FEDERATION OF FOOD & DRINK
INDUSTRY ASSOCIATIONS OF TURKEY

TOWARDS 2023
ALCOHOLIC BEVERAGE SECTOR

Its Evaluation in Terms of Agriculture and Foreign Trade Ecosystem

Our country has a huge potential in terms of alcoholic beverage production due to its geographical location and agricultural richness. However, this potential cannot be evaluated at the level it deserves. This report includes the challenges faced by the sector and solutions that can guide all stakeholders.

TGDF June 2021

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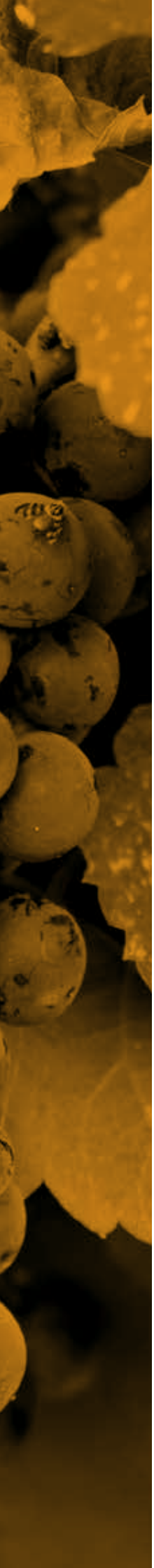

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PRESENTATION

The history of the first beer produced from barley, found in the western regions of Iran, dates back to 3000 BC. This geography has been producing Alcoholic Beverages for thousands of years.

Our country has a huge potential in terms of alcoholic beverage production due to its geographical location and agricultural richness. However, this potential is never evaluated at the level it deserves.

The alcoholic beverage sector represents a very high value-added chain that provides significant income to countries. This report you are reading presents the challenges and solutions in this value chain from farm to export.

We believe that the information contained in our report will guide all stakeholders, including public authorities, in their work, and will lead the Turkish Alcoholic Beverages Industry to reach the position it deserves in the world markets.

We would like to thank everyone who contributed to the preparation of this report, especially our esteemed academicians, Dr. Onur Terzi and Assoc. Dr. Cenker Göker.

MARKET SIZE

1. Worldwide Alcoholic Beverages Market size

IN 2020 **1.58 Trillion $**

IN 2024 **1.75 Trillion $**

EXPORT

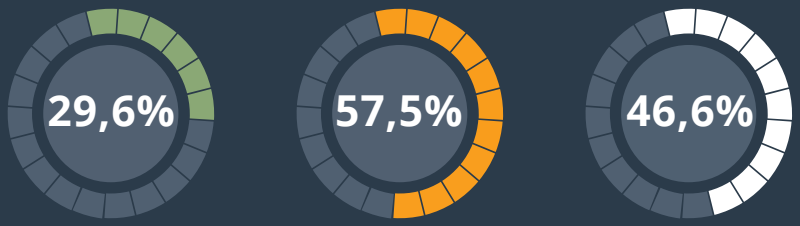
2. World Alcoholic Beverages Export Market Size

IN 2020 **88,2 billion $**

Turkey's share in the world export market **0.12 %**

SECTOR CAPACITY

3. Capacity utilization rates of the alcoholic beverage sector in Turkey



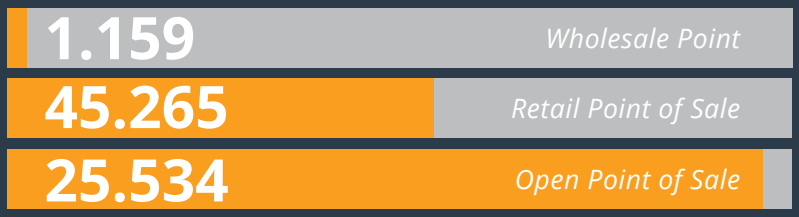
Distilled Alcoholic Beverages Sector

Beer Sector

Şarap Sektörü

SALES POINTS

4. Alcoholic beverage Sales Points in Turkey



ILLEGAL PRODUCTION AND SCT

5. Illegal Production and SCT Loss

The amount of distilled alcoholic beverage produced in 2019 only:

20 milyon liters

SCT loss due to illegal production in 2019:

1.5 billion TL

Dr. ONUR TERZİ

In this report prepared on the Alcoholic Beverages sector, we tried to reveal the situation of the sector both in the world and in our country, and the relationship of the large ecosystem formed by agriculture, tourism, and foreign trade with the Alcoholic Beverages sector on the way to 2023. In addition, we have shown with numerical data how the sector will look in the coming years, depending on the relationship of the sector with agricultural production and the importance of the support it gives to the agricultural sector. Moreover, we tried to convey the problems experienced by the sector regarding SCT and illegal production from different perspectives. We would like to thank especially the Turkish Food and BEVERAGE Federations management and sector representatives who supported us during the preparation of this report. I hope that the prepared report will be beneficial for our country's economy and the sector.

After graduating from Ege University, Faculty of Agriculture, Department of Dairy Technology in 2003, he started his career by working in food and technology companies. He completed his master's degree in agricultural economics in 2006 and went to Italy for his doctorate. During this period, he worked in the fields of sales and marketing in the private sector. He stepped into the financial sector in 2008. Until 2013, he worked in agricultural banking field teams and had the chance to get to know the agricultural sector end-to-end. In this process, he carried out both his private sector career and his academic career together. Throughout his career, he has specialized in agricultural finance, marketing and digital transformation. He worked in the execution and implementation of many projects in these areas. He especially developed projects for value chain financing and the application of financing technologies to the agricultural sector. In 2020, he received the title of doctor of agricultural economics with his doctoral thesis in the field of agricultural finance. He still continues his career in the private sector.

Assoc. Prof. Dr. CENKER GÖKER

One of the main differences between developed and developing economies is that while developed economies are on the corners of production and export, developing economies strive for the production and export of new products. Agricultural products come to the fore again with the effect of the increasing world population in an effort to find new products and new export areas. Our country's orientation to agricultural products with high added value will increase agricultural employment, the profitability of existing enterprises and therefore the taxes they will pay, and it will also make a significant contribution to closing the current account deficit. This report, which examines the impact of high value-added agricultural-based products on the creation of a developed agricultural economy, proposes a perspective for our country to be even more successful.

Assoc. Prof. Dr. Cenker GÖKER graduated from Ankara University Faculty of Law in 2001. In his university career, which he started after his internship at Ankara Bar Association, he gave lectures at leading universities in Turkey, as well as being a visiting researcher in Germany and the United States. In addition to his master's and doctorate degrees in tax law, he has an associate professorship in financial law. He has been working in the field of financial law for over 20 years. He is still working as a lecturer at Ankara University Faculty of Law, Department of Financial Law. He continues his studies in the field of financial law with dozens of articles and books, as well as his doctoral thesis titled "Directional Taxation", which states that taxation can be used as a tool for the fulfillment of public policies in economic and social issues beyond providing financial resources to the state.

EXECUTIVE SUMMARY

In Turkey, the Alcoholic Beverages sector is one of the most important sectors that transforms raw materials from the agricultural sector into high value-added BEVERAGEs and contributes to the tourism sector and SCT income from domestic consumption in this process. In other words, the Alcoholic Beverages Sector is one of the most important components of the value chain that starts from the field, transforming agricultural products such as grapes, barley, anise, and hops produced by thousands of farmers every year into high value-added BEVERAGEs. It is estimated that more than 50 thousand farmer families in Turkey produce for the alcoholic beverage sector. Companies operating in the alcoholic beverage sector support the agricultural sector with both contracted production practices and activities aimed at improving agricultural production.

Alcoholic Beverages produced in Turkey are offered for sale at more than 45 thousand retail and wholesale points and more than 25 thousand open sales points (hotel/restaurant). As can be seen, the alcoholic beverage sector connects thousands of farmers and a large organization consisting of thousands of sales points on the purchasing side of agricultural products. The capacity utilization rate in the sector, which has an annual production capacity of nearly 2 billion liters as of 2019, is 54% on average. The development of this ratio means the development and support of the entire value chain. In this way, many more

farmer families will have the chance to participate in production, and wider sales opportunities will emerge in both domestic and foreign markets, especially in tourism. On the other hand, the annual capacity of 2 billion liters reached by the sector shows both the investments made in this field and the production power of the sector.

The Alcoholic Beverages sector in Turkey creates an income effect on the country's economy through 3 channels. Chief among these are the purchases of raw materials from the agricultural sector, and the contribution of sales made in the tourism and foreign trade channels to the turnover of enterprises and the SCT tax on sales made in the domestic market draw attention as other income effects. The development and growth of the sector directly affects the impact of these 3 important factors on the country's economy.

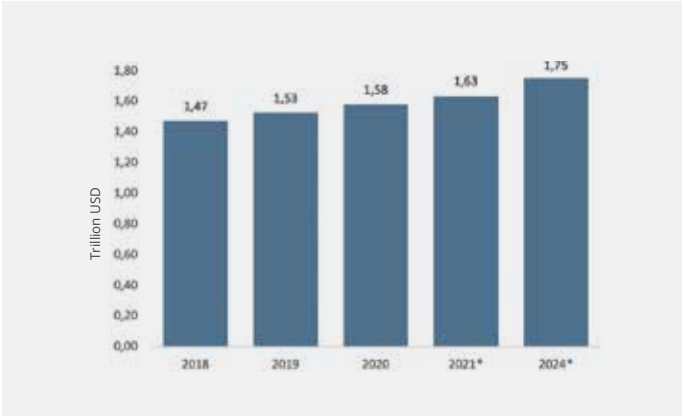
The global Alcoholic Beverages market is expected to reach a volume of 1.75 trillion dollars in 2024, and the foreign trade of Alcoholic Beverages is predicted to exceed 100 billion dollars. Turkey's share in the world's Alcoholic Beverages foreign trade is almost one in a thousand. However, Turkey has the potential to get a much higher share in the field of foreign trade with its wide plains, very large vineyards, and fertile lands. However, the increase in exports is directly dependent on the awareness of the country and therefore the recognition of the Alcoholic Beverages produced by Turkey. For this reason, a series of flexibility is needed for promotion and awareness in the tourism sector. Because Turkey is the fourth country in Europe that hosts the most tourists. Thanks to the contribution of the tourism sector to the promotion, the awareness of the country will increase, and in this process, Turkey's foreign trade volume will expand, and a very strong sector that uses domestic resources and has a current account surplus will emerge. There are Alcoholic Beverages that reach billions of dollars in brand value worldwide. From this point of view, it is understood that Turkey has the potential to create such strong brands with effective promotions through fairs and Turkish Trade Centers.

Turkey ranks 136th out of 191 countries in per capita alcohol consumption and is therefore in the category of countries with very low alcohol consumption. On the other hand, the high selling prices of Alcoholic Beverages in recent years have led to an increase in informal production. Especially after 2016, the amount of ethyl alcohol supplied to the market exploded, and in the same period, kits and products related to home BEVERAGE production were launched. Due to the high price, there was a great increase in the production of illegal BEVERAGE production and 796 thousand liters of illegal BEVERAGE production were seized in 2019 alone. However, according to the reports of the Court of Accounts, it was noted that ethyl alcohol, which was put on the market in 2019, was used in the production of 20 million liters of distilled Alcoholic Beverages (raki, vodka, etc.) and caused a SCT loss of 1.56 billion TL for 2019 due to illegal production. Re-regulation of SCT rates for both reducing illegal production and a balanced domestic consumption will make a great contribution to the sector. In this context, it would be a reasonable system to increase the targeted inflation rate once a year instead of the beginning of summer, when the peak season of the alcoholic beverage market begins. It is thought that the best period for the regulation of SCT rates is March or September, due to seasonality stemming from both the tourism season and agricultural production. While a developing alcoholic beverage sector will allow more farmer families and agricultural land to contribute to production, it will assume a role that gives current account surplus and earns foreign exchange with the steps to be taken towards foreign trade.

1

THE MARKET OF ALCOHOLIC BEVERAGES IN THE WORLD

1.1 General View



Source: Alcoholic Beverage Market Insights, Trends, Opportunity & Forecast 2021

Figure 1 1
Projected development of the alcoholic beverage market between 2018 and 2024 (trillion dollars)

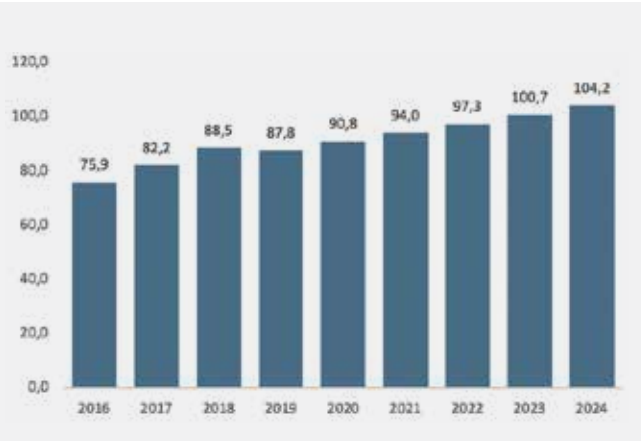
The worldwide Alcoholic Beverages market has exceeded the 1.58 trillion dollar market size limit as of 2020. Especially after 2018, the increase in the variety of Alcoholic Beverages caused the market to grow faster than expected, and the market size is expected to reach 1.75 trillion dollars in 2024.

The alcoholic beverage industry includes beer, wine, distilled Alcoholic Beverages. Many companies operating in the industry have brands spanning multiple subsectors. With the increase in the number of consumers trying to limit their alcohol intake in recent years, companies in the sector have started to offer low alcohol product types. In this way, the general production capacity of the sector increases and it paves the way for the development of the agricultural sector, which is a raw material provider. The growth of the sector also makes a positive contribution to the packaging industry and thus supports employment.

Beer is the most consumed alcoholic beverage worldwide. Global production is at the level of 1.9 billion hectoliters. China comes first in production, followed by the USA. In 2020, brands such as Budweiser, Heineken and Stella Artois in particular stand out as leading brands worldwide.

The global wine market, on the other hand, is predominantly managed by the 3 largest producing countries, Italy, Spain and France. In contrast, the USA is the fourth largest producing country with a production volume of 24.3 million hectoliters in 2019 and is also among the largest global exporters of wine.

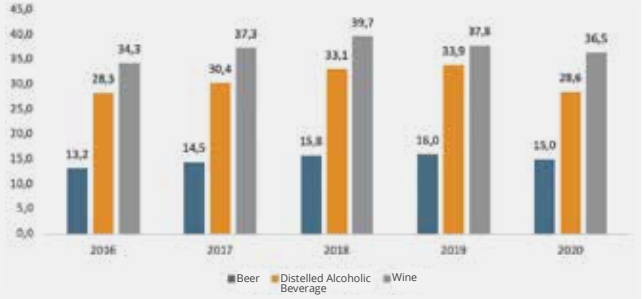
In terms of distilled Alcoholic Beverages, more than one-third of total alcohol sales in the United States are made up of BEVERAGEs in this group. Smirnoff, owned by Diageo, became the best-selling vodka brand worldwide in 2019 with a sales volume of 25.6 million cases (approximately 230 million liters).



Source: Trademap data and Alcoholic Beverages Market Insights are forecasted based on market development for years 2021-2024.

Figure 1 2
World Alcoholic Beverages Export (billion dollars)

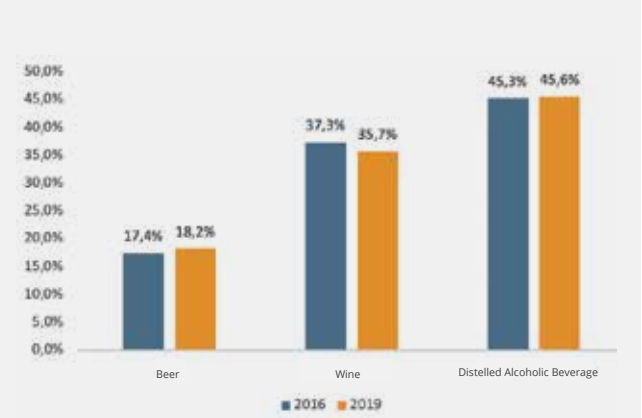
According to the exact figures of 2019, the export of Alcoholic Beverages worldwide has exceeded 85 billion dollars. In 2024, it is estimated that the export market will exceed the limit of 100 billion dollars.



Source: Trademap

Figure 1 3
Development of export figures of different Alcoholic Beverages (billion dollars)

When the BEVERAGE groups subject to foreign trade are examined, the product with the highest export value is wine. After wine, distilled Alcoholic Beverages and beer follow respectively (Figure 1.3).



Source: Trademap

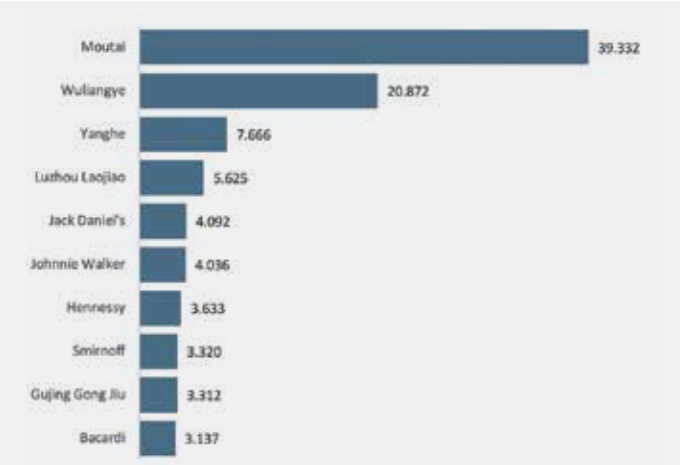
Figure 1 4
Change in the share of different Alcoholic Beverages in exports

Although the products in the wine group are leading in world exports, it is seen that especially beer and distilled Alcoholic Beverages started to take a larger share from exports between 2016-2020. While the share of wine group in total exports was 37.3% in 2016, this figure decreased to 35.7% as of 2020. On the other hand, the share of beer and distilled Alcoholic Beverages increased slightly (Figure 1.4).

1.2. Statistics and Market Situation on Sub-Groups

1.2.1. Distilled Alcoholic Beverages Sector

Distilled Alcoholic Beverages (spirits), one of the most diverse groups in the Alcoholic Beverages market, have been following an increasing trend in recent years with the influence of the cultures and preferences of the countries. The products in this group form the basis for a wide variety of cocktails, thus revealing very different consumption methods. In fact, companies make ready-made mixes of well-known cocktails (pina colada, mojito, etc.) and put them on the market.



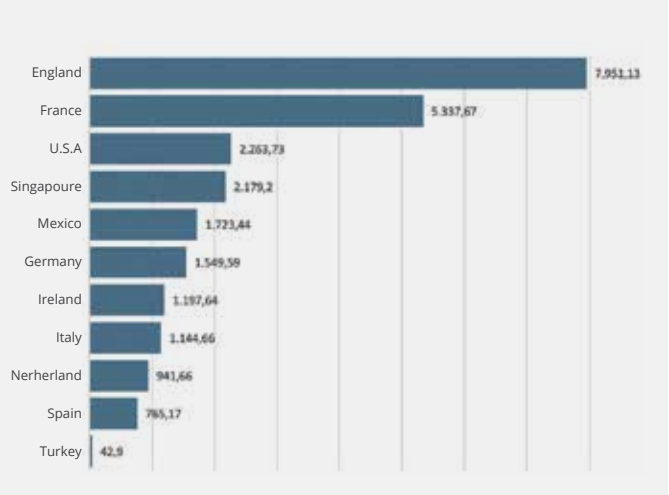
Source: Brand Finance 2020, Spirits Section

Figure 1 5
Most valuable brands in the distilled Alcoholic Beverages market by 2020 (million dollars)

As of 2020, the most valuable brands in the distilled Alcoholic Beverages market are mostly rice and corn-based liqueurs originating from the Far East, while whiskey and vodka brands have reached billions of dollars in brand value (Figure 1.5).

When the domestic markets of the countries are examined, it is seen that China has become a global country in this field, with an alcoholic beverage revenue of over 130 billion dollars in 2018. The USA follows China with approximately 80 billion dollars. The country in the first place in terms of per capita consumption globally is Estonia. Annual per capita consumption of 20 liters of distilled Alcoholic Beverages was realized in Estonia. On the other hand, distilled Alcoholic Beverages constitute a very important group, especially in the US market. In the last few years, sales volume of distilled Alcoholic Beverages accounted for more than one-third of total alcohol sales in the United States. Retail sales of distilled Alcoholic Beverages reached approximately US$ 97 billion, while vodka leads the sector in terms of sales volume, followed by whiskey and rum, respectively.

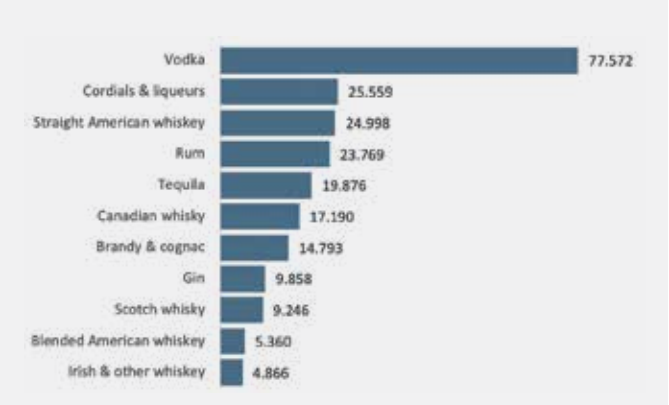
When the foreign trade in the distilled Alcoholic Beverages market is examined, the country with the highest export volume as of 2018 is England, followed by France and the USA. In 2018, England exported 8 billion dollars of Distilled Alcoholic Beverages. Turkey, on the other hand, ranks 49th in the world with an export value of 43.9 million dollars. (Figure 1.6).



Source: Trademap (2019 data was used due to the lack of country data for 2020)

Figure 1 6
Major Distilled Alcoholic beverage Exporting Countries, 2019 (million dollars)

The USA is one of the countries where distilled Alcoholic Beverages are consumed the most. As of 2019, per capita consumption of distilled Alcoholic Beverages in this country is 6.54 liters per year. When the total consumption amount in the subgroups is analyzed, it is seen that vodka is in the lead by far, followed by liquor group BEVERAGEs. It can be said that the consumption of rum and tequila in the USA is also extremely high (Figure 1.7).



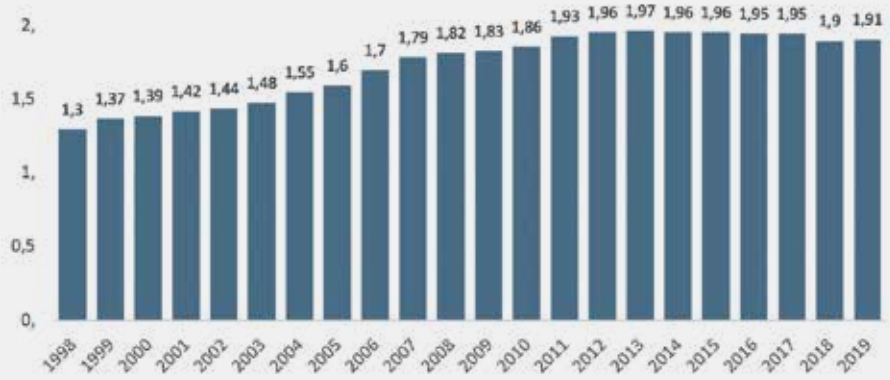
Source: Comtrade

Figure 1 7
Distribution of distilled Alcoholic Beverages consumed in the USA as of 2019 by groups (number of 9-liter cases)*

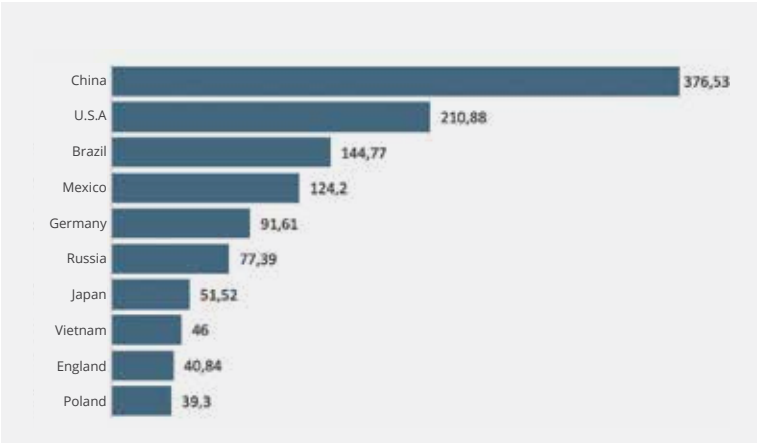
1.2.2. Beer Sector

Beer is one the popular Alcoholic Beverages widely consumed around the world. Beer is produced in every country in the world. In recent years, it has been observed that beer production has undergone changes, especially in the Americas. It is seen that the concept of 'craft beer' has started to become widespread, and smaller-scale but custom-made beer production has started to become widespread alongside large industrial beer production facilities. Despite these developments, beer brands such as Budweiser and Miller Light still lead the American beer market. Worldwide beer production has approached the level of 2 billion hectoliters. In terms of production, the sector has recorded a significant growth of 46% in the last 20 years. On an annual basis, the production amount of the sector has grown by 1.8% per year, but it has followed a horizontal course for the last 5 years.

Figure 1 8 Worldwide beer production between 1998-2019 (billion hectoliters)



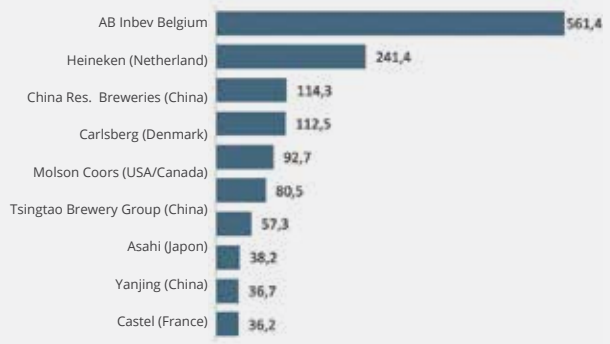
Source: Barth-Haas Group, Hops 2019/2020



Source: Barth-Haas Group, Hops 2019/2020

The leading countries in beer production are China, the USA and Brazil. Mexico and Germany are ranked right after these countries (Figure 1.9). However, the beer production capacity on the basis of the company differs according to the country ranking.

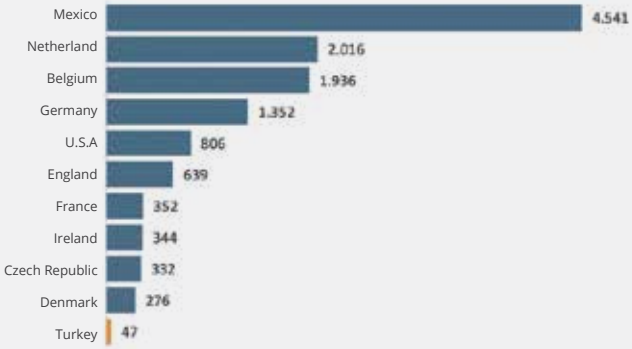
Figure 1 9
Top 10 beer producing countries as of 2019 (million hectoliters)



Source: Barth-Haas Group, Hops 2019/2020

Figure 1 10
Top 10 beer producing companies worldwide (million hectoliters)

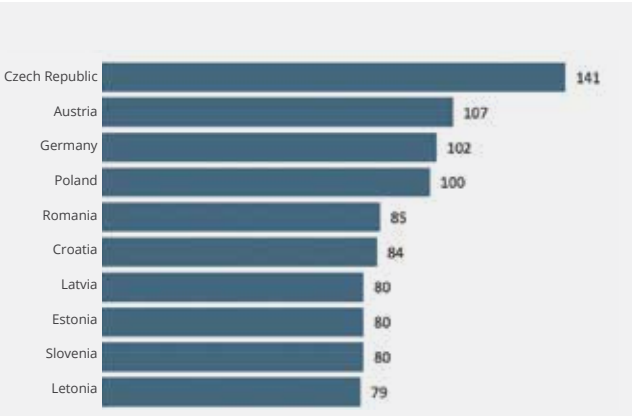
When we look at the top 10 beer producers around the world, Belgium-based AB InBev company ranks first, followed by Dutch Heineken company. On the same chart, Turkey ranks 10th with Anadolu Efes.



Source: Trademap

Figure 1 11
Major beer exporting countries, 2019 (million USD)

When the BEVERAGE groups subject to foreign trade are examined, the product with the highest export value is wine. After wine, distilled Alcoholic Beverages and beer follow respectively.



Source: Trademap

Figure 1 12
Top 10 countries in terms of annual beer consumption per capita as of 2019 (liters)

When beer consumption is analyzed, it is seen that the 3 countries with the highest consumption are China, USA and Brazil, respectively. However, when the data is analyzed in terms of per capita consumption, it is seen that the European continent consumes more beer. Czechia ranks first with an annual consumption of 141 liters per capita, followed by Austria and Germany. When these data are examined, it can be said that the European continent is the most dense region in terms of beer consumption per capita in the world.

1.2.3. Wine Sector

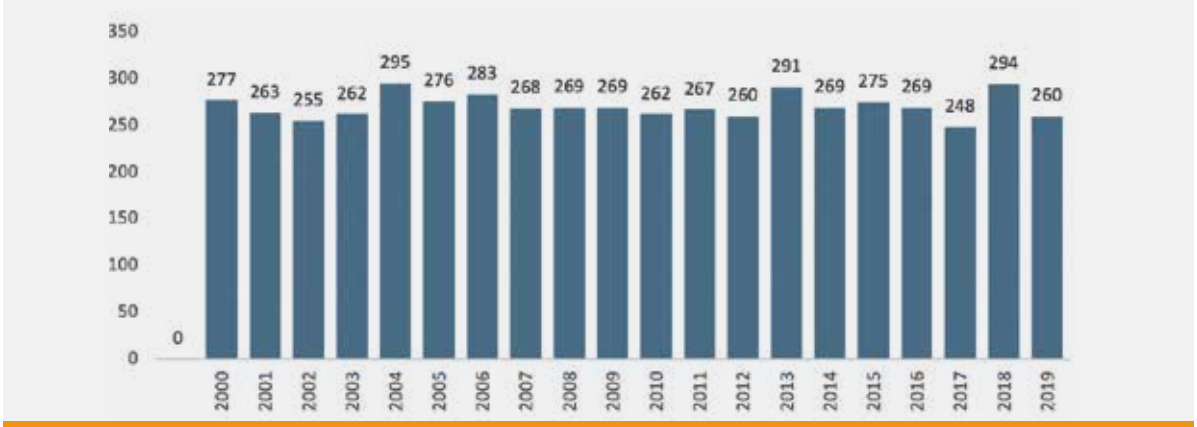
Wine is an alcoholic beverage produced by fermenting mostly grapes and sometimes other fruits without the addition of sugar, acid, enzymes, water or any other nutrients. It can be used with meals, plain or to prepare mixtures. For this reason, it is an important BEVERAGE worldwide and in Europe due to its wide usage area. The colour spectrum ranges from the pinkish hues of the rose varieties to deep intense reds and bright whites.

Italy, France and Spain are the three leading wine producing countries in the world. Other key players in the European wine industry include Germany and Portugal. There are three main types of wine popular with consumers: red wine, white wine, and rose wine. Rose wine is a distinctive product of France, representing a production share of 16 percent of the entire wine production market, while red wines and white wines are more common both in terms of production and consumption.

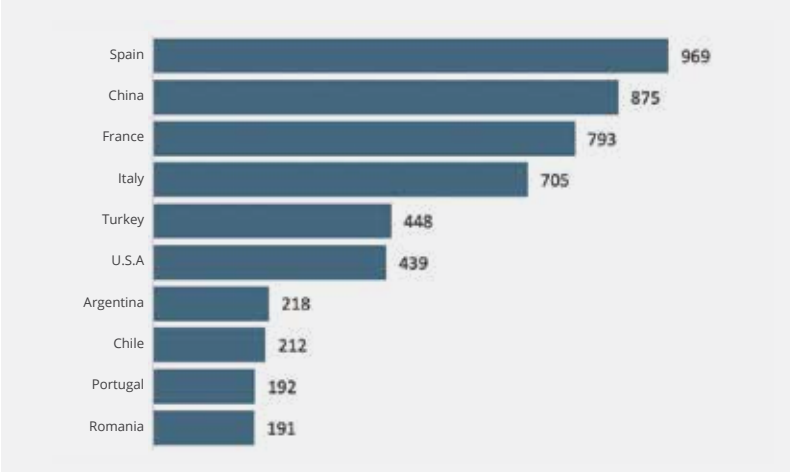
The United States produced more than 800 million gallons (3 billion liters) of wine in 2016. This amount corresponds to about 9 percent of the global wine production volume. The country's wine production is concentrated in the State of California, which accounted for about 90 percent of all U.S. wine production in 2018, and as of 2020, there are approximately 10,742 wineries in the United States. The most consumed wine varieties in the USA are Merlot, Chardonnay and Cabernet.

Although the amount of wine produced worldwide varies over the years, an average of 270 million hectoliters of wine is produced annually. The production amount, which reaches its peak in some years in the sector, decreases to its lowest levels in some years. The main reason for this is the changes in the production structures of wine grape production, which is the main raw material, depending on the climatic conditions in the regions. Adverse climatic conditions experienced in the agricultural production process affect the productivity, as wine grape types are special and do not grow in every region. For example, factors such as adverse climatic conditions faced by Spain, France and Italy in the European continent or forest fires in the US state of California directly affect the amount of grape production and therefore wine production.

Figure 1 13 Worldwide wine production between 2000-2019 (billion hectoliters)



Source: OIV First Estimates, 2020



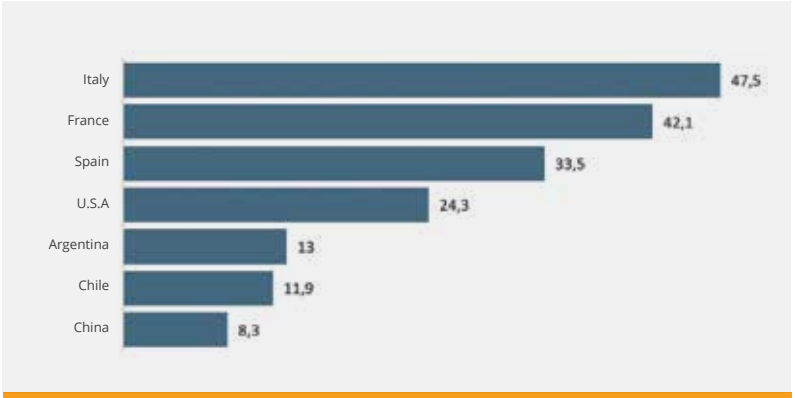
Source: OIV First Estimates, 2020

Figure 1 14
Wine grape areas (thousand Ha) of important countries as of 2018 and the change between 2014-2018

57% of the grapes produced worldwide are wine grapes, and the total area of wine grapes is decreasing. In the period of 2014-2018, the area of vineyards decreased by 1.5%. However, there are countries that have increased their wine grape areas in this process. In the same period, China increased its wine grape area by 7.3%, Italy by 2.3% and France by 0.5%.

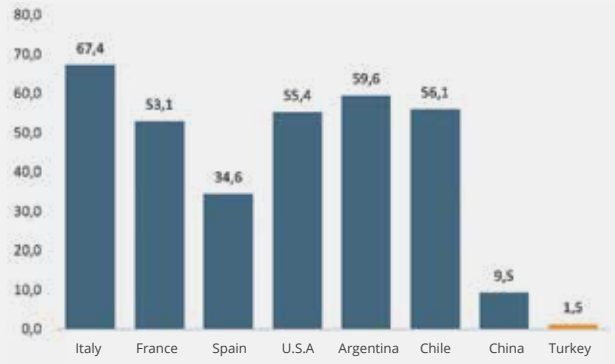
	2014	2015	2016	2017	2018	Change
Spain	975	974	975	968	969	-0,62%
China	813	847	858	865	875	7,63%
France	789	785	786	788	793	0,51%
Italy	690	685	693	699	705	2,17%
Turkey	502	497	468	448	448	-10,76%
USA	450	446	439	434	439	-2,44%
Argentina	228	225	224	222	218	-4,39%
Chile	213	214	214	213	212	-0,47%
Portugal	224	204	195	194	192	-14,29%
Romania	192	191	191	191	191	-0,52%

Source: OIV First Estimates, 2020



Source: OIV First Estimates, 2020

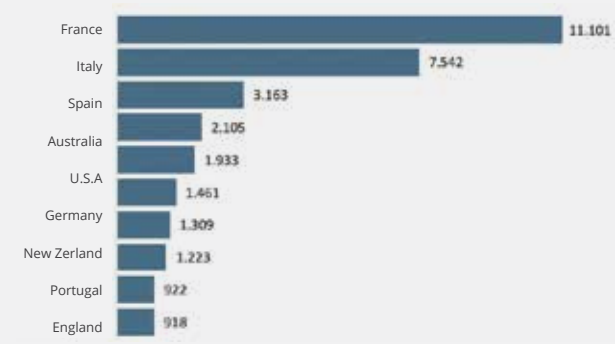
Figure 1 15
Wine production of leading wine producing countries in 2019 (million hectoliters)



Source: Calculations made on OIV and TAPDK data

Figure 1 16
Wine production (hectoliters) of major wine producing countries corresponding to one hectare of wine grape area)

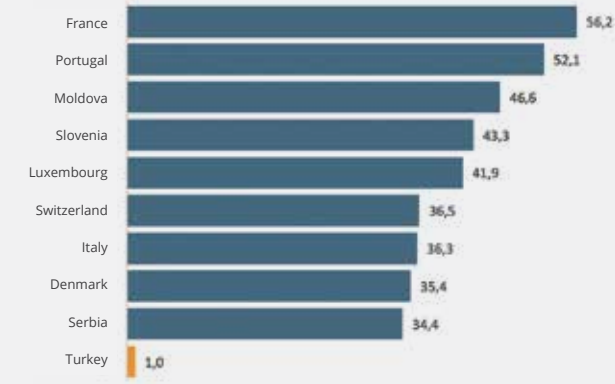
When the relationship between the large wine grape lands and the amount of wine production is examined, it is noteworthy that the highest wine production per hectare especially in Italy and Argentina. While an average of 54-55 hectoliters of wine is produced for one hectare of wine vineyards in the world's leading countries, this figure is up to 1.5 hectoliters in Turkey.



Source: Trademap

Figure 1 17
Countries exporting the most wine as of 2019 (million dollars)

Sharing the first place in wine production, France, Italy and Spain are the countries that take the first three places in wine exports, as well. As of 2019, France's wine exports have exceeded 10 billion dollars, and it has a share of 2% in the country's total exports.

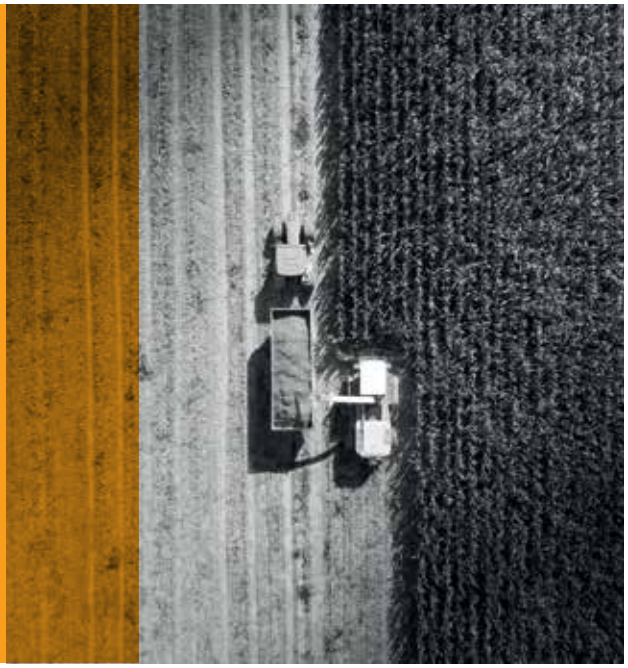


Source: World Health Organisation

Figure 1 18
Annual wine consumption per capita (liter)

France ranks first with 56.2 liters of wine consumption per capita, followed by Portugal, which has a relatively limited wine production. Especially in Eastern and Central European countries, high wine consumption stands out and it is understood that countries with high production capacity concentrate more on the export side. In Turkey, the per capita consumption is 1 liter.

2



ALCOHOLIC BEVERAGES SECTOR IN TURKEY

2.1 Production, Placement on the Market and Raw Material Production Status

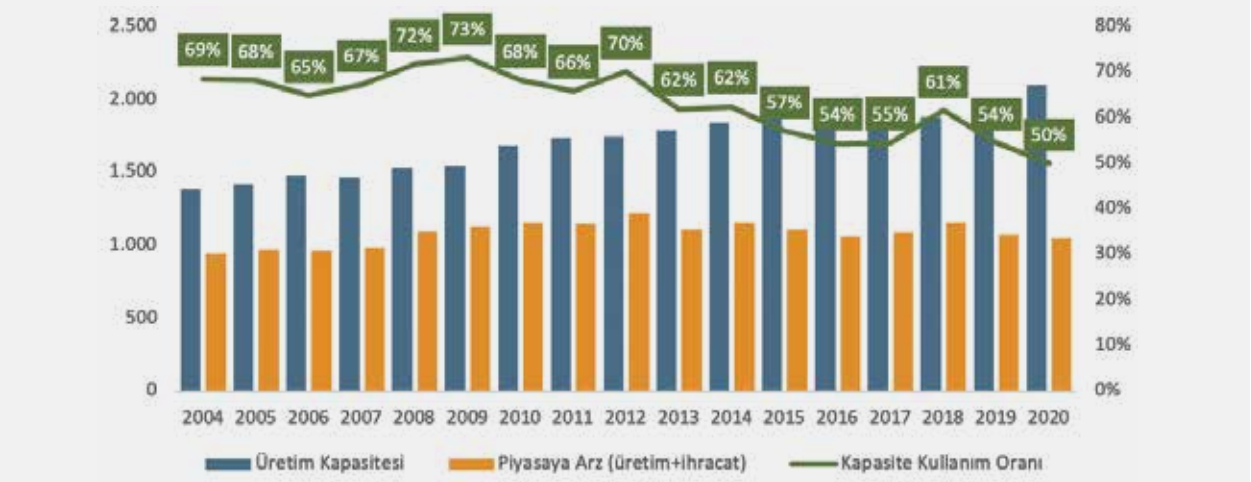
The Alcoholic Beverages sector in Turkey produces a large number of beverages in the beer, wine and distilled Alcoholic Beverages groups, similar to the world. All processes of the sector regarding production, export, import, and distribution are framed by laws and regulations. All kinds of production or commercial activities in this field are regulated to be subject to permission and control. All processes are followed by the General Directorate of Food Control and the Department of Alcohol and Alcoholic Beverages within the Department of Tobacco and Alcohol (TADB) under the Ministry of Agriculture and Forestry.

Regardless of which group the alcoholic beverage is produced, the most important input in the production process is provided by agricultural raw materials. Brewery barley, hops, wine grapes, sumalik raisins, anise and other aromatic fruit or plant extracts are the basic raw materials. For this reason, while examining the production amounts of Alcoholic Beverages under this heading, agricultural raw material production statistics are also examined. Thus, the relationship of the sector with agricultural production will be better understood.

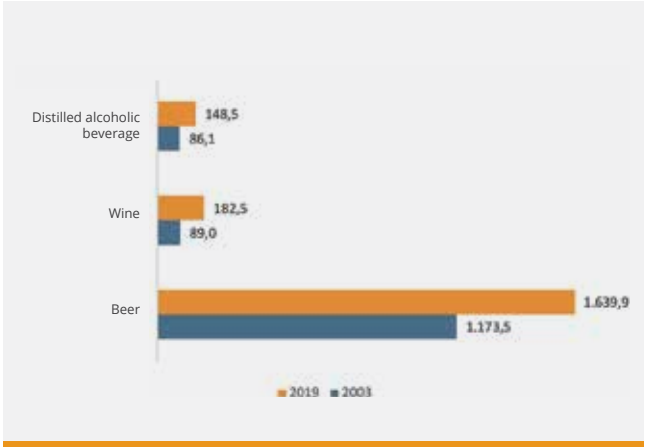
The number of manufacturing companies in Turkey, which was 66 in 2004, increased to 249 as of 2019. Of these, 19 produce beer, 214 wine and other fermented BEVERAGEs, and the remaining 16 distilled Alcoholic Beverages. Between 2004 and 2020, the production capacity of Alcoholic Beverages in Turkey increased by 42% from 1.3 billion liters to 2 billion liters per year. However, the capacity utilization rate decreased from 64% to 50%. In other words, the contribution of sector-wide investments to production and economy remained well below expectations. While the amount of Alcoholic Beverages produced (domestic market + export) was 946 million liters in 2004, this figure increased to 1.047 million liters in 2020. While the total capacity of the sector increased by 51%, the amount of supply from production to the market increased by 10% (Figure 2 1).

Figure 2 1

Change in capacity, production and capacity utilization rate in the alcoholic beverage industry between 2004-2020 (million liters)



Source: TADB, Activity Reports

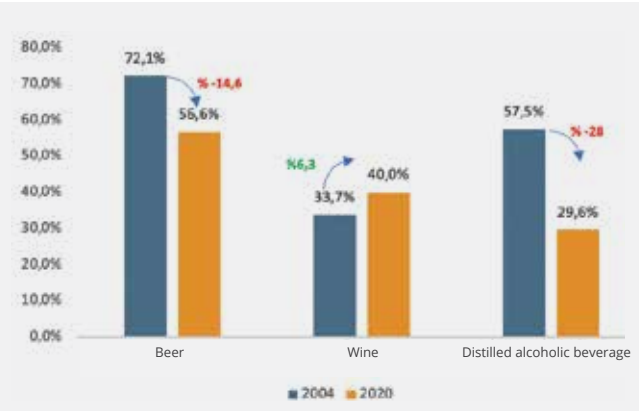


Source: TADB, Activity Reports

Figure 2 2

Change of installed capacities in main production groups (million liters)

When the installed capacity is examined in terms of the main production groups, it is understood that the production capacity has increased in all groups. In the 15-year period, the beer sector has increased its capacity by 40%, while the wine sector has increased its capacity by 110%. In the distilled Alcoholic Beverages sector, the capacity increase was 74%.



Source: TADB, Activity Reports

Figure 2 3

Change of capacity utilization rates in main production groups

Despite the capacity increases experienced, it can be said that the capacity utilization rates of the main groups did not increase. Especially distilled Alcoholic Beverages are the group with the highest decrease in capacity utilization rate. In the wine sector, there is an increase in capacity utilization (Figure 2.3).

2.1.1. Distilled Alcoholic Beverages Sector

The leading product in the distilled Alcoholic Beverages sector in Turkey is raki. Apart from raki, gin, liqueurs, vodka, whiskey, and other products (cognac, brandy, etc.) are produced or imported.

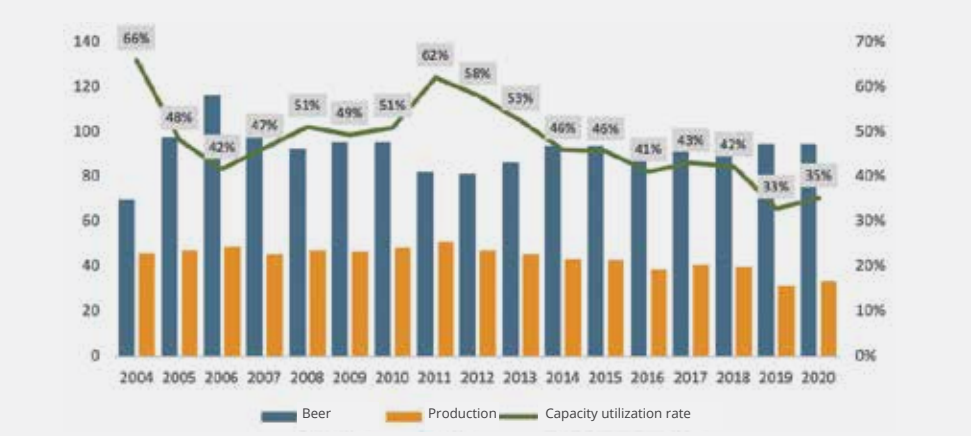
As of 2019, 16 companies operate in this field in Turkey. The same company produces more than one product variety, and the main product is raki (Figure 2.4).

Figure 2 4 Distribution of companies producing distilled Alcoholic Beverages into subgroups

	Gin	Liqueur	Vodka	Raki	Other	Total
2004	1	1	2	7	3	11
2005	1	2	3	8	3	14
2006	2	2	3	9	4	17
2007	2	2	4	7	3	15
2008	2	2	4	7	2	14
2009	2	2	2	8	2	13
2010	2	2	4	8	2	15
2011	3	3	3	7	1	14
2012	3	4	4	8	1	16
2013	3	5	5	9	1	17
2014	4	5	6	11	1	23
2015	5	5	6	11	1	23
2016	5	5	6	12	1	16
2017	5	5	6	11	2	15
2018	4	6	7	11	2	16
2019	6	7	8	12	2	16

Source: TADB, Activity Reports

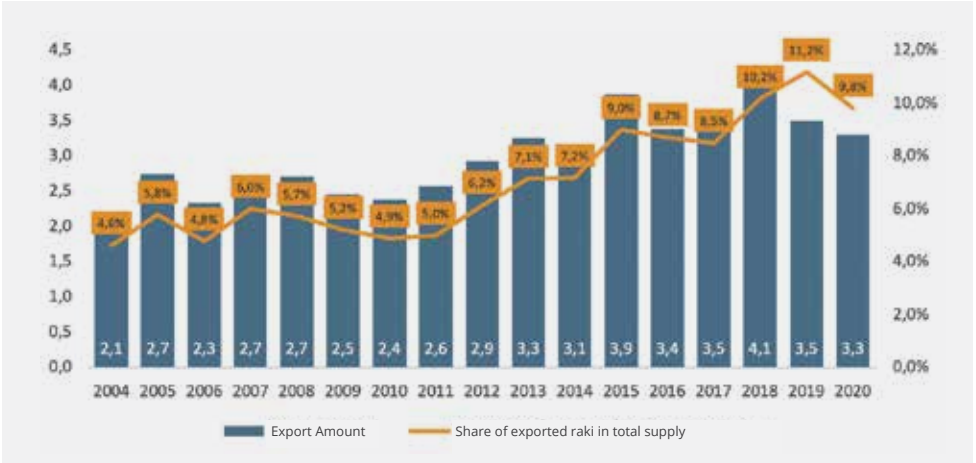
Raki production, which is the leading product in the sector, has decreased from 46 million liters to 31 million liters in the last 15 years. In fact, although there is a significant increase in capacity in the sector, the production for the domestic market and export remains low compared to the capacity. The capacity utilization rate, which was 66% in 2004, decreased to 35% in 2020. On the other hand, the sector invested in this field and increased its capacity from 70 million liters in 2004 to 95 million liters (Figure 2 5).



Source: TADB, Activity Reports
**: Production = Supply from production to domestic market + export*

Figure 2 5
Capacity, production and capacity utilization rate (million liters) in the raki sector between 2004-2020*

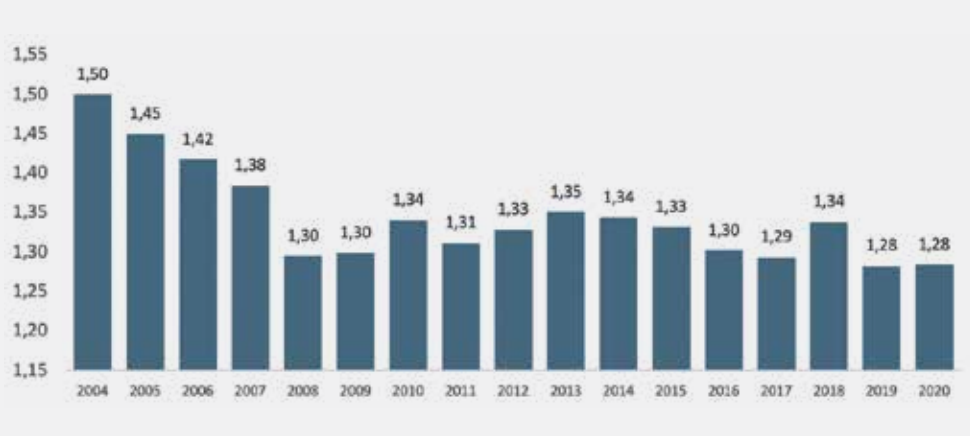
The decrease in consumption in the domestic market forced the raki producer companies to direct them to the foreign market. Firms have tended to use their capacities in this direction and export raki to the foreign market. However, compared to the leading world countries, the amount of exports remained low. Raki exports have only increased from 2.1 million liters to 3.3 million liters in the last 15 years. This amount is only 9.8% of the total raki produced (Figure 2.6).



Source: TADB, Activity Reports

Figure 2 6
Raki exports between 2004-2019 (million liters)

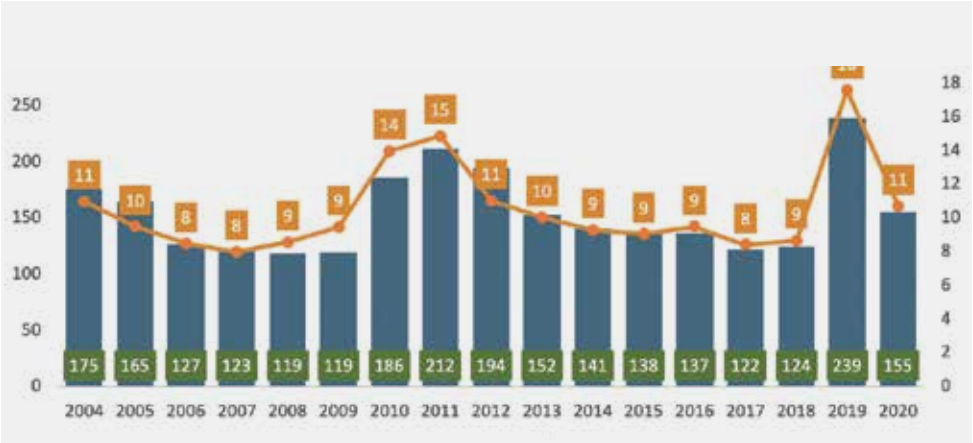
The contraction in raki production also affected the production of raisins required for souma, one of the most important inputs of the sector. Raisin production has followed a relatively flat course in the last 15 years. An average of 1.5 million tons of raisins are produced annually. This horizontal course in production was actually made possible by the increase in productivity per decare. Because after 2007, raisin cultivation areas started to shrink and the raisin area, which was 1.5 million decares in 2004, decreased to 1.28 million decares (Figure 2.7).



Source: TURKSTAT

Figure 2 7
Change of vineyard areas where raisins are produced (million decares)

Anise, another important input in raki production, has a fluctuating production course. Although cultivation areas differ from year to year, it is understood that anise production actually increases in years when demand is high (Figure 2.8).



Source: TURKSTAT

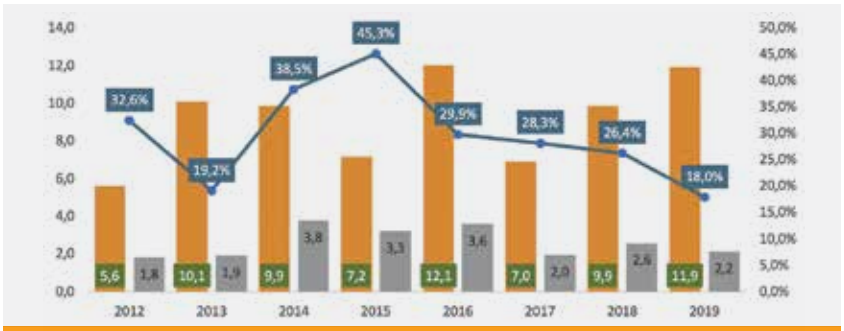
Figure 2 8
Anise cultivation areas and production amount (thousand decares/thousand tons)

Anise is actually one of the products that are subject to export by our country. Turkey is an important exporter of anise and fennel group products. It is one of the top 10 exporting countries in this product group. In 2019, it exported nearly 12 thousand tons of products. However, due to the fluctuation in anise production, the export share of anise in this group decreased from 45% to 18%. On the other hand, it is seen that Turkey imports products in this group up to 6 million USD per year. In 2017 and 2018, when anise production was very low, import records were broken for products in this group. Turkey can export approximately 30-35% of the anise it produces domestically, and the average export weight is at the level of 3.75 USD. In this sense, the increase in anise production affects both the export side and the meeting of the anise needs of the raki sector (Figure 2.9 and Figure 2.10).

	2012	2013	2014	2015	2016	2017	2018	2019
India	154.697	174.635	217.052	150.775	187.397	213.222	259.351	281.758
Russia	780	6.378	8.953	31.698	60.058	49.381	42.265	30.576
Bulgaria	30.146	17.312	21.927	20.320	19.281	17.640	15.034	20.714
Italy	5.968	6.938	9.956	13.393	14.538	13.059	15.194	15.546
Vietnam	0	5.291	6.794	6.322	6.212	8.869	7.634	15.469
UAE	2.893	0	17.042	23.443	11.897	11.453	0	14.008
China	8.418	8.332	7.416	7.791	8.016	9.732	14.654	12.299
Turkey	5.646	10.115	9.891	7.183	12.062	6.951	9.896	11.942
Afghanistan	16.503	15.148	21.099	8.006	6.148	0	0	10.895
Morocco	5.368	7.399	8.843	6.005	4.831	5.286	6.145	10.073

Source: TURKSTAT, Comtrade

Figure 2 9 Anise & Fennel group product exporter top 10 countries (tons)



Source: TURKSTAT, Comtrade

Figure 2 10
Anise & Fennel seed group and only anise export amount (thousand tons)

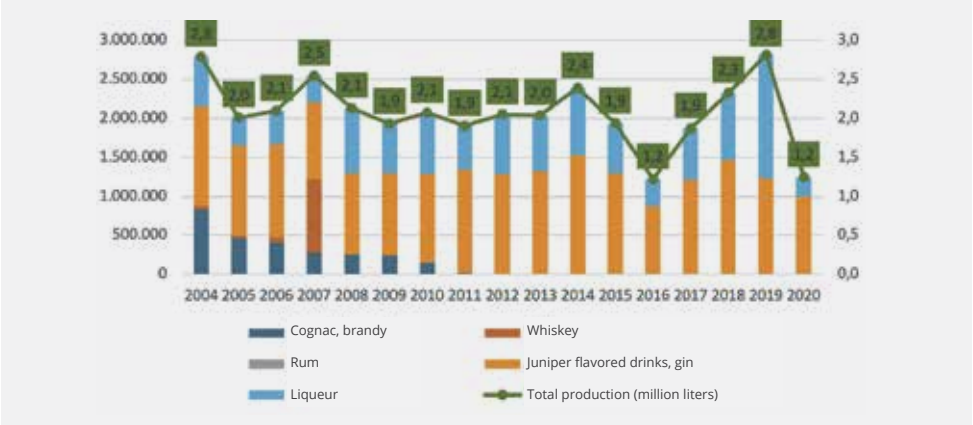
When the production of vodka, which is another important distilled alcoholic beverage, is examined, despite the increased production capacity, similar to that of raki, the decreased production amount is striking. Although there has been an increase in the amount of production over the years, the capacity utilization rate has decreased to 32%. Similar investments made in the raki sector were also made for vodka production, but the capacity utilization did not reach the level expected by the entrepreneurs (Figure 2 11).

Source: TADB, Activity Reports
**: Production = Supply from production to domestic market + export*

Figure 2 11
Capacity, production and capacity utilization rate (million liters) in the vodka sector between 2004-2020)*

Despite the high installed capacity in vodka production, Turkey's vodka export is at a very low level. Although the sector exported 329 thousand liters in 2018, this figure decreased to 104 thousand liters in 2019, and only 31 thousand liters could be exported in 2020.

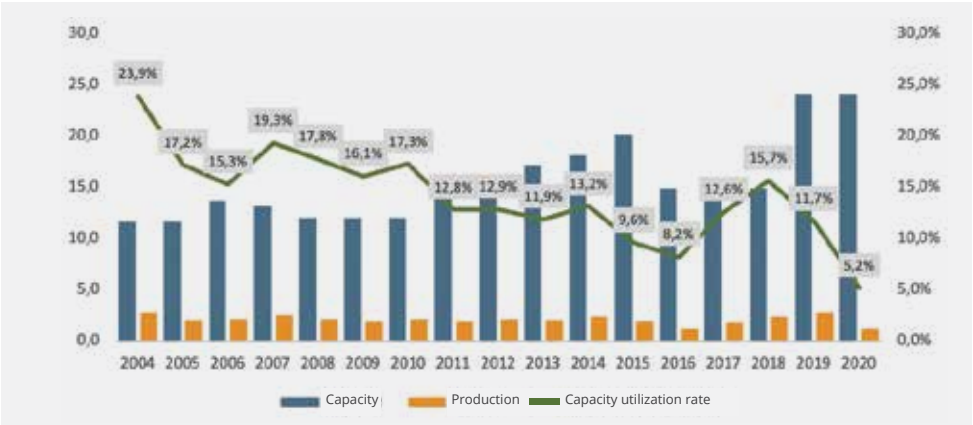
In the field of distilled Alcoholic Beverages in Turkey, besides raki and vodka, products such as gin and liquor are also produced. In fact, although other distilled Alcoholic Beverages such as rum, whiskey, cognac and brandy are included in this group, the production of these products has completely decreased over the years. Whiskey production in Turkey since 2007 and cognac production since 2011 has completely ceased. Currently, only liquor and gin production is in question, and it can be said that the production amount has followed a horizontal course over the years.



Source: TADB, Activity Reports
**: Production = Supply to the domestic market from production + export*

Figure 2 12
Production amount of other distilled Alcoholic Beverages between 2004-2020

It is observed that there is a very low level of capacity utilization in these product groups, such as raki and vodka BEVERAGEs. Despite a production capacity of 24 million liters in 2020, only 1.2 million liters of gin and liquor were produced. These products are the product group with the lowest capacity utilization rate and are exported in trace amounts (Figure 2 13).



Source: TADB, Activity Reports
**: Production = Supply to the domestic market from production + export*

Figure 2 13
Capacity, production and capacity utilization rate (million liters) in the field of gin, liquor, whiskey, cognac and brandy between 2004-2020*

2.1.2. Beer Sector

The beer sector in Turkey has a production capacity of more than 1.6 billion liters and 19 companies operate in the sector. While the capacity utilization rate of the sector is at the level of 56.6% as of 2020, the production in 2020 was 928 million liters. Although the sector broke a record with 1.1 billion liters of production in 2012, there was a production loss of 15% in the 8-year period. While the production capacity in the beer sector increased by 36% between 2004 and 2020, production could only increase by 7.8% (Figure 2 14).

Source: TADB, Activity Reports
**: Production = Supply from production to domestic market + export*

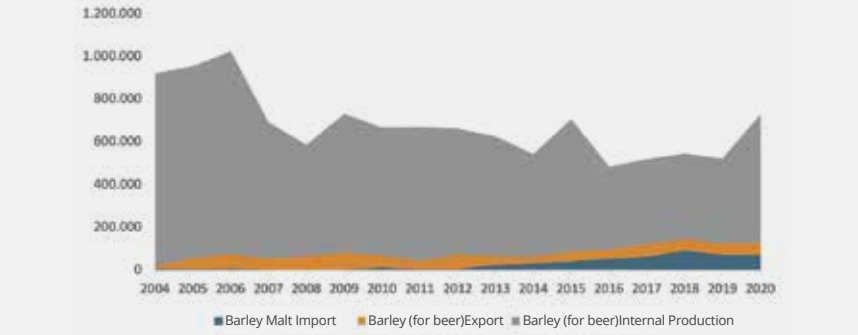
Figure 2 14
Beer production and capacity utilization rate (million liters) between 2004-2020*

Barley, the most basic raw material of beer production, has a fluctuating but declining production structure. In addition, it can be said that barley cultivation areas have decreased by almost half. Brewery barley production area, which was 3.5 million decares in 2004, decreased to 1.9 million decares in 2020. In addition, its share in the total barley production area decreased from 10% to 6% (Figure 2.15).

On the other hand, imports of barley and malt made a significant leap in the same period. While the import amount of barley for beer was 14 thousand tons in 2004, this figure increased to 56 thousand tons in 2020. However, what is more striking is that the import of barley malt, which was only 6500 tons in 2004, increased to 72 thousand tons in 2020. It can be said that the low quality in barley production and the decrease in the production amount cause the sector to purchase raw materials from the foreign market (Figure 2 15).

Source: TURKSTAT

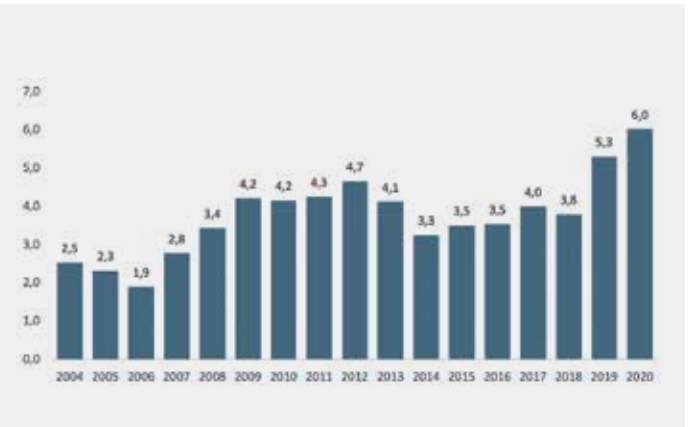
Figure 2 15
Change in brewery barley and total barley production areas in Turkey between 2004-2020 (million decares)



Source: TURKSTAT

Figure 2 16
Turkey's Barley Malt, Brewery Barley Import and Domestic Production Comparison (thousand tons)

Another important raw material in beer production is hops. This plant is produced only in Bilecik in Turkey and the annual production is about 1900 tons. The cultivation area varies between 3.300-3.400 decares over the years and follows a horizontal course. In addition to production in the domestic market, raw or processed hops are imported for the production of different flavors and products. Moreover, the average import price per ton has increased from 9 dollars to 28 dollars over the years. The sector paid more than $6 million to import products in this group in 2020. The country with the highest imports is Germany (Figure 2 17).

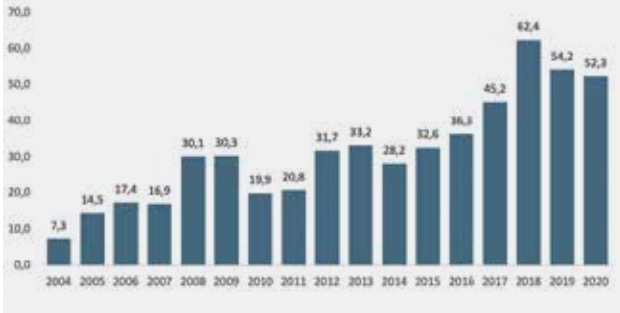


Source: TURKSTAT

Figure 2 17
Turkey's imports of raw and processed hops between 2004-2020 (million USD)

Although the annual average beer production has been one billion liters in the last 10 years, it is very clear that the sector has turned to the import channel for raw materials due to the decreasing barley production.

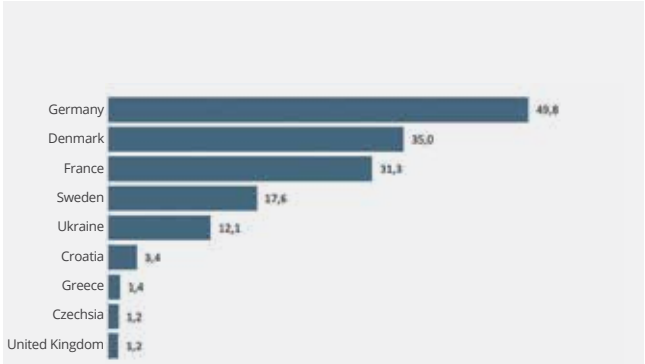
However, raw material exports are not only caused by the contraction in domestic production.



Source: TURKSTAT

Figure 2 18
Turkey's Barley Malt, Brewery Barley and Hops Import Figures (million dollars)

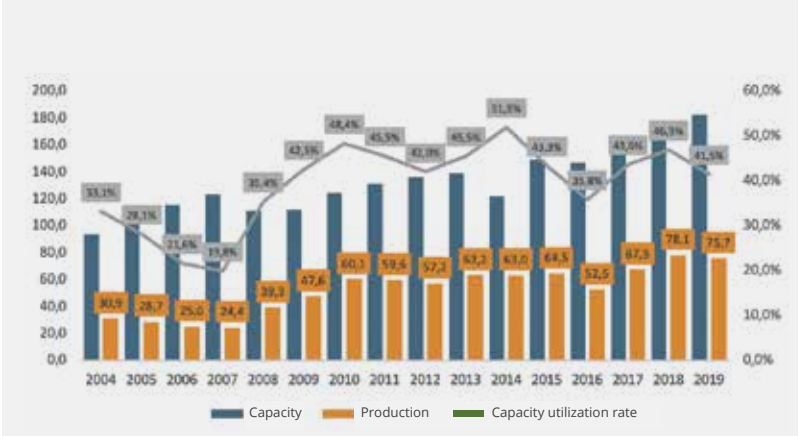
The sector cannot find barley in the quality standards it wants and purchases are made from the foreign market for the continuity of the quality in the final product. For this reason, while the imports made in these items were only 7.3 million dollars in 2004, an import record was broken with 62.4 million dollars in 2018 and the average of the last 3 years of imports of the sector exceeded 50 million dollars (Figure 2 18).



Source: TURKSTAT
*: Brewery barley, malt, hops

Figure 2 19
Major countries imported beer raw materials between 2018 – 2020 (million dollars)*

The countries where beer raw materials are imported the most are listed as Germany, Denmark and France (Figure 2.18 and Figure 2.19).



Source: TURKSTAT

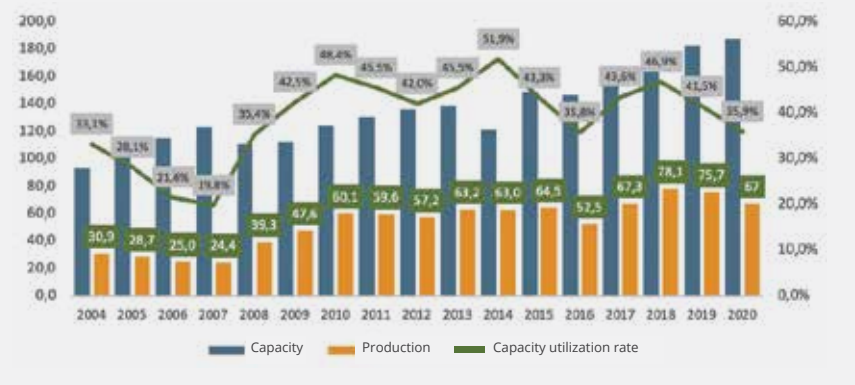
Figure 2 20
Change in Turkey's beer exports and imports (million dollars)

In contrast to imports of raw materials for beer production, beer exports remained limited. In 2019, total beer exports amounted to 47 million dollars, while beer imports amounted to 12.3 million dollars. However, beer imports have entered an increasing trend in the last 5 years (Figure 2.20).

2.1.3. Wine Sector

Turkey is one of the leading countries in the world in terms of wine vineyards, and Anatolia is considered the birthplace of viticulture. Therefore, Turkey has a long history of wine production. There are companies that have been operating in the sector for many years, and the number of companies that have obtained wine production permits has increased significantly in recent years. In the sector, which had 50 facilities in 2003, 214 facilities operate as of 2019.

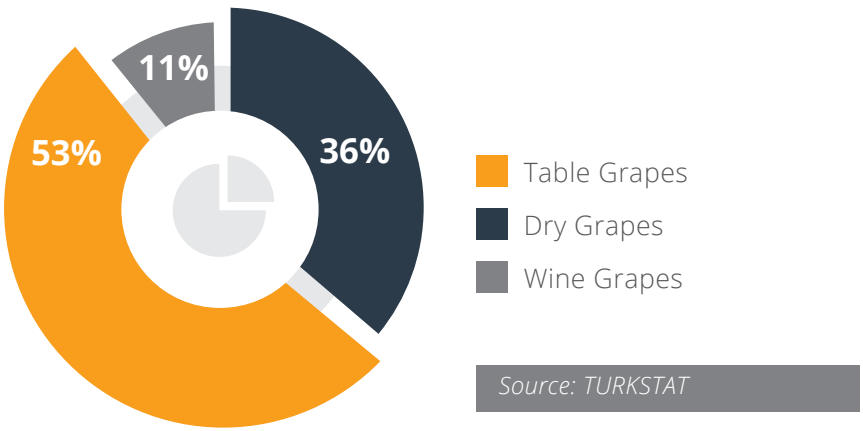
In recent years, about 70-80 billion liters of wine is produced (supply and exported to the domestic market) in Turkey. However, the sector has a lot of development areas in terms of installed capacity and vineyard areas. Although the annual production capacity of the sector is 187 billion liters, it has a capacity utilization rate of 36%. Although this rate has fluctuated over the years, it can be said that it has increased slightly (Figure 2 22).



Source: TADB, Activity Reports
**: Production = Supply from production to domestic market + export*

Figure 2 21
Capacity, production and capacity utilization rate (million liters) in the wine field between 2004-2020*

More than 4 million tons of grapes are produced annually in Turkey. As of 2020, 53% of the grapes produced are consumed as table, and the wine production is only 11%.



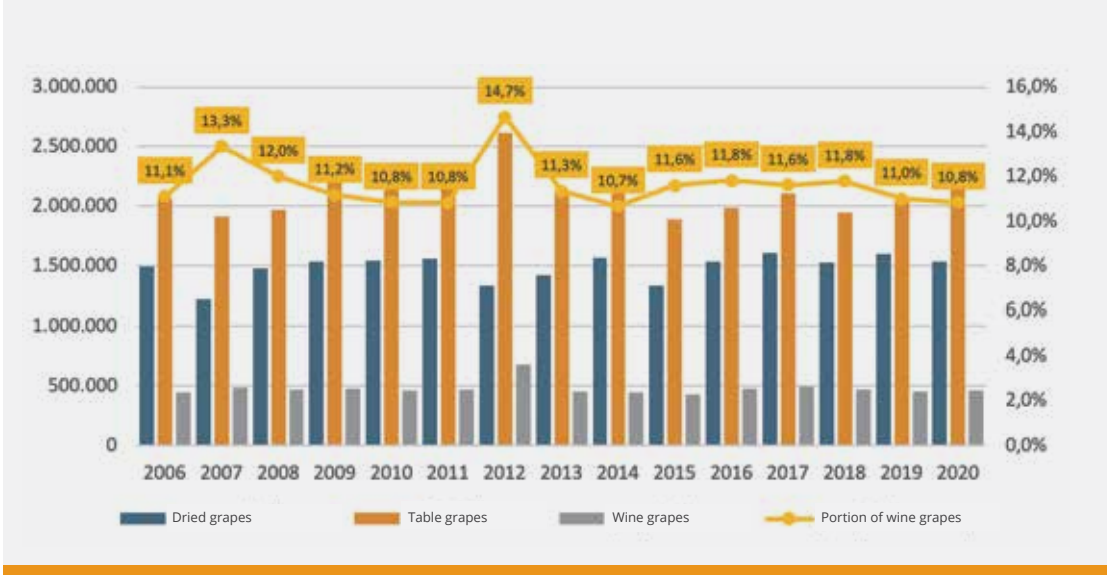
Source: TURKSTAT

Figure 2 22
Distribution of grape production by 2020

Wine grape areas have an average of 10% in total grape production, and the amount of production follows a horizontal course.

Figure 2 23

Change of grape production areas and share of wine grapes according to usage in Turkey (decares)



Source: TURKSTAT

3

VALUE CHAIN IN THE ALCOHOLIC BEVERAGE SECTOR

3. 3. Evaluation of the Value Chain Extending from Field to Export in the Alcoholic beverage Sector

3.1. The Relationship between Alcoholic Beverages and Agricultural Production

3.2. Sales/Distribution Network and Internal Market Relationship

3.3 Foreign Trade and Competition Relationship

When all the numerical data analyzed in the previous sections are evaluated, the following points stand out in the Alcoholic Beverages sector of Turkey:

- Low production compared to its capacity,
- Decreases in agricultural raw material production,
- Some agricultural raw materials have to be supplied by importation,
- Insufficient export despite the production capacity,
- Net importer position of the country in all Alcoholic Beverages groups.

Each of the above-mentioned items includes topics that should be examined by taking a wide process from production to sales and marketing. Interviews and surveys conducted throughout the sector show that the development of agricultural production and foreign trade opportunities should be handled with a brand new perspective.

In this section, some situation determinations were made by blending the survey results on both agricultural production and foreign trade with general statistical data.

3.1. The Relationship between Alcoholic Beverages and Agricultural Production

The main raw materials of all Alcoholic Beverages are met by agricultural production. Products such as barley, wine grapes and raisins, which have no substitutes, such as anise and hops, are the basic raw materials of Alcoholic Beverages. Companies producing in Turkey supply these inputs from the agricultural sector. It is seen that there are different methods such as purchasing directly from the producer, purchasing from the cooperatives or purchasing products through traders in the procurement process of the companies. Although the purchase amounts vary on the basis of sub-products, it is clearly understood that all companies establish direct relations with the farmers both through contracted production and spot purchases.

In the surveys, 25 of the 32 producer companies (78%) declared that they purchase directly from the producer. Direct purchases have an important place in the total raw material purchases of companies that purchase directly from producers. While 8 of these companies purchase 75% or more of their raw materials directly through the producer, it is seen that the other companies make their raw material procurement through direct procurement between 10-50% on average (Figure 3.1 and Figure 3.2).

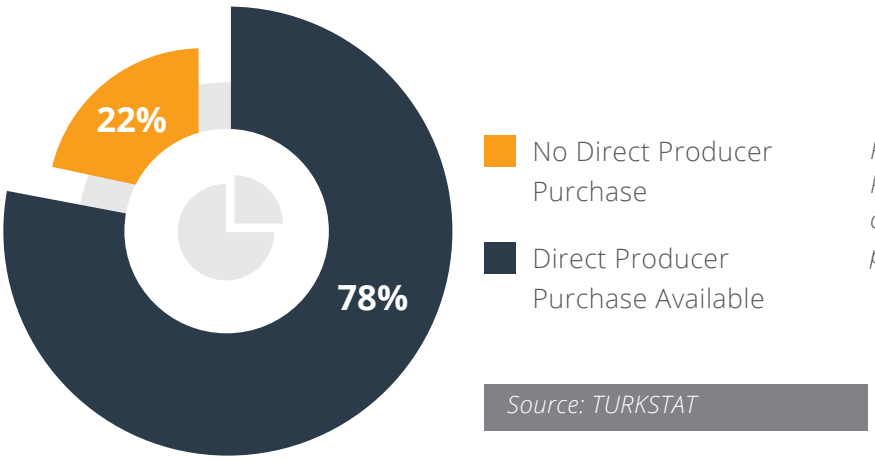
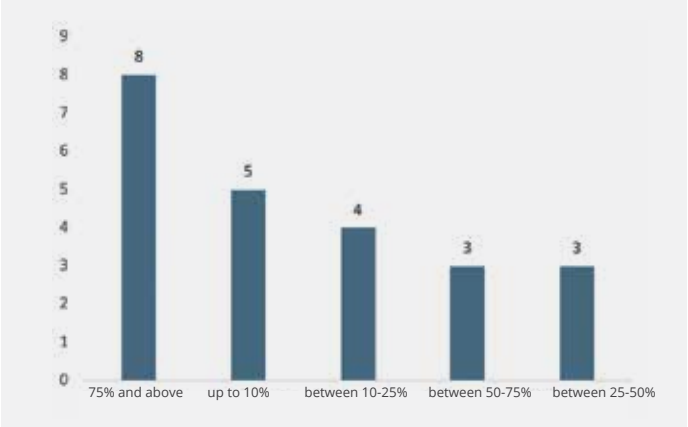


Figure 3 1
Purchase status of the surveyed companies directly from the producer

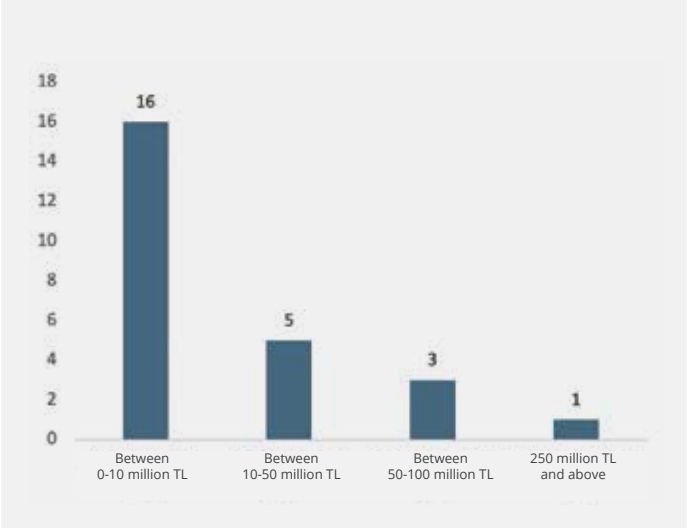
Source: TURKSTAT

It is observed that there is a very low level of capacity utilization in these product groups, such as raki and vodka BEVERAGEs. Despite a production capacity of 24 million liters in 2019, only 2.8 million liters of gin and liquor were produced. These products are the product group with the lowest capacity utilization rate and are exported in trace amounts (Figure 2.13).



Source: TURKSTAT

Figure 3 2
Number of companies according to the ratio of direct producer purchases in total raw material purchases



Source: TURKSTAT

Figure 3 3
Number of companies according to agricultural raw material purchase amounts

In addition to direct producer purchases, companies also purchase through traders. Half of the surveyed companies make purchases through traders. In this case, it is concluded that the companies balance their purchasing channels depending on the course of the market and the supply of agricultural products. Although the amount of agricultural product purchases varies greatly according to the scale of the companies, it is seen that the annual agricultural product purchase amounts of the surveyed companies vary between 50-70 million TL on average (Figure 3.3).

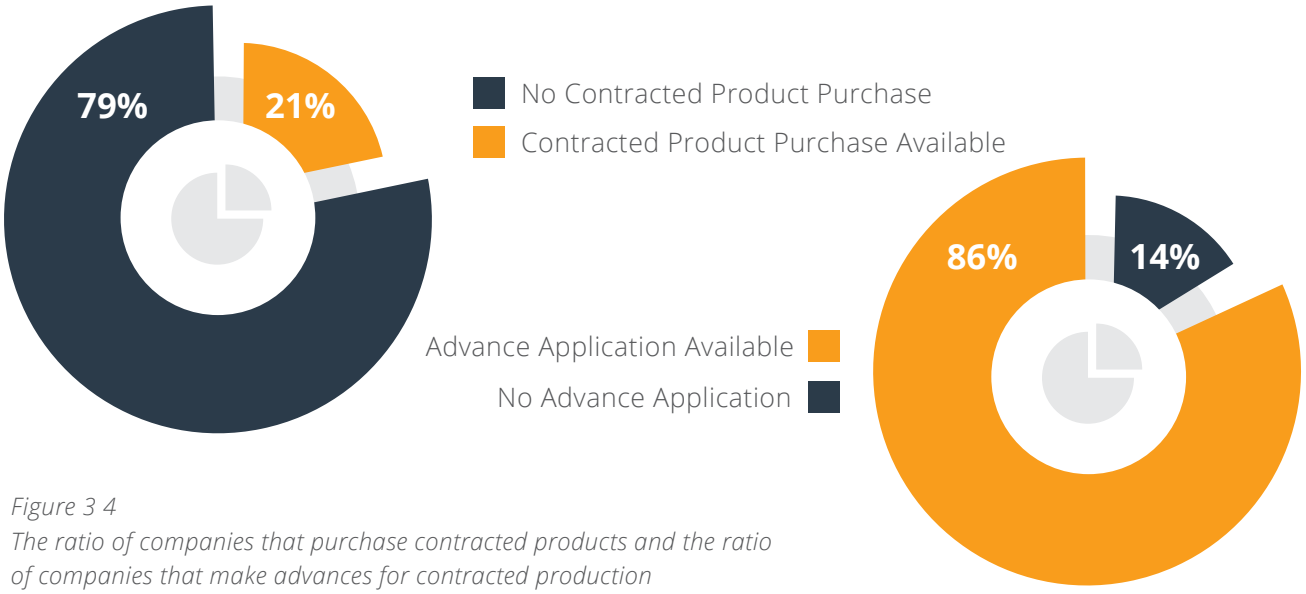


Figure 3 4
The ratio of companies that purchase contracted products and the ratio of companies that make advances for contracted production

It has been determined that 21% of the purchases made by the companies directly from the producer channel are provided by contracted production. In each production group, there are companies that buy products under contract, and almost all of these companies cover the production period expenses of the farmers by making advance payments.

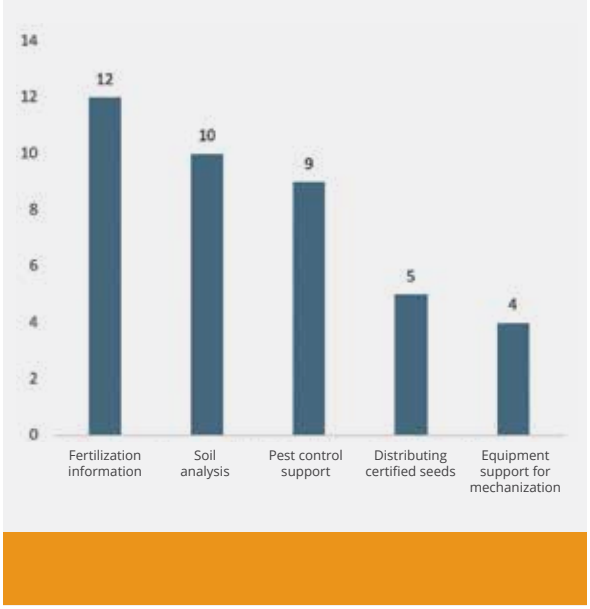


Figure 3 5
Studies to improve the quality of raw materials and the number of companies operating in this field

Companies carry out many activities in order to improve agricultural production as well as advance payments for farmers' production costs. In the surveys, it has been determined that the companies support the farmers on issues such as fertilization, pest control and soil analysis. Direct programs have been put into effect in order to increase the production quality and to obtain higher efficiency in each production group. In addition to these, companies are trying to increase the quality of raw materials with the advantages provided in issues such as certified seed distribution and equipment support for mechanization.

It can be said that these works carried out by the companies are aimed not only to meet the need for quality raw materials, but also to make it sustainable. It is seen that when the surveyed companies cannot find raw materials of sufficient quality in the domestic market, they meet this demand through imports. The lower the production or quality in the domestic market, the more imports are made. From time to time, companies have to resort to importing up to 75% of their total raw material needs.

As examined in the previous sections, Turkey's raisin and fresh grape production areas are shrinking and production is following a decreasing trend. When we look at the statistics of Turkey and the world in this field for many years, it is seen that Turkey was not in the past leader position in grapes. While Turkey and a limited number of countries in the world stood out in terms of grape production in 1961, grape production increased in 2018 all over the world, especially around Turkey (Figure 3.6). It can be said that the increase in grape production, especially in China, may pose a threat in the coming years. This is a clear proof that countries have adopted the understanding of producing agricultural products in their own countries by acting within the framework of long-term plans. In addition, increasing the production of grapes and processing them into wine, raki or other distilled Alcoholic Beverages is a value chain that creates a very high added value.

Grape Production, 1961 *Source: FAO*

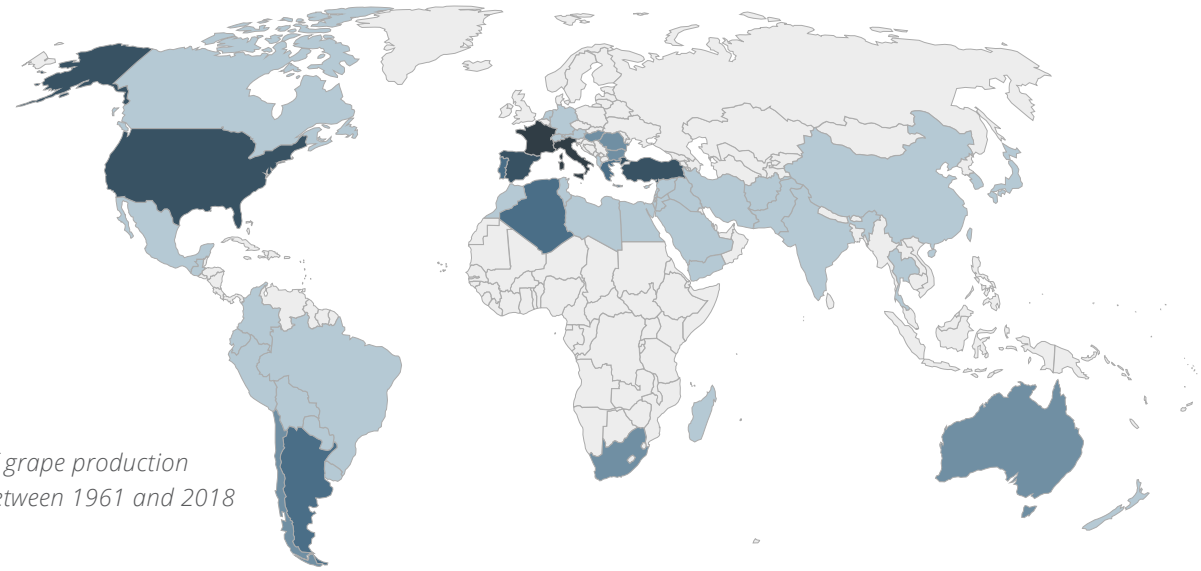
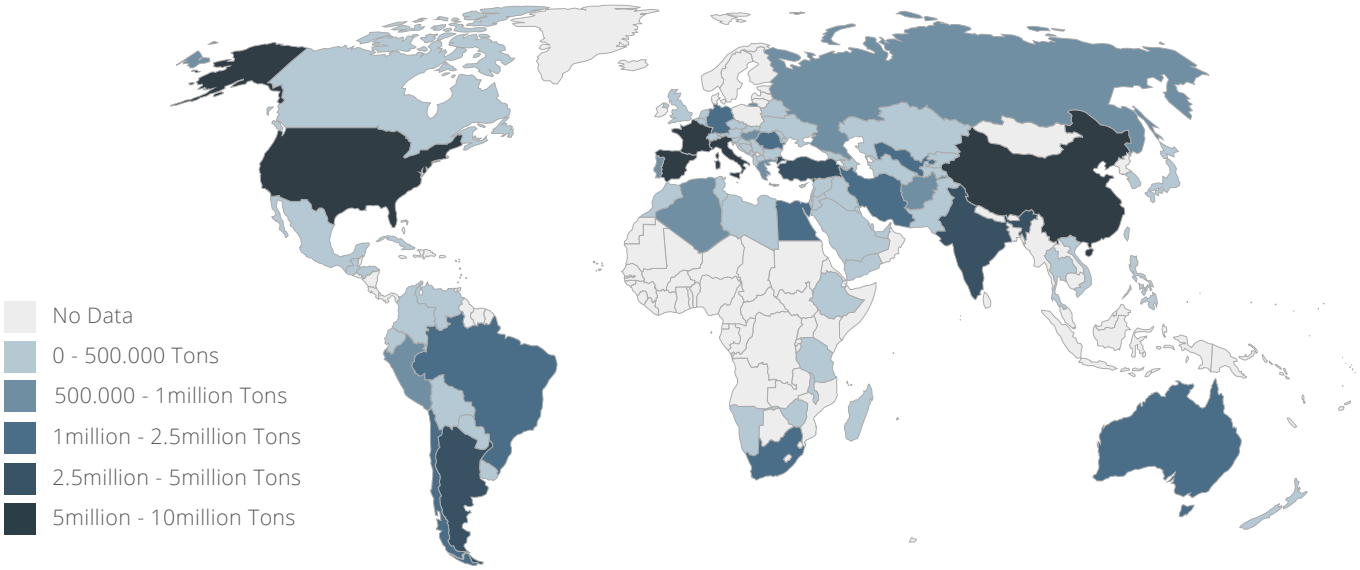


Figure 3 6
Distribution of grape production in the world between 1961 and 2018

Grape Production, 2018 *Source: FAO*



Similarly, it is understood that the production of anise group products has increased all over the world, similar to grapes, and many countries started to produce anise between 1961 and 2018 (Figure 3.7).

Anise Production, 1961 *Source: FAO*

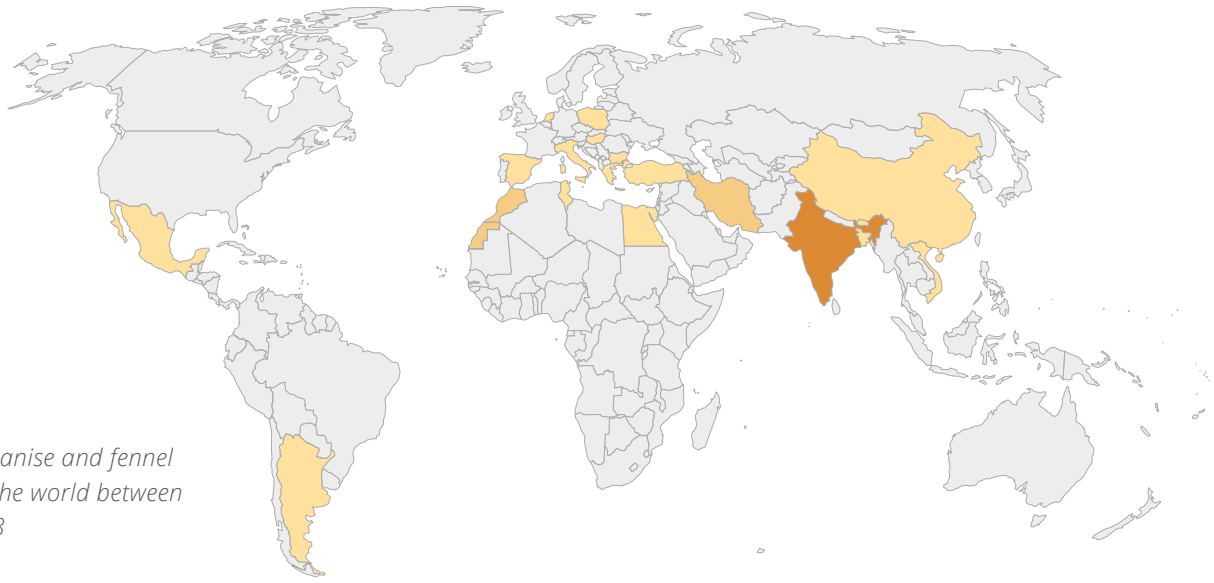
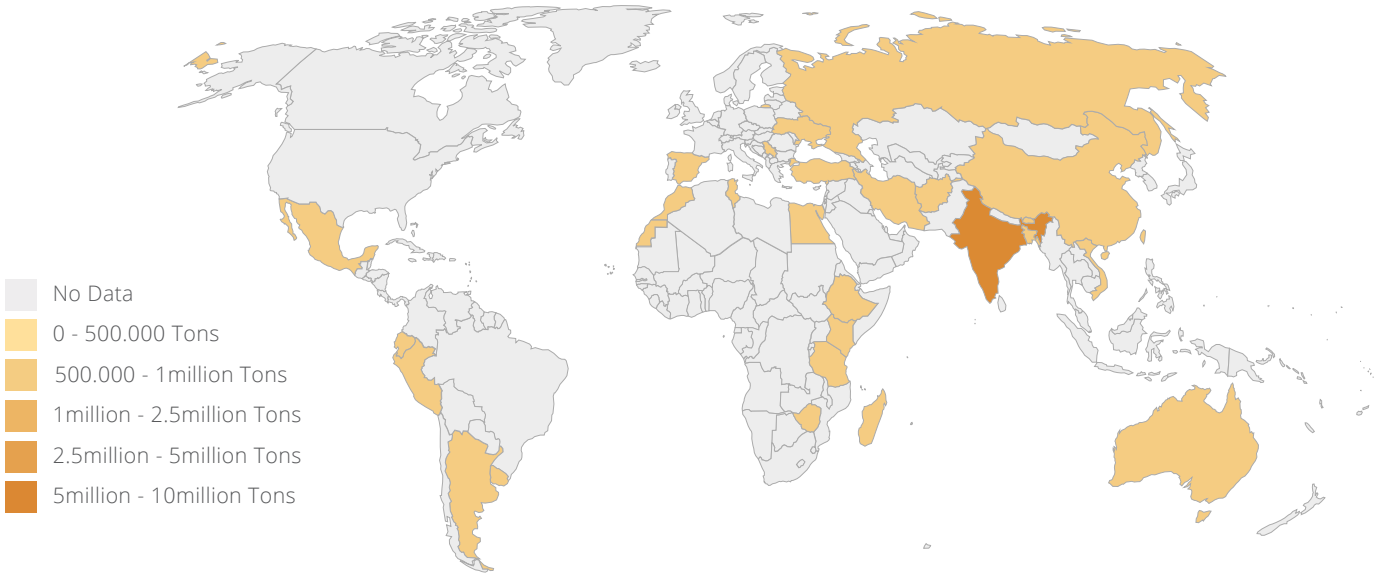


Figure 3 7
Distribution of anise and fennel production in the world between 1961 and 2018

Anise Production, 2018 *Source: FAO*



It is known that the production of barley, which is the most basic input for beer production, is insufficient as in other raw materials and imports of raw materials are used for beer production. Turkey is not able to use its own beer production capacity adequately, but it has a development area in the production of quality barley, which is needed by the brewer. In addition, it is seen that the whole world has a tendency to meet its own needs in the field of barley production, just like in grapes. While the country producing barley was few in the world in 1961, barley production became available in all countries except Central Africa in 2018.

Barley Production, 1961 *Source: FAO*

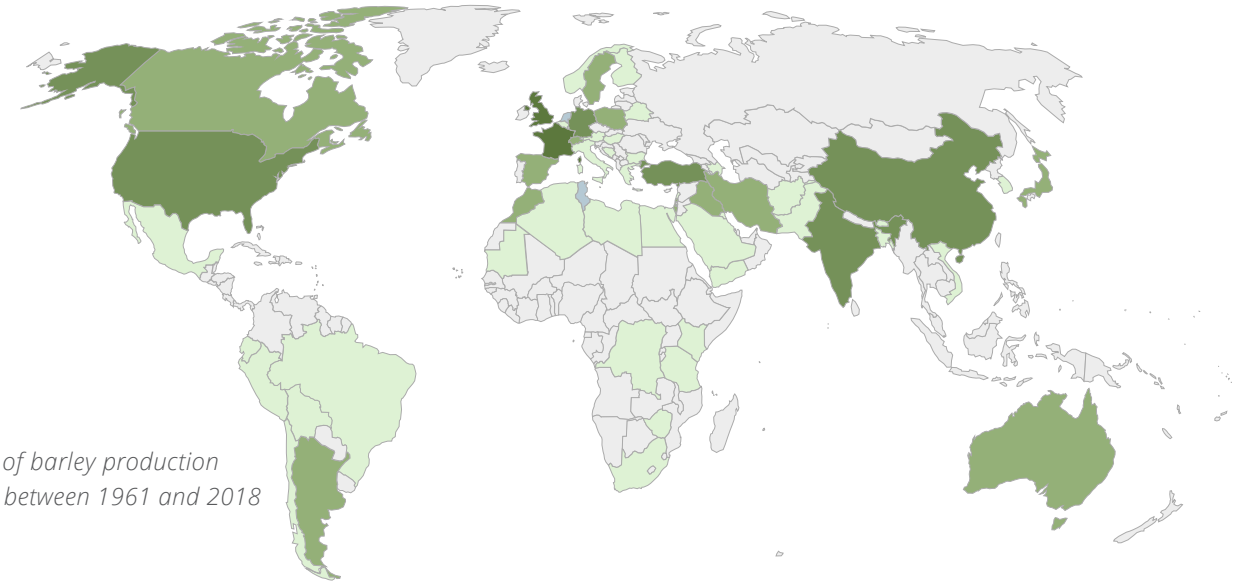
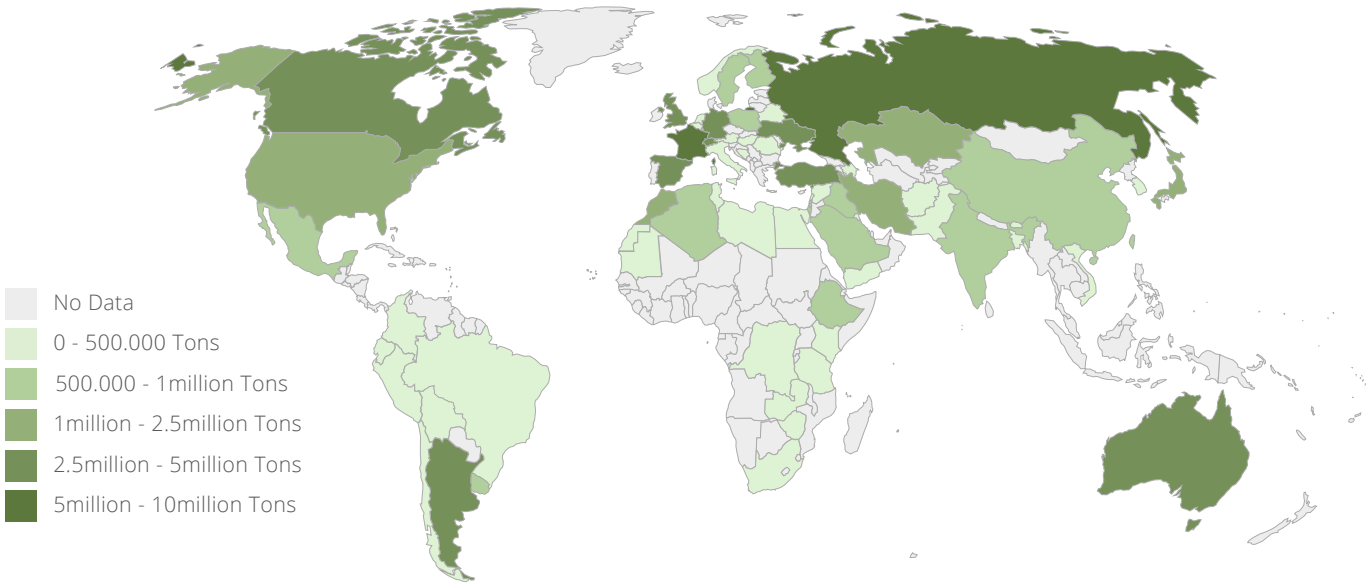


Figure 3 8
Distribution of barley production in the world between 1961 and 2018

Barley Production, 2018 *Source: FAO*



As can be seen, the Alcoholic Beverages sector has a very intense relationship with agricultural production. It is seen that the sector pays a very important import cost due to the fact that the basic raw materials used by the sector are not produced domestically. In addition, it is very clear that the whole world has taken measures in the last 50 years to produce the mentioned raw materials and has designed their production plans accordingly.

It can easily be said that increasing the total capacity utilization rate in the alcoholic beverage sector by 10% will have a great impact on agricultural production. It is an important opportunity for Turkish agriculture, especially that the sector has a desire to work with farmers in this field and provides both information and financial support to add value to the sector. Few sectors in Turkey are able to buy products directly from the producer with contracted production or conventional production and produce products with high added value and suitable for export. Moreover, it is known that Turkey has the potential to meet all the raw materials of the alcoholic beverage sector. It is emphasized in many studies conducted in this field that it is necessary to increase production especially in the field of grapes and cereals. In summary, since the Alcoholic Beverages sector could not fully use its production capacity due to the low demand estimated due to illegal alcohol consumption and the necessary steps could not be taken in terms of exports, it could actually contribute positively to the current account deficit of the country with exports, but it cannot provide this contribution due to the shrinking agricultural production.

3.2. Sales/Distribution Network and Internal Market Relationship

Companies operating in the alcoholic beverage sector have direct or indirect relations with thousands of sales points in the country. In alcoholic beverage sales, there is a sales network structure where wholesale points, retail points and open Alcoholic Beverages are sold. The number of wholesale points in Turkey is 1,159.

When the sales network is examined, it is seen that the provinces with the strongest network are Turkey's leading metropolises. When we look at the country in general, it is understood that the wholesale sales points are less dense than the west, especially in the eastern regions.

Wholesale alcoholic beverage outlets

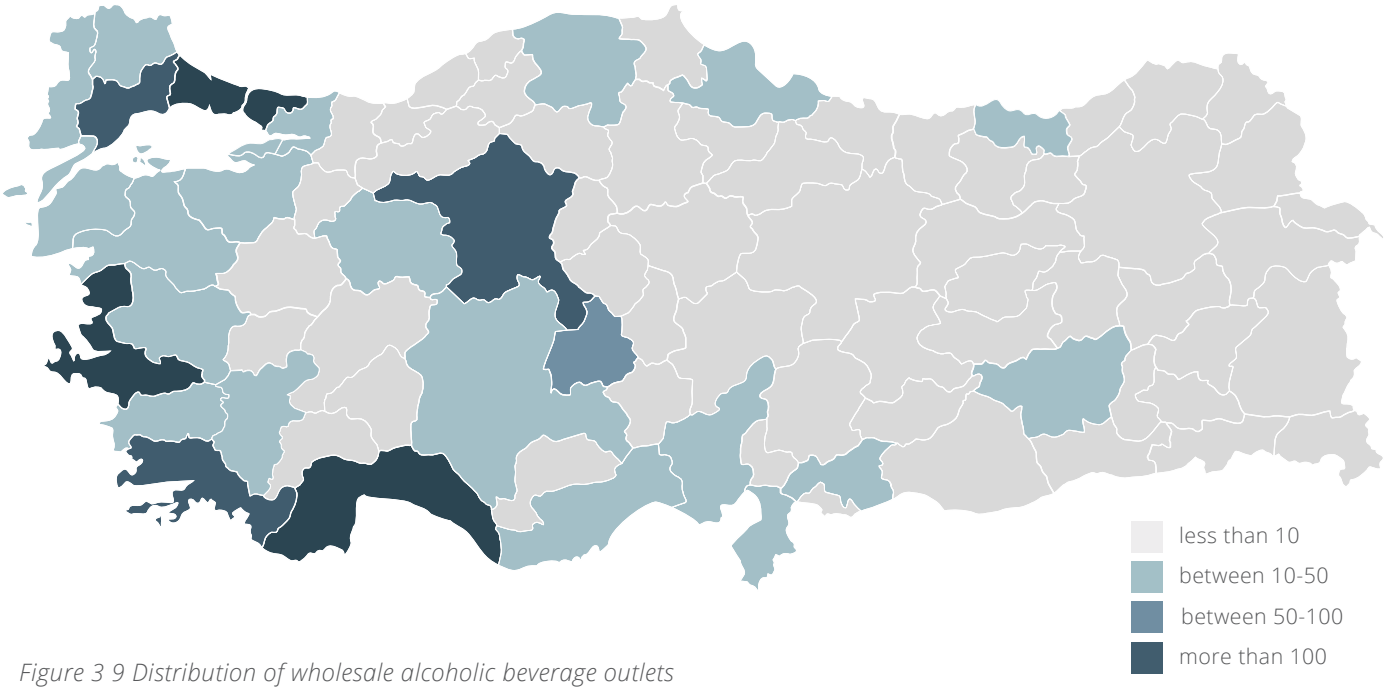


Figure 3 9 Distribution of wholesale alcoholic beverage outlets
Source: TADB

Looking at the distribution of retail sales points, mainly grocery stores, markets and kiosks come to the fore. As of 2020, there are more than 45 thousand sales points across the country. However, about 7 thousand of them are active and the remaining sales points are in a state where the operating permit period has not been extended. The decrease in retail sales points may cause the demand contraction that the sector may encounter in the domestic market. (Figure 3.10).

Figure 3 10
Distribution of retail alcoholic beverage outlets by vendor class

- Grocery store
- Kiosk
- Market
- Supermarket
- Nuts shop
- Other

Source: TADB

When the distribution of retail sales points is examined, it is seen that the western part of the country has a denser network, similar to the wholesale points. Istanbul and Izmir are home to more than 12 thousand retail outlets in total, and more than 25% of the retail outlets across Turkey are located in these two provinces. Another remarkable point is that retail sales points are concentrated in regions that receive heavy tourists in terms of summer tourism. It is known that Turkey has a very large tourism capacity apart from the south and west coasts. In this respect, it can be said that it is an important development area for retail sales points to have a more homogeneous structure throughout the country (Figure 3.11).

Wholesale alcoholic beverage outlets

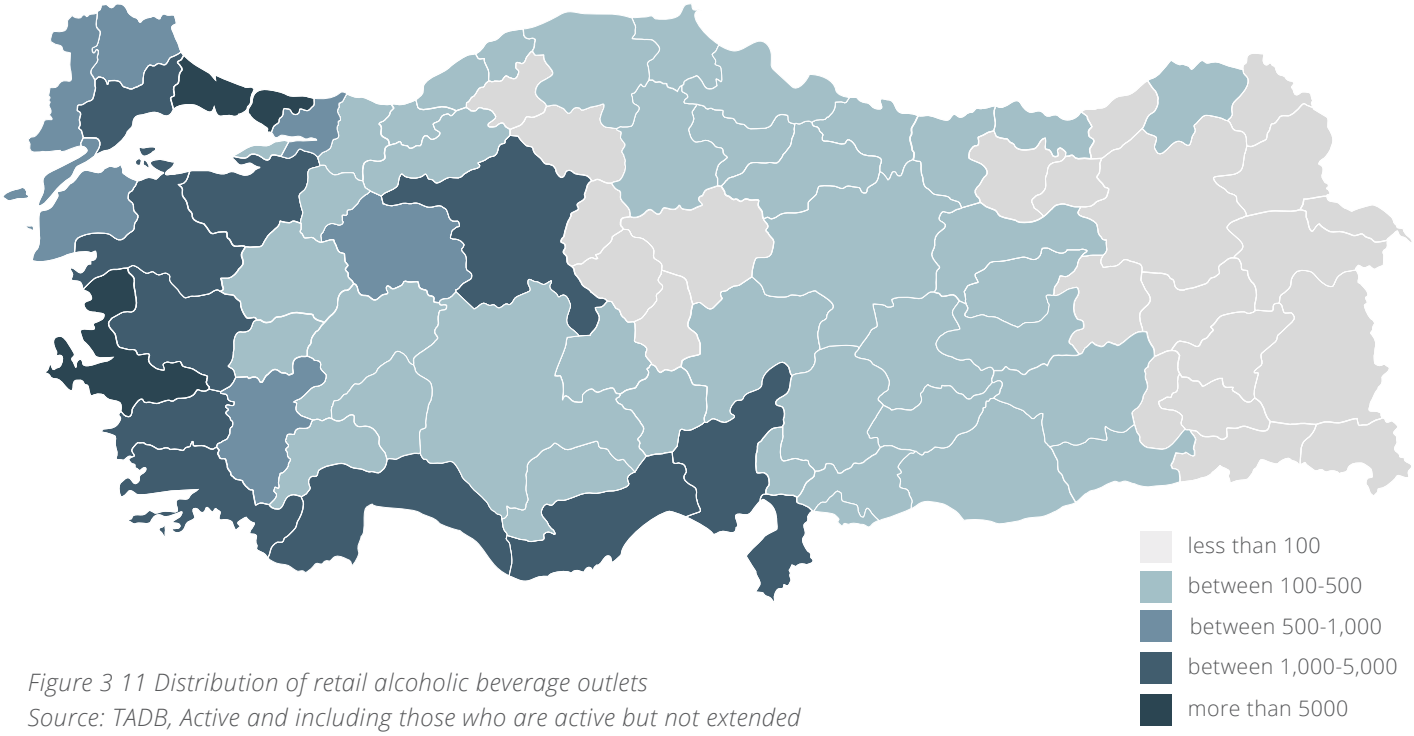


Figure 3 11 Distribution of retail alcoholic beverage outlets
Source: TADB, Active and including those who are active but not extended

Another important channel of alcoholic beverage sales is open sales areas such as restaurants, hotels or bars. There are 25,434 outdoor alcoholic beverage sales outlets throughout Turkey, 44% of which are located in Muğla, Istanbul and Antalya. It is understood that these areas, which can be described as beverageing restaurants throughout Turkey, are mostly located in metropolitan areas and on the coastline for summer tourism. On the other hand, it is also an indication that the consumption of Alcoholic Beverages by the consumer is limited outside. In the eastern regions of Turkey, the number of restaurants with alcohol is 35-40 per province (Figure 3.12).

Wholesale alcoholic beverage outlets

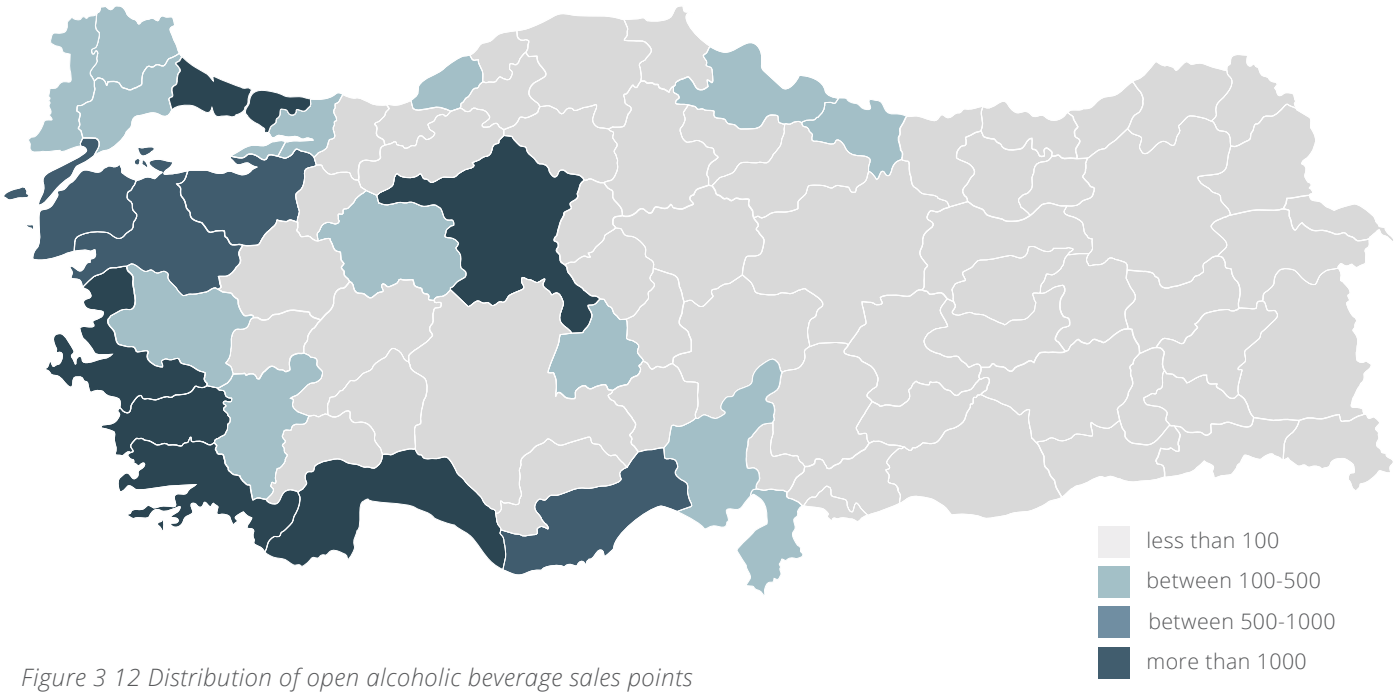


Figure 3 12 Distribution of open alcoholic beverage sales points
Source: TADB, Active and including those who are active but not extended

In the interviews held throughout the sector, it is stated that sales points have decreased after the increase in SCT in recent years. At the same time, it was determined in the surveys conducted with the companies that the market for beer, distilled Alcoholic Beverages and raki shrank, while the wine market followed a horizontal course. It can be said that this situation caused both the shrinkage of the sales point network and the inability to evaluate the sales potential in touristic areas. At this point, it should not be overlooked that illegal producers and smugglers, who evaluate the new market created by those who want to avoid the tax burden on Alcoholic Beverages, cause huge tax losses to the state. According to the 2019 report of the Department of Anti-Smuggling and Organized Crime of the General Directorate of Security, 422,741 bottles and 796,320 liters of illegal/fake alcohol were seized in our country in 2019, thanks to the devoted efforts of the security forces. Considering that these figures are the ones revealed in the operations of the security forces, the size of the illegal/fake alcohol market in our country will also be seen. In addition to the tax loss of the state, the fight against illegal/fake alcohol, which corresponds to the market shrinkage in terms of legal entrepreneurs, constitutes one of the most important problems of the sector in economic terms.

As mentioned in the previous section, the decrease in production especially in the raki and beer markets negatively affects the employment support in these sectors. In the surveys conducted with the companies, it has been determined that there are facilities where employment has decreased by more than 10% in beer and raki businesses, while a limited increase in employment has been declared in wine facilities.

3.3. Foreign Trade and Competition Relationship

Alcoholic Beverages are exported to a limited extent in Turkey. Despite the fact that 85 billion dollars of alcohol exports were made in the world in 2019, the total export of Turkey in all product groups is about 90 million USD. At this point, its share in exports is only 0.1%. At the same time, the countries that Turkey exports, import Alcoholic Beverages in large quantities. However, the share of Turkey in exports to these countries varies between 2-3 per thousand (Figure 4.1).

Figure 3 13 As of 2019, the top 10 countries to which Turkey exports most Alcoholic Beverages and the amount of Alcoholic Beverages exported from other countries to these countries

	Turkey's Export Amount (USD)	Export Amount from Other Countries (USD)	Turkey's Share
Iraq	22.137.945	No Data *	-
TRNC	19.451.316	No Data *	
Germany	15.649.706	5.175.584.749	0,30%
United Kingdom	6.396.062	6.092.733.375	0,10%
Lebanon	4.338.238	No Data *	-
Canada	2.644.539	3.351.505.353	0,08%
Belgium	2.600.490	1.655.582.622	0,16%
Austria	1.771.126	533.222.551	0,33%
USA	1.707.822	21.883.158.153	0,01%
Azerbaijan	1.462.095	26.025.257	5,62%

Source: Comtrade
**: Not shown due to inconsistent data.*

When the figures in the table above are examined, it can be seen that Turkey has difficulty in accessing the market somehow and is trying to increase its share in exports, but remains at a level far below its potential. For example, only 1.7 million dollars could be obtained from the imports of the USA, which is the world's largest importer of Alcoholic Beverages, approaching the level of 22 billion dollars.

Another comparison can be made over the target markets of the world's largest alcoholic beverage exporting countries. While the export volume of France, the world's largest exporter, to Canada is close to 800 million USD, Turkey's is only 2.6 million USD. When the same table is examined, it can be seen that Turkey's share is quite low in terms of many countries (Figure 3.14).

Figure 3 14 Top 10 exporting countries of the world's top 5 exporter countries and Turkey's share in these countries' imports

Exporter	Importer	Import Amount	Turkey's Exports	Turkey's Share
USA	Canada	2.012.089.488	1.707.822	0,08%
USA	United Kingdom	719.470.158	872.549	0,12%
USA	Panama	443.413.849	0	0,00%
USA	Japan	435.371.970	115.568	0,03%
USA	Chile	425.069.176	15.649.706	3,68%
USA	Netherlands	290.158.953	1.064.682	0,37%
USA	Mexico	254.585.131	24.229	0,01%
USA	Hong Kong	243.093.002	1.446.657	0,60%
USA	France	238.253.904	2.222	0,00%
USA	Germany	4.273.318.746	1.707.822	0,04%
United Kingdom	USA	1.664.487.241	6.396.062	0,38%
United Kingdom	France	1.164.474.157	1.446.657	0,12%
United Kingdom	Singapore	1.079.314.994	15.649.706	1,45%
United Kingdom	Spain	1.059.414.714	0	0,00%
United Kingdom	Germany	747.731.878	2.600.490	0,35%
United Kingdom	Netherlands	707.334.089	180.487	0,03%
United Kingdom	Hong Kong	607.892.840	24.229	0,00%
United Kingdom	China	541.219.989	2.644.539	0,49%
United Kingdom	Ireland	503.789.894	542.196	0,11%
France	USA	1.922.042.965	1.707.822	0,09%
France	United Kingdom	1.446.405.559	15.649.706	1,08%
France	China	1.072.335.462	6.396.062	0,60%
France	Germany	464.770.904	542.196	0,12%
France	Singapore	408.765.347	2.644.539	0,65%
France	Belgium	343.720.427	872.549	0,25%
France	Japan	255.598.772	1.064.682	0,42%
France	Hong Kong	228.329.972	2.600.490	1,14%
France	Canada	216.029.850	180.487	0,08%
France	Switzerland	215.459.565	235.682	0,11%
Italy	USA	5.588.403.088	1.707.822	0,03%
Italy	Germany	125.764.894	6.396.062	5,09%
Italy	United Kingdom	99.249.332	1.446.657	1,46%
Italy	Switzerland	89.863.129	416.923	0,46%
Italy	Canada	87.173.792	2.644.539	3,03%
Italy	France	84.057.135	0	0,00%
Italy	Netherlands	64.258.061	0	0,00%
Italy	Belgium	44.311.411	180.487	0,41%
Italy	Japan	41.438.074	115.568	0,28%
Italy	Sweden	36.644.239	44.497	0,12%
Mexico	USA	5.588.403.088	1.707.822	0,03%
Mexico	United Kingdom	125.764.894	6.396.062	5,09%
Mexico	China	99.249.332	1.446.657	1,46%
Mexico	Australia	89.863.129	416.923	0,46%
Mexico	Canada	87.173.792	2.644.539	3,03%
Mexico	Chile	84.057.135	0	0,00%
Mexico	Guatemala	64.258.061	0	0,00%
Mexico	Japan	44.311.411	180.487	0,41%
Mexico	Spain	41.438.074	115.568	0,28%
Mexico	Italy	36.644.239	44.497	0,12%

Source: Calculated from data from Trademap and Comtrade.

It is clear that the sector needs to be supported in order for Turkey to get a share of the 85 billion dollar export pie around the world, to be a partner in the competition and to open up to foreign markets.

It is known that the sector, which produces completely with domestic raw materials in Turkey, wants to open up to foreign markets. In the surveys conducted with the companies, it was determined that 10 of the 18 companies were foreign trade departments. On the other hand, it is seen that participation in international fairs is very limited. The number of fairs that the sector participates in per year varies between 2-3. However, more than 100 international fairs are held around the world. It is observed that these fairs are generally concentrated in the last two quarters of the year. The distribution of the countries to which Turkey exports the most and the international fairs show that the sector has missed a very large foreign trade market (Figure 3.15).

It can be said that one of the main reasons for Turkey's inability to enter a very wide foreign market around the world is the obstacles to the sector's promotion of itself in the country and abroad. In the surveys conducted, it was stated that the main obstacle in accessing export markets was "awareness", followed by price competition and insufficient incentive/support mechanism. It is clear that publicity and appearing in the international arena are necessary for awareness. In addition, it is possible to create brand recognition in our country, which hosts millions of tourists every year and where a significant portion of alcohol consumption is carried out by these people. In terms of hotels, measures can be taken to encourage the use of local products and to serve alcohol consumed by tourists in a way that emphasizes its brand. This will increase brand awareness. However, it is important that especially European tourists can reach the brands they consume in our country, as well as in their own countries. However, it should not be forgotten that this situation cannot be achieved only by participating in foreign fairs. It can be said that there is a greater need for international promotion incentives here (Figure 3.16).

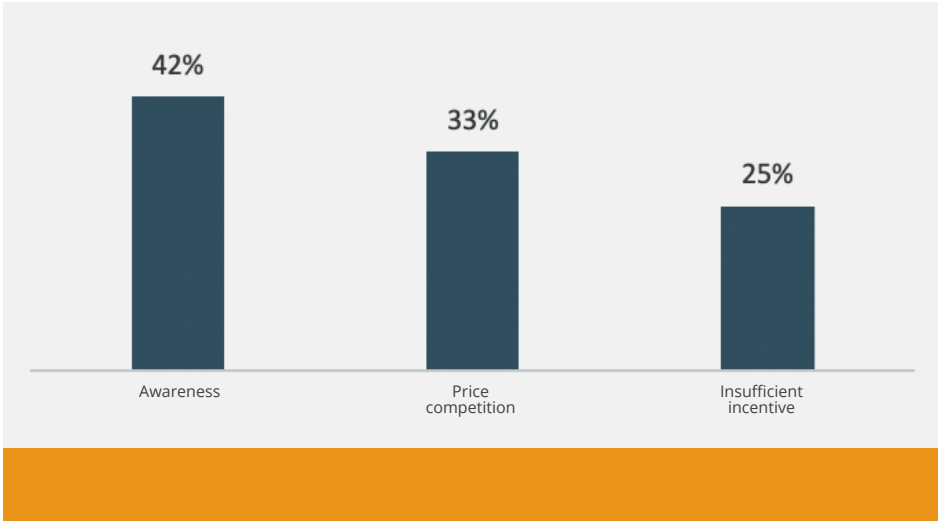
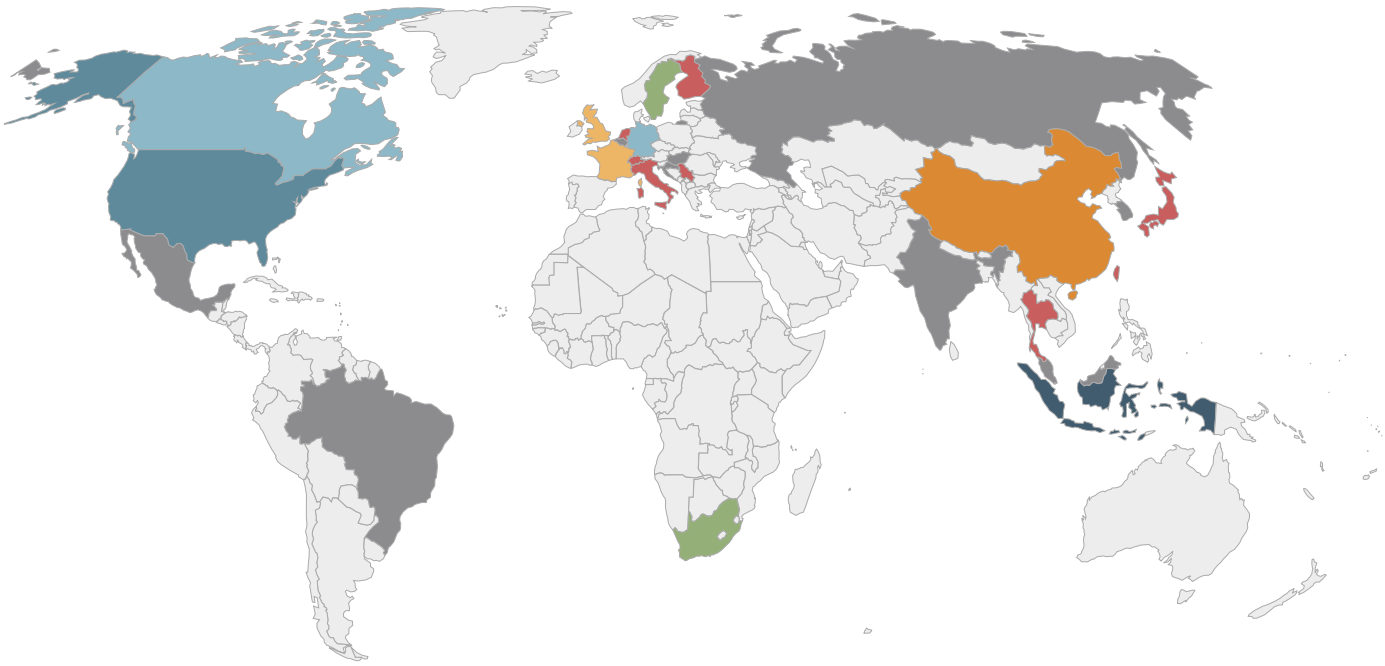


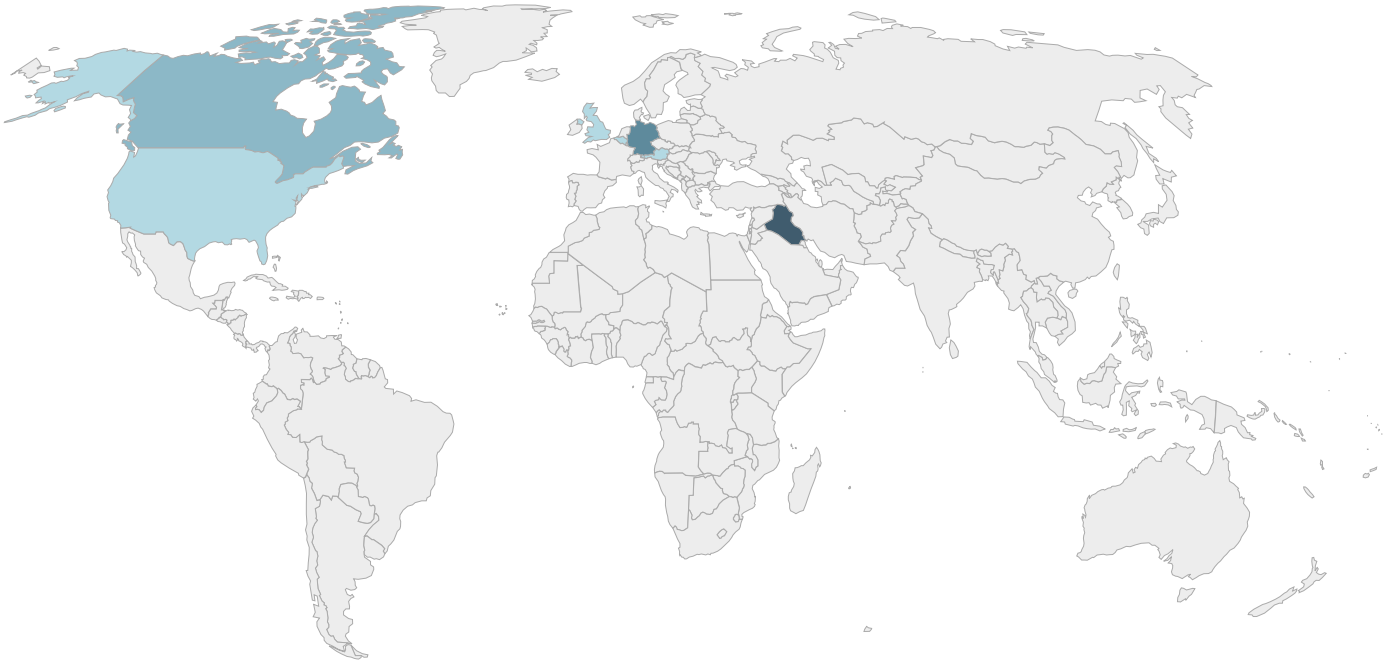
Figure 3 16
3 main obstacles to opening up to foreign markets and developing exports

Figure 3 15 International Food, BEVERAGE and Hospitality Sector Fairs and Turkey's Foreign Market for Alcoholic Beverages

Distribution of International Food and Beverage Fairs



Turkey's Top 10 Exporting Countries



4

SUGGESTIONS FOR TRANSITION TO VALUE-ADDED STRUCTURE

Turkey is a country in the "high-middle" income group according to the world bank data. Development plans and programs made for many years aimed to ensure the transition of the country from middle-income groups to high-income groups. In this transition, the growth and development of the sectors in which Turkey is comparatively superior, the increase in the share of products produced with domestic raw materials, and the reduction of the current account deficit by increasing the foreign trade volume can be counted as important measures. Turkey has very important targets for 2023, among which two important elements stand out. The first of these is to increase total exports to 226 billion USD, and the second is to increase the share of industry in GDP. At the same time, it is aimed to increase the agricultural GDP to 58 billion USD (47 billion USD by 2020), and it is foreseen to increase the employment rate to 50.8% (Figure 4.1).

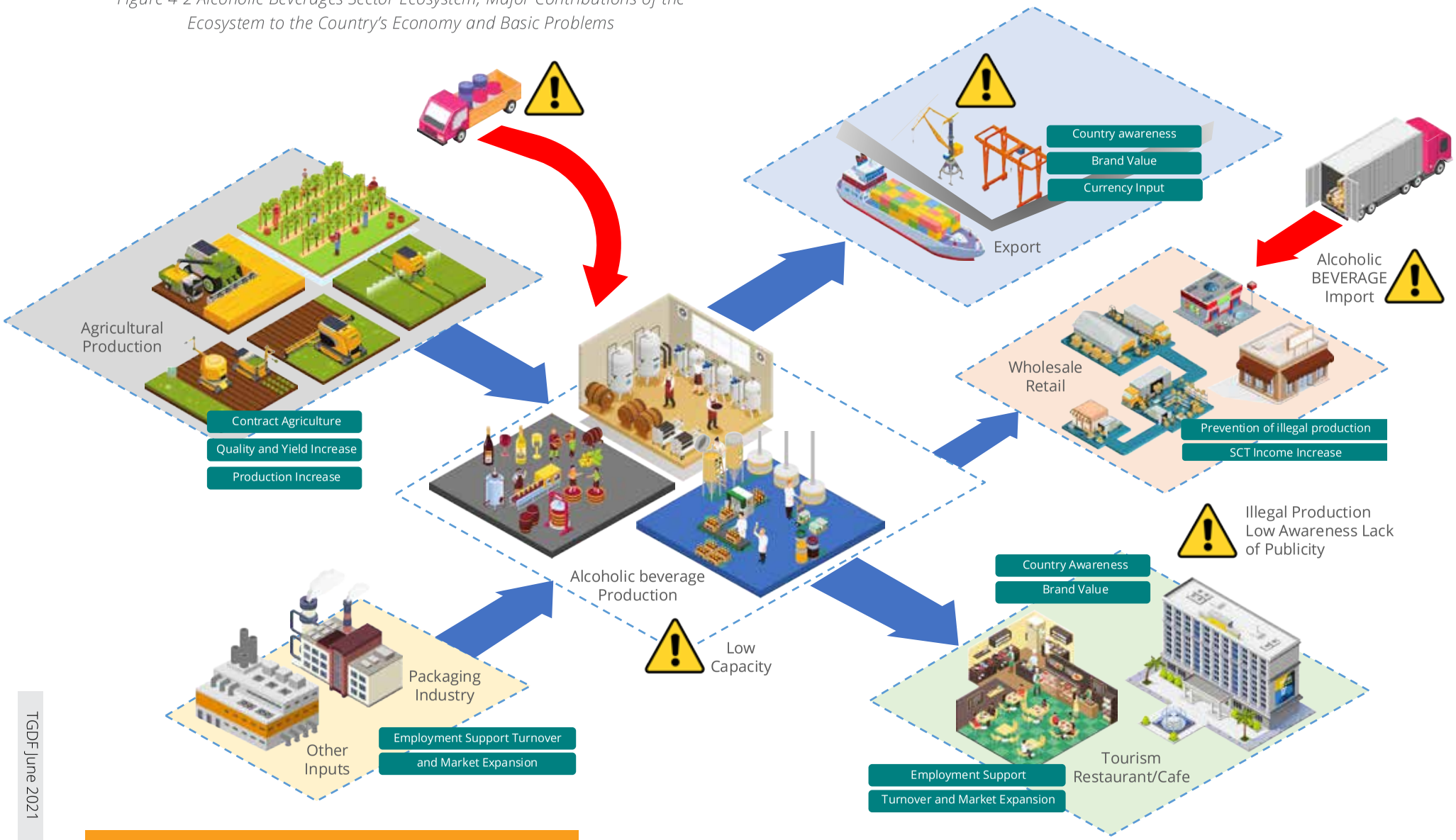
Figure 4 1 11. 2023 targets for key economic indicators in the development plan

Key Indicators	2018	2023
GDP (2009=100 Zinc. Vol., Billion TL)	1737	2142
GDP (Current, Billion TL)	3701	7453
GDP (Current, Billion Dollars)	784	1080
Population (Mid-Year, Million People)	81,4	86,5
GDP Per Capita (Current, USD)	9632	12484
GDP Per Capita (PPP, Dollars)	28205	37423
Sectoral Distribution of Value Added (Ratio to Current GDP, Percent)		
Agriculture	5,8	5,4
Industry	22,2	24,2
Services	61,5	60,1
Labor Market		
Labor Force Participation Rate (%)	53,2	56,4
Labor (Million People)	32,3	36,7
Employment (Million People)	28,7	33
Employment Rate (%)	47,4	50,8
Unemployment Rate (%)	11	9,9
Source: T.R. Presidential Strategy and Budget Department		

The Alcoholic Beverages sector is one of the most suitable sectors to support the targets considered as export potential. When the ecosystem of this sector is examined, it is clearly seen that in addition to its contributions to the economy, it faces some problems that have been noted throughout the study (Figure 4.2).

It is seen that this ecosystem has many factors that improve agricultural production, contribute to foreign trade market share and support tourism. In the following sections, the advantages and recommendations of the sector in this area are discussed.

Figure 4 2 Alcoholic Beverages Sector Ecosystem, Major Contributions of the Ecosystem to the Country's Economy and Basic Problems



Source: TERZİ, 2021

The main agricultural raw materials required for the production of Alcoholic Beverages are fresh grapes and raisins, brewed barley, wine grapes, anise and hops. Apart from these, many fruits and aromatic plants are used for flavored wines, liqueurs, and other distilled Alcoholic Beverages. The main contributions of the sector to agricultural production can be listed as follows:

a) Input support for quality and productivity improvement
b) Correct fertilization and breeding with informative studies
c) Sustainable farmer incomes by ensuring the continuity of production
d) Purchase guarantee provided by contract farming
e) Incorporation of barren or low productive areas into production

However, the continuity of these contributions and increasing the number of contributions will only be possible with the sector's demand for more raw materials. However, the amount of production is low despite the installed capacity of the sector. In this case, no more raw material demand can be made. In this case, when the production amounts of the products in question are examined, it can be seen that the farmers give up or pause production.

Increasing capacity utilization will be possible by increasing production. In this case, the raw material demand of the sector will increase. In this way, it will contribute to the agricultural production of the country and it will be possible to produce quality raw materials by developing the cooperation of the sector with the farmers. All developments will ensure that the foreign currency paid for all kinds of raw materials imported from abroad remains within the country.

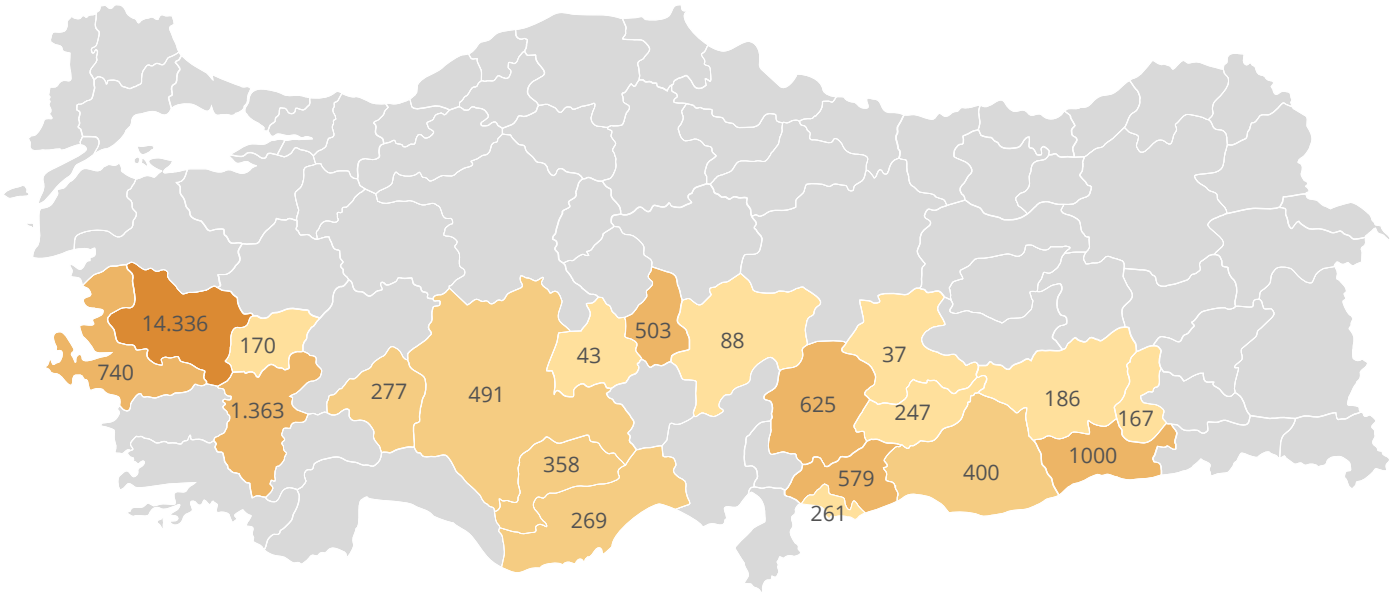
Dried Grapes

When the production of dried grapes, which is one of the basic inputs for ethyl alcohol, is examined, it is seen that there is a concentration in certain regions of the country. It is anticipated that the capacity utilization rates of distilled alcoholic beverage production facilities, especially raki, will be increased by increasing production and spreading it in different regions of the country. Making production possible outside certain provinces is also important for increasing the production capacity of the sector in the long run. Currently, dried grapes are produced in the western and southern parts of the country. Raki production is made in certain provinces. Thanks to the expansion of production, it will increase the chances of establishing new facilities in different regions (Figure 4.3).

It is seen that the production will follow a horizontal course in the estimations made on the 17-year production data regarding the dried grape production. However, it is calculated that the estimated production figures of raki production in the same period will be in a downward trend. Although there is a possibility that raki production will decrease to 28 million liters in 2025, it is inevitable that the product gap in the market will be covered by illegal production. The increase in the amount of illegal/fake alcohol seized in the annual reports announced by the Department of Anti-Smuggling and Organized Crime of the General Directorate of Security further demonstrates this situation. This situation will both pose a threat to the sector and have a negative impact on grape production. In an opposite scenario, it can be said that the production of dried grapes will start to increase very rapidly and this will positively affect the production of fresh grapes (Figure 4.4).

Figure 4 3 Distribution of dried grape production by provinces (thousand tons) and number of raki production facilities

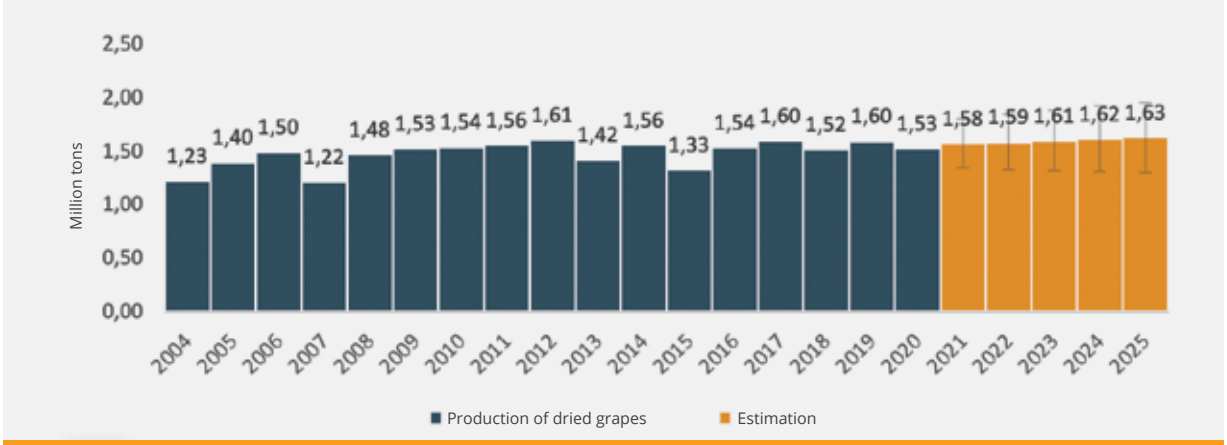
Dried Grapes



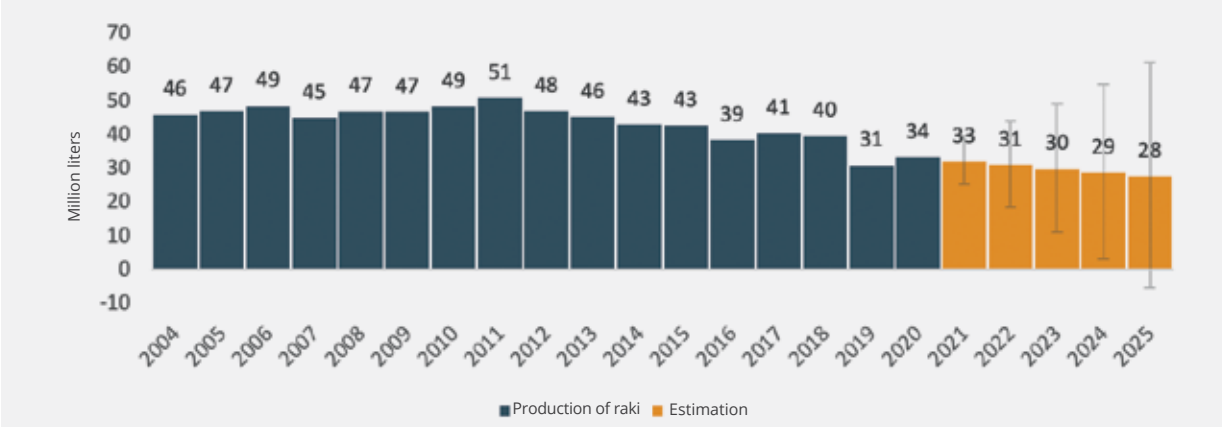
Raki Production Facilities

Source: TADB and TURKSTAT Crop Production Data

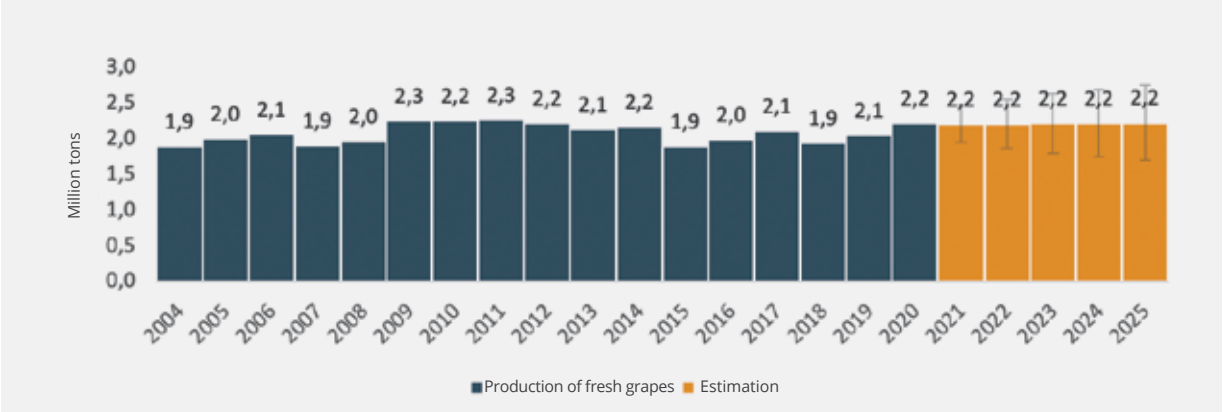
Figure 4 4 Estimated levels of dried grapes, fresh grapes and raki production for 2025



Source: Estimated by Exponential Smoothing (ETS) method based on TADB and TURKSTAT Crop Production Data



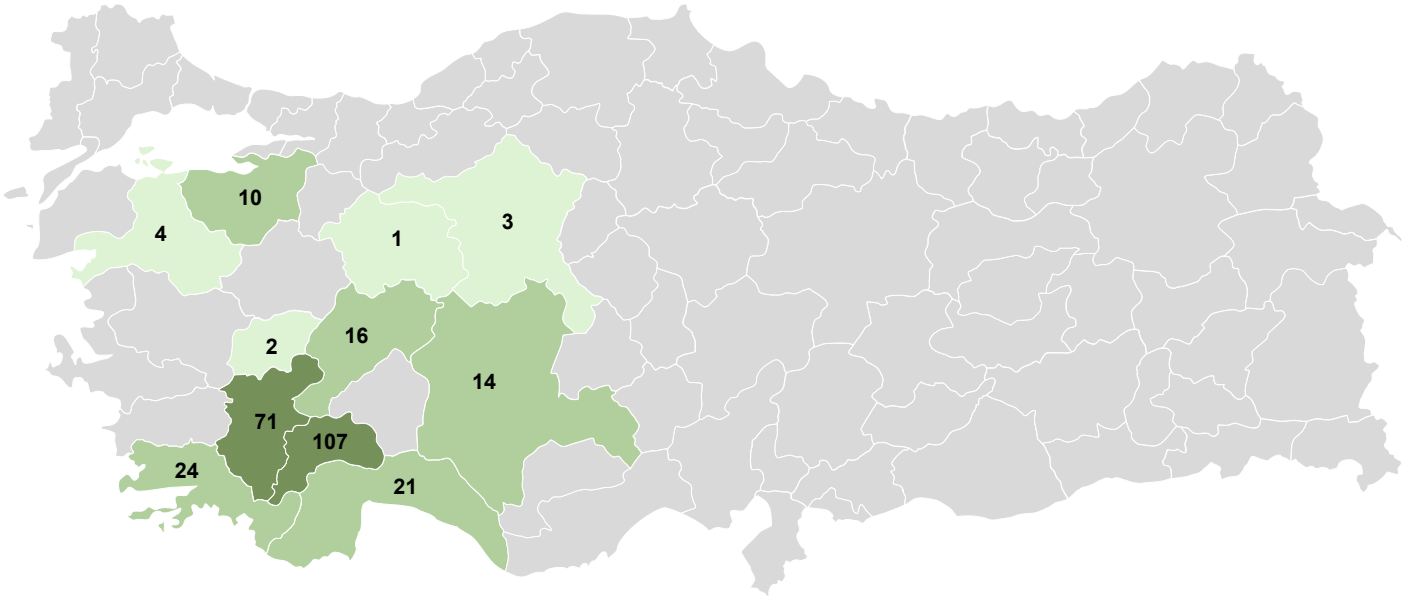
Source: Estimated by Exponential Smoothing (ETS) method based on TADB and TURKSTAT Crop Production Data



Source: Estimated by Exponential Smoothing (ETS) method based on TADB and TURKSTAT Crop Production Data

Anise production, which is of critical importance for the production of raki, Turkey's unique and traditional alcoholic beverage, is made in limited regions and has an extremely fluctuating production and cultivation area trend. Anise production is only made in the Central Aegean and Central Anatolia regions, and it is known that raki producer companies are doing a lot of work to improve anise production. It can be said that each liter increase in raki production will improve the production areas of the anise plant, which can grow especially in barren and infertile soils. Turkey is also a country that can export in this product group, and in the years of high production, more than 12 million dollars could be exported. The increase in domestic production will both meet the raw material resource of the raki sector and support Turkey to increase its export share in this field (Figure 4.4).

Anise

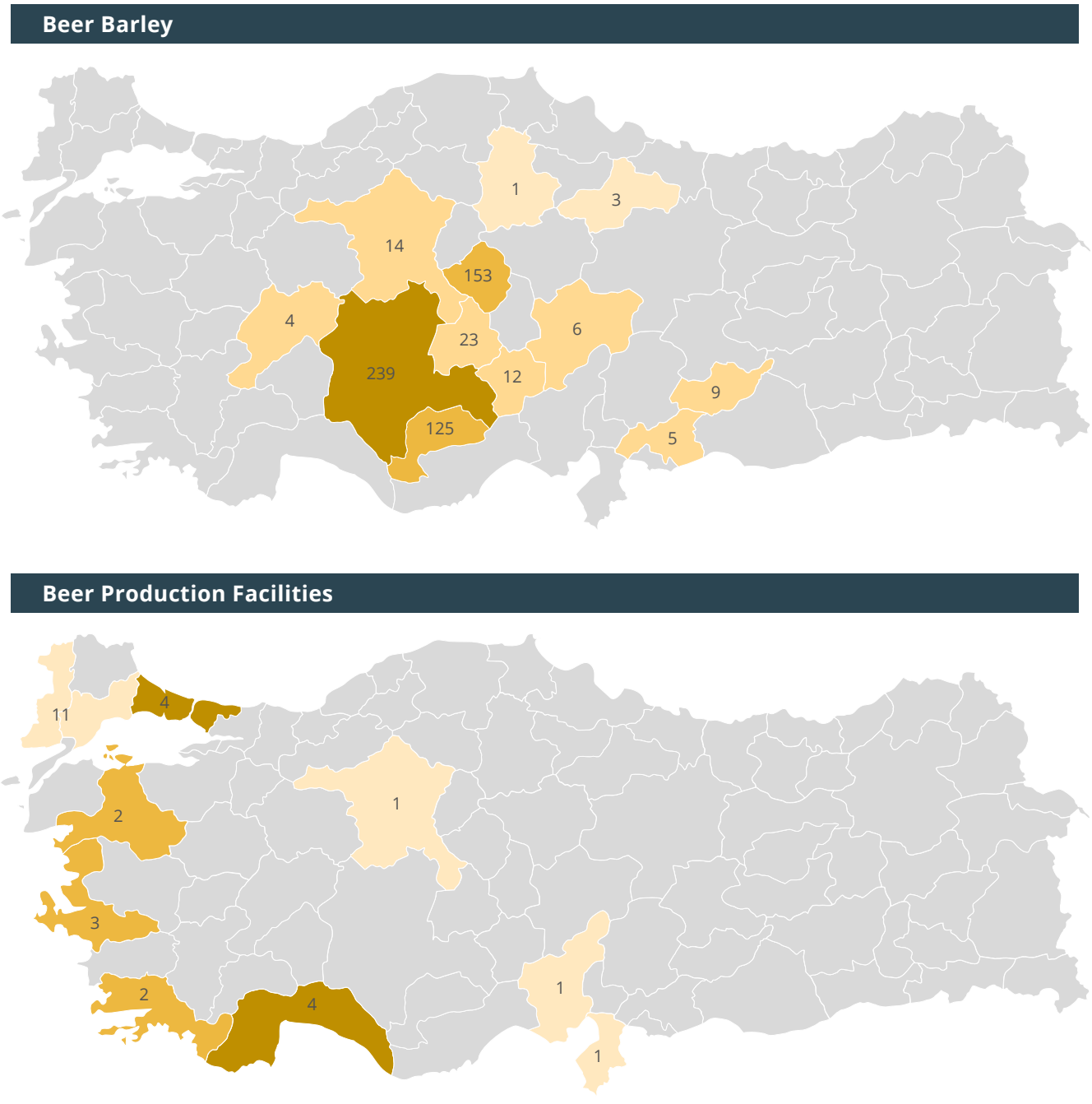


Source: TADB and TURKSTAT Crop Production Data

Beer Barley

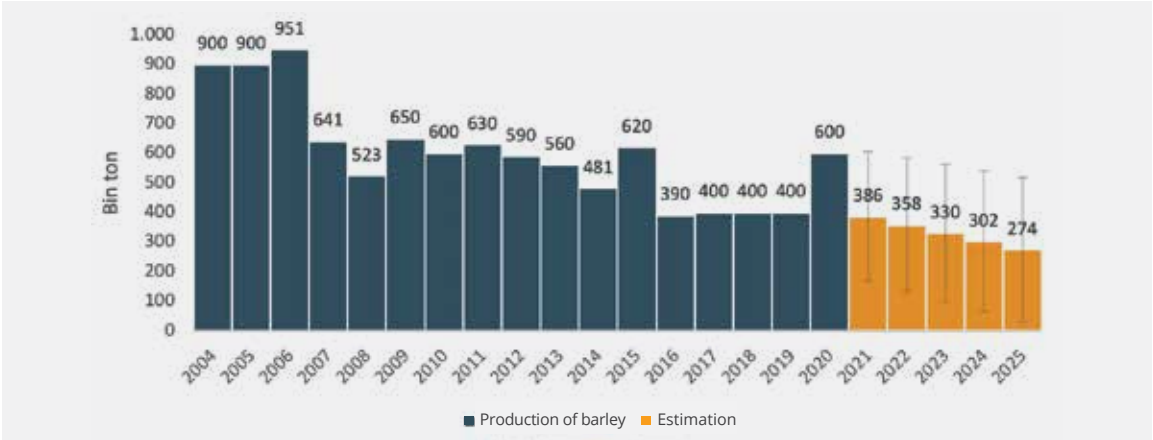
Barley production, which is required for the production of malt, which is the basic raw material of beer, is mainly produced in the Central Anatolia region of Turkey. Although barley production in Anatolia has a history dating back to ancient times, barley production for beer has decreased to 6% of the total production. At the same time, it is known that the sector imports a significant amount of malt and malt raw materials. It is seen that 52 million dollars of beer raw material imports were made in 2020.

Figure 4 6 Distribution of barley production by provinces (thousand tons) and number of beer production facilities

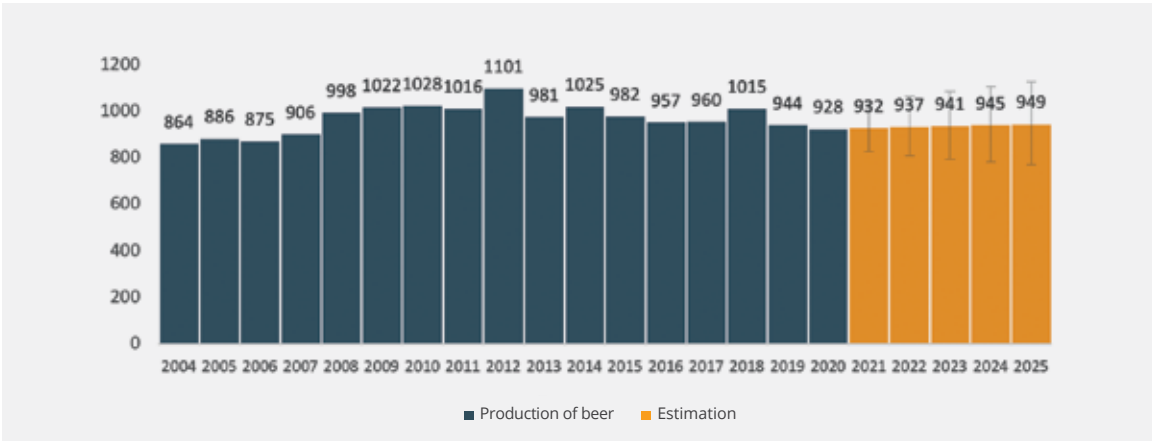


Although barley is a product that can be produced throughout the country, spreading it to different regions from the areas where it is currently produced may be a measure that will increase the amount of raw material production. When estimation is made on the production data of 17 years, it is predicted that the barley production for beer will decrease below the level of 300 thousand tons in 2025. In this case, Turkey will import more beer raw materials and the final product price will be adversely affected due to import-dependent raw material supply. However, it is estimated that beer production will reach roughly 950 million liters in 2025. In this case, it is essential to increase the beer barley production. On the other hand, assuming that the beer sector operates with a 60% capacity utilization rate, increasing the production capacity to 1.5 billion liters will only be possible with the abundance of raw materials.

Figure 4 7 Estimated levels of beer barley and beer production for 2025



Source: Estimated by Exponential Smoothing (ETS) method based on TADB and TURKSTAT Crop Production Data

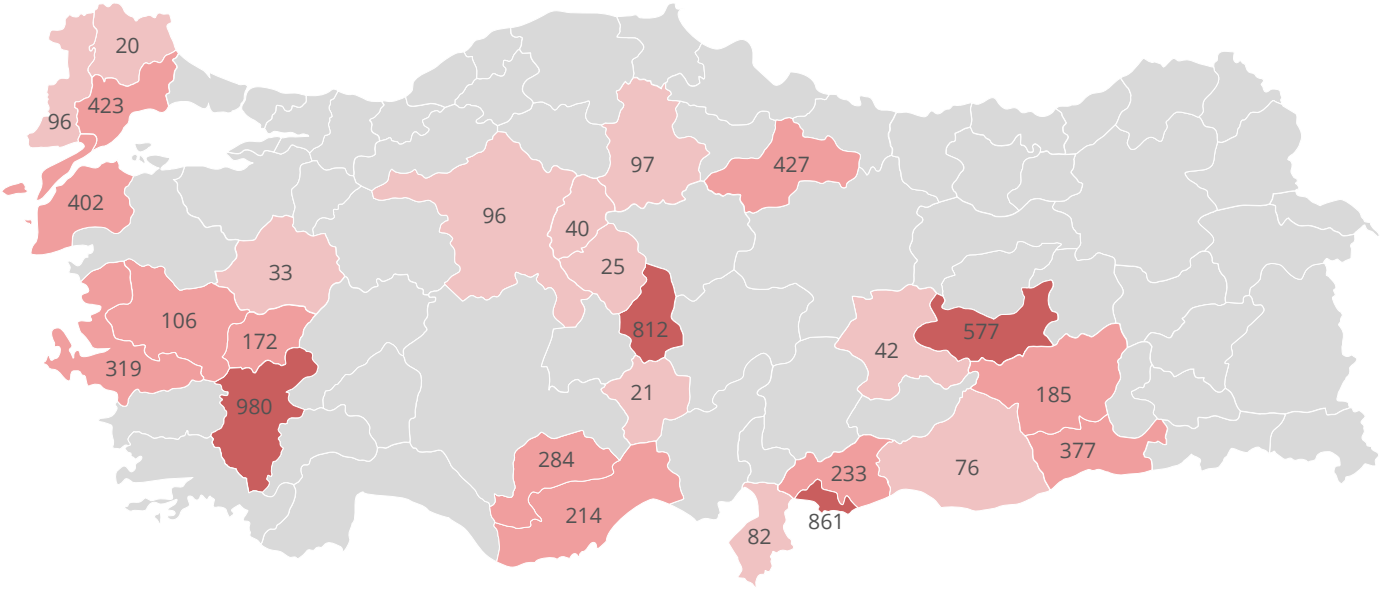


Source: Estimated by Exponential Smoothing (ETS) method based on TADB and TURKSTAT Crop Production Data

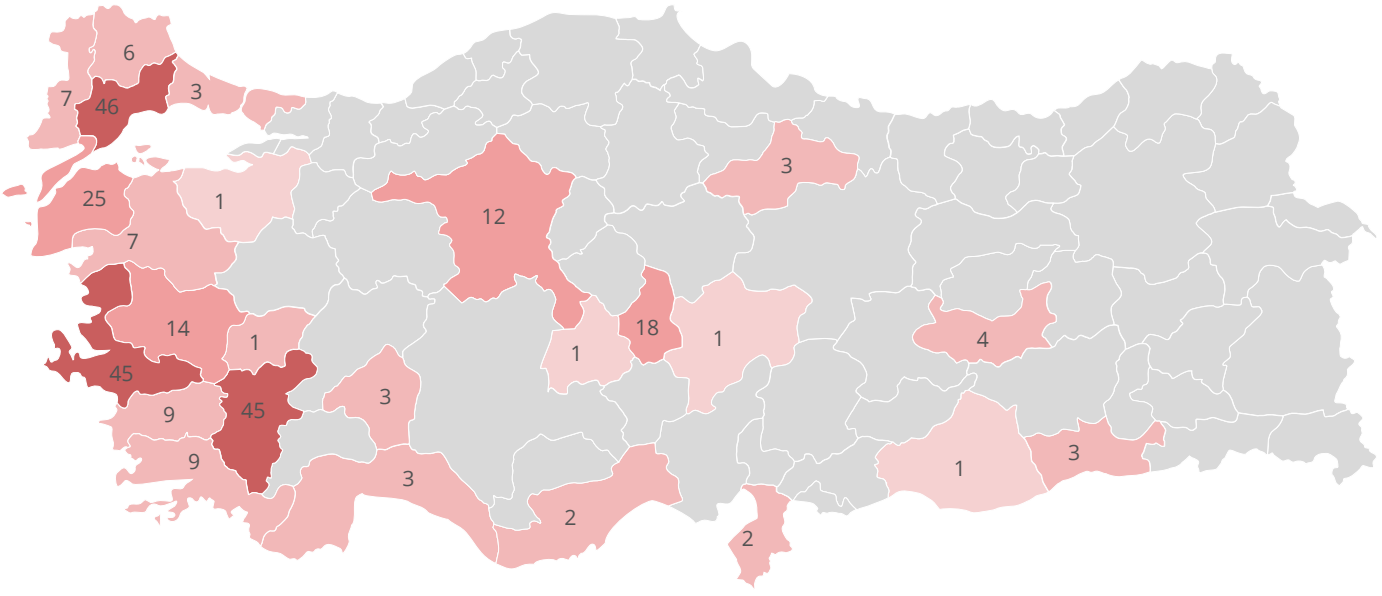
Wine Grapes

Although it is known that the wine grape areas are decreasing in Turkey, it is seen that the vineyards spread in the west-east axis. Inner Aegean, Southeastern Anatolia and Thrace regions are the leading regions in wine grape production. It can be said that wine production is concentrated mainly in the western regions.

Wine Grapes



Wine Production Facilities



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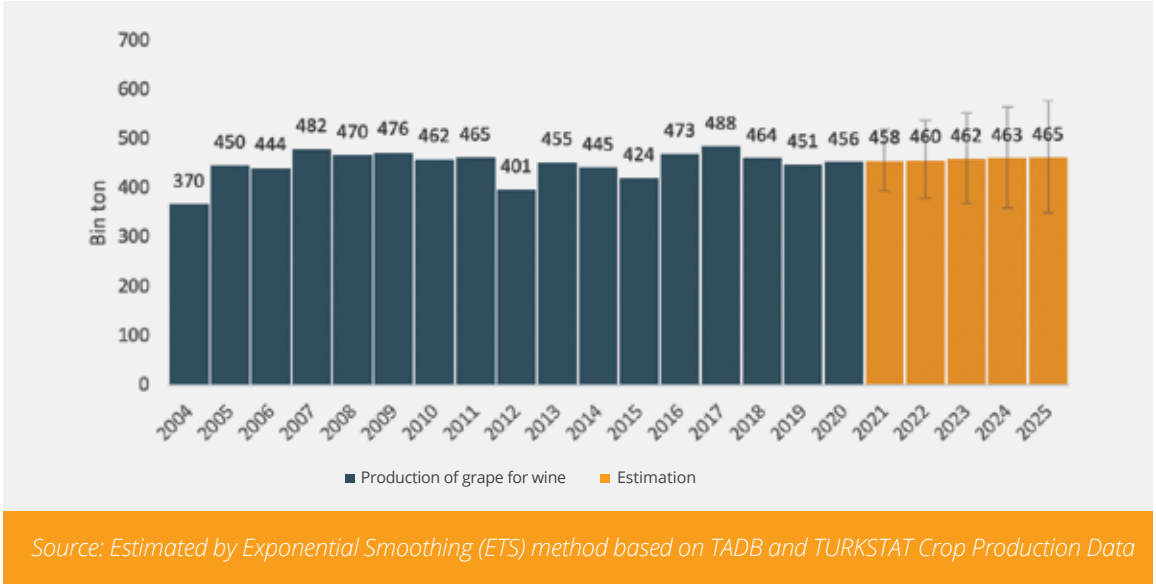
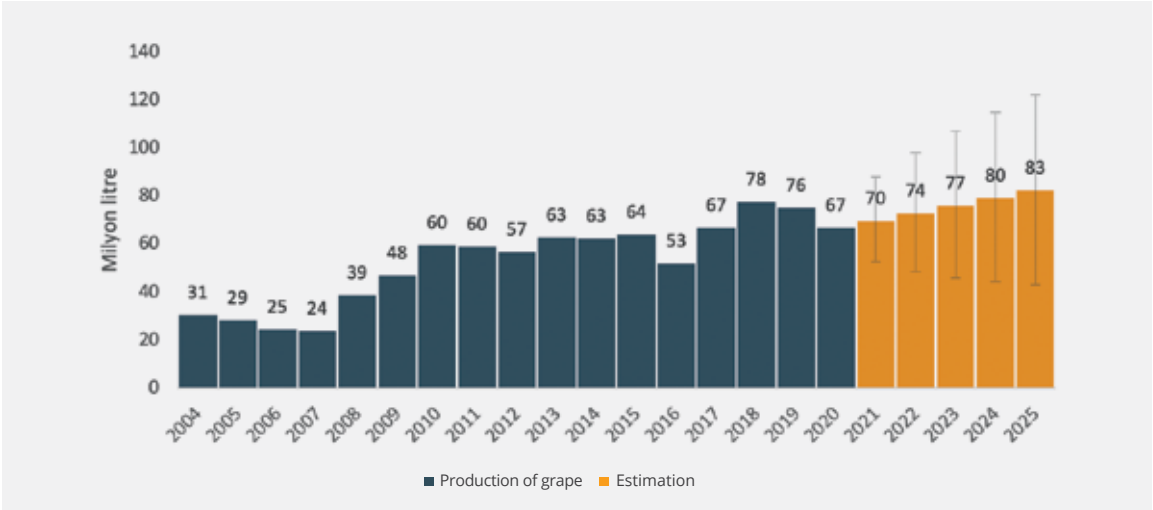
When retrospective production data are examined, it is estimated that wine production will reach 83 million liters by 2025. On the other hand, it is predicted that the production of wine grapes will follow a flat course and the cultivation areas will decrease. At this point, it is clear that the sector will face the problem of insufficient raw materials in the face of the increase in wine production (Figure 4.8).

Figure 4 8 Estimated levels of wine grape and wine production for 2025



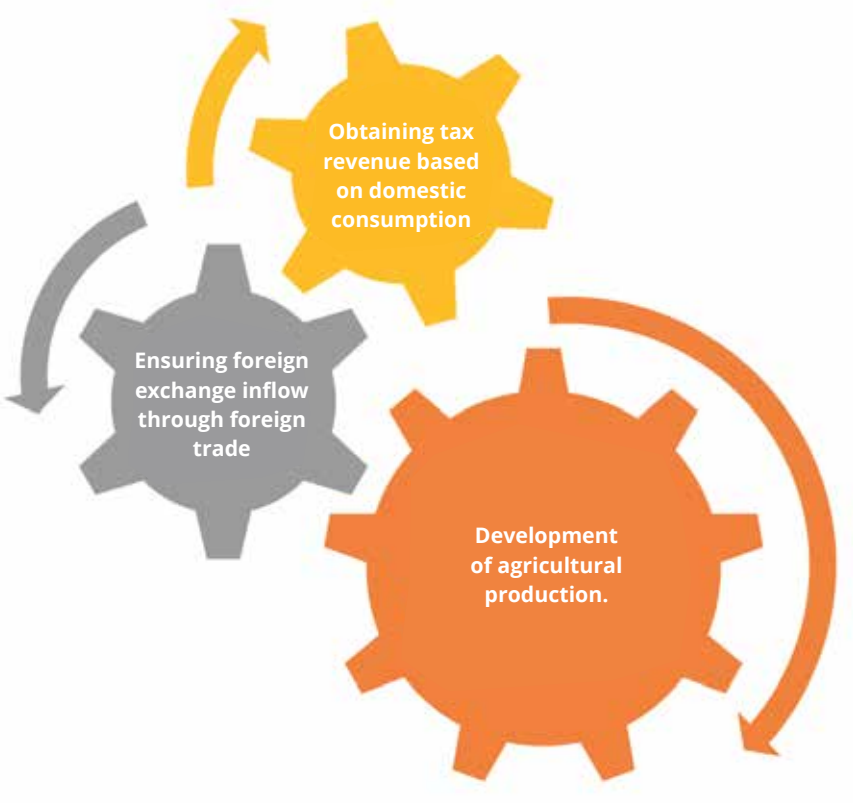
Source: Estimated by Exponential Smoothing (ETS) method based on TADB and TURKSTAT Crop Production Data



Source: Estimated by Exponential Smoothing (ETS) method based on TADB and TURKSTAT Crop Production Data

4.1. Targets and Suggestions for the Development of the Sector

The Alcoholic Beverages industry can contribute to the country's economy in three basic ways. The first of these is the support of agricultural production, the second is the foreign exchange inflow to the country thanks to the exported products, and the third is the tax revenues on domestic consumption (Figure 4 9). Therefore, it is of great importance to strengthen these 3 basic elements. The recommendations part of the study includes the measures to be taken especially for these elements.



ure 4 9
Main Factors Contributed to the Economy of the Alcoholic Beverages Sector in Turkey

In order for the sector to realize these 3 different economic effects with full performance, a series of measures and actions must be planned. Because the production capacity of the sector is already high, but the production amount is low, and its share in the foreign market is around 1%.

At this point, it can be said that the most basic goal is to increase Turkey's own agricultural raw material production, to export high value-added Alcoholic Beverages produced with domestic resources to the world and to increase its share in this market.

4.1.1. Increasing and Developing Agricultural Raw Material Production in Turkey

Turkey has the necessary agricultural production conditions, knowledge and experience for the production of all kinds of Alcoholic Beverages. Although many measures have been taken to support the agricultural sector in Turkey in recent years, it is known that some product groups are still imported. Although there are currently agricultural supports given by the state, the production trends of agricultural products required for the production of Alcoholic Beverages tend to decrease rather than increase. The main reason for this is the decrease in the raw material demand of the sector or the supply of raw materials through imports due to quality problems. In this respect, with the measures to be taken in this area:

- In order to support the production of products such as barley, grapes, anise and hops, the sector needs to increase its raw material purchasing power.
- As the production volume of the sector increases, the demand for agricultural production will increase, and in this context, the rate of imported raw materials will decrease.
- Thanks to the development of agricultural production, the quality of raw materials will increase and this quality increase will be reflected in the final product.
- The socio-cultural effects of the increase in production employment with the realization of agricultural production should also be evaluated.
- Thanks to the increase in farmer incomes, the welfare level in the rural area will be positively affected and the rural development process will be supported.

The number of farmers producing raw materials for the production of Alcoholic Beverages in Turkey is about 300 thousand. The largest share in this group belongs to the grape producers. However, not all grapes produced are used for the alcoholic beverage sector. Considering that companies in the group of distilled Alcoholic Beverages can buy up to 120 thousand tons of grapes annually for the production of raki and ethyl alcohol, it can be said that the number of farmers producing for the sector decreases to one in ten. In other words, the number of grape producers for the alcoholic beverage sector is 19-20 thousand, except for wine grapes. Anise producer, another important raw material, is about 5 thousand and constitutes a very small mass. Similarly, it is predicted that beer barley producers are close to 20 thousand (Figure 4.9).

Agricultural Product	Number of Farmers
Anise	4.548
Barley (for Beer)	19.250
Hops	365
Grape (for Wine)	30.082
Grape (drying)	59.933
Grape (table)	178.184
Total	292.362

Source: Calculated from Ministry of Agriculture and Forestry EQS Consolidated Data. (with an estimated margin of error of 5%)

Figure 4 10
Number of farmers producing agricultural raw materials in Turkey (estimated)

The development of agricultural production in this area is directly dependent on the increase in the raw material demand of the alcoholic beverage sector. In this case, it can be said that more families can contribute to agricultural production. In this case, it will be possible to use unsuitable agricultural lands for production, and it will be possible to put forward a product group with almost a purchase guarantee for the farmers to seek alternative products.

It is known that the sector currently purchases around 120 thousand tons of raisins or more than 200 thousand tons of fresh grapes. In addition to grape purchases, the sector purchases around 4 thousand tons of anise. For example, with a simple simulation on the amount of raisins and anise required for raki production, it can be revealed how important the sector can be to agricultural production: It is clearly seen that the sector can support thousands of farmer families despite the production of 3, 5 and 10 million liters of raki. It is calculated that more than 700 farmers contribute to production for each million liters of production. This figure most clearly reveals the direct impact of the alcoholic beverage sector on the agricultural sector. On the other hand, cultivation areas are supported and almost 8 thousand decares of land are used for agricultural production for each million liters of raki production. It is clear that as the amount of production increases, more farmer families and agricultural land will participate in production. A 15% increase in the production capacity of the sector will enable more than 3,000 farmers to be involved in production (Figure 4 11).

Figure 4 11 The relationship of raki production with the amount of agricultural production, cultivation area and number of farmers

Raki Production (million Liters)	Agricultural Raw Material	Amount of Need (kg)	Yield (kg/da)*	Planting Area (da)*	Average Cultivation Per Farmer (da)*	Farmer Family
1	Raisins	1.750.000	900	1.944	15	130
	Fresh Grape	6.300.000	1.400	4.500	10	450
	Anise	100.000	70	1.429	9	159
3	Raisins	5.250.000	900	5.833	15	389
	Fresh Grape	18.900.000	1.400	13.500	10	1.350
	Anise	300.000	70	4.286	9	476
5	Raisins	8.750.000	900	9.722	15	648
	Fresh Grape	31.500.000	1.400	22.500	10	2.250
	Anise	500.000	70	7.143	9	794
10	Raisins	17.500.000	900	19.444	15	1.296
	Fresh Grape	63.000.000	1.400	45.000	10	4.500
	Anise	1.000.000	70	14.286	9	1.587

Source: Amount of raw materials required for raki production (GISDER)

**: Yield is calculated by weighted average over TURKSTAT data. The cultivation area has been estimated based on the average cultivation area per farmer in the ÇKS records of the products in question. (5% margin of error)*

The same is true for wine production. It is estimated that approximately 30 thousand farmers produce wine grapes in Turkey. But it is not clear whether all grapes are processed for wine. On the other hand, it can be seen that wine production has a structure that directly supports agricultural production, similar to raki.

It is estimated that 156 farmers are involved in production for each million liters of wine produced. It can be said that approximately 1,900 decares of wine vineyard area is involved in production over an average of 12 decares of vineyard area. Wine grape production is of great importance, especially in terms of permanent use of barren lands and vacant lands. This type of production, which does not require planting every year and helps to protect the soil covered with vegetation for a long time, can be easily implemented in any region where climate characteristics are suitable. Increasing Turkey's current wine production by 15% means that 1500-1600 farmers are involved in wine grape production. Wine grape production is one of the labor-intensive production types, and it contributes directly to employment due to the use of family labor and the need for seasonal labor. In addition, it is foreseen that there will be a noticeable increase in grape quality thanks to the development of vineyard areas required for wine production.

This situation will directly affect the quality of Turkish wine and will contribute to the awareness in the foreign market (Figure 4 12).

At this point, the importance of working towards presenting the branded wines served in tourism facilities to tourists becomes evident.

Figure 4 12 The relationship of wine production with agricultural production amount, cultivation area and number of farmers

Wine Production (million liters)	Agricultural Raw Material	Amount of Need (kg)	Yield (kg/da)*	Planting Area (da)*	Average Cultivation Per Farmer (da)*	Farmer Family
1	Wine Grapes	1.400.000	750	1.867	12	156
3	Wine Grapes	4.200.000	750	5.600	12	467
5	Wine Grapes	7.000.000	750	9.333	12	778
10	Wine Grapes	14.000.000	750	18.667	12	1.556

Source: Average amount of grapes required for 1 liter of wine production is 1.4 kg (ŞARAPDER)

**: Yield is calculated by weighted average over TURKSTAT data. The cultivation area has been estimated based on the average cultivation area per farmer in the ÇKS records of the products in question. (5% margin of error)*

Barley, which is the raw material of malt required for beer production, makes a positive contribution to the evaluation of large amounts of agricultural land in terms of being an agricultural product produced in large areas.

An average of 250 tons of barley is required for each million liters of beer production, which means that approximately 833 decares of land is included in the production and 9 farmer families participate in the production.

Barley production can be done in arid and barren soils.

At the same time, since it is a crop suitable for alternation, it is possible to plant crops after barley. In addition, straw, which is a by-product of barley, is a very important roughage input in animal husbandry. Since 70% of the total agricultural production in Turkey is of dry type, supporting the unirrigated lands with barley production is of great importance for the farmers to obtain sustainable income. A 15% increase in the production of the beer sector in Turkey means that 117 thousand decares of agricultural land and approximately 1,300 farmers will participate in production (Figure 4 13).

Figure 4 13 The relation of beer production with agricultural production amount, cultivation area and number of farmers

Beer Production (million liters)	Agricultural Raw Material	Amount of Need (kg)	Yield (kg/da)*	Planting Area (da)*	Average Cultivation Per Farmer (da)*	Farmer Family
1	Beer Barley	250.000	300	833	95	9
3	Beer Barley	750.000	300	2.500	95	26
5	Beer Barley	1.250.000	300	4.167	95	44
10	Beer Barley	2.500.000	300	8.333	95	88

Source: Average amount of grape barley required for 1 liter beer production is 0.254 kg (BMÜD)

**: Yield is calculated by weighted average over TURKSTAT data. The cultivation area has been estimated based on the average cultivation area per farmer in the ÇKS records of the products in question. (5% margin of error)*

4.1.2. Development of Contract Agriculture in Agricultural Raw Material Production

Although it is known that companies in the alcoholic beverage sector are already supplying raw materials with contracted production, further dissemination of this will make a positive contribution to agricultural production and farmer incomes. Contracted production in Turkey is practiced in products such as tomato paste, corn, sugar beet and tobacco. However, it should not be forgotten that the establishment of a much healthier structure related to contract agriculture will make an effective contribution to the economy. Due to the fluctuations in product prices and the absence of a guarantor in the contracts, contract farming is still an application that has a field of development.

However, the relationship between raw materials and end products in the Alcoholic Beverages sector and the relationship between tomato-paste or starch-corn are different. For example, after the transformation of grapes into raki or the evolution of barley into beer, very high value-added products are produced. For example, while the average price of raki grapes is 1.3-1.5 TL per kilo, one kilo of raki is 50 TL (excluding SCT and VAT). From this point of view, it is clear that the high added value provided is in favor of the farmers. In production chains with high added value, contract manufacturing can give better results than other traditional production methods. Because the high added value in the production chain can enable the reduction of negative effects such as price fluctuations. At the same time, it is possible to offer in-kind and cash advances to farmers on a larger scale during the contracted production process. In addition, with contracted production, the bond of the sector with the farmers becomes stronger, and the way for improvement in product quality and production techniques is cleared.

It is clear that the development of the alcoholic beverage industry will greatly contribute to the development of agricultural production in Turkey. If this contribution is supported by an application such as contract production, it is estimated that the contribution will be higher. At the beginning of the biggest problems of the farmers are borrowing due to the equity problem in the production period and income losses due to the inability to sell the product at value price at the end of production. Considering the average cultivation amounts of the farmers producing for the alcoholic beverage sector, it is understood that this farmer group is generally small-medium sized. On the other hand, it has been determined that the farmers in this group have bank debts that are much higher than their income (Figure 4 14).

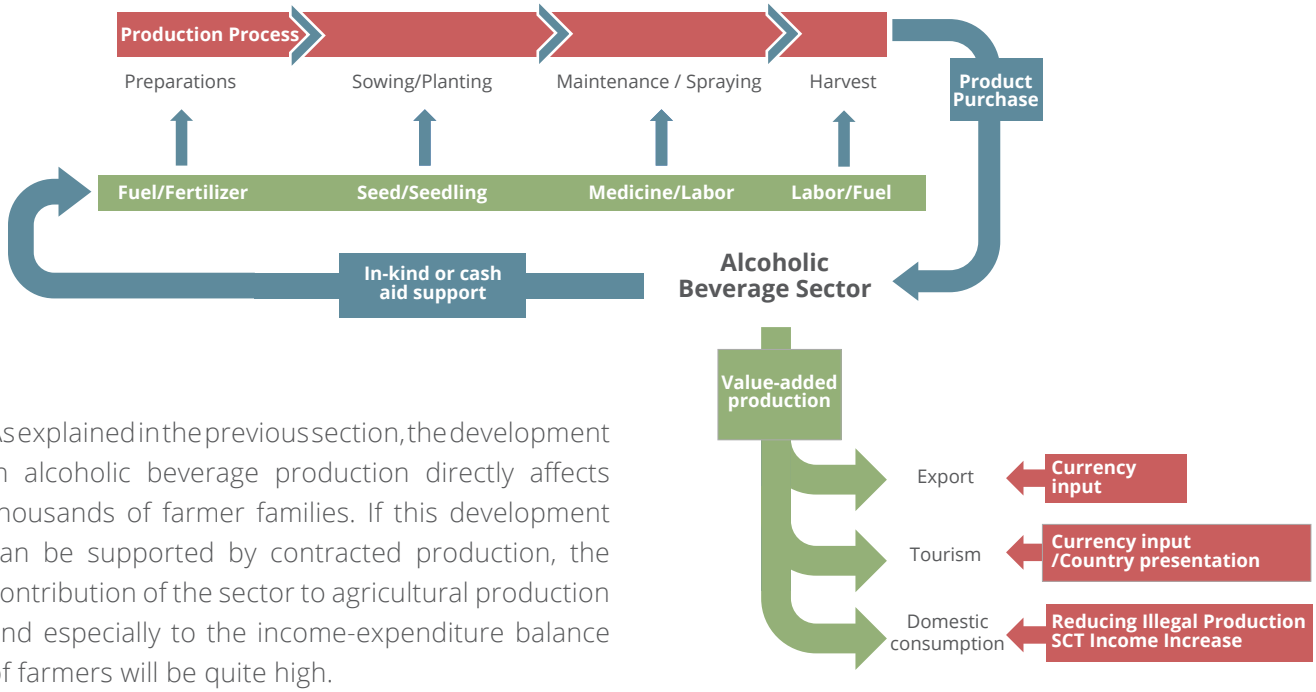
Total Gross Income Segment (TL)	Total Debt/Agricultural Gross Income Ratio
0-50.000	147,5%
50.000-100.000	101,7%
100.000-250.000	116,4%
250.000-500.000	54,1%
500.000+	41,5%

Source: TERZİ, 2020

Figure 4 14
Ratio of total bank debt of farmers in various income groups to agricultural gross income

Thanks to the contracted production, the farmers will be able to minimize the shortage of equity in the production period with the agreements to be made between the farmers and the companies. At the same time, it can be said that companies will contribute to the reduction of unit costs by purchasing high quality seeds or other inputs wholesale and distributing them to farmers for quality products. Thus, the farmers in this group will pay less financing costs and will have the chance to protect their income with production guaranteed. Despite many problems in agricultural practices with existing contracts, 60-70% of the farmers seem willing to engage in contract farming (TERZİ,2020). Large amounts of production in this area, where there is the necessary ground for contract farming practice, will have many contributions to agricultural production and farmers. It seems possible to establish a long value chain thanks to the fact that the Alcoholic Beverages produced can be sold to the foreign market, used by the tourism sector and sold for domestic consumption. In this way, it is possible to talk about brand new value chains for Alcoholic Beverages, such as "from farm to export" or "from farm to tourism". This value chain has higher added value than traditional value chains and has the potential to create new topics within the framework of Turkey's promotional program.

Figure 4 15 The interaction of contract production and the Alcoholic Beverages sector and its connection to the country's economy



As explained in the previous section, the development in alcoholic beverage production directly affects thousands of farmer families. If this development can be supported by contracted production, the contribution of the sector to agricultural production and especially to the income-expenditure balance of farmers will be quite high.

In the calculations made within the scope of this study, it is estimated that 300 farmer families can be included in the production for each million liters of alcoholic beverage production. This means roughly 5,000-6,000 decares of land to receive agricultural products. In addition, the installed capacity is ready for this production increase and almost no investment will be required. The costs of products such as grapes, anise, and barley, which are the necessary raw materials for Alcoholic Beverages, are very different from each other, but due to contracted production, the farmer's need for equity in the production period will decrease, so the borrowing rate will decrease and the financing cost will decrease accordingly. At least, the working capital requirement for products in this group will decrease. Assuming that the alcoholic beverage raw material has a share of 50% in the total income of the farmers, it can be said that the debt ratio of the farmers will decrease according to their income. It is known that a farmer with an annual gross income of 100 thousand TL has more debt than this (TERZİ, 2020). The fact that this farmer makes half of his production on a contractual basis has the effect of reducing the borrowing rate by half.

- Sustainable production and creation of a quality raw material source
- Reducing farmers' debts and financing costs
- Development of production techniques with production practices to be made with companies
- Expansion of raisin and fresh grape production areas and dissemination of modern viticulture techniques
- Dissemination of anise and hops production and evaluation of arid lands
- Increasing the variety and area of wine vineyards
- Improvement of quality and yield in barley production thanks to quality seeds and inputs
- Supporting the farmer's cooperative organization

It is estimated that 300 farmer families can be included in the production for each million liters of alcoholic beverage production. This means roughly 5,000-6,000 decares of land to receive agricultural products. In addition, the installed capacity is ready for this production increase and almost no investment will be required.

The above-mentioned issues regarding the support of agricultural production in Turkey have long been adopted by the world's largest alcoholic beverage producers and have found application.

For example, **AB Inbev** has included "smart agriculture" and "financial empowerment" programs in its current agricultural production programs. In this way, it aims to make the value chain created by the farmers safer and stronger. With the "SmartBarley" program that they launched in 2019, the company's field experts have continuously collected the production data of farmers, ensuring that areas of improvement for production and quality are revealed. On the other hand, by establishing model farms, it transfers the most modern techniques used in the production of barley, hops and some aromatic plants to the farmers. The company implements a series of conservation and environmental awareness activities under the title of "Water stewardship" not only for soil and production, but also for the protection of water resources. Within the framework of these practices, methods and techniques are developed to ensure that water is used in the most efficient way in both agricultural production and BEVERAGE production.

Another world-renowned company, **Diageo**, has created a "Sustainable Agriculture Guide" (SAG) program in many regions of the world, especially in Africa. Within the scope of this program, more than 78 thousand farmers in Africa alone were involved in production and contributed to the sustainable raw material supply chain. Diageo continued its contract farming practices through local producers and aimed to develop these farmers. On the other hand, with the "Farm Sustainability Assessment" (FSA) tool developed by the company, the environmental impacts of farmers are measured and their sustainability levels are monitored.

The Brown-Forman company established a foundation called DendriFund. Thanks to this foundation, investments are made in the production of wood, grain, and water, which are the basic components for whiskey production, and cooperatives working in this field are supported. While the foundation focuses on sustainable forestry activities, it also works to ensure the sustainability of rye production throughout the state of Kentucky. The focus of the work is the protection of agricultural lands, the improvement of soil health and water quality, and the continuity of rye production is ensured regionally.

Pernord-Richard, on the other hand, focused his work in the field of agriculture, especially on sustainable agriculture and renewable (regenerative) farming. It has produced supplier maps for grain, grape, agave (aromatic plant originating from South America) and sugar cane, which are the basic raw materials they buy from the agricultural sector. It carries out field studies to support sustainable agriculture in this area. On the other hand, it has determined 8 wine regions as pilot regions for renewable agricultural production. The company aims to develop renewable agricultural production in these regions by working in partnership with 5 thousand farmers by 2030.

4.1.3. Promotion in Domestic and Foreign Market

The continuity of the alcoholic beverage industry passes through the production and sales chain. As long as the sector can promote its own products, it can provide continuity in its sales, and in this way, it can continue its development and make the desired contribution to the country's economy. Otherwise, the products produced by the sector with high quality and high added value will have to be offered for sale in a limited market area. In this case, it is clear that the sector will move away from sustainable production. Advertising and promotion of Alcoholic Beverages is prohibited in Turkey, and all kinds of promotion and sponsorship activities for these products are limited. The state aims to limit alcohol consumption and reduce the factors that will negatively affect public health. However, the wide scope of the bans and the lack of flexibility even at points that will contribute to the economy negatively affect the ecosystem in question in terms of international competition. These promotion restrictions lead to the following situations:

- It is not possible for the sector to create alternative markets.
- There are no studies to increase the awareness of the country.
- The capacity utilization rate of the sector remains at a low level.
- It prevents the turning of low-capacity agricultural raw materials into high value-added BEVERAGEs.
- The alcoholic beverage value chain is weakening, therefore the desired support cannot be given to agricultural production.
- The awareness of the country remains at a low level since there is no promotion for foreign tourists.
- The idea that Alcoholic Beverages are part of a culture cannot be conveyed to the consumer, and the consumer tends to consume unregistered Alcoholic Beverages, the quality of which cannot be assured, by prioritizing only the price.

The worldwide alcoholic beverage market is expected to reach $1.75 trillion in 2024. The export market already has a volume of nearly 90 billion dollars, and it is estimated that this market will exceed 100 billion dollars in 2024.

All these effects are an obstacle for the sector to make the desired contribution to the country's economy. At this point, it is thought that steps should be taken to promote the products produced by the sector entirely with domestic raw material resources, especially for the foreign market and foreign consumers.

The worldwide alcoholic beverage market is expected to reach $1.75 trillion in 2024. The export market already has a volume of nearly 90 billion dollars, and it is estimated that this market will exceed 100 billion dollars in 2024. Although wine group products have a large share in the export market, the share of distilled Alcoholic Beverages tends to increase in recent years.

At this point, it is thought that there is an opportunity for development in both the wine and distilled alcoholic beverage group.

Brand values of whiskey and vodka brands worldwide have reached the level of 3-4 billion dollars. In fact, liquor brands originating from the Far East have a brand value of tens of billions of dollars. All these data show that it is possible to create a brand and increase brand value in this field.

In other words, an area emerges where Turkey can create a brand with its own domestic raw materials for products in the raki, vodka, wine and beer group.

For example, the England and France are among the world's largest exporters of distilled Alcoholic Beverages. Only the England has an export of nearly 8 billion USD. Turkey's export figure in the same area remained at only 42 million dollars. In addition, the consumption level of products in the vodka and liquor group is in an increasing trend. Especially in the USA, vodka and liquor group beverages are consumed more than whiskey and rum. At this point, it can be said that there is an important development opportunity especially in the group of distilled Alcoholic Beverages.

In the beer sector, a wide variety of beers produced in small businesses with traditional methods have begun to be preferred. It can be seen that even countries with limited barley production produce beer in very large quantities. It is observed that countries with limited beer consumption in terms of population, such as the Netherlands and Belgium, export beer in very large quantities.

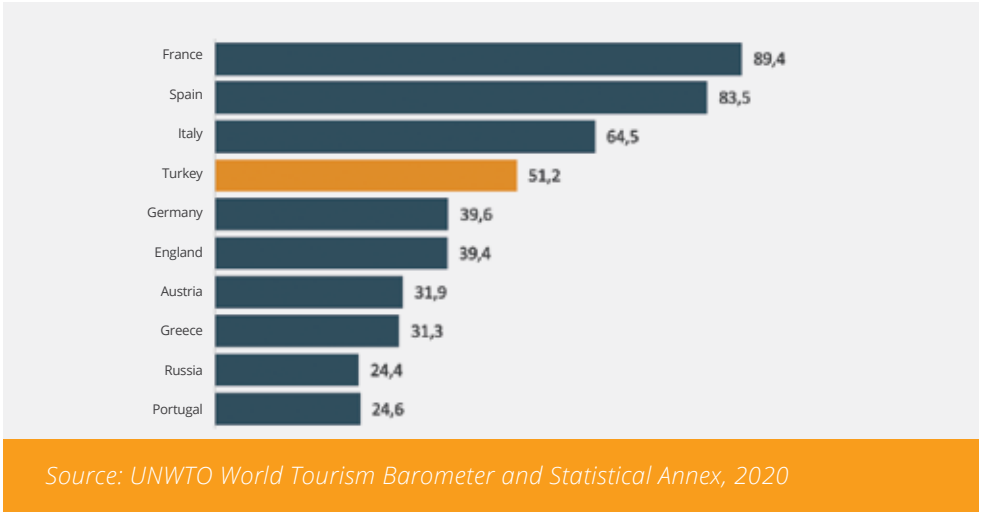
Although Turkey ranks 5th in terms of wine grape area, it has very low wine production in terms of production. At the same time, the capacity to utilize vineyards for wine production remains low. For example, while 67.4 hectoliters of wine can be produced for one hectare of wine vineyard in Italy, this figure is 1.5 hectoliters in Turkey.

Countries that are leaders in the world in terms of wine vineyards are also leaders in wine exports. Only France has a wine export of around 11 billion USD. Italy ranks second with 7.2 billion USD. Despite such a large area of wine grapes, Turkey lags far behind both in terms of production and exports. It is understood that countries show asymmetry in terms of wine consumption and wine export per capita, similar to beer. For example, while France is the leader in terms of both consumption and exports, countries such as England, Moldova, Luxembourg, and Denmark are countries with high per capita consumption but limited production and exports. In other words, it can be said that countries with large vineyards have established their export and domestic consumption balance in the direction of exports.

As can be seen, the alcoholic beverage market in the world has a structure that contains many opportunities. The agricultural productions of countries such as France, England, Italy and Mexico leading this market are not richer than Turkey. In fact, Turkey is a country that produces much more agricultural GDP than the first major exporting country, France, England and Italy, and has a comparative advantage in many products. On the other hand, it is seen that Turkey exports very little to the countries where the world's leading exporters of Alcoholic Beverages sell the most (see Figure 3 14).

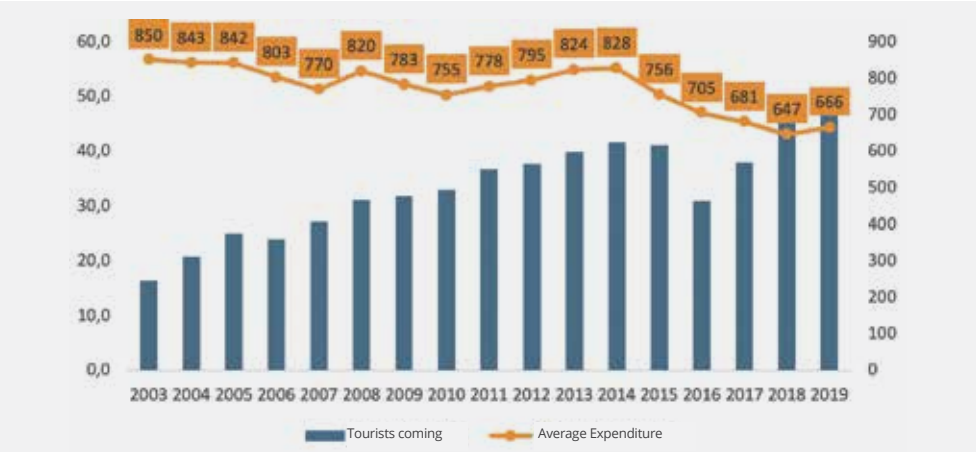
The three biggest obstacles to the Alcoholic Beverages industry in Turkey in the foreign market are as follows:

- Low awareness of the country
- Price competition against our country
- Inadequate promotional incentives



Source: UNWTO World Tourism Barometer and Statistical Annex, 2020

Figure 4 16
As of 2019, the top 10 countries hosting the most tourists in Europe (million people)



Source: TURKSTAT, Tourism statistics

Figure 4 17
Number of tourists coming to Turkey between 2003-2019 (million people) and average expenditure per capita (dollars)

Among them, the awareness of the country is of course a big obstacle and it is one of the areas where measures should be taken as soon as possible. Because awareness is a factor that especially affects product demand. The establishment of concepts such as Turkish/Anatolian raki, Turkish/Anatolian wine or Turkish/Anatolian beer in the foreign market will be possible with the steps to be taken in this area. In order to increase the awareness of the country, promotional activities should be carried out both in the domestic market and in the foreign market. In this respect, it is clear that the most important promotional activity in the domestic market is especially the tourism sector.

Hotel bed capacity in Turkey ranks 4th in Europe. The number of touristic facilities in Turkey with an operating certificate or a facility certificate from the municipality is around 13 thousand. It has a bed capacity of 1.6 million in these facilities and ranks 4th after Italy, Germany and Spain. In addition, with 51 million tourists in 2019, it became the 4th country with the highest number of tourists in Europe (Figure 4 16). However, it ranks 16th in the world in terms of tourism revenues (Ministry of Tourism, 2021). On the other hand, although Turkey hosts so many tourists, it can export a little over 100 million dollars, while Germany, which hosts fewer tourists than Turkey, exports 3.9 billion dollars. The main reason for this is the decrease in expenditure amounts per tourist over the years. The expenditure amount, which was 800 dollars per person for many years, has decreased below 700 dollars in the last 4-5 years (Figure 4 17).

Tourists come to Turkey from all over the world and the countries that send the most tourists are Russia, Germany, Ukraine, England and Bulgaria, respectively.

Tourists come to Turkey from all over the world and the countries that send the most tourists are Russia, Germany, Ukraine, England and Bulgaria, respectively. The first 5 cities where incoming tourists are hosted are Istanbul, Antalya, Muğla, Ankara and Izmir. These 5 provinces are home to almost 80-90% of the tourists who come to visit the country. When the statistics on the subject are examined, it is seen that between the years 2016-2020, 135-140 million tourists visited these 5 cities. These provinces are also the locations where tourists spend the most nights. Although Turkey has the infrastructure to host so many tourists, spending per tourist remains low.

In particular, it is assumed that the all-inclusive concept affects this situation. On the other hand, when the expenditure distribution of tourists is examined, it is seen that the most expenditure is made in the field of food and BEVERAGE. The interesting thing is that food and BEVERAGE expenses are higher than "all-inclusive" package tour expenses. It can be said that the reason behind the high expenditures in the field of food and BEVERAGE is the reflexes of the tourists to know Turkish cuisine and discover different tastes. In other words, it can be said that tourists visit Turkey not only to relax or have fun, but also to get acquainted with a different eating and beverageing culture (Figure 4 18).

Figure 4 18
The main items that tourists spend by years (million dollars)

Kaynak: TÜİK, Turizm istatistikleri

Turkey can use the potential it has created in tourism to promote its own Alcoholic Beverages. In this regard, the following recommendations are made:

• 70% of the tourists coming to Turkey come by air and 95% of them enter the country from Istanbul or Antalya. For this reason, only domestically produced Alcoholic Beverages should be sold or served on the flight menus of Turkish Airlines, one of Turkey's most valuable global brands, and other airline companies.

• Touristic facilities that can meet certain conditions, especially 4 or 5 star hotels operating in Istanbul, Antalya, Muğla, Ankara and İzmir, which are the 5 provinces that host the most tourists, can be declared as "Tourism-Oriented Alcohol Free Zone". Alcohol advertising, promotion and sale may be allowed within the boundaries of the hotels to be included in these regions. In this way, a great opportunity can be created for the promotion of products such as Turkish/Anatolian Raki, Turkish/Anatolian Wine and Turkish/Anatolian Beer. Because, in the face of the difficulties of promoting abroad and the need for a budget, it will be much easier and lower cost to be able to promote to the tourists who come to you.

• The hotels in the "Tourism-Oriented Alcohol Free Zone" to be created will act as the stores of the sector and will generate revenue from the sale of all kinds of Alcoholic Beverages to be sold to foreigners within the hotel.

• Thanks to the fact that the touristic facilities are located in modern and wide areas, alcoholic beverage companies can be allowed to sponsor special concerts or shows in the hotels located in these free zones. In this way, it will be possible for companies to introduce newly designed light or special Alcoholic Beverages to accompany entertainments and concerts.

• The areas where promotion is free will allow the implementation of very different marketing techniques for the promotion of Turkish/Anatolian Beer and vodka, especially Turkish/Anatolian raki and wine. Companies will be able to enrich these promotional processes with some special applications for foreign tourists such as gifts, raffles and even certificates. In this way, it is thought that many tourists will be supported to come back to Turkey.

• İzmir, Aydın and Muğla regions, where tourism is intense in Turkey, are famous for both dry/fresh vineyards and wine vineyards. Agro-tourism tours can be organized within the scope of tourism-specific promotion, where tourists can watch the production adventure of the beverages they take to their own countries, starting with agricultural production and continuing with production. blending the promotion of beverages with domestic agricultural production at the same time can provide an extremely interesting agrotourism development. For example, one of the most remarkable tourism activities in France and Italy is visits to the vineyard and wine cellar. Thus, these countries are transforming the wine sector, which has high value-added products, into tourism.

With the above-mentioned issues, the promotions to be made for foreigners coming to Turkey can be strengthened and at the same time, the contribution of the advertising and promotion sector to employment in this field will increase.

Another important issue is the promotions in the foreign market. Numerous trade fairs and promotional events for Alcoholic Beverages are held around the world. It is known that Turkey's participation in these activities is very limited. more than 100 food and beverage fairs are held around the world. Most of these fairs are held in the USA, China and Australia. However, it is understood that the participation in the interviews with the sector is negligible. However, Turkey's awareness will increase with the support and branding of a product group produced entirely with domestic resources in foreign markets. In this case, a sector in which we are a net exporter in terms of foreign trade will emerge.

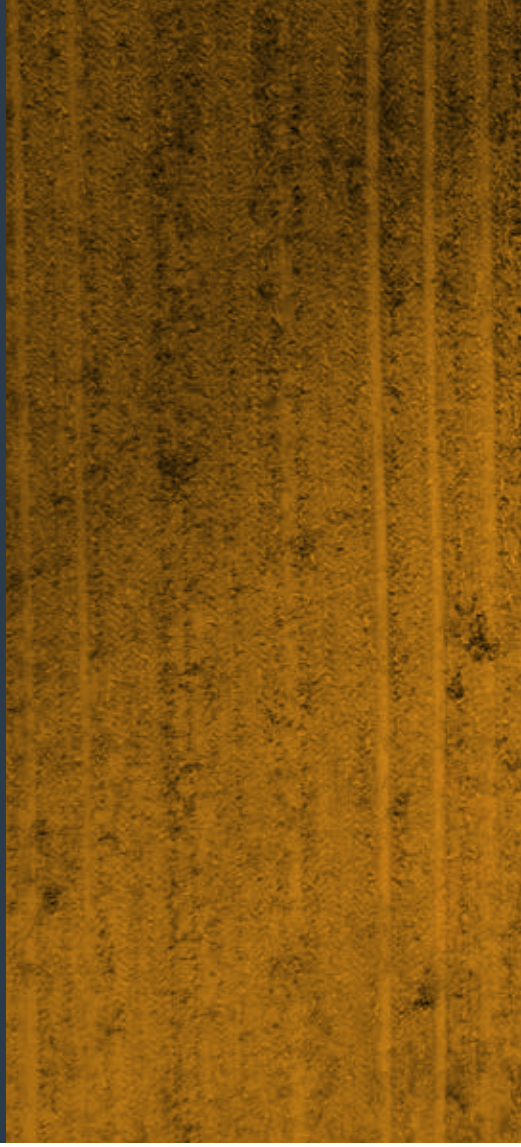
Although it is known that international fairs will be a very important opportunity for the promotion of Turkey, it is very important to support companies in the alcoholic beverage sector for participation in these fairs. It is known that companies bring their existing or newly designed products to fairs for promotion purposes. The positive or negative evaluation of raki, wine or beer, which will be tasted by visitors and professionals from all over the world, by international authorities in these fairs, which are based on tasting and experience, will greatly contribute to the sector. Thanks to such tests in terms of taste, smell and appearance, the industry will have the chance to receive very different feedbacks. In this way, the sector will be able to devote more time to R&D studies such as designing brand new products and using different components to catch new trends. For example, it is very important to introduce Turkish/Anatolian raki. It is known that different beverages such as ouzo or araki, similar to Turkish raki, are produced in Mediterranean countries. In fact, in countries such as Italy, some types of liqueurs that are drunk over the meal have an almost dry raki taste (TERZİ, 2021). In addition, it may be possible to produce varieties of Turkish raki with different flavors for different geographies according to the feedbacks and demands received at these fairs. it is known that many food and beverage companies have been using this method for years.

Figure 4 19
Locations and Promotion Issues of Turkish Trade Centers

Country	City	Promoted Sectors
USA	New York	Home Textile, Ready-to-Wear, Carpet, Leather
USA	Chicago	(During the installation phase)
England	London	Ceramics and Informatics
UAE	Dubai	Informatics, Furniture

Source: http://ttcenter.com.tr/tr/nerelerdeyiz.html

As it should be noted, the locations where Turkish Trade Centers are established, excluding Dubai, are extremely important cities for the alcoholic beverage industry. 3 of the 18 fairs organized in the USA for the sector are held in New York and 2 of them are held in Chicago. Participating in these fairs, especially for raki, wine and beer, and taking part in Turkish Trade Centers for promotion after the fairs will contribute to the awareness of the country. As it is understood, it is aimed to introduce high value-added industrial and Information products in Turkish Trade Centers. However, it should not be forgotten that Turkey imports intermediate goods in these industrial products, including informatics. Food and beverage production is perhaps the most important product group that turkey can sell abroad with entirely domestic resources. Alcoholic Beverages have a high added value in this group. Considering Turkey's share and potential in the world's foreign trade in Alcoholic Beverages, the following points are suggested for promotion abroad:



Participation can be made in agricultural fairs organized around the world in order to introduce the agricultural raw material resources produced by Turkey for the alcoholic beverage industry. It can be passed on to stakeholders in other countries where Turkey does not only produce grapes for cake or biscuits, or barley for animal feed.

• It would be very beneficial for the Ministry of Commerce to introduce the alcoholic beverage sector in the Turkish Trade Centers established in the USA and to promote the products of Turkish companies as a group, not individually, for promotion.

• Since the promotion of Alcoholic Beverages does not cause as high furnishing costs or space costs as the promotion of furniture, textiles or carpets, a much more attractive promotional environment can be established with a lower cost.

• It may be possible to organize an organization by the Ministry of Commerce in order to participate as the alcoholic beverage sector in at least one of the fairs held in the USA, especially in New York City.

• Participation support should be given to the fairs held in Australia, France and England, especially in the USA and China. A wide promotion activity such as country sponsorship can be organized for the promotion of "Turkish Raki" in at least one of the fairs held in the Mediterranean basin.

• Participation can be made in agricultural fairs organized around the world in order to introduce the agricultural raw material resources produced by Turkey for the alcoholic beverage industry. It can be passed on to stakeholders in other countries where Turkey does not only produce grapes for cake or biscuits, or barley for animal feed.

• Similarly, participation in international agricultural fairs on winemaking or viticulture with the aim of promoting Turkey's wine grape regions will make a great contribution to the sector.

Another important contribution of the promotions in the domestic and foreign markets is to catch the world alcoholic beverage trends and to ensure that the products suitable for the market can be designed faster. For example, cachaça, the most famous beverage of Brazil, was previously only consumed in South American countries, but was introduced as an alternative to rum. However, it was introduced to the world with cocktails that can be made with cachaça, the most famous of which is "caiprinha". Thus, this beverage came out of Brazil and became consumed primarily in the USA, Portugal and other European countries. From this point of view, it is of great importance to constantly examine and follow the trends in the alcoholic beverage sector. It can be seen that these trends have very different trends in the distilled Alcoholic Beverages, wine and beer groups:

General Trends

• Demand for Alcoholic Beverages with less sugar continues to increase. Using zero-calorie sugar substitutes like stevia and erythritol can help meet this demand.

• Consumer perception around the ready-to-beverage (RTD) segment is evolving rapidly. The products on the market draw a more open outlook to be tried by the consumer.

• The variety of flavors in the hard cider category is appreciated by consumers looking for options beyond craft beers. As the craft beer market has reached a certain point, differentiation in hard cider products offers some market opportunities.

• Younger Y and Z generations are looking for low-alcohol or non-Alcoholic Beverages. Beer, cider (hard cider) or ready-to-beverage liquors/cocktails have elements that will attract consumers in this market.

• Creativity needs to be supported with new flavor combinations, barrel materials and rules with new hybrids. Today, it is predicted that creative flavors and new approaches are inevitable to stay at the top of the alcoholic beverage sector.

Trends in distilled Alcoholic Beverages

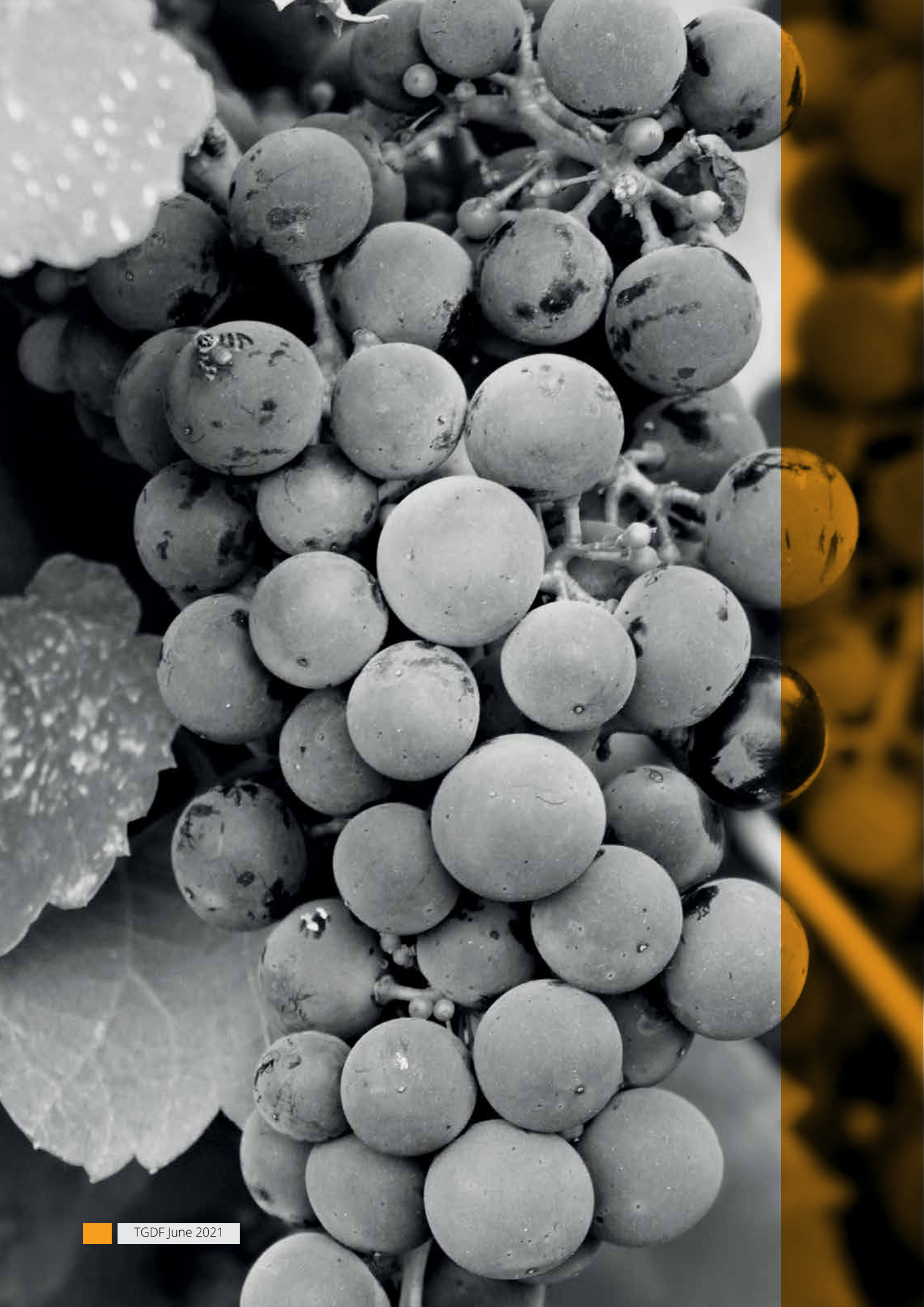
• Softer flavored BEVERAGEs fall into product categories.

• With the premiumization approach, it is predicted that the growth in high quality and super premium products will continue.

• Especially the Y generation is interested in products in this group.

• Some brands focus on the marketing of the core brand rather than the marketing of the sub-brands.

• Beverageing with meals and in moderation is especially preferred. In this sense, raki consumed by adding water has a chance to be an important reason for preference.



Wine Trends

• Leading varieties include Cabernet Sauvignon and Chardonnay.

• Rosé wines tend to maintain their popularity not only in summer but also in other months of the year.

• The product presentations in the premium wine category are the group that attracts the most attention of consumers.

• Higher quality boxed / canned wines are becoming more preferable, which changes consumer perception.

• Wine group products offered in smaller volumes further support growth. Especially, the preference rate of products in 187 cc and 500 cc volumes is increasing.

• The localization trend is getting stronger. For this reason, the cultivation of local grapes such as Boğazkere, Öküzgözü, Kalecik Karası, Emir, Misket and Narince in Turkey gains importance.

It is extremely important for Turkey to make promotions in the Alcoholic Beverages sector for direct exports in the foreign market and for potential foreign consumers in the domestic market.

When the above trends are examined, it is understood how active the world alcoholic beverage market is. For this reason, Turkey's organizing promotional activities both in the domestic market and in the foreign market will increase the contribution of the sector to the economy. Because after the covid-19 pandemic, very different changes may occur in these trends. Some changes that may occur in the alcoholic beverage sector, especially during the pandemic, can be listed as follows:

• 2 to 3x growth in e-commerce and direct-to-consumer (DtC) sales channels.

• There is a tendency for consumers to stay away from fresh and perishable beverages.

• Products of well-known brands are much more preferred.

• Declines in alcohol sales are particularly adversely affecting Craft Breweries. It is stated that most of these breweries are at risk of closing.

• Challenges continue to arise in supply chains for non-durable products. Therefore, it is necessary to bear more costs for the right storage conditions.

• It seems that 30% of consumers tend to eat healthier after the epidemic.

In summary, it is extremely important for Turkey to make promotions in the Alcoholic Beverages sector for direct exports in the foreign market and for potential foreign consumers in the domestic market. In this promotion process, it will be possible for the sector to integrate into the ecosystem formed by the world market or to raise the current level of integration. In this way, the sector will both support the domestic agricultural raw material production and become a sector that can give a current account surplus and is a source of foreign currency for the country.

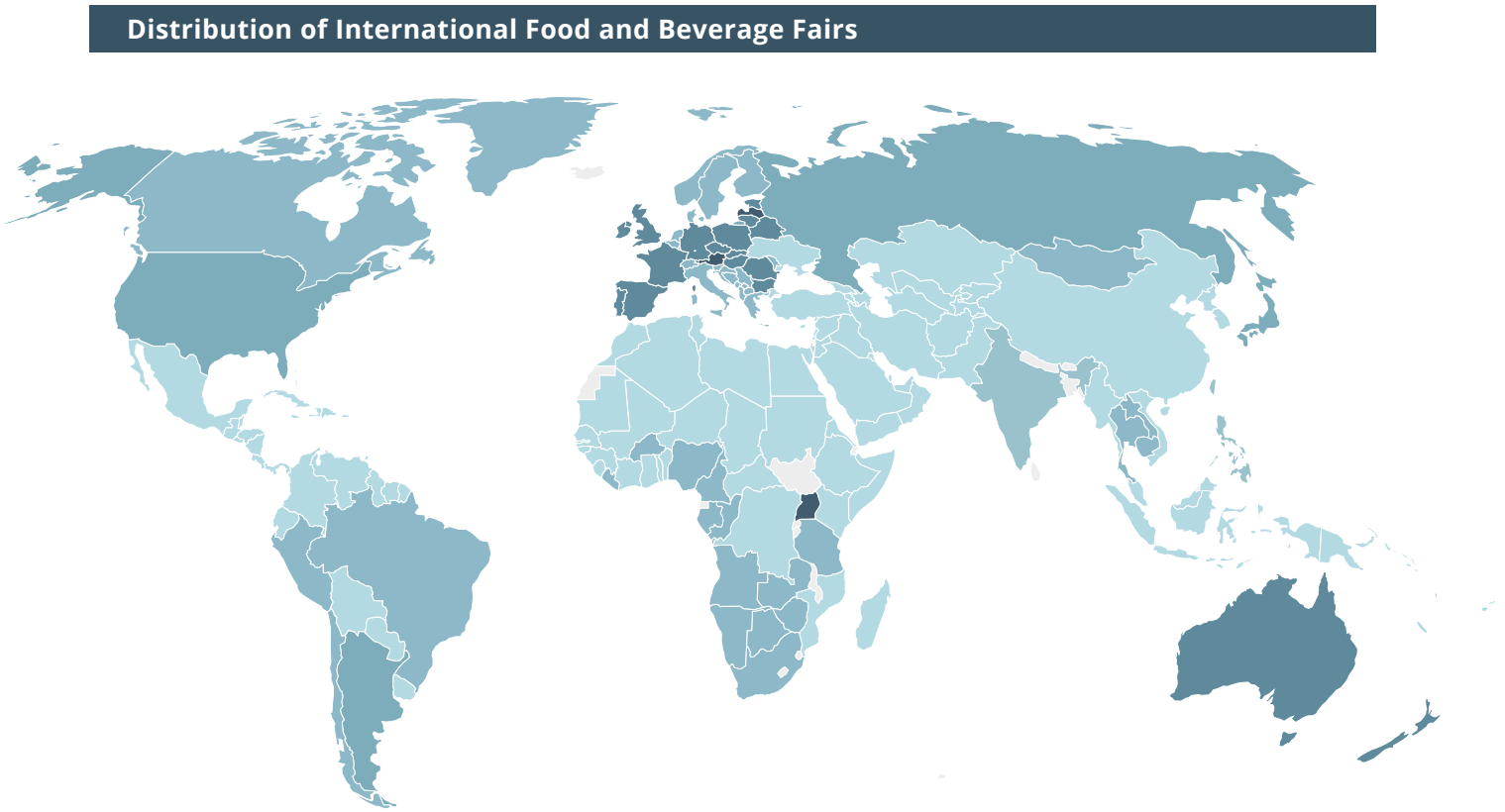
4.1.4. Balancing Domestic Consumption and Preventing Illegal Production

Turkey ranks last in the world in per capita alcohol consumption. Both the regulations and the sector itself constitute a supporting ground for responsible consumption.

Turkey is already a country that consumes less alcohol due to its socio-cultural structure. In addition, it is certain that the companies in the sector do not have an attitude that contradicts their supportive role in consumers' awareness of responsibility and knowing the harms of excessive consumption of alcohol.

When the pure alcohol consumption per capita in the world is examined, it is seen that Turkey is a very low-ranking country (Figure 4 20). When the details are examined, it is understood that Turkey ranks 136th in 191 countries in terms of total consumption and is among the last countries in terms of beer, wine and distilled Alcoholic Beverages. In other words, it can be said that one bottle of raki or wine or two cans of beer is consumed per person per year in Turkey. The data of the World Health Organization confirms that Turkey is in the group of countries with very low alcohol consumption (Figure 4 21 and Figure 4 22).

Figure 4 20 Distribution of annual pure alcohol consumption per capita (15+ years, 2017)



Order	Country	Pure Alcohol Consumption per Capita (liter)
1	Seychelles Islands	20,24
2	Estonia	13,27
3	Czech Republic	12,93
4	Latvia	12,6
5	Uganda	12,19
6	Lithuania	11,96
7	Austria	11,7
8	France	11,69
9	Bulgaria	11,28
10	Luxembourg	11,16
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136	Turkey	1,38

Source: https://www.who.int/data/gho/data/indicators/indicator-details/GHO/alcohol-recorded-per-capita-(15-)-consumption-(in-litres-of-pure-alcohol)

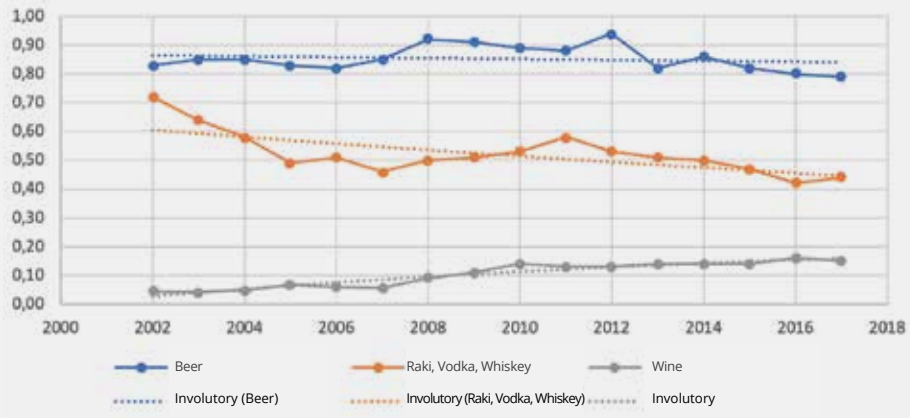
Figure 4 21 Top 10 countries with the highest alcohol consumption per capita and Turkey's place in the ranking (15+ years, 2017)

Figure 4 22 Per capita pure alcohol consumption of Turkey in different beverage groups and its place in the world ranking (15+ years, 2017)

Order	Beer	Wine	Distilled Alcoholic Beverages
Annual Consumption Per Capita (liter of pure alcohol)	0,79	0,15	0,44
World ranking (out of 191 countries)	122	102	117

Source: https://www.who.int/data/gho/data/indicators/indicator-details/GHO/alcohol-recorded-per-capita-(15-)-consumption-(in-litres-of-pure-alcohol)

When the trend of per capita alcohol consumption in different groups in Turkey is analyzed, it is observed that there is a partial increase in wine consumption, a slight decrease in beer consumption, and a decrease in the consumption of raki and vodka, which are distilled Alcoholic Beverages. However, there is an asymmetrical relationship between the amount of decrease in consumption per capita and the amount of production in the sector. For example, for the raki and vodka group, the per capita consumption decreased by 10%, while the production amount of raki, the most consumed distilled alcoholic beverage, decreased by 32% in the same period. There can be many explanations for this asymmetrical relationship. Indeed, efforts are being made to reduce the consumption of Alcoholic Beverages in the society, and efforts to raise awareness about alcohol consumption are observed through measures such as advertising and promotion bans, and many warnings written on the packaging. However, when the increase in the population over the age of 15, the partial decrease in raki/vodka consumption per capita and the decrease in raki production are compared, the differences come to mind, what is the effect of illegally produced Alcoholic Beverages in this process? raises the question.



Source: It was calculated from the data of https://www.who.int/data/gho/data/indicators/indicator-details/GHO/alcohol-recorded-per-capita-(15-)-consumption-(in-litres-of-pure-alcohol)

The population over the age of 15 in Turkey increased from approximately 47 million people in 2007 to 54.9 million people in 2017 with an increase of 17%. In the 10-year period in which the young population has increased so rapidly, it is observed that the per capita alcohol consumption has decreased to a limited extent, but there has been a significant decrease in registered raki and beer production.

Millions of bottles of illegal liquor are seized in many operations carried out by the General Directorate of Security in Turkey. According to the data of the Gendarmerie General Directorate, a total of 1 million 422 thousand 291 liters of illegal Alcoholic Beverages were seized in the last 9 months of 2019, while a total of 248 thousand 729 liters of illegal Alcoholic Beverages were seized in the first 9 months of 2020, despite the effect of the pandemic.

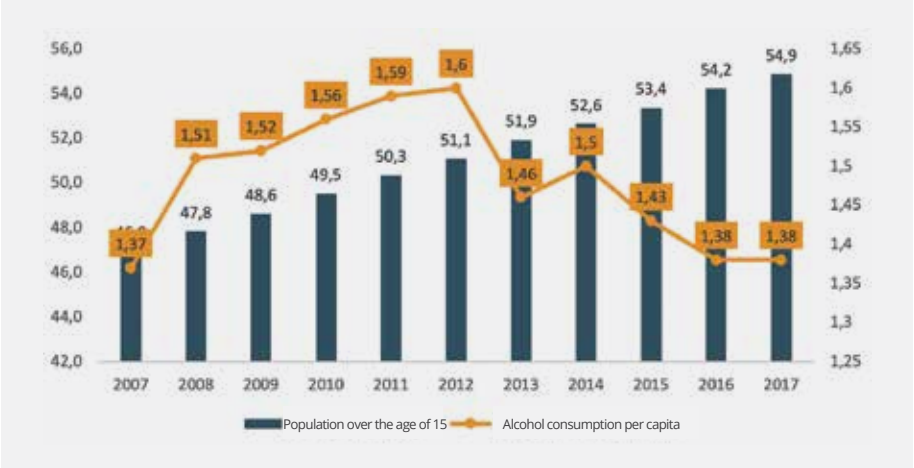


Figure 4 23
The increase in the population over the age of 15 (million people) and the change in pure alcohol consumption per capita (liter) between 2007-2017 in Turkey

Source: It has been compiled from TURKSTAT population data and World Health Organization data

There is a lot of data on the home production or illegal production of Alcoholic Beverages. When the data on the supply of ethyl alcohol on the market is examined, it is seen that there has been a tremendous increase between 2017 and 2019. While domestic ethyl alcohol use was only 12 thousand liters in 2013, this figure exceeded 2.3 million liters in 2019. Similarly, ethyl alcohol supplied to the market for medical use increased from 1.41 million liters to 7.76 million liters.

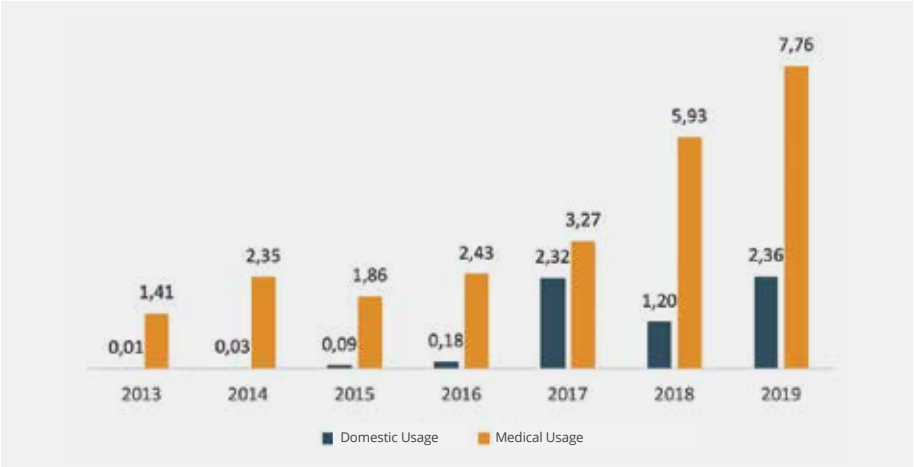


Figure 4 24
Ethyl alcohol usage figures for domestic and medical purposes (million liters)

Source: Ministry of Agriculture and Forestry Audit Report, 2019

In the audit report prepared by the Court of Accounts of the Ministry of Agriculture and Forestry, it is mandatory to supply denatured ethyl alcohol for domestic use, which is approximately 2.3 million liters in 2019, and therefore it is not possible to serve its use in food production, which is the main supply purpose. Considering that the current annual supply of 2.3 million liters is directed towards the production of illegal Alcoholic Beverages, it is considered appropriate to ban the supply of the product in question, and it has been observed that the preparations for the necessary regulation amendment continue.

The supply of domestic alcohol in 2019 was 2.3 million liters when it should have been close to zero, the supply of medical alcohol in 2019 was 7.7 million liters while it should have been around 1.5 million liters and according to these data, the excess supply in 2019 was around 8 million

liters, and if this amount of ethyl alcohol is used for the production of illegal Alcoholic Beverages, the amount of distilled Alcoholic Beverages to be obtained is at the level of 20 million liters, decreased by 25 percent. Domestic alcoholic beverage production, which was 50 million liters in 2018, reached 40 million liters in 2019.

At this point, it is calculated that the state's SCT loss for 2019 alone has reached 1.56 Billion TL.

In the evaluation of both the ethyl alcohol market supply data and the estimated illicit production data mentioned in the TCA report, it can be said that the share of SCT in sales prices creates an

imbalance in the consumption of registered Alcoholic Beverages in domestic consumption, and this imbalance causes SCT losses, increased production of illegal/fake Alcoholic Beverages and cause mostly unregistered Alcoholic Beverages. There is an incredible increase in the number of searches for some words, especially in Google searches originating from Turkey. As of 2014, there has been an explosion, so to speak, in searches for raki, beer or wine at home.

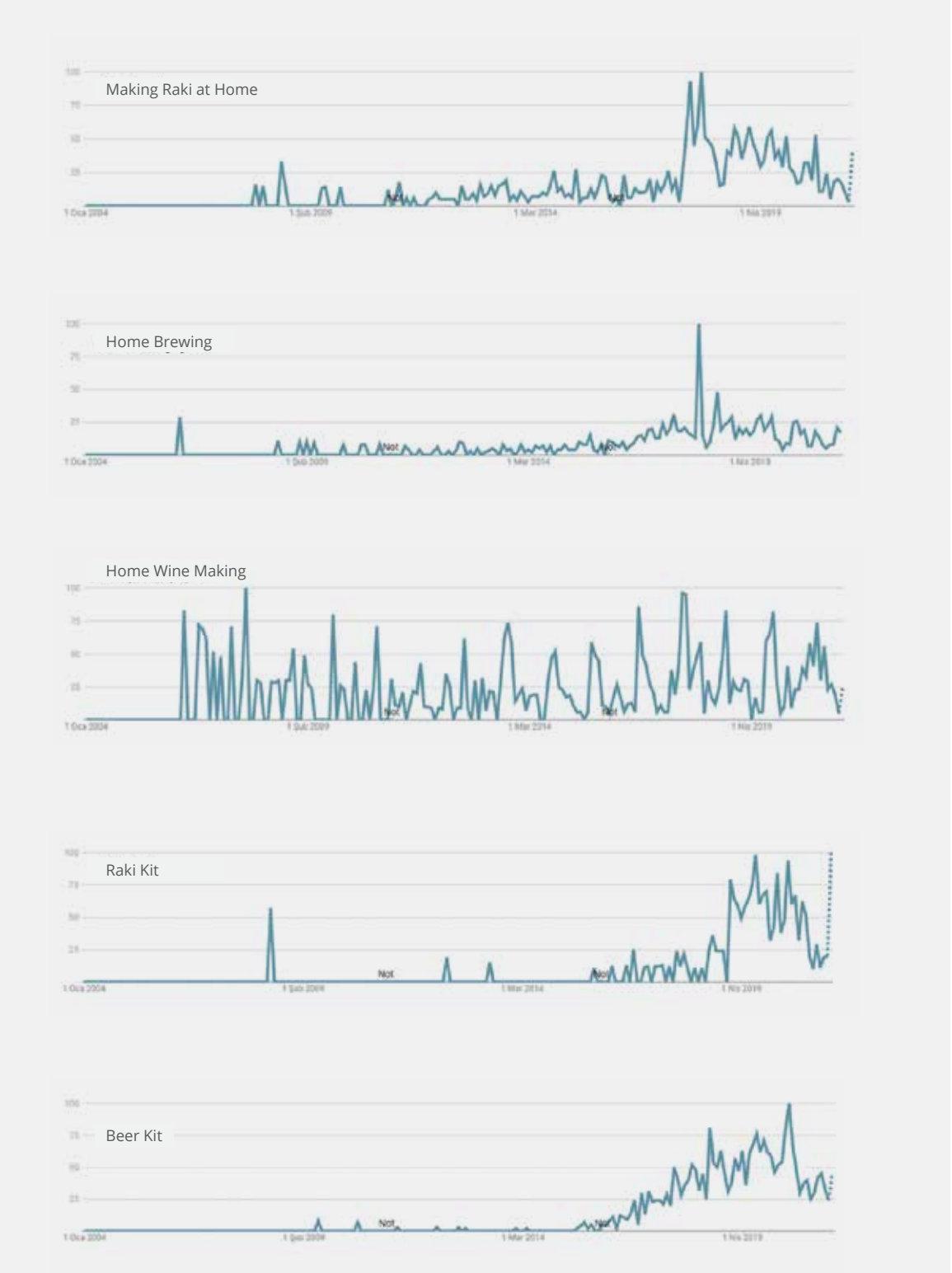
The symmetrical relationship between the increase in the number of calls and the above-mentioned ethyl alcohol market supply figures is a very important data. In the search data, "home winemaking" is another word that has been searched continuously since 2004, and it proves the informality in this sector. Another search subject is searches for liquor kits. Especially after 2018, the frequency and intensity of searching for words such as "raki kit" or "beer kit" increased

It is seen that the domestic alcohol supply in 2019 was 2.3 million liters when it should have been close to zero, while the medical use alcohol supply in 2019 was 7.7 million liters while it should have been around 1.5 million liters.

exponentially. Although the increase in Google search data is considered insufficient to reveal how much alcoholic beverage is produced at home or the amount of moonshine produced under the stairs, these data prove that there is an explosion in demand for these types of production (Figure 4 25). When the population increases in the last 10 years, in Turkey, the amount of ethyl alcohol supply and the change in the data on alcohol consumption per capita are examined, it is seen that the regulations for the sale or consumption of alcohol are not at a satisfactory point in preventing fake/illegal alcohol consumption. In fact, this approach leads to billions of lira SCT and VAT losses in terms of the State budget.

Figure 4 25

Intensity of searches on Google for some keywords related to the production of Alcoholic Beverages (2005-2020)



Source: Ministry of Agriculture and Forestry Audit Report, 2019

A series of evaluations made by the Turkish Psychiatric Association on alcohol prohibitions are especially important for understanding the subject in terms of social psychology. According to these evaluations, alcohol consumption decreases as we can reach Alcoholic Beverages, and increases in beverage prices have a reducing effect on alcohol consumption. The prohibition of advertisements and promotions also has a similar effect on reducing consumption. However, the following points stand out in the same evaluations:

- Not everyone who beverages alcohol is addicted.

- Not everyone who consumes Alcoholic Beverages is a potential culprit. The problem is the uncontrolled use of alcohol.

- Hiding, secret consumption or prohibition of Alcoholic Beverages does not reduce the interest in these beverages, but on the contrary, increases them.

- As the prices of Alcoholic Beverages increase, the production of moonshine or harmful to human health increases.

- Alcohol is not like cigarettes. Their policies should be different. Smokers directly harm their environment. Therefore, the restriction of smoking is a social necessity. But to accept or not to accept the harm caused by Alcoholic Beverages is more a matter of personal preference.

- When a regulation is made on the basis of those who use alcohol in a way that causes problems, that is, based on bad examples, some people start to perceive this situation as an intervention in their lifestyle.

In the light of these evaluations, it is clearly understood that registered production and consumption should be replaced by illegal production. In addition, making regulations rather than prohibitions will give better results both for the sector itself and for the health of consumers.

In the meetings held with the representatives of the sector, there is a common opinion that the sector is in favor of responsible consumption and that the regulations to be made by the state are or will be supported.

However, it is clear that the high increases in illegal BEVERAGE production or domestic production are an area that consumers who want to avoid the tax burden tend to. However, it is not easy to put forward "quantitative data" since scientific studies in this field are limited in Turkey. However, available statistics and reports show that the sector has difficulty in making the expected contribution to the country's economy with a balanced domestic consumption. The financial dimensions of the issue can also be briefly evaluated as follows:

- Considering the corporate tax on the alcoholic beverage sector, income tax paid due to employment, social security premiums and most importantly SCT, it is seen that it is a sector that makes significant contributions to the public purse.

- The issue that the entrepreneurs in this sector need is the tax cost, which is the most important cost item. **It is important for entrepreneurs to know in what form and to what extent a tax burden they will face, in terms of investment decisions or whether they will continue to stay in the sector.** The Principle of Certainty in Taxation is "one of Adam Smith's traditional principles of taxation. It means that the amounts, imposition and collection times and forms of taxes are certain and definite. The sales forecasts of the companies, combined with the costs and profitability rates of that year, will show the tax burden to be encountered. However, in the case of SCT and VAT, which are taxes on expenditures, consumption may not occur despite production, since consumers, not entrepreneurs, will bear this tax burden. Or, as seen in our country, there may be consumption of illegally procured products despite legal production.

Considering the corporate tax over the alcoholic beverage sector, income tax paid due to employment, social security premiums and most importantly SCT, it is seen that it is a sector that makes significant contributions to the public purse.

In this case, the entrepreneurs knowing the tax burden on consumers will give them an idea about what kind of demand contraction or demand expansion they will encounter.

- Businesses that create employment and pay taxes need to know what kind of tax burden will be on the product they produce. However, the fact that the SCT can change at any time may affect the potential investors and current sector players of the sector.

• "Every innovation in tax norms causes changes in the economic preferences of individuals. It is very difficult to predict which economic preference a change proposal in tax policy will create. Therefore, the predicted and the actual may differ. While trying to deter any behavior, another type of behavior that the state tries to prevent may emerge. For example, when the SCT amounts are increased to combat alcoholism, illegal/fake alcohol consumption may increase and the expected result may not be achieved, and the government may lose billions of lira in taxes. The problem in using taxation as a tool to not encourage the use of Alcoholic Beverages, but to reduce their consumption, is that consumers tend to turn to more affordable illegally produced products. In addition to the tax loss it creates, this situation also creates great problems in terms of human health. For this reason, when the tax burden on Alcoholic Beverages is realized in a way that affects consumer preferences, "illegal/fake beverage production and trade" increases. Moreover, as the increase observed in alcohol consumption actually shifts to illegal and unhealthy alcohol production, on the contrary, an increase in health expenditures should be expected. For this reason, taxes may cause the solution of the issue to shift to other axes in the connection between the harm of alcohol to health and consumption of Alcoholic Beverages.

• As in all tax matters, the essence of the issue is to find the optimal point in the distribution of the tax burden in order to ensure tax compliance of the taxpayers. For example, if the price of a bottle of alcoholic beverage is 100 TL with SCT and VAT, but a fake/illegal or under-the-counter bottle of alcoholic beverage is sold for 20 TL, both the state and legal producers lose. The loss of the legal producer is the decrease in the capacity utilization rate as a result of the contraction in demand. However, the state's loss is the loss of corporate tax, SCT and VAT, as well as the social costs it will undertake due to the decrease in employment. With a simple calculation, it can be calculated that there is a loss of billions of liras.

• When this loss is evaluated, for example, with 422,741 bottles and 796,320 liters of counterfeit/illegal liquor seized by the police forces in 2019, it will be clear that the solution is not to increase the SCT burden on Alcoholic Beverages that consumers can legally purchase.

As the tax burden increases, counterfeit/illegal production and consumption creates its own

In order for the employment that the alcoholic beverage industry adds to our country and the taxes they pay to become increasingly sustainable, the effective struggle with the under-the-counter businesses should also be intervened in terms of tax burden.

informal and illegal economy, but the state has great tax losses. In order to achieve the optimum point regarding the tax burden, the predictable increases realized once a year and at publicly known rates such as the expected or actual inflation rate will convince the entrepreneurs of the sector, which can make great contributions to our country's economy, especially in terms of tourism and exports, to stay in the game. In this way, it will be possible to increase the income tax due to the increase in agricultural added value, the decrease/elimination of the current account deficit, the increase in employment, the corporate tax due to the increase in the profits of the companies, and the increase in SCT and VAT revenues with the elimination of the fake/illegal sector.

In this sense;

• Unlike the D-PPI rate, the SCT, which was also increased during the year, created the consumer's urge to turn to fake/illegal products should be noticed.

• The fight against alcoholism should be a state policy and should be supported. However, the shift of alcohol consumption to counterfeit/illegal consumption and the prevention of under-the-counter businesses from having a say in production cannot depend only on the success of the Security Forces, so the sectoral tax burden should be re-evaluated.

• In order for the employment that the alcoholic beverage sector adds to our country and the taxes they pay to become increasingly sustainable, the effective struggle with the under-the-counter businesses should also be intervened in terms of tax burden.

• Abandoning the practice of updating the SCT rates and fixed figures during the year, apart from the increase in the D-PPI rate at the end of the year, may prevent consumers from turning to fake/illegal products on the grounds of tax burden.

• Investments to be made in order to bring the export power of the alcoholic beverage sector to the fore should be supported.

• Considering the employment created by the alcoholic beverage industry, especially in the field of agriculture, insurance premium supports should be provided for workers in the factories as a bonus for success, thus eliminating the reservations of the producers regarding the use of capacity.

4.1.5. Recommendations Regarding the Ideal Taxation System Based on the Special Consumption Tax - Inflation Relationship

The price elasticity of demand for some consumer goods such as tobacco, Alcoholic Beverages, salt, tea and coffee is weak. There are also no substitutes for such products. For these reasons, imposing taxes on expenditures creates an efficient taxation, since there is demand for such products no matter what their price may be. While the value added tax is applied at different rates such as 1-8-18% on the value, the special consumption tax can realize specific or proportional taxation according to the lists attached to the law. The Special Consumption Tax Law, which entered into force on 1.8.2002, is an efficient tax for the public purse. While the total of all tax revenues in 2020 was 1,027,000,000 TL, 207 billion TL of this was obtained from SCT. (314 Billion TL with VAT) Among these, the income from Alcoholic Beverages was around 16 Billion TL. Special consumption tax is collected from the goods included in the four lists attached to the Law.

List III includes tobacco products, alcoholic and non-Alcoholic Beverages. Since the state has no subject limit in terms of taxation, for example, fruit juices were not within the scope of SCT in the first version of the law, but today they are within the scope of SCT. Likewise, which product will be subject to proportional tax and which product will be subject to a fixed amount of tax is at the discretion of the state. In terms of goods with higher taxes but high demand, the economic reality manifests itself in the form of under-the-counter production/illegal production. Although, the reason why hundreds of thousands of bottles of smuggled alcohol have been caught in the illegal alcohol operations of the General Directorate of Security in the last 10 years is the continuity of the income obtained from illegal trade. Because there is a very clear difference between alcoholic products, which the state can follow the official sale of and the factory can trace back to the consumer, and alcohol produced illegally or entering our country illegally.

In the first, the state receives tax revenue, and in the second, it cannot obtain a single penny of tax. In this case, just as every penny increase in gasoline prices causes the general level of prices to increase with the butterfly effect in dozens of different sectors, every price increase over Alcoholic Beverages causes a further transition to the illegal economy. Moreover, since the state can see the loss of revenue more or less, when the tax it imposes on sales that will be realized legally increases every year by a higher amount than inflation, tax revenues increase, although it accelerates the shift to the illegal economy. However, it should not be forgotten that the increase in the general level of prices also creates an inflationary effect. The reason for this is not only the final consumer's consumption of alcohol, but also that heavy consumption in sectors such as tourism and entertainment can turn into hikes made by the operators considering their profitability. Since Alcoholic Beverages have a share in the cost structure of many products and services, from hotel room prices to wedding organization prices, the inflationary effect should be carefully monitored after SCT updates. A study by TURKSTAT within the scope of this subject may reveal the extent of the inflation effect. In addition, the acceleration of the shift to the illegal economy with the increase in SCT should be watched carefully.

As in other items, the special consumption tax increases regularly at a certain amount/rate in order to meet the income expectation of the state. The fact that these increases occur in 6-month periods is realized as we enter the summer months when intensive consumption starts. However, many other SCT products are only updated at the end of the year. These updates take place depending on inflation as well as the revaluation rate. The general level of prices decreases in the summer months. The reason for this is that the inflation basket, which is heavily dependent on food products, is positively affected by low summer prices. In this context, when an increase due to inflation is realized, there is a difference in pricing between January-June inflation rates and January-December inflation rates, where positive inflation cannot be reflected in the summer months. In this context, it would be a reasonable system to increase the targeted inflation rate once a year instead of the beginning of summer, when the peak season of the alcoholic beverage market begins. It is thought that the best period for the regulation of SCT rates is March or September, due to seasonality stemming from both the tourism season and agricultural production. Moreover, in this way, the tax burden that has exceeded the optimum point will be able to return to reasonable levels and the tax loss of billions of liras fleeing to the illegal alcohol economy will return to the public

purse. In addition to these, it can be predicted that the inflationary effect will disappear in terms of the sectors affected by the tourism sector.

There is a need for a transformation to a system that will make the tax revenues that the state plans to achieve every year without decreasing or even increasing, and at the same time eliminating the illegal alcohol economy. If we build on the results, the reason for the illegal alcohol economy in our country today is that the tax burden (SCT + VAT) on legally sold products has passed the optimum point. As such, since it is possible to produce some Alcoholic Beverages with some easily accessible products, illegal production of substitutes for distilled Alcoholic Beverages takes place. This type of production cannot be sustained without demand. For the transformation of demand, a transformation is needed in the equation of cost + profit + tax = price of legal products. Since a decrease in the cost of alcohol obtained from agricultural products can only be realized by developing agricultural activities, the state's special support to this area will make an important contribution. In terms of company profits, a conclusion can be reached by analyzing factors such as the establishment costs and operating costs of the enterprises established by the producers.

However, the most important factor forming the price is the tax burden on the product. Table (A) of List III attached to the SCT Law clearly shows the tax burden. Moreover, considering that the tax burden in question is updated twice a year, the necessary transformation in the price equation actually emerges: reducing the costs with agricultural supports and balancing the tax burden at the optimum point. When these two situations occur simultaneously, the following results are expected to be achieved.

- Since the inflationary effect will be negative at the general level of prices, it will be possible to contribute to the country's economy.

- According to the data of the General Directorate of Security, for example, 80,183 liters in 2015, 42,574 liters in 2016, 247,851 liters in 2017, 1,048,645 liters in 2018 and 796,320 liters in 2019, which run into the illegal alcohol economy every year, were seized during operations. Although it is not possible to measure how much of the seized amounts constitute the actual illegal amount. However, if it is accepted that the amounts seized are 100% of the illegal alcohol in the country, a figure of approximately 3 million liters is reached in the last 5 years (including the year 2020). Since a large part of this 3 million liters is distilled alcohol, it can be seen that the state's SCT and VAT loss is ten billion liras.

Here, when the SCT burden in legal sales is balanced at the optimum point, as long as there is no price gap between them, consumers will prefer legal products, so an increase in the SCT revenues of the state will be seen.

• As the profits of legal producers will increase with the decrease in the illegal alcohol economy, the amount of corporate tax they will pay will also increase.

• With the decrease in the illegal alcohol economy, producers using only a small part of their capacity will increase employment. With employment, the tax revenues of the state will increase.

• With the expansion of production capacity, it is a fact that the producers will be more willing to open up to foreign markets when the support mentioned above is realized, and it will contribute to exports and thus to closing the current account deficit.

For the reasons explained, to combat the illegal alcohol economy created by alcoholic products, which are agreed to pass the optimum taxation point in our country, it is suggested that the link between the SCT updates, which take place every year and twice a year, with inflation should be evaluated.

It would be a reasonable system to increase the target inflation rate once a year instead of the beginning of summer, when the peak season of the alcoholic beverage market begins. Moreover, in this way, the tax burden that has exceeded the optimum point will be able to return to reasonable levels and the tax loss of billions of liras fleeing to the illegal alcohol economy will return to the public purse.

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