MILK AND MILK PRODUCTS SECTOR

Non-exhaustive list of issues and questions to facilitate preparations for bilateral meetings

1. <u>BASIC INFORMATION</u>.

• dairy cows number

	2000	2001	2002	2003	2004*
Dairy cows (head)	5,349,171	5,151,170	4,444,194	5,097,740	3,915,083
of which buffaloes milked	69,602	65,356	51,626	57,378	39,362
Of which cattle milked	5,279,569	5,085,814	4,392,568	5,040,362	3,875,721

Source: TURKSTAT

The data for the number of the bovine animals and sheep and goats collected yearly via Province and District Directorates of MARA by the data collection forms sent by TURKSTAT. The information for the number of animals provided by agricultural technicians in provinces and districts is based on their regional observations and existing information which is used for veterinary purposes.

The number of sheep and goats milked

Year	Goat	Sheep
1990	6,013,000	23,698,830
1991	5,877,600	23,222,330
1992	5,602,240	22,399,330
1993	5,463,880	21,531,850
1994	5,162,520	20,507,510
1995	4,907,590	19,262,500
1996	4,725,880	18,890,080
1997	4,407,190	17,168,690
1998	4,247,189	16,776,236
1999	4,086,263	16,473,340
2000	3,792,707	15,920,159
2001	3,773,466	14,846,753
2002	3,553,438	13,637,194
2003	3,126,656	12,477,217
2004*	2,476,574	9,919,191

Source: TURKSTAT

^{*}The figure for year 2004 is provisional.

^{**}The dairy cow figure is the number of milked animals. The number of milked animals is calculated by multiplying the number of female mature animals by milking ratios.

^{*} The figures for 2004 are provisional.

Number of bovine animal milked by type and race

				Cow	
Year	Buffaloes	Total	Culture	Cross-Bred	Domestic
1990	187,570	5,892,550	530,330	1,941,170	3,421,050
1991	171,140	6,119,280	650,800	2,087,120	3,381,360
1992	165,000	6,070,410	698,270	2,124,170	3,247,970
1993	147,980	6,031,950	750,250	2,214,720	3,066,980
1994	150,070	6,082,150	779,700	2,308,270	2,994,180
1995	122,370	5,885,590	870,250	2,392,620	2,622,720
1996	113,730	5,968,220	920,180	2,457,930	2,590,110
1997	92,210	5,594,290	879,780	2,355,540	2,358,970
1998	84,893	5,489,043	879,841	2,346,093	2,263,109
1999	79,973	5,537,892	903,499	2,424,629	2,209,764
2000	69,602	5,279,569	904,849	2,335,119	2,039,601
2001	65,356	5,085,814	912,411	2,248,877	1,924,526
2002	51,626	4,392,568	850,725	1,971,740	1,570,103
2003	57,378	5,040,362	1,034,817	2,236,680	1,768,865
2004*	39,362	3,875,721	832,711	1,699,804	1,343,206

Source: TURKSTAT

dairy cows' milk production: total production + yield per cow + dairy cows' milk deliveries to dairies

	2000	2001	2002	2003	2004*
Cow milk production (tons)**	8,799,371	8,552,409	7,541,558	9,562,916	9,648,604
Buffalo milk	67,330	63,327	50,925	48,778	39,279
Cow milk	8,732,041	8,489,082	7,490,633	9,514,138	9,609,325

Source: TURKSTAT

Sheep and Goat Milk Production

	Sheep Milk	Goat Milk Production (Ton)
1000	Production (Ton) 1,145,015	337,535
1990		· ·
1991	1,127,430	334,785
1992	1,089,230	319,420
1993	1,047,325	313,975
1994	991,760	296,710
1995	934,495	277,205
1996	921,660	265,445
1997	826,348	249,302
1998	813,078	245,579
1999	804,696	236,581

^{*} The figures for 2004 are provisional.

^{*}The figure for year 2004 is provisional.

^{**}The milk production is obtained by multiplying the number of animals milked by average milk yields. In the computations, milk yields of provinces for the year 1984 were being used until 2003. After 2003 milk yields of provinces obtained from the 2001 Census of Agriculture. The milk yields are available on the level of provinces.

2000	774,380	220,211
2001	723,346	219,795
2002	657,387	209,621
2003	769,959	278,136
2004*	771,716	259,087

Source: TURKSTAT

Milk Production by Type and Breed: 1994-2004

Year		Cattle		
	Culture	Cross-Breed	Domestic	Buffaloes
1994	2,309,715	4,584,835	2,234,275	143,625
1995	2,581,710	4,751,020	1,942,580	114,540
1996	2,723,910	4,827,955	1,913,755	108,190
1997	2,593,151	4,586,892	1,734,133	86,700
1998	2576065	4,586,511	1,669,483	79,815
1999	2 618 031	4 722 638	1 624 821	75 243
2000	2,639,113	4,591,861	1,501,067	67,330
2001	2,660,282	4,410,758	1,418,042	63,327
2002	2,467,889	3,867,656	1,155,088	50,925
2003	3,215,859	4,568,252	1,730,027	48,778
2004*	3,231,461	4,608,293	1,769,571	39,279

Source: TURKSTAT

Yield per cow

Milk Yield for the Animals Registered In the Herd Book (kg)

	2002	2003
Holstein	5.771	5.762
Brown Swiss	4.927	4.807
Simential	4.420	4.236

Source: Cattle Breeders' Association of Turkey

Herd Book

	<u>2002</u>	2003	2004	2005
Province	28	38	47	57
Number of Establishments	8,422	13,442	21,937	34,545
Number of Animals	178,471	271,948	435,351	695,636

Source: Cattle Breeders' Association of Turkey

^{*}The figure for year 2004 is provisional.

^{**}The milk production is obtained by multiplying the number of animals milked by milk yields. In the computations, milk yields of provinces for the year 1984 were being used until 2003. After 2003 milk yields of provinces was obtained from the 2001 Census of Agriculture. The milk yields are available on the level of provinces.

^{*}The figure for year 2004 is provisional.

Pre Herd Book

	2002	2003	2004	2005
Province	81	81	81	81
Number of Establishments	230,340	452,253	592,607	875,616
Number of Animals	764,784	1,246,629	1,586,324	2,314,271

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Source: Cattle Breeders' Association of Turkey

Distribution of Dairy cows' milk:

Large and Modern Establishments	27 %
Medium Size Establishments and Dairies	33 %
Direct Sales (Street Milk)	20 %
Milk Consumed by Farmers	20 %

Source: MARA

• production of different dairy products (1): drinking milk / other fresh dairy products / butter (dairy + farm) and butter-concentrate / cheese (dairy+farm) / skimmed milk powder / whole milk powder / other milk powders / condensed milk / casein and caseinates

Total Number of Milk Establishments

Years	Number of Milk	Total Number of Food	Share of Milk Establishments in
	Establishments	Establishments	the Total (%)
1994	3,243	22,243	14.57
1996	3,237	23,654	13.68
1998	3,380	23,951	14.11
2000	3,047	27,543	11.06
2002	2,160	25,425	8.49

Source: MARA

Number of Milk Prossesing Establishments, Capacity and Production (1994-1996)

		1994		1996			
	Number of Units	Capacity	Production (Ton)	Number of Units	Capacity (Ton)	Production (Ton)	
Sterilized Milk	8	242,794	85,789	13	280,383	15,917	
Pastorized Milk	42	612,545	106,430	46	542,907	130,837	
Aroma Milk	1	2,240	2,137	2	3,040	3,419	
Yoghurt	766	612,967	200,343	709	543,227	203,528	
White Cheese	940	1,129,906	156,621	913	1,251,231	161,392	
Kasar Cheese	330	292,131	25,693	381	206,242	44,618	
Tulum Cheese	71	19,342	2,465	68	20,550	2,814	
Melted Cheese	4	3,474	814	5	5,922	1,451	
Curd Cheese							
Gravyer Cheese							
Other Cheese	167	5,216	835	168	6,281	1,205	
Butter Milk	54	62,522	18,398	68	64,679	20,781	
Cream	27	894	359	29	1,527	245	
Whey Powder	3	5,678	2,450	4	5,630	2,212	
Suzme (dehidrated)							
Yoghurt	18	5,328	2,156	12	10,345	6,118	
Milk Powder	6	38,024	3,159	6	38,874	13,391	
Butter	326	32,308	10,215	345	49,816	17,662	
Ice Cream							
Edable Ice							
Milk Gathering Center (Raw Milk)							
Other Products	1,548	68,489	14,648	1,620	226,960	71,548	
Total	4,311	3,133,858	632,512	4,389	3,257,614	697,138	

Source: MARA

Number of Milk Prossesing Establishments, Capacity and Production (1998-2000)

	1998			2000			
	Number of Units	Capacity	Production (Ton)	Number of Units	Capacity	Production (Ton)	
Sterilized Milk	15	299,783	221,635	10	415,372	181,821	
Pastorized Milk	52	414,722	126,186	37	1,792,497	142,182	
Aroma Milk	1	2,240	5,500	1	3,055	3,529	
Yoghurt	800	622,109	229,570	860	826,868	312,667	
White Cheese	860	1,174,332	151,686	803	1,108,697	231,602	
Kasar Cheese	1,767	392,872	55,946	478	327,333	58,865	
Tulum Cheese	75	20,559	2,464	94	15,104	3,614	
Melted Cheese	6	6,664	1,744	7	13,965	8,124	
Curd Cheese							
Gravyer Cheese							
Other Cheese	69	8,315	2,611	51	7,302	2,397	
Butter Milk	100	82,547	33,615	167	142,068	50,480	
Cream	28	181,164	160,183	35	3,135	1,527	
Whey Powder	3	5,773	1,337	4	12,836	3,926	
Suzme (dehidrated)							
Yoghurt	77	17,202	9,002	24	3,249	1,315	

Milk Powder	6	36,380	3,573	7	27,450	9,019
Butter	298	136,834	105,589	312	58,886	29,902
Ice Cream						
Edable Ice						
Milk Gathering Center						
(Raw Milk)						
Other Products	1,653	101,230	19,799	4,632	82,284	42,188
Total	5,810	3,502,726	1,130,440	7,522	4,840,101	1,083,158

Source: MARA

Number of Milk Prossesing Establishments, Capacity and Production (2002)

	2002						
	Number of Units	Capacity	Production (Ton)				
Sterilized Milk	35	231,728	91,125.5				
Pastorized Milk	48	286,629	170,645				
Aroma Milk	2	11,367	6,102				
Yoghurt	718	1,083,284.95	613,946.83				
White Cheese	832	1,138,536.5	218,259.96				
Kasar Cheese	552	215,056.3	54,291.85				
Tulum Cheese	194	28,666.5	9,870.3				
Melted Cheese	50	24,506	11,799				
Curd Cheese	197	6,506.7	2,722.2				
Gravyer Cheese	4	120	62				
Other Cheese	169	20,095	9,100.5				
Butter Milk	290	1,154,487.1	1,018,137.14				
Cream	114	15,302.4	8,656.75				
Whey Powder	42	35,380	14,043.4				
Suzme (dehidrated)							
Yoghurt	50	45,765	18,805				
Milk Powder	38	21,558	9,863.5				
Butter	340	107,416.5	33,546.39				
Ice Cream	650	113,714.42	18,528.78				
Edable Ice	6	83	67.2				
Milk Gathering Center							
(Raw Milk)	15	80	57				
Other Products	76	15,422	10,802				
Total	4,422	4,555,704.37	2,320,432.3				

Source: MARA

• balance sheets for cheese, butter and skimmed milk powder (2)

Please note that the following tables are calculated in the form of <u>milk equivalent</u> therefore compared to the previous section there might be differences.

Cheese Supply and Disappearance 2002-2006 (Tons)

	2002	2003	2004	2005 b	2006°
Milk Equivalent*					
SUPPLY					
Beginning Stocks	728,170	693,935	646,763	603,760	563,523
Production	6,026,520	6,405,570	6,427,236	6,519,205	6,740,434
Import	43,630	32,170	38,470	35,000	36,000
Total Supply	6,798,320	7,131,675	7,112,469	7,157,965	7,339,957
DISAPPEARANCE					
Total Domestic Disappearance	6,033,296	6,400,292	6,427,719	6,503,441	6,736,295
Export	71,090	84,620	80,990	91,000	92,000
Total Disappearance	6,104,386	6,484,912	6,508,709	6,594,441	6,828,295
Ending Stocks	693,935	646,763	603,760	563,523	511,662
Stocks/Use Ratio	11.37	9.97	9.28	8.55	7.49

⁽a) All types of cheese (b) Estimate (c) Projected.

Source: MARA

Yoghurt/Buttermilk Supply and Disappearance 2002-2006 (Tons)

	2002	2003	2004	2005 a	2006 b
Milk Equivalent*					
SUPPLY					
Beginning Stocks	24,164	23,519	27,832	29,126	29,350
Production	2,204,945	2,679,828	2,266,335	2,241,597	2,236,629
Import	308	283	273	285	290
Total Supply	2,229,417	2,703,630	2,294,440	2,271,008	2,266,269
DISAPPEARANCE					
Total Domestic Disappearance	2,205,881	2,675,735	2,265,072	2,241,343	2,235,423
Export	17	63	242	315	245
Total Disappearance	2,205,898	2,675,798	2,265,314	2,241,658	2,235,668
Ending Stocks	23,519	27,832	29,126	29,350	30,601
Stocks/Use Ratio	1.07	1.04	1.29	1.31	1.37

⁽a) Estimate (b) Projected.

Source: MARA

Butter Supply and Disappearance 2002-2006 (Tons)

	2002	2003	2004	2005 a	2006 b
Milk Equivalent					
SUPPLY			Tons		
Beginning Stocks	143,000	148,177	150,016	149,861	148,169
Production		1,254,358	1,119,954	1,277,294	1,377,294
Import		78	31	25	23
Total Supply	1,357,041	1,402,613	1,270,001	1,427,180	1,525,485
DISAPPEARANCE					
Total Domestic	1,208,729	1,252,513	1,120,097	1,278,970	1,375,738

^{*}Multipliers are as follows: White Cheese: 6,65; Kasar Cheese: 9,16; Cream, melted cheese: 7,92; Other Cheese: 11,76; Yoghurt: 1,3; Butter Milk: 0,7; Milk Powder: 10; Butter: 15 and Ice Cream: 1

^{*}Multipliers are as follows: White Cheese: 6,65; Kasar Cheese: 9,16; Cream, melted cheese: 7,92; Other Cheese: 11,76; Yoghurt:1,3; Butter Milk: 0,7; Milk Powder: 10; Butter:15 and Ice Cream:1

Disappearance					
Export		85	42	41	43
Total Disappearance	1,208,863	1,252,598	1,120,139	1,279,011	1,375,781
Ending Stocks	148,177	150,016	149,861	148,169	149,704
Stocks/Use Ratio	12.26	11.98	13.38	11.58	10.88

⁽a) Estimate (b) Projected.

*Multipliers are as follows: White Cheese: 6,65; Kasar Cheese: 9,16; Cream, melted cheese: 7,92; Other Cheese: 11,76; Yoghurt: 1,3; Butter Milk: 0,7; Milk Powder: 10; Butter: 15 and Ice Cream: 1

Source: MARA

Dry Milk Supply and Disappearance 2002-2006(Tons)

Dry Mink Supply and L	Isappearance	2002 2000	(TOHS)		
	2002	2003	2004	2005 a	2006 b
Milk Equivalent*					
SUPPLY					
Beginning Stocks	45,125	46,837	47,169	46,076	47,132
Production	118,409	120,520	85,254	83,596	82,118
Import	54,180	116,439	114,289	114,118	112,118
Total Supply	217,714	283,796	246,712	243,790	241,368
DISAPPEARANCE					
Total Domestic					
Disappearance	170,123	234,647	196,294	192,185	187,417
Export	754	1,980	4,342	4,472	5,472
Total Disappearance	170,876	236,627	200,636	196,658	192,889
Ending Stocks	46,837	47,169	46,076	47,132	48,479
Stocks/Use Ratio	27.41	19.93	22.97	23.97	25.13

⁽a) Estimate (b) Projected.

Source: MARA

Ice Cream Supply and Disappearance 2002-2006 (Tons)

zee eream zupprj unu	2002	2003	2004	2005 a	2006 b
Milk Equivalent*					
SUPPLY					
Beginning Stocks	6,000	6,197	6,088	6,275	5,682
Production	72,235	65,115	72,165	75,128	77,148
Import	431	232	527	463	485
Total Supply	78,666	71,544	78,780	81,866	83,315
DISAPPEARANCE					
Total Domestic					
Disappearance	68,778	61,689	69,715	72,661	73,766
Export	3,691	3,767	2,790	3,523	3,715
Total Disappearance	72,469	65,456	72,505	76,184	77,481
Ending Stocks	6,197	6,088	6,275	5,682	5,834
Stocks/Use Ratio	9	9	9	7	8

⁽a) Estimate (b) Projected.

Source: MARA

^{*}Multipliers are as follows: White Cheese: 6,65; Kasar Cheese: 9,16; Cream, melted cheese: 7,92; Other Cheese: 11,76; Yoghurt:1,3; Butter Milk: 0,7; Milk Powder: 10; Butter:15 and Ice Cream:1

^{*}Multipliers are as follows: White Cheese: 6,65; Kasar Cheese: 9,16; Cream, melted cheese: 7,92; Other Cheese: 11,76; Yoghurt: 1,3; Butter Milk: 0,7; Milk Powder: 10; Butter: 15 and Ice Cream: 1

• per capita consumption of different dairy products

Per capita consumption (kg/annum)

	2002	2003	2004	2005	2006
				(Predicted)	(Forecast)
Drinking Milk	21.00	21.00	21.00	21.00	20.96
Cheese	89.00	93.00	92.00	91.69	93.55
Yoghurt/Butter					
Milk	32.54	38.88	32.42	31.60	31.04
Butter	17.83	18.20	16.03	18.03	19.11
Milk Powder	2.51	3.41	2.81	2.71	2.60
Ice Cream	1.01	0.90	1.00	1.02	1.02
Total Milk*	132.09	143.95	136.77	136.20	138.14

^{*}All milk and milk products including drinking milk.

Source: MARA

• structure of the milk production (n° of farms with <5 cows, between 5 and 10 cows,...)

2001*	
Number of holdings	2,147,068
that engaged with animal husbandry	
The number of holdings engaged with both crop	2,074,439
production and animal husbandry	
The number of holdings engaged with only animal	72,629
husbandry	

2001*	
The number of holdings engaged with fattening of	71,216
cattle and buffaloes	
The number of holdings engaged with milk	1,746,927
production from cattle and buffaloes	

40 427
530 151

Total agricultural holdings in Turkey 2001*	3,076,649
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^{*} TURKSTAT results of 2001 agriculture census, agricultural holdings (households) survey¹.

¹ In Agricultural Holdings (Households) Survey the coverage is all agricultural holdings in the villages and in the centers of districts having less than 5,000 inhabitants and this survey is a sampling survey. The agricultural census is conducted every ten years. The next one will be conducted on 2011.

2001* The distribution of the holdings that have bovine animals by size				
The number of bovine animals	The number of holdings			
1-4	1 043 022			
5-9	447 078			
10-19	196 193			
20-49	55 598			
50-149	4 936			
150-299	76			
300+	24			
TOTAL	1 746 927			

^{*}TURKSTAT results of 2001 agriculture census, agricultural holdings (households) survey.

2	2001*			
The distribution of the holdings that have sheep and goat by size				
(the holdings engaged with milk production)				
The number of sheep and goat	The number of holdings			
1-4	64,744			
5-9	58,400			
10-19	88,192			
20-49	155,231			
50-149	130,048			
150-299	27,250			
300+	6,286			
TOTAL	530,151			

^{*} TURKSTAT results of 2001 agriculture census, agricultural holdings (households) survey. The holdings engaged with fattening is excluded.

As of December 2005 the number of holdings keeping bovine animals is 2,240,576. The data is collected from the Identification and Registration Database for the bovine animals of MARA. The distribution of holdings according to the average number of animals is given below:

2005*				
Size of holding (the number of cattle and buffaloes)	Number of holdings engaged in cattle and buffaloes			
1-4	1,136,050			
5-9	469,302			
10-15	184,201			
15 +	451,023			
Total	2,240,576			

^{*}Source : MARA.

• milk price paid to farmers by dairies + basis for payment (fat/protein, hygiene standards)

Average milk price in 2002 was 0.21 €/L

Average milk price in 2003 was 0.22 €/L

Average milk price in 2004 was 0.24 €/L

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Source: MARA

A system which has a legal base and that applies punishment/premium payments according to the quality of the milk does not exist in our country. But some of the milk manufacturers apply punishment/premium payments for milk according to pre determined criteria (e.g. fat proportion, antibiotic, total number of bacteria etc.).

2. MARKET ORGANISATION

• structure of the dairy industry (no. of private companies and co-operatives, tons of milk processed by each of the dairies)

The Distribution Under the Milk Promotion Premium (2002)

Structure of Milk Establishments	Number	Percentage Share (%)
Number of Private Establishments	2,100	97.22
Number of Cooperatives Establishments	51	2.36
Number of Public Establishments*	9	0.42
TOTAL	2,160	100

^{*}Five belongs the universities, as R/D centers, AOC belongs to MARA, one belongs to TIGEM, one belongs to Ministry of Justice, one belongs to a Municipality.

Source: MARA

• importance and role of the dairy trade

The Milk sector is crucial in Turkey because it is important;

- as the provider of traditional consumption goods
- for a balanced and healthy nutrition
- for the development of animal husbandry industry
- for the increase in agricultural productivity
- for the development process of regions with priority (as a household consumption and income generating activity)
- in creation of employment opportunities in rural and less developed areas

The Turkish food industry is rapidly growing. During the last five years, the proportion of food industry in GDP increased from 4.6% to 4.8%. The number of food enterprises is approximately 28.000 and nearly 12% of these holdings are milk and milk products' manufacturers. The high share of milk and milk products in food industry is due to the high number of dairies (with insufficient use of high technology) and traditional consumption habits. After 1995, due to the increase in the efficiency of private sector and foreign capital investment, there has been an increase in the amount of milk produced and variety of milk products.

Even though there are differences between districts in general, the milk sector has a very complex marketing network. The main problems of the dairy sector are;

• the small and dispersed structure of milk holdings

- ♦ lack of efficient farmers organizations
- insufficient number and inefficiency of existing cooperatives
- producers face difficulties during cyclical (seasonal) production changes
- the existing large and modern establishments have to collect their milk from small size establishments that are scattered and do not produce in hygienic conditions.

In spite of the small family enterprise production structure in the dairy sector, during the recent years, investment in the dairy sector has increased rapidly and thus high increase in milk production is observed. With increase in income and consumer awareness, the demand for milk products produced via traditional methods has decreased steadily and the market share of pasteurized milk has increased. When we look at the geographical distribution of dairy holdings, Marmara Region (39%) and Aegean Region (26.5%) are the leading regions. The Eastern Anatolia Region and Southeastern Anatolia Region have considerably small share in terms of dairy holdings. Nevertheless, parallel to the increase in livestock sector investment in Eastern Anatolia Region and Southeastern Anatolia Region, the share of milk and milk products production has increased.

The export of milk products mainly consists of long shelf-life products. Cheese and butter are the most important export products. Following the registration of traditional products which are highly consumed in the domestic market, an increase in their production and export is expected. During the recent years a significant level of improvement has been accomplished in the export of ice-cream. The foreign investments have had a considerable contribution in this growth. The Turkic Republics are the main export markets for these dairy products.

Turkey has a geographical advantage of being close to milk importing countries. Especially, the Russian Federation and Middle East Countries are the main milk products importing countries and when Turkey gains higher access to these markets there will be a positive impact on the national economy.

• ex-factory prices of the main dairy products: what is their level and how are prices established (e.g. price quotation committees, representative markets, price publications)

There are no institutions or organizations with legal foundation that have the sole responsibility of forming milk prices. The milk prices in Turkey are determined by free market conditions.

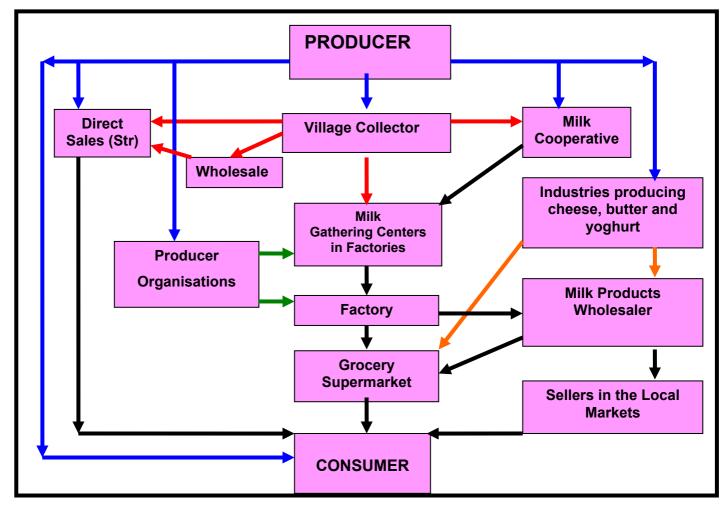
Wholesale Prices of Some Dairy Products: 2000-2004 (€/Kg)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Milk								·				
2000	0.2228	0.2370	0.2395	0.2402	0.2554	0.2597	0.2624	0.2730	0.2725	0.2748	0.2875	0.3338
2001	0.1765	0.1670	0.1669	0.1611	0.1622	0.1631	0.1626	0.1787	0.1816	0.1818	0.1987	0.2152
2002	0.1697	0.1832	0.1856	0.1910	0.2176	0.2236	0.2310	0.2316	0.2317	0.2478	0.2493	0.2629
2003	0.2239	0.2346	0.2390	0.2399	0.2396	0.2406	0.2408	0.2397	0.2394	0.2390	0.2533	0.2542
2004	0.2423	0.2561	0.2603	0.2560	0.2562	0.2599	0.2566	0.2583	0.2599	0.2598	0.2847	0.2891
Pastorize	ed Milk											
2000	0.4952	0.5240	0.5285	0.5445	0.5607	0.5803	0.5919	0.6096	0.6214	0.7178	0.7488	0.7505
2001	0.4036	0.4001	0.4221	0.4327	0.4364	0.4268	0.4406	0.4500	0.4681	0.5147	0.5643	0.5910
2002	0.4835	0.4835	0.4927	0.5382	0.5592	0.5619	0.5694	0.5694	0.5694	0.5937	0.6283	0.6361
2003	0.5488	0.5488	0.5505	0.5538	0.5777	0.5777	0.5780	0.5780	0.5780	0.5816	0.5832	0.5882
2004	0.5709	0.5760	0.5839	0.6328	0.6316	0.6389	0.6389	0.6525	0.6525	0.6585	0.6705	0.6679
Sterilized	d Milk											
2000	0.4952	0.5240	0.5285	0.5445	0.5607	0.5803	0.5919	0.6096	0.6214	0.7178	0.7488	0.7505
2001	0.4036	0.4001	0.4221	0.4327	0.4364	0.4268	0.4406	0.4500	0.4681	0.5147	0.5643	0.5910
2002	0.4835	0.4835	0.4927	0.5382	0.5592	0.5619	0.5694	0.5694	0.5694	0.5937	0.6283	0.6361
2003	0.5488	0.5488	0.5505	0.5538	0.5777	0.5777	0.5780	0.5780	0.5780	0.5816	0.5832	0.5882
2004	0.5709	0.5760	0.5839	0.6328	0.6316	0.6389	0.6389	0.6525	0.6525	0.6585	0.6705	0.6679
White Cl	heese											
2000	0.8057	0.8115	0.9032	0.9048	0.9048	0.9213	0.9466	0.9482	0.9646	1.0017	1.0615	1.0615
2001	0.5863	0.5904	0.6021	0.6224	0.6321	0.6330	0.6330	0.6330	0.6595	0.7260	0.8343	0.0009
2002	0.7140	0.7140	0.7140	0.7339	0.8076	0.8082	0.8095	0.8095	0.7829	0.7946	0.7956	0.7997
2003	0.6845	0.6845	0.7100	0.7177	0.7514	0.7520	0.7520	0.7618	0.7618	0.7763	0.7763	0.7763
2004	0.7561	0.7603	0.7637	0.7686	0.7686	0.7686	0.7932	0.8063	0.8308	0.8477	0.8559	0.8613
	d Cheese											
2000	2.1048	2.1731	2.2001	2.2762	2.3010	2.3391	2.3491	2.4113	2.4392	2.6974	2.8899	2.9305
2001	1.5798	1.5859	1.5925	1.7204	1.7137	1.7165	1.7310	1.7505	1.8267	1.9289	1.9659	1.9667
2002	1.5152	1.5887	1.5904	1.6954	1.7795	1.7793	1.8557	1.8736	1.8924	2.4221	2.5115	2.5162
2003	2.1561	2.1767	2.3753	2.3928	2.3933	2.3895	2.3082	2.3155	2.3185	2.3485	2.5081	2.5089
2004	2.3992	2.4574	2.4604	2.4617	2.5405	2.4726	2.4726	2.5869	2.5994	2.7692	2.8448	2.8550
Kasar												
2000	6.6589	6.6651	6.9800	6.9800	7.1604	7.2538	7.8374	7.8580	8.0019	8.3585	8.9259	9.1061
2001	5.0213	5.1307	5.1953	5.2292	5.2308	5.2333	5.2368	5.2368	5.4391	5.9356	6.1825	6.5875
2002	5.0471	5.1474	5.1459	5.1673	5.7442	5.8242	5.8242	6.0659	6.1192	6.1192	6.1192	6.1317
2003	5.3111	5.3579	5.3579	5.4492	5.6311	5.6311	5.6311	5.6311	5.8153	5.8153	5.8153	5.9167
2004	5.7844	5.8424	5.8524	5.8524	5.8524	5.8524	6.1008	6.1008	6.1891	6.2427	6.2427	6.3013
Yoghurt												
2000	1.0210	1.0437	1.0819	1.1147	1.1683	1.1998	1.2354	1.3321	1.3618	1.4193	1.4711	1.4819
2001	0.7873	0.8081	0.8372	0.8490	0.8745	0.8989	0.9414	0.9481	0.9637	1.0925	1.1447	1.1940
2002	0.9278	0.9470	0.9825	1.0337	1.0566	1.0630	1.0975	1.1086	1.0908	1.0922	1.1242	1.1297
2003	0.9190	0.9198	0.9059	0.9266	0.9358	0.9369	0.9369	0.9367	0.9427	0.9429	0.9526	0.9609
2004	0.9230	0.9350	0.9393	1.0753	1.0753	1.0875	1.0875	1.1011	1.1081	1.0138	1.0380	1.0440
Buttermi												
2000	0.9879	1.0642	1.2001	1.2306	1.2320	1.2542	1.2826	1.2826	1.2834	1.3442	1.3678	1.3706
2001	0.7240	0.7240	0.7393	0.7420	0.7258	0.7458	0.7756	0.7792	0.7792	0.8428	0.8735	0.9460
2002	0.7353	0.7353	0.7349	0.7542	0.7548	0.7742	0.8159	0.8506	0.8108	0.8110	0.8685	0.8727
2003	0.7621	0.7699	0.7761	0.8230	0.8431	0.8432	0.8844	0.8859	0.8859	0.8890	0.8952	0.8952
2004	0.8546	0.8536	0.8536	0.8543	0.8543	0.8745	0.9135	0.9168	0.9185	0.9008	0.9385	0.9432
2004 C		0.8330	0.6550	0.6543	0.6543	0.6743	0.7133	0.7108	0.7103	0.7008	0.7363	0.743

Source: TURKSTAT

• retail sector: through which channels are milk and dairy products sold (supermarkets, doorstep delivery, small local shops,..)

Milk and Milk Products Marketing Channels in Turkey



Source: UYSAL, Y., MAZGİT, İ., "Türkiye Hayvancılık Sektörünün Sorunlarının Çözümüne Yönelik", Yaşar Eğitim ve Kültür Vakfı, İzmir, 1993, p.67. *Producer Organisations has been added to the original chart.

• is milk production subject to quantitative restrictions (production quotas)

The milk production is not subject to any type of quantitative restriction.

• are there public interventions in the market: guaranteed milk prices, public purchase of butter, skimmed milk powder, cheese or other dairy products (if so, what the buying price and mechanism, how are the product resold on the market?)

There isn't any public intervention in Turkey.

• are there other aids or support measures (e.g. private storage aid, disposal measures, school milk aid,..)

Milk producing farmers are supported with both income support and structural support in accordance with the applicable provisions of the Communique No: 2005/13 on Livestock Support Schemes which was published in the Official Gazette No: 25765 on 24.03.2005. This legislation has been put into effect to implement the Council of Ministers' Decree No. 2005/8503.

Income Support: It is paid to natural or legal persons who has produced raw milk. Producers delivering milk to milk processing plants licensed by the MARA are eligible to obtain this support.

In order to be eligible for milk production support, farmers must;

- have a double-wall tank;
- sell milk they produce to milk processing facilities with a pasteurization or UHT system;
- operate facilities free of diseases,
- be registered in the pedigree and pre-pedigree,
- be registered in an agricultural cooperative, or
- own small ruminant husbandry farms

Farmers are required to fulfill at least one of those requirements.

In order to increase the improvement of livestock sector and livestock production as well as providing high quality standarts milk requirements of industry, farmers, who sell the milk of large ruminants (cow, buffalo) and small ruminants (sheep, goat) to licensed milk processing plants, are supported on per liter basis

The amounts of income support are paid on per liter basis at different levels to achieve improvement and structural transformation of this sector, including encouraging establishment of milk producer unions and keeping records about production.

Milk support is paid in following amounts on per liter basis:

Milk Supports	Amount of Income Support (€/L)	Income Support for Structural Improvement (€/L)
The members of cattle breeders' unions (DSYBs) in regions free of diseases	1.80	2.70
The members of agricultural development cooperatives and others in areas free of diseases	1.80	1.80
The members of agricultural development cooperatives, who are also registered with a DSYB and receive services from an agricultural adviser under a contract	1.80	2.10
The members of agricultural development cooperatives, who receive services from an agricultural adviser under a contract	1.80	1.50
The members of DSYBs	3.60	-
The members of agricultural development	1.80	0.60

cooperatives and milk producers' unions		
Other producers not included any of the	1.80	-
categories above.		
Producers of small ruminants milk	1.80	-

Structural Support: Beneficiaries include enterprises (owned by natural or legal persons), which are registered with the pedigree or prepedigree. Any producer entitled to receive support payments must have minimum 10 cows registered with the pedigree or prepedigree. A structural support is paid to the producers, who establish milking and refrigeration systems in order to enhance quality of milk. The subsidy is intended to fund a part of the cost of such facilities.

40 % of the invoiced cost of milking units and refrigerating tanks up to € 47,930.00 is paid to respective producers.

Milking units purchased must be brand new and comply with TSE standards, and test reports must be suitable to their existing production capacities.

• how are the public interventions on the market organised? (e.g. government office)

There is no public intervention in Turkey.

• what rules or standards are applied as regards the composition and quality of different dairy products?

Turkish Food Codex – The Communiqué on Raw Milk and Heat Processed Drinking Milk (Official Gazette Date: 14 February 2000, No: 23964)

Turkish Food Codex – The Communiqué on Fermented Milks (Official Gazette Date:03 September 2001, No: 24512)

Turkish Food Codex – The Communiqué on Edible Casein and Caseinats (Official Gazette Date: 03 September 2001, No: 24512)

Turkish Food Codex – The Communiqué on Concentrated Milk and Milk Powder (Official Gazette Date:12 April 2005, No: 25784)

Turkish Food Codex – The Communiqué on Butter, Other Milk Fat Based Spreadable Products and Concentrated Butter (Official Gazette Date:12 April 2005, No: 25784)

Turkish Food Codex – The Communiqué on Ice Cream (Official Gazette Date:13 January 2005, No: 25699)

For chese according to By-Law on Determining the Special Qualities of the Equipment and Materials that are related to Food Products and Public Health (GMT) (Official Gazette Date:18 October 1952, No: 8236)

3. <u>IMPORT / EXPORT</u>.

• statistical information on exports and imports of different dairy products (2) in recent years (by country of destination/origin)

See statistical annex

• is there a license system for trade with third countries (import + export)? If so, can you describe the system (documents used, conditions for granting, control).

Under the current Import/Export Regime, no import/export licenses are required for milk and milk products. Import licenses are only required for the importation of agricultural products under the tariff quotas resulting from bilateral agreements.

• is there a system of export subsidies? If so, can you describe its operation (direct aid to traders, credit guarantees, sales from intervention stocks.)

There is no export subsidy provided for milk and milk products.

• can you give an overview of the export and import commitments of your country resulting from the Uruguay round agreement (WTO)

Bound Tariffs:

	Milk and Milk Products	Bound rate of duty
		(%)
0401-0405		180
0406 10		180
0406 20		180
	B:Other	
	I. Gruyere, cheddar, parmesan, dutch and similar cheese	45
0406 30		180
0406 40		45
0406 90		180
	B:Other	
	II. Gruyere, Sbrinz XIV. b. 2. bb. Other	45
1702 19 00	II. Cheddar, parmesan, dutch and similar cheese 1702 10	45
1702 17 00	Lactose	18.9

	Lactose syrup	135
	2106 90	
	A. Cheese fondues	58.5
	B. Flavoured or coloured sugar syrups	58.5
	C. I. Other, containing less than 1,5 % milkfat,	53
	2,5 % milk proteins, 5 % sucrose or isoglucose,	
	5% glucose or starch, or not containing any of	
	these products	
	C. II. Other	58.5
2309	2309 10	8.5
	2309 90	
	A. Green leaf concentrates containing protein	4.3
	obtained thermally from alfalfa sap, and their	
	derivatives	
	B. Other	7.8

Export Subsidies:

	Milk and Milk	Annual Outlay	Annual	Quantity
	Products	Commitment	Commitment	
		(US \$)	(Tonnes)	
0401 01	Creams	9904.3		155.7
0401 30	Milk	1171.2		19.8
0403	Yogurt. Yogurt	6042.0		227.9
	processed with water			
0405 00	Butter	42137.4		143.6
0406	Cheese	351509.9		2634.2

• are there import agreements with third countries? If so, please give details.

Milk and milk products are subject to following preferential import arrangements.

	THE EUROPEAN UNION				
(Turkey-EU Association Council Decision No 1/98)					
CN CODE	DESCRIPTION	QUOTA	DUTY		
0402 10	Milk and cream in powder, granules or other solid forms, of a fat content by weight, not exceeding 1.5% (inward processing)	2,500 tons	0		
0402 21	Milk and cream in powder, granules or other solid forms, of a fat content by weight, exceeding 1.5% not containing added sugar or other sweetening matter (inward processing)	2,500 tons	0		
0404	Whey	700 tos	30 % ad valorem		
0405 10	Butter and other fats and oils derived from milk; dairy spreads	3,700 tons	0		
0405 20 90			0		
0405 90			0		
0406 30	Processed cheese, not grated or powdered	300 tons	0		
0406 90	Other cheese	2,000 tons	0		
	TURKEY-CROATIA FREE TRADE AGREEMENT (Entered into force on 01.07.2003)		•		
CN CODE	DESCRIPTION	QUOTA	DUTY		

0406 (excl	Cheese and curd	150 ton	50% red MFN		
0406 90 29,31,50,86,87,88					
TURKEY-BOSNIA AND HERZEGOVINA FREE TRADE AGREEMENT					
(Entered into force on 01.07.2003)					
PRODUCTS		QUOTA	DUTY		
All milk products		Unlimited	0		

Methodology aspects:

- (1) Same dairy products should be provided as much as possible in the case of:
 - Basic information under chapter 1
 - Import/export under chapter 2

To avoid any confusion, please take note of this table of correspondence between code NC and name of the product for the main dairy products:

Name of products	Code NC
Drinking milk	0401 10 - 04 01 20
Other Fresh dairy products	04 01 30
Butter	04 05 10
Butter concentrate	04 05 90
Skimmed milk powder	04 02 10
Whole Milk powder	04 02 21
Condensed milk	04 02 91

(2) Balance sheet = production + import – (consumption + export)