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**World and Syrian Trade in Citrus and
Related Agricultural Policy**

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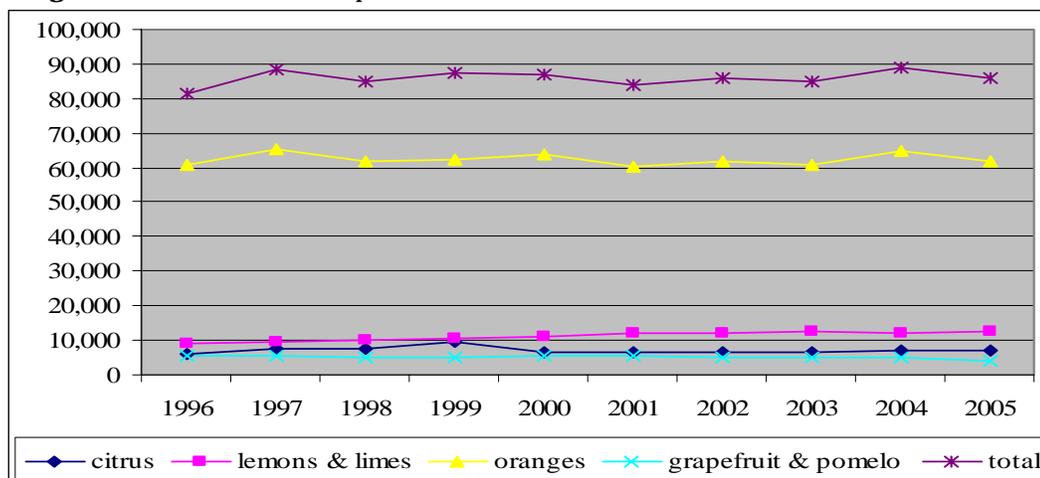
Introduction

This brief aims at presenting the production, consumption, and world trade of fresh citrus¹ during 1996-2005 in addition to recent developments in world agricultural policies mainly in European Union affecting citrus. Also, it aims at presenting Syrian citrus production, trade and agricultural policies related to the same period being this sector important for Syria, citrus exports exceeding, both in 2000 and 2001, 1 Billion SP and being citrus a source of income for more than 30² thousand of Syrian households.

1. World production

Citrus production accounted for nearly 20% of world production of fruit during 1996 -2005, but fluctuated during the same period, passing from 81.5 million tons in 1996 to 89 million tons in 2004, then slowing down again in 2005 reaching 85.7 million tons (Figure 1)

Figure 1- Citrus total world production, 1996 – 2005 (thousand tons)



Source: FAOSTAT, 10 September 2007

Fluctuation in Citrus production during 1996 - 2005 is mainly attributed to fluctuations in oranges production, which account for nearly 72% of total citrus production (2005), equivalent to 61.8 million tons. Lemons and limes represented 14 % of total citrus production and their production increased from 9 million tons in 1996 to 12.5 in 2005 (3.4% growth rate).

Other citrus products accounted for 8% in 2005 and their production increased from 6 to 7 million tons during 1996-2005, while grapefruit production accounted for 6% in the same year and its production decreased from about 5.4 to 4.2 during the same period (previous figure).

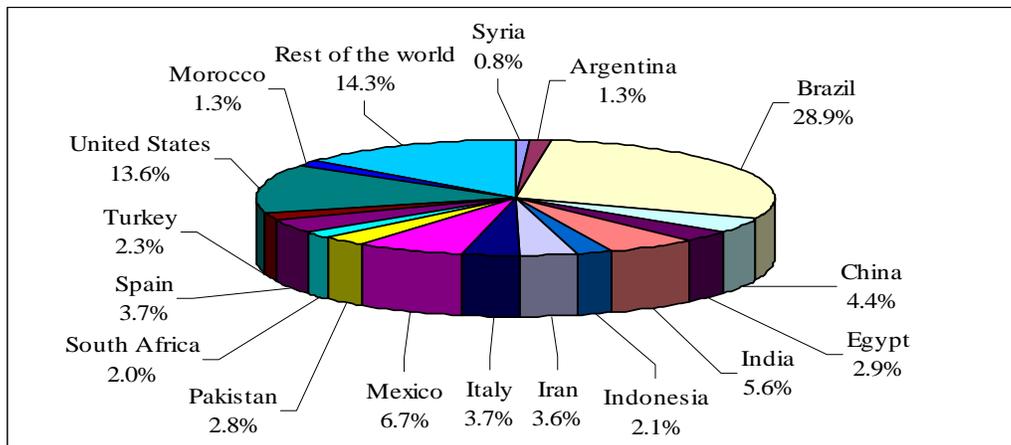
Regarding main producing countries, according to Food and Agriculture Organization (FAO) data in 2007, citrus fruits are produced in nearly 104 countries, with 70 % of production centered in the Northern Hemisphere and, particularly, in Brazil, Mediterranean countries, United States and China, which altogether represent more than two thirds of world citrus production.

¹ This paper discusses fresh citrus (Oranges – Grapefruits & Pomelo – Lemons & Limes – other citrus) in terms of production and trade at the international and domestic level. It is worth mentioning that citrus Juice will be discussed later in terms of production and trade on the international and domestic level also.

² Al-thora newspaper no. 12606, 13/1/2005

As for orange, the most important produced citrus fruit in the world (72% of world production of Citrus in 2005), Brazil is the main producing country followed by United States – Mexico and India with shares off 28% - 14 % - 7 % - 6 % of total oranges world production, respectively (Figure 2).

Figure 2- World main producing countries of oranges in 2005 (% of total world oranges production)



Source: FAOSTAT, 10 September 2007

Main producers of other citrus products fruits are illustrated in Table 1.

Table 1- Main producers of other citrus products in 2005 (% of world production)

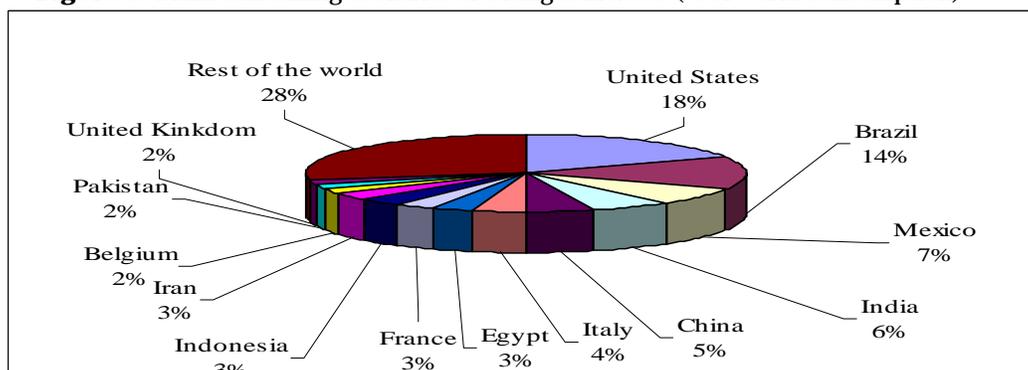
Lemons & Limes (%)	Mexico 14- India 13 – Argentina 11 – Brazil 8 – United States 6 – China 5 – Iran 5 – Italy 5 – Turkey 5 – Egypt 2.7 – rest of world 25.3
Other Citrus products (%)	Nigeria 49 – China 15.7 – Colombia 10.3 where the three countries account for 75 % of world production.
Grapefruit And Pomelo (%)	United States 22 – China 10.6 – South Africa 8.7 – Mexico 8.4 – Syria 6.7 – Israel 6.3 – Argentina 4.6 – Cuba 3.7 – India 3.7 – Turkey 3.6- rest of world 21.5

Source: FAOSTAT, 10 September 2007

2. World consumption

World consumption of oranges during 1996 – 2005 accounted for about 52.7 million tons on average. Food and Agriculture Organization data indicate a slight decrease in fresh orange's consumption and indicate that main consuming countries of oranges are nearly the same main producing countries (Figure 3).

Figure 3- Main consuming countries of Oranges in 2005 (% of world consumption)



Source: FAOSTAT, 10 September 2007

Main consuming countries of other citrus products are presented in table 2.

Table 2- Main consumers of other citrus products in 2005 (% of world consumption)

Lemons & Limes (%)	United State 14 – India 11 – Mexico 10 – Brazil 7 – China 5 – Italy 5 – Argentina 3 – Turkey 3 – Spain 2.5 – Egypt 2 – rest of world 30
Other Citruses (%)	Nigeria 44 – China 16 – Colombia 10.6 these three countries account for (70.6%) of world consumption – guinea 3 – Japan 3 – Philippine 3 – Saudi Arabia 2 – Nepal – rest of the world 16.4
Grapefruit And Pomelo (%)	United States 12 – Japan 12 – China 8.7 – France 6 – Syria 6 – Mexico 5 – Netherlands 5 – United Kingdom 3.7 – Canada 3 – South Africa 3 – India 3 – Germany 2.7 – Italy 2.3 – rest of the world 27.6

Source: FAOSTAT, 10 September 2007

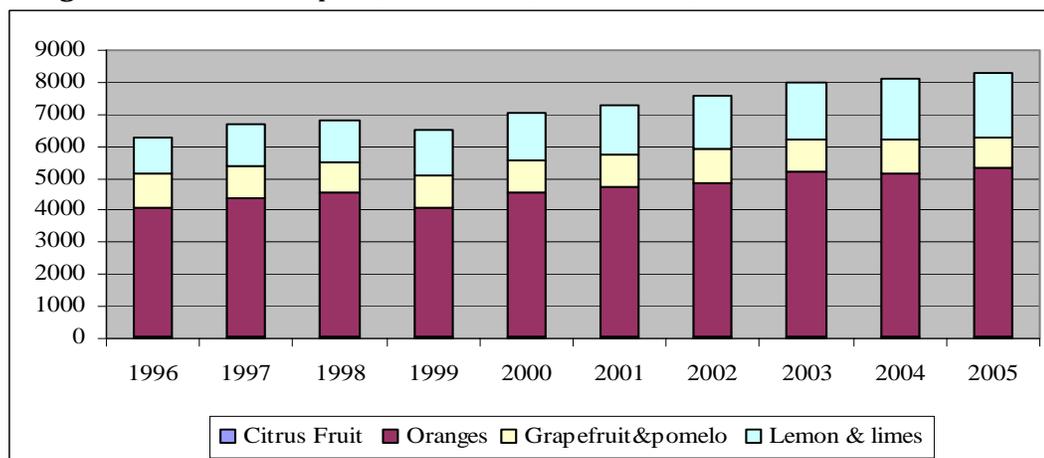
3. World trade in Citrus

3.1 World exports

World exports of citrus increased during 1996-2005 from about 6 to 8 million tons (10 % of world production). Also, the value of exports increased from \$3.1 billion to \$4.2 billion during the same period.

Oranges held the greatest share of citrus exports and they accounting for 63 % of total citrus exports in 2005 (Figure 4), followed by Lemons and Limes (24.4%), Grapefruit and Pomelo (11.7%) and other citrus products (0.6 %).

Figure4- Citrus world exports, 1996-2005 (thousand tons)



Source: FAOSTAT, 9 September 2007

As figure 4 illustrates world exports of oranges increased from 4 to 5.2 million tons in quantity and from about \$1.9 billion to \$2.5 billion in value during 1996 -2005. Also, Lemons and Limes exports increased during the same period while exports of Grapefruit and Pomelo remained almost constant.

3.2 Main exporting countries

Spain is the main exporter of oranges in the world, followed by South Africa and United States. The exports of these three countries accounted in 2005 for about half of total orange world exports (Table 3).

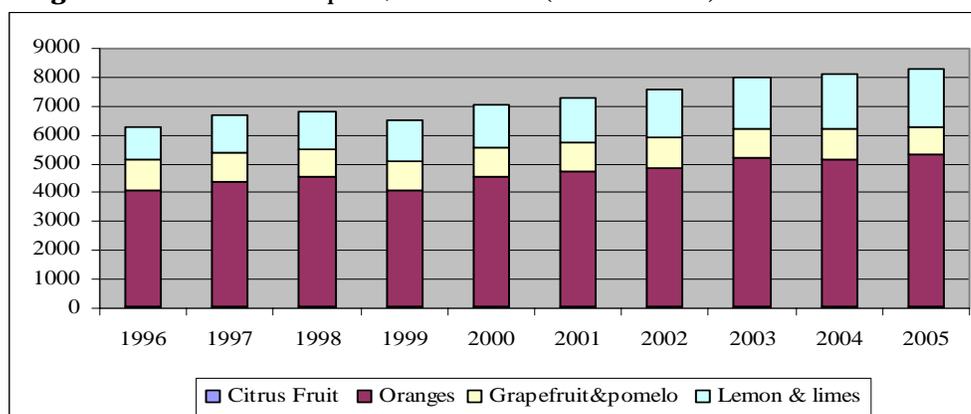
Table 3 - Main citrus exporting countries in 2005 (% of world exports)

Orange (%)	Spain 22 – South Africa 16 – United States 11 – Egypt 9 – Turkey 4 – Greece 4 – Morocco 4 – Argentina 3 – Netherlands 3- Australia 2- rest of the world 20
Lemons & Limes (%)	Argentina 17.5 – Mexico 17 – Spain 17 – Turkey 17 – South Africa 5.6 – United States 5 – Netherlands 4.4 – Brazil 2 – Italy 2 – rest of the world 12.5
Other Citruses (%)	China 20 – Benin 10 – Netherlands 10 – India 8 – Israel 7 – Turkey 5 – Spain 4 – South Africa 4 – Egypt 4 – rest of the world 28
Grapefruit And Pomelo (%)	South Africa 23 – United States 21 – Israel 9 – Netherlands 8 – Turkey 8 – Belgium 4 – Spain 3 – Cyprus 3 – Netherlands 2- rest of the world 19

Source: FAOSTAT, 9 September 2007

3.3 World imports

Citrus world imports increased from 6.3 million tons in 1996 to 8.3 million tons in 2005. This increase was accompanied by an increase in value from \$4 to \$5.4 billion in the same period. As for citrus production and exports, orange imports constitutes the greatest share of citrus world imports (63%) and they increased from 4 million tons in 1996 to 5.2 million tons in 2005 followed by Lemons and Limes, Grapefruit and Pomelo and Other citrus products (Figure 5).

Figure 5- Citrus world imports, 1996 – 2005 (thousand tons)

Source: FAOSTAT, 9 September 2007

3.4 Main importing countries

Germany ranks first in importing Oranges followed by the Netherlands, France, Former Russia (Table4).

Table 4- Main citrus importers, 2005 (% world imports)

Orange (%)	Germany 10 – Netherlands 8 – France 7 – Russia 7 – Saudi Arabia 6- United Kingdom 6- Canada 4 – China 4 – Belgium 3 – Iran 3 – Spain 3- Italy 2 – Japan 2 – Korea 2 – Ukraine2- rest of world 31
Lemons & Limes (%)	United States 17 – Russia 9 – Germany 6.7 – France 5.5 – Netherlands 5.2- Poland 4.7 – Spain 4.4 – United Kingdom 4.4 – Italy 4.3 – Japan 3.8 – Saudi Arabia 3.8 – Greece 3.2 – Ukraine 3- Belgium 2.8 – Canada 2.8 – rest of world 19.6
Other Citruses (%)	Canada 13 – Denmark 12- Saudi Arabia 8 – China 6.7 – Finland 5 –United Kingdom 4.5 – Bangladesh 4.4 – Netherlands 3- Russia 3.6 – Poland 2.5- China 2.5- rest of world 21.4
Grapefruit And Pomelo (%)	Japan 22- Netherlands 11 – France 10 – Germany 6.4 – Belgium 6 – United Kingdom 6 – Canada 5 – Italy 3.6 – Russia 3.6 – Poland 2.5 – China 2.5 – rest of world 21.4

Source: FAOSTAT, 9 September 2007

4. World agricultural policies related to Citrus

Since the European Union is the major importer of citrus products, one of the most relevant policy measures is the Common Market Organization for Fruit and vegetables of the EU's Common Agricultural Policy (CAP).

Domestic support policies of CAP for citrus sector work through a system of export refunds, product withdrawal from the market based on specific intervention thresholds, and direct producer aid.

Before the CMO for fruit and vegetables was reformed in 1996,, a large part of the European budget for fresh fruit and vegetables was allocated to intervention measures (€300 million) and to export refunds (€200 million). The reform partially shifted the policy from market intervention measures to supporting producers through producer organizations and their recognized operational programmes. In addition, this reform introduced minimum entry prices and took into account the Uruguay Round agreement which decreased the intervention support to around €100 million and the export refunds to €80 million.

According to the United Nations Conference for Trade Agricultural Development, the EU provided \$204 million of support to Clementine producers (Aggregate Measure of Support, AMS). An additional \$71 million was directed to mandarin producers and another \$14 million was allocated to producers of the Satsuma Variety. For set aside land, orange producers received approximately \$478 million.

EU agricultural policies, also, include promotional measures seeking to enhance citrus production. Promotional measures for apples and citrus entered into force on January 1, 2001. The total cost of the promotional measures amounted to €8.32 million.

Apart from the European CAP, world agricultural policies also include Sanitary and Phytosanitary (SPS) measures which entered into force with the establishment of the World Trade Organization on 1 January 1995. As a consequence of the existence of such policies, Clementine from Spain was banned from the United States in 2001 after Mediterranean fruit fly larvae were found in several shipments.

Finally, it is worth mentioning that world agricultural policies related to citrus include trade agreements amongst several countries to benefit from preferential treatment through the reduction of the level of tariffs or even the allowance of duty – free access. The most relevant example in this context is the Euro – Mediterranean association agreement thanks to which Syrian share of citrus exports to EU in the initial agreement is 45.000 thousand tons with annual increase of 3% and unlimited quantity for grapefruit. However, the implementation of such agreement for Syria will be difficult in the short run because of the high EU quality standard requirements and also because of the stiff competition in the citrus world market.

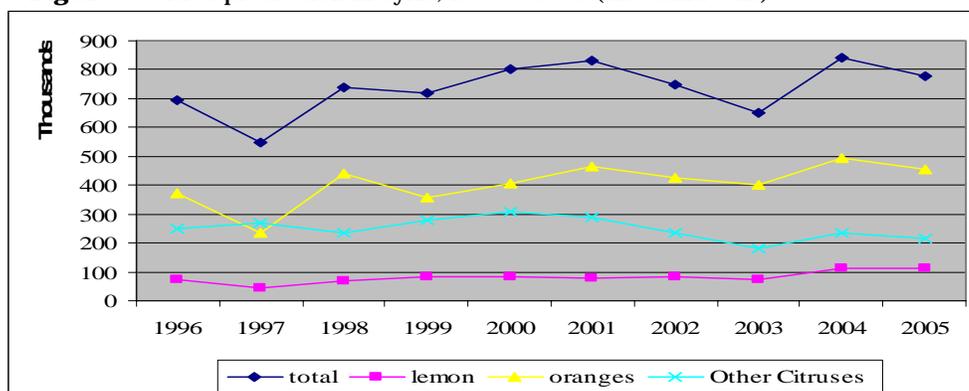
5. Citrus production in Syria

Syrian production of citrus is mainly centered in Lattakia (78.3% of total Syrian production, during 1996-2005, on average), followed by Tartous (20.2%), while in the rest of the country it does not exceed 1.5 %.

Syrian production is characterized by fluctuation and it accounted for 550 thousand tons in 1997, reaching its peak in 2004 (844 thousand tons, Figure 6), while in 2005 the production was 777 thousand tons. The reason for this decline is mainly because the climate in Syria is changing and also because old citrus trees are not always replaced.

Syrian production of orange was 372.5 thousand tons in 1996 and reached its peak in 2004 (495 thousand tons), while the production in 2005 decreased to 452.5 thousand tons.

Figure 6- Citrus production in Syria, 1996 – 2005 (thousand tons)



Source: NAPC database, 2007

Other citrus products excluding oranges accounted in recent years for about 28% of total Syrian citrus production and the produced quantity was 248 thousand tons in 1996 to decrease to 214 thousand tons in 2005. Lemon production accounted for about 14% of total citrus production and its production increased from 75 thousand tons in 1996 to reach nearly 111 thousand tons in 2005 (Figure 5).

Syrian production of oranges was about 0.8% in 2005 of total world oranges production (Syria ranked eighteenth), whilst Lemon production accounted for 0.7 % of world lemon production and Syria ranked fifth in the production of grapefruit (6.7% of grapefruit world production).

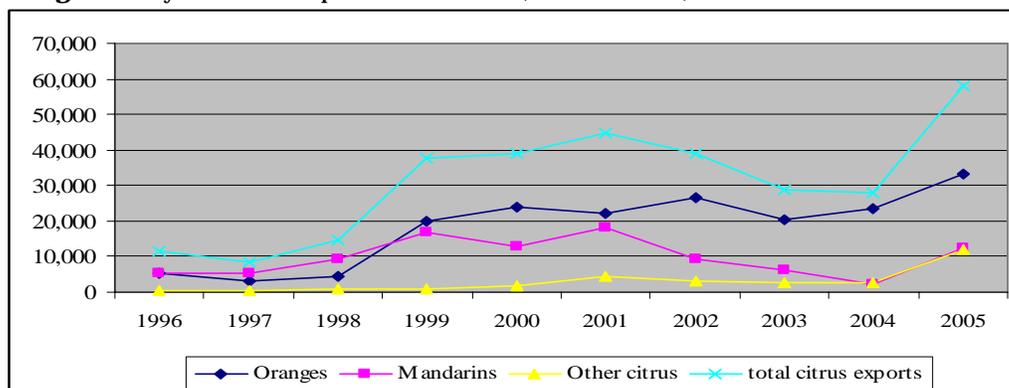
Total citrus planted area increased from 26 thousand hectares in 1996 to 31.8 thousand hectares, while productivity fluctuated between a maximum value in 1996 (104 kg/tree) and a minimum value in 2003 (73 kg/tree) while, in 2005, it was 82.3 kg/tree.

6. Syrian citrus trade

6.1 Syrian exports

Syrian citrus exports grew significantly between 1996 – 2005, passing from 11.4 thousand tons in 1996 to 58 thousand tons in 2005, but as a result of population' increase Syrian citrus consumption increased significantly (e.g. for oranges from 283 thousand tons in 1996 to 415.7 thousand tons in 2005), thus resulting in export reduction in both 2003 and 2004 (Figure 7).

Figure 7- Syrian citrus exports, 1996-2005 (thousand tons)



Source: NAPC database, 2007

Syria exports several citrus products. Oranges exported quantity increased significantly during 1996-2005: it did not exceed five thousand tons during 1996 – 1998 then it started increasing in 1999 to reach its peak in 2005 recording about 33 thousand tons, while exported quantities of Mandarin recorded 18 thousand tons in 2001 and then decreased remarkably during 2002 – 2005 (down to 12.5 thousand tons in 2005). Other citrus exports were small between 1996 and 2004, but remarkably increased in 2005 reaching 12 thousand tons (Figure 5).

It is also worth mentioning that Syrian export share in world markets for orange, lemon and grapefruit were 0.5%, 0.7 and 0.4, respectively, in 2005.

Export value in 2005 was 485 million SP, because of a sharp decrease in average unite value of orange exports (57 % of citrus exports), which decreased from US\$ 447.9 per ton in 1996 to US\$ 298.1 per ton in 2005. Main destination countries in 2005 were Iraq, replacing Jordan which shifted to the second position, followed by Saudi Arabia (Table 4).

Table 4- Main Syrian citrus export destinations, 2001 – 2005

Years	Main destinations (% Citrus exports)
2001	Saudi Arabia 54.5 – Jordan 15.4 – Kuwait 11.8 – United Arab Emirates 7.0- Qatar 5.1 – Oman 2.0 – Bahrain 1.4
2002	Saudi Arabia 44.5 – Jordan 25.6 – Kuwait 11.4 – United Arab Emirates 7.4- Qatar 5.5 – Oman 2.1 – Bahrain 1.4
2003	Jordan 34.9 - Saudi Arabia 27.8 – Kuwait 15.3 – Qatar 5.7 - United Arab Emirates 4.9 – Lebanon 2.2 – Romania 1.9 – Ukraine 1.7 – Serbia 1.6
2004	Jordan 45.2 - Saudi Arabia 21.3 – Lebanon 10.6 – Kuwait 8.0 – Iraq 6.3 - United Arab Emirates 3.7 – Qatar 2.7
2005	Iraq 39 – Jordan 28 - Saudi Arabia 13.5 – Lebanon 6.6 – Kuwait 5.1 - United Arab Emirates 2.1 – Oman 1.5 – Qatar 1.6 – Bahrain 0.5 – Algeria 0.3

Source: NAPC database,

6.2 Syrian imports

Syria is not considered an importing country of citrus products and is a self-sufficient country also producing surpluses, but Syrian adoption of free trade policies has allowed importing citrus in 2001 in little quantities up to 7 thousand tons equivalent to 1.7 million SP. This quantity increased as a result of implementing the Great Arab Free Trade Agreement to reach 23 thousand tons, equal to 115.4 million SP in value and with Lebanon was the main importing country.

7. Local policy related to production and trade

During the last decade, Syria government policies directed to the citrus sector have led to a significant production increase also characterized by a reduced use of chemical pesticides. Such policies included: introducing new high productivity varieties, selling subsidized seedlings, providing free extension services, implementing Integrated Pest Management to control diseases, providing soft loans to farmers, preventing from importing citrus seedlings since 1987 and restricting production of citrus seedlings in citrus bureau.

The exemption of commodities from agricultural production tax, the abolishment of procedures related to compensating imports value from earned foreign currencies of exports, Syrian accession to the International Transit Agreement and its effect in reducing the cost of transporting fruits exports have increased exports significantly.

8. Determinant factors of Syrian citrus trade

- Competition in the world markets is considered the most determinant obstacle for the development of Syrian citrus exports (e.g. protectionist policies in many countries like in the EU).
- Lack of specialized companies in exporting citrus and lack of international standards related to grading, sorting, and packaging, product homogenization in addition to the lack of proper requirements for storing, refrigerating, waxing and packaging.
- Lack of large transport companies in Syria in addition to the fact that many trucks are old, thus increasing unit shipments cost.
- Lack of studies aimed at finding new markets for Syrian citrus products and studies which might investigate consumer preferences. Plus, there is a lack of focus on exported citrus types such as Valencia, Grapefruit, Clementine, Ortanic, and Maniola.
- Inefficient distribution policies comes the largest share of citrus directed to export from wholesale markets and existing also additional cost related to the presence of mediators and transport.
- Lack of promotional policies for Syrian citrus products.

9. Suggestions

- Focusing on packaging, stowing, and product homogeneity in addition to storing, refrigerating, and quality to achieve economic profitability and compete in world markets taking into account the final destination of citrus products (either export, domestic marketing or juice processing).
- Conducting studies on all potential markets that may pay greater prices (mainly EU markets) and focusing on consumer preferences in such markets. In addition starting preparations to benefit from the advantages of the Syrian – European agreement and focusing on production surpluses from the most important exporting varieties that can be exported.
- Importing refrigerating trucks according to the International Transit Agreement.
- Providing support to farmers and stimulating them to expand biological pest control in addition to providing support for exporting to developed countries with trade barriers.
- Advertising and promoting through participating in Arab and world exhibitions and focusing on establishing brand names for Syrian citrus products.

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