



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

# **The structure of Turkey's citrus fruit export from the standpoint of Turkey's membership in the EU**

**Ahmet Zenginoglu<sup>1</sup>, Gert van Dijk<sup>2</sup>**

<sup>1</sup>Department of Business Economics and Management, Mediterranean Agronomic Institute of Chania, Greece

<sup>2</sup>Wageningen University and Nyenrode University, the Netherlands  
[ahmetzenginoglu@yahoo.co.uk](mailto:ahmetzenginoglu@yahoo.co.uk), [g.vandijk@cooperatie.nl](mailto:g.vandijk@cooperatie.nl)



**Paper prepared for presentation at the 98<sup>th</sup> EAAE Seminar 'Marketing Dynamics within the Global Trading System: New Perspectives', Chania, Crete, Greece as in: 29 June – 2 July, 2006**

*Copyright 2006 by [Ahmet Zenginoglu and Gert van Dijk]. All rights reserved.  
Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.*

## The Structure of Turkey's Citrus Fruit Export from the Standpoint of Turkey's Membership in the EU

Ahmet Zenginoglu<sup>1</sup>, Gert V. Dijk<sup>2</sup>

<sup>1</sup> Mediterranean Agronomic Institute of Chania (MAICh), Dept. of Business Economics and Management, Greece  
E-mail: ahmetzenginoglu@yahoo.co.uk

<sup>2</sup> Wageningen University and Nyenrode University, the Netherlands  
E-mail: coop99@xs4all.nl or g.vandijk@cooperatie.nl

**Abstract.** *The citrus fruit production has rapidly increased both in the world and in Turkey. The EU holds a big place in Turkey's citrus fruit export. The relations between the EU and Turkey also play a considerably significant role for the citrus trade. It is crucial to examine the factors affecting Turkey's citrus export, together with determining how the structure of Turkey's citrus export towards the EU will form. Three main problems of Turkey's citrus export can be described. These are the lack of product quality demanded by standards and consumers, the absence of product variety demanded in the EU-markets, and the existence of competing countries. However, having a good taste in citrus fruit and short distance between the EU and Turkey can be considered as the advantages from the point of Turkey's export. It is clear that changes in the EU necessitate a well-directed production. From this viewpoint, the most important issue is the perspective of how to construct a successful exportation, by starting with a directed production according to changes in the EU. So, the main objective of this research is to examine Turkey's citrus export towards the EU and to determine advantages and disadvantages that Turkey may face regarding its adaptation process and its probable membership in the EU.*

**Keywords:** Citrus export, agricultural trade, EU, Turkey.

### 1. Introduction

The market conditions being changed by the globalisation all over the world in last decades have required countries to review their foreign trade policy. This situation has more importance for the developing countries whose agricultural exportation is significantly important for their foreign money needs and the agricultural sector's development. Furthermore, in developing countries like Turkey, the export of agricultural products has an important place together with the processed agricultural products in foreign trade. And in Turkey, fresh fruit and vegetables take the lead among agricultural products which have high trade capacity. Turkey has a noteworthy potential in the fruit and vegetable sector, with respect to average of years 1999-2003. The fresh fruit export has maintained a significant portion of the total fresh fruit and vegetable export with 60 %.

**Table 1.** Citrus Fruit Export Share in Turkey's Fresh Fruit Export (1000 \$)

Years	Fresh Fruit	Citrus Fruit	Ratio (%)
1999	345.305	248.974	72
2000	258.554	170.630	66
2001	339.899	212.342	63
2002	392.310	253.713	65
2003	476.394	258.861	54
1999-2003 average	367.892	228.904	64

Source: www.die.gov.tr, 2004.

Turkey's fresh fruit exportation ratio over production is five percent, while the ratio for the citrus fruit is 20 %. This depicts how important the economic value of citrus fruit exportation is, from the viewpoint of foreign money input to Turkey<sup>[1]</sup>.

Having a look at the situation all over the world, citrus fruit is also the first in international fresh fruit trade. As a result of liberalisation of trade and technique progression in storing and transport operations, the citrus fruit sector has acquired more global trade. Although the intensity of growth has been different according to the types of citrus fruit, production and trade have recently increased. And this increment has appeared especially in easy-peelers' production, while consumption of citrus as fresh fruit has exhibited stagnation in developed countries<sup>[2]</sup>. These global developments have affected the other countries for which the citrus fruit trade is important, and then those countries have become dependent on these developments for the citrus fruit trade.

## 2. The world citrus fruit production and export

### 2.1 The world citrus fruit production

Citrus fruit is harvested in the area situated at latitude between 40° north and 40° south. Citrus fruit is therefore typically grown in Mediterranean type climates.

World citrus fruit production and consumption have grown strongly since the mid-1980s. After two decades, production has reached approximately 100 million tonnes in 2005. The increment in production has arisen from increasing plantation areas, increasing income and consumers' preferences through more healthy and packaged food consumption<sup>[2]</sup>.

**Table 2.** The world's citrus fruit production (1.000 Mt).

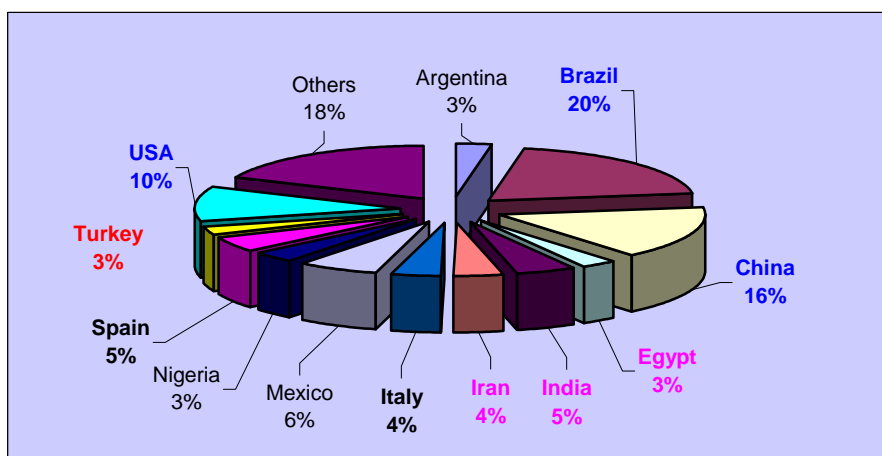
	Orange		Tangerines		Lemon		Grapefruit	
Years	Production	Index	Production	Index	Production	Index	Production	Index
1990	49.654	100	12.497	100	7.273	100	4.059	100
1995	59.283	119	16.003	128	8.667	119	5.140	126
2000	64.147	129	18.262	146	11.135	153	5.333	131
2005	59.858	121	23.312	187	12.554	173	3.667	90

**Source:** www.fao.org, 2005.

Production of oranges, tangerines, lemons and limes has expanded rapidly, and even faster growth has been realized for processed citrus products as improvements in transportation and packaging have lowered costs and improved quality. Rapid expansion of production and slower demand growth for oranges and grapefruit, however, has resulted in lower prices for both fresh and processed oranges and grapefruit. The rate of new plantings has slowed and projected growth rates in both production and consumption over the next ten years are expected to be lower than those realized over the last ten years<sup>[3]</sup>.

When the shares of producer countries' in world citrus fruit production are observed, it is seen that Brazil, USA and China constitute 46 % of total production. From the EU, Spain and Italy comprise 5 and 4 % share of total production. In recent years, Iran, India

and Egypt seemed to have developed both in citrus production and trade. Turkey makes up three percent of total citrus production.



**Graph 1.** Producer countries' share in the world's citrus production, 2005.

**Source:** www.fao.org, 2005.

Generally, productions of all citrus species are projected to increase in subsequent years. Orange producing countries in Asia are expected to continue to expand production, but nearly all of it will be consumed in domestic markets. Tangerine production is projected to decrease, but increase especially in Spain, China, Morocco, Brazil and Argentine. For the lemon production, Mexico, Argentine and Spain from the Mediterranean Region are said to have maintained their production level so they remain leaders. And grapefruit production is projected to remain in the USA and Israel, increase a little in Cuba, Mexico, Argentine and South Africa, and increase especially in Turkey due to new grapefruit plantation areas<sup>[4]</sup>.

## 2.2 The world citrus fruit export

Globalization of the fruit and vegetable trade has made fresh produce accessible to consumers around the world, overcoming seasonality and smoothing price fluctuations. High income-growth rates in developing countries portend higher rates of fruit and vegetable consumption and trade in the future<sup>[5]</sup>. This situation is also currently effective for the citrus fruit trade, because citrus is a fruit group which has different types according to time of ripening such as early, middle and late ripening varieties and according to colour or taste such as blond or blood, and sweet and sour.

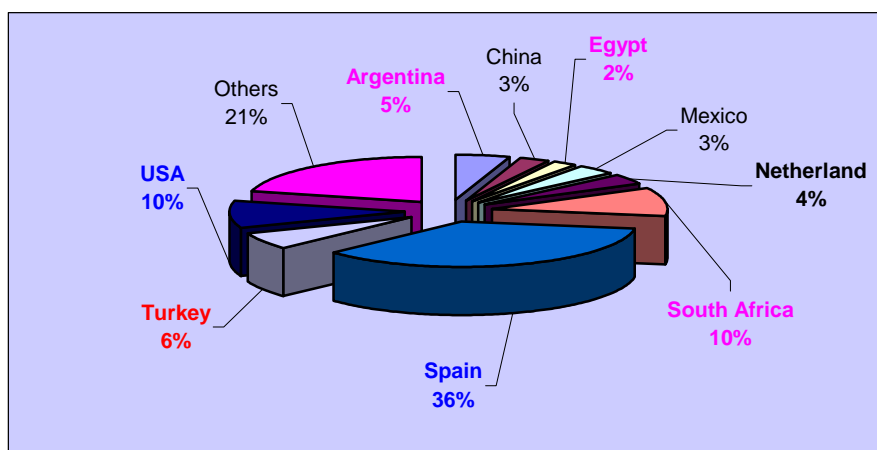
As a result of these developments in the citrus fruit sector, exportation has generally increased. A faster growth has been realized first in lemon then tangerine exportation. Growth has been slower in orange and grapefruit exportation. Deceleration in orange exportation is believed to be caused by the high demand in easy-peelers such as Clementine. Then, this situation has made tangerines the most dynamic sector of citrus fruit both in production and trade<sup>[6]</sup>.

**Table 3.** The world's citrus fruit export quantity (1.000 Mt.) and value (1.000 US \$).

Years	Orange		Tangerines		Lemon		Grapefruit	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1990	4.397	1.795.008	1.036	474.380	1.416	905.623	940	435.391
1995	4.572	2.184.966	1.258	739.579	2.025	1.535.586	1.132	597.000
2000	4.565	1.724.519	1.599	727.855	2.511	1.397.072	1.042	458.807
2004	5.045	2.817.672	2.035	1.102.972	2.906	2.116.659	1.082	624.621

Source: www.fao.org, 2004.

Having a look at the shares of exporter countries in total citrus exportation, Spain constitutes the largest part of total exportation with 36 %. After Spain, USA and South Africa come up with their 10 % shares in exportation. In spite of having no economic production, the Netherlands from the EU, reexports citrus fruit. Turkey comprises six percent from total exportation, while Argentina and Egypt, developing countries in citrus exportation, have five and two percent of total exportation.

**Graph 2.** Exporter countries' share in the world's citrus export, 2004.

Source: www.fao.org, 2004.

Exportation of all citrus fruit is projected to increase in subsequent years due to increasing income, increasing demand and different consumption types of citrus fruit <sup>[3]</sup>.

### 3. Turkey's citrus fruit production and export

#### 3.1 Turkey's citrus fruit production

Citrus fruit in Turkey is produced along the coasts of the Mediterranean, Black Sea and Aegean Region. 90 % of total production is supplied by the Cukurova Area, from the Mediterranean Region, which supplies 70 % of Mediterranean Region of Turkey <sup>[7]</sup>.

Developments in the citrus sector have also affected Turkey's citrus via prices, varieties, production. The citrus production in Turkey has rapidly increased in the last two decades and reached to 2,5 million tonnes. Although the fastest growth in grapefruit has been realized, it has the smallest share of total production. Transformation of some

plantation area into the citrus fruit plantation area has generally increased citrus fruit production<sup>[8]</sup>.

**Table 4.** Turkey's citrus fruit production (1.000 Mt).

	<b>Orange</b>		<b>Tangerines</b>		<b>Lemon</b>		<b>Grapefruit</b>	
<b>Years</b>	<b>Production</b>	<b>Index</b>	<b>Production</b>	<b>Index</b>	<b>Production</b>	<b>Index</b>	<b>Production</b>	<b>Index</b>
<b>1990</b>	735	100	345	100	357	100	33	100
<b>1995</b>	842	115	453	131	418	117	65	196
<b>2000</b>	1.070	146	560	162	460	129	130	393
<b>2005</b>	1.250	170	585	170	600	168	150	454

**Source:** www.fao.org, 2005.

This transformation has affected Turkey's orange production. Despite the stagnation in world orange production, Turkey's orange production has revealed a higher growth ratio, compared to world conjuncture. Due to increasing demand for easy-peelers, tangerine production has intensively increased, but with a lower growth ratio compared to the world's ratio. Lemon production has increased with an increasing exportation, having a slower growth according to the world. Finally, grapefruit production has rapidly increased because of its being well-utilized through exportation.

### 3.1 Turkey's citrus fruit export

Turkey's citrus exportation has increased although it has shown some instability during the last 2 decades. It has acquired the most active time at the beginning of new century, owing to a very high foreign currency rate and a high amount of export supports for citrus fruit in Turkey. Grapefruit has the biggest export-production ratio with 65 % among all citrus fruit. The reason that constitutes this situation is that grapefruit consumption in Turkey is not high, compared to other citrus fruit.

**Table 5.** Turkey's citrus fruit export quantity (1.000 Mt.) and value (1.000 US \$).

	<b>Orange</b>		<b>Tangerines</b>		<b>Lemon</b>		<b>Grapefruit</b>	
<b>Years</b>	<b>Quantity</b>	<b>Value</b>	<b>Quantity</b>	<b>Value</b>	<b>Quantity</b>	<b>Value</b>	<b>Quantity</b>	<b>Value</b>
<b>1990</b>	79	29.240	115.496	49.762	125.084	51.262	36.828	12.479
<b>1995</b>	90	31.290	115.844	42.216	140.752	63.854	45.785	15.743
<b>2000</b>	100	32.982	141.475	49.634	164.689	67.704	85.181	22.745
<b>2004</b>	134	51.573	216.102	95.559	216.756	99.211	116.632	51.975

**Source:** www.fao.org, 2004.

All citrus fruit exportations of Turkey are projected to increase in subsequent years. Orange export is projected to increase to 153 thousand tonnes in 2020<sup>[9]</sup>. Tangerines export is projected to increase to 223 thousand tonnes<sup>[8]</sup>. But, by taking the current tangerine export quantity, (216 thousand tonnes), into consideration, tangerine export can be said to exceed the mentioned projection. Increasing grapefruit production will trigger off its export, so that Turkey is going to be able to compete with Israel and the USA in the EU markets<sup>[3]</sup>.

#### 4. The structure of Turkey's citrus fruit exportation

Having an export ratio over production of 20-25 %, citrus fruit in Turkey is important, with its export value, 300 million US \$. From this standpoint, the structure of Turkey's citrus fruit export is of great importance for the members of this structure. The more important is that what currently affects this structure, and what will affect in the near future.

It must be stated that there is no specific policy for the citrus fruit production or export. But the sector benefits from the general agricultural and trade policy which is applied for all agricultural products. The increasing production via investments on citrus plantation areas and the increasing export via large export markets such as Russia, the EU countries and Balkan countries keep Turkey's citrus fruit export fresh and continuous. Problems occurring in Turkey's citrus export and general crises in Turkey's economy in recent decades have made citrus exporters develop their own strategies according to their current or target markets.

The most important citrus markets for Turkey are the East European countries together with Russia and Ukraine. Likewise, while the primary markets are Russia, Ukraine and East Europe countries, the secondary markets are the Middle East and the West European countries in orange and lemon export. For other citrus fruit export, the primary markets are also the same, but the West European countries play a bigger role than Middle East countries in these varieties' export<sup>[10]</sup>. The primary markets constitute a big part of Turkey's citrus export and export is continuous in these markets. The secondary markets such as Romania, Saudi Arabia, Georgia and Balkan countries have a changeable quantity of export each year.

**Table 6.** Turkey's citrus fruit exportation by countries.

<b>Orange</b>	<b>Tangerines</b>	<b>Lemon</b>	<b>Grapefruit</b>
<b><u>1.</u></b>	<b><u>1.</u></b>	<b><u>1.</u></b>	<b><u>1.</u></b>
Russia , Ukraine, EU,	Russia , Ukraine, EU,	Russia, S. Arabia, Ukraine, EU,	EU, Russia, Romania,
<b><u>2.</u></b>	<b><u>2.</u></b>	<b><u>2.</u></b>	<b><u>2.</u></b>
Romania, S. Arabia, Georgia.	Montenegro, S. Arabia, Romania.	Romania, Montenegro, Macedonia.	S. Arabia, Bulgaria, Ukraine.

**Source:** State Institute of Statistics, 2004

As stated earlier, liberalisation of trade and some other developments all over the world have been affecting the agricultural trade. When this situation is evaluated from the standpoint of Turkey, it seems that the EU is the most important agent which affects Turkey's agricultural export, since the Community is one of the biggest fruit market for Turkey. Moreover, the EU is the most important regionalism activity since Turkey has started negotiations with the EU for whole membership.



So, during the EU negotiations period, the study of Turkey's citrus fruit export towards the EU (one of the biggest export center) and the other countries is important since citrus fruit is the most important of exportable agricultural products. It is crucial to examine the factors affecting Turkey's citrus fruit export in order to be able to comprehend the changing structure of Turkey's citrus fruit export.

#### **4.1 The factors affecting Turkey's citrus fruit exportation**

Generally speaking, it is stated that deceleration in citrus production growth will cause decrements in plantation areas because of current lower prices that producers have been receiving. In the first decade of the 21<sup>st</sup> century, a protective policy will be applied in the citrus sector, so that at the end of this period, prices will probably go up again and these higher prices will get new citrus plantation areas formed <sup>[4]</sup>. Furthermore, there many factors which may specifically affect Turkey's citrus export from the point of the EU. So, at the end of this decade, there may be an end to the negotiations between the EU and Turkey so that this situation will be important for the relations between the EU and Turkey for agricultural policies. Thus, it is necessary to take a closer look at the current factors affecting Turkey's citrus export.

##### **4.1.1 Local problems in Turkey's citrus fruit exportation**

Starting from the production level to the selling or delivery level, the last point of the chain, there are considerable problems affecting Turkey's citrus export. The most important problems of Turkey's citrus export can be described as the lack of a specific policy to apply for the citrus sector, the lack of product quality demanded by standards and consumers, the absence of product variety demanded in the EU-markets, and other competing countries. Besides this, having a good taste in citrus fruit and short distance between the EU and Turkey can be considered as the advantages of Turkey's export.

The main problems can be divided into two groups such as internal problems of exporters and general external problems. The internal problems can be counted as the lack of finding stable markets within trustable importers, effective mediators or agencies, disability in benefiting technologic developments due to costs and difficulties in creating product differentiation. And the external problems can be attributed to the high cost in transport and packaging processes, the inappropriate quality standards in fruit, and the discontinuity in payments from the importers of some countries, especially old Eastern European countries, Ukraine and Russia <sup>[11]</sup>.

As a result of these problems, Turkey's citrus fruit export is negatively affected, so that the demanded export level has not been caught either by the government or by exporters. These problems also affect citrus export by influencing its structure, changing the exporter's strategy, exporting methods and so on.

##### **4.1.2 The common agricultural policy of the EU**

As it is widely known, the EU agriculture sector is organised with a Common Agricultural Policy (CAP) which is applied in the entire Community. In 2003, the EU farm ministers adopted a fundamental reform of the Common Agricultural Policy (CAP). The reform will completely change the way the EU supports its farm sector. The

new CAP will be geared towards consumers and taxpayers, while giving the EU farmers the freedom to produce what the market wants. In future, the vast majority of subsidies will be paid independently from the volume of production <sup>[12]</sup>. It is inferred from this that CAP is the agricultural policy system of the EU which can be changed and adapted to developments and situations either in the Community or all over the world, by aiming at the same targets for all member states in the EU.

The CAP affects Turkey in many aspects. These effects are more important when Turkey's membership in the EU and the EU's being the main fruit market both in import and export are taken into consideration. So, it is considerably significant that Turkey has to adapt to CAP, since it has started negotiations with the EU, by implementing the Community's regulations inside of its own markets. From the citrus fruit's side it is important to adapt to the Common Market Organisation (CMO) of Fruit and Vegetables.

The idea behind organising the markets in fruit and vegetables is to stabilise prices in that sector, guarantee a fair standard of living for farmers and give them an incentive to improve the quality of their products and their marketing methods. The market-organisation arrangements in this sector were radically reformed in 2001. In the 2003 reform, the common agricultural policy was changed to make it simpler <sup>[13]</sup>.

The support mechanisms managed in the content of CAP in the EU have been arranged in a designated regime. But in Turkey, support policies have always been changed both in content and method so that there has not been a stable support mechanism structure <sup>[14]</sup>. This situation makes the adaptation more difficult since these mechanisms are not similar to those the EU implements.

One of the most important issues from the point of practising CAP is producer's organisations (PO) which are designed to play an active role in organising fresh fruit and vegetable markets in the EU. So, this is also effective for Turkey's responsibilities related to its adaptation. There has been an "Agricultural Producers' Organisation Regulation" which was legalised in 2004 in Turkey, for the production group, fresh fruit and vegetable, including citrus fruit as well. Although this regulation has been authorised and seems to appease a deficient regarding this issue, it has been stated that this regulation is not enough in practise from the standpoint of CAP so that it will perform only as a mediator between producers and purchasers or wholesalers <sup>[15]</sup>.

The other effect of CAP on Turkey's citrus is from the trade side, because, although, Spain is an EU member and biggest citrus exporter country, the EU imports citrus fruit from external markets such as Turkey, Egypt, South Africa, Israel, and the USA. These countries hold a significant share of the EU's imports.

The economic weight of the fruit and vegetable sectors represents an average of 16.4 % of total agricultural production of the EU-15 in the period 2001-2003 (for 2003, the share of the sector is 17.2 % for the EU-15 and if we include the 10 new member countries, 16.8 %). Annual production of fruit was 35 million tonnes, of which 9.7 million tonnes was for citrus fruit. Production levels have slightly increased since the mid-1990 <sup>[16]</sup>. It is inferred that citrus production and trade are important in the EU as well.

The EU is the largest importer of fruits and vegetables in the world, even when intra-EU trade is excluded. With its large and relatively affluent population, and that population's demand for high-quality fresh fruits and vegetables year-round, the EU is dependent on imports. The EU, however, is a customs union (a grouping of countries that have a common tariff for third countries), and the fruit and vegetable sector has a common market organization (CMO) with policy mechanisms and trade agreements in place to stabilise markets (as previously stated) <sup>[5]</sup>.

So, all of these situations indicate that the EU arranges its trade policy according to its CAP. When citrus export is taken into consideration from this point, there occur some issues such as standards, customs, and some certifications such as EurepGap, although they are not related to CAP. But these certifications are supported by CAP. So Turkey must have minimum standards in fruit required by CMO of fruit and vegetable.

A more important issue is that Turkey has to obey the entry price regulation of the EU. General statutes about trade with third countries are regulated under chapter-5 of the CMO of fruit and vegetables <sup>[13]</sup>. After the Uruguay Round of WTO, tariff quotas, duties or taxes have been forbidden regarding import from third countries. However, an entry price regulation has been put in practise for some products in the content of CMO. So there is a tariff which is dependent on entry price of that product. So, different products bring different tariffs.

Fruit and vegetables imported with a price equal to the related entry price or higher than it are only subject to custom duties. But products imported with a price lower than entry price are subject to a tariff equivalent to the addition of custom duties. An equivalent tariff is applied for the products whose prices are between 92-100 % of entry price. Products with a price lower than 92 % of entry price are subject to a maximum tariff equivalent to the addition of the mentioned tax <sup>[17]</sup>.

Sometimes, citrus exporters from Turkey may have difficulties adapting to these entry prices so that their products are compulsorily subject to a maximum tariff equivalent. This entry price application may not have caused them to be subject to this regulation before 2000. But after 2000, because of some reasons such as economic crises and increasing costs, this regulation has caused some difficulties in adapting to the entry price in the fresh fruit and vegetable sector due to internal problems faced by exporters in Turkey <sup>[18]</sup>. It is also difficult for exporters to adapt, because these products together with citrus fruit are subject to entry price in specific periods when there are plenty of them after harvest in Turkey. So these periods may restrict price formation for export toward the EU.

Considering the relations between the EU and Turkey, Turkey has to adapt to the EU agricultural policy. This adaptation will be difficult for Turkey. Because agriculture is the sector in which the progression of Turkey has been the smallest for its whole membership in the EU in 40 years. Since CAP' regulations contain more than half of the EU regulations, services to be carried out are extensive and difficult. Moreover, the issues that adaptation is obligatory require significant investments and structural regulations <sup>[19]</sup>.

#### **4.1.3 The effects of new EU members on Turkey's citrus fruit exportation**

After May 2004, the EU-15 became the EU-25, with the entrance of the Czech Republic, Estonia, Hungary, Latvia, Cyprus, Lithuania, Malta, Poland, Slovakia and Slovenia. It is projected that the EU, one of the biggest export markets of Turkey, will incur a structural change which will affect Turkey's export, by developments from WTO agreements and ten new members in the next ten years.

The most effective factor that will affect Turkey from the point of these new members is the community preference principle of CAP. This principle is thought to cause a situation that is in these new members' favour but opposite to Turkey, from the point of agricultural export. A similar situation has been experienced when the EU's enlargement took place when including Mediterranean countries such as Greece, Spain and Portugal <sup>[20]</sup>. This situation may also affect fresh fruit and vegetable export, as well as citrus. In contrast, the new members of the EU may affect Turkey's citrus export in a good way. Cancelling the free trade agreements with these countries by their entrance to the EU, protective policies in these countries have been eliminated. That can be considered as an advantage for Turkey's entering these markets.

The increase the EU population with the inclusion of new members and their increasing consumption especially in the fresh fruit sector seem to be other advantages. The total fruit import of new members was 887 thousand tonnes in 2003 <sup>[20]</sup>. The increment that will take place in the import of citrus to balance the consumption with the EU-15 will form new markets for Turkey. Citrus producer countries are only Malta and Cyprus among new members. So there is no difference between the EU-15 and the EU-25 in citrus production. The economic growth is projected to increase by 4,5 % per year in new members so that after 16 years, new members' citrus consumption of 7-10 kg., will be equal to the EU-15 which is currently 22 kg in average <sup>[21]</sup>. That means increasing consumption will be supplied by import, as there is no production in new members for economic purposes. That will be very significant for Turkey's citrus export.

#### **4.1.4 Competitors of Turkey in citrus fruit exportation**

The citrus producer countries, especially the Mediterranean countries such as Spain, Israel, Egypt, Morocco, Turkey and others compete for citrus markets. One of the most important markets is of course the EU. Russia and Ukraine can be considered as important markets after the EU. These countries affect Turkey's citrus export from some points such as price, their local policies, and the EU policies.

From these points, price must be the most effective variable since importers firstly ask for prices. So some exporters state that Turkey can export citrus because its prices are lower than those of other competing countries such as Spain and Cyprus as it is seen in table 7. But some others state that Turkey is not able to export citrus fruit on a desired level since its prices are higher than that of some competing countries such as Egypt, Greece and so on.

**Table 7.** Citrus fruit export prices by exporter countries (US \$/kilo), 2004.

Country	Orange	Tangerines	Lemon	Grapefruit
Cyprus	0,56	0,60	0,57	0,59
Egypt	0,3	0,27	0,27	0,26
Greece	0,43	0,55	0,5	0,46
S. Africa	0,37	0,6	0,49	0,38
Spain	0,78	0,93	0,67	0,79
Turkey	0,38	0,42	0,46	0,45

Source: www.fao.org, 2004

Some exporters from competing countries may offer lower prices by receiving support from their governments so that exporters from Turkey may be compelled to enter to markets with a lower price than it should be. So their profit margins decrease, causing difficulties for the creation of continuous markets <sup>[11]</sup>.

#### 4.1.5 World trade organization's agreements

WTO is one of the most effective factors on national trade policies of countries. WTO's function is "to ensure that trade flows as smoothly, predictably and freely as possible", i.e. to facilitate the change from the currently "distorted" world market into one of more open competition <sup>[22]</sup>. Turkey, one of WTO members, has also signed a WTO agreement, GATT, by undertaking to perform needs of this agreement.

For this reason, export support policies have been adapted to GATT agreement's conditions. So export supports contains product advertisement and marketing activities in an international area, within the framework of GATT <sup>[23]</sup>.

As a matter of fact, the second basic rule of GATT is aimed at export subventions. According to this rule, export subventions must be decreased by 24 % in value and 14 % in quantity in 10 years in developing countries <sup>[24]</sup>. Fruit are also involved in this agreement for Turkey. After that regulation, Turkey has started to apply export support not as direct payment over the quantity of exported products, but as an elimination in exporters' tax debts, insurance payments, or expenditures <sup>[23]</sup>.

Citrus fruit production is supported by direct payments which are included in green box supports by WTO. Citrus fruit is also included in the green box. And the ratio of customs duty applied for citrus fruit in Turkey is about the mentioned ratio which is undertaken so that there is no problem from the point of those matters <sup>[21]</sup>.

**Table 8.** Applied and undertaken tariff ratio by Turkey.

Applied tariff ratio	Undertaken ratio-2004
54,6	54

Generally speaking, it has been observed that Turkey has got no difficulties in obeying the obligations of GATT. Adaptation of the EU, which applies the highest exportation subventions and protection ratio, to GATT is also important for Turkey, both from the viewpoint of the future of Turkey's agriculture and its adaptation to the EU agricultural

policy. On the other hand, when Turkey and the EU are carrying out the commitments of GATT, they also try to harmonise their foreign agricultural trade by GATT agreements <sup>[24]</sup>.

#### **4.1.6 Technical barriers on trade**

According to WTO, technical regulation is an obligatory document which states the processing and production methods, properties of products together with official laws. The standard is not an obligatory document although it is similar to the technical regulation from the viewpoint of contents and statements <sup>[25]</sup>. When standards are accepted and applied to restrict trade by being away from their basic targets, then they are technical barriers.

When it is handled from the point of the EU, the biggest market of Turkey, the most important issue is EurepGap. Because the EurepGap makes up a starting point for the global provision chain and is accepted both by producers and retailers <sup>[18]</sup>.

Products having certificates such as ISO, HACPP, EurepGap and etc. are becoming more important and nearly obligatory in the EU markets, which are selective and have high quality expectations. Especially citrus gardens with EurepGap certificates are still insufficient in Turkey <sup>[26]</sup>. Products with the EurepGap certificate are currently demanded by importers from the EU. Furthermore, some retailers from the EU have stated that they will prefer to purchase citrus fruit from producers who have that certificate <sup>[14]</sup>. The application of EurepGap protocol in Turkey is difficult because of some characteristics of the Turkish agricultural sector. The factors which restrict the application of the EurepGap protocol are the following;

- production areas with a small parcel,
- family farming existence in citrus production,

These factors oblige producers to obtain this certificate because of high cost. It is clear that the EurepGap protocol will be effective not only for citrus export but also for the fresh fruit and vegetable trade since it is large enough to cover all of these fresh products.

#### **4.2 Projection of the near future of Turkey's citrus fruit exportation**

Generally speaking, Turkish citrus fruit export is projected to increase by increasing production and developments all over the world. Orange, tangerines and lemon exports are projected to increase via their increasing production, while grapefruit export is projected to decrease via its decreasing production <sup>[27]</sup>. But depression of local marketing and this decrement in grapefruit can be eradicated owing to the importation of new the EU members <sup>[21]</sup>.

As a result, increasing production and exportation, increasing consumption in new member states of the EU and Balkan countries, and some developments in trade regulations in Russia and Ukraine, two of the biggest citrus markets, seem to maintain Turkey's citrus fruit export in subsequent years at high levels.

## 5. Conclusion and summary

The citrus fruit sector of Turkey has 20-25 % export-production ratio while the fresh fruit and vegetable sector make up only five percent. This situation reveals that citrus fruit is one of the most important fruit sectors when it is considered for its 300 million US \$ export revenue. In order to benefit from the citrus fruit sector, problems in that sector must be eliminated by taking some political issues into consideration. From this standpoint, the EU adaptation and GATT agreements are the most important for Turkey, a developing country. So, probable solutions to be applied to solve problems must be determined according to these factors. These solutions are follows;

- Firstly, production must be organised. New plantation techniques and technology must be applied in production. Certification processes must be the priority for these targets;
- For this aim, a citrus organisation must be authorised to direct production and to mediate between producers and exporters to be able to define targets and to develop the sector;
- There must be an organised specific policy to apply on the citrus sector, since it is significantly important for its economic value;
- Producers' organisations which direct local marketing must be priority to be developed, since they are one of the most important issues of the EU;
- In order to be able to stop price fluctuations in the local and foreign markets because of seasonality and other factors, storage conditions must be developed, and investments must be supported for this <sup>[28]</sup>;
- Production towards export must be directed according to demand of current or target markets;
- In order to benefit from new the EU members' citrus import, demanded citrus fruit varieties and their properties must be clarified correctly. Exporters must do marketing researches for these countries and for the markets of Ukraine and Russia to be able to properly direct their exportation;
- Export unions must conduct efficient marketing studies to be able to gather the information exporters need;
- Export supports must be arranged according to the needs of exporters. These supports must be subject to export with high quality;

Going forward with developments suitable with the EU and GATT conditions and following world citrus conjuncture and appropriating an organised production and export structure will increase the dynamism of citrus sector so that desired export level must be reached both by government and exporters.

When these progressions are considered together with suitable conditions for production as a competitive advantage, Turkey is thought to be able to reach its competitors' power in markets, by benefiting its potential which has not been used at all yet.

## References

1. SPO, (2001), "The Fruit Sub-commission Report of Crop Production Specialisation Commission Reports", The State Planning Organisation, 8<sup>th</sup> Five-Year Development Plan for 2001-2005, DPT: 2649- OIK: 657, pp. 609-661. Ankara, (in Turkish).
2. UNCTAD, (2005), "Information on Citrus Fruit, Market Information in Commodities Area", (<http://r0.unctad.org/infocomm/anglais/indexen.htm#>, 10.12.2005).
3. FAO, (2003), "Projections of World Production and Consumption of Citrus To 2010", *The Thirteenth Session of Intergovernmental Group on Citrus Fruit Meetings, Havana-Cuba, 20-23 May 2003*.
4. AEU, (2001), "Tendency of Production and Consumption of Citrus to 2010", Akdeniz Exporters' Unions Researching Serials, Production Report, Report No: 14, Antalya, (in Turkish).
5. ERS, (2004), "Global Trade Patterns in Fruit and Vegetables", United States Department of Agriculture, Economic Research Service, Agriculture and Trade Report, Report Number: WRS-04-06, June, USA.
6. FAO, (2003), "New Trends in Production and Trade in Easy Peelers", *The Thirteenth Session of Intergovernmental Group on Citrus Fruit Meetings, Havana-Cuba, 20-23 May 2003*.
7. AERI, (2003), "Citrus Situation and Projections Report 2003/2004", Agricultural Economics Research Institute, Ankara, (in Turkish).
8. Kaska, N., Guleryuz, M., Kaplankiran, M., Kafkas, S., Ercisli, S., Esitken, A., Aslantas, R., Akcay, E. (2005), "Production Targets in Turkish Fruit Growing", Turkey Agriculture Engineering 6<sup>th</sup> Technical Congress, Ankara, 3-7 January 2005, (in Turkish).
9. Gulcan, R., Tekintas, E., Misirli, A., Saglam, H., Gunver, G., Adanacioglu, H. (2000), "Production Targets in Turkish Fruit Growing", Turkey Agriculture Engineering 5<sup>th</sup> Technical Congress, Ankara, 17-21 January 2000, (in Turkish).
10. CLAM, (2002), "CLAM General Assembly" France, 9-10 October 2002.
11. Mutlu, S., Yurdakul, O. (2002), "The Structure of Citrus Export of Cukurova Region", Journal of Agricultural Faculty of Cukurova University, Adana. (in Turkish).
12. ([http://ec.europa.eu/comm/agriculture/capreform/index\\_en.htm](http://ec.europa.eu/comm/agriculture/capreform/index_en.htm) , 24.04.2006)
13. EC, (1996) "The Common Organization of Fruit and Vegetable Market", Council Regulation (EC) No: 2200/96, (Updated in 2004), Brussels.
14. Sayin, C., Tascioglu, Y., Mencat, M. Nisa, "Common Market Organisation of fresh fruit and vegetable in the EU, and measures Turkey should take toward adaptation", *The 6<sup>th</sup> Agricultural Economics Congress, Tokat-Turkey, 16-18 September 2004*. (in Turkish).



15. Atis, E., Artukoglu, M., (2005), “Common Market Organisation of fruit and vegetable in the EU and evaluation of Turkey from the standpoint of adaptation”, *Adaptation of Turkish Agriculture to the EU Common Agriculture Policy*, AERI Congress Publications, Ankara, June 2005, Publication No: 134, (in Turkish).
16. EC, (2004), “Analysis of the Common Market Organisation in Fruit and Vegetables”, Commission Staff Working Document, SEC (2004) 1120, Brussels.
17. AEU, 2005, “Producers’ Organisations in the EU”, Antalya Exporters’ Union E-publications (<http://www.aib.org.tr/proje/ureticiorgut.pdf> , 10.04.2006), (in Turkish).
18. Koc, D. (2003), *Practical Information in Exportation, Fresh Fruit and Vegetable Sector* Undersecretariat of the Prime Ministry for Foreign Trade, the Export Promotion Center’s Publications, Ankara, (in Turkish).
19. Isikli, E. (2005), “How Turkish agriculture complies with the EU agriculture?” *Adaptation of Turkish Agriculture to the EU Common Agriculture Policy*, AERI Congress Publications, Ankara, June 2005, Publication No: 134, (in Turkish).
20. AEU, 2005, “Fresh fruit and vegetable export of ten new member states of the EU”, (<http://www.aib.org.tr/proje/abyeniuyeler.pdf> , 11.02.2005), (in Turkish).
21. Karahocagil, P., Tunaligil, R. (2004), “The citrus markets in the EU, and the situation of Turkey after the attendance of new states to the EU” *The 6<sup>th</sup> Agricultural Economics Congress, Tokat-Turkey, 16-18 September 2004*. (in Turkish).
22. FAO, (2003), “Current Multilateral Trade Negotiations on International Citrus Trade”, *The Thirteenth Session of Intergovernmental Group on Citrus Fruit Meetings, Havana-Cuba, 20-23 May 2003*.
23. UFT, (2005), “Government Supports Regulation on Export”, Undersecretariat of the Prime Ministry for Foreign Trade, Ankara, (in Turkish).
24. Sayin, C., “*Agricultural support policies in Turkey, way of searching reforms, IMF, GATT and the EU reflections*”, Publications of The Union of Chambers and Commodity Exchanges of Turkey, Ankara, (in Turkish).
25. (<http://www.wto.org>, 2006)
26. Saman, K., (2005), “Citrus market opportunities”, Mersin Chamber of Commerce and Industry E-publications, (<http://www.mtso.org.tr/mp/contents.php?id=667> , 20.06.2005), (in Turkish).
27. AERI, (2005), “*Citrus Situation and Projections Report*”, Agricultural Economics Research Institute, Ankara, (in Turkish).
28. CAE, (2006), “Citrus Sector; Problems and Suggestions for Solution”, Union of Chambers of Turkish Engineers and Architects, Chamber of Agriculture Engineers, Adana Branch Office Opinions, E-publications, (<http://www.zmo.org.tr/odamiz/bizden.php?kod=2538> , 01.02.2006), (in Turkish).