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Tomatoes and Products

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Report Highlights:

Israel's fresh tomato exports are facing increased competition in its main markets and decreased in MY2002 by almost 40 percent. Main problems of fresh tomatoes industry are water shortage, steadily increasing price for water and shortage of manpower. Tomato products export which exceeded \$33 million in 1995 dropped by more than 60 percent in MY2001.

Includes PSD changes: Yes
Includes Trade Matrix: Yes
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Executive Summary

Total tomato production in MY2002 (July 2002-June 2003) is estimated at 363,000 mt, comprised of 353,000 mt from Israeli farms and 10,000 mt produced by Palestinian farmers. Out of the total, 171,000 mt were consumed fresh, 13,000 mt were exported and 165,000 mt were delivered to processing plants. Another 15,000 mt were removed from the market by the Vegetable Production and Marketing Board as surplus. The total deliveries to the processing plants in MY2002 were lower than the average of the past few years. The basic contract price on processing tomatoes remained the same as in previous year (\$60 per metric ton), but 10.3 percent higher exchange rate for the US Dollar helped with improving the trade terms for the industry in NS terms. Tomato products exports, which increased by more than 33 percent in MY2001, over the export in MY2000, are estimated to rise again by another 10 percent in 2002. Exports of fresh tomatoes in MY2002 shrunk by almost 30 percent, compared to the previous year and will total 13,000 tons, due to the return of Spanish tomato exporters market. Cherry tomatoes' share in fresh exports has remained high and reached almost 80 percent of the total in 2002.

Outlook for MY2003

No significant changes are anticipated in the production of fresh tomatoes. In addition to stiff restrictions on the number of foreign laborers licensed to work in Israel, the government has imposed, in the frame of the new economic policy, a tax on each foreign laborer. If the policy is not changed, production cost in tomato industry, which is a high manpower consumer will increase significantly. Contracts have been signed for 190,000 mt of processing tomatoes but late planting and low temperatures in the early spring may cause final deliveries of between 180 and 185 thousand metric tons (tmt). The price for water is to be raised by 15 percent during the coming months, in addition to the 40 percent increase during 2002. The exchange rate for the US Dollar is expected to be 10 percent lower than its rate in 2002 season. These two factors may affect the profitability for the processing tomato industry, which can influence growers' decision to continue in growing tomatoes in the future. If the industry fails to develop new markets or sophisticated products which can command a high price, it may not be able to raise the farm gate price for its raw material and the planted area can be expected to continue to shrink in the coming years.

PSD Table

Country: Israel						
Commodity : Fresh Tomatoes (ha, metric tons)						
Marketing Year		2001		2002		2003
Beginning		7/2001		7/2002		7/2003
	Old	New	Old	New	Old	New
Plant for Fresh						
Consumption	1,230	1,230	1,180	1,180	0	1,290
Plant for Processing	1,740	1,740	1,700	1,760	0	2,000
TOTAL Area Planted	2,970	2,970	2,880	2,940	0	3,290
Harvest of Fresh Market	1,220	1,220	1,170	1,150	0	1,250
Harvest for Processing	1,650	1,650	1,650	1,700	0	1,950
TOTAL Area Harvested	2,870	2,870	2,820	2,850	0	3,200
Production - fresh	192,300	193,340	187,000	187,650	0	190,000
Production- processing	146,000	145,950	165,000	165,445	0	190,000
TOTAL Production	338,000	339,290	352,000	353,095	0	380,000
Supply for the PA	10,000	10,000	15,000	12,000	0	15,000
TOTAL SUPPLY	348,000	349,290	367,000	365,095		395,000

Source: Ministry of Agriculture (MOA), Vegetable Growers Organization (VGO);
Vegetable Production and Marketing Board of Israel (VPMBI).

Table 1. End Use of Fresh Tomatoes - 1,000 mt

Marketing Year	2000	2001	2002	2003*
Total Supply	420	349	365	395
Fresh Consumption	163	172	171	180
Surplus Removal	21	12	15	12
Processing	223	146	165	190
Direct Export	12	18	13	12
Intermediate Products	1	1	1	1

Source: Based on CBS figures, Agricultural Statistics Quarterly, No. 4, 2000, 2001 and 2002.

*Forecast.

Fresh Table Tomatoes

Production

Planted Area

Total area planted to table tomatoes in 2002 was 1,180 ha, 4.1 percent less than in 2001. The main reduction in planted area was of open field varieties (10 percent) which have been shrinking steadily in recent years as a result of increasing danger for infection by the Tomato Leaf Curl Virus. Crop year 2003 will see a 5 percent increase in planted area which will total 1,240 hectares. Open field area will increase by 50 hectares (11percent) while greenhouse area will increase by as 2 percent. Open field area will increase in CY2003 in order to take advantage of the exceptional rainy winter and the low temperature during spring which was expected to reduce the contamination by the Leaf Curl Virus. Temporary increase in open field area may happen after rainy winters. Parallely field area will continue to shrink, as it does steadily in recent years. In the long term, expanded greenhouse planting can be expected to displace the open fields, providing higher yields, convenient working conditions, lower insecticide application against the white fly and a more even use of manpower for harvest throughout the year. According to the industry, greenhouse area can be expected to grow by another 25-30 ha, while open field planting will shrink accordingly.

Table 2. Table Tomatoes: Planted Area by Cultivation Method - ha

Marketing Year	2000	2001	2002	2003
Open Fields	550	500	450	500
Greenhouses	560	550	550	560
Net Covers	150	180	180	180
Total	1,260	1,230	1,180	1,240

Source: Vegetable Growers Association (VGA)

Table 3. Tomatoes: Area Planted in MY 2003 by Type and Region - ha

Region	Cherry Tomatoes	Other Varieties		
	Greenhouse	Greenhouse	Net Covers	Open Field
Galilee and Golan	0	40	0	200
Center	20	150	20	150
Besor and Arava	140	210	160	150
Total	160	400	180	500

Source: Vegetable Production and Marketing Board of Israel (VPMBI)

Annual Production

Annual fresh tomato production in MY2002 will total 187,650 mt, 3 percent lower than the

previous year. Almost 80 percent is produced in greenhouses and under netting. Only some 20 percent is grown in open fields, usually in spring and summer. The average yield for all growing methods in MY2002 is 159 mt/ha, 1.3 percent higher than in 2001. The main reason for the increased average yield is the higher share of the greenhouse area, out of the total area for table tomatoes. As result of the increased open field area in 2003 the average yield per hectare is expected to decrease slightly.

**Table 4. Table Tomatoes: Production, Domestic Sales
and Surpluses - mt**

Year (CY)	Supply	Sales*	Surplus
1992	132,440	128,331	4,109
1993	145,101	136,287	8,814
1994	142,102	132,537	9,565
1995	134,191	104,754	29,437
1996	152,692	126,004	26,688
1997	152,751	138,389	14,362
1998	151,175	137,296	13,879
1999	149,166	135,496	13,670
2000	168,685	148,539	20,146
2001	172,029	165,700	6,329
2002	187,800	175,800	12,000

Source: (VPMBI), Marketing and Industry Division.

* Sales do not include exports.

As the open field area shrinks, marginal land and the less efficient farmers are removed from production. Most open field crops are now planted on fertile land previously planted to citrus and avocado. Greenhouse yields were slightly higher than the long term average due mainly to mild temperatures during the growing, flowering and harvest periods.

CY 2002 supply grew by 9.2 percent over the previous year, while sales (excluding exports) grew by 6.1 percent. The increased difference accounts for almost 90 percent increase in surpluses removed from the market.

Production Problems in Crop Year 2002

Weather conditions affect mainly the open field area. Higher than average temperatures during the late spring and early summer of CY2002 caused fast ripening of the table tomatoes. The months of May, June and July saw expanded shipments to the market and as a result expanded surpluses. For the rest of the year regular temperatures and weather conditions provided good growing conditions and a smooth supply of fresh tomatoes to the market. The political unrest which began in late September 2000, caused a manpower shortage, mainly in the Besor area in the south, which had been totally dependent on Palestinian labor from the Gaza Strip. Producers had to rely on scarce foreign laborers, mainly from Thailand. The various grower organizations collaborated to rotate them as harvest seasons shifted between citrus, flowers, vegetables and other crops. The government is now in the process of limiting and reducing the number of foreign workers. In

addition, according to the new economic policy approved by the Government of Israel (GOI), employers of foreign workers will need to pay NS15,000 (\$3,450) annual tax. The growers are very much concerned by the new policy. At the time of writing this report, due to some cooling down of the political unrest in the area, Israel has increased the number of Palestinian workers who are allowed to work in Israel. This may be a partial solution to the problem.

Water Problems

Israel's critical water shortage may not affect the size of the fresh tomato industry in terms of water availability, but it may increase the cost of water, thus changing profitability considerations. The main growing regions benefit from a sufficient supply of special sources of water: the Besor area has plenty of recycled water at its disposal. The Arava region, in Israel's far south, the second important region of tomato production is rich in deposits of water containing varying levels of salinity which can be utilized by tomatoes. Growers mix the saline with sweet water to obtain optimal levels for tomato cultivation. Also, new varieties of tomatoes were developed, which can utilize saline water. The result is a very sweet tomato, very popular in the market. Water problems of the Gaza Strip where seawater incursions are evident in several sections of the coastal aquifer, can be expected to affect the tomato supply from the PA to the Israeli market. In the short run it will reduce Palestinian tomato sales to Israel but eventually may lead to total abandonment of tomato production by Palestinian farmers in the Gaza Strip.

Cherry Tomato Production

Due to growing demand, the production of Cherry tomatoes is increasing steadily. Deliveries to market in 2002 were 5 percent higher than in previous year and more than 30 percent over the deliveries two years ago. Export of Cherry tomatoes decreased in MY2002 by 30 percent below the MY2001 shipments.

Table 5. Cherry Tomato Production - mt

Destination	MY 2000	MY 2001	MY2002
Domestic Market	11,118	12,283	17,465
Exports	9,043	12,790	8,868
Total	20,161	25,073	26,333

Source: Central Bureau of Statistics and VPMBI Annual Report.

Producer Prices

Table 6. Fresh Table Tomatoes: Farm Gate Prices - NS/mt

Month	2000	2001	2002	2003
January	2055	1243	2130	1554
February	1658	1172	1051	1674
March	1545	1155	1414	1885
April	1374	1952	2883	
May	1237	1883	1180	
June	1267	1594	1163	
July	1475	1591	1544	
August	1652	1640	2678	
September	1730	1987	4560	
October	1962	1902	2390	
November	1797	1812	2120	
December	1470	1848	1832	

Source: CBS, Price Statistics Monthly. Contract terms: Average farm gate price for fresh table tomatoes (excluding cherry tomatoes).

Currency: New Sheqel (NS). Exchange rate Monthly average):

\$1.00 = 4.20 (01/2000), 4.12 (01/2001), 4.53(01/2002), 4.84 (01/2003).

Both farm gate and consumer prices fluctuated throughout CY2002. Prices declined in January and February due to a growing surplus caused mainly by reduced consumer demand. The last week in March and the first week in April 2002 witnessed very high consumer and grower prices due to a combination of scarce harvest labor and peak demands for Passover. During May, June and July prices declined as supplies increased, because of early ripening. Prices rose again during summer. The summer and autumn months saw a stiff incline in tomato prices, due to shortage of tomatoes. The first months of 2003 are characterized by reduced prices for tomatoes as result of reduced consumption, which is an outcome of the deep economic recession.

Production Policy

Production and marketing policy is formulated by the government and implemented by the VPMBI. It is designed to ensure a smooth flow of tomatoes to market at reasonably profitable prices to the growers. The main policy tool is a guaranteed minimum price for growers who declare in advance the area they intend to plant and harvest. They are required to insure the declared area with the Natural Damages Insurance Company. The table below indicates that the Board guarantees the price only on 70 mt per hectare for open field tomatoes.

Table 7. Guaranteed Farm Gate Prices for Fresh Greenhouse Tomatoes - NS/mt

Marketing Season	Compensation for Harvested	Trigger Price
	NS/mt	NS/mt
January 1 - April 30	650	1,810
May 1 - June 30	500	1,810
July 1 - October 31	350	1,810
Nov. 1 - Dec. 31	650	1,810

Source: VPMBI, Economic Dept.

Exchange rate in January 2003: \$1=NS4.84

**Table 8. Guaranteed Farm Gate Prices for Fresh Open Field-grown Tomatoes in CY2003
NS/mt**

Marketing Season	Guaranteed Price		Trigger Price	Maximum guaranteed yield
	Ploughed	Harvested		
	NS/mt	NS/mt	NS/mt	Mt/ha
January 1 to May 31	100	160	1,210	70
June 1 to Sept. 30	100	120	1,210	70
October 1 to Dec. 31	100	160	1,210	70

Source: VPMBI, Economic Dept.

Exchange rate in January 2003: \$1-NS4.84

Note: The sum paid to the farmers differs, depending on whether the farmer ploughs the crop before the harvest or payment is made on a crop already picked.

* - The "guaranteed yield" is the maximum yield in mt/ha for which the government offers a guaranteed price.

Consumption

Tomatoes are an important component in the Israeli cuisine. Stable supply of tomatoes to the market is one of the important obligations of the Vegetable Production and Marketing Board (VPMBI). In recent years, annual consumption of fresh tomatoes has been relatively constant, totaling some 14,000 mt per month.

Domestic Demand

In 2002, tomatoes constituted 13.8 percent of total direct consumption of fresh vegetables in the

domestic market. This is a 7 percent decline from its share in previous year. Cucumbers, carrots, and cabbage have increased their market share at the expense of the tomato's market share. According to the VPMBI, per capita consumption declined steadily between 1996 and 1999. The introduction of Cherry and Cluster tomatoes has helped stabilize the consumption of tomatoes in recent years.

Table 9. Per Capita Annual Consumption of Fresh Tomatoes - kg

1995	24.2
1996	26.8
1997	26.2
1998	25.3
1999	22.1
2000	23.6
2001	24.5
2002	24.7

Source: VPMB

Consumer Prices**Table 10. Wholesale Prices of Table Tomatoes - NS/kg - Monthly Average**

Month	Regular Tomatoes	Cluster Tomatoes	Cherry Tomatoes	Cherry Clusters
December 2002	2.24	2.36	3.36	4.23
January 2003	1.58	1.79	2.85	4.18
February 2003	2.30	2.38	3.38	4.82
March 2003	2.50	2.80	4.50	5.90
April 2003	3.59	1.89	2.93	4.03

Source: VPMBI, Marketing Division

Exchange rate: NS 4.53(01/2002), NS 4.84 (01/2003).

Table 11. Wholesale - Retail Markup on Fresh Tomatoes - NS/kg

Calendar Year	Consumer Price	Wholesale Price	Difference - percent
1997	3.28	1.68	95
1998	3.86	2.44	58
1999	3.40	1.84	85
2000	3.53	1.71	106
2001	3.96	2.06	92
2002	4.10	2.19	87

Source: VPMBI, Marketing Division, Annual average prices of tomatoes.

Marketing

Retail chains account for an estimated fifty percent of total retail tomato sales. The second most popular venue is the open markets. In order to increase per capita consumption of tomatoes, the VPMBI, in cooperation with the Vegetable Growers Organization (VGO) and the extension service of the Ministry of Agriculture (MOA), are encouraging the introduction of new products such as varieties of cherry tomatoes and tomato clusters. They have also prepared an official quality standard for tomatoes and five other fresh vegetables in which cultivation methods, pesticide application and residues, packaging, storage conditions, delivery to market and the legal enforcement system are all defined. The Board is also financing a sales promotion campaign every few months in order to stimulate vegetable consumption. It emphasizes the health advantages of consuming fresh vegetables.

Trade

General Trends

Exports of fresh tomatoes in MY2001 were 86 percent higher than the multi annual average. It exceeded 20,000 mt of which almost two thirds were cherry tomatoes. The expanded export was a result of low yields in Spain, the most important Israel's main competitor in Europe and in the American market. MY2002 saw a decline in exports of about 40 percent to more than 12,370 mt, of which almost 80 percent were cherry tomatoes. The decline is a result of the Spanish expanded harvest. In recent years Israeli exporters have been meeting increasing competition from cherry tomatoes from Africa - mainly Senegal. Shippers expect this competition to capture a growing share of the market and, unless the Israeli tomatoes find new outlets, annual exports can be expected to drop to their previous levels of under 10,000 mt. Israel's main export markets in recent years have been Britain and Holland, followed by Germany, the U.S. and France.

Table 12. Trade Matrix - Fresh Tomato Exports

Year CY	Value \$1,000				Quantity (mt)			
	1999	2000	2001	2002	1999	2000	2001	2002
U.S.	2,679	2,028	NA	3,802	1,234	1,445	NA	2,135
EU	17,182	21,488	NA	16,960	8,491	10,840	NA	9,879
Others	2,848	1,873	NA	312	303	1,112	NA	360
Total	22,709	25,389	33,210	21,074	10,028	13,397	20,512	12,374
Of which:	19,444	18,413	25,580	17,570	7,815	9,043	12,790	9,760
Cherry								

Source: CBS, Foreign Trade Annuals. Quantity for 2002 is based on information received from VPMBI, VGO and Agrexco.

*Excluding trade with Gaza Strip and West Bank.

Note: CBS claims higher exports than shown by VPMBI, Agrexco and MOA figures. Apparently the CBS figures include exports from the Palestinian Authority which mainly are shipped through Israeli ports.

Import Policy

According to the Paris Accords between Israel and the Palestinian Authority (PA), the two entities constitute a single customs union. Beginning in 1998, Israel permitted unlimited shipments of agricultural products from the PA into its markets. At their high, 29,000 mt of Palestinian tomatoes from the Gaza Strip reached Israeli consumers. Lately quantities have dropped significantly due to the political situation in the region. Imports from other countries are not limited but pay a duty which makes them uncompetitive in the market place.

Table 13. Tarriffs on Fresh Tomato Imports in 2003

Import Period	HS Code	MFN Tariff	Not to Exceed	Discount on U.S. fruit
June- October	0702.0010	NS0.68/kg	208.4%	25%
November-May	0702.0090	NS0.92/kg	208.4%	25%

Source: Ministry of Finance, Israel Customs Tariff.

Note: Under the U.S-Israel 1996 Agreement on Trade in Agricultural Products, U.S. tomatoes enjoyed a duty free tariff rate quota (TRQ) of 147 mt in 2002. Despite the duty free quota no tomatoes were imported from the United States. In practice it is unlikely that U.S. growers can compete with lower cost producers in neighboring countries, even on the duty-free quota.

Implications for U.S. Trade

Israel and the Palestinian Authority are totally self sufficient in tomatoes. As a matter of fact, there is sufficient greenhouse area in Gaza to supply all of the PA and Israel with fresh tomatoes all year long. In the event of an acute shortage, which becomes less likely as the greenhouse area grows, limited imports of fresh, duty-free vegetables may be permitted. It is unlikely that the United States producers of fresh tomatoes will be able to compete with the low cost exporters of Spain, Turkey, Greece and the Canary islands, whose shipping lines are much shorter than from the United States. Israeli producers of table tomatoes consider Europe to be the natural market for their products, mainly now when the exchange rate of the Euro is higher than that of the US Dollar. Expanded shipments to the United States may occur only when growing competition in Europe changes its status as Israel's natural market and in the event of special opportunities, when other exporters to the United States fail to fill the demand in the market, as was the case with Spain in MY2001. In any case, potential shipments from Israel or the PA are insignificant relative to the size of the US market.

Processing Tomatoes

Production

Production in crop year 2002 was 13 percent higher than in previous year but still, almost 30 percent lower than the 1998 - 2002 annual average (230,000 mt). The total area planted to processing tomatoes is dictated by the quantities the processors are willing to accept. In the pre-season negotiations between the growers' representatives and the processors, the factories signed contracts for delivery of 178 tmt in crop year 2002. Ultimately, only 165,445 mt entered the processing plants. The reasons for the lower than expected yields were as following:

1. The crop suffered from the beginning from unfavorable conditions due to low precipitation in the winter, low soil moisture at the beginning stage and decreased water quota during the growing period.
2. Planted area in the Jezreel valley was adversely affected by orobanche and lost almost 50 percent of the anticipated yield.
3. A heat wave in the beginning of June 2002 caused 100 percent damage in some planted areas, mainly in the Beit Shean Valley. Another heat wave in the middle of the harvest season caused dropping of a significant amount of the ripened tomatoes.
4. In August 2002, prices for tomatoes in the market were high and as a result 2,500 mt of processing tomatoes found their way to the open markets instead of delivered to the processing plants. The first three parameters had also affected the average Brix level of the 2002 crop.

Planted Area

In 2002, 1,760 ha were planted, compared to 1,740 ha in crop year 2001. In 2003, planted area will expand by 13.6 percent and will total 2,000 ha. The Golan Heights, previously an important growing area, mainly for the late ripening varieties, has almost abandoned tomato production due to the water shortage. Farms there have shifted almost all of their reduced irrigation quotas to their fruit orchards.

Economies of size are a key factor in the production of tomatoes for the processing industry. They have caused most small holders to abandon the industry to large cooperative farms (kibbutzim) or private companies. Between 85 and 90 percent of all processing tomatoes are produced on large holdings of 50 to 150 ha.

Production Trends

The planted area in Israel is mainly determined by the price offered the growers by the processors. In recent years this has been deteriorating steadily in real terms, partly due to the pressure of world market prices on the processors. The total area in the future will also be affected by the significant increase in the price of water. The combination of the two may turn processing tomatoes into an unprofitable crop for all but the most efficient growers. According to the trade, it is unlikely that production in Israel will return to the 300 tmt levels of recent years. The planted area may remain at its current level or may grow slightly if the processors succeed in developing new, sophisticated products which can command higher prices in the market and enable the manufacturers to offer the growers better prices.

Production Techniques

Ninety percent of the area under processing tomatoes is transplanted from nurseries, of which 90 percent is mechanically planted and ten percent is planted by hand. Combines harvest 95 percent of the crop. Hand picking is used only on small marginal fields. Most of the harvest is conducted by a few large contractors who own a complete line of machinery and usually are also growers.

Varieties

The Brigade variety which accounted for, almost 60 percent of the planted area just 5 years ago, is now planted only on between 10 to 15 percent of the area. The variety was found vulnerable in hot climatic conditions. The share of the LRT varieties, which are rich with Licopen is growing at the expense of the Brigade.

**Table 14. Varieties: Actual Share of Total Area In 1999-2002
and 2003 Recommendations - %**

Variety	1999	2000	2001	2002	2003
Total Area - ha	3100	2200	1740	1760	2000
Brigade	24.9	19.6	15.0	12.5	10.0
H8892	6.0	5.4	3.9	0.9	1.0
XPH5811	16.2	14.3	16.0	19.7	30.0
EPTX127	3.5	5.7	7.4	9.0	-
BOS3155	6.9	7.7	7.7	4.7	5.0
951	6.3	6.2	9.0	12.1	15.0
LRT89	6.5	16.5	13.9	9.4	13.5
Giant	8.9	5.0	5.0	5.0	7.0
Others - (experimental)	20.8	19.6	22.1	26.7	19.0
Total	100.0	100.0	100.0	100.0	100.0

Source: MOA, Extension services.

The Water Problem

Processing tomatoes are still the most profitable of all annual summer crops in Israel. However, the 39 percent hike in water charges during CY2002 together with the 15 percent increase scheduled, according to the new economic policy accepted by the government, to be implemented in the course of 2003, combined with a relatively low product price being offered by the processors, may cause many farmers to abandon the industry.

Grower Prices

The basic price to growers has not been changed from that in MY2001 and was set at \$60/mt for tomatoes at Brix of between 4.90 to 5.00. Premiums for higher Brix values and penalties for below average levels were handled differently by different plants. Some paid or penalized

\$1.25/mt for each Brix unit respectively above or below the basic level. Others paid or penalized \$2.50/mt per two Brix levels above or below the basic contract Brix level. Average price to growers for the season worked out to be \$60.0 per ton, just as the same as in previous season.

Table 15. Average Price for Industrial Tomatoes,

1996-2002 - \$/mt

Crop Year	Base Price	Average Brix	Average Paid
2002	60.0	4.95	60.0
2001	60.0	4.96	60.0
2000	62.5	5.09	65.6
1999	64.5	4.95	65.3
1998	64.5	5.08	70.7
1997	64.5	4.96	68.7
1996	64.5	4.97	68.9

Source: VPMBI Statistical Annual, MY2002

Deliveries to Processors

Contracts for production of 178 tmt were signed at the beginning of 2002. Actual deliveries were 7 percent lower, totaling 165.5 tmt. Because of high level of damaged fruit, only 157,600 mt were actually processed. Deliveries to the processing plants were as shown in the table below.

Table 16. MY 2001 and 2002 Deliveries to Processors - mt

Month	2001	2002
June	32,991	23,835
July	53,899	73,979
August	54,753	64,728
September	4,130	2,905
Total	145,773	165,447

Source: VPMBI. Vegetable Processing Division.

Since the total production is in a decline in the last two years the processors prefer to shorten the processing period. Therefore, May deliveries - mainly from the eastern valleys, which were common in previous years, disappeared in last two years at the processors' behest. In MY 2002, almost 84 percent of the crop was delivered during the months of July and August, compared to 75 percent in MY2001. In earlier years, these two months accounted for only 60-65 percent of the total.

The Processing Plants

Five processing plants are active, out of 13 which competed for raw material ten years ago. Even these five are operating at half capacity. That is why the plants contracted to shorten the delivery season to the three months of June, July and August. In the past, when the processors had attempted to extend the growing and delivery season to May at the early end and September at the late end, regions with slightly more extreme climates grew processing tomatoes. At present, the Golan Heights which specialized in late ripening varieties, have almost completely abandoned this crop. All the processing plants are in the center and the north of the country.

Table 17. Deliveries to Processors in MY2002 and Planned for MY2003 - mt

Processing Plant	Delivered in 2002	Planned for 2003
Pri Nir	43,372	55,000
Cham	39,396	43,000
Miloz	26,798	35,000
Gan Shmuel*	43,023	45,000
Zan Lakol	12,957	12,000
Total	165,446	190,000

Source: The processing plants and the Industrial Crop Division of VPMBI.

* Including "Licored" - the Licopen production plant.

Quality

Brix level in MY2002 was similar to that in MY2001. Both years came after a few years in which Brix level had been steadily on the rise. In MY 2002 average Brix level reached 4.95 compared to 4.96 in MY2001 and 5.09 in the MY2000. The factors which affected the quality were discussed above ("Production" section).

Main Products

The main products of the processing plants are: paste, puree, juice, peeled tomatoes (whole and diced), ketchup, pizza sauces, and lycopene, an organically based natural edible red colorants.

Forecast for 2003

For crop year 2003, the processors increased their orders from the growers due to shortage of tomato products in the international market and expectations for continued world shortage. The price remains as it was for MY2002. Production contracts with the growers totaled 200,000 mt at a base price of \$60.00/mt, but due to preseasonal climatic conditions and unfavorable conditions

at the early stage of the growing period, forecast is for only 190,000 mt.

Consumption

Domestic consumption of tomato products accounts for a steadily increasing share of total production. For years, it was considered to constitute about 35 percent of production. In MY 2002, with significantly lower exports and smaller production runs, local consumption represents as much as fifty percent or more of total supply of tomato products. Processors have begun to pay increasing attention to the needs of the domestic market. Most consumption is of paste and pizza sauces. American fast food chains have brought American eating habits to the population and as a result the demand for both of these has increased. In addition to domestic production, some of the local demand is satisfied by imports, especially of ketchup.

Trade

Exports have declined steadily in recent years from a level of \$33 million in CY1995 to \$13.9 million in 1999 and only \$8 million in 2000. MY2001 saw a 63 percent recovery and totaled \$11.8 million. Forecast for MY2002 is for \$12 to 12.5 million. The steep decline in former years is a result of surpluses in the world market and the failure of Israeli producers to compete with low-cost producers such as China.

Table 18. Tomato Products: Total Exports - mt

Year	Paste	Peeled	Sauce	Juice	Total
1995	18,761	20,952	11,744	2,184	53,641
1996	14,477	10,256	8,490	2,007	35,230
1997	11,865	11,583	2,216	1,773	29,025
1998	11,269	15,635	3,231	858	31,353
1999	9,599	8,543	2,216	728	21,086
2000	4,670	3,310	1,060	667	9,707
2001	4,105	7,343	787	753	12,988
2002	5,460	7,391	670	799	14,320

Source: Citrus and Tomato Products Board. Excluding data of "Licored" Products.

Table 19. Tomato Products: Total Exports - \$ '000

Year	Paste	Peeled	Sauce	Juice	Total
1995	11,876	13,652	6,659	1,407	33,594
1996	12,382	6,191	4,940	1,270	24,783

1997	9,697	7,010	2,254	1,203	20,164
1998	9,624	10,111	2,137	638	22,510
1999	7,816	4,992	1,477	470	14,755
2000	3,854	2,039	618	732	7,243
2001	4,147	6,206	759	721	11,833
2002*	3,773	4,264	447	456	8,940

Source: Citrus and Tomato Products Board. Excluding data of "Licored" Products.

* 9 months.

Table 20. Tomato Products: Exports to U.S.A. - mt

CY	Paste	Peeled	Sauces*	Total
1995	4,373	19,223	1,620	25,216
1996	4,809	5,720	482	11,011
1997	2,131	7,567	33	9,731
1998	3,000	9,410	140	12,550
1999	12,388	3,400	230	16,018
2000	2,392	395	842	3,629
2001	775	5,018	200	5,993
2002**	1,341	2,996	956	5,293

Source: Citrus and Tomato Products Board. Excluding data of "Licored" Products.

* - Includes tomato juice.

** 9 months

Table 21: Tomato Products: Exports to U.S.A. - \$ '000

CY	Paste	Peeled	Sauces*	Total
1996	3,222	3,203	270	6,695
1997	1,890	4,108	180	6,178
1998	3,848	6,459	432	10,739
1999	6,318	2,210	51	8,579
2000	2,292	237	444	2,973
2001	496	3,600	1,472	5,568
2002**	785	2,556	1,119	4,461

Source: Citrus and Tomato Products Board. Excluding data of "Licored" Products.

* - Includes tomato juice.

** 9 months.

Table 22. Trade Matrix. Imports of Tomato Products - \$ '000

Country	1998	1999	2000	2001	2002
U.S.	577	683	851	903	6
UK	12	0	8	0	0
Italy	0	0	44	31	28
Turkey	310	215	198	247	134
All others	18	44	67	75	14
Total	917	942	1,168	1,256	182

Source: CBS, Foreign Trade Statistics and the Citrus and Tomato Products Board

Table 23. Trade Matrix. Exports of Tomato Products - \$ '000

Calendar Year	1998	1999	2000	2001	2002**
U.S.	10,703	8,579	2,973	5,568	4,461
UK	1,789	1,039	787	1,159	644
Other EU	3,170	1,771	1,906	1,263	1,637
Total EU	4,959	2,810	2,693	2,422	2,281
East Europe	3,731	766	553	1,686	573
Far East Asia	1,593	672	794	729	316
All Others	1,524	1,928	230	1,428	1,309
Grand Total	22,510	14,755	7,243	11,833	8,940

Source: Foreign Trade Statistics Annuals and the Citrus and Tomato Products Board.

Table 24. Duties on Imported Tomato Products in CY2002, Percent and NS/kg

Product	Duty-free Quota	HS Code	MFN Rate	Duty on US Goods
Peeled	189 mt	2002.1090	12%+NS 0.49/kg BNM than 50%	10.8% + NS0.44 BNM than 45%
Powder		2002.9020	8%	Exempt
Paste: in containers > 100 kg	443 mt	2002.9010	12% + NS1.63/kg BNM than 50%	10.8%+NS1.47/kg BNM than 45%
Other paste	443 mt (included)	2002.9011	12% + NS1.63/kg BNM 50%	10.8% +NS1.47/kg BNM than 45%
Juice: in containers >100 kg	201 mt	2009.5091	12%+NS0.22/kg BNM than 50%	10.8%+NS0.20/kg BNM than 45%
Other juice	201 mt (included)	2009.5099	12%+No0.22/kg BNM than 50%	10.8%+NS0.20/kg BNM than 45%
Sauce		2103.2000	12%	Exempt

Source: Ministry of Finance, Customs and VAT Authority.

* - BNM - But not more

PSD Table						
Country: Israel						
Commodity : Tomato Paste, 28-30% TSS Basis						
		2001		2002		2003
	Old	New	Old	New	Old	New
Marketing Year Begin		07/2001		07/2002		07/2003
Delivery to Processors	146,000	145,950	165,000	165,445	0	190,000
Beginning Stocks	5,787	7,780	3,847	4,185	0	2,200
Production	16,560	16,055	18,975	17,370	0	19,950
Imports	0	0	500	500	0	500
TOTAL SUPPLY	22,347	23,835	23,322	22,055	0	22,650
Exports	6,000	4,780	7,000	6,360	0	7,500
Domestic Consumption	12,500	14,870	12,500	13,495	0	14,500
Ending Stocks	3,847	4,185	3,822	2,200	0	650
TOTAL DISTRIBUTION	22,347	23,835	23,322	22,055	0	22,650

PSD Table						
Country: Israel						
Commodity : Tomato sauce						
		2001		2002		2003
	Old	New	Old	New	Old	New
Marketing Year Begin		07/2001		07/2002		07/2003
Delivery to Processors	145,770	145,950	165,000	165,445	0	190,000
Beginning Stocks	1,378	1,378	548	1,274	0	238
Production	6,570	6,576	7,095	4,964	0	6,500
Imports	2,500	1,860	3,500	1,500	0	1,500
TOTAL SUPPLY	10,448	9,814	11,143	7,738	0	8,238
Exports	3,000	1,540	4,000	1,000	0	1,200
Domestic Consumption	6,900	7,000	7,000	6,500	0	6,900
Ending Stocks	548	1,274	143	238	0	138
TOTAL DISTRIBUTION	10,448	9,814	11,143	7,738	0	8,238

PSD Table						
Country: Israel						
Commodity : Canned Tomatoes						
		2001		2002		2003
	Old	New	Old	New	Old	New
Marketing Year Begin		7/2001		7/2002		7/2003
Delivery to Processors	146,000	145,950	165,000	165,445	0	190,000
Beginning Stocks	6,011	6,010	2,011	2,510	0	1,813
Production	11,100	12,270	13,365	16,060	0	18,500
Imports	0	0	250	0	0	0
TOTAL SUPPLY	17,111	18,280	15,626	18,570	0	20,313
Exports	7,000	7,370	7,500	8,105	0	8,700
Domestic Consumption	8,100	8,400	7,500	8,652	0	9,000
Ending Stocks	2,011	2,510	626	1,813	0	2,613
TOTAL DISTRIBUTION	17,111	18,280	15,626	18,570	0	20,313