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**Report Number:** TU2024-0055

**Report Name:** Fresh Deciduous Fruit Annual

Country: Turkiye

Post: Ankara

**Report Category:** Fresh Deciduous Fruit

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## **Report Highlights:**

Turkiye's commercial apple production in MY 2024/25 is forecast to fall to a five-year low because of unusually dry and warmer weather conditions, which growers say is caused by climate change. Even though production is down, apple exports are forecast higher year-on-year and expected to be the third largest on record. In contrast to apples, commercial pear production is projected to reach a record as weather conditions were better in the key pear-growing areas. With higher production, pear consumption and exports are likewise forecast higher. Commercial grape production is projected higher than last year, but still below the long-term average because of losses resulting from mildew disease.

#### **APPLES**

## **Production**

For the MY 2024/25 season, commercial apple production is forecast at 4.0 million metric tons (MMT), which is down 13 percent from last year's newly revised estimate due to unfavorable growing conditions in the major apple-growing regions. Some industry contacts are predicting production will drop even lower, while the Turkish Statistical Institute's (TUIK) forecast is more optimistic than both industry and Post. Meanwhile, MY 2023/24 production was adjusted lower based on the latest official data.

Growers are blaming climate change for the drop in production. Warmer temperatures, dry weather conditions, and shortages of irrigation water were cited as the main culprits. The economic losses resulting from this drop in production and lower quality fruit will be a significant setback for many growers who continue to grapple with rising input costs for water, labor, and pest control products.

In the province of Isparta – the leading apple producing region in the country, accounting for a quarter of national production – winter temperatures in 2024 did not go below freezing (0 Celsius / 32 Fahrenheit) all winterlong, resulting in fewer winter buds and apples at harvest time. In addition, dry weather and shortages of irrigation water negatively impacted production. Water levels in Lake Egridir, the main source of irrigation water for the region, reached alarming low levels because of inadequate rainfall for the past few years. In response, the provincial government limited the use of irrigation water coming from the lake. As a result of this restriction, some orchards located further away from the lake could not get enough water, which stunted the size of the apples and made them too small to be sold in local or international markets. In addition, some of apples in the Isparta region were also damaged because of hail. These smaller and, in some cases hail-damaged apples, will be diverted to juice production.

These climactic impacts on this year's apple harvest disproportionately impacted smaller, traditional apple growers since they are generally unable to invest in modern agricultural technologies (e.g., shade coverings) to protect against some of these weather-related variables. Figure 1 shows apples trees from traditional orchards in the Isparta region; the apples are small and show signs of hail damage. By comparison, Figure 2 shows apples from a largescale commercial operation in the same region; the apples are noticeably larger, higher quality, and suitable for sale locally or abroad. The main reason for this visible difference in the size and quality of the apples is the technologies being used on these larger, more modern operations.

Figure 1. Traditional Apple Orchards in Turkiye





Source: FAS, Istanbul, 2024

For the last decade, Turkiye's apple production has generally been trending upward as growers have invested in modernizing their operations, introduced the latest growing techniques and innovations, and have started planting higher-yielding trees (Figure 2). For example, larger growers have invested in modern, two-dimensional orchards where they are using drip irrigation systems, shade covers to protect the apples from hail and sun damage, harvest machines, and fans to protect apple blossoms from frost damage. These investments have enabled Turkiye to produce larger volumes of high-quality apples, a large share of which are going for export.

While investments have been made to modernize Turkiye's apple production industry, traditional low-yielding orchards are still common. These traditional orchards are less efficient and produce smaller, lower quality apples compared to the larger, more modern operations. Some of these traditional growers are interested in modernizing their operations but are unable to do so because of high startup costs.

Figure 2. Two-Dimensional Apple Orchard in Turkiye





Source: FAS, Istanbul, 2024

With its diverse geography and climate, Turkiye produces hundreds of varieties of apples, but only a few of these are marketed commercially. The main varieties are Starking, Golden, Amasya, and Granny Smith, which collectively accounted for nearly three-quarters of total production in MY 2023/2024. Starking (a cousin of the Red Delicious apple) is the most popular variety, making up about 38 percent of total production or about 1.73 MMT (Figure 3), with the Golden variety being the second most popular at almost 1.1 MMT. The production of these two varieties have shown notable increases over the last decade owing to export demand.

In addition to the top apple varieties, the production of other apple varieties over the last five years, especially red and sweet apple varieties, has grown by 25 percent (Figure 3). These varieties include Starkrimson, Scarlet Spur, Pink Lady, and Red Chief. The main reason for this increase is growing export demand from India and Middle Eastern countries.

<sup>1</sup> http://www.turktarim.gov.tr/Haber/368/en-cok-starking-ve-golden-uretiyoruz

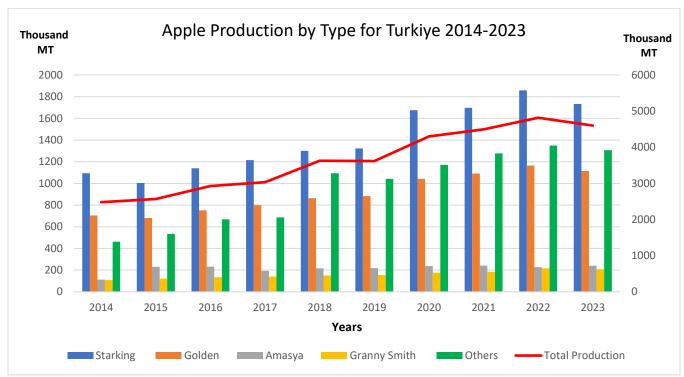


Figure 3. Turkiye Apple Production by Type 2014-2023 (MT)

Commercial apple orchards are largely concentrated in the central Anatolia and Mediterranian regions in the southwestern part of Türkiye. As shown in Figure 4, approximately 53 percent of all commercial apple production comes from three provinces: Isparta, Karaman, and Nigde. Isparta is the largest apple producing province with about 1.2 MMT of apples annually. Karaman, a major source of export production, is the second largest apple producing province with 750,000 MT of production. In response to growing domestic and export opportunities, growers in apple-producing areas have switched to producing more profitable and higher-yielding apple varieties.

Figure 4. Top Apple Producing Provinces in Turkiye

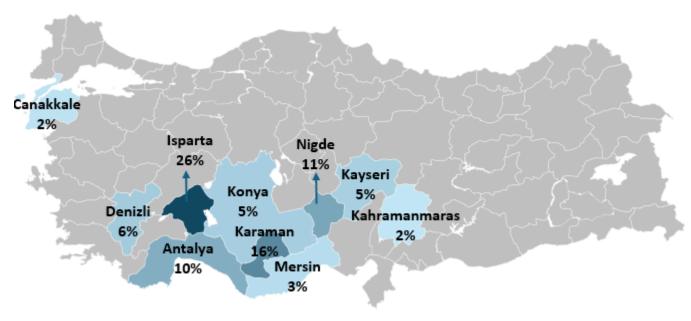
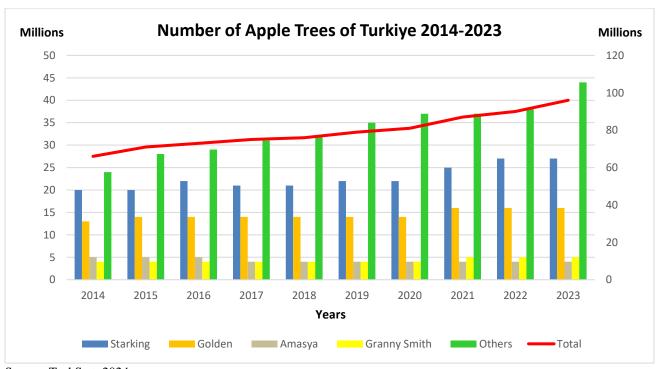


Figure 5. Number of Apple Trees for Turkiye 2014-2023 (Millions)



Source: TurkStat, 2024

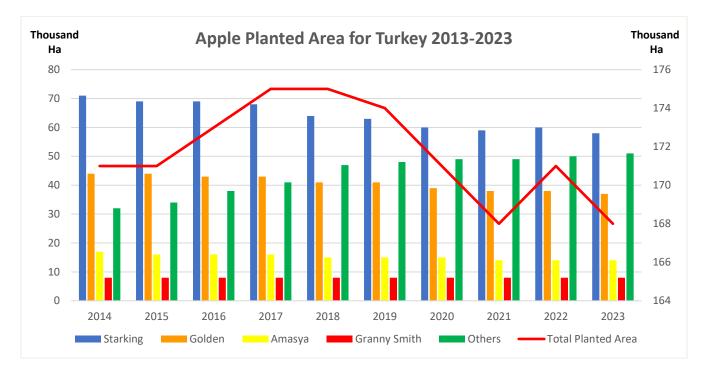


Figure 6. Planted Area of Apple Trees for Turkiye 2014-2023 (Thousand Ha)

# Consumption

Apple consumption in MY 2024/25 is forecast at about 3.8 MMT, down year-over-year because of the decline in domestic production. The apple consumption estimates for MY 2023/24 was adjusted slightly lower due to a downward revision to production for this period.

Apples are one of the most preferred fresh fruits in Turkiye due to their widespread availability, traditional use, and large number of varieties. Annual per capita consumption of apples is estimated at 30-35 kg. Approximately 55-60 percent of apple production is consumed as fresh fruit, with consumers generally preferring to eat Starking, Golden, Amasya, and Granny Smith varieties. About 35-40 percent of apple production is processed into juice, canned products, vinegar, or dried products. About 5-10 percent of production is exported as fresh produce.

For MY 2024/25, Post predicts that more apples will be used for juice production because there is smaller sized, lower quality fruit resulting from suboptimal growing conditions. Smaller growers hired fewer pickers to help with the harvest because of the high cost of labor and the low returns expected from selling the apples for juice. Rather than picking apples from the tree by hand, pickers used the shake-and-catch method to collect the fallen fruit from the ground.

With the use of modern, temperature-controlled storage facilities, apples can be stored and marketed throughout the year. Current cold storage capacity in Turkiye is more than  $1.0 \, \text{MMT}$  and increasing yearly with new investments. Isparta province – the leading apple producing province in Turkiye – is

home to many cold storage facilities for apples and other fruits. Other apple and fruit-growing regions across the country are also investing in expanding their cold storage capacity.

As of November 2024, the average retail price for Golden and Gala apples is about 40 Turkish Lira (TL)/kg (\$1.17), Starking and Fuji apples is about 45 TL/kg (\$1.31), while Granny Smith apples retailed higher at 60 TL/kg (\$1.75). The exchange rate in November is \$1=34.27 TL.

#### **Trade**

Apple exports for MY 2024/25 are forecast nearly unchanged from last year at 320,000 MT. While apple production is forecast to fall, Post does not expect a corresponding drop in exports since most of the apples for export are coming from large-scale commercial operations which were less impacted by the adverse growing condition. This prediction assumes steady demand from Turkiye's top export markets.

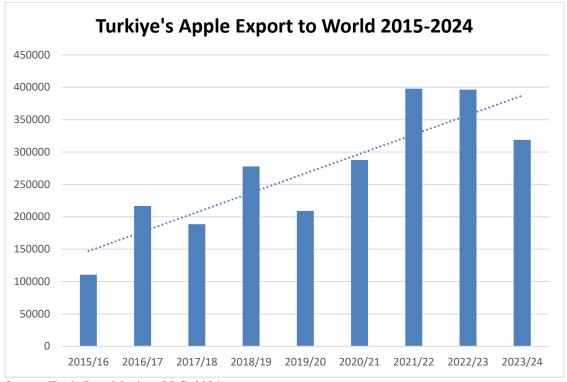
In MY 2023/24, Turkiye's top export destinations were India, Iraq, Libya, Russia, Syria, and Saudi Arabia (Table 1). In the last few years, Türkiye's apple exports to India have really taken off, climbing from about 30,000 MT in MY 2018/19 to almost 130,000 in MY 2023/24. India has been Turkiye's top export market for two consecutive years. Red Delicious apples are the leading variety being exported from Turkiye to India.

With this increase in sales to India, Turkish apples are now competing head-to-head with U.S. apples in the Indian market (Figure 8). India's decision last year to remove its 20 percent retaliatory tariff on U.S. apples helps even the playing field and will make U.S. apples more competitive with Turkish apples. <sup>2</sup> This increased competition could result in lost market share for Turkish apples in the Indian market.

Türkiye's apple export volumes have increased 10 times over the last decade as growers have adapted their operations to capitalize on growing export opportunities (Figure 7). Proximity to export markets and competitive prices have also helped fuel Turkish apple exports.

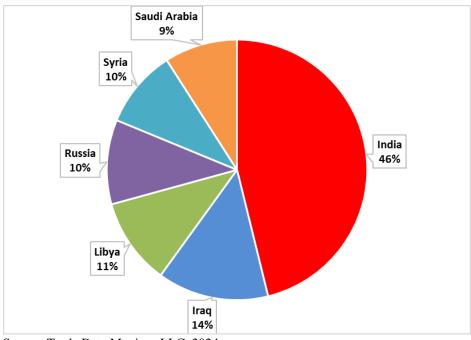
<sup>2</sup> https://fas.usda.gov/data/india-success-story-india-cuts-retaliatory-tariffs-us-almonds-apples-walnuts-chickpeas-lentils

Figure 7. Apple Export of Turkiye 2015-2024 (MT)



Source: Trade Data Monitor, LLC, 2024

Figure 8. Turkiye's Top Export Destinations for Apple by Volume as a Percentage (2023-2024)



Source: Trade Data Monitor, LLC, 2024

Table 1. Turkiye's Top Fresh Apple Export Destinations 2019-2024 (MT, HS 080810)

Partner	Year Ending: June (Metric Ton)							
	2019/20	2020/21	2021/22	2022/23	2023/24			
India	29,055	67,573	110,765	117,801	129,167			
Iraq	37,196	34,039	53,625	77,429	38,674			
Libya	15,741	30,534	49,650	37,450	30,087			
Russia	40,132	60,707	73,081	54,492	29,352			
Syria	31,639	45,770	61,758	43,386	27,172			
Saudi Arabia	8,801	2,652	0	23,585	25,371			
Total	209,072	287,602	397,963	396,326	318,749			

Source: Trade Data Monitor, LLC, 2024

#### **Pears**

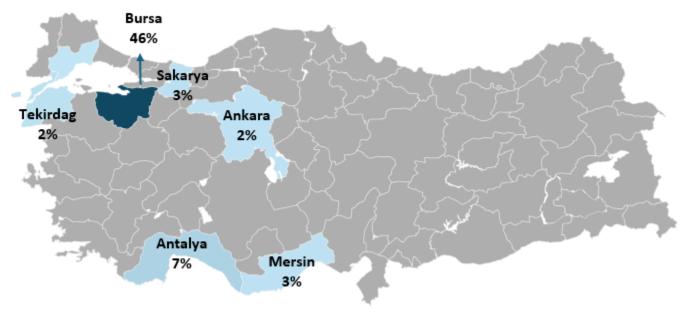
#### **Production**

For the MY 2024/25 season, commercial pear production is forecast at a record of 600,000 MT, up about 12 percent from last year's newly revised figure due to good weather conditions in pear-growing regions. (Note: several of the major pear-growing provinces located in the northern part of the country weren't impacted as much by the negative weather conditions experienced in the apple growing regions in the south-central part of the country.) Turkiye's pear harvest generally starts around July and continues through October.

Overall pear production has increased by 15 percent over the last five years, which is mostly due to increasing demand from foreign export markets, especially Russia, Iraq, and Romania. In response to strong export demand, Turkish pear growers in recent years have invested in new orchards and uprooted non-commercial varieties, replanting those areas with fruit suitable for export markets.

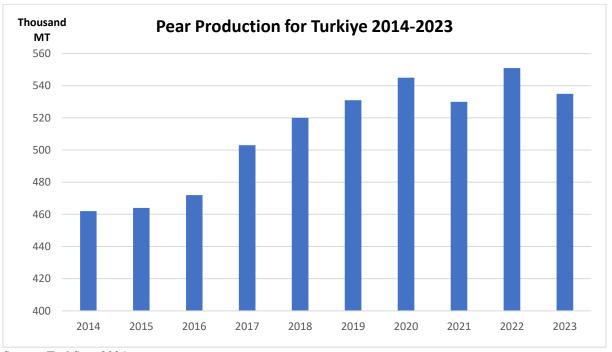
There are many different pear varieties grown in Türkiye, such as Santa Maria, Akca, Mustafabey, Cassia, Williams, Ankara, and Deveci. Almost 50 percent of the production is concentrated in the northern, southern, and western coastal areas of Türkiye, especially in the Marmara, Aegean, and Mediterranean regions (Figure 9).

Figure 9. Top Pear Producing Provinces in Turkiye



Source: Tuik,2024

Figure 10. Pear Production of Turkiye 2014-2023 (MT)



Source: TurkStat, 2024

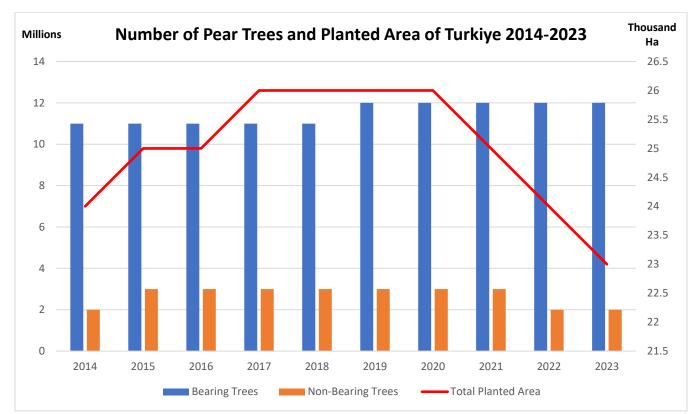


Figure 11. Number of Pear Trees and Planted Area in Turkiye 2014-2023 (millions, thousand ha)

## Consumption

Pear consumption in MY 2024/25 is forecast up year-over-year to 540,100 MT due to the projected increase in domestic production. About 90 percent of pears are consumed fresh, 3-5 percent are exported, and the remainder are canned. The preferred varieties are Santa Maria (30 percent), Deveci (20 percent), Ankara (10 percent), Williams (10 percent), Keiffer (5 percent), and Akca (5 percent). The rising number of cold storage facilities in Turkiye helps to provide pears and other fresh fruit to consumers throughout the winter. Annual pear consumption is 5 kg per capita.

As of November 2024, the average retail price for a kilogram of Santa Maria and Margaret pears is 60 TL/kg (\$1.75). Deveci pears are retailing for a little less at 55 TL/kg (\$1.61). The exchange rate in November is \$1=34.27TL.

#### **Trade**

Pear exports for MY 2024/25 are forecast higher than last year at 80,000 MT due to an increase in domestic production. In MY 2023/24, Turkiye exported almost 60,000 MT of pears. Russia was the leading export destination, accounting for about one-third of total export volumes. Other leading export destinations for Turkish pears were Iraq and Romania (Table 2).

Table 2. Turkiye's Top Fresh Pear Export Destinations 2019-2024 (MT, HS 080830)

	Year Ending: June (Metric Ton)							
Partner	2019/20	2020/21	2021/22	2022/23	2023/24			
Russia	18,219	28,170	34,468	31,349	20,712			
Iraq	12,770	17,100	17,573	24,195	7,707			
Romania	5,745	7,579	7,252	5,784	5,252			
Israel	1,693	2,461	7,326	5,445	2,784			
Bulgaria	1,370	2,014	3,107	2,067	2,273			
Germany	1,130	1,566	2,102	1,799	2,182			
Total	50,865	73,317	94,258	89,101	59,584			

Source: Trade Data Monitor, LLC, 2024

## **Table Grapes**

#### **Production**

Commercial table grape production for MY 2024/25 is forecast at about 1.9 MMT, which is slightly higher from last year's newly revised estimate but still below the long-term average due to the continued effects from downy mildew disease. Some industry contacts are predicting grape production will drop even lower, while the Turkish Statistical Institute's (TUIK) forecast is more optimistic than both industry and Post. Meantime, the MY 2023/24 production estimate is revised slightly downward based on the latest TUIK data.

Grapes are a major commercial crop and grown throughout Türkiye as shown in Figure 12. In MY 2023/24, about 4.0 MMT of grapes – all uses – were produced. About 53 percent were table grapes, 38 percent were raisin grapes, and 9 percent for wine (Figure 12). Figure 14 shows grape production by use over the last decade. For information on raising production, please refer to <u>Turkiye Raisins Update</u> (<u>TU2024-0031</u>).

Figure 12. Distribution of Grape Production of Turkiye, 2023

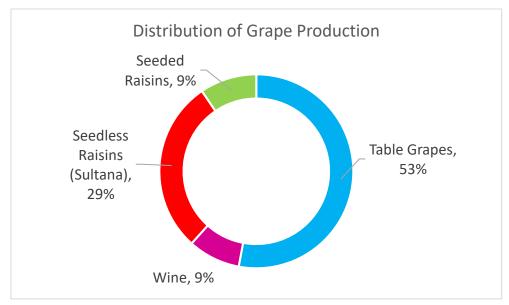
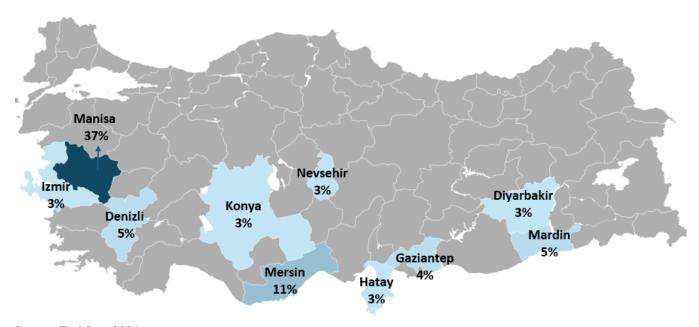


Figure 13. Location of the Top Grape Producing Provinces in Turkiye



Source: TurkStat, 2024

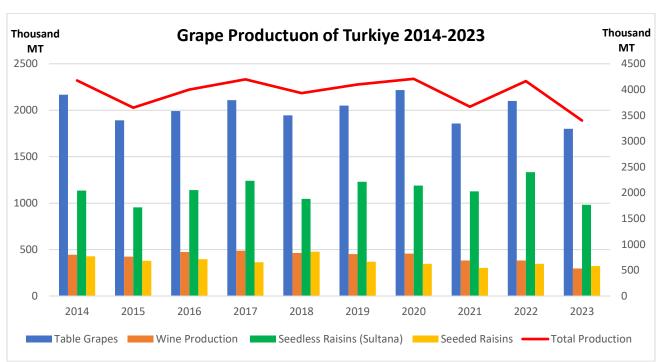


Figure 14. Grape Production in Turkiye by Use 2014-2023 (MT)

As shown in Figure 15, Turkiye's total grape production area is around 380,000 hectares (ha), with table grapes accounting for the largest percentage of the planted area. The table grape planted area has been trending downward for the last six years as growers switch to higher-yielding varieties.

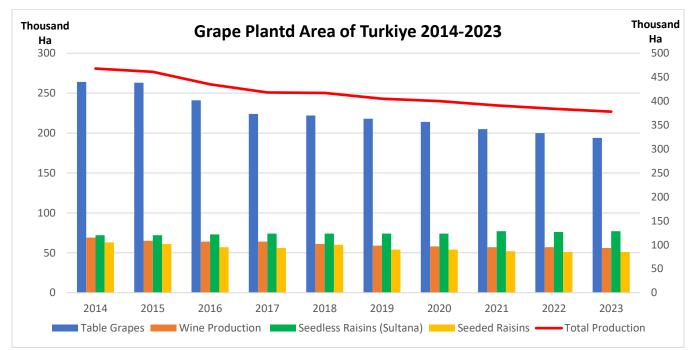


Figure 15. Planted Area of Grapes by Type for Turkiye 2014-2023 (Thousand Ha)

## Consumption

Table grape consumption for MY 2024/25 is forecasted at a little more than 1.8 MMT due to a slight increase in production. The MY 2023/24 consumption estimate is revised downward to almost 1.8 MMT, based on adjusted in official production numbers.

In MY 2023/24, almost half of Türkiye's total grape production was consumed as fresh table grapes and about 38 percent was dried and sold as raisins, including seedless Sultanas which are primarily exported. The remainder was processed, primarily as molasses (3 percent) and wine (9 percent). Fresh grapes are seasonal and are available throughout the summer until the middle of autumn. Annual consumption of all grapes is around 35 kg per capita.

As of November 2024, the average retail price for a kilogram of table grapes was 50 TL (\$1.46).

#### **Trade**

For MY 2024/25, table grape exports are forecast higher year-over-year at 150,000 MT due mainly to an increase in domestic grape production. In 2023/24, table grape exports reached nearly 142,000 MT. Russia was the top export destination, followed by Ukraine and Poland (Table 3).

Table 3. Turkiye's Top Table Grape Export Destinations 2019-2024 (MT, HS 080610)

	Year Ending: May (Metric Ton)							
Partner	2019/20	2020/2021	2021/22	2022/23	2023/24			
Russia	102,305	116,263	129,440	145,360	78,623			
Ukraine	31,165	35,757	50,395	22,133	19,126			
Poland	7,758	6,964	4,220	2,721	8,402			
Romania	2,703	6,027	8,477	6,657	5,384			
Belarus	10,610	7,723	20,254	6,703	4,857			
Saudi Arabia	9,987	5,165	0	8,741	4,206			
Total	205,708	214,557	263,568	227,171	141,905			

Source: Trade Data Monitor, LLC, 2024

## **Deciduous Fruit Policy**

In recent years, Turkish farmers have invested in new deciduous fruit orchards thanks to stable export demand and government support payments. Deciduous fruit growers, who are registered in the government's Farmer Registration System (CKS), are eligible for basic subsidies to offset some of the cost of fuel and fertilizer, as shown in Table 4. The government also provides support payments for growers using certified saplings and seedlings. For reference, the government of Türkiye (GoT) allocated about \$2.66 billion in subsidy payments in 2024 to support overall agricultural production. However, a line-by-line breakout of this amount that ends up going to deciduous fruit growers is unavailable.

While support payments to growers have increased in recent years, the cost of inputs is rising at a faster rate and undermining the effectiveness of these payments. According to TUIK statistics, the prices for fertilizer and fuel in October jumped year-over-year by 26 and 51 percent, respectively, compared to the same month a year ago. In addition, even though farmgate prices for deciduous fruits continue to climb higher, these increases are not keeping pace with rising input costs. Consequently, some growers, especially smaller-scale operations that only sell fruit on the local market, are struggling financially to turn a profit.

In recent years, to address the effects of climate change on the country's agricultural sector, Turkish authorities have implemented different measures, such as limits on producing water-intensive crops in water scarce areas. The government is reportedly also considering new laws and regulations to promote sustainable agriculture practices across the full spectrum of row crops, tree nuts, fruits, and vegetables. While the status and specific details of this pending legislation are unknown, the government is expected to impose limits on the number of new orchards of deciduous fruits and control water use in areas suffering from water shortages.

Table 4. Subsidies given by GoT to Deciduous Fruit Growers

Subsidies for Deciduous Fruit Growers									
Subsidy Type 2019 2020 2021 2022 2023									
Soil analysis (TL/da)	0.8 (\$0.16)	0.8 (\$0.14)	0.8 (\$0.11)	1 (\$0.09)	1 (\$0.06)				
Fertilizer support (TL/da)	4 (\$0.83)	4 (\$0.70)	8 (\$0.57)	21 (\$0.9)	21 (\$1.26)				
Fuel support (TL/da)	10 (\$2.09)	15 (\$1.76)	17 (\$2.14)	62 (\$1.92)	86 (\$3.73)				
Exchange rates	1\$/5.68 TL	1\$/7 TL	1\$/8.86 TL	1\$/16.58 TL	1\$/24.01 TL				

Source: Turkiye Ministry of Agriculture and Forestry, 2024

Imports of fresh apples, pears, and table grapes are negligible given domestic production volumes and high import duties. Tariffs on these fruits are provided in Table 4. Turkiye is also a major producer and exporter of juice.

Table 5. Import Duties for Fresh Apples, Pears, and Table Grapes, December 2023

Product	Tariff Code	Duty (percent)
Fresh Apples	0808.10	60.3
Fresh Pears	0808.30	60.3
Fresh Table Grapes	0806.10	54.9

Source: Official Gazete

# Production, Supply, and Distribution (PS&D) Tables (MT)

Apples, Fresh	2022/2	023	2023/2	2024	2024/2	2025
Market Year Begins	Jul 20	22	Jul 2	023	Jul 20	)24
Turkiye	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted (HA)	170000	170000	171000	167000	0	170000
Area Harvested (HA)	170000	170000	171000	167000	0	170000
Bearing Trees (1000 TREES)	75913	75913	76000	80000	0	85000
Non-Bearing Trees (1000 TREES)	14165	14165	14200	16000	0	20000
Total Trees (1000 TREES)	90078	90078	90200	96000	0	105000
Commercial Production (MT)	4817500	4817500	4700000	4600000	0	4000000
Non-Comm. Production (MT)	150000	150000	150000	150000	0	150000
Production (MT)	4967500	4967500	4850000	4750000	0	4150000
Imports (MT)	500	1000	500	367	0	400
Total Supply (MT)	4968000	4968500	4850500	4750367	0	4150400
Domestic Consumption (MT)	4571600	4572153	4535500	4431618	0	3830400
Exports (MT)	396400	396347	315000	318749	0	320000
Withdrawal From Market (MT)	0	0	0	0	0	0
Total Distribution (MT)	4968000	4968500	4850500	4750367	0	4150400
(HA), (1000 TREES) ,(MT)						

OFFICIAL DATA CAN BE ACCESSED AT: PSD Online Advanced Query

Pears, Fresh	2022/2	2023	2023/	2024	2024/2	2025	
Market Year Begins	Jul 20	)22	Jul 2	023	Jul 20	)24	
Turkiye	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	
Area Planted (HA)	23700	23700	23000	22700	0	23000	
Area Harvested (HA)	23700	23700	23000	22700	0	23000	
Bearing Trees (1000 TREES)	11554	11554	11550	12340	0	12500	
Non-Bearing Trees (1000 TREES)	2480	2480	2300	2366	0	2400	
Total Trees (1000 TREES)	14034	14034	13850	14706	0	14900	
Commercial Production (MT)	551000	551000	540000	534513	0	600000	
Non-Comm. Production (MT)	20000	20000	0	20000	0	20000	
Production (MT)	571000	571000	540000	554513	0	620000	
Imports (MT)	300	331	100	160	0	100	
Total Supply (MT)	571300	571331	540100	554673	0	620100	
Domestic Consumption (MT)	482200	482211	485100	495089	0	540100	
Exports (MT)	89100	89120	55000	59584	0	80000	
Withdrawal From Market (MT)	0	0	0	0	0	0	
Total Distribution (MT)	571300	571331	540100	554673	0	620100	
(HA) ,(1000 TREES) ,(MT)							

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Grapes, Fresh Table	2022/2	2023	2023/	2024	2024/2	025
Market Year Begins	Jun 2	022	Jun 2	023	24	
Turkiye	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted (HA)	384000	384000	380000	378000	0	370000
Area Harvested (HA)	384000	384000	380000	378000	0	370000
Commercial Production (MT)	2099859	2099859	1780000	1799000	0	1875000
Non-Comm. Production (MT)	120000	120000	120000	120000	0	120000
Production (MT)	2219859	2219859	1900000	1919000	0	1995000
Imports (MT)	4800	300	600	300	0	300
Total Supply (MT)	2224659	2220159	1900600	1919300	0	1995300
Fresh Dom. Consumption (MT)	1997259	1992764	1760600	1777395	0	1845300
Exports (MT)	227400	227395	140000	141905	0	150000
Withdrawal From Market (MT)	0	0	0	0	0	C
Total Distribution (MT)	2224659	2220159	1900600	1919300	0	1995300
(HA) ,(MT)						

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# **Attachments:**

No Attachments