Australia	9.1	8.6	8.5	**-1%**
European Union	144.8	143.9	143.0	**-1%**
New Zealand	22.0	21.1	21.0	**0%**
United States	102.6	103.0	104.1	**1%**
Major Exporter Total	**290.4**	**288.5**	**288.6**	**0%**

Note: Data is rounded.

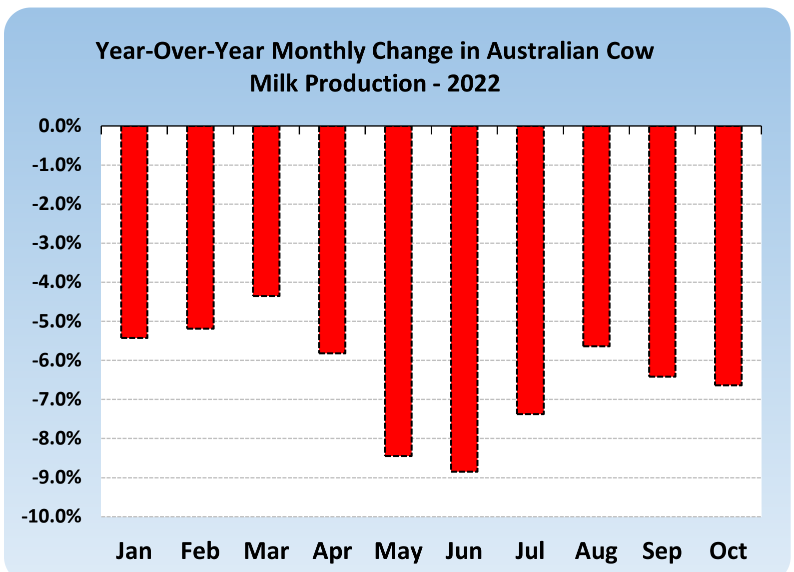
Percent Change in Monthly Milk Production and 3-Month Moving Average for Major Milk Producers



Note: --Includes, Argentina, Australia, EU, New Zealand, U.S.
--Adjusted for Leap Year 2020

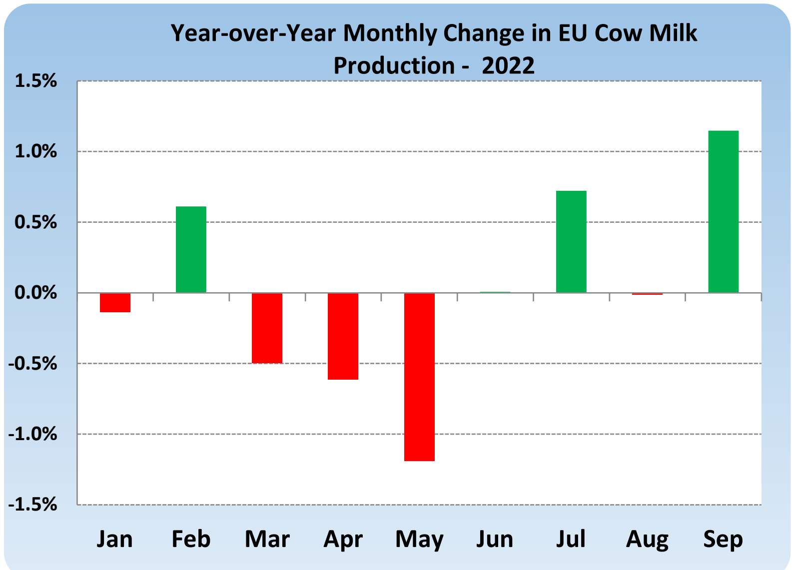
- In **Argentina**, milk output is forecast to rebound in 2023 after dry weather conditions in the summer and a cold autumn impacted yields in 2022, which brought an end to two successive years of higher milk production. Milk production is expected to grow by 1 percent in 2023 reflecting a return to normal weather conditions, improved availability of inputs (mainly concentrates, fertilizers and fuels for feedstuffs production), and investments in comfort-related technology and more efficient husbandry practices, which have been key to maintaining milk production growth.

- Milk production in **Australia** is expected to decline 1 percent in 2023. The overall outlook for production conditions in 2023 is favorable with record milk prices, low hay prices, and easing feed grain prices. Above average rainfalls across the major dairy farming regions have provided ample fodder and low-cost water for irrigation. Traditionally, these conditions would cause producers to boost dairy cow numbers and lead to higher milk production. However, dairy farms continue to face labor shortages which will prevent expansion in cow numbers. Furthermore, energy and fertilizer costs have soared, causing dairy farmers to scale back cow numbers and either partially or fully convert to beef cattle production. These enterprises require less labor and may be more profitable with beef prices near record highs. For 2023, there is unlikely to be any substantial price relief in imported nitrogen fertilizer prices, which have grown upwards of 3-4 times since January 2021, or electricity costs (milking parlors on dairy farms use substantial amounts of electricity). As fertilizer and energy prices are expected to remain high, there will be continued pressure on dairy farmer profitability.



- In **China**, raw milk production is expected to reach 42.1 million tons in 2023. The growth in China's raw milk production can be attributed to government policies supporting dairy production, large-scale investments by dairy companies, and the importation of over 1.2 million head of high-quality cattle during the last 5 years. It is estimated that approximately 80 percent of cattle imports, which have come predominantly from New Zealand and Australia, are for dairy production. Dairy processors are expected to process much of this year's seasonal surplus raw milk into WMP.

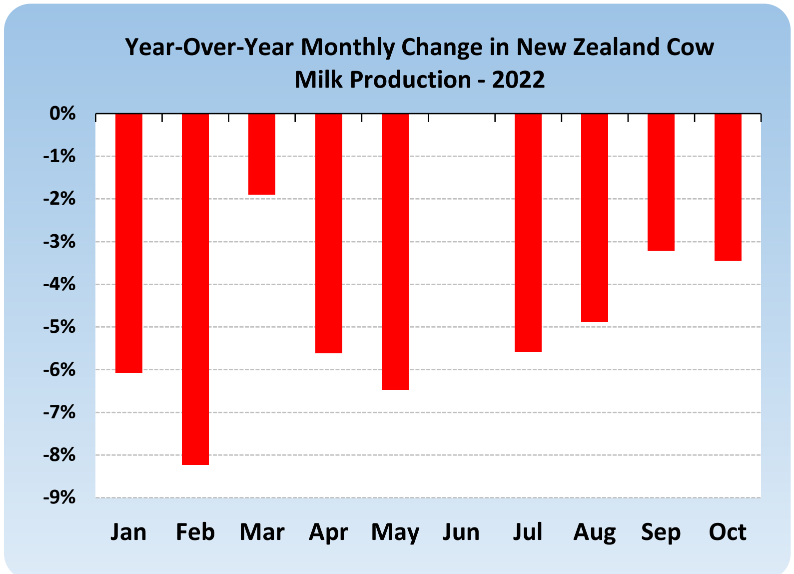
- Dairy cow numbers in the **European Union** (EU) are forecast to fall below 20 million head in 2023, a decline of 1.7 million head since 2016, and a decrease of 564,000 head since 2021. Despite continued year-on-year increases in milk productivity, the decline in cow numbers has eroded EU cow milk production, which is forecast for 2023 at 143.0 million tons. The planned implementation on January 1, 2023, for the new Common Agricultural Policy (CAP) and the accompanying Farm to Fork Strategy (F2F), will likely add uncertainty for the dairy sector in the coming year.



The EU-wide drought in 2022, which persisted all summer, hindered 2022 fodder production and has depressed milk production as higher production costs for energy, fertilizer, and feed negated higher farm-gate milk prices. Non-cow milk production, mostly concentrated in Mediterranean member states, has fared better, driven by consumer demand for dairy products like goat cheeses or mozzarella buffalo, as well as local milk production for niche products protected by a geographical indication (GI). However, farmers in France and Italy that produce milk for GI products faced shortages of fodder and halting production as they could no longer met the feeding standards for their GI production.

- Despite relatively high milk prices, **New Zealand** milk production is forecast to decline marginally in 2023 to 21.0 million due to a smaller dairy herd and slightly lower milk per cow yields. Cow yields are forecast to be impacted by a third consecutive La Niña weather pattern, as well as a smaller feed base, impacted by a cold and wet winter slowing spring pasture growth coupled with a smaller winter forage crop from prolonged dry conditions in the first half of 2022. Cow numbers are forecast to decline 0.3 percent to 4.9 million head, continuing the trend of herd contraction since peaking at 5.2 million head in 2014.

For 2022, milk production in New Zealand is forecast at 21.1 million tons, down 4 percent from 2021. At the start of the 2022 year, most dairy production regions encountered a prolonged dry period, symptomatic of the La Niña weather pattern. The prolonged dryness in the first half of 2022 coincided with an upsurge in COVID-19 cases which initially had a major impact at farms. Surging cases led to a slowdown at slaughter facilities due to lack of workers and resulted in many cull dairy cows being delayed and held on farm. These cows then utilized feed that would have typically been prioritized for the milking herd. Producers were also hampered by rising input costs with a range of industry estimates putting on-farm inflation for dairy farms at 16-17 percent as of mid-2022. New Zealand dairy farms are reliant on imports for farm inputs such as agrichemicals and nitrogen fertilizer from China, which saw global supply chain disruptions from COVID-19 disruptions. In addition to feed costs, fuel and electricity prices have also been rising for dairy farms.



CHEESE:

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

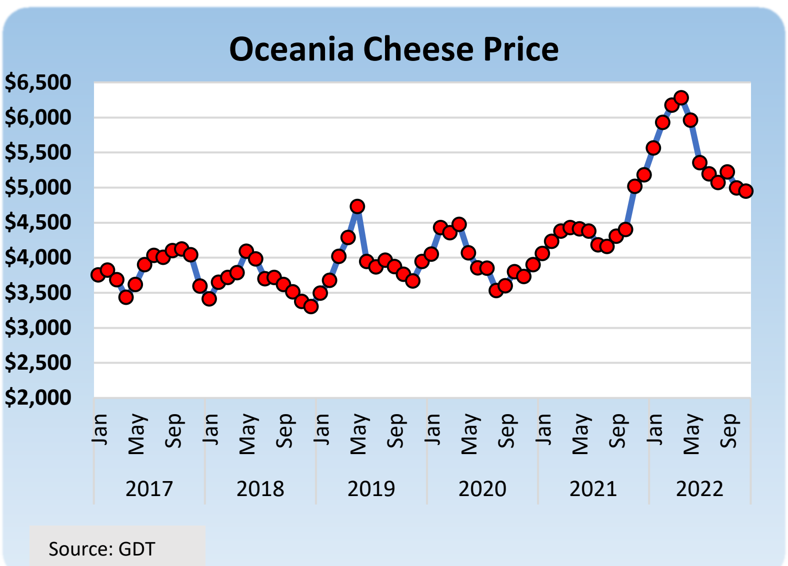
	2021	2022 Forecast	2023 Forecast	2022-2023 Change
Australia	157	155	165	**6%**
Belarus	298	310	320	**3%**
European Union	1,385	1,370	1,375	**0%**
New Zealand	358	335	335	**0%**
United States	402	451	469	**4%**
Major Exporter Total	**2,600**	**2,621**	**2,664**	**2%**

Note: Data is rounded.

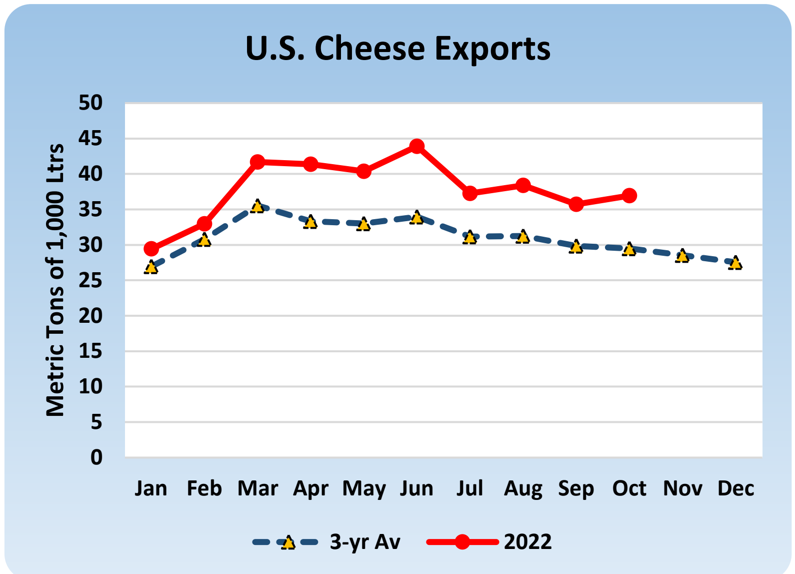
- **European Union** cheese production in 2022 is expected to remain stable, despite lower milk production, due in part to industry preference for cheese production over other dairy commodities. In addition, new cheese processing plants have opened in the Netherlands, Belgium, Germany, and France, and are mostly producing industrial mozzarella for the food processing industry. EU cheese production is forecast up slightly in 2023 by one-half percent to reach 10.6 million tons, as domestic cheese demand picks up again after the relaxing of COVID-19 related restrictions.

EU cheese exports are forecast to decline by 1 percent in 2022 as high prices and weaker demand in China and Ukraine hamper global demand for commodity cheeses. However, Japan , South Korea, and Saudi Arabia continue to be important markets for the EU. Exports are expected to remain relatively unchanged in 2023, forecast up less than 1 percent, with continued recovery in demand from the United Kingdom offsetting weakened demand from China.

- **<u>New Zealand</u>** cheese production for 2023 is forecast down 4 percent due to lower milk supply. Strong international prices have pushed a larger percentage of production toward exports, but with an increase in whole milk powder and lower milk availability, growth in exports for 2023 is limited. The forecast for 2023 cheese exports is expected to remain the same as 2022 at 335,000 tons. Demand continues to be strong in Asia for mozzarella products. The demand for soft cheeses, such as cream cheese, also continues to grow in Asia but there are constraints as manufacturing plants are already nearing full capacity.



- **U.S.** cheese exports in 2023 are forecast 4 percent higher to 469,000 tons on stronger demand from key markets in Japan and Canada. Shipments of cheese have been strong in 2022 and the export forecast has been revised up 3 percent to 451,000 tons. Through October, shipments to Mexico, Japan, and South Korea have grown double digits year over year and account for more than half of U.S. shipments. Other major destinations are Australia, Canada, Panama, and Guatemala that combined account for 15 percent of U.S. cheese shipments.



BUTTER (Includes Butteroil/AMF):

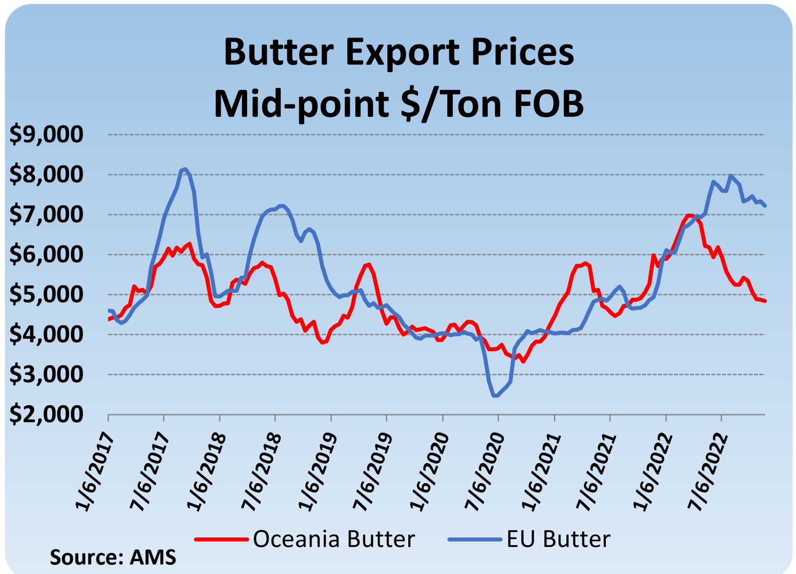
Butter Exports Summary for Major Exporters (1,000 Tons)

	2021	2022 Forecast	2023 Forecast	2022-2023 Change
Belarus	78	78	80	**3%**
European Union	265	260	265	**2%**
New Zealand	436	500	450	**-10%**
United States	58	84	74	**-12%**
Major Exporter Total	**837**	**922**	**869**	**-6%**

Note: Data is rounded.

- In 2023, **New Zealand** butter production is forecast down 5 percent to 475,000 tons, following its downward trend in butter production after peaking in 2015. Milk production is forecast lower, and processors are shifting milk for manufacturing towards whole milk powder (WMP) production to satisfy demand from China and Indonesia.

Through October 2022, New Zealand's butter exports have been strong, at 14 percent ahead of 2021. China was the largest market, accounting for 25 percent of shipments, followed by Australia (7 percent), Philippines (7 percent) and Saudi Arabia (6 percent). Since April, Oceania butter prices have diverged from EU prices, with EU butter trading at a premium of $2,970/ton after lower GDT auction prices in May, July, and October.



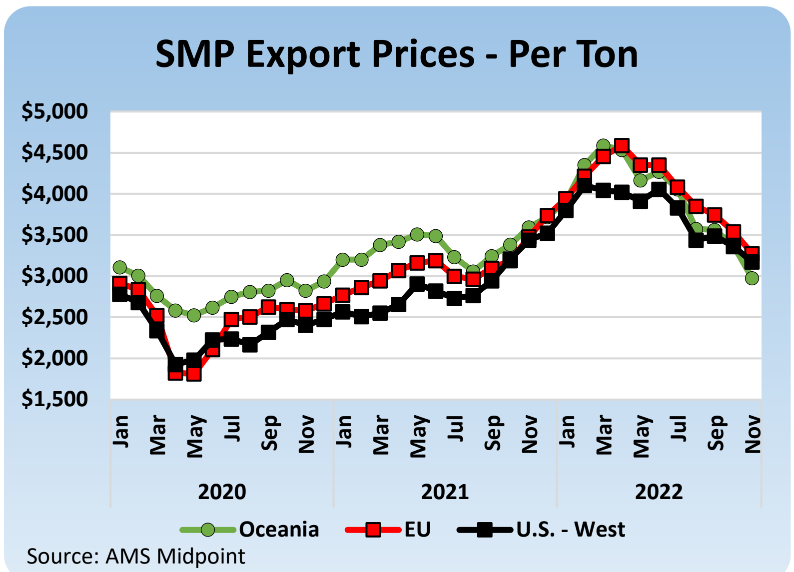
- Butter imports in **China** are forecast to shrink 3 percent in 2023 to 150,000 tons. This will largely reflect lower demand as China's butter production growth in 2023 is only fractional, limited by production capacity. Imports currently account for nearly 60 percent of domestic consumption. Butter consumption is expected to decline in 2023 to 259,000 tons, but it still would mark the second largest level of domestic consumption since 1970. This is driven in part by consumer popularity for bakery goods and food service products containing butter, as well as by large-scale food manufacturers. This also includes the HRI sector, an important component driving butter consumption, with a growing upper middle class in large cities, which had been affected by the uncertainty surrounding China's use of COVID-related lockdowns.

SKIM MILK POWDER (SMP):

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

	2021	2022 Forecast	2023 Forecast	2022-2023 Change
Australia	156	145	130	**-10%**
Belarus	120	123	123	**0%**
European Union	788	700	625	**-11%**
New Zealand	326	355	335	**-6%**
United States	893	825	836	**1%**
Major Exporter Total	**2,283**	**2,148**	**2,049**	**-5%**

Note: Data is rounded.



- **Australia** exports of SMP are projected to decline 10 percent to 130,000 tons in 2023. The lower forecast comes as stocks have been drawn down over the last 2 years when processors took advantage of attractive world market prices and milk supplies were limited. Declining SMP production due to lower milk production and increased industry focus on cheese production, is expected to limit exportable supplies. Over the last 5 years, the composition of Australia's export markets has undergone a shift, with exports to China now accounting for almost half of Australia's SMP exports.

- 2023 SMP production in the **European Union** is forecast to decline 5 percent. SMP production is closely tied to butter production and butter production is forecast to decline. Exports are also expected to fall 11 percent due to limited production and lower demand from China and Indonesia (which has shifted to buying from New Zealand), as well as new import controls in Algeria. China and Algeria are the EU's largest export markets for SMP, accounting for 27 percent of exports this year through September.

- **U.S.** SMP production is forecast to grow modestly by 1 percent in 2023, reflecting higher available milk supplies, partially recovering after an 8 percent decline in 2022. Exports in 2022 were also down in 2022 reflecting both tighter supplies and increased competition. The price gap between U.S. and EU SMP has narrowed significantly in the second half of 2022, and a strong dollar relative to the euro has created an environment that is difficult for U.S. exporters. For November, EU prices for SMP were quoted at $1.47 per pound FOB while the U.S. price for Western low-medium head NDM FOB ex-plant was $1.46 per pound.[1] Exports are slated to recover modestly in 2023, up 2 percent to 836,000 tons, reflecting growth in exports to Mexico, the Philippines, and Indonesia.

- SMP consumption in **China** is forecast to decline in 2023 as domestic processors are expected to shift away from SMP in favor of WMP for snack food processing. In 2023, SMP imports are expected to decline to 320,000 tons, a year-on-year decline of 3 percent, on higher SMP global prices and increased use of WMP. Domestic production of SMP is unlikely to affect imports as domestically produced SMP is limited. New Zealand, Australia and the United States continue to dominate China's SMP imports, accounting for nearly 70 percent of SMP imports in the first half of 2022.

WHOLE MILK POWDER (WMP):

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

	2021	2022 Forecast	2023 Forecast	2022-2023 Change
Argentina	145	165	180	**9%**
Australia	51	55	45	**-18%**
European Union	298	250	240	**-4%**
New Zealand	1,617	1,450	1,500	**3%**
Major Exporter Total	**2,111**	**1,920**	**1,965**	**2%**

Note: Data is rounded.

- **New Zealand** 2023 WMP production will rebound, reaching 1.5 million tons, up 3 percent from 2022, but still below 2021. Despite lower total milk production, demand from key importers is expected to rebound, supporting a shift of some milk back into WMP production. With this stronger than expected demand, exports are forecast to rise slightly but remain below the 2021 record of 1.6 million tons.

1 https://www.ams.usda.gov/mnreports/dymaveragesytd.pdf

- WMP production in **<u>China</u>** is forecast to increase 7 percent in 2023 due to higher milk supplies. Bakeries suffered significant losses in 2022 due to prolonged COVID-19 restrictions and a slowing economy. In 2023, although demand by the baking industry may remain limited, in the food processing sector, overall demand for WMP is expected to grow as domestic production volume increases and domestic prices are favorable while global NDM prices stay relatively strong. As a result, in 2023, WMP consumption is expected to increase to 1.795 million tons. WMP imports are forecast to remain unchanged at 700,000 tons, as domestic WMP production and stocks should satisfy consumption growth in 2023. New Zealand is expected to remain the dominant supplier, followed by Uruguay and Australia.

U.S. DAIRY EXPORT FORECASTS:

U.S. Dairy Products Export Forecast - Calendar Year 2022-2023

	2023(F)	Milk Equivalent (Bil. Lbs.) Fat	Skims	2022(F)	Milk Equivalent (Bil. Lbs) Fat	Skims
NON-FAT DRY AND SKIM MILK PWDR	836,000 MT	0.4	19.5	825,383 MT	0.4	19.2
MILK POWDER > 1.5% MILK FAT	38,500 MT	0.5	0.6	36,416 MT	0.5	0.6
BUTTER/MILKFAT/SPREADS	73,650 MT	3.3	0.0	83,666 MT	3.8	0.0
CHEESE AND CURD	469,450 MT	6.8	3.7	451,536 MT	6.7	3.6
FLUID PRODUCTS 4/	192,350 Liters	0.5	0.4	201,952 Liters	0.5	0.4
DRIED WHEY PRODUCTS	658,000 MT	0.8	15.1	662,204 MT	0.8	15.3
LACTOSE	444,000 MT	0.0	10.8	444,501 MT	0.0	10.8
OTHER DAIRY PRODUCTS	214,300 MT	0.7	2.3	230,000 MT	0.7	2.5
TOTAL - Billion Pounds		13.0	52.3		13.5	52.4

Note: 1) CY 2022 includes actual exports through October 2022
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 ON A MILK EQUIVALENT BASIS THROUGH OCTOBER 2022:

Top Dest. -M.E. Milkfat Basis (Mill. lbs)	2022	
MEXICO	2,628	23%
CANADA	1,824	16%
SOUTH KOREA	1,336	12%
JAPAN	717	6%
CHINA (MAINLAND)	443	4%
BAHRAIN	402	4%
Other	3,951	35%
TOTAL	11,300	

Top Dest.-M.E. Skim Basis (Mill. lbs)	2022	
MEXICO	9,787	22%
CHINA (MAINLAND)	9,191	21%
PHILIPPINES	3,446	8%
INDONESIA	2,920	7%
JAPAN	2,054	5%
CANADA	1,932	4%
Other	14,812	34%
TOTAL	44,143	

Additional Resources:

For additional information, please contact Jeffrey Dwyer at 202-690-0755 or Jeffrey.Dwyer2@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: https://gain.fas.usda.gov/#/

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

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): https://apps.fas.usda.gov/gats/default.aspx

The next publication of this circular will be on July 18, 2023.

Fluid Milk - Cow Numbers: Summary For Selected Countries

1,000 Head

	2018	2019	2020	2021	2022	2023 Dec
Cows In Milk						
India	52,482	54,600	56,450	58,000	59,500	61,000
European Union	21,409	21,029	20,766	20,514	20,200	19,950
Brazil	16,300	16,500	16,400	16,646	16,896	17,065
Mexico	6,550	6,500	6,550	6,600	6,650	6,700
China	6,200	6,100	6,150	6,200	6,400	6,600
Russia	6,815	6,711	6,615	6,495	6,430	6,350
New Zealand	4,993	4,946	4,922	4,904	4,875	4,860
United Kingdom	1,904	1,879	1,867	1,856	1,859	1,850
Argentina	1,640	1,598	1,610	1,562	1,546	1,530
Belarus	1,500	1,498	1,485	1,480	1,475	1,470
Ukraine	2,078	1,970	1,789	1,722	1,450	1,360
Australia	1,525	1,440	1,385	1,365	1,335	1,325
Canada	970	968	972	980	972	975
Japan	731	730	715	726	737	740
Korea, South	205	204	202	204	203	200
Taiwan	62	62	63	65	66	66
Philippines	11	11	11	11	12	11
Subtotal	125,375	126,746	127,952	129,330	130,606	132,052
United States	9,398	9,337	9,392	9,448	9,410	9,420
Total	134,773	136,083	137,344	138,778	140,016	141,472

Cows Milk Production and Consumption: Summary For Selected Countries

1,000 Metric Tons

	2018	2019	2020	2021	2022	2023 Dec
Cows Milk Production						
European Union	142,258	143,060	145,436	144,833	143,900	143,000
India	89,800	92,000	93,800	96,000	97,000	99,500
China	30,750	32,012	34,400	36,830	39,200	40,900
Russia	30,398	31,154	32,010	32,020	32,150	32,300
Brazil	23,745	24,262	24,965	24,845	23,660	24,500
New Zealand	22,017	21,896	21,980	21,995	21,100	21,000
United Kingdom	15,189	15,429	15,447	15,428	15,155	15,000
Mexico	12,368	12,650	12,750	12,850	12,980	13,250
Argentina	10,837	10,640	11,445	11,900	11,900	12,000
Canada	9,944	9,903	10,035	10,157	10,230	10,330
Australia	9,451	8,832	9,099	9,067	8,550	8,475
Belarus	7,345	7,394	7,765	7,830	7,910	7,980
Japan	7,289	7,314	7,438	7,515	7,630	7,660
Ukraine	10,070	9,646	9,258	8,800	7,300	6,980
Korea, South	2,041	2,035	2,088	2,030	2,040	2,020
Taiwan	385	410	437	450	460	465
Philippines	16	17	17	16	17	17
Subtotal	423,903	428,654	438,370	442,566	441,182	445,377
United States	98,688	99,084	101,292	102,630	102,967	104,101
Total	522,591	527,738	539,662	545,196	544,149	549,478
Fluid Use Dom. Consum.						
India	77,000	79,000	81,000	83,000	85,000	87,450
European Union	23,313	23,373	24,106	23,951	23,800	23,650
China	12,700	13,200	13,000	15,595	16,250	16,700
Brazil	10,762	10,900	11,170	11,120	10,564	10,881
Russia	7,318	7,270	7,080	6,990	6,900	6,800
United Kingdom	6,763	6,404	6,376	6,261	6,050	6,000
Mexico	4,183	4,190	4,145	4,150	4,166	4,185
Japan	3,995	4,000	4,020	4,050	4,065	4,070
Ukraine	4,862	4,967	5,025	4,960	4,150	4,010
Canada	2,832	2,816	2,844	2,751	2,730	2,705
Australia	2,620	2,536	2,528	2,490	2,450	2,420
Argentina	1,771	1,645	1,800	1,900	1,800	1,800
Korea, South	1,566	1,575	1,523	1,540	1,530	1,515
Belarus	1,050	1,055	1,075	1,085	1,080	1,075
New Zealand	515	520	525	530	535	535
Taiwan	420	443	475	479	480	480
Philippines	96	117	119	124	130	140
Subtotal	161,766	164,011	166,811	170,976	171,680	174,416
United States	21,425	21,050	21,027	21,000	20,975	20,900
Total	183,191	185,061	187,838	191,976	192,655	195,316

Cheese Production and Consumption: Summary For Selected Countries

1,000 Metric Tons

	2018	2019	2020	2021	2022	2023 Dec
Production						
European Union	9,872	10,155	10,362	10,550	10,550	10,600
Russia	970	983	1,059	1,075	1,085	1,100
Brazil	760	770	790	790	745	770
Canada	510	515	523	522	530	540
Argentina	444	523	488	530	535	535
United Kingdom	472	472	488	503	515	520
Mexico	419	437	446	448	455	465
Australia	366	364	379	385	390	395
Belarus	275	300	346	355	370	380
New Zealand	370	365	350	380	375	360
Others	284	285	289	296	267	263
Total Foreign	14,742	15,169	15,520	15,834	15,817	15,928
United States	5,914	5,959	6,005	6,217	6,350	6,425
Total	20,656	21,128	21,525	22,051	22,167	22,353
Total Dom. Consumption						
European Union	8,790	9,019	9,183	9,361	9,365	9,415
Russia	1,200	1,231	1,338	1,363	1,390	1,430
Brazil	785	795	817	817	774	800
United Kingdom	793	790	783	749	740	745
Mexico	526	551	549	568	594	605
Canada	536	539	555	562	571	585
Argentina	380	461	420	457	435	450
Japan	329	346	335	335	332	335
Australia	293	297	305	310	320	320
Korea, South	155	166	188	195	193	200
Others	496	516	550	620	545	558
Total Foreign	14,283	14,711	15,023	15,337	15,259	15,443
United States	5,675	5,751	5,745	5,939	6,029	6,079
Total	19,958	20,462	20,768	21,276	21,288	21,522

Cheese Trade: Summary For Selected Countries

1,000 Metric Tons

	2018	2019	2020	2021	2022	2023 Dec
Total Exports						
European Union	1,279	1,348	1,402	1,385	1,370	1,375
New Zealand	322	335	327	358	335	335
Belarus	211	244	275	298	310	310
United Kingdom	187	206	190	154	175	180
Australia	172	160	153	157	155	165
Argentina	61	61	70	78	85	90
Russia	24	26	30	35	40	45
Others	39	30	35	35	36	36
Total Foreign	2,295	2,410	2,482	2,500	2,506	2,536
United States	348	357	355	402	451	469
Total	2,643	2,767	2,837	2,902	2,957	3,005
Total Imports						
United Kingdom	508	524	485	400	400	405
Russia	250	273	311	326	345	375
Japan	286	303	292	288	280	285
European Union	197	212	223	196	185	190
Mexico	123	121	114	132	155	155
China	108	115	129	176	145	150
Korea, South	124	131	148	157	150	150
Others	264	277	309	339	322	337
Total Foreign	1,860	1,956	2,011	2,014	1,982	2,047
United States	138	139	128	145	146	153
Total	1,998	2,095	2,139	2,159	2,128	2,200

Butter Production and Consumption: Summary For Selected Countries

1,000 Metric Tons

	2018	2019	2020	2021	2022	2023 Dec
Production						
India	5,600	5,850	6,100	6,300	6,500	6,700
European Union	2,069	2,125	2,173	2,141	2,080	2,040
New Zealand	550	525	500	470	500	475
Russia	256	268	282	270	275	280
Mexico	228	231	233	235	236	245
United Kingdom	140	194	194	212	205	205
Belarus	115	116	120	121	123	125
Canada	116	112	118	122	120	125
China	108	110	108	109	109	110
Brazil	85	85	82	82	81	82
Others	292	254	270	254	235	222
Total Foreign	9,559	9,870	10,180	10,316	10,464	10,609
United States	893	905	973	940	933	975
Total	10,452	10,775	11,153	11,256	11,397	11,584
Domestic Consumption						
India	5,577	5,803	6,081	6,289	6,456	6,645
European Union	1,898	1,900	1,909	1,927	1,890	1,845
Russia	346	384	402	393	389	400
Mexico	250	277	266	256	270	273
China	226	198	230	246	262	259
United Kingdom	153	195	203	212	210	210
Canada	124	141	141	147	150	155
Australia	117	104	106	95	91	92
Brazil	91	89	85	88	86	88
Japan	78	83	79	81	84	85
Others	186	201	200	178	167	172
Total Foreign	9,046	9,375	9,702	9,912	10,055	10,224
United States	898	940	978	985	935	985
Total	9,944	10,315	10,680	10,897	10,990	11,209

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

Butter Trade: Summary For Selected Countries

1,000 Metric Tons

	2018	2019	2020	2021	2022	2023 Dec
Total Imports						
China	120	91	123	139	155	150
Russia	88	117	128	122	120	125
European Union	76	77	52	51	70	70
United Kingdom	78	74	74	55	55	55
Australia	42	40	43	37	35	40
Canada	22	25	24	28	32	30
Mexico	33	59	42	23	35	30
Taiwan	23	24	22	22	25	25
Ukraine	1	4	10	10	1	10
Japan	16	25	18	12	9	9
Others	8	6	5	8	8	8
Total Foreign	507	542	541	507	545	552
United States	59	66	70	69	81	74
Total	566	608	611	576	626	626
Total Exports						
New Zealand	501	509	471	436	500	450
European Union	247	302	316	265	260	265
Belarus	78	67	69	78	78	80
India	33	47	20	11	44	55
United Kingdom	65	73	65	55	50	50
Argentina	11	15	21	31	30	30
Australia	17	18	16	22	20	15
Ukraine	29	16	9	9	10	5
Russia	3	2	3	3	3	3
Mexico	11	13	9	2	1	2
Others	4	6	6	4	4	3
Total Foreign	999	1,068	1,005	916	1,000	958
United States	49	26	27	58	84	74
Total	1,048	1,094	1,032	974	1,084	1,032

Nonfat Dry Milk Production and Consumption: Summary For Selected Countries

1,000 Metric Tons

	2018	2019	2020	2021	2022	2023 Dec
Production						
European Union	1,568	1,556	1,590	1,504	1,450	1,375
India	600	635	660	680	700	730
New Zealand	410	375	362	330	350	330
Japan	120	125	140	150	160	165
Brazil	155	158	161	164	157	162
Australia	201	150	155	147	150	145
Belarus	122	126	126	122	125	125
Others	418	421	432	424	423	436
Total Foreign	3,594	3,546	3,626	3,521	3,515	3,468
United States	1,067	1,107	1,209	1,238	1,140	1,170
Total	4,661	4,653	4,835	4,759	4,655	4,638
Total Dom. Consumption						
European Union	992	835	795	748	785	790
India	572	601	636	653	682	695
Mexico	347	340	353	382	430	447
China	299	358	355	446	353	343
Indonesia	161	187	196	197	204	218
Philippines	159	177	204	185	174	185
Brazil	184	183	187	188	179	184
Others	779	730	715	741	712	739
Total Foreign	3,493	3,411	3,441	3,540	3,519	3,601
United States	369	422	384	363	326	332
Total	3,862	3,833	3,825	3,903	3,845	3,933

Nonfat Dry Milk Trade: Summary For Selected Countries

1,000 Metric Tons

	2018	2019	2020	2021	2022	2023 Dec
Total Imports						
Mexico	360	361	309	338	385	400
China	280	344	336	426	330	320
Indonesia	162	188	197	199	205	220
Philippines	159	177	179	168	180	185
Algeria	167	120	144	138	135	135
Russia	95	88	60	59	55	50
European Union	46	56	36	32	35	40
Taiwan	23	23	24	25	23	25
Brazil	29	25	26	24	22	22
Japan	52	47	39	22	20	20
Others	88	87	83	70	55	59
Total Foreign	1,461	1,516	1,433	1,501	1,445	1,476
United States	1	1	1	1	1	1
Total	1,462	1,517	1,434	1,502	1,446	1,477
Total Exports						
European Union	826	945	831	788	700	625
New Zealand	358	373	356	326	355	335
Australia	155	128	129	156	145	130
Belarus	121	124	123	120	123	123
India	43	8	5	45	32	45
Canada	66	47	40	19	35	35
United Kingdom	60	82	72	52	38	35
Argentina	23	22	28	21	25	25
Ukraine	23	20	16	13	15	10
Japan	0	0	0	1	8	5
Others	60	68	6	9	8	8
Total Foreign	1,735	1,817	1,606	1,550	1,484	1,376
United States	712	701	810	893	825	836
Total	2,447	2,518	2,416	2,443	2,309	2,212

Whole Milk Powder Production And Consumption: Summary For Selected Countries

1,000 Metric Tons

	2018	2019	2020	2021	2022	2023 Dec
Production						
New Zealand	1,450	1,490	1,570	1,600	1,485	1,530
China	965	1,052	992	1,010	1,050	1,125
European Union	684	697	736	663	620	600
Brazil	585	596	590	594	568	586
Argentina	192	188	213	234	245	255
Mexico	119	120	122	123	124	125
Chile	62	70	73	58	71	73
Indonesia	81	82	85	96	59	61
Belarus	50	45	49	57	57	60
Russia	56	65	55	52	55	55
Others	98	77	58	67	45	38
Total Foreign	4,342	4,482	4,543	4,554	4,379	4,508
United States	65	64	63	67	82	82
Total	4,407	4,546	4,606	4,621	4,461	4,590
Total Dom. Consumption						
China	1,534	1,722	1,585	1,807	1,747	1,795
Brazil	652	657	678	640	646	660
European Union	381	424	418	376	390	380
Algeria	245	250	256	240	228	225
Indonesia	142	135	134	153	165	165
Mexico	103	106	105	116	110	112
Russia	100	110	94	80	78	75
Argentina	75	84	80	73	70	70
Chile	66	71	75	68	67	67
Australia	35	33	40	40	35	35
Others	137	145	114	102	102	95
Total Foreign	3,470	3,737	3,579	3,695	3,638	3,679
United States	31	36	34	34	61	55
Total	3,501	3,773	3,613	3,729	3,699	3,734

Whole Milk Powder Trade: Summary For Selected Countries

1,000 Metric Tons

	2018	2019	2020	2021	2022	2023 Dec
Total Imports						
China	521	671	644	849	700	700
Algeria	271	233	251	221	210	220
Indonesia	59	54	51	63	105	106
Brazil	68	61	89	52	84	80
Australia	28	37	43	37	40	45
Taiwan	34	32	36	36	35	32
Russia	27	46	31	28	25	25
European Union	43	42	27	11	20	20
Philippines	23	32	29	19	15	20
Mexico	7	3	3	7	5	7
Others	21	19	11	9	7	6
Total Foreign	1,102	1,230	1,215	1,332	1,246	1,261
United States	7	9	13	9	13	10
Total	1,109	1,239	1,228	1,341	1,259	1,271
Total Exports						
New Zealand	1,369	1,536	1,533	1,617	1,450	1,500
European Union	346	315	345	298	250	240
Argentina	135	97	148	145	165	180
Australia	55	42	37	51	55	45
Belarus	33	23	27	37	36	40
Mexico	23	17	20	14	19	20
Chile	4	4	2	2	9	10
Brazil	1	0	1	6	6	6
China	2	1	1	2	3	5
Russia	0	0	1	1	2	2
Others	4	10	6	5	2	2
Total Foreign	1,972	2,045	2,121	2,178	1,997	2,050
United States	48	39	39	39	36	37
Total	2,020	2,084	2,160	2,217	2,033	2,087