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Israel

Avocado

Annual

2002

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Report Highlights:
The MY2001 avocado harvest totaled 83 thousand tons of which 46 thousand tons were exported. Shipments to local market were 46 percent higher than in previous year. Total area planted to avocado is 5,000 hectares and is expected to remain at that level due to shortage of water and increasing competition in Europe.

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

The MY 2001 (October 01- September 02) avocado harvest totaled 83 thousand metric tons (tmt), nearly 31 percent higher than in MY2000. Exports, almost all to the EU, were 19.4 percent higher than in MY2000 and totaled 46 tmt.

The average annual wholesale price for avocado in local currencies was 23 percent lower than the previous year. This was mainly due to competition between the three main Israeli exporters and by the new sales advertising regulation in France- the main consumer of Israeli avocado. Total income from exports (F.O.B.) in dollars and at the farm gate was only 3.8 percent higher than in MY2000, despite the much higher quantities. Shipments to the local market totaled 35 tmt, more than 46 percent higher than in previous year. The farm gate price for fresh avocado in the local market fell by almost 15 percent, compared to MY2000. Profitability in MY2001 was 8.8 percent higher than in 2000 but lower than the profits of four years earlier. Production in MY2002 is forecast at 55 tmt, 34 percent lower than in 2001. It is mainly due to unfavorable conditions at blossom time and a heat wave in mid June.

Total area planted to avocado fluctuates around 5,000 hectares. This planted area is considered to be sufficient to supply both domestic and export demand. In the past most of the avocado plantations were concentrated in the Western Galilee and in central Israel. There is a trend in recent years towards the southern part of the country. There is plenty of recycled water there as well as favorable growing conditions.

PSD Table						
Country	Israel					
Commodity	Fresh Avocado					
	Revised	2000	Preliminary	2001	Forecast	2002
	Old	New	Old	New	Old	New
Market Year Begin		09/2000		09/2001		09/2002
Area Planted	5,100	5,100	4,900	5,000	0	5,100
Area Harvested	4,600	4,600	4,500	4,610	0	4,650
Bearing Trees	0	0	0	0	0	0
Non-Bearing Trees	0	0	0	0	0	0
Total No. of Trees	0	0	0	0	0	0
Production	63,000	63,490	70,000	83,000	0	55,000
Imports	0	0	0	0	0	0
Total Supply	63,000	63,490	70,000	83,000	0	55,000
Exports	38,000	38,545	44,000	46,000	0	32,000
Fresh Consumption	23,000	23,900	24,000	35,000	0	20,500
Processed, destroyed	2,000	1,045	2,000	2,000	0	2,500
Total Distribution	63,000	63,490	70,000	83,000	0	55,000

Source: CBS, Agricultural Statistics Quarterly, No. 4/2001; 2/2002. Foreign Trade Statistics Annuals. Annual Report for MY2001 by the Fruit Production and Marketing Board of Israel (FPMBI) . Avocado Growers Union of Israel (AGUI), Agrexco.

Production

Planted Area

Although the area planted to avocado has remained steady in recent years at a total of approximately 5,000 ha, it is 49 percent down from it's peak in 1981 (9,765 ha). The main causes for the drop in planted area are lack of profitability, mainly as result of low yields in many orchards. In MY2001, total planted area reached 5,000 hectares of which 4,610 hectares were fruit bearing. Plans from three or four years ago to expand the area planted to avocado to it's size in the 80's
(almost 10,000 ha) were reconsidered and cancelled. It is now assumed that in the medium term planted area will remain stable. Expanded use of recycled water in avocado groves will require replanting of old groves which were planted on the Mexican rootstocks with trees grafted on Indian rootstocks that were found to be efficient users of recycled water.

Table 1: Avocado Planted Area
'000 hectares

Crop Year	Ha
1981 keep it's current	9,765
1990	9,118
1992	8,337
1994	7,852
1996	7,349
1998	6,660
1999	5,450
2000	5,100
2001	5,000
2002	5,100

Source: CBS, Agricultural Statistics Quarterly, No. 4/2001. CY2002 is based on industry information.
Note: There is a difference in planted area as published by CBS and that accepted as current by the avocado section of the Fruit Production and Marketing Board of Israel (FPMBI). Figures given by the Board are based on an annual census and therefore should be considered more reliable. Fruit Board figures were used in the PS&D table and Table 2, below.

Table 2. Planted Area by Variety – MY2001
Hectares and %

Variety	Planted Area	% of Total
Ettinger	1,150	23
Hass	1,700	34
Fuerte	850	17
Pinkerton	390	8
Ardith	390	8
Nabal	360	7
Reed	110	2
Wurtz	50	1
Total	5,000	100

Source: Fruit Board, 2001 Annual Report.

Despite the strong demand of the marketing people for the "Hass" variety, sixty six percent of the total area is planted to "green" varieties. The reason for the preference of "green" varieties by the Israeli growers lies first of all in their higher yields: due to higher production costs (mainly manpower) Israeli growers need higher yields than their main competitors from Spain and Mexico in order to gain any profits. The Hass, yields small size fruits under the Israeli climatic conditions and they get low prices in the export markets.

Table 3: Planted Area by Region – MY 2001
Hectares and Percent

Region	Planted Area	% of Total
Galilee and Golan	700	14
Western Galilee	1,200	24
Inner Valleys	400	8
Central Israel	1,450	29
Coastal Plain and Hills	500	10
South	750	15
Total	5,000	100

Source: Based on information received from the Sub Tropical Division of the Ministry of Agriculture Extension Services.

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As result of the deterioration of water quality in the traditional avocado growing regions, formerly the Western Galilee and Central Israel, the industry has moved to the south where recycled water is available in large quantities and growing conditions were found favorable. Avocado groves in the south which constituted 5 percent of the total in 1996, increased their share to 15 percent in 2001. This trend is expected to continue.

Average Yield

Despite the high investment in R&D, yield per hectare did not exceed 10 metric tons for many years. Major reasons for low yields are deterioration of water quality and suboptimal climatic and soil conditions in groves in marginal areas. In recent years yields are trending upward: average yield is now close to 15 mt per hectare. MY2001 ended with an exceptional average yield which reached 18 mt/ hectare, while records of 23 to 25 mt were also observed, mainly in the south. The high yield was a result of the drought during the winter of 2001/2. Drought conditions during the winter are usually followed by high avocado yields. It is an outcome of two factors:

1) After a drought the roots of the Avocado tree enter the next blossoming season fully awaken,
2) Lack of spring wild flowers as a result of the low precipitation, diverts the pollinating bees to the avocado trees, which flower at that time of the year.

Extension specialists expect that in time, with the abandonment of marginal groves and the maturing of the new orchards on salt-resistant Indian rootstocks, better trained growers, improved management and expanded planted area in favorable regions, the national average yield can rise to 18 mt/ha or even higher. Groves yielding beneath that level will not survive economically.

Total Production

The drought conditions during the winter of 2001/02 and favorable climatic conditions during the flowering and growing periods produced an exceptionally good crop which totaled 83 tmt, of which 46 tmt were exported, 35 tmt locally consumed and 2 tmt were processed. Yield forecasts for
MY 2002 show an expected 34 percent fall compared, in compare to the total production last year. This is a result of the rainy winter of 2002, the late rains that caused late blossoming of wild flowers which competed with the avocado for pollination by the bees and the heat wave in late June 2002. The heat wave caused fruit drop in the late varieties (Ardit, Reed, Nabal) and harmed the quality of a significant share of all varieties. Total yield is forecast at 55 tmt, of which 32 tmt are for export, almost 21 tmt will be consumed in the local market and 2.5 tmt will be processed or destroyed by the Natural Disasters Insurance Fund. In the long term, total production is expected to stabilize at 80 to 85 thousand metric tons.

Table 4: Avocado Production and Sales
'000 metric tons

		Of which:	
Marketing Year	Total Production	Export	Local*
1992	57	27	30
1993	42	29	13
1994	49	35	14
1995	57	49	8
1996	70	44	26
1997	64	35	26
1998	46	25	21
1999	77	46	31
2000	63	39	24
2001	83	46	37
2002 (Forecast)	55	32	23

Source: CBS, Agricultural Statistics Quarterlies.
Forecast for 2002: based on information from FPMBI.
* Including processed and destroyed avocado.

Total Production Value
Farm gate production value, of exports and domestic sales in the 2001 season totaled NS312 million (US$69 million), 15 percent higher (in NS terms) than in MY2000 (NS271 million=$65.6M). The higher income was due to of the higher exportable quantities. Both the export price and the domestic price were lower than in the previous season.

Producer's Returns
Average gross income per hectare (in NS terms) in MY2001 was 14.9 percent higher than the previous year. Average income in MY2000 totaled NS58,910/hectare; income in MY2001 reached NS67,680/hectare. This is a result of the higher yields and F.O.B. prices in local currencies which were 22 percent lower.

Production Cost
Production cost in crop year 2001 was 5.6 percent higher than the previous year. Water price was the main cause for the increased production cost. It's price expanded by 9.9 percent. The increased yields demanded increased manpower for picking.

Production Profitability
Profitability improved by 8.8 percent compared to crop year 2000.

Fruit Quality – Eco Fresh
Fruit quality in MY2001 was fairly good. Fruit quality control is enforced in the packing plants. The Fruit Production and Marketing Board of Israel (FPMBI) has introduced a new growing protocol, called "Eco Fresh". Growers who join the program will benefit from higher prices and higher income, since their fruit is declared "biological" or "organic" and of higher quality. After a few seasons of testing, the FPMBI started introducing the European "Euro Gap" protocol which dictates a defined and controlled growing method. It allows their produce to enter special retail chain stores and to obtain higher prices.

R&D
The R&D budget for CY2002 is NS1.7 million, of which 1.2M is collected from the growers and 0.5 M is received from the Head Scientist of the MOA. R&D efforts aim to increase irrigation efficiency, defining the needed quality of recycled water, cultivation methods that can contribute to the health of the trees, improving pollination, fruit quality in the grove, post harvest fruit quality, reducing the percentage fruit drop and biologic plant protection. Due to pressures from the European Union, use of pesticides is rare. The industry continues to invest a large proportion of its R&D funds on development of natural predators.

Production Policy
Government offers assistance with new investments in avocado on condition that the new plantations are based on use of recycled water. Special grants are offered growers who uproot plantations supplied from fresh water sources.

Consumption

Local consumption for fresh Avocado is highly price sensitive. It varies significantly from year to year. Prices in the local market are affected by total production and by the success of the exporters. Increased exports are at the expense of the local market. The market for organic avocado, which increased in recent years, stopped growing. The reason is now the subject of a study by the FMPBI.

Trade

See detailed description of main trends in Israel's avocado trade in Agricultural Report IS1012.

Table 5: Trade Matrix - Fresh Avocado Exports by Country
metric tons

	CY97	CY98	CY99	CY00	CY01
France	22,373	16,623	15,863	22,032	16,695
Germany	5,933	3,239	4,166	5,176	3,944
Benelux	3,395	2,881	4,833	6,708	7,907
Scandinavia	3,113	2,765	1,831	3,162	1,804
U.K.	2,438	1,499	2,866	4,697	5,470
Switzerland	828	612	513	575	553
Italy	968	810	939	1,128	1,475
Austria	482	450	543	591	678
Spain	204	61	161	117	100
Others	209	84	223	380	384
TOTAL	39,943	29,024	31,938	44,566	39,010

Source: CBS, Foreign Trade, Annuals

Export Policy

The policy is aimed at maximizing avocado exports while maintaining the highest prices possible. Since the traditional markets for Israeli avocado usually absorb everything Israel has to offer; no efforts have been made to develop new markets. France is the biggest buyer, followed by Germany and the Benelux. In the past most sales to Europe were to wholesalers and distributors. In recent years, there is a growing tendency to sell directly to retail chains.

Competitors

In recent years expanded exports of Mexican and Spanish avocado have become Israel's main concern in Europe. With the opening up of the U.S. market to Mexican exporters they shifted their shipments from Europe to the East Coast of the U.S. It is now believed that the Mexicans will continue to watch the European markets and will appear with changing quantities whenever prices justify it. Spain's proximity to the main markets in Europe gives it a considerable advantage over Israeli avocado, as is the case with citrus.

Israel as a Market for American Avocado

American exporters are unable to enter the Israeli market, due to phytosanitary restrictions. Similarly, Israeli avocado cannot enter the U.S. American avocado prices are higher than in Israel and in Israel's avocado markets.

Table 6: Trade Matrix - FOB Prices and Total Value of Avocado Exports
US$'000

	Quantity	Price	Value
Marketing Year	tons	$/ton	$'000
1993	28,650	1,255	35.960
1994	35,600	1,235	43,970
1995	49,100	959	47,086
1996	43,500	949	41,282
1997	34,500	940	32,430
1998	24,970	1,247	31,137
1999	45,900	807	37,041
2000	38,545	982	37,851
2001	46,000	854	39,280

Source: FPMBI

Table 7: Trade Matrix - Avocado Exports Value by Destination
'000 US Dollar

	CY1999	CY2000	CY2001
Destination	$'000	$'000	$'000
France	18,239	20,452	15,861
Germany	4,511	4,666	3,747
Benelux	5,646	6,967	7,512
Scandinavia	1,823	2,643	1,696
UK	3,560	4,826	5,198
Switzerland	585	551	525
Italy	1,052	1,064	1,402
Austria	644	565	648
Spain	218	139	94
Others	261	383	377
Total	36,539	42,256	37,060

Source: CBS Statistical Abstracts, Foreign Trade Statistics Annuals

Marketing

MY2001 started good but at the end of the year was disappointing.. The increased yields together with quite good F.O.B. prices at the beginning of the export season gave hope for good income. At the end F.O.B. price (IN $ terms) in MY2001 was 15 percent lower than that in previous year and the total income from export was 1.3 percent higher. The Israeli export activity during MY2001 was affected by two main factors:

1) Appearance in the market of the third export company.
2) New advertising regulations in France, which is the main importer of Israeli avocado.
3) In the past most of the export was executed by two export companies: "Agrexco", which dominated 85 percent of the export and "Mehadrin" who exported the rest. In MY2001, a third company, located at the northern part of the state named "Kedem" entered the export market. It's share out of the total export reached 15 percent while Agrexco's share reduced to 75 percent and Mehadrin exported 10 percent of the total. Agrexco for years guaranteed the growers a weekly price, according to it's anticipation for prices in the coming week. At the beginning of MY2001, in order to prevent growers

to supply "Kedem" any merchandise, Agrexco promised the growers higher price than it should. "Kedem" in order to remain in the market promised higher price than Agrexco did. The third company did the same. The growers reacted by urging picking and the expanded quantities put pressure on the exporters. The buyers in Europe who became aware to the difficulties of the Israeli exporters pressed hard on the price and reduced prices quite steeply. The growers in Israel reacted by stoppage of harvest and some shortage was felt in the markets. So started fluctuation in selling price, which did not end until the end of the season. In addition a competition between the companies started in Europe. Since the companies could not show difference in quality or in service, the competition went into the price. The final result was lower than previous year's F.O.B. price.

4) The new advertising regulations (see details in Report IS1012) caused the retail chains to work with no long term planning. The orders for avocado came in from week to week, which caused difficulties to the exporters in supplying the proper quantities. The chains were unable to advertise sales and could not gain benefits of the increased quantities that were offered to them. This also had an affect on the final F.O.B. price.

MY 2002 started with good prices but the quantities will be 30 percent lower than in previous year. The European market will lack 30 tmt of avocado, compared to MY2001. The reason is lower produce in Israel and in Spain.