Turkey

Post: Ankara

Milk Surplus in Turkey

Report Categories:
Dairy and Products
Agricultural Situation

Approved By:
Elizabeth Leonardi, Agricultural Attaché

Prepared By:
Sinem Duyum, Agricultural Specialist

Report Highlights:
Turkey’s dairy and red meat balance is always tenuous, with never enough red meat leading to high prices, and a protected market generally from imports. An oversupply of milk and shortage of red meat in 2008 led to some mass slaughtering of dairy cattle which some are predicting may happen again. In 2008, after many cattle were slaughtered, it led to a rise in milk prices, and consequently a rise in imports of live animals to replace the herd. The recent decline in Turkey’s dairy products exports due to turmoil Turkey’s main export market of Iraq, are leading to a glut of milk on the market and a fear that dairy farmers may begin to slaughter animals from the national herd.
**General Information:**

Total cattle population in Turkey has decreased in 2015 to 13,994,071 head of animals while it was 14,223,109 in 2014. The main reason for this decrease was slaughtering as part of the control program for recent Foot and Mouth Disease (FMD) outbreaks and increases of slaughtered animals to take advantage of high red meat prices in 2015.

Dairy industry is about half of the share of the total livestock production industry in Turkey. Because of its importance, in order to improve milk yield in Turkey, MinFAL has been working on animal improvements through genetic studies, and importing high quality genetics. Industrial production has become important with urbanization. However geographical position of Turkey is not suitable for breeding dairy cattle and input prices for breeders are too high since there are shortages on feed production and challenges on feed import. With regard to market of dairy products, there is no integration between producers and customers because of many stakeholders within the market chain. Sector may also not play active role within the marketing because of the shortages on branding. Having more stakeholders within the market chain has caused huge price difference between consumer price and production price.

Cattle Breeders’ Association of Turkey (CBAT), who has a big role in dairy sector, has put importance on animal registration and they are willing to have more educated breeders who are able to register their animals into system. CBAT in cooperation with MinFAL has established milk analysis laboratories and collected information on milk quality and udder health since 2010. Also they created mobile recording system to keep and track data on milk production. They started to implement pedigree and stud book projects and progeny testing project in Simmental and Brown Swiss breeds for red meat production along with the activities for milk production in Holstein breeds.

**Milk Production**

Turkey produced 18,654,682 MT milk (from cow, sheep and goat, buffalo) in 2015 as it was almost the same quantity in 2014 with 18,630,859 MT.

**Graph 1. Turkey’ Milk Production (MT)**

![Graph showing Turkey's milk production from 2010 to 2015](source)

Source: Cattle Breeders` Association of Turkey (CBAT), 2016
In 2015, 5,535,773 cattle were milked and 17 million MT milk was collected and 62,999 buffalo were milked and 62 thousand MT buffalo milk was collected. As of September 2015, Holstein breed population was 5,5 million head of animals while cross-breed of Holstein was 907 thousand head of animals.

**Dairy Products Production**

8.9 million MT of cow milk was sent to the Turkish milk processing industry in 2015 with 3.5 percent increase while compared to 2014. The other 8 million MT produced in Turkey is not processed and is used for animal feed, consumed at the farm/village level (not processed), or was not fit for human consumption.

### Chart 1. Dairy production in 2015

<table>
<thead>
<tr>
<th>Dairy Products</th>
<th>Production (MT)</th>
<th>Dairy Products</th>
<th>Production (MT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole milk</td>
<td>934,739</td>
<td>Sheep milk</td>
<td>41,141</td>
</tr>
<tr>
<td>UHT whole milk</td>
<td>846,816</td>
<td>Crème</td>
<td>32,097</td>
</tr>
<tr>
<td>Whey</td>
<td>659,984</td>
<td>Fat content &gt;29%</td>
<td>28,355</td>
</tr>
<tr>
<td>Cow’s cheese</td>
<td>637,284</td>
<td>Pasteurized semi-skimmed milk</td>
<td>23,682</td>
</tr>
<tr>
<td>Semi-skimmed milk</td>
<td>440,383</td>
<td>Fat content &lt;=29%</td>
<td>3,742</td>
</tr>
<tr>
<td>UHT semi-skimmed milk</td>
<td>416,700</td>
<td>Skimmed milk</td>
<td>3,402</td>
</tr>
<tr>
<td>Milk Powder</td>
<td>112,175</td>
<td>UHT skimmed milk</td>
<td>3,402</td>
</tr>
<tr>
<td>Pasteurized whole milk</td>
<td>87,881</td>
<td>Sheep’ Cheese</td>
<td>1,917</td>
</tr>
<tr>
<td>Skimmed milk powder</td>
<td>65,912</td>
<td>Buffalo milk</td>
<td>1,335</td>
</tr>
<tr>
<td>Goat milk</td>
<td>56,286</td>
<td>Goat’ Cheese</td>
<td>337</td>
</tr>
<tr>
<td>Whole-fat milk powder</td>
<td>46,206</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Turkish Statistical Institute (TurkSTAT), 2016

### Graph 2. Dairy production in 2015
Consumption
The most consumed dairy products in Turkey are yogurt, white cheese, kashar cheese and ayran (drink made of yoghurt and water). Consumption of drinking milk is too low and most of consumed drinking milk is whole milk. Recently, market share of UHT milk and low-fat dairy products has been increasing. Product range has become wide with urbanization and change on consumer demands. Per capita consumption of dairy and dairy products in Turkey is around 236 kg (500 lbs.) and has decreased 0.84 percent while compared to 2014.

Graph 3. Per consumption of dairy products in Turkey, 2012-2015

Drinking Milk Consumption
1 lt. packaged UHT milk has 61 percent market share in the market with 847 thousand MT. Total drinking milk consumption has increased 1 percent in 2015 while compared with previous year.

Graph 4. Drinking Milk Per Capita Consumption, 2011-2015

Cheese, Yoghurt and Butter Consumption
White cheese has big market share and consumption has been increasing in line with its production. Consumption of packaged cheese varieties has 87 percent and deli-cheese has 13 percent market share. Cheese consumption has increased 5 percent in 2015 while compared to 2014.

**Graph 5. Cheese Per Capita Consumption, 2011-2015**

![Graph 5](image)

Source: MinFAL, 2016

Yoghurt consumption has increased 3 percent in 2015 while compared with previous year.

**Graph 6. Yoghurt Per Capita Consumption, 2011-2015**

![Graph 6](image)

Source: MinFAL, 2016

Butter is most imported dairy products in Turkey. Consumption of butter is too high. Yogurt consumption has increased 10 percent in 2015 while compared with previous year.

Background
The situation today in Turkey is similar to 2008. In that instance, Milk prices had declined to 0.30 TL because of intensive milk powder imports in 2007 and 2008, and also feed prices were very high as a result of drought. Additionally, during these years MinFAL reduced the livestock subsidies by half and which led producers to send their dairy cows into slaughterhouses. Consequently, animal population dramatically decreased in 2009 and meat and milk prices increased. MinFAL then allowed imports of live cattle (slaughter and feeder cattle) and carcass meat in 2010 (see Graph 9). For further information; please see GAIN report date: 11/16/2015 No: TR5043 here and GAIN report date: 8/5/2015 No: TR5040 here.

Graph 8. Breeding Cattle Import, 2009-2015

Source: Turkish Statistical Institute (TurkSTAT), 2016
Graph 9. Slaughtering/ Feeder Cattle Import, 2012-2015

![Slaughtering/ Feeder Cattle Import](image)

Source: Turkish Statistical Institute (TurkSTAT), 2016

Graph 10. Beef Import, 2009-2015

![Beef Import(MT)](image)

Source: Turkish Statistical Institute (TurkSTAT), 2016

Turkey has a commitment to EU to import 19,500 MT beef per year within scope of EU-Turkey Custom Union Agreement signed in 1995. However Turkey had not imported beef from EU for years until June, 2010. The peaked year was 2011 with 110,000 MT and it never reached to 19,500 MT after 2012.

<table>
<thead>
<tr>
<th>Year</th>
<th>HS6</th>
<th>HS6 name</th>
<th>Country</th>
<th>Quantity (MT)</th>
<th>Value ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>020120</td>
<td>Beef; carcass (fresh/chilled)</td>
<td>France</td>
<td>40</td>
<td>190,831</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Germany</td>
<td>39</td>
<td>213,448</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Poland</td>
<td>40</td>
<td>182,030</td>
</tr>
<tr>
<td>2014</td>
<td>020130</td>
<td>Beef; Boneless(fresh/chilled)</td>
<td>Bosnia</td>
<td>520</td>
<td>4,671,398</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td></td>
<td></td>
<td>639</td>
<td>5,257,707</td>
</tr>
<tr>
<td></td>
<td>020120</td>
<td>Beef; carcass (fresh/chilled)</td>
<td>Bosnia</td>
<td>410</td>
<td>2,777,486</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Herzegovina</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>020130</td>
<td>Beef; Boneless(fresh/chilled)</td>
<td>Bosnia</td>
<td>6,365</td>
<td>52,314,220</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td></td>
<td></td>
<td>6,775</td>
<td>55,091,706</td>
</tr>
</tbody>
</table>

Here you see the table above most of import is done from Bosnia Herzegovina within scope of special agreement between two countries. Since the meat prices are still too high in Turkey, the Ministry of Agriculture announced early this year that they have 50,000 MT beef import permission from Ministry of Economy.

### Graph 11. Turkey` Cattle Population

![Cattle Population](image)

Source: Turkish Statistical Institute (TurkSTAT), 2016

According to CBAT, raw milk producers were not able to produce milk effectively because of high feed prices in 2008 and the huge amount of milk powder import since industry didn’t need raw material like milk powder to produce dairy products. Official data says that in this crisis 400,000 head of dairy cows were sent to slaughterhouses in that year. In total, there were 1.5 million cattle slaughtered that year for meat (beef and dairy), so in 2008 almost a third of the total was from dairy cattle, which is much higher.
than the typical share. The meat prices relaxed as a result of the mass dairy cow slaughtering, however with decreasing animal population in 2009, it consequently leaded to a hike in meat prices. MinFAL pulled the import trigger in 2010. First they started by allowing meat imports (carcass meat), and then allowing slaughter cattle, and then feeder cattle imports.

Graph 12. Average cattle carcass prices between the years of 2005-2010

![Graph 12](image)

Source: Beef Price (TL), TurkSTAT, ESK. Note: $1 = 2.87 TL as of March 25, 2016.

The fear of reverting back to 2008 situation
Milk production prices (raw milk prices) have not been increasing for 20 months. In fact, it has been declining for 3-4 months and the lowest price (1.15 TL/ per liter) which is determined by National Milk Board (NMB) has not been given by Turkish dairy producers (industry) to farmers – they have been giving lower prices. It has even been declined 0.70 TL. Turkish NMB mission is to make policies and lead to put them into practice to develop the sector and undertake tasks to regulate the market. The board is also a member of International Dairy Federation. They especially regulate the raw milk prices in Turkey. However keeping the raw milk prices at the same level (1.15 TL) and purchasing of raw milk by the industry at a lower price than 1.15 TL has put the milk producers (farmers) in a difficult situation. This feels particularly painful for the producers because the raw milk purchased at 0.70 TL from the farm is sold at 3.35 TL in the domestic market as processed products.

Turkish Agricultural Chamber Union (TACU), who is also member of the National Milk Board, claimed that they will abdicate from the Board since they believe that the Board is no longer able to protect the lowest price (ceiling floor-1.15 TL/ per liter) and getting to lose their function. The Chamber thought that this crisis will again bring the other problem, to which Turkey is very familiar: high meat prices.

The crisis has again occurred on July, 2015 by increasing milk production and decline in consumption. The reason of increasing milk production is that big companies and investors who are not actually interested in livestock and agriculture have established large-scale farms with zero interest loans given by Turkish Agricultural Bank.
However on the other hand, milk producers, cooperatives, unions and companies have been in difficulties on marketing their milk since the milk processing industry has started to purchase raw milk from farmers at a price lower than 1.15 TL.

Additionally, MinFAL has reduced ‘value added taxes’ for feed and fertilizer for farmers from 18 percent to zero percent. Farmers were keen on this implementation, however despite the removal of VAT, the prices of fertilizer and feed have been remained the same - there are many stakeholders within the market chain of feed and fertilizer and they haven’t reduced prices for farmers. At the same time, feed prices have been getting higher and it has caused economic losses for the producers. Producers have again started to send their dairy cows into slaughterhouses and the crises like in 2008 could be seen in 2016, as well. According to the sector, the 2008 crises caused huge economic losses in Turkish livestock sector because they faced competition from imported meat which slightly lowered domestic prices.

**Government Interventions**

In order to encourage the 15.4 billion TL (around $5 billion) dairy industry in Turkey, MinFAL has increased the milk powder subsidy given to the industry from 3 thousand TL/per ton to 4.5 thousand TL/per ton at the beginning of 2016. Within scope of the grant given to ESK, the Board purchases raw milk from primary producers at 1.15 TL/per lt and the purchased raw milk is processed at the facilities contracted with ESK to make milk powder. Since January 2016, raw milk has been purchased by the milk industry within this contracting model, so it has taken some milk off the market. ESK’s purchases have been initiated with the Aegean region since dairy sector is intensive in there and will continue in Balikesir province and Central Anatolian region.

The Government of Turkey (GOT), who tried to solved 2008 crises by carcass meat/feeder cattle import, this time has granted Meat and Milk Board (ESK) to intervene to the market to regulate the milk price as they did the same for increasing meat prices. For further information; please see GAIN report date: 11/16/2015 No: TR5043.

According to Turkish Agricultural Chamber Union (TACU), ESK is supposed to purchase 4-5 thousand MT raw milk from primary producers to balance supply in the domestic market. ESK will produce milk powder in contracted dairy facilities and sell it as milk powder to domestic market and for export.

**Dairy Products in Trade**

**Import:**

Turkey imports most of their dairy products from European Countries. In total, Turkey imported 35,159 MT dairy products in 2015, and 36,519 MT in 2014. Most imported dairy products are cheese and butter. In 2015, Turkey’s butter imports from European Union (EU) increased to 103 MT while it was 58 MT in 2014, so they are similar to butter level imports from the United States in 2015. Milk products imports amounts from the United States have varied over the years, however, total dairy import from the U.S. has recently sharply decreased from 4,931 MT in 2014 to 99 MT in 2015. Three-fourths of that was butterfat and the rest was milk powder, lactose and cheese. FAS estimates Turkey’s dairy imports would not be increasing in 2016 since the domestic market will be self-sufficient for butterfat production. This is because of milk powder by products, cream, which will be marketed to the domestic dairy processors as a result of the GOT interventions on milk surplus in Turkey.
Turkey Import Statistics From With United States

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Unit</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2010</td>
</tr>
<tr>
<td>Milk and milk products Total</td>
<td>T</td>
<td>Milk and milk products</td>
<td>2163</td>
</tr>
<tr>
<td>0405</td>
<td>T</td>
<td>Butter And Other Fats And Oils Derived From Milk</td>
<td>134</td>
</tr>
<tr>
<td>0406</td>
<td>T</td>
<td>Cheese And Curd</td>
<td>465</td>
</tr>
<tr>
<td>0404</td>
<td>T</td>
<td>Whey &amp; Milk Products Nesoil, Flavored Etc. Or Not</td>
<td>0</td>
</tr>
<tr>
<td>2105</td>
<td>T</td>
<td>Ice Cream And Other Edible Ice, With Cocoa Or Not</td>
<td>0</td>
</tr>
<tr>
<td>0402</td>
<td>T</td>
<td>Milk And Cream, Concentrated Or Sweetened</td>
<td>1564</td>
</tr>
<tr>
<td>0403</td>
<td>T</td>
<td>Buttermilk, Yogurt, Kephir Etc, Flavored Etc Or Not</td>
<td>0</td>
</tr>
</tbody>
</table>

Source of Data: Global Trade Atlas, 2016

Within the scope of Turkey’s harmonization to European Union (EU), MinFAL has been gradually implementing EU veterinary health certificates on imports of live animal and animal products although Turkey’s domestic production has not completely been in line EU standards. MinFAL published the new import certificate for dairy products a few years ago. Even though Turkey is not yet a member of the European Union, MinFAL requires exporting countries to use a veterinary certificate that is the same with the EU certificate given in the EU Commission Regulation No 605/2010. The certificate refers to numerous EC regulations to which Turkey has not completely harmonized their regulations to yet.

Negotiations for a new certificate for trade between the United States and Turkey had been ongoing and trade had been taking place under an extension of the previous certificate which was granted by Turkey. Trade came to a halt on March 31st, 2016 when Turkey decided not to grant another extension for the use the current certificate for products from the United States to be used while negotiations were ongoing.

Export;
Turkey’s dairy products export has decreased 25 percent in 2015 because of the turmoil in the neighboring countries. Turkey mostly exports to Iraq, Saudi Arabia and Lebanon. Turkey mainly exports cheese, yoghurt, ice cream and whey.
Graph 13. Turkey's dairy export and import between 2012-2015 (Thousand metric tons)

Source: Turkish Statistical Institute (TurkSTAT), 2016

Graph 14. US-Turkey dairy products trade (MT)

Source: Turkish Statistical Institute (TurkSTAT), 2016

Export to Russia;
Russian Federation (RF) requested FMD free country/administrative unit to export dairy products into RF from Turkey. As a result of the negotiations between two countries it was agreed that the products could be exported after pasteurization/heat treatment according to the related OIE chapter. 8 establishments out of 41 recommended establishments by MinFAL are approved by RF experts. Russia has not put the restriction on dairy import from Turkey. In general, Turkey's dairy export to Russia has not been significant since the market price is not favorable. Turkey exported 266 MT dairy products to RF in 2015.