

## TURKISH AGRICULTURE AND FOOD INDUSTRY

Turkey is a country of agricultural origin whose agricultural output shows significant increases every year. Historically, the agricultural sector has been Turkey's largest employer and major contributor to the country's GDP, exports and industrial growth. However, as the country has developed, agriculture has declined in importance relative to the rapidly growing industrial sector.

Turkey is the largest producer and exporter of agriculture products in the Near East and North African region. Exports of agro- industrial commodities were valued at \$ 6,5 billion in 2008. As a result of the adoption of Economic Stabilisation Measures in 1980, Turkey's GNP growth rates and exports reached high levels. While total exports were US \$ 2.9 billion in 1980, this figure exceeded US \$ 132 billion in 2008. Although two thirds of the total exports were agricultural products before the year 1980, in 2008 the share of agricultural and food products were 7,9 % and the share of industrial products were 94,8 % (including agro-industry).

Due to the climatic and ecological conditions that are naturally granted, Turkey has the means to dominate world trade in many traditional agricultural products.

Together with hazelnuts, sultanas, dried apricots and dried figs which are traditional agricultural export products, Turkey dominates the world markets both in terms of production and exports. Cereals, pulses, cut flowers and fisheries are also of significant importance for Turkish agricultural export.

Also, Turkey's vast agricultural potential, offers an extensive range of fruits such as grapes, figs, olives, apricots, sour cherries and strawberries and vegetables such as potatoes, tomatoes, leeks, peppers and onions which can be preserved by different methods and presented in a variety of ways.

Rapid growth occurred throughout the 1980's, led by manufacturing but also by agro-industry and a resurgence of both domestic and foreign investment in Turkey. Trade policies, which included export credits and credit subsidies, also enhanced the export performance of the sector.

Utilizing the above mentioned advantages processed fruits and vegetables, products, pastry and milling industry, sugar confectionery, chocolate and cocoa products, pulses, tobacco and tobacco products are the promising sectors of Turkey's agriculture and agro-industry.

The geographical location of Turkey presents the country a very advantageous situation in international trade. Turkey's proximity to Europe, the Middle East and North Africa, Central Asia provides an easy access to large markets through the Black Sea to the North, the Aegean Sea to the West and the Mediterranean Sea to the south.

As far as Turkey's foreign trade partners are concerned, it is seen that OECD countries take the biggest share. Among these, EU countries and especially Germany, constitute the major destinations where Turkish export products are shipped. In 2008 about 48% of products of Turkish origin exported to the EU. Apart from EU countries, Member States of the Organisation of the Islamic Conference (OIC) have also important potential for products originating from Turkey; which took a share of 25 % in 2008. USA has also important share (3,25%) in Turkey's exports.

## Processed Fruits and Vegetables

Dried fruits and edible nuts, tomato paste and other tomato products, canned fruits and vegetables, frozen fruits and vegetables, dehydrated vegetables and fruit juice are regarded as the most important sectors under this heading. These sectors include items making up the majority of Turkey's total export revenues both from agriculture and agro-industry.

The products of the dried fruits and edible nuts sector, which are very important for the Turkish economy, are hazelnuts, raisins, dried figs and dried apricots. These products are regarded as traditional agricultural export products of Turkey. Especially, hazelnut, raisins, dried figs and dried apricots have been the products representing Turkish production and quality for years. With them Turkey dominates the world markets: Turkey is the number one producer and exporter of hazelnuts, dried apricots and figs in the world.

Hazelnuts, rich in unsaturated fats, apricots rich in vitamin A and many minerals and raisins having blood-making property are supplied to health conscious consumers around the world.

These products are mainly exported to EU, USA and other developed countries. For this reason, and with the respect to the fact of realising about 70% of the world hazelnut production, these products have a strategic importance for Turkey. The export revenues from these four products exceeded \$ 2.2 billion in 2008.

The biggest share in the exports of the processed fruit-vegetable sector belongs to the tomato paste. Turkey is the third biggest producer and exporter in the world this special commodity. The production of this very important ingredient enhancing colour, flavour and texture of various dishes and meals was 240 thousand tons in 2007 and about 105 thousand tonnes were exported in 2008. Export revenue from this sector in 2008 was realized as \$150 million.

The frozen fruits and vegetables sector has a history of not more than 30 years in Turkey, and has been basically export-oriented. Since the consumers of this sector are more keen on health and are aware of nutritional aspects, frozen fruits and vegetable products have been among the food items gaining popularity and also by the new trends in life styles demand will continue to grow in the future. The production and exports of the sector is growing steadily. One third of the production is consumed in the country, while the rest is exported. By the growing number of people that become more health conscious and by the new trends in life styles, demand will continue to grow. Frozen leeks, peppers, French fries, peas, strawberries, sour cherries and plums are the major products exported from Turkey to the world markets. More than 75 - 80 % of exports are shipped to EU countries. Total export of this sector is 72 thousand tons and \$ 109 million in 2008.

The production of canned fruit and vegetables is mostly parallel to national and international demand. Canned sour cherries, canned peaches, canned okra, canned peas, mixed vegetables and canned beans hold the largest share in canned fruit and vegetable exports.

The fruit juice and concentrate industry has become one of the progressive agro-industry sectors in Turkey. This export-oriented industry has flourished rapidly due to the modern production units, new investments and strong support of abundant fresh fruit production. Fruit juices of various types (concentrated, mixed, sweetened etc.) are very popular primarily because of their nutrient content. The products of this sector are also good alternatives to carbonated beverages. The species processed into fruit juice and concentrates are apples, pears, apricots, peaches, oranges, tangerines, grapefruits, lemons, sour cherries, strawberries, pomegranates and grapes.

The products of this sector which export revenues were realized at \$ 131 million in 2008, are mainly destined for EU countries (Germany, United Kingdom and the Netherlands) and the USA. The major export commodity of this sector is apple juice making up more than 50 % of the sector's export.

The dehydrated vegetable industry is yet a minor but developing branch of the Turkish agro-industry.

### Vegetable Oil Industry

Turkey has an important place among other countries regarding the quantity and quality of its vegetable oil industry production. Although several kinds of vegetable oils are produced in Turkey, sunflower oil and corn oil and are the leading export items of the vegetable oil industry.

### Olive Oil Industry

Being a very important ingredient enhancing flavour and texture for the meals Turkish olive oil is recommended to the household kitchens of the world. Olive oil, besides its delicious taste, is highly recommended by doctors for people suffering from high cholesterol. Production and export quantities are strictly dependent on the olive production as the olive production, which may change from year to year.

Being a net exporter of olive oil, Turkey supplies a variety of olive oil products to a wide range of countries, including major producer countries that either consume or re-export Turkish olive oil. Together with the EU countries, the USA is the major importer of olive oil and Turkey is one of the most important supplier to these countries. In addition, Turkish olive oil is in demand in every part of the world. Today, Turkey exports olive oil to more than 90 countries and very few countries are left having not experienced the excellent taste and aroma of Turkish olive oil.

### Milling and Pastry Industry

The major products of this sector are wheat flour, pasta and biscuits. Turkey is among the major producers of wheat throughout the world. The yearly production of wheat is about 21 million tons. In Turkey, today, there is about 850 factories processing wheat to wheat flour and other by-products with varying capacities. The milling industry's total production was realised as approximately 25 million tons. With the figures exported in past years, Turkey is considered among the six biggest exporters throughout the world, major markets being Middle Eastern and CIS countries.

Depending on the foreign demand Turkish pasta and biscuit exports have shown sharp increases since 1990. Due to high volume of raw material pastry and milling products account for approximately half of agro -industrial output in terms of value. The increase in exports of these sectors has also accelerated Turkish agro-industry exports. Most of the production facilities are located in Central and Eastern Anatolia where high quality wheat is grown in plentiful amounts.

In the light of the substantial quantity of production Turkey is among the major exporters in the world and exporting pasta to over 157 countries all over the world. Turkish pasta exports were about 175 thousand tons and \$ 181 million in 2008. The types of pasta produced in Turkey are pasta with vegetables (spinach or tomato) eggs and cuscus, which is a Turkish speciality also being exported. Vitamin enriched macaroni and macaroni high in fibre content and whole wheat macaroni another varieties gaining popularity in recent years due to healthy lifestyle trends of consumers. Between 1989 and 1994, USA has been the major export market for Turkish pasta. Today, CIS, Eastern Europe, Middle East and Africa constitute the principal markets for Turkish pasta.

Due to the increasing foreign demand since 1990, the capacity and production in the Biscuit Sector increased with new investments. In recent years varieties including sweet, semi-sweet, custard cream biscuits and savoury crackers as well as chocolate coated biscuits, biscuits fortified with vitamins and biscuits enriched with bran and oats are produced in and exported from Turkey. Turkish biscuit exports were about 140 thousand tons in 2008. While exported to only 15 countries in 1980, Turkey exported biscuits to over 100 countries in the world in 2008.

### Sugar, Sugar Confectionery, Chocolate and Cocoa Products

Besides being an important sugar producer and exporter, in recent years, confectionery products, particularly chewing gums, chocolate and chocolate products have become important and are gaining popularity among the Turkish export commodities. Also, Turkish specialities of this industry like halva and Turkish Delight are being introduced to international markets successfully.

The increase in export of the sector in recent years is accelerated by the increase in export to CIS countries. Total exports for sugar and sugar confectionary was nearly 1 million tons. Total exports were about 231 thousand tons in 2008 and export revenues exceeded \$ 643 million for the same period.

### Pulses and Cereals

Turkey has a major role among the important countries producing pulses and has the means of dominating the world trade in pulses. Red lentils and chickpeas that contain high levels of plant proteins, vitamins (especially A, B1 and B2) and minerals (Calcium, Iron and Magnesium) are among the most popular export items. Turkey's total pulses production realized as 979 thousand tons in 2008. Lentils and chickpeas are the major products in Turkish pulses production. Although Turkey exports to many countries all over the world, the majority of the exports are destined to the Middle East, European and North African countries.

Cereals are also of great importance in Turkish agriculture, where wheat is the major grain produced in Turkey where she ranks the seventh in world wheat production. Barley, oats, rye, spelt, maize, millet and rice are also produced in significant quantities.

### Fishery Products

Turkey is surrounded by sea on three sides, the Black Sea in the north, the Mediterranean Sea in the south and Aegean Sea in the west. Utilizing this advantage, Turkey has been known as a country of fishery products since ancient times. Differences in terms of temperature, salt content etc. in these seas, provide fish and fishery products of different species and delicious tastes. The total production of fishery products in Turkey was realized at 772 thousand tons in 2007. More than \$ 414 million was gained from the exports of this sector in 2008. Main export markets are the European Union, the USA and Japan. Major Turkish export products in this sector are fresh fish is the most important export item, followed by the fresh and canned crustaceans and molluscs.

On the other hand, a great number of fish farms have arisen due to the recognition of high water resources and request of consumers demanding fishery products available to them throughout the year. The most common species produced by aquaculture are trout, sea bream, sea bass. Fresh water fishing and fish farming has accelerated the progress in this sector. In fresh water fishing, Turkey is already in a position to become a supplier to EU countries and USA.

## Spices

Owing to Turkey's climatic and ecological conditions, many spices are cultivated or gathered from the natural vegetation. Oregano, laurel leaves, mahaleb and juniper berries are gathered from nature whereas varieties like cumin, anise, red pepper, fenugreek, fennel and coriander are cultivated.

Turkey is the major producer of laurel leaves, oregano and cumin in the world. USA, Hong Kong, Japan and EU countries are the major potential markets for spices originating from Turkey.

## Fresh Fruits and Vegetables

Several types of climate leading to increased product variety and the near vicinity has made Turkish fruit and vegetables popular. Turkey produces 80 types of fresh fruit and vegetables out of 140 products grown in the world. Out of 80 types of fresh produce, 50 kinds are subject to exports. The major export markets in this industry are the Russian Federation, EU and Middle Eastern countries. The most popular fresh fruit varieties are citrus fruits like oranges, lemon and grapefruits, apples, melons and grapes; whereas tomatoes, potatoes, onions, pepper, cucumber and gherkins are the leading products in the fresh vegetable products. In 2008, the exports of fresh fruits were realized at \$ 1061 million and the exports of fresh vegetables reached \$613 million.

## Cut Flowers

Commercial cut flower production in Turkey was initiated at the beginning of the 20th century. However, production for international markets started with 4 hectares in 1985. Turkey has been exporting cut flowers of high quality since then. Now, the production area is about 3930 hectares by 2004. The rapid increase in production during this period shows that the natural resources of Turkey can be used effectively. Turkey's export revenue from this product has been more than \$ 24 million in 2008, the major export market being the UK. The Russian Federation, Ukraine, Bulgaria, Greece, the Netherlands and Japan are the other important destinations for cut flowers.

## Poultry

Parallel to the trend towards consuming meat containing less cholesterol, the popularity and domestic consumption of the poultry sector in Turkey has increased. Chicken and turkey products are the most commercialised kinds of products in this sector while they have also very rich diversity of product groups like in whole or cut-in-piece, ready-to-eat, charcuterie forms both for domestic use or export purposes. Another trend in this industry, as a result of healthy life styles, is the adaptation of traditional Turkish dishes made previously with red meat, like meat balls, Döner or various kinds of Kebabs. These products are also expected to gain demand in international markets. In 2008 the 80 thousand tons of poultry products were exported and were valued at \$ 85,6 million.

## Milk and Dairy Industry

The processing of milk and dairy products on a commercial basis and in modern plants dates back to 35 years. Turkey is the largest producer of milk and dairy products in the region. The rich varieties of cheese have made Turkey one of the preferred supplier of this product. While the traditional products, like Van Otlu (Herby) cheese, Mihaliç Cheese, İzmir Tulum Cheese, Erzincan Tulum Cheese, the traditional Turkish White Cheese, salinized Diyarbakır Örgü Cheese and etc., are demanded internationally; Mozzarella Cheese and Kashkaval cheese have special importance in Turkish foreign trade as well.

## Mineral Water

Turkey is one of the most fortunate countries endowed with substantial natural and mineral water resources. Turkey produced more than 3,6 billion litres mineral water the exports destined to European, Middle- and Far East Countries. However, the production and export capacity of mineral water of Turkey is much higher than these figures.

## Honey

Since it is consumed in large amounts in Turkey, the honey sector is quite developed. In Turkey, because of the rich flora favouring climatic conditions in many different regions throughout the country, various types of honey are produced. Pine and Flower honey are the most well known types in Turkey.

## Alcoholic Beverages

The beer sector is the most dynamic sector in the alcohol and has most certainly benefited from the changes in drinking habits. Production of beer is increasing in Turkey year by year. The production has reached to 905 million litres in 2005. This growth resulted from increasing tourism activities and increase in domestic and international consumption.

Rakı, a traditional Turkish spirit made from grapes with a high alcoholic content and also called as “Lion’s Milk” due to its white colour when mixed with water, ranks second in the production of alcoholic beverages following beer.

Turkey has diverse soil and climate types allowing wine producers to obtain several types of grapes for producing different kinds and flavors of wine. Producers in this industry continue to increase their current wine production capacity and invest in utilizing in modern technologies. Wine types in Turkey are widely diversified and as a result of the improvement of quality, many Turkish brands have been awarded gold medals in international competition.

## Organic Agricultural Products

Nowadays consumers are becoming increasingly interested in environmentally sound products, as a result of continuously expanding awareness. Thus, the desire for healthy life has oriented consumers toward healthy food and organic agricultural products. The movement towards healthy food has started in 1960’s in developed countries, spread all over the world. Parallel with world developments, organic agricultural activities began in Turkey in 1985 based on demand of importing countries. Due to its rich plant variety Turkey is one of the countries best suited for organic cultivation. Today, nearly 250 kinds of agricultural products were organically produced in Turkey and shipped abroad pioneering with dried fruits and nuts, olive and olive oil, pulses and spices. Industrial products such as cotton, textiles and essential oils have also be started to be produced organically.

## Tobacco and Tobacco Products

Turkey is the main producer of oriental type tobacco in the world. Among the main industrial crops produced in Turkey, tobacco is a traditional agricultural export item of Turkey. Turkey is the major producer and the exporter of this product in the world. The new trend in the sector is the production and export of tobacco products. After the introduction of foreign investment, it is expected that the export increase will be accelerated with tobacco products.

As a whole, the Turkish food industry obeys and applies all the rules of hygienic requirements to produce high quality sanitary products. Also, the exports of the traditional agricultural products are controlled by mandatory standards in order to supply products suitable for the consumers of the world. This enables the Turkish food industry to export to all the countries in the world.

In summary, in the Turkish agricultural and food industry, production is realized in conformity with all rules of hygiene in order to produce high-quality and sanitary products. In this regard, many firms in Turkey have started to apply internationally recognized quality and food safety systems like ISO 9000, ISO 22000, HACCP, BRC, IFS, SQF or GLOBALGAP. This enables the Turkish food industry to export to all countries in the world. In addition, the similarity of consumers' preferences with Moslem countries and the geographic and cultural proximity to many European markets allow Turkish food exporters to penetrate international markets easily.

However, the Turkish agriculture and food industry export potential is not limited with these products. There are many other products that are worth experiencing and these are recommended to all consumers in the world.

From all of the described products above, it can be easily seen that Turkey has become a big potential supplier of various agricultural and food products. It is apparent that Turkey is likely to continue to develop her trade with world markets as her products become known and preferred more and more in the future.

In the mean time, trade between Turkey and the world markets must not be solely limited to export and import business; foreign investment is always welcome to Turkey. Joint ventures in Turkey and other countries are potential activities, which are expected to be the major promoting tool for enhancing trade relations of Turkey.