

THIS REPORT CONTAINS ASSESSMENTS OF COMMODITY AND TRADE ISSUES MADE BY USDA STAFF AND NOT NECESSARILY STATEMENTS OF OFFICIAL U.S. GOVERNMENT POLICY

Required Report - public distribution

Date: 9/14/2018

GAIN Report Number: TR8029

Turkey

Tree Nuts Annual

Turkey Tree Nuts Annual Report 2018

Approved By:

Christine Strossman, Agricultural Counselor

Prepared By:

Caglar Erdogan, Agricultural Marketing Specialist

Report Highlights:

Turkey's pistachio harvest is expected to reach record high levels for the Marketing Year (MY) 2018/19. Walnut production remains stable and almond production is slowly increasing, but strong consumer demand for these products mean continued imports are expected, though 2018/19 tree nut import levels are likely going to be lower than previous years. The United States is a major supplier of walnuts and almonds to Turkey, but additional tariffs are impacting trade.

Commodities:

Walnuts, Inshell Basis Almonds, Shelled Basis Pistachios, Inshell Basis

I. PISTACHIO

a. PRODUCTION

Pistachio production is cyclical. There are "on-years" during which harvests are significantly higher than during "off-years." Therefore, yields can vary dramatically from year to year and also between regions and orchards in Turkey. Marketing Year (MY) 2017/18 was an off-year after two consecutive on-years.

MY 2018/19 is expected to be an on-year, although rains in the Southeastern Anatolia Region have not been ideal. Post forecasts Turkey's pistachio production will reach a record of 210,000 MT in MY 2018/19, up from 80,000 MT in MY 2017/18. Rainfall was lower than the previous Irrigation Year (IY) 2016/17 (October 01, 2016 to June 30, 2017) and also below normal seasonal averages during the IY 2017/18, according to the Turkish Meteorological Institute (TMI). However, University of Harran in Sanliurfa reports that rains that came in May 2018 will boost pistachio production in Sanliurfa and Gaziantep, the two most prominent provinces for pistachio production. In addition, there was no frost damage in spring 2018 during the blossoming period of pistachios. According to the Gaziantep Commodity Exchange (GCE), MY 2018/19 yield will be about 10 percent lower than its potential would be under ideal conditions, mainly due to lower rainfall and the lack of sufficient male trees, as well as diseases and insect issues. There was also some hail in August 2018 in the Manisa region which affected pistachio orchards, although there was only a small impact on overall yield.

The Southeastern part of Turkey, which is called the "Southeastern Anatolia Region" is the traditional production area for pistachios. The provinces in this region, Gaziantep, Sanliurfa, Adiyaman, Siirt, Kilis, Kahramanmaras, Mardin and Diyarbakir, are the most significant locations for commercial pistachio production and represent 95 percent of the total production and around 40 percent of this comes from Gaziantep. The remaining 5 percent of the pistachio production is in the Aegean, Mediterranean, and Marmara regions. All in all, 56 out of 81 provinces in Turkey produce pistachios, according to GCE. During the last decade, production in regions outside of Southeastern Anatolia is an increasing trend.

In recent years, in order to break the natural "off year/on year" production cycle, producers and traders have been expanding implementation of good agricultural practices, especially in some parts of Southeastern Anatolia. Pistachios are mostly grown in dry conditions as irrigation for pistachios is not common in Turkey. The common perception about pistachio trees is that they can grow naturally in marginal soil and conditions. While this may be correct, yields have proven to be much better in "good" soil conditions and with irrigation. Moreover, more orchards are being irrigated to protect against abnormal drought conditions in recent years.

Research activities have been conducted by the universities located in Southeastern and Eastern Anatolia Regions for better production methods and plant protection measures for pistachio orchards. Producers and researchers predict that better variety selection and good agricultural practices will solve the problem of "cycling" in the future. However, the cycling effect still plays a prominent role in the amounts of production currently.

In MY 2017/18, the pistachio production area in Turkey is reported as 328,804 hectares (288,041 decares), about a five percent increase compared to the MY 2016/17 production area of 313,431 hectares (3,134,316 decares). There are an estimated 47,765,600 bearing trees and 19,460,000 non-bearing trees, according to the Turkish Statistical Institute (TurkStat) as of MY 2018/19; both are about 12 percent higher than the previous MY. Over the last five years, bearing trees increased by about 30 percent, non-bearing trees by 57 percent, and total tree numbers increased by about 36 percent. In previous years, trees took ten years to mature and produce a full harvest, but due to better agricultural practices, harvest can now be done in five years after planting. Currently, the average pistachio yield is around 4 kilograms (kg) per tree in on-years and 2 kg per tree in off-years.

There are two main types of pistachios grown in Turkey. Most Turkish pistachios are the Gaziantep (Antep) variety, which are thinner and smaller than the typical Iranian variety. Gaziantep and Sanliurfa varieties are similar. The Siirt variety accounts for about 15 percent of total production. It is a high yielding variety with less production fluctuation than the Gaziantep variety. The size and shape of the nuts are in between the Gaziantep and Iranian pistachios. Quality is directly related to size in Turkey: 90 nuts or fewer per 100 grams is considered first quality, 90-100 nuts are second quality, 100-120 nuts are third quality, and more than 120 nuts are fourth quality.

With the increasing number of new saplings planted in the Sanliurfa and Siirt regions, the production of high quality pistachios is predicted to increase in the future.

b. CONSUMPTION

Most of Turkey's pistachio crop is consumed domestically and consumption varies from year to year according to availability of pistachios on the market. Traditionally, Turkish people consume 35 percent of total domestic consumption as a snacking nut and the rest are used in the production of confectionery products, especially in traditional desserts and bakery products like baklava. During the last decade or so, the use of pistachios in chocolate making and ice cream has increased as well.

MY 2017/18 was an off-year, and the harvest of 80,000 MT was even lower than the previous off-years due to drought in the Southeastern Anatolia Region in fall 2016 and winter 2017. As a result, the price of pistachios rose to 220 Turkish Liras (TL) per kilogram (kg) in May 2018 up from 90 TL per kg in March 2018. May was the beginning of the holy month of Ramadan, when the consumption of traditional desserts with pistachios, such as baklava, increase significantly. In many cities, such as Bursa and Malatya, dessert producers substituted walnuts or hazelnuts for pistachios in desserts.

Packaging of tree nuts, including pistachios, has doubled over the last few years throughout the country, especially in the coastal regions (Aegean, Mediterranean and Marmara). Purchasing of pre-packaged nuts from supermarkets is becoming more popular in larger cities as opposed to buying them in bulk from nuts stores. Currently, 35 percent of total tree nuts are being packaged. Post forecasts that the packaging of tree nuts, including pistachios will have positive influence on per capita consumption over time. Current per capita consumption is around 1.6 kg/year in Turkey.

Due to anticipated high production in MY 2018/19, resulting in relatively lower prices for pistachios, and the fact that other nut prices (such as walnut and almonds) are increasing, Post forecasts that MY 2018/19 pistachio consumption will increase to 176,000 MT, which is a 55 percent increase compared to last year.

Pistachio prices have dropped with the start of the harvest MY 2018/19. The price of bulk shelled early harvest pistachios (generally used for baklava and some other traditional desserts) is about 90 TL/kg

 $(14.45~\mathrm{USD^1/kg})$ compared to about 200 TL/kg (32.11 USD/kg) a month ago. Current retail prices of inshell Antep Pistachios in Istanbul are between 60 to 75 TL/kg (~\$9.63 - \$12.04 USD/kg) as of August 29, 2018, depending on the retailer.

c. TRADE

Turkey generally consumes most of its domestic pistachio production and a minor amount of total production is exported. Some is stored to plan for an upcoming off-year. As MY 2017/18 was an off-year with low production, exports were only 5,000 MT. Export destinations were Israel, Jordan, Saudi Arabia, Azerbaijan and European Countries such as Italy, Germany, and France.

In MY 2018/19, because pistachio production is expected to more than double and supply will exceed domestic demand, exports are forecast to increase to 17,000 MT.

Pistachios can be imported to Turkey with a 43.2 percent tariff rate. However, on June 25th, 2018 <u>an additional 10 percent tariff was introduced</u> to U.S.-origin nuts (almonds, walnuts, pistachios, and pecans) as retaliation for the U.S. Government increasing the tariffs on Turkish steel and aluminum. On August 15th, 2018, the additional tariff was doubled <u>to 20 percent</u>. The total tariff rate on pistachios from the United States to Turkey is 63.2 percent compared to 43.2 percent for all other countries.

Due to higher production in MY 2018/19 and the depreciation of the Turkish Lira (TL) against foreign currencies, there will be less demand for imports. Post forecasts Pistachio imports² at 5,000 MT in MY 2018/19.

The Gaziantep Commodity Exchange (GCE) has announced that they will conduct a project which establishes the "Pistachio Perfection Center" in Gaziantep with the support of the Turkish government. Scientific studies related to product quality and safety will be carried out in the center, aiming to increase the trade and the image of Turkish pistachios.

d. STOCKS

Pistachio stocks vary considerably from year to year in line with cyclical production. Moreover, pistachio production, trade, and stock amounts are not registered by the Government of Turkey (GoT) nor related associations in the sector. The Gaziantep Pistachio Industry Association was established in 2014 with the goal to establish a system for the registration of pistachio production and stocks, though no active registration system is in place yet.

According to tree nut producers, better data would help prevent price fluctuations, especially in low production years, as fluctuations have a negative impact on consumption and food industry usage.

¹ The exchange rate is 6.228 TL/USD as of August 28, 2018. The rate was 4.625 TL/ USD as of June 1, 2018, just as a comparison basis.

² Note import figures for nuts are calculated by using export data from other countries, and this can include shipments to free trade zones within a country as well.

For these reasons, GCE has taken some steps to increase the trade and storage of the commodity under safe conditions after harvest. GCE received a Government of Turkey grant to establish a 10,000 MT capacity licensed warehouse in Gaziantep, planned to open in 2019. Scientists from various universities are supporting improvement of storage conditions, since the cyclical nature of pistachio production in Turkey elevates the importance of stocks. Good storage conditions also minimize food safety concerns such as aflatoxin. GCE aims to prevent price fluctuations using the licensed warehouse system, so producers, consumers and traders will all benefit. They also aim for transparency in stock numbers using this warehouse system, to improve the supply-demand pricing mechanism.

Traders kept higher stocks of pistachio in MY 2016/17, compared to previous years, due to low production and high price expectations in MY 2017/18. MY 2017/18 had record low yields compared to the past 10 years. Due to selling of stocks in MY 2017/18 and expectation of high yields in 2018/19, stocks are forecast to drop to 500 MT at the beginning of MY 2018/19.

e. POLICY

The GoT stopped providing direct supports specifically to pistachio farmers several years ago, but supports the pistachio farmers with the general agriculture subsidies if they are registered in the Farmers Registration System. Supports are announced by GoT in the beginning of each calendar year.

GoT offered farmers the following support for the year 2018. Note that a decare (da) is equivalent to .1 hectares.

- 100TL/da (16.06USD³/da) and 400 TL/da (64.23USD/da) respectively for the establishment of orchards that are planted with standard seedlings and certified seedlings
- 10TL to 100 TL /da (1.61USD/da to 16.06USD/da) for organic agriculture;
- 50 TL/da (8.03USD/da) for Good Agricultural Practices;
- 14 TL/da (2.25USD/da) for fuel and fertilizer.

³ The exchange rate is 6.228 TL/USD as of August 28, 2018. The rate was 4.625 TL/ USD as of June 1, 2018.

II. ALMOND

a. PRODUCTION

Almond production in Turkey is forecast to increase slightly to 16,000 MT in MY 2018/19, up from 15,000 MT in MY 2017/18.

There were no frost impacts reported in any regions during MY 2018/19. The rains in Datca Peninsula were a bit lower than normal levels in the IY 2017/18 but overall levels were similar to last year. Despite that, it was a dry autumn in 2017, especially in September and October, therefore the yield will not be as high as the previous year in the Datca Peninsula. Fall rains are particularly important for almonds. Adiyaman province in the Southeastern Anatolia Region had lower than normal seasonal averages of rain in the IY 2017/18, but it was better than the previous year. However, strong, unexpected amount of rains and wind in the district of Kahta in spring 2018 damaged the fresh fruits of the almonds there. In late July, heavy rain and hail in Manisa affected the almond crop, according to reports in the region.

Almond trees can be seen scattered throughout the country in Turkey, as a naturally grown plant, or planted in lands which are considered non-arable. Most often almond trees are used on property lines throughout Anatolia. The traditional location of cultivated orchards for almonds is the Datca Peninsula in the southern part of the Aegean Coast. Datca almonds are well-known and liked by Turkish consumers but the production is insufficient to meet all the consumption needs of Turkey. Starting in the early 2010s, the city of Adiyaman in the Southeastern Anatolia Region, has become the center of almond production in Turkey due to its suitable climate and soil. Adiyaman traditionally produced tobacco, but farmers are realizing the opportunity in the almond market and production is expanding there.

The district of Kahta within Adiyaman is now the leader in almond production in Turkey since 2016, according to the Kahta Union of Hard Shelled Fruit Producers. They state that as of MY 2018/19, Adiyaman province has 6,000 hectares of almond orchards and the government plan is for the province to have 10,000 hectares of almond orchards by 2023, with the goal to produce enough almonds to meet domestic demand in Turkey. In this respect, in spring 2017, GoT established the Adiyaman Hard Shelled Fruits Research Institute which will work in cooperation with University of Adiyaman. The Institute is now under construction and new staff is being hired. An almond and pistachio processing facility has also been established by the Agricultural Credit Cooperative Union with the support of GoT and opened in spring 2018.

There are also almond orchards in the province of Manisa, where the climate is suitable for cultivating almond trees. The market for domestically-produced almonds is usually strong, and new orchards have been established to meet the demand.

Although almonds are grown in most parts of the country, they typically have been considered a minor crop and not widely cultivated commercially in Turkey. The former Ministry of Forestry and Water Affairs (MinFWA) had been conducting "Special Afforestation Projects" for almost 30 years with the target of afforestation and improvement of non-arable lands and the rural economy by leasing the forest and government-owned lands to the population living in the villages nearby those areas and private sector as well. Almonds have been the most popular trees with around 45 percent of total trees planted in the scope of these projects. Despite the increase in the number of planted almond trees, because they may be planted in less productive places or not looked after carefully, almond production has not increased significantly in these areas.

Since imports and prices have been rising in recent years, the GoT has taken another action to increase domestic production via increasing the number of almond trees. As a result, the "Almond Action Plan" was prepared by the GoT for 2013-2017. In the scope of this plan, eight million almond seedlings were planned to be planted within five years. However, implementation focused on increasing forested area rather than agricultural production. Weather conditions in the past three years have also limited the implementation of the plan.

The GoT also encourages producers to establish new orchards by allocating free land for 49 years, providing some interest-free financial support and financially supporting farmers registered in the "Farmers Registration System" for using certified seedlings in these orchards. Most of the current almond production has been from unstandardized seedlings which results in inconsistent yields and qualities.

As a result of these incentives and government support, the establishment of almond orchards has become popular in Turkey and the private sector has concentrated on establishing new almond orchards for commercial production in Izmir, Manisa, Mugla, Denizli, Urfa, Canakkale and Adiyaman Provinces. It is believed that these initiatives will increase the production of almonds in the future.

b. CONSUMPTION

Post forecasts that there will be a decrease in almond consumption to 30,000 MT in MY 2018/19 as a result of an increase in retail prices due to inflation and currency devaluation. Almonds are mainly consumed as snack food and limited amounts are used in the confectionary and cosmetics industries in Turkey. As with pistachios, the packaging of tree nuts, including almonds, has increased and about a third of tree nuts are sold as packaged.

Almond retail prices in Istanbul, Turkey are about 65 - 85 TL/kg $(10.44 - 13.65 \text{USD}^4/\text{kg})$ for both shelled roasted almonds and raw almonds, though prices vary by neighborhood.

c. TRADE

Turkey is a net importer of almonds and the United States continued to be the major global supplier of high quality almonds in MY 2017/18. Australia, Spain, Uzbekistan, and Iran are the other suppliers of almonds to Turkey.

As of January 1st, 2018, the <u>GoT lowered import tariffs</u> on almonds, walnuts, and cashews from 43.2 percent to 15 percent. Pistachio and pecan tariff rates were not reduced. However, on June 25th, 2018 <u>an additional 10 percent tariff was introduced</u> on U.S.-origin nuts (almonds, walnuts, pistachios, and pecans) as retaliation to the U.S. Government increasing the tariffs on Turkish steel and aluminum. On August 15th, 2018, the additional tariff was doubled to 20 percent.

The final import tax on almonds and walnuts from the United States is 35 percent on the cost, insurance and freight (CIF) value of the shipment as of August 2018, and is 15 percent for all other origins. There is still a demand for high quality almonds in the Turkish market and according to the sector, domestic production will not be able to meet this demand in MY 2018/19. However, due to an expected decrease in consumption as a result of increased prices in Turkey, Post forecasts that imports will decrease to 22,000 MT in MY2018/19.

Turkish customs also has a reference (oversight) price for nuts. If the CIF invoice value of the in-shell almond is at or below \$4,400 the tariff will be applied at \$4,400 per ton. If the per ton CIF invoice value

⁴ The exchange rate is 6.228 TL/USD as of August 28, 2018. For comparison, the rate was 4.625 TL/ USD as of June 1, 2018.

is greater than \$4,400 the tariff will applied at the actual CIF invoice value. The tariff for shelled almonds is based on a minimum CIF per ton value of \$6,900 or greater.

HS CODE	COMMODITY	OVERSIGHT VALUE ON CIF (USD/MT*)
080211	In Shell Almond	4,400 USD
080212	Shelled Almond	6,900 USD

^{*}Ton: Gross Weight

If almonds are imported in the scope of the Inward Processing Regime (IPR), importers do not pay tax if the almonds will be exported after it is processed, such as being shelled or packaged. Turkey's main almond export destinations are Middle East and North African countries (such as Iraq, Saudi Arabia, Libya, Tunisia and Algeria).

d. POLICY

As with other tree nuts, the GoT supports almond farmers who are registered in the "Farmers Registration System". Supports are announced by GoT in the middle of each calendar year. These supports are available to all farmers regardless of what they are planting.

GoT offered farmers the following supports for the year 2018:

- 100TL/da (16.06USD⁵/da) and 400 TL/da (64.23USD/da) respectively for the establishment of orchards that are planted with standard seedlings and certified seedlings
- 10TL to 100 TL /da (1.61USD/da to 16.06USD/da) for organic agriculture;
- 50 TL/da (8.03USD/da) for Good Agricultural Practices;
- 14 TL/da (2.25USD/da) for fuel and fertilizer.

 $^{^{5}}$ The exchange rate is 6.228 TL/USD as of August 28, 2018. The rate was 4.625 TL/ USD as of June 1, 2018, just as a comparison basis.

III. WALNUT

a. PRODUCTION

In MY 2018/19 Post expects about a nine percent increase in production to reach 63,000 MT. In the Marmara region of Turkey, where some of the good commercial walnut orchards are located, there was less rain than normal in fall 2017 and winter 2018, but spring and summer were rainy. Throughout the whole country, the rainfall in Irrigation Year 2017/18 was below the 10 year average, but was higher than last year. There was no reported frost in in the spring affecting walnuts.

Walnut trees, like almonds, are scattered throughout the country. They grow in almost every province of the country but commercial plantations of walnuts are relatively new to Turkey. The GoT has implemented programs to encourage increasing production of walnuts. There are good commercial orchards established in the last 10-15 years in the Thrace region, in the Sakarya and Kocaeli provinces (in the Marmara Region) and a few in the Adiyaman province in the Southeastern Region of the country. However, these are insufficient to meet the demand for high quality walnuts among Turkish consumers. GoT encourages producers to establish new walnut orchards by allocating free land for 49 years and some interest-free financial support and supports farmers who are registered in the "Farmers Registration System" for using certified seedling in these orchards. New orchards are established in many provinces by the private sector due to these incentives and high market prices. These new orchards are in the Aegean, Marmara, Southeastern Anatolia and Mediterranean regions. Chandler is becoming the most popular variety, due to consumer preference. However, some issues remain in terms of suitability of varieties to local conditions and reliability of certified seedlings.

Walnut has been the second most popular tree planted under MINFWA's Special Afforestation Projects, with around 30 percent of the total. However, in regions such as Central and Eastern Anatolia, many trees were planted in soils or locations which were not ideal for walnut production. Irrigation is mostly not available in these lands and delivering the water to the plots is costly, especially on slopes.

In order to increase domestic production, a "Walnut Action Plan" was prepared by the GoT for the 2012-2016. In the scope of this Plan, five million walnut seedlings were planned to be planted during this five year period. As with the Almond Plan, the implementation of the Walnut Plan focused on increasing forest area rather than agricultural production. Moreover, the Action Plan has not yet been fully implemented because of bad weather conditions. So far, around 3 million walnut trees were planted within this plan. Despite the increase of areas in walnut production due to the above-mentioned afforestation projects, walnut production has not increased significantly.

Until 1970, walnuts had been propagated only by seeds and therefore, until the last decade, it was very difficult to find established orchards of standard cultivars. However, the importance of propagation by grafting and budding is now understood and as a result, orchards of standard cultivars are becoming increasingly widespread. Currently, the major problem for walnut producers in Turkey is low yields. There is also great need for improved varieties. Yalova Horticulture Research Institute, which is located in the Marmara Region, is Turkey's leading walnut research facility and the developer of new varieties. Commercial production of the improved varieties developed by this institute has begun in Balikesir, Denizli, Bursa and Kahramanmaras provinces.

b. CONSUMPTION

The walnut consumption estimate for Turkey is 130,000 MT for MY 2018/19, down from 134,500 MT in MY2017/18, due to expected retail price increases linked with the depreciation of the Turkish Lira.

In Turkey, walnuts are commonly used in desserts, just like pistachios. Turkish desserts such as pestil and köme are made by combining walnuts with mulberries and grapes. Walnuts are also used in baklava, ice cream, halva production, cookies/cakes, breads/bakery, pastries, and in the dried fruit industry as well. The leaves and green shells are used as a pigment in Turkey. Walnut wood has been used for the furniture industry for many years.

Walnut consumption has increased significantly in recent years due to consumers understanding the health benefits and increased packaging of tree nuts, including walnuts. Most walnuts in the market are sold in bulk, in-shell. Turkish consumers purchase walnuts regularly and use them as an ingredient in everyday foods. Walnuts are the second most-purchased nut after hazelnuts.

Currently, walnut retail prices are above last year's prices in Istanbul (in terms of TL prices) at the beginning of the harvest due to the exchange rate of the U.S. dollar against the TL. Shelled walnuts are priced from 70 to 90 TL/kg (\$11.24 - \$14.50 USD⁶/kg) and in-shell walnuts are from 20 to 30 TL/kg (\$3.21 - \$4.82 USD/kg) varying by production and retail outlet.

c. TRADE

Depending on the year, around 45-55 percent of total walnut consumption is supplied through domestic production, and because of the strong demand for high quality walnuts in the Turkish market, the remaining amount is imported to meet the demand. The United States continues to be the major in-shell walnut supplier in MY 2017/18. After the United States, Chile, Uzbekistan, Ukraine, China, and Moldova were the other walnut suppliers, largely due to price and seasonality considerations. Traders agree that Turkey will continue to be an importer of walnuts due to high quality product demand by Turkish consumers. However, due to the depreciation of the lira against major currencies, Post forecasts a decrease in walnut imports ⁷ to 75,000 MT in MY 2018/19.

As with almonds, the import tariffs have changed for walnuts in 2018. As of January 1st, 2018 the import tariff of 43.20 percent has decreased to 15 percent on the CIF value of the shipment. However, in retaliation for the tariffs put on Turkish steel and aluminum by the United States, the GoT has put first a 10 percent extra tariff on all tree nuts imported from the U.S.A. and then another 10 percent was added. The final import tax on walnuts from the United States is 35 percent and is15 percent for all other origins.

Like almonds, walnuts also have a reference (oversight) pricing system at Turkish Customs. If the per ton CIF invoice value for in-shell walnuts is at or below \$3,500, the tariff will be applied to \$3,500 per ton. If the per ton CIF invoice value is greater than \$3,500 the tariff will be applied to the actual CIF invoice value per ton. The tariff for shelled walnuts is based on a minimum CIF per ton value of \$6,500 or greater. Traders prefer to import in-shell walnuts, though they import some shelled as well.

HS CODE	COMMODITY	OVERSIGHT VALUE ON CIF (USD/MT*)
080231	In Shell Walnut	3,500 USD
080232	Shelled Walnut	6,500 USD

^{*}Ton: Gross Weight

_

⁶ The exchange rate is 6.228 TL/USD as of August 28, 2018. The rate was 4.625 TL/ USD as of June 1, 2018, just as a comparison basis.

⁷ Note import figures for nuts are calculated by using export data from other countries, and this can include shipments to free trade zones within a country as well.

Turkey's processing industry has grown in recent years. Imports of both in-shell and shelled walnuts, and exports of shelled walnuts have increased substantially.

Importers can utilize the Inward Processing Regime (IPR) for walnuts that are imported to be further processed and exported to third countries. With the IPR, importers do not pay the import tariffs if they export the end product. U.S. walnuts imported under IPR tend to be processed and exported to Middle Eastern and African countries (Egypt, Saudi Arabia, Tunisia, Libya).

d. POLICY

The GOT supports walnut farmers who are registered in the "Farmers Registration System". Supports are announced by GOT in the middle of each calendar year.

GoT offered farmers the following supports for the year 2018:

- 100TL/da (16.06USD⁸/da) and 400 TL/da (64.23USD/da) respectively for the establishment of orchards that are planted with standard seedlings and certified seedlings
- 10TL to 100 TL /da (1.61USD/da to 16.06USD/da) for organic agriculture;
- 50 TL/da (8.03USD/da) for Good Agricultural Practices;
- 14 TL/da (2.25USD/da) for fuel and fertilizer.

⁸ The exchange rate is 6.228 TL/USD as of August 28, 2018. The rate was 4.625 TL/ USD as of June 1, 2018, just as a comparison basis.

IV. HAZELNUTS

Turkey is the largest producer and exporter of hazelnuts in the world, accounting for 75 percent of world production and around 70 percent of world exports.

In the Black Sea Region of Turkey where hazelnuts grown, in Irrigation Year 2017/18 there was a normal level of rain, though less than last year, so yields are expected to be only slightly impacted. Some diseases in Samsun Province, hail in July in Sakarya province, and too much rain in August 2018, adversely affected the yield. On August 8, 2018 there was a flood due to heavy rain in Ordu province where a lot of hazelnuts are grown. The hazelnuts that had been already harvested in the first week of the harvest and left for drying were destroyed. Reports indicate that many hazelnut trees were also affected by the flood and the storm. This will hurt next year's yields in Ordu province. Post forecasts hazelnut production at 600,000 MT in MY 2018/19, down from 700,000 MT last year.

Although hazelnuts are grown in more than 48 provinces around Turkey, production is primarily concentrated along Turkey's Black Sea coast. Hazelnut orchards are typically located within 30 km of the coast. In the western Black Sea area, the growing region starts from Zonguldak (east of Istanbul) and extends east along the entire Black Sea and the mountains until close to the Georgian border. There are approximately 500,000 producers and 4,000,000 people directly or indirectly employed by hazelnut production in Turkey, on an area of 650,000 - 700,000 hectares.

The Black Sea region is divided into three distinct growing areas: (1) The hilly region from Ordu to Trabzon, centered around Giresun, and east of Trabzon including Rize which in a normal year produces about 55 percent of the crop, (2) The flatter, mixed farming region west of Ordu to Samsun, which produces about 15 percent of the crop, and (3) The area west of Samsun, which produces the remaining 30 percent. Hazelnuts require relatively little effort to cultivate and inputs are low. Turkish hazelnuts usually ripen between early and late August, depending on the altitude of the orchard and climatic conditions. Hazelnuts are hand-picked from the trees and dried in the sun. Harvesting takes place during several weeks in August and September. Turkey produces around 650,000 MT of hazelnuts under normal weather conditions.

Both the GoT and private companies purchase hazelnuts from producers. About one third of the exports are carried out by Italian-owned Ferraro Hazelnut Company which also owns the brand Nutella. The company has purchased the largest Turkish trader and its Italian competitor in 2015 and became the largest hazelnut trader in Turkey. Approximately half of all exports are carried out by international companies. Most years, the Turkish Grain Board (TMO) purchases and stocks hazelnuts on behalf of the GoT. In addition, the Union of Hazelnut Agriculture Sales Cooperatives (FISKOBIRLIK) also purchases and stocks them to keep prices stable. Note that USDA does not maintain a Production, Supply and Distribution table for hazelnuts.

$\label{eq:variable_variable} \textbf{V. PRODUCTION, SUPPLY and DISTRIBUTION STATISTICS:} \\$

Pistachios, Inshell Basis	2016/2017		2017/2018		2018/2019	
Market Begin Year	Sep 2015		Sep 2017		Sep 2018	
Turkey	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted	0	0	0	0	0	0
Area Harvested	0	0	0	0	0	0
Bearing Trees	0	41400	0	42500	0	47700
Non-Bearing Trees	0	11900	0	17100	0	19400
Total Trees	0	53300	0	59600	0	67100
Beginning Stocks	8500	8500	0	10000	0	500
Production	155000	155000	0	80000	0	210000
Imports	9550	9550	0	16000	0	5000
Total Supply	173050	173050	0	106000	0	215500
Exports	6600	6600	0	5000	0	17000
Domestic	156450	156450	0	100500	0	176000
Consumption						
Ending Stocks	10000	10000	0	500	0	22500
Total Distribution	173050	173050	0	106000	0	215500
(HA), (1000 TREES), (MT	")					

Almonds, Shelled Basis	2016/2017		2017/2018		2018/2019		
Market Begin Year	Aug 20	Aug 2016		Aug 2017		Aug 2018	
Turkey	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	
Area Planted	0	0	0	0	0	0	
Area Harvested	0	0	0	0	0	0	
Bearing Trees	0	5950	0	6660	0	6810	
Non-Bearing Trees	0	4550	0	4960	0	5100	
Total Trees	0	10500	0	11620	0	11910	
Beginning Stocks	500	500	0	500	0	500	
Production	14000	14000	0	15000	0	16000	
Imports	28600	28600	0	26000	0	22000	
Total Supply	43100	43100	0	41500	0	38500	
Exports	7400	7400	0	8000	0	8000	
Domestic	35200	35200	0	33000	0	30000	
Consumption							
Ending Stocks	500	500	0	500	0	500	
Total Distribution	43100	43100	0	41500	0	38500	

(HA), (1000 TREES), (MT)

Walnuts, Inshell Basis	2016/2017		2017/2018		2018/2019	
Market Begin Year	Sep 20	16	Sep 2017		Sep 2018	
Turkey	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted	0	0	0	0	0	0
Area Harvested	0	0	0	0	0	0
Bearing Trees	0	7600	0	8150	0	8766
Non-Bearing Trees	0	5590	0	6800	0	7894
Total Trees	0	13190	0	14950	0	16660
Beginning Stocks	5500	5500	0	6800	0	3800
Production	63000	63000	0	58000	0	63000
Imports	105100	105100	0	80000	0	75000
Total Supply	173600	173600	0	144800	0	141800
Exports	7600	7600	0	6500	0	10000
Domestic Consumption	159200	159200	0	134500	0	130000
Ending Stocks	6800	6800	0	3800	0	1800
Total Distribution	173600	173600	0	144800	0	141800
(HA) ,(1000 TREES) ,(M	T)	1	1		1	