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Report Highlights:

FAS/Tel Aviv (Post) forecasts Israel's marketing year (MY) 2024/45 wheat imports to increase due a decline in domestic production, a need to increase stocks because of the Israel-Hamas conflict, as well as lower international grain prices. The uncertainty of supplies and high reliance from the Black Sea Basin for grain and feed incentivized the Ministry of Agriculture (MOA) to source grains (primarily wheat) from origins that have not historically supplied to Israel. Israel's imports of barley and corn will likely decrease slightly on account of lower poultry and egg production (which may be offset in increased imports of such goods). With less consumption of some grains, Israel's total grain and feed emergency stock is forecast to increase as due to the Israel-Hamas conflict and a population growth of 2 percent.

Executive Summary

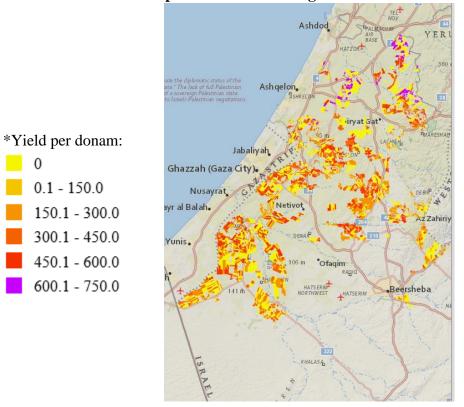
The Israel-Hamas conflict (which began on October 7, 2023) has led to Israel reassessing its emergency stock of grains due to the disruption of plots (primarily wheat) near the Gaza periphery, and in the event of a disruption in trade from the conflict. Moreover, poor weather conditions are forecast to also affect production, leading Israel to seek more imports for stock which would normally be sourced domestically. Although the government provided incentives for more wheat to be planted for MY 2024/25, most of the wheat will be planted for silage, rather than grain production. While tourism has significantly declined due to the conflict, Israeli travel outside of the country has also decreased due to a call for reservists or an inaccessibility to travel. As such, the impact on demand for food and feed from a decline in tourism has been somewhat offset by increased consumption from Israelis, and a population increase of 2 percent. As most Israeli farmers prefer to use their land and water resources for cash crops (such as almonds, pomegranates, figs, and pears which have lower water demand), Israel is expected to continue to rely on imported grain and feed but is increasingly looking to suppliers outside of the Black Sea Basin (BSB).

Shipping challenges have also led to changes within the grain and feed sector. As freight prices increased, the government and industry had to adjust to an increase in commodity prices. The Houthi attacks in the Red Sea and the operational queues at the Panama Canal have had little effect on Israeli grain shipments, as most grains arrive from the BSB and from the eastern coast of the Americas (without passing through the Panama Canal or the Red Sea). However, the difficulty in importing feeder cattle (primarily from Australia) due to the inability to ship through the Red Sea (among other reasons) could affect Israel's feed imports and consumption in the near term. For shipments destined for the West Bank, industry contacts report that trade continues to flow smoothly.

Wheat

Production:

As marketing year (MY) 2022/23 (July – June) experienced a decline in wheat production due to poor weather conditions (see Table 1), MY 2023/24 is also forecast to decline. Post forecasts MY 2024/25 wheat production at 80,000 MT, as a result of significant precipitation during the late stage of production, as well as an inability to plant wheat near the Gaza periphery (see Map 1). While the poor weather conditions may have led to a reduction in quality, the weather conditions primarily impacted quantity. Israeli millers are less concerned about the quality than quantity of the wheat produced, as all domestically produced wheat must go to silos for stock (. However, as local production only meets around 15 percent of annual consumption, millers blend imported wheat with domestic wheat and are required to purchase domestic wheat each month.



Map 1: Wheat Producing Areas in Southern Israel

Source: <u>The Israeli Ministry of Agriculture GIS system</u>
*Most recent data is from 2008, but the map generally reflects the wheat growi

*Most recent data is from 2008, but the map generally reflects the wheat growing areas near the Gaza periphery.

Roughly 70 percent of Israeli wheat is planted in the south, with the remainder planted in the central and northern regions. Average rainfall in the southern wheat producing regions generally reaches 450 millimeters (mm) per year, while the northern regions receive 500-550 mm per year and is usually concentrated from October to April. In MY 2023/24, rainfall was average in most areas, but began late in the season, which affected seed germination. Later, heavy rains in some areas created water logging which also caused a reduction in yields.

On average, 100,000 hectares (ha) of wheat is planted per year, with 70 percent harvested for milling. The remaining 30 percent is used as fodder for livestock feed. Post anticipates that only 90,000 ha will be planted this MY, of which 55,000 ha will be harvested for grains and 35,000 ha will be harvested for silage for animal feed.

In addition to unfavorable weather conditions, the Israel-Hamas conflict will adversely affect production as some plots located near the Gaza border were not planted due to security restrictions or the destruction of land. As most of Hamas' attacks were concentrated in the south, many Israelis living in the vicinity and working on wheat farms were forced to evacuate and have yet to return due to the ongoing conflict. Even if people were to return to the specific plots of land to harvest, many of these plots of land were destroyed. As a result, the planted wheat area for MY 2024/25 is estimated to decrease by 10,000 ha. Although the Israeli MOA has offered farmers incentives to identify new plots for planting wheat this year, these plots will most likely be used for early harvest to produce silage for animal feed instead of food.

Table 1: Israel's Wheat Production and Annual Percent Change

Table 1. Islaci 5 Wheat I Toutellon and Aminual I creent Change						
MY	Total Production*	Annual Percent Change				
2013/14	130	0				
2014/15	90	-31				
2015/16	155	72				
2016/17	142	-8				
2017/18	50	-65				
2018/19	70	40				
2019/20	75	7				
2020/21	80	6.6				
2021/22	98	22.5				
2022/23	120	22.4				
2023/24	95	-20.8				
2024/25	80*	-15.8				

^{*}Forecast: based on weather reports, media sources

Consumption:

Total MY 2024/25 wheat consumption is forecasted at 1.8 million metric tons (MMT), slightly higher than MY 2023/24. Post is also revising its total MY 2023/24 wheat consumption up due to slightly higher demands for wheat from feed lots.

Feed Wheat – The Israeli feed milling industry shifts easily from corn, barley, and sorghum to wheat and vice-versa, depending on the prevailing prices. In MY 2023/24, prices for wheat, barley and corn were quite similar and unlike past years, the price had a small effect on the preference to use one over the other. Post forecasts around 800,000 MT to be used as feed.

Milling Wheat – In addition to importing packaged flour, Israel also mills wheat for human consumption in 19 Israeli flour mills. Total capacity of these mills averages 1.3 MMT. Although many Israeli consumers are seeking healthier alternatives to white wheat flour such as rice, spelt, teff, and rye flours, consumption is set to increase slightly on account of population growth.

[♦] *In Thousand Metric Tons (TMT)*

Trade:

Post forecasts Israel's MY 2024/25 imports of wheat to reach 1.8 MMT on account of the Israeli government primarily looking to increase its emergency stock due to the Israel-Hamas conflict. Although the Israeli government sought to increase imports after the Covid-19 pandemic, the Government of Israel announced that its emergency stock was insufficient, as it had not taken into account Israel's population growth in many years.¹

According to industry sources, demands for wheat from countries that have not historically supplied wheat to Israel (e.g., Kazakhstan, Latvia, and Poland) have increased, as Israel seeks to diversify its imports away from traditional sources such as Russia. As an example, on September 11, 2023, Israel signed a deal with Azerbaijan and Uzbekistan in order to diversify its supply of wheat to Israel. However, in MY 2023/24, Russia remained the largest exporter of wheat to Israel, with Ukraine falling shortly behind. Although official trade data reflects an increase from more European Member States exporting to Israel in MY 2023/24, exports were most likely reexports of Ukrainian and Russian wheat. For MY 2024/25, Israel will continue to purchase from Ukraine and Russia as prices remain low, but imports from these countries will start to decline as Israel seeks imports from other countries, including the United States. Since 2010, imports of U.S. wheat have been limited, as prices of U.S. wheat have historically been at least \$30/MT higher than Black Sea origin wheat. However, with the Israeli government seeking to diversify its imports, U.S. wheat exports to Israel are forecast around 100,000 MT.

After October 7, 2023, many grain importers initially reported difficulty in booking vessels that were willing to ship to Israeli ports, and later faced delays from the lack of port workers or truck drivers that were called up as reservists for military service. Despite these issues, trade continued to flow throughout MY 2023/24, even with higher insurance and freight costs. In addition to higher costs, industry reported challenges of long waiting periods to offload (due to increased security procedures), with some consumers initially stocking wheat to ensure supply in the event trade was disrupted. Although Houthi attacks on vessels passing through the Red Sea also created higher insurance and freight costs for importers of certain commodities, Israel's grain imports were the least impacted, as all of the imported grain arrives through ports in the Mediterranean Sea.

Stocks:

MY 2024/25 wheat stocks are forecast at up, as the Israeli government looks to increase its emergency stock. Although the Israeli government began to slowly resupply the country's emergency stock after Covid-19 delays, the start of the Israel-Hamas conflict led the Israeli government to further evaluate its emergency stock and reassess population growth from the past few years. Although storage capacity of grains in Israel is limited, there are plans to construct new grain silos at the Port of Haifa in the next few years.

Emergency stocks are controlled by the MOA and require all domestically produced wheat to go to stock. Through tenders, the MOA chooses companies that are best suited to store emergency

¹ https://www.themarker.com/consumer/2022-05-03/ty-article/.premium/00000180-98a1-df65-a9a0-9bf5cce00000?utm_source=App_Share&utm_medium=Android_Native&utm_campaign=Share

 $^{{}^2\}underline{\text{https://www.i24news.tv/en/news/israel/diplomacy/1694457371-israel-signs-grain-deal-with-azerbaijan-uzbekistanto-ensure-food-security}$

stock. In addition to the emergency stock, local importers also maintain some milling wheat stock, which tend to be imported. Historically, emergency stocks have been primarily based on the size of the domestic wheat harvest, rather than demand. However, in the case of a shortage in local wheat production, stocks are rebuilt with imported wheat, as was done this year due to insufficient local supply.

The government's emergency stocks of milling wheat are usually at their annual high in July, after the end of the harvest in Israel. During this period, stocks are estimated to be high, but generally decline from July through March or April to around 30,000 MT and rebound again at the harvest. The MOA also holds emergency stocks of feedstuffs, which include feed grains, oilseed meal, distiller's dried grains with solubles (DDGS) and corn gluten feed (CGF). Like other commodities in the emergency stock, the Israeli government is looking to increase its emergency feed wheat stocks to for the livestock sector.

Table 2: Wheat Production, Supply and Distribution

Wheat	2022/2023 Jul 2022		2023/2024 Jul 2023		2024/2025 Jul 2024	
Market Year Begins						
Israel	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	49	65	50	65	0	55
Beginning Stocks (1000 MT)	540	540	570	563	0	648
Production (1000 MT)	142	120	100	95	0	80
MY Imports (1000 MT)	1895	1790	1700	1750	0	1802
TY Imports (1000 MT)	1895	1790	1700	1750	0	1820
TY Imp. from U.S. (1000 MT)	1	40	0	90	0	100
Total Supply (1000 MT)	2577	2450	2370	2408	0	2530
MY Exports (1000 MT)	7	30	5	30	0	30
TY Exports (1000 MT)	7	30	5	30	0	30
Feed and Residual (1000 MT)	850	730	800	790	0	800
FSI Consumption (1000 MT)	1150	1127	1000	940	0	1000
Total Consumption (1000 MT)	2000	1857	1800	1730	0	1800
Ending Stocks (1000 MT)	570	563	565	648	0	700
Total Distribution (1000 MT)	2577	2450	2370	2408	0	2530
Yield (MT/HA)	2.898	1.8462	2	1.4615	0	1.4545

(1000 HA), (1000 MT), (MT/HA)

MY = Marketing Year, begins with the month listed at the top of each column

TY = Trade Year, which for Wheat begins in July for all countries. TY 2024/2025 = July 2024 - June 2025

Barley

Production:

Post estimates that the area planted for barley to be 6,700 ha, with 5,000 ha for grain production, and the remaining 1,700 ha for silage for MY 2024/25 (October– September). Most barley production is located in the south of Israel, while the remainder is in the Beit-Sh'ean Valley. Production for barley is roughly 3 MT/ha for grains, and around 8.5 MT/ha when cultivated for silage.

Consumption:

Post is revising MY 2023/24 feed consumption up due to a lower price compared to wheat this year (as barley is alternated with feed wheat). Post forecasts Israel's MY 2024/25 slightly down, as feed (primarily for sheep), may also decline on account of a reduction in sheep imports. As Israel primarily imports sheep from Australia, the Houthi attacks on ships in the Red Sea has caused ships carrying sheep destined for Israel to either return to Australia³ or reroute along the Cape of Good Hope. As a result, Israel may import more frozen or chilled meat in lieu of live animals, if transportation issues persist. Furthermore, Israeli feed mills prefer to use wheat and corn over barley (in general), pending prices are similar. For MY 2023/24, Post is revising feed consumption estimates slightly up from last year's previous estimate, as prices were lower for barley this year.

Trade:

Post forecasts Israel's MY 2024/25 barley imports at 365,000 MT, slightly less than MY 2023/24. For the past few years, there have been no U.S.-origin barley, and most of Israel's barley imports come from the BSB (e.g., Russia and Ukraine) due to shipping proximity and lower prices. This year, some Ukrainian barley was replaced by French and Bulgarian supplies (of which some may have been re-exported Ukrainian barley). However, Russia still dominated Israel's imports of barley, and like other grains, Israel may look for alternative sources in the near term as it looks to diversify its import origins.

As Israeli consumers tend to associate a yellow color in poultry to poor animal health and/or obesity, poultry producers and feed millers use higher amounts of barley and other grains in feed rations to mitigate the strong yellow pigment in chicken meat (which is caused by a pigment in corn called *xanthophyll 1* that turns broiler meat yellow). However, as consumption of poultry meat may decline, this could in turn reduce the need to import more feed in the near term.

Stocks:

Post forecasts Israel's MY 2024/25 barley stocks at 72,000 MT on account for Israel seeking to increase its emergency stock as a result of the Israel-Hamas conflict. While most of the stocks will be held in government silos, a limited volume may also be held at private feed mills and feed lots.

³ https://www.reuters.com/world/asia-pacific/stranded-livestock-land-australia-after-red-sea-turn-back-weeks-sea-2024-02-

^{13/#:~:}text=The%20MV%20Bahijah%20sailed%20from,home%20by%20the%20Australian%20government.

Table 3: Barley Production, Supply and Distribution

Barley	2022/2023 Oct 2022		2023/2024 Oct 2023		2024/2025 Oct 2024	
Market Year Begins						
Israel	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	6	5	6	5	0	5
Beginning Stocks (1000 MT)	30	30	30	42	0	57
Production (1000 MT)	10	15	10	15	0	15
MY Imports (1000 MT)	260	470	350	370	0	365
TY Imports (1000 MT)	260	470	350	370	0	365
TY Imp. from U.S. (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	300	515	390	427	0	437
MY Exports (1000 MT)	0	0	0	0	0	0
TY Exports (1000 MT)	0	0	0	0	0	0
Feed and Residual (1000 MT)	260	463	350	360	0	355
FSI Consumption (1000 MT)	10	10	10	10	0	10
Total Consumption (1000 MT)	270	473	360	370	0	365
Ending Stocks (1000 MT)	30	42	30	57	0	72
Total Distribution (1000 MT)	300	515	390	427	0	437
Yield (MT/HA)	1.6667	3	1.6667	3	0	3

(1000 HA), (1000 MT), (MT/HA)

MY = Marketing Year, begins with the month listed at the top of each column

TY = Trade Year, which for Barley begins in October for all countries. TY 2024/2025 = October 2024 - September 2025

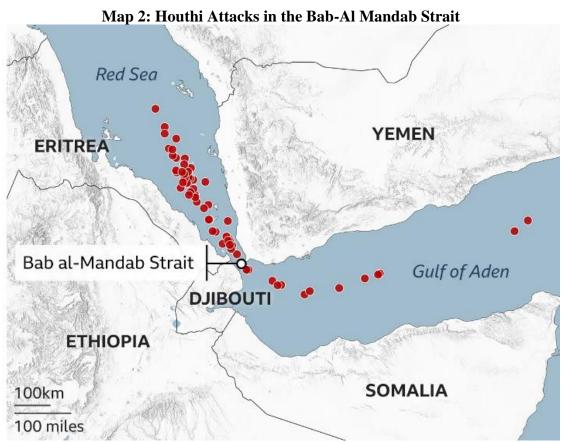
Corn

Production:

Israel is a relatively insignificant producer of corn, and no corn is cultivated for feed use. In calendar year (CY) 2023, more than 7,000 ha was planted and was used for silage only. Israel is entirely dependent upon imports of feed corn and corn for its starch industry. Due to water constraints (e.g., dependency on irrigation, water shortages, and high prices), farmers continue to produce other higher value crops in lieu of feed corn.

Consumption:

Corn is traditionally the main commodity used in Israel's feed industry and is driven by poultry and egg production, followed by dairy, turkey, and other ruminants. Annual per capita meat consumption in Israel is estimated at 91.7 kilograms (KG) per person and is not expected to change in the near term. However, due to disruptions in shipping cattle via the Red Sea from Houthi attacks at the Bab al-Mandab Strait (see Map 2), a decline in live cattle imports from Portugal due primarily to phytosanitary issues, as well as a disruption in some production areas in conflict zones, Post forecasts Israel's domestic consumption and production of live cattle to decline. Therefore, as corn consumption is dependent upon poultry and egg production, Post forecasts MY 2024/25 corn consumption slightly down from MY 2023/24.



Source: https://www.bbc.com/news/world-middle-east-68031732

In turn, Post forecasts an increase in imports of frozen or chilled meat to offset a loss in domestic consumption in live animals and feed in the near term. However, a small percentage of feed will continue to be used by farmers and the wildlife protection services to feed migrating birds to deter them from agricultural fields and inland aquaculture.

Table 4: Live Animal Production During Calendar Year 2023

Product	Estimated Production	Reason			
		Production increased by 4 percent due to an			
		increase in the hotel, restaurant, and institutional			
		sector from tourism, but is forecast to decline on			
Broilers	545,000 MT	account of decreased production in conflict areas.			
		Production increased by 4 percent, but may change			
Table Eggs	2.4 billion	depending on the production in conflict areas.			
		No percentage change from last year as production			
Milk	1.52 million liters	is regulated by quotas.			
		Production increased by 6 percent due to increased			
Beef	75,000 MT	demand for fresh beef.			
		Production declined slightly due to a decrease in			
		consumption as a result of high-priced turkey			
Turkey	82,000 MT	meat.			
		Production data is from the latest figures in 2020,			
Mutton/Goat	12,000 MT	but is set to decline due to trade disruptions.			
		Production is unchanged as industry is very			
		limited due to religious restrictions and is not			
Pork	14,000 MT	expected to change.			

Eight feed mills control roughly 90 percent of the local feed milling industry. The largest feed miller controls 22 percent of the market and plans to increase production by 12 percent. There are 150 feed centers in Israel, which are communal feed mills operated by local farming communities (i.e., Kibbutzim), and sell their feed mix to the cattle industry. Fifteen of these are large feed centers servicing the largest cattle producers, while the remaining 135 are smaller operations selling feed to smaller producers. Each small feed center supplies feed to 100-300 cattle.

Due to the dry weather in Israel (including long dry summers and short winters with little rainfall), beef cattle lack grazing meadows. Most of the year, farmers must feed cattle, making beef production in Israel relatively expensive. Post estimates that the total market for the Israeli feed milling industry (feed millers and feed centers) is about 4.25 MMT, all of which is imported (grains, feed meals, DDGS and gluten feed, excluding hay and silage). Their typical formulation is composed of grains, oilseed meals (i.e., soy, sunflower, and canola), and other feed sources such as DDGS and CGF. Israeli feed mills export about 15 percent of their production to the Palestinian Authority (PA). Limited soy and corn seeds are imported to the industry for processing, and the by-products are later sold to the feed industry.

Trade:

MY 2024/25 corn imports are expected to total 1.6 MMT, slightly less than last year, as corn consumption is also forecast to decline. Post is also revising previous MY imports down, which are not reflective of a change in market conditions, but rather a result of a recently discovered data transcription error.

For MY 2024/25, Post forecasts U.S. corn exports to Israel at 80,000 MT. In recent years, corn has primarily been imported from Ukraine, Argentina, and Brazil. The decline of U.S. corn exports to Israel in the past decade is due to competitive pricing of Ukrainian and South American corn, and cheaper shipping costs from the BSB and European Union origins. According to Israeli importers, Ukrainian corn (including freight) may be as much as \$30 per ton lower than the U.S. corn. Because of price, Ukraine was the largest supplier of corn to Israel in MY 2023/24, with most exports of Ukrainian corn likely being re-exported from other European countries. Second to Ukraine was Brazil, due to the competitive pricing. Corn prices in the local market decreased by roughly 20 percent this year, keeping it at the almost the same price levels as wheat and barley (see Table 5).

Table 5: Feed Prices in Israel (\$USD/MT)

	August 2021	August 2022	August 2023	% Difference (2022-2023)				
Corn	340	363	289	-20.4				
Barley	312	400	275	-31.25				
Feed wheat	335	405	286	-29.38				
Soy meal	580	680	637	-6.32				
Gluten feed	340	455	324	-28.79				
Canola meal	359	463	374	-19.22				
Sunflower meal	400	443	388	-12.42				
DDGS	395	470	379	-19.36				
Exchange rate INS/\$	3.22	3.28	3.746	-14.2				

Source: Israeli Cattle Growers Association, COMMODEX reports

Israel remains a steady, long-time customer of U.S. corn co-products including DDGS and corn gluten feed (CGF). In recent years, DDGS and CGF imports have increased significantly. In MY 2023/24, Israel imported 600,000 MT of CGF and DDGS, of which 88 percent was from the United States. This figure has doubled over the last decade. The Israeli dairy sector is the primary user of DDGS and CGF, with some DDGS earmarked for poultry production.

Stocks:

Like other grains, Israel is seeking to replenish its emergency stock; as a result, Post forecasts MY 2024/25 up at 200,000 MT. Most of this stock will be held in government silos, with the remainder held at privately-owned feed mills and centers.

Table 6: Corn Production, Supply and Distribution

Corn	2022/2023 Oct 2022		2023/2024 Oct 2023		2024/2025 Oct 2024	
Market Year Begins						
Israel	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	0	0	0	0	0	0
Beginning Stocks (1000 MT)	130	130	120	120	0	170
Production (1000 MT)	0	0	0	0	0	0
MY Imports (1000 MT)	1150	1270	1600	1650	0	1600
TY Imports (1000 MT)	1150	1270	1600	1650	0	1600
TY Imp. from U.S. (1000 MT)	27	27	0	80	0	80
Total Supply (1000 MT)	1280	1400	1720	1770	0	1770
MY Exports (1000 MT)	10	10	10	10	0	10
TY Exports (1000 MT)	10	10	10	10	0	10
Feed and Residual (1000 MT)	1050	1170	1500	1490	0	1460
FSI Consumption (1000 MT)	100	100	100	100	0	100
Total Consumption (1000 MT)	1150	1270	1600	1590	0	1560
Ending Stocks (1000 MT)	120	120	110	170	0	200
Total Distribution (1000 MT)	1280	1400	1720	1770	0	1770
Yield (MT/HA)	0	0	0	0	0	0
						<u> </u>

(1000 HA), (1000 MT), (MT/HA)

MY = Marketing Year, begins with the month listed at the top of each column

TY = Trade Year, which for Corn begins in October for all countries. TY 2024/2025 = October 2024 - September 2025

Attachments:

No Attachments