

USDA Foreign Agricultural Service

GAIN Report

Global Agriculture Information Network

Template Version 2.09

Required Report - public distribution

Date: 2/2/2009

GAIN Report Number: IS9001

Israel Grain and Feed Annual 2009

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Report Highlights:

Israel is almost completely dependent on imports to meet its grain and feed needs. Due to increased supplies of feed wheat from Eastern Europe and the Black Sea Basin (BSB) in 2008/09, the local feed milling industry will shift from corn and sorghum to feed wheat. It is expected that American grain imports in 2008/09 will decrease and the FSU, and Argentine market shares will take over part of the American market share. It is estimated that the domestic economic slowdown will not affect local meat and poultry consumption, and therefore, there will be almost no impact on local feed demand in 2008/09.

Includes PSD Changes: Yes Includes Trade Matrix: Yes Annual Report Tel Aviv [IS1]

Executive Summary

Despite the global and local economic slowdown, total grain import demand in MY 2008/09 and 2009/10 is forecast to remain relatively constant at just above 3 million tons, mostly corn (1.1 million tons) and wheat (1.6 million tons).

The main change in MY 2008/09 and 2009/10 is that the local feed milling industry will shift from corn and sorghum to feed wheat.

Due to continued unfavorable rainfall in the southern part of the country, where about 70 percent of the milling wheat is produced, it is estimated that domestic wheat production for MY 2009/10 will be below national average wheat production levels, and will total about 60,000-100,000 MT. A more precise estimate will be available in March-April 2009.

Since it will be necessary to rebuild stocks following the drought reduced crop in MY 2008/09 combined with the expected decrease in local wheat harvest in the current MY, and the increased supplies of wheat from Eastern Europe, wheat imports are forecast to increase to nearly 1.6 million tons in MY 2008/09.

As a result of the increase in milling wheat supplies from the Black Sea Basin (BSB) in MY 2008/09, it is expected that U.S. market share of milling wheat in Israel will decrease from 37 percent in MY 2007/08 to 25-30 percent in MY 2008/09.

Due to rising competition of feed wheat from the BSB in MY 2008/09, corn imports are forecast to decrease by 15-25 percent from the previous MY and reach only 1-1.2 million tons. In addition, it is expected that corn imports from the competitors will increase in 2008/09. Therefore, post estimates that U.S. market share of corn in Israel will decrease from 88 percent in MY 2007/08 to 55-70 percent in MY 2008/09 (about 600-750 TMT of U.S. corn).

Driven by the sharp drop in world prices for corn, combined with the recent announcement made by the Israel Water Authority that Israel is currently facing the worst water supply crisis in 80 years, domestic corn production is expected to decrease dramatically in MY 2009/10 and is forecast at 5,000-6,000 tons (75 percent down compared to the previous year). A more precise estimate will be available in July-August 2009.

Wheat

| | PS&D TABLE ISRAEL WHEAT | | | | | | | | | |
|-------------------------|-------------------------------|--------------------|------------------|----------|----------------|------------------|--------------------------------|---------|------------------|-----------|
| | | 2007 | | | 2008 | | | 2009 | | |
| | | 2007/200 |)8 | | 2008/20 | 09 | | 2009/20 | 10 | |
| | Marke | et Year Be 2007 | egin: Jul | Market | Year B 2008 | egin: Jul | Market Year Begin: Jul 2009 | | | |
| | Official | Post | New Post Data | Official | Post | New Post Data | Official | Post | New Post Data | |
| Area Harvested | 67 | 26 | 70 | 50 | 69 | 50 | | | 60 | (1000 HA) |
| Beginning Stocks | 169 | 110 | 169 | 175 | 140 | 206 | | | 156 | |
| Production | 145 | 60 | 145 | 60 | 160 | 60 | | | 80 | (1000 MT) |
| MY Imports | 1,161 | 1,530 | 1,337 | 1,900 | 1,490 | 1,520 | | | 1,480 | (1000 MT) |
| TY Imports | 1,161 | 1,530 | 1,337 | 1,900 | 1,490 | 1,520 | | | | (1000 MT) |
| TY Imports from U.S. | 0 | 0 | 319 | 0 | 0 | 230 | | | 290 | |
| TOTAL SUPPLY | 1,475 | 1,700 | 1,651 | 2,135 | 1,790 | 1,786 | | | 1,716 | (1000 MT) |
| MY Exports | 0 | 0 | 45 | 0 | 0 | 0 | | | 1 | (1000 MT) |
| TY Exports | 0 | 0 | 45 | 0 | 0 | 0 | | | | (1000 MT) |
| Feed Consumption | 350 | 710 | 480 | 1,000 | 750 | 700 | | | 660 | (1000 MT) |
| FSI Consumption | 950 | 850 | 920 | 950 | 890 | 930 | | | 910 | (1000 MT) |
| Total Consumption | 1,300 | 1,560 | 1,400 | 1,950 | 1,640 | 1,630 | | | 1,570 | (1000 MT) |
| Ending Stocks | 175 | 140 | 206 | 185 | 150 | 156 | | | 146 | (1000 MT) |
| TOTAL DISTRIBUTION | 1,475 | 1,700 | , | , | 1,790 | , | | | 1,716 | (1000 MT) |
| Yield | 2. | 2. | 2.0714 | 1. | 2. | 1.2 | | | 1.3333 | (MT/HA) |
| TS=TD | | | 0 | | | 0 | | | 0 | |

Local Wheat Production

Israel suffered unfavorable weather conditions in MY 2008/09, including drought in the Negev region, which is the largest wheat growing area in the country, a cold spell in mid-January 2008 and heat waves in April 2008, which brought about substantial crop losses. In MY 2008/09 local wheat production declined approximately 85 thousand tons or 59 percent.

MY 2008/09 was marked as a "sabbatical" year in Israel - Jews are not supposed to consume the crops produced in that year. Therefore, most wheat was sold to the Palestinians and the remainder was sold for animal feed in Israel.

Due to the fact that the wheat was not milled for human consumption in Israel in 2008, the Israeli wheat association did not check the quality parameters (protein level, moisture and gluten index).

While in any given year about 90,000 HA are planted to wheat, only about 75 percent is harvested for milling; the remainder is cut as fodder for livestock feed. Due to unfavorable rainfall in the southern part of the country, where about 70 percent of the milling wheat is produced, it is estimated that wheat production will be below national average levels and is forecast to total about 50,000-80,000 MT in MY 2009/10. A more precise estimate will be available in March 2009.

Table 1: Wheat Production, Thousand Metric Tons, Crop Year

| MY | Total Production | Percent Change Compared to Previous Year |
|-------|------------------|---|
| 1998 | 155 | |
| 1999 | 29 | -81.29 |
| 2000 | 96 | 231.03 |
| 2001 | 162 | 68.75 |
| 2002 | 179 | 10.49 |
| 2003 | 187 | 4.47 |
| 2004 | 128 | -31.55 |
| 2005 | 180 | 40.62 |
| 2006 | 132 | - 26.67 |
| 2007 | 145 | 9.80 |
| 2008 | 60 | -58.6 |
| 2009* | 50-80 | (-15)-(33) |

Source: CBI, Statistical Abstract of Israel, Different Years.

Farm Gate Price for Locally Produced Wheat

As a result of the drought conditions in MY 2008/09, the Ministry of Agriculture declared a drought year in the southern part of the country, which is the main wheat growing area. It was agreed that local wheat growers who suffered from the drought would receive compensation from the Israeli Government. However, the compensation figures were never released.

The price paid to farmers is based on the CBOT price at harvest time. Freight and handling costs are added to construct a landed equivalent. In MY 2008/09, the average base price paid to farmers was \$298/ton.

Stocks

Ending stocks in December 2008 are estimated at 165,000 tons. Stocks generally decline through the summer, and then begin rebounding again in the fall with the onset of the harvest.

Consumption

Despite the global and local economic slowdown, local consumption is forecast to remain relatively constant at 1.6-1.7 million tons in MY 2008/09. Human consumption is steady at about 900,000 tons annually, so any variation in total annual consumption is a result of changes in wheat for feed use. There are 19 flour mills, and their full capacity is 1.3-1.4 million tons. The Israeli feed milling industry shifts easily from corn, barley and sorghum to feed wheat, depending on price relationships. Due to increased supplies of feed wheat from Eastern Europe and the Black Sea Basin (BSB) in 2008/09, the local feed milling industry will shift to feed wheat.

^{*}Forecast: Based on information collected from the Field Crops Organization.

Trade

<u>MY 2008/09 Outlook</u> - As a result of the expected increase in milling wheat supplies from the BSB in 2009/10, it is expected that U.S. market share of milling wheat in Israel will decrease from 37 percent in 2007/08 to 25-30 percent in 2008/9. Post estimates the U.S. share of milling wheat is projected to remain at 20-35 percent in the forthcoming years.

It is estimated that domestic milling wheat production in MY 2008/09 will be below national average levels, therefore in order to rebuild stocks and meet consumption, milling wheat imports are forecast to increase. On the other hand, due to the sharp decline in local wheat production in 2008/09 combined with "sabbatical" year in Israel, milling wheat imports in MY 2007/08 were 29 percent above the previous MY levels and local consumption was met. It is estimated that milling wheat imports are forecast to total 850-900 tmt, 0-10 percent increase from MY 2007/08.

The local economic slowdown combined with an expected decrease of 5 percent in local milk production (Israel has surpluses in its milk powder stocks) in CY 2009 will decrease slightly the demand for feed wheat. On the other hand, the dramatic decrease in feed wheat prices will push the Israeli feed milling industry to shift from corn and sorghum to feed wheat. Imports of feed wheat are forecast to total about 550-630 tmt in 2008/09, a 15-30 percent increase from the previous year. All feed wheat is imported from the BSB.

<u>MY 2009/10 Outlook</u> - The Israeli feed milling industry shifts easily from corn, barley and sorghum to feed wheat, depending on price relationships. If supplies of feed wheat from Eastern Europe and BSB will be the same as in MY 2008/09, imports of feed wheat and milling wheat will not change significantly from MY 2008/09 levels and will total about 1.5 million tons.

<u>MY 2007/8</u> - As a result of significantly higher prices for feed wheat in the end of CY 2007 and first half of CY 2008, imports of feed wheat in MY 2007/08 decreased by nearly 18 percent compared to MY 2006/07 (from 583 tmt to 481 tmt). On the other hand, as a result of a significant decrease in wheat prices in the second half of CY 2008, imports of feed wheat between January and October 2008 (567 tmt) exceeded the imports of feed wheat during CY 2007 (474 tmt).

Imports of milling wheat in MY 2007/08 increased by 29 percent compared to the previous MY (from 665 tmt to 856 tmt). The increase was due to the "sabbatical" year in Israel, when all local produced wheat was sold to the Palestinians and for animal feed.

Due to limited milling wheat supplies from the Black Sea Region in MY 2007/08, imports of U.S. milling wheat increased by 110 percent (from 152 tmt in 2006/07 to 319 tmt in 2007/08) compared to the previous MY, and as a result, the market share of U.S. milling wheat in Israel increased 61 percent compared to the previous year (from 23 percent market share in 2006/07 to 37 percent market share in 2007/08).

There have been no imports of feed wheat from the U.S. in recent years, and this situation is not expected to change in the future.

Table 2: Imports of Wheat, Country of Purchase, CY, \$ Thousand

| Country | Valu | e (\$ Thousa | and) | % o | f Total Imp | orts |
|----------------------|---------|--------------|---------|-------|-------------|-------|
| | 2005 | 2006 | 2007 | 2005 | 2006 | 2007 |
| France | 16,818 | 17,300 | 11,540 | 7.8 | 7.7 | 3.5 |
| Netherlands | 17,012 | 26,776 | 80,793 | 7.9 | 11.9 | 24.5 |
| Austria | 2,260 | 0 | 6,652 | 1.0 | 0.0 | 2.0 |
| Germany | 3,285 | 10,446 | 27,230 | 1.5 | 4.7 | 8.2 |
| U.K. | 17,234 | 6,513 | 10,473 | 8.0 | 2.9 | 3.2 |
| Hungary | 3,381 | 8,255 | 8,573 | 1.6 | 3.7 | 2.6 |
| Other EU | 93 | 4,795 | 8,017 | 0.0 | 2.1 | 2.4 |
| Total EU | 60,083 | 74,085 | 153,278 | 27.8 | 33.0 | 46.4 |
| Switzerland | | | | | | |
| (Major trade center) | 67,915 | 83,414 | 103,229 | 31.4 | 37.2 | 31.3 |
| Total West Europe | 127,998 | 157,499 | 256,507 | 59.2 | 70.2 | 77.7 |
| Russia | 8,981 | 1,712 | 14,598 | 4.2 | 0.8 | 4.4 |
| Ukraine | 1,151 | 1,247 | 1,445 | 0.5 | 0.6 | 0.4 |
| Bulgaria | 2,591 | 2,878 | 0 | 1.2 | 1.3 | 0.0 |
| Other East Europe | 1,438 | 33 | 13 | 0.7 | 0.0 | 0.0 |
| Total East Europe | 14,161 | 5,870 | 16,056 | 6.5 | 2.6 | 4.9 |
| Total Europe | 142,159 | 163,369 | 272,563 | 65.7 | 72.8 | 82.6 |
| U.S. | 71,608 | 61,027 | 57,206 | 33.1 | 27.2 | 17.3 |
| Argentina | 2,617 | 91 | 270 | 1.2 | 0.0 | 0.1 |
| Others | 1 | 1 | 54 | 0.0 | 0.0 | 0.0 |
| Total Outside | | | | | | |
| Europe | 74,226 | 61,119 | 57,530 | 34.3 | 27.2 | 17.4 |
| Grand Total | 216,385 | 224,488 | 330,093 | 100.0 | 100.0 | 100.0 |

| Import Trade Matrix Israel Wheat | | | | | | |
|--|---------|----------------------|----------|--|--|--|
| Time Period | MY | Units | 1,000 MT | | | |
| Imports for | 2006/07 | Imports for | 2007/08 | | | |
| U.S. | 1! | 52 U.S. | 319 | | | |
| Others | | Others | | | | |
| Total for Others | | 0 Total for Others | 0 | | | |
| Others not Listed | 1,0 | 96 Others not Listed | 1,096 | | | |
| Grand Total | 1,24 | 48 Grand Total | 1,337 | | | |

Source: CBS, Foreign Trade Statistics, Different Years. 2008 data unavailable.

* Israel's trade statistics are based on "country of purchase" which in many cases is different from the "country of origin". UK, Netherlands and Switzerland, which are large trading centers, appear in Israel's statistics as suppliers of feed and food grains, when actually they are locations of brokers.

| Import Trade Matrix Israel Wheat | | | | | | |
|--|-------|-------------------|----------|--|--|--|
| Time Period | CY | Units | 1,000 MT | | | |
| Imports for | 2007 | Imports for | 2008 | | | |
| U.S. | 203 | U.S. | 314 | | | |
| Others | | Others | | | | |
| Total for Others | 0 | Total for Others | 0 | | | |
| Others not Listed | 996 | Others not Listed | 1,217 | | | |
| Grand Total | 1,199 | Grand Total | 1,531 | | | |

Barley

| | PS&D TABLE ISRAEL BARLEY | | | | | | | | | |
|-----------------------|--------------------------------|-------------------|------------------|----------|---------|------------------|----------|-------------------|------------------|-----------|
| | | 2007 | | | 2008 | | | 2009 | | |
| | | 2007/200 |)8 | | 2008/20 | 09 | | 2009/20 | 10 | |
| | Marke | t Year Be 2007 | egin: Oct | Market | Year B | egin: Oct | Marke | t Year Be 2009 | egin: Oct | |
| | Official | Post | New Post Data | Official | Post | New Post Data | Official | Post | New Post Data | |
| Area Harvested | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | (1000 HA) |
| Beginning Stocks | 24 | 26 | 24 | 44 | 5 | 6 | | | 10 | (1000 MT) |
| Production | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | (1000 MT) |
| MY Imports | 250 | 210 | 202 | 300 | 290 | 270 | | | 320 | (1000 MT) |
| TY Imports | 250 | 210 | 202 | 300 | 290 | 270 | | | | (1000 MT) |
| TY Imports from U.S. | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | (1000 MT) |
| TOTAL SUPPLY | 274 | 236 | 226 | 344 | 295 | 276 | | | 330 | (1000 MT) |
| MY Exports | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | (1000 MT) |
| TY Exports | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | (1000 MT) |
| Feed Consumption | 220 | 221 | 210 | 270 | 260 | 255 | | | 290 | (1000 MT) |
| FSI Consumption | 10 | 10 | | | 11 | 11 | | | 12 | (1000 MT) |
| Total Consumption | 230 | 231 | 220 | | 271 | | | | 302 | (1000 MT) |
| Ending Stocks | 44 | 5 | 6 | 64 | 24 | 10 | | | 28 | (1000 MT) |
| TOTAL DISTRIBUTION | 274 | 236 | | | 295 | | | | | (1000 MT) |
| Yield | 0. | 0. | 0. | 0. | 0. | 0. | | | 0. | (MT/HA) |
| TS=TD | | | 0 | | | 0 | | | 0 | |

Barley Production, Consumption and Trade

There is a limited amount of barley produced in Israel, but it is all harvested as silage; all barley grain is imported. All barley production is located in the south of Israel. Most of it is sold to the Arab sector for feeding livestock, mainly sheep. Due to non-favorable rainfall in the southern parts of the country, production in crop year 2007/08 totaled about 1,500 tons, 40 percent below crop year 2006/07 levels.

<u>MY 2008/09 Outlook</u> - It is expected that higher supplies from Eastern Europe will increase barley imports in MY 2008/09. On the other hand, competitive prices of feed wheat from the Black Sea Region will moderate barley imports' increase. Therefore, it is estimated that barley imports in 2008/09 will increase 15-35 percent compared to the previous year, and will total about 250-280 TMT. Data for the first quarter of 2008/09 (October-December) show barley imports have increased significantly from the same period one year ago (from 24 tmt to 60 tmt - 150 percent up).

<u>MY 2009/10 Outlook</u> - The Israeli feed milling industry shifts easily from corn, barley and sorghum to feed wheat, depending on price relationships. If supplies of feed wheat from Eastern Europe and BSB do not change significantly from MY 2008/09 levels and barley prices are competitive, barley imports will likely remain the same or exceed last MY's levels by 5-20 percent in order to meet the projected slight growth in demand.

<u>MY 2007/8</u> - In MY 2007/08, due to lower supplies of barley from Eastern Europe, imports of barley decreased 18 percent compared to the previous year (from 246 tmt to 202 tmt).

There have been almost no imports of barely from the U.S. in recent years, and it is not expected to change in the future.

Table 3: Imports of Barley, Country of Purchase, CY, \$ Thousand

| | Value (\$ Thousand) | | | % of | Total Im | ports |
|--------------------------|---------------------|--------|--------|-------|----------|-------|
| Country | 2005 | 2006 | 2007 | 2005 | 2006 | 2007 |
| France | 1,618 | 261 | 6,163 | 5.5 | 0.6 | 14.1 |
| Netherlands | 6,841 | 13,211 | 13,188 | 23.3 | 30.3 | 30.1 |
| Austria | 0 | 1,395 | 0 | 0.0 | 3.2 | 0.0 |
| Germany | 934 | 0 | 4,086 | 3.2 | 0.0 | 9.3 |
| U.K. | 3,824 | 72 | 813 | 13.0 | 0.2 | 1.9 |
| Hungary | 0 | 0 | 1,153 | 0.0 | 0.0 | 2.6 |
| Other EU | 3,231 | 0 | 1,585 | 11.0 | 0.0 | 3.6 |
| Total EU | 16,448 | 14,939 | 26,988 | 56.0 | 34.3 | 61.5 |
| Switzerland (Major trade | 9,244 | 21,348 | 15,516 | | | |
| center) | | | | 31.5 | 49.0 | 35.4 |
| Total West Europe | 25,692 | 36,287 | 42,504 | 87.5 | 83.3 | 96.9 |
| Russia | 3,009 | 379 | 0 | 10.2 | 0.9 | 0.0 |
| Ukraine | 0 | 3,671 | 777 | 0.0 | 8.4 | 1.8 |
| Other East Europe | 363 | 0 | 0 | 1.2 | 0.0 | 0.0 |
| Total East Europe | 3,372 | 4,050 | 777 | 11.5 | 9.3 | 1.8 |
| Total Europe | 29,064 | 40,337 | 43,281 | 99.0 | 92.6 | 98.7 |
| U.S. | 0 | 1,578 | 553 | 0.0 | 3.6 | 1.3 |
| Total Outside Europe | 301 | 1,635 | 17 | 1.0 | 3.8 | 0.0 |
| Grand Total | 29,365 | 43,551 | 43,851 | 100.0 | 100.0 | 100.0 |

Source: CBS, Foreign Trade Statistics, Different Years. 2008 data unavailable.

* Israel's trade statistics are based on "country of purchase" which in many cases is different from the "country of origin". UK, Netherlands and Switzerland, U.S.A, which are large trading, centers, appear in Israel's statistics as suppliers of feed and food grains, when actually they are locations of brokers.

| Import Trade Matrix Israel Barley | | | | | |
|---|---------|-----------------------|----------|--|--|
| Time Period | MY | Units | 1,000 MT | | |
| Imports for | 2006/07 | Imports for | 2007/08 | | |
| U.S. | | 0 U.S . | 0 | | |
| Others | | Others | | | |
| Total for Others | | 0 Total for Others | 0 | | |
| Others not Listed | 2 | 246 Others not Listed | 202 | | |
| Grand Total | 2 | 246 Grand Total | 202 | | |

| Import Trade Matrix Israel Barley | | | | | |
|---|------|-----------------------|----------|--|--|
| Time Period | СУ | Units | 1,000 MT | | |
| Imports for | 2007 | Imports for | 2008 | | |
| U.S. | | 0 U.S . | 0 | | |
| Others | | Others | | | |
| Total for Others | | 0 Total for Others | 0 | | |
| Others not Listed | | 188 Others not Listed | 238 | | |
| Grand Total | | 188 Grand Total | 238 | | |

Sorghum

| | PS&D TABLE ISRAEL SORGHUM | | | | | | | | | |
|-------------------------|---------------------------------|-------------------|------------------|----------|----------------|------------------|----------|-------------------|------------------|-----------|
| | | 2007 | | | 2008 | | | 2009 | | |
| | | 2007/200 |)8 | | 2008/20 | 09 | | 2009/20 | 10 | |
| | Marke | t Year Be 2007 | egin: Oct | Market | Year B 2008 | egin: Oct | Marke | t Year Bo 2009 | egin: Oct | |
| | Official | Post | New Post Data | Official | Post | New Post Data | Official | Post | New Post Data | |
| Area Harvested | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | (1000 HA) |
| Beginning Stocks | 25 | 12 | 25 | 12 | 25 | 20 | | | 10 | (1000 MT) |
| Production | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | (1000 MT) |
| MY Imports | 150 | 90 | 171 | 100 | 37 | 65 | | | 80 | (1000 MT) |
| TY Imports | 150 | 90 | 171 | 100 | 37 | 65 | | | 0 | (1000 MT) |
| TY Imports from U.S. | 137 | 76 | 164 | 0 | 31 | 50 | | | 80 | |
| TOTAL SUPPLY | 175 | 102 | 196 | 112 | 62 | 85 | | | 90 | (1000 MT) |
| MY Exports | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | (1000 MT) |
| TY Exports | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | (1000 MT) |
| Feed Consumption | 158 | 70 | 168 | 107 | 50 | 67 | | | 75 | (1000 MT) |
| FSI Consumption | 5 | 7 | 8 | | 7 | 8 | | | 9 | (1000 MT) |
| Total Consumption | 163 | 77 | 176 | | 57 | 75 | | | 84 | (1000 MT) |
| Ending Stocks | 12 | 25 | 20 | 0 | 5 | 10 | | | 6 | (1000 MT) |
| TOTAL DISTRIBUTION | 175 | 102 | 196 | 112 | 62 | | | | 90 | (1000 MT) |
| Yield | 0. | 0. | 0. | 0. | 0. | 0. | | | 0. | (MT/HA) |
| TS=TD | | | 0 | | | 0 | | | 0 | |

Sorghum Production, Consumption and Trade

There is a limited amount of sorghum produced in Israel, but it is all harvested as silage; all sorghum grain is imported. The level of consumption hinges on price relationships with other grains, primarily corn and feed wheat. In crop year 2007/08, about 1,500 hectares were planted for sorghum silage. The majority of sorghum production is located in the north of Israel. Production in crop year 2007/08 totaled about 20,000 MT, 33 percent below crop year 2006/07 levels.

 $\underline{MY~2008/09~Outlook}$ - Due to the dramatic increase in imports of sorghum in 2007/08 combined with the increase in feed wheat imports from the BSB since August 2008, it is projected that sorghum imports in 2008/09 will decrease by 60 percent compared to the previous MY, and will reach about 65,000 MT.

As a result of the projected decrease in sorghum imports combined with increased supplies of sorghum from the Ukraine, it is expected that sorghum imports from the U.S. will total about 50-55 TMT, and the U.S. market share of sorghum in Israel will decrease to 70-80 percent.

<u>MY 2009/10 Outlook</u> - The Israeli feed milling industry shifts easily from corn, barley and sorghum to feed wheat, depending on price relationships. If supplies of feed wheat from Eastern Europe and BSB will not change much from MY 2008/09 levels, total sorghum imports into Israel are expected to reach up to 80,000 MT in 2009/10.

<u>MY 2007/8</u> - Until July 2008, sorghum replaced feed wheat, however, data from August-December 2008 show sorghum imports have decreased significantly to zero. The dramatic decrease from August-October 2008 resulted from feed wheat replacing sorghum combined with Israeli surpluses in its sorghum stocks. Therefore, sorghum imports in 2007/08 increased 151 percent from the previous MY.

In MY 2007/08, the market share for U.S. sorghum increased 45 percent compared to the previous marketing year, giving it a 96 percent market share. The increase in U.S. market share was due to restricted supplies of sorghum and feed wheat from Eastern European countries.

Table 4: Sorghum Production for Silage, Ton and Ha, Calendar Year

| Crop Year | Ha | Yields – Ton | Ton Per Ha |
|------------------------------------|-------|--------------|------------|
| 2000 | 800 | 12,000 | 15.0 |
| 2001 | 1,000 | 13,500 | 13.5 |
| 2002 | 1,370 | 18,400 | 13.4 |
| 2003 | 2,340 | 30,200 | 12.9 |
| 2004 | 2,530 | 36,900 | 14.6 |
| 2005 | 3,000 | 45,000 | 15.0 |
| 2006 | 2,700 | 39,000 | 14.5 |
| 2007 | 2,000 | 30,000 | 15.0 |
| 2008 | 1,500 | 20,000 | 13.3 |
| (according to preliminary figures) | | | |

Source: Ministry of Agriculture and Rural Development, 2007 Annual Report.

Table 5: Imports of Grain Sorghum, Country of Purchase, CY, \$ Thousand

| | Valu | e (\$ Thousa | nd) | % of Total Imports | | | |
|------------------------------------|-------|--------------|--------|--------------------|-------|-------|--|
| Country | 2005 | 2006 | 2007 | 2005 | 2006 | 2007 | |
| Netherlands | 0 | 0 | 722 | 0.0 | 0.0 | 3.4 | |
| U.K. | 1,287 | 218 | 647 | 18.2 | 2.8 | 3.1 | |
| Switzerland (Major trading center) | 2,539 | 5,833 | 16,792 | 35.9 | 75.4 | 79.5 | |
| Hungary | 1,924 | 1,683 | 520 | 27.2 | 21.8 | 2.5 | |
| Total Europe | 5,750 | 7,734 | 18,684 | 81.4 | 100.0 | 88.5 | |
| U.S. | 1,316 | 0 | 2,423 | 18.6 | 0.0 | 11.5 | |
| Total Outside Europe | 1,316 | 6 | 2,429 | 18.6 | 0.0 | 11.5 | |
| Grand Total | 7,066 | 7,740 | 21,110 | 100.0 | 100.0 | 100.0 | |

Source: CBS, Foreign Trade Statistics, Different Years. Data unavailable for 2008.

^{*} Israel's trade statistics are based on "country of purchase" which in many cases is different from the "country of origin". UK, Netherlands and Switzerland, which are large trading centers, appear in Israel's statistics as suppliers of feed and food grains, when actually they are locations of brokers.

| Import Trade Matrix Israel Sorghum | | | | | |
|--|------|--------------------|----------|--|--|
| Time Period | MY | Units | 1,000 MT | | |
| Imports for | 2006 | Imports for | 2007 | | |
| U.S. | 5 | 8 U.S . | 164 | | |
| Others | | Others | | | |
| Total for Others | | 0 Total for Others | 0 | | |
| Others not Listed | 1 | Others not Listed | 7 | | |
| Grand Total | 6 | 8 Grand Total | 171 | | |

| | - | Trade Matrix Israel orghum | |
|-------------------|------|----------------------------------|----------|
| Time Period | CY | Units | 1,000 MT |
| Imports for | 2007 | Imports for | 2008 |
| U.S. | | 115 U.S . | 93 |
| Others | | Others | |
| Total for Others | | 0 Total for Others | 0 |
| Others not Listed | | 16 Others not Listed | 13 |
| Grand Total | | 131 Grand Total | 106 |

Corn

| PS&D TABLE ISRAEL CORN | | | | | | | | | | |
|------------------------------|----------|-------------------|------------------|----------|-----------------------------|------------------|----------|-----------------------------|------------------|-----------|
| | | 2007 | | | 2008 | | | 2009 | | |
| | | 2007/200 | 08 | | 2008/20 | 09 | | 2009/20 | 10 | |
| | Marke | t Year Be 2007 | egin: Oct | Market | Market Year Begin: Oct 2008 | | | Market Year Begin: Oct 2009 | | |
| | Official | Post | New Post Data | Official | Post | New Post Data | Official | Post | New Post Data | |
| Area Harvested | 0 | 4 | 3 | 0 | 2 | 1 | | | 1 | (1000 HA) |
| Beginning Stocks | 128 | 106 | 128 | 102 | 126 | 80 | | | 36 | |
| Production | 0 | 45 | 20 | 0 | 26 | 6 | | | 6 | (1000 MT) |
| MY Imports | 1,374 | 1,375 | 1,412 | 1,000 | 1,250 | 1,200 | | | | (1000 MT) |
| TY Imports | 1,374 | 1,375 | 1,412 | 1,000 | 1,250 | 1,200 | | | | (1000 MT) |
| TY Imports from U.S. | 1,207 | 920 | 1,246 | 0 | 800 | 750 | | | 800 | |
| TOTAL SUPPLY | 1,502 | 1,526 | 1,560 | 1,102 | 1,402 | 1,286 | | | 1,342 | (1000 MT) |
| MY Exports | 0 | 0 | 0 | 0 | 0 | 0 | | | | (1000 MT) |
| TY Exports | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | (1000 MT) |
| Feed Consumption | 1,300 | 1,300 | 1,380 | 900 | 1,200 | 1,150 | | | 1,200 | |
| FSI Consumption | 100 | 100 | 100 | 100 | 110 | 100 | | | 105 | (1000 MT) |
| Total Consumption | 1,400 | 1,400 | , | | | - | | | 1,305 | (1000 MT) |
| Ending Stocks | 102 | 126 | 80 | 102 | 92 | 36 | | | 37 | (1000 MT) |
| TOTAL DISTRIBUTION | 1,502 | 1,526 | 1,560 | 1,102 | 1,402 | 1,286 | | | 1,342 | (1000 MT) |
| Yield | 0. | 13. | 6.6667 | 0. | 13. | 6. | | | 6. | (MT/HA) |

Corn Production and Consumption

Production: MY 2008/09 was the fifth consecutive year that corn for grain (yellow corn) was grown in Israel. In MY 2008/09 corn production increased dramatically and totaled about 20,000 tons, from 3,000 HA. All local grain corn was non-biotech and was consumed by food manufacturers that export their products to Europe. Driven by the sharp drop in world prices for corn, combined with the recent announcement made by the Israel Water Authority that Israel is currently facing the worst water supply crisis in 80 years, corn production is expected to decrease dramatically in 2009/10. Corn production in MY 2009/10 is forecast at 5,000-6,000 tons (75 percent down compared to the previous year). A more precise estimate will be available in July-August 2009.

Consumption: In MY 2007/08, corn consumption totaled 1.4 million tons, 9 percent higher than in the previous year. The increase was due to a shortage of feed wheat and barley from Eastern Europe. As a result of the increased supplies of feed wheat from the Black Sea Basin, consumption in 2008/09 is forecast to decrease to 1-1.2 million tons.

Trade

<u>MY 2008/09 Outlook</u> - Due to rising competition of feed wheat from the Black Sea Basin in MY 2008/09, corn imports are forecast to decrease by 15-25 percent from the previous MY (about 1-1.2 million tons). It is expected that in the first half on CY 2009, domestic demand for corn will decrease and will rise again in the second half of CY 2009. Data for the first quarter of 2008/09 (October-December) show corn imports have decreased significantly from the same period one year ago (from 469 tmt to 238 tmt - 49 percent drop).

Corn is imported mainly from the U.S. with Argentina, Ukraine and Russia supplying the remainder. Local importers are aware that U.S. corn is a superior livestock feed than corn from the BSB. However, it is expected that corn imports from the competitors will increase in 2008/09. Therefore, post estimates that U.S. market share of corn in Israel will decrease from 88 percent in 2007/08 to 55-70 percent in 2008/09 (about 600-750 tmt of U.S. corn).

<u>MY 2009/10 Outlook</u> - The Israeli feed milling industry shifts easily from corn, barley and sorghum to feed wheat, depending on price relationships. If supplies of feed wheat from Eastern Europe and BSB do not change much from MY 2008/09 levels and global corn production stays at MY 2008/9 levels, therefore total corn imports into Israel are expected to reach about 1.1-1.3 million tons in MY 2009/10. In the future, the U.S. is forecast to maintain 50-65 percent market share, with Argentina and Eastern Europe supplying the remainder.

<u>MY 2007/08</u> - Due to the shortage of feed wheat and barely from Ukraine and Russia in MY 2007/08, imports of U.S. corn reached a seven-year record, with 1.25 million tons, a 72 percent increase from MY 2006/07, and an 88 percent market share. In 2007/08 corn imports totaled 1.4 million tons, a 9 percent increase compared to the previous MY.

Table 6: Imports of Corn, Country of Purchase, CY, \$ Thousand

| | Valu | e (\$ Thousa | and) | % of Total Imports | | |
|----------------------|---------|--------------|--------|--------------------|-------|-------|
| Country | 2005 | 2006 | 2007 | 2005 | 2006 | 2007 |
| France | 2,282 | 495 | | 1.6 | 0.3 | 1.7 |
| Italy | 106 | 203 | | 0.1 | 0.1 | 0.2 |
| Netherlands | 39,127 | 12,411 | | 27.1 | 7.2 | 12.1 |
| Germany | 5,910 | 0 | ,236 | 4.1 | 0.0 | 0.5 |
| U.K. | 15,000 | 4,309 | | 10.4 | 2.5 | 6.8 |
| Other EU | 1,320 | 3,108 | | 0.9 | 1.8 | 0.6 |
| Total EU | 63,745 | 20,526 | | 44.1 | 11.8 | 21.9 |
| Switzerland (Major | | | | | | |
| trading center) | 46,649 | 121,383 | 88,977 | 32.3 | 70.1 | 37.8 |
| Total West Europe | 110,394 | 141,909 | | 76.3 | 81.9 | 59.7 |
| Russia | 1,008 | 0 | | 0.7 | 0.0 | 0.0 |
| Ukraine | 1,250 | 1,848 | | 0.9 | 1.1 | 0.0 |
| Other East Europe | 3,244 | 0 | | 2.2 | 0.0 | 0.0 |
| Total East Europe | 5,502 | 1,848 | | 3.8 | 1.1 | 0.0 |
| Total Europe | 115,896 | 143,757 | | 80.1 | 83.0 | |
| U.S. | 18,895 | 28,234 | | 13.1 | 16.3 | 26.9 |
| Argentina | 9,418 | 216 | | 6.5 | 0.1 | 10.7 |
| Others | 432 | 1,030 | | 0.3 | 0.6 | 2.7 |
| Total Outside Europe | 28,745 | 29,480 | | 19.9 | 17.0 | 40.3 |
| Grand Total | 144,641 | 173,237 | | 100.0 | 100.0 | 100.0 |

Source: CBS, Foreign Trade Statistics, Different Years. Data unavailable for 2008.

* Israel's trade statistics are based on "country of purchase" which in many cases is different from the "country of origin". UK, Netherlands and Switzerland, which are large trading centers, appear in Israel's statistics as suppliers of feed and food grains, when actually they are locations of brokers.

| Import Trade Matrix Israel Corn | | | | | |
|---------------------------------------|------|-------------------|----------|--|--|
| Time Period | MY | Units | 1,000 MT | | |
| Imports for | 2006 | Imports for | 2007 | | |
| U.S. | 72: | 3 U.S . | 1,246 | | |
| Others | | Others | | | |
| Total for Others | (| Total for Others | 0 | | |
| Others not Listed | | Others not Listed | 166 | | |
| Grand Total | | Grand Total | 1,412 | | |

| Import Trade Matrix Israel Corn | | | | | |
|---------------------------------------|------|-------------------|----------|--|--|
| Time Period | СУ | Units | 1,000 MT | | |
| Imports for | 2007 | Imports for | 2008 | | |
| U.S. | 977 | U.S. | 844 | | |
| Others | | Others | | | |
| Total for Others | (| Total for Others | 0 | | |
| Others not Listed | 506 | Others not Listed | 337 | | |
| Grand Total | | Grand Total | 1,181 | | |

Table 7: Grains Imports to Israel, MY, Thousand Metric Tons

| MY ¹ | Milling Wheat | Feed Wheat | Total Wheat | Barley | Corn | Sorghum | Total Import |
|-----------------|------------------|---------------|----------------|--------|-------|---------|-----------------|
| 2002 | 614 | 666 | 1,280 | 460 | 698 | 45 | 2,483 |
| 2003 | 907 | 181 | 1,088 | 493 | 1,292 | 194 | 3,067 |
| 2004 | 730 | 685 | 1,415 | 374 | 1,040 | 50 | 2,879 |
| 2005 | 871 | 700 | 1,571 | 301 | 1,173 | 44 | 3,089 |
| 2006 | 665 | 583 | 1,248 | 246 | 1,295 | 68 | 2,857 |
| 2007 | 856 | 481 | 1,337 | 202 | 1,412 | 171 | 3,122 |
| Average | 774 | 549 | 1323 | 346 | 1152 | 95 | 2,916 |

Source: Ministry of Agriculture, Office of Prices and Supply

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¹ October-September

Table 8: Import Share of Total Import Quantity, Percent, MY

| MY | Milling Wheat | Feed Wheat | Total Wheat | Barley | Corn | Sorghum | Total Import |
|---------|------------------|---------------|----------------|--------|------|---------|-----------------|
| 2002 | 24.7 | 26.8 | 51.6 | 18.5 | 28.1 | 1.8 | 100.0 |
| 2003 | 29.6 | 5.9 | 35.5 | 16.1 | 42.1 | 6.3 | 100.0 |
| 2004 | 25.4 | 23.8 | 49.1 | 13.0 | 36.1 | 1.7 | 100.0 |
| 2005 | 28.2 | 22.7 | 50.9 | 9.7 | 38.0 | 1.4 | 100.0 |
| 2006 | 23.3 | 20.4 | 43.7 | 8.6 | 45.3 | 2.4 | 100.0 |
| 2007 | 27.4 | 15.4 | 42.8 | 6.5 | 45.2 | 5.5 | 100.0 |
| Average | 26.5 | 18.8 | 45.4 | 11.9 | 39.5 | 3.3 | 100.0 |

Source: Ministry of Agriculture, Office of Prices and Supply

Table 9: U.S. Market Share of Total Import Quantity, Percent, MY

| MY | Milling Wheat | Feed Wheat | Barley | Corn | Sorghum |
|---------|---------------|------------|--------|------|---------|
| 2002 | 58 | 0 | 0 | 39 | 89 |
| 2003 | 74 | 0 | 0 | 82 | 89 |
| 2004 | 42 | 0 | 0 | 24 | 54 |
| 2005 | 30 | 0 | 3 | 52 | 65 |
| 2006 | 23 | 0 | 0 | 56 | 85 |
| 2007 | 37 | 0 | 0 | 88 | 96 |
| Average | 44 | 0 | 0.5 | 57 | 80 |

Source: Ministry of Agriculture, Office of Prices and Supply