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Report Name: Dairy and Products Annual

Country: Bulgaria

Post: Sofia

Report Category: Dairy and Products

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Report Highlights:

The Bulgarian dairy industry faced significant challenges in Marketing Year (MY) 2021 with the national dairy herd, cow milk production and collection, as well as processing contracting. A dry and hot summer, combined with increasing feed grain prices, inflation pressure (especially of energy supply), and a labor deficit led to a decline in the number of dairy farms and stocks. Consolidation and restructuring of the industry continued through the dominating role of larger, more efficient dairy operations. The process was further accelerated in MY 2022 due to another hot and dry summer season, skyrocketing feed prices, inflation reaching almost 20 percent, and deteriorating consumer demand due to higher prices of dairy products. Industry development was also impacted by repercussions of the war in Ukraine. FAS/Sofia (Post) expects that with recently increased prices for fresh milk, better controlled inflation and softening feed grain prices, the dairy industry should stabilize and start recovering in MY 2023.

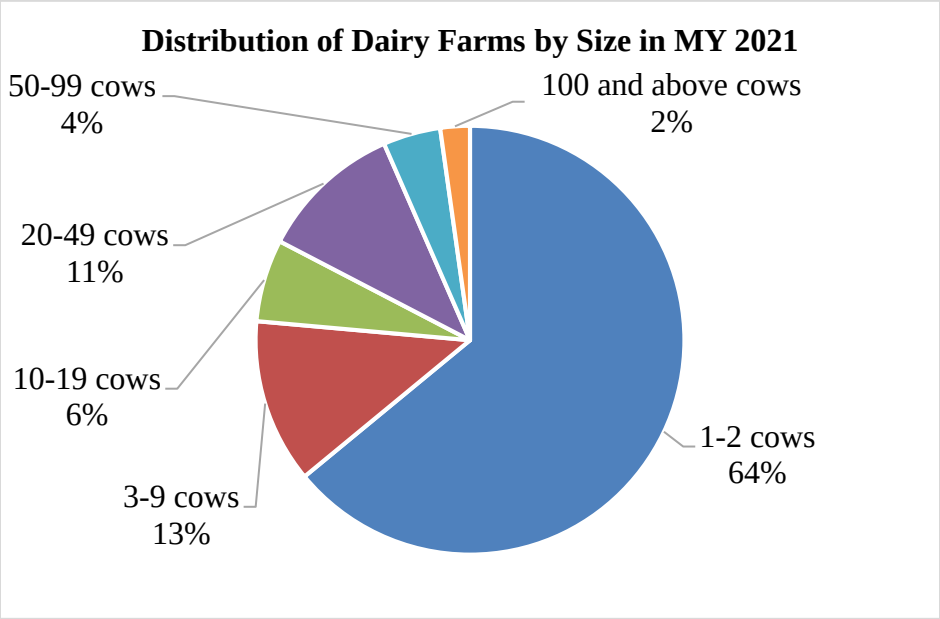
Dairy Farms and Dairy Cow Inventory
Following a temporary, COVID-related increase in the number of small dairy farms in MY 2020, the dairy industry faced challenges in MYs 2021 and 2022 due to sharply increasing feed and energy prices.

In MY 2021 the number of dairy farms declined by 9.3 percent to about 16,000 (Table 1). All categories of farms (except one) experienced a decline. The smallest subsistence farms (1-2 cows) saw the steepest decline of 12.8 percent, but unlike in the past, the 50-99 dairy cow farms also decreased (by 15.6 percent). The exception was the category of small farms (3-9 dairy cows), which grew by 6.5 percent and proved to be more resilient to the economic challenges faced by the industry. According to sources, this was a result of shrinking production from bigger farms, which allowed this lower category to expand. In addition, these farms showed some cost-saving advantages, such as use of their own feed, family labor, and small-scale dairy processing for short supply chains. Consumer demand for fresh milk and/or dairy products from small farms was favorable due to demand for a healthier lifestyle.

There has been an identical trend of decreasing dairy cow inventory, which dropped by 5.7 percent compared to MY 2020. All types of farms recorded a decline in stocks except the same group of small farms (3-9 dairy cows). This group expanded its stocks by almost 30 percent, and was followed by the group of the largest farms (100+ dairy cows) which had a modest decline in inventory of 2.3 percent (Table 1).

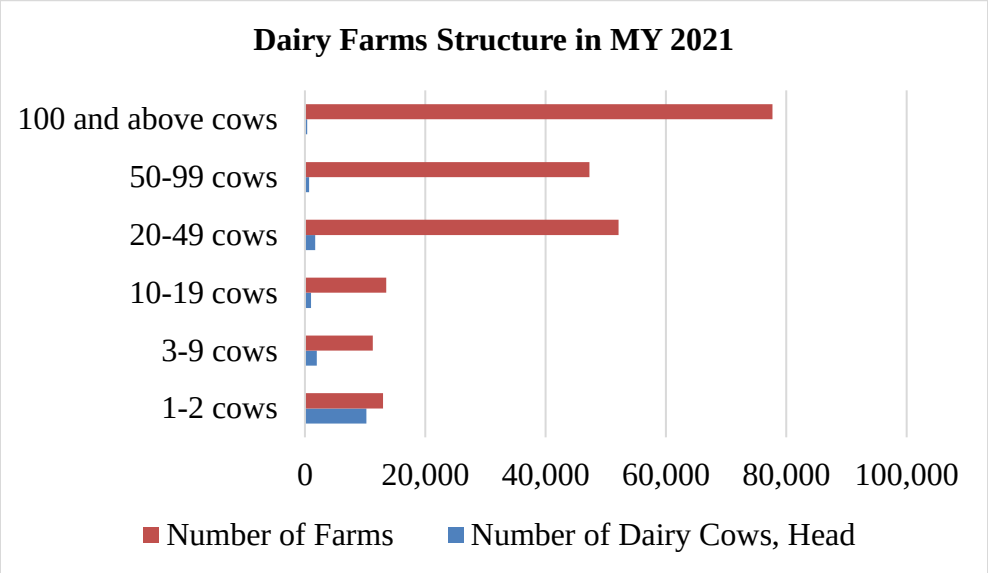
Restructuring and consolidation of the industry continued in MY 2021. While the share of the smallest farms (1-2 cows) continued to decline (3 percent) from the previous year, they accounted for 64 percent of Bulgaria's total number of dairy farms. Incredibly, this figure represented only six percent of the total national dairy herd, however (Graph 1). The number of commercial farms (100+ dairy cows) remained stable, as owners invested in productivity and technology. Farms with at least 50 dairy cows accounted for 6.5 percent of the total dairy cattle farms and 48 percent of the national dairy herd. At the end of MY 2021 the average number of dairy cows per farm continued to increase from 14.1 in MY 2020 to 15.9. In MY 2021 the national beef cow herd grew by 19.1 percent to 166,000 head, accounting for 44 percent (38 percent in MY 2020) of total cows, although some of these were spent dairy cows registered as "for meat".

Graph 1:



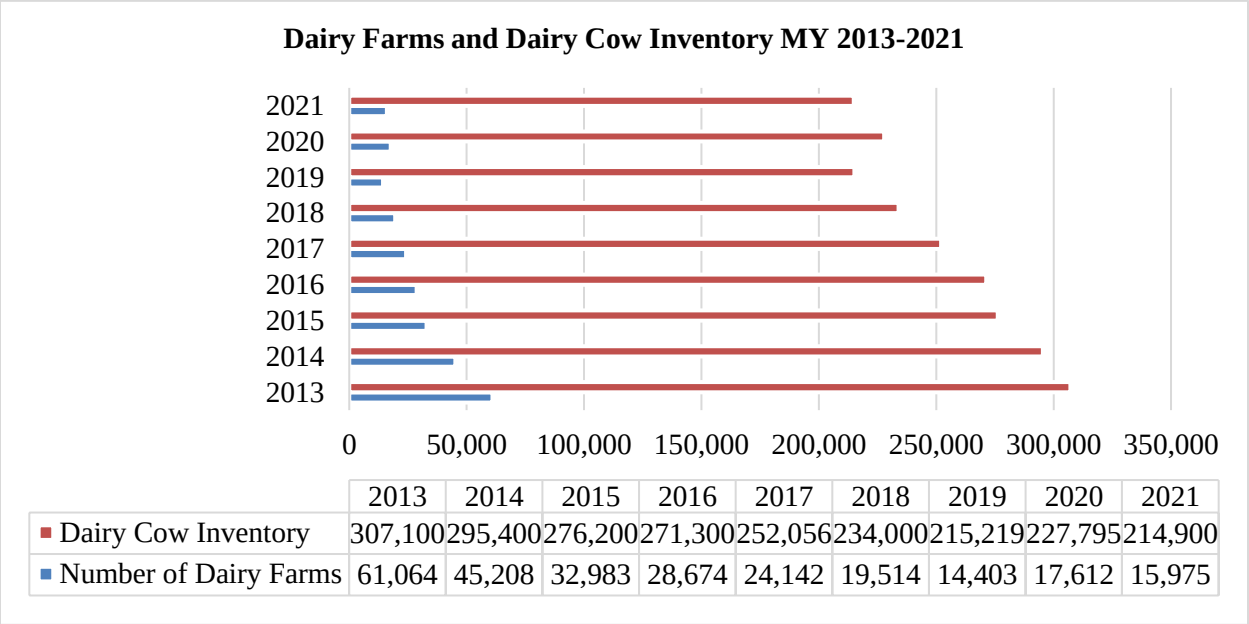
Source: Bulgarian Ministry of Agriculture Statistical Bulletins

Graph 2:



Source: Bulgarian Ministry of Agriculture Statistical Bulletins

Graph 3:



	2013	2014	2015	2016	2017	2018	2019	2020	2021
Dairy Cow Inventory	307,100	295,400	276,200	271,300	252,056	234,000	215,219	227,795	214,900
Number of Dairy Farms	61,064	45,208	32,983	28,674	24,142	19,514	14,403	17,612	15,975

Source: Bulgarian Ministry of Agriculture Statistical Bulletins

Post expects that Bulgaria's dairy cow inventory may not be able to stabilize in MY 2022 but has the potential to gradually recover in MY 2023. Hot and dry summers in MYs 2021 and 2022 were challenging for dairy farm productivity. In addition, feed grain prices have sharply increased since MY 2021 and remain volatile in MY 2022 despite good grain crops. This has led to sub-optimal feeding practices, which in turn is affecting milk yields. Milk prices became more favorable for dairy farmers in the second half of MY 2022, but for many farmers it was too late. Industry reports that farm consolidation has intensified, and a number of smaller farms decided to sell their operations to bigger dairy producers. Average milk yields are estimated to grow steadily, mainly at larger commercial farms, while smaller farms may face challenges.

Fluid Milk Production

Milk Production: In MY 2021 total fluid milk and cow milk production decreased by 5.2 percent, in line with the reduction in stocks despite slowly improving milk yields. Sheep and goat milk declined by 8 and 3 percent, respectively, while buffalo milk increased by 4.1 percent over MY 2020 (Table 2). The share of cow milk output to total milk production was at 87.7 percent.

According to tentative January-September 2022 data, milk deliveries continued to decline compared to the corresponding period in MY 2021. Domestic dairies processed 5.3 percent less domestic fresh milk, with the same reduction for cow milk. Lower cow inventories and flat milk yields in MY 2022 should lead to a moderate milk production decline.

Milk Deliveries: Over the last five years, milk deliveries have grown due to increased consolidation and commercialization (Tables 3 and 4, Graph 4). In MY 2021, however, this trend was interrupted. Total milk and cow milk deliveries declined by 5.2 percent each, with the share of cow milk deliveries totaling 94 percent. This reduction followed the trend of declining total milk production. Although the demand for milk by the dairies was strong, the fresh milk prices could not compensate for much higher production costs (Table 3). Still, cow milk deliveries achieved 80 percent (77 percent in MY 2020) of

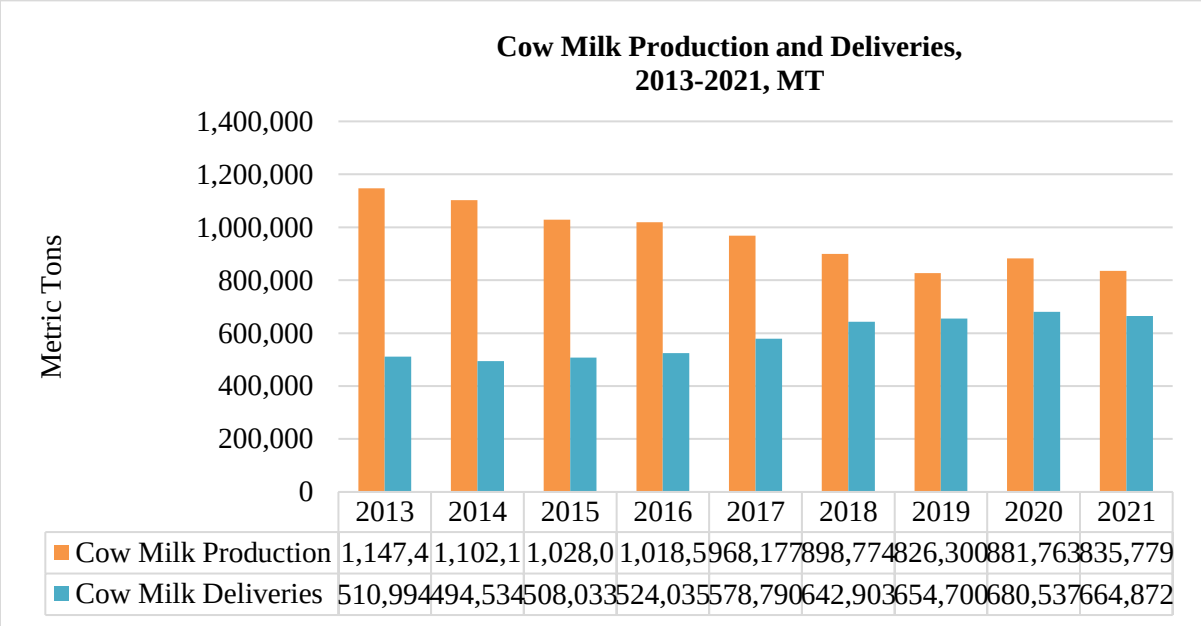
production in MY 2021. Post expects that this trend will continue as dairy farms and processors continue to modernize. Additionally, milk quality has become more consistent, largely due to farm consolidation.

Milk Cost and Prices: MY 2021 Bulgarian cow milk prices were higher than in the previous year (see average monthly prices here) and varied between €32.43/100 kg (April and June) and €36.77/100 kg (December). These prices lagged behind EU averages by 10-15 percent in different months. Although Bulgarian cow milk prices were below EU averages, there was a clear trend of price convergence in MY 2021.

From January-October 2022 prices varied between €37.61/100 kg (January) and €47.25/100 kg (October). Average milk prices in September 2022 (€45.87/100 kg) were 5.9 percent higher than in August 2022, and 37.3 percent more than a year ago. This growth, however, was below the EU average (46.1 percent) and was comparable with the rates in Austria and Czech Republic. Still, Bulgaria's October 2022 average milk price was 15 percent below the EU average (€55.20/100 kg). The gap between domestic and EU average milk prices has widened in MY 2022.

Milk for Direct Sales: Direct sales and on-farm milk consumption have declined since MY 2016 (Table 3). In MY 2021, the share of direct sales and on-farm cow milk use declined further to 20 percent (23 percent in 2020) due to the industry's commercialization and the efforts to limit gray market channels.

Graph 4:



Source: Bulgarian Ministry of Agriculture Statistical Bulletins

Milk Processing

In MY 2021 consolidation and expansion of dairies intensified, and Bulgaria had 244 dairy processors. Merging of the two main dairy players (Hellenic Dairies/Tirbul and Delta Food/United Milk Company)

is projected to lead to the establishment of a market leader with about 10 percent market share. At least three more dairies announced investment and expansion plans, mainly for specialty dairy products.

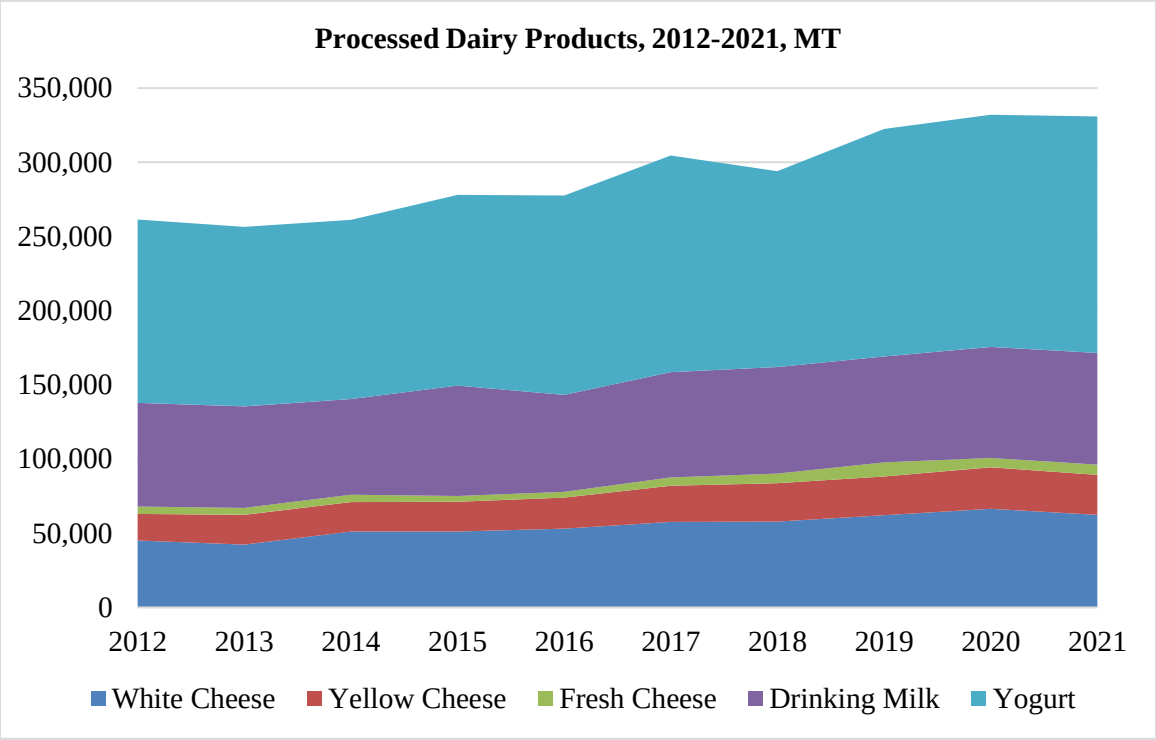
Overall, Bulgarian dairies processed 1.9 percent less domestic and imported milk in MY 2021 due to lower milk deliveries. Cow milk accounted for 94.4 percent of all industrial use, followed by sheep milk at 3.4 percent, goat milk at 1.6 percent, and buffalo milk at 0.6 percent (Table 4). Buffalo milk is produced in small quantities and does not meet the volumes required by commercial dairies.

The demand for raw milk by the processors was favorable and led to higher total dairy imports, including imports of fluid milk and milk substitutes (see Trade section). Often, demand for imported milk is driven by cost and/or logistical advantages for imports. According to the authorities, in MY 2021 processors used 20,000 MT of imported raw milk (17,000 MT in 2020), 3,121 MT of concentrated milk, 7,497 MT of powdered milk and cream, 4,709 MT of milk concentrate, and 930 MT of other milk substitutes (source: Ministry of Agriculture (MinAg) Bulletin 408/June 2022).

MY 2021 output of processed products declined slightly by 0.4 percent to 330,000 MT (Graph 5, Table 6) due to a 1.7 percent reduction in total cheese production, including lower output of white cheese (by 6.1 percent) and yellow cheese (by 4 percent). Manufacturing of other dairy products increased: yogurt by 1.8 percent, smoked cheeses by 7.7 percent, butter by 22.6 percent and drinking milk by 0.6 percent. The value of processed dairy products declined by 3.6 percent (source: MinAg Bulletin 408/June 2022).

Tentative data for January-August 2022 confirms that overall dairy product production continued to decline, by 5.9 percent; cheese output decreased by 8.1 percent, drinking milk by 12.1 percent, yogurt by 4.5 percent, and butter by 25.4 percent. Consumer demand has deteriorated due to higher prices of dairy products, despite better a tourism and travel season. According to MinAg, as of October 2022 retail prices of white cheese were 44.1 percent higher than a year ago, and those of yellow cheese increased by 35.9 percent. Drinking milk prices grew by 42.7 percent. Retail sales remained strong, however they could not compensate for lower consumption at the HRI sector.

Graph 5:



Source: Bulgarian Ministry of Agriculture Statistical Bulletins

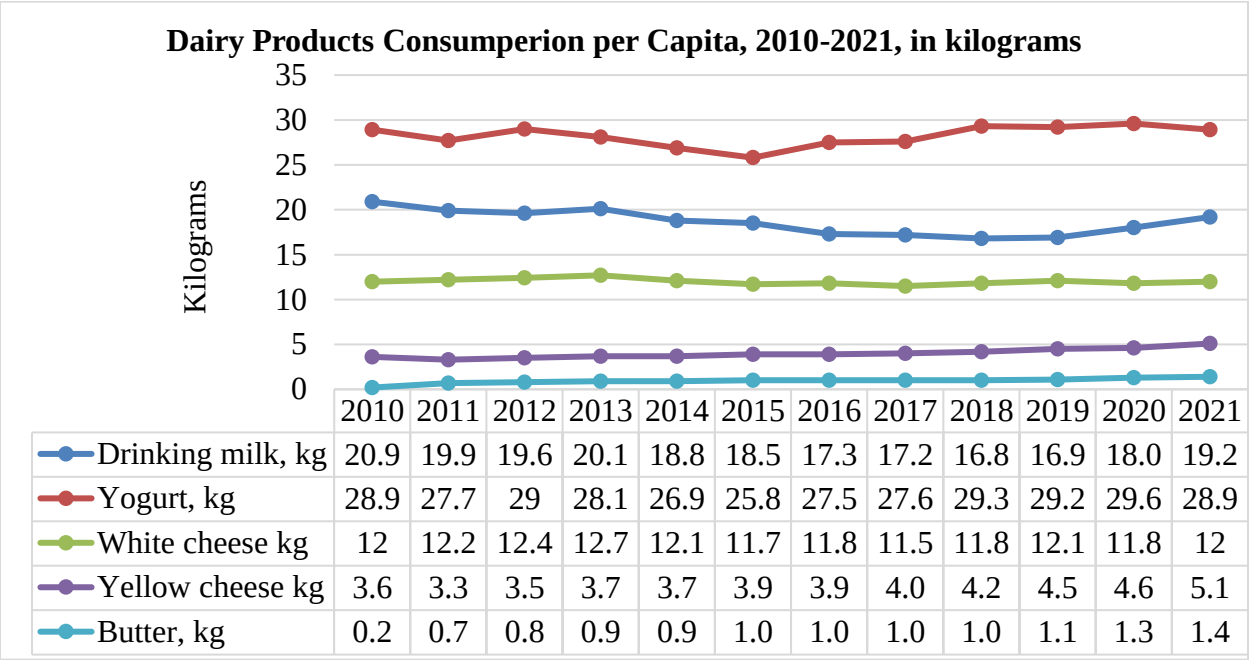
Consumption

Official consumption data includes mainly retail sales and home use, but does not include the food service sector which is a substantial driver for consumer demand. In MY 2021 food service's role in overall consumption was limited due to a partially-functioning HRI industry in COVID-19 recovery. Since retail sales remained strong, official consumption per capita recorded growth. However, due to much lower numbers of tourists and decreased dining out, total consumption of dairy products is estimated lower for MY 2021.

Annual dairy product consumption per capita in MY 2021 increased by about two percent, from 65.3 kg/capita in MY 2020 to 66.8 kg/capita in MY 2021 (Graph 6). Fluid milk consumption was higher at 19.2 kg/capita, although it continued to face increasing competition from plant-based alternatives such as soy, almond, rice, and other types of milk. White cheese consumption increased 1.7 percent to 12.0 kg/capita and yellow cheese was 11 percent higher at 5.1 kg/capita. Butter consumption also increased, by 7.7 percent to 1.4 kg/capita. Yogurt was the only exception, with a decline of 2.4 percent to 28.9 kg/capita.

In MY 2022 to date consumer demand has been affected by higher prices, especially for butter and cheese. At the same time, consumer interest in a healthier lifestyle has driven an increase in purchases of high-end organic, lactose-free and other specialty dairy products. Yogurt and cheese are leading this niche market.

Graph 6:



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Drinking milk, kg	20.9	19.9	19.6	20.1	18.8	18.5	17.3	17.2	16.8	16.9	18.0	19.2
Yogurt, kg	28.9	27.7	29	28.1	26.9	25.8	27.5	27.6	29.3	29.2	29.6	28.9
White cheese kg	12	12.2	12.4	12.7	12.1	11.7	11.8	11.5	11.8	12.1	11.8	12
Yellow cheese kg	3.6	3.3	3.5	3.7	3.7	3.9	3.9	4.0	4.2	4.5	4.6	5.1
Butter, kg	0.2	0.7	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.1	1.3	1.4

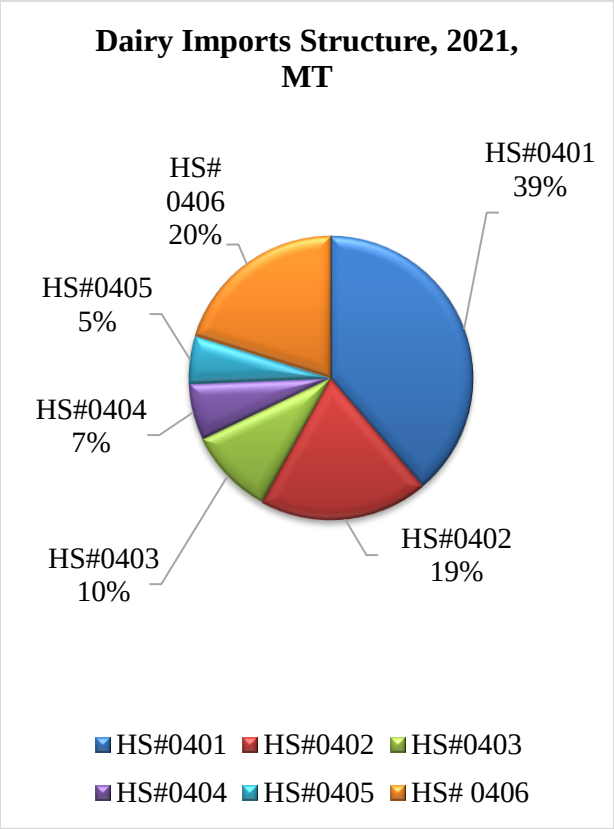
Source: Bulgarian Statistical Institute

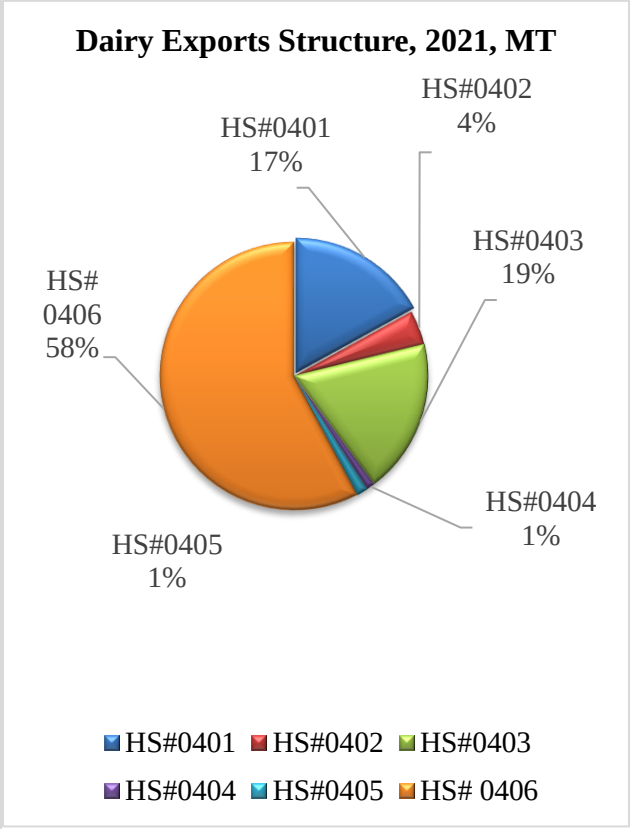
Trade

MY 2021 dairy product (HS#0401-0406) imports by volume increased by 13 percent to 166,000 MT due to the deficit of fresh milk, lower domestic production of some dairy products, and favorable local demand. Imports consisted mainly of fresh milk for processing (39 percent of total imports), non-fat dry milk (NFDM), whole milk powder (WMP), and whey. Cheese imports were record high and accounted for 20 percent of total imports, up by 18.9 percent over MY 2020 (Graphs 7 and 9).

MY 2021 dairy exports increased to 44,000 MT, up three percent from MY 2020. Cheese accounted for the largest share of exports at 58 percent (Graph 8), followed by buttermilk (HS#0403) at 19 percent.

Graphs 7 and 8: Dairy Imports and Exports Structure, 2021





Source: Trade Data Monitor/ TDM

Fluid Milk (PSD Fresh milk, HS#0401): MY 2021 imports of fresh milk increased by 10 percent due to strong demand by processors and lower milk deliveries. Major suppliers were Romania, Hungary, and Poland. During the first 7 months of MY 2022 (January-July) imports grew by 1.7 percent because of the milk deficit (reduced production and deliveries). In MY 2021 fluid milk exports were 15 percent lower than in MY 2020 due to more favorable domestic demand. This trend was sustained from January-July 2022 with another 43.8 decrease in exports.

NFDM (PSD Non-Fat Dry Milk, HS#040210): MY 2021 imports of NFDM increased by 36.5 percent over MY 2020 due to higher demand by the dairies. Poland, Germany, Romania, and the Netherlands were the major suppliers. In MY 2022 (through July) imports decreased by 21 percent.

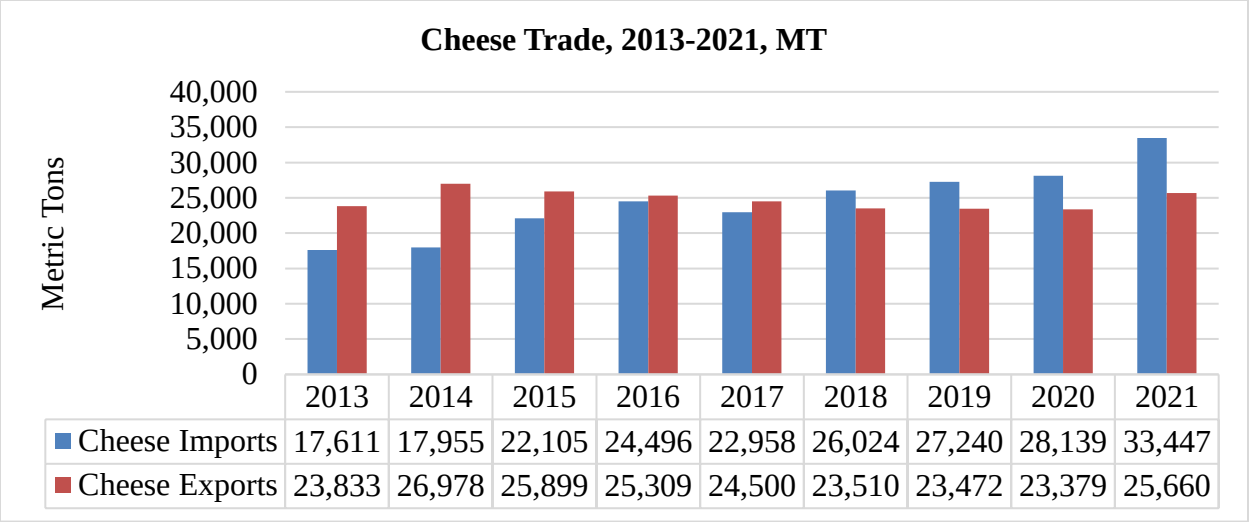
WMP (PSD-Dry Whole Milk Powder, HS#040221, 040229): MY 2021 imports of WMP declined by about 50 percent to below 1,000 tons. According to January-July 2022 data, WMP imports decreased further by 34 percent. The main suppliers were the Netherlands, Poland, and Czech Republic.

Butter (PSD-Butter and Milk Fat, HS #040510, 04051090, in BET): MY 2021 butter imports decreased by 7 percent from the MY 2020 record-high of 9,000 milk equivalent (BET) due to weakening consumer demand and higher prices. Bulgaria sourced butter mainly from Germany and the Netherlands. January-July 2022 butter imports decreased further by 20 percent, due to 40 percent higher average import price.

Cheese (PSD Cheese, HS#0406): MY 2021 cheese imports reached a new record high of 33,447 MT, up 18.9 percent over MY 2020. Imports were driven by strong domestic demand and reduced domestic production. While average import prices were about 8 percent higher in 2021, it was not a barrier to imports. From January-July 2022 imports continued to grow, though at a slower rate of 3.8 percent due to 12 percent higher prices compared to MY 2021. Cheese imports were sourced mainly from Germany, the Netherlands, and Poland. Cheese imports continued to exceed exports (Graph 9).

Cheese exports are traditionally important for Bulgaria and supported by various private and public programs. However, since MY 2016 cheese exports have declined. In MY 2021 cheese exports grew by 9.8 percent over MY 2020. However, for the first seven months of MY 2022 exports declined by over 14 percent. Bulgaria's main cheese export markets are Greece, Germany, Romania, Saudi Arabia, the United States, and the United Kingdom. (Graph 9).

Graph 9: Cheese Trade, Imports and Exports, MY 2013-2021



	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cheese Imports	17,611	17,955	22,105	24,496	22,958	26,024	27,240	28,139	33,447
Cheese Exports	23,833	26,978	25,899	25,309	24,500	23,510	23,472	23,379	25,660

Source: TDM (PSD Cheese)

Agricultural Policy

Animal Health:

No significant diseases have affected the dairy industry in MY 2021 and to date in MY 2022.

Animal Breeding and Selection:

In MY 2021 and MY 2022 MinAg continued to allocate more resources to support the breeding association and subsidize the use of high-quality genetics by farmers. Breeding associations receive a subsidy every year to support their administrative expenses toward keeping the pedigree books. In MY 2022 about 50 breeding associations were granted $3.9 million to cover up to 70 percent of their administrative expenses.

According to industry sources, these subsidies had a positive effect on breeding work. Imports of bovine semen in MY 2021 reached 140,000 doses, 4 percent more than in MY 2020. In value terms, MY 2021 imports reached $800,000, 7 percent higher than in MY 2020.

Dairy Product Regulations:

In August 2021 the authorities approved an amended regulation (Ordinance 3) limiting sales of cheese containing plant oils or "extra" water. According to the regulation, production of any dairy product should be made using, as a minimum, 80 percent fresh milk and up to 20 percent other milk substitutes such as powder milk, concentrated milk, and/or milk proteins. White cheese should contain not less than 40 percent dry substance and should not have less than 40 percent fat content. If a cheese product has lower than these characteristics, then it should be labeled as "cheese with higher water content" and should be sold only packaged, not in bulk. Such products are considered "imitating" and the words "dairy" cannot be used on the label/package. The label should say "Imitating Product" and should list all ingredients. At retail, such products should be placed separately from other dairy products on shelves/spaces indicated as "imitating products". The regulation banned sales of such cheese in bulk at window displays at shops and required mandatory packaging within 3 months.

Domestic Support:

In 2022 the authorities approved allocations for support of farms affected by the war in Ukraine. Dairy farms are eligible for this additional support, which is expected to be paid to farmers by December 2022. Current plans are for subsidies ranging from $250 to $15,000 per farm depending on the number of dairy cows.

Coupled support programs exist for dairy cows, for dairy cows under selection control, and for dairy cattle farms in mountainous areas. In 2021 $17 million were paid to 3,542 dairy farms. The subsidy rate was set at $184/head for up to 50 animals and $148/head for over 50 animals. For dairy cattle under selection control, 930 farmers were paid $20 million at a subsidy rate of $305/head for up to 50 animals and $244/head for above 50 animals. For dairy farms in mountainous areas, $415,000 were paid to 318 small farmers at a rate of $174/head. In addition, dairy farms are eligible for so called transitional, not coupled, national aid. The budget of this program in 2020 was at $16 million, and the beneficiaries were 4,128 farms at a rate of $85/head of cattle and $150/head of buffalo (source: Agrarian Report 2021).

In school year 2020/21 Bulgaria continued to fund a program for fresh produce and dairy products for children (about $13 million), and in total 434,000 children in 3,448 schools participated in the program. In the 2021/22 school year, 415,000 children took part in the program at 3,366 schools (source: Agrarian Report 2021).

Geographic Indications

In February 2021 Bulgaria started an application process with the European Commission to receive Protected Designation of Origin status for Bulgarian yogurt and Bulgarian white cheese in brine. It is expected that the process will take 1-2 years.

Appendix:

Table 1. Dairy Cattle Farms and Dairy Herd, 2021

Changes in the number of dairy cattle farms and dairy herd, 2021 vs. 2020				
Number of dairy cows per farm	Number of farms as of end-2021	Change 2021/2020	Dairy cows, 1,000 head	Change 2021/2020
1-2	10,229	-12.8%	13.0	-9.7%

3-9	1,979	+6.5%	11.3	+29.9%
10-19	992	-6.1%	13.5	-6.9%
20-49	1,727	-2.1%	52.1	-7.6%
50-99	692	-15.6%	47.3	-12.9%
100 and above	356	-7.0%	77.7	-2.3%
Total	15,975	-9.3%	214.9	-5.7%
Source: Bulletin 405, April 2022, Statistical Office, MinAg				

Table 2. Milk Production, 2009-2021, MT

Milk Production, 2009-2021, MT					
Years	Cow milk	Buffalo milk	Sheep milk	Goat milk	Total milk
2009	1,073,401	7,022	87,247	64,090	1,231,760
2010	1,124,360	7,933	85,001	60,410	1,277,704
2011	1,125,824	8,868	89,296	61,543	1,285,531
2012	1,093,034	8,081	87,403	53,333	1,241,851
2013	1,147,418	8,704	93,814	54,425	1,304,362
2014	1,102,731	8,850	74,615	44,565	1,230,762
2015	1,028,036	9,454	73,964	40,810	1,152,265
2016	1,018,567	9,460	79,296	40,969	1,148,291
2017	968,177	10,355	69,040	43,585	1,091,157
2018	898,774	11,731	71,190	43,179	1,024,873
2019	826,293	13,281	66,969	37,226	943,769
2020	881,763	15,898	76,114	31,309	1,005,084
2021	835,779	16,551	70,027	30,371	952,727
Share, %	87.7%	1.7%	7.4%	3.2%	100.0%
2021/2020 Percent Change	-5.2%	+4.1%	-8.0%	-3.0%	-5.2%
Source: Bulletin 405, April 2022, Statistical Office, MinAg					

Table 3. Produced and Processed Domestic Milk in 2019-2021, MT

Produced and processed milk in 2019		
	Total milk	Including cow milk
Processed at dairies	693,538 MT	654,647 MT
Other: direct sales, on-farm and feed	250,231 MT	171,646 MT
Total milk	943,769 MT	826,293 MT
Change 2019/2018	+1.8% more processed total milk	+1.8% more processed cow milk
Produced and processed milk in 2020		
Processed at dairies	720,946 MT	680,537 MT
Other: direct sales, on-farm and feed	284,137 MT	201,225 MT
Total milk	1,005,084 MT	881,763 MT
Change 2020/2019	+6.5% more processed	+6.7% more processed cow

	total milk	milk
Produced and processed milk in 2021		
Processed at dairies	703,171 MT	664,872 MT
Other: direct sales, on-farm and feed	249,556 MT	170,907 MT
Total milk	952,727 MT	835,779 MT
Change 2021/2020	-5.2% less processed milk	-5.2% less processed cow milk
Source: Bulletin 408, June 2022, Statistical Office, MinAg Note: The data reflect domestically produced and processed milk and does not include imported milk.		

Table 4. Milk Production and Processing, 2019-2021, liters

Processing on milk, domestic and imported, 2019-2021							
Type of milk	**2019**		**2020**		**2021**		**Change 2021/2020**
	000 liters	% of total processed milk	000 liters	% of total processed milk	000 liters	% of total processed milk	
Cow milk	644,904	94.4%	676,449	94.4%	663,382	94.4%	-1.9%
Sheep	23,496	3.5%	25,318	3.5%	24,109	3.4%	-4.8%
Goat	9,291	1.4%	10,413	1.4%	11,228	1.6%	+7.8%
Buffalo	4,760	0.7%	4,461	0.7%	4,421	0.6%	0.0%
Total	682,451	100.0%	716,641	100.0%	703,140	100.0%	-1.9%
Source: Bulletin 408, June 2022, Statistical Office, MinAg Note: The data includes both domestic and imported processed milk							

Table 5. Quality of Milk in 2021

	Fat Content, Percent	**Protein Content, Percent**
Cow milk	3.62%	3.21%
Sheep milk	6.34%	5.12%
Goat milk	3.62%	3.25%
Buffalo milk	6.89%	4.25%
Source: Bulletin 408, June 2022, Statistical Office, MinAg		

Table 6. Production of Processed Dairy Products in 2020 and 2021

Production of processed dairy products in 2020 and 2021			
	2020	**2021**	**Change 2021 vs.2020**
Packaged fresh milk, thousand liters	74,834	75,265	+0.6%
Packaged cream, MT	2,906	3,572	+22.9%
Yogurt	156,497	159,263	+1.8%
Cheese, total	*104,987*	*103,180*	*-1.7%*
-White cheese	66,459	62,384	-6.1%
--incl. cheese with	13,780	13,082	-5.1%

plant fats			
-Yellow cheese	27,962	26,854	-4.0%
-Smoked cheeses	1,600	1,723	+7.7%
Butter/oils	1,025	1,257	+22.6%
Source: Bulletin 408, June 2022, Statistical Office, MinAg			

Attachments:

No Attachments.