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Report Highlights:

Jordan's MY 2023/24 wheat imports are forecasted to reach 1.25 million MT -- with Ukraine, Romania, and Russia dominating wheat imports in the first seven months of calendar year 2023. Jordan has begun to diversify its sources for barley (bringing in more from Australia and less from traditional European suppliers). Jordanian corn imports are still dominated by Argentina, supplying nearly 60 percent of all corn in calendar year 2022, and Brazil, with the United States supplying only a nominal volume. Jordan increasingly sourced rice from India last year, given its price advantages, but the United States remains a competitive supplier in the market.

Disclaimer: Unless stated otherwise, data in this report are based on the views of Foreign Agricultural Service Analysts in Jordan and are not official USDA data.

Executive Summary:

The Hashemite Kingdom of Jordan (Jordan) is among the poorest water-resourced countries on earth. Water scarcity is the limiting factor for the country's ability to grow crops. Accordingly, Jordan is a net food importing country, and Jordan's domestic production of cereals is negligible. Jordan is roughly 95 percent reliant on imports to meet its wheat and barley consumption needs, and 100 percent reliant on imports to meet its rice consumption needs.

FAS Amman (Post) forecasts Jordan's wheat production in marketing year (MY) 2023/24 (i.e., July 2023 to June 2024) to reach 30,000 metric tons (MT), while imports are forecast to reach 1.25 million MT. The Government of Jordan (GoJ) has gradually been implementing a [National Food Security Strategy](#) based on ensuring the availability of sufficient strategic stocks of basic food items. The program aims to "expand Jordan's storage capacity of strategic food stuff{s}, diversify import sources, develop contingency and emergency plans, especially those related to imports, and provide an environment that is convenient for the public sector to work smoothly and easily."¹

MY 2023/24, Jordan's wheat consumption is forecast to total 975,000 MT. Wheat imports are not expected from the United States due to higher freight costs relative to other origins, especially the Black Sea region (which is anticipated to remain the predominant supplier during the Marketing Year).

Jordanian MY 2023/24 (i.e., July 2023 to June 2024) barley consumption, which predominantly goes to feed, is expected to total 950,000 MT, pressured by a 2023 FMD disease outbreak in the country.²

MY 2023/24 (i.e., July 2023 to June 2024) corn imports are forecast to decrease to 700,000 MT due to the FMD outbreak, with U.S. origin corn expected to supply 100,000 MT. Imports and consumption fluctuations are expected due to the market instability stemming from Russia's invasion of Ukraine, coupled with fears of feed shortages; all of which are driving purchase decisions.

FAS Amman forecasts Jordan's imports of rice in MY 2023/24 (January 2024 to December 2024) to total 220,000 MT, with U.S. rice (forecasted at 70,000 MT) maintaining its position as the second largest supplier of rice to the Jordanian market (although U.S. supplies were recently constrained by the California drought and the container freight crisis). U.S. industry market development efforts continue to pay dividends in the Jordanian market.

¹ See Page 27 of <https://jordan.un.org/en/download/117388/201684>.

² For additional information, see, e.g., [JO2023-003: FMD outbreak in Jordan](#).

Wheat

Table 1. - Production, Supply and Distribution:

Wheat	2021/2022		2022/2023		2023/2024	
	Jul-21		Jul-22		Jul-23	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Market Year Begins						
Jordan						
Area Harvested (1000 HA)	30	30	30	30	30	30
Beginning Stocks (1000 MT)	526	526	422	791	465	1100
Production (1000 MT)	28	0	30	30	35	30
MY Imports (1000 MT)	983	1250	1100	1300	1250	1250
TY Imports (1000 MT)	983	1250	1100	1300	1250	1250
TY Imp. from U.S. (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	1537	1776	1552	2121	1750	2380
MY Exports (1000 MT)	100	10	100	76	100	90
TY Exports (1000 MT)	100	10	100	76	100	90
Feed and Residual (1000 MT)	15	15	15	15	0	15
FSI Consumption (1000 MT)	1000	960	1000	930	1000	960
Total Consumption (1000 MT)	1015	975	1015	945	1000	975
Ending Stocks (1000 MT)	422	791	437	1100	650	1315
Total Distribution (1000 MT)	1537	1776	1552	2121	1750	2380
Yield (MT/HA)	0.9333	0	1	1	1.1667	1
(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 2023/2024 = July 2023 - June 2024						

NOTE: "New Post" data reflects FAS/Cairo's assessments and are NOT official USDA data.

Production:

In general, Jordan's wheat production is negligible. In MY 2022/23, as a result of normal rainfall, production remained average (i.e., 30,000 MT), providing close to one week of the country's annual consumption needs. Jordanian wheat yields, however, are being pressured year-on-year due to the increasing threat of drought -- driven by climate change, desertification, and the dilution of seed genetics.

Consumption:

In MY2023/24, FAS/Amman forecasts Jordanian wheat consumption to total 975,000 MT. Jordan's population continues to grow at an annual rate of 2.2 percent.³ Local pita bread is the main staple of the Jordanian diet -- the most basic food in the Middle East. Keeping bread prices affordable is an important objective of the government of Jordan (GOJ) and they have managed to reform (from product subsidies

³ See <https://jordantimes.com/news/local/jordans-population-reached-11302-million-end-2022#:~:text=Key%20to%20Jordan's%20population%20growth,and%20706%20people%20per%20bed.>

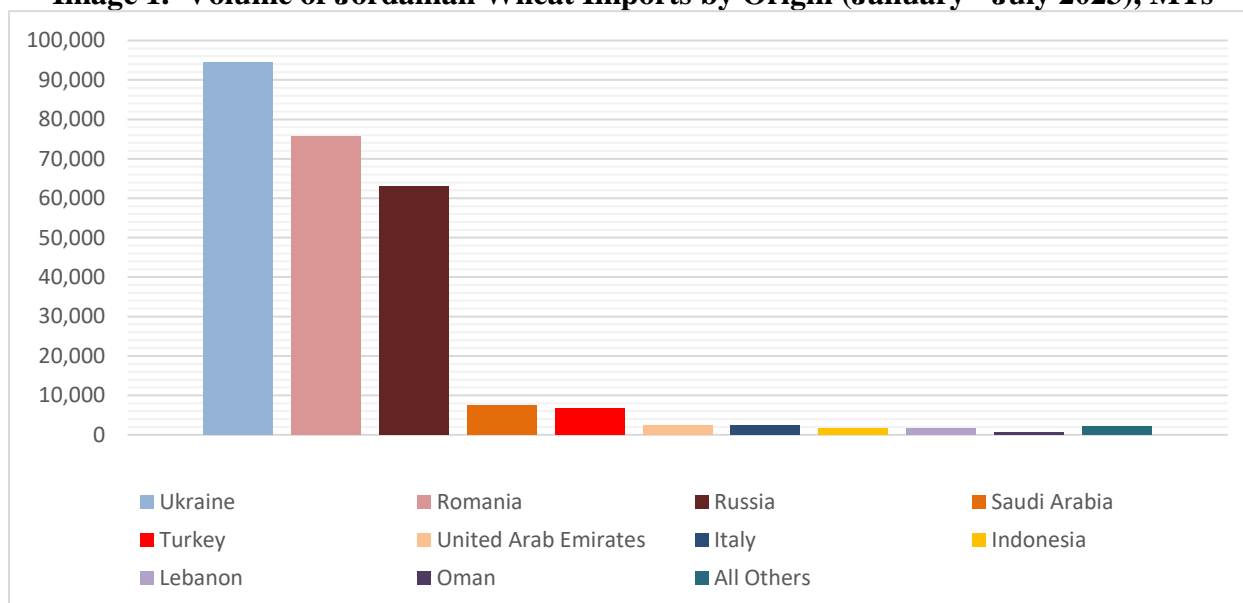
to a direct beneficiary subsidy) the bread subsidy while maintain stability.⁴ Additional information on this topic can also be found in the policy section of this report.

Trade:

In MY 2023/24, wheat imports are expected to total 1.25 MMT. The Jordanian expansion of storage to mitigate challenges associated with Russia’s invasion of Ukraine and COVID-19 has helped protect the small nation from food shortages. The government has reserves of at least 12 months’ consumption. This initiative has allowed the country to weather the global food crisis more efficiently.

Under its procurement practice, the GoJ issues purchase orders based on international wheat future prices and availability. The top wheat supplier to Jordan in the first seven months of calendar year 2023 was Ukraine, followed by Romania and Russia. However, Russia withdrew from the Black Sea Grain Initiative in mid-July 2023.⁵ During this time of conflict in the Black Sea region, Romanian wheat is being consolidated and transshipped through neighboring countries -- including Hungary, Bulgaria, Serbia, etc. Jordan is not expected to import wheat from the United States in MY2023/24 unless innovative marketing programs are implemented.

Image 1. Volume of Jordanian Wheat Imports by Origin (January - July 2023), MTs



Source: Trade Data Monitor

Stocks

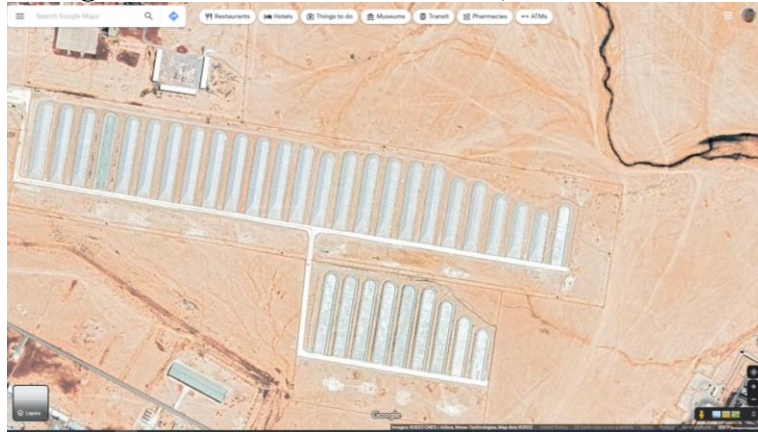
FAS Amman forecasts MY 2023/24 beginning wheat stocks at 1.1 MMT. However, Jordan continues to develop a strategic inventory of wheat - aiming to hold enough wheat for two years to buffer against market instability/volatility. Accordingly, MY 2023/24 ending stocks are expected to increase to 1.3 MMT.

⁴ For more information, see [JO18001: Jordan Ends Bread Subsidies, Implements USDA-Style SNAP EBT Program](#).

⁵ NOTE: Russia withdrew from the Black Sea Grain Initiative in mid-July 2023. See, e.g., <https://www.atalayar.com/en/articulo/society/russian-withdrawal-of-grain-exports-triggers-regional-food-crisis/20230720170931188549.html> and <https://news.un.org/en/story/2023/07/1138752>.

The GoJ has finalized its project to expand local silo capacity at the new port in Aqaba; with a Panamax carrying capacity where the new silos are located. As projects are being completed, they are also immediately utilized to capacity. An additional 300,000 MT has been constructed as bunker storage (a traditional storage method historically used for paddy rice). There is bunker storage in different parts of Jordan to meet its food security objectives, not only for Jordan but also for the region. Jordan's King has repeatedly noted his aim for his country to be a regional hub for food security.

Image 2. Example of Storage Bunkers Outside of Amman, Jordan



Source: Google

Policy:

The GoJ's [Ministry of Industry, Trade, and Supply \(MIT\)](#) is the sole Jordanian customer of foreign wheat which is purchased through a competitive process by the local representatives of international companies. The process includes purchasing the lowest price within preset specifications. On many occasions, however, MIT has turned down offers when technical staff are convinced the price offered is higher than the average market price or if short-term future prices are anticipated to improve.

Jordan's wheat bread, known as "unified bread" (in Arabic as *mowahad*), is now minimally subsidized by the government. The GoJ has reformed the bread subsidy system to ensure benefits go directly to low-income families by providing direct cash subsidies. According to the GOJ, the policy enabled the government to improve the efficiency of the subsidy program and eliminated 90 percent of consumption waste and subsidy abuse (by placing the responsibility for using the subsidy on families who can now make their own bread buying decisions).

MIT sets the price for selling the Unified (*mowahad*) bread at \$.45 per kg (compared to \$.22 per kg before the subsidy reforms were implemented). Whenever there is an increase in the cost of an input used for making bread, such as fuel, electricity tariffs, or the minimum wage payment, the GoJ lowers the flour price to compensate for the increased cost. For example, last August, the GoJ lowered the flour price by \$6 per MT to mitigate against the increase in fuel and electricity prices.

Marketing:

MIT sells wheat to Jordanian mills at the government's preset price (current preset price is \$196.30), which is based on a moving average of inventoried wheat costs, including purchasing, storage, and transportation costs (current inventoried cost is \$474.40). The mills subsequently sell the flour to bakers under MIT's supervision. The reforms in the subsidy system closed gaps where bakers previously

benefited by channeling the subsidized flour into other unsubsidized purposes. The reform has narrowed the gaps so that this practice is not feasible anymore. Many businesses that were abusing and dependent on the subsidy system were phased out.

The Jordanian bread cost is \$776.60 per MT, sold to consumers at \$452 per MT (when highly subsidized) and at \$565 per MT (for the least subsidized consumers).

Barley

Table 2. Production, Supply and Distribution:

Barley Market Year Begins Jordan	2021/2022		2022/2023		2023/2024	
	Jul-21		Jul-22		Jul-23	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	25	25	25	25	25	25
Beginning Stocks (1000 MT)	66	66	239	490	283	665
Production (1000 MT)	25	24	25	25	25	25
MY Imports (1000 MT)	1278	1250	900	1100	1000	1000
TY Imports (1000 MT)	1023	1250	800	1100	1000	1000
TY Imp. from U.S. (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	1369	1340	1164	1615	1380	1690
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)	1130	800	1000	900	900	900
FSI Consumption (1000 MT)	0	50	0	50	0	50
Total Consumption (1000 MT)	1130	850	1000	950	900	950
Ending Stocks (1000 MT)	239	490	164	665	408	740
Total Distribution (1000 MT)	1369	1340	1164	1615	1308	1690
Yield (MT/HA)	1	0.96	1	1	1	1

(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 2023/2024 = October 2023 - September 2024

NOTE: "New Post" data reflects FAS Cairo's assessments and are NOT official USDA data.

Production:

Jordanian production of barley is negligible, as the country's water availability severely hampers barley production. Most barley in Jordan is used for animal grazing during its early growth stages.

Consumption:

The current rainy season looks promising, allowing sheep to spend more time grazing on rangeland. Accordingly, FAS/Amman forecasts barley consumption to total 950,000 MT in MY 2023/24. The local (Awasi) sheep are known for their exquisite palatability in the Gulf Cooperation Council (GCC)

countries and attract premium prices. Consequently, Jordan depends on lower priced imported sheep, to meet its domestic needs, mainly imported from Australia, New Zealand, and Romania.

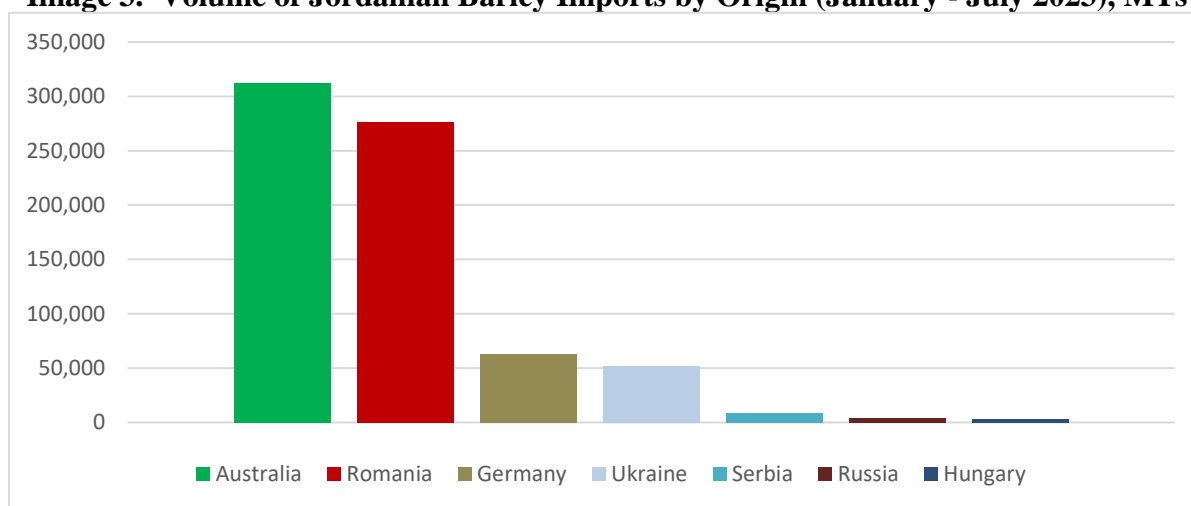
Most of the imported barley is used for feed for sheep and, to a lesser extent, for dairy cattle and poultry rations. Barley use has dropped significantly after the GoJ adopted an animal tag system 10 years ago. Under the system, each shepherd receives subsidized barley (\$50/MT) according to the actual number of tagged animals in his/her possession.

Trade:

Jordanian MY 2023/24 barley imports are expected to total 1 MMT, slightly below MY 2022/23 levels. Despite a GOJ policy to build up reserves to protect against drought, the Russian invasion of Ukraine has led to fluctuations in market prices. Additionally, the aforementioned FMD outbreak is expected to limit the production of both grazing sheep and dairy cows, suppressing some of the demand for imported barley.

Jordan’s traditional barley suppliers are Black Sea basin countries, but increased diversification has been seen in recent years. However, no barley imports from the United States have been recorded for nearly two decades.

Image 3. Volume of Jordanian Barley Imports by Origin (January - July 2023), MTs



Source: Trade Data Monitor

On a monthly basis a government committee from the Ministry of Agriculture (MoA), MIT, and other GoJ agencies convene to decide upon the allocated barley subsidy, assessing the current economic conditions, the prevailing weather, the season, and any other relevant factors to set the barley price for herders. The MIT usually calculates the expenses of government services associated with transportation, storage, and other logistics associated with barley delivery, then calculates a moving average of the cost (including the purchase price, then discounting the subsidy).

The system allows for arbitrage when significant price swings occur, as traders can quickly take advantage and profit by offering a lower price than the government’s set price, effectively undercutting

the program. The percentage of that trade varies but is usually less than 10 percent of the barley trade size.

Stocks:

FAS Amman expects MY 2023/2024 stocks to increase to 740,000 MT as the government endeavors to grow its stocks to bolster food security.

Policy:

The MoA has announced it will reduce the number of sheep and goats registered to receive subsidized barley by one million head. The MoA believes the 4.9 million head to be inflated as the national animal tag system shows the country is home to less than 3.9 million head. Accordingly, the MoA is committed to protecting farmers by expanding the feed ration per head from 20 kg to 25 kg during the winter season, breeding season, and period of no grazing (November through end of February). Only sheep and goats owners receive subsidized barley at a discounted price (excluding cattle and poultry farmers).

Marketing:

MIT is the predominant barley importer in Jordan. MIT solicits bids through traders that meet the stipulated standards. Once it purchases the barley, MIT distributes and sells the barley at the subsidized price to herders based on the number of tagged animals that are recorded in the national database.

Corn

Table 3. Production, Supply and Distribution:

Corn Market Year Begins Jordan	2021/2022		2022/2023		2023/2024	
	Oct-21		Oct-22		Oct-23	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	1	0	1	0	1	1
Beginning Stocks (1000 MT)	40	40	25	70	25	100
Production (1000 MT)	10	10	10	10	10	10
MY Imports (1000 MT)	715	1000	800	1000	700	700
TY Imports (1000 MT)	715	1000	800	1000	700	700
TY Imp. from U.S. (1000 MT)	0	100	0	0	0	100
Total Supply (1000 MT)	765	1050	835	1080	735	810
MY Exports (1000 MT)	5	20	20	25	5	25
TY Exports (1000 MT)	5	20	20	25	5	25
Feed and Residual (1000 MT)	725	950	780	950	700	700
FSI Consumption (1000 MT)	10	10	5	5	5	5
Total Consumption (1000 MT)	735	960	785	955	705	705

Ending Stocks (1000 MT)	25	70	30	100	25	80
Total Distribution (1000 MT)	765	1050	835	1080	735	810
Yield (MT/HA)	10	0	10	0	10	10
(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 2023/2024 = October 2023 - September 2024						

NOTE: "New Post" data reflects FAS Cairo's assessments and are NOT official USDA data.

Production:

Jordan's corn production is negligible, with annual production totaling less than 10,000 MT. Domestically produced corn is mainly used for human consumption.

Consumption:

Jordanian MY 2023/24 corn consumption is forecast at 705,000 MT, driven by fears of a recurrence of the country's recent FMD outbreak, specifically in dairy cattle. In contrast, the Jordanian poultry industry is optimistic that local demand for its products will remain strong and the explosive growth in poultry consumption has resulted in three consecutive years of oversupply, with persistent low prices that put significant pressure on many small and medium sized farmers.

Jordan's poultry industry is considered the biggest agri-business sector in the country, with an investment value of roughly \$4.5 billion. Local broiler production is estimated at 200,000 MT per year, while egg production increased by more than 60 percent over the last two years, (nearly one billion eggs are being produced per year). Jordanian aquaculture is relatively limited but growing.

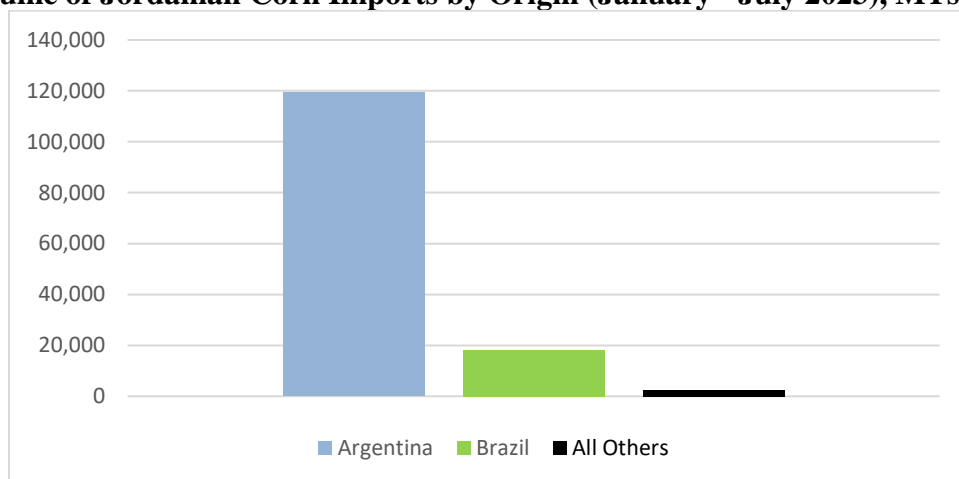
Trade:

FAS Amman forecasts 700,000 MT of corn imports in MY 2023/24, down from one million MT in MY 2022/23. Earlier this calendar year, Jordanian media reported the Cooperative Society for Cattle Owners and Milk Producers President, Ali Ghabayen, noted "dozens of {FMD} infections have been recorded among cows at farms in Dulail and the nearby Halabat, with some farms reaching a 100-percent rate of infection."⁶ During the first seven months of calendar year 2023, Jordanian corn imports were down 55 percent, by volume, when compared to the same period in 2022.

The Jordanian market is still dominated by Argentina, supplying nearly 60 percent of all corn in calendar year 2022, and Brazil, with the United States supplying only a nominal volume (figure 3). [The Jordan-U.S. Free Trade Agreement](#) no longer provides an advantage for U.S. corn as all imported corn is exempt from tariffs. Additionally, South American corn, while believed by farmers to have less nutritional value than other sources, arrives in a more desirable form -- a clear, non-dusty grain.

⁶ See <https://www.jordannews.jo/Section-109/News/Foot-and-mouth-disease-has-spread-to-1-6-of-Kingdom-s-cattle-26710>

Image 4. Volume of Jordanian Corn Imports by Origin (January - July 2023), MTs



Source: Trade Data Monitor

Stock

Historically only a nominal volume of corn was stored on-farm by poultry farmers to meet their monthly needs. However, the fear of market instability, brought on by Russia’s invasion of Ukraine, has increased GoJ interest in building corn stocks in the long-term. Some investors have reportedly enlarged their storage facilities to build stocks.

Marketing:

Corn in Jordan is imported and distributed through private sector traders who usually unload corn directly to trucks then immediately deliver it to dairy and poultry farms.

Rice

Table 4. Production, Supply and Distribution:

Rice, Milled	2021/2022		2022/2023		2023/2024	
	Jan-22		Jan-23		Jan-24	
	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)	16	16	16	21	16	20
Milled Production (1000 MT)	0	0	0	0	0	0
Rough Production (1000 MT)	0	0	0	0	0	0
Milling Rate (.9999) (1000 MT)	0	0	0	0	0	0
MY Imports (1000 MT)	220	220	220	219	230	220
TY Imports (1000 MT)	220	220	220	219	230	220
TY Imp. from U.S. (1000 MT)	22	38	0	31	0	70

Total Supply (1000 MT)	236	236	236	240	246	240
MY Exports (1000 MT)	0	5	0	5	0	5
TY Exports (1000 MT)	0	5	0	5	0	5
Consumption and Residual (1000 MT)	220	210	220	215	225	210
Ending Stocks (1000 MT)	16	21	16	20	21	25
Total Distribution (1000 MT)	236	236	236	240	246	240
Yield (Rough) (MT/HA)	0	0	0	0	0	0
(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 Rice, Milled begins in January for all countries. TY 2023/2024 = January 2024 - December 2024						

NOTE: "New Post" data reflects FAS Cairo's assessments and are NOT official USDA data.

Production:

Jordan is one of the driest countries in the world and does not produce rice due to the crop's high water demands.

Consumption:

Jordanian MY2023/24 rice consumption is forecasted to total 210,000 MT. Rice is a Jordanian diet staple and is widely used in one of the country's traditional festive dishes called "Mansaf." Jordan has an average annual consumption of nearly 20 kg of rice per person. The preferred variety is medium grain (Camolino), which accounts for more than 50 percent of imports, followed by long grain white rice, and Basmati and Jasmine rice.

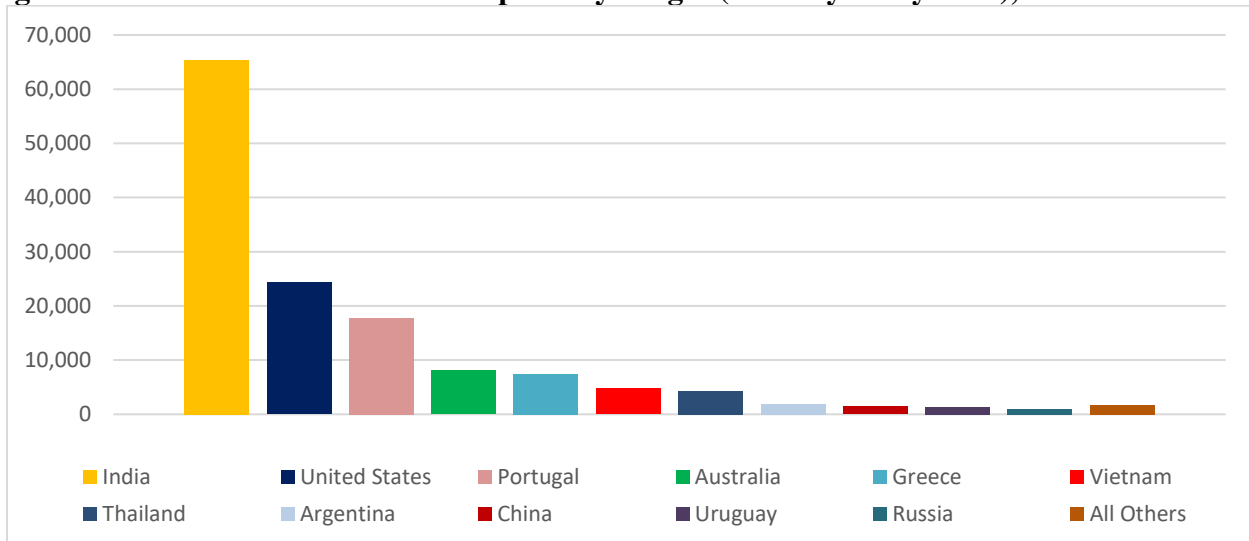
Trade:

MY2023/24 imports are expected to relatively unchanged at 220,000 MT. The U.S. share of Jordanian rice imports plunged down by more than 44 percent to 38,000 MT in MY2022/23. Increased container freight costs, a shortage of supply in the United States, and increased international competition challenged the U.S. medium-grain presence in the market. Indian rice accounted for a larger share of the market last year (37 percent of the volume of imports in calendar year 2022, compared to 31 percent in 2021) given its price competitiveness.

NOTE: The Consumption of rice in Jordan fluctuates due to the time of year (Ramadan is a popular time to consume rice) and based on the buying power of consumers.

The top rice suppliers to Jordan are India, whose market share has tripled in recent years, the United States, Portugal, Australia, Greece, Vietnam, and Thailand (figure 4). Most Asian rice is long grain that falls into two categories: 1. long grain white rice which is of lower price and constitutes most of the Asian imports, and 2. aromatic and basmati rice that commands a premium over the medium rice (but is less preferred in local recipes).

Image 5. Volume of Jordanian Rice Imports by Origin (January - July 2023), MTs



Source: Trade Data Monitor

Stocks:

Since rice trade is managed by the private sector, and there is no government policy on strategic stocks for this commodity, minimal stocks are maintained in Jordan.

Policy:

Since the import duty on rice is zero for all origins, there are no advantages offered by the U.S.-Jordan Free Trade Agreement.

Marketing:

Rice in Jordan is imported and distributed through private sector traders that package and provide a continuous supply to retailers as soon as it is discharged from the vessels.

Attachments:

No Attachments