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Report Highlights:

FAS Amman (Post) forecasts Jordan's wheat imports in MY 2023/24 to reach 1.25 million MT. The Russian war on Ukraine directly impacts Jordan, as most of Jordan's wheat and barley come from Black Sea. U.S. corn and rice imports are forecast at 100,000 MT and 70,000 MT respectively, and the U.S. is the leading supplier of rice to the Jordanian market.

Executive Summary:

The Hashemite Kingdom of Jordan is among the poorest water-resourced countries on earth. Water scarcity is the limiting factor of the country's ability to grow crops. Jordan is classified as a net food importing country, and Jordan's domestic production of cereals is negligible.

FAS Amman (Post) forecasts Jordan's wheat production in marketing year (MY) 2023/24 to reach 30 thousand metric tons (TMT). Wheat imports are forecast to reach 1.25 million MT.

The Government of Jordan (GoJ) has gradually been implementing a practical food security strategy based on purchasing wheat and barley and building up an inventory inside the country.

Barley consumption is expected to decrease less than 950 TMT, due to an FMD disease outbreak. FAS Amman forecasts Jordan's imports of U.S. rice in MY 2023/24 at 70 TMT and U.S. corn at 100 TMT, respectively, with U.S. rice maintaining its position as the leading supplier of the Jordanian market, although the supply was shortened by the California drought and the container freight crisis.

In MY 2023/24, Jordan's wheat consumption is forecast to reach 975 TMT. Wheat imports are not expected from the United States due to higher freight costs relative to other origins, especially the Black Sea region.

In MY 2023/24, corn imports are forecast to decrease to 700 TMT due to the FMD outbreak, with U.S. origin corn expected to supply 100,000 MT. Imports and consumption fluctuation is expected due to the Black Sea war impact on market instability, coupled with fears of feed shortage; all are driving purchase decisions.

Rice imports will amount to 220,000 MT, of which the U.S. will be the top supplier with 70,000 MT. U.S. industry market development efforts continue to pay dividends.

Commodities:**Wheat****Production:**

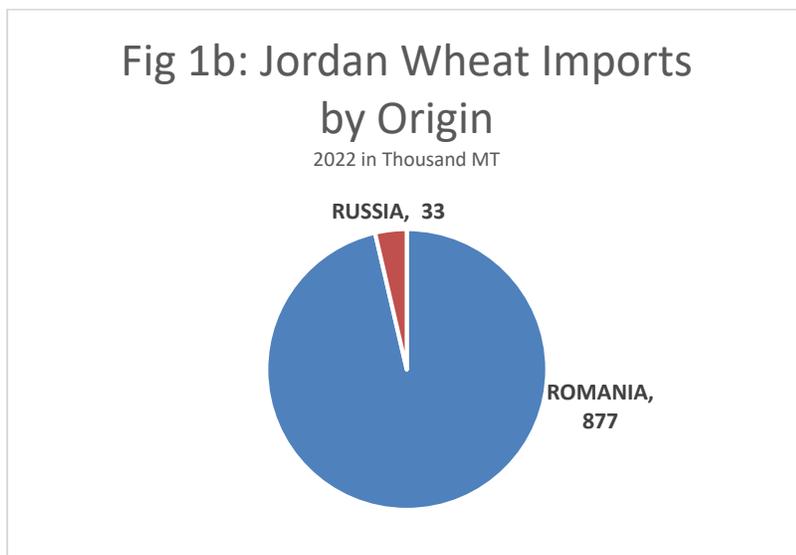
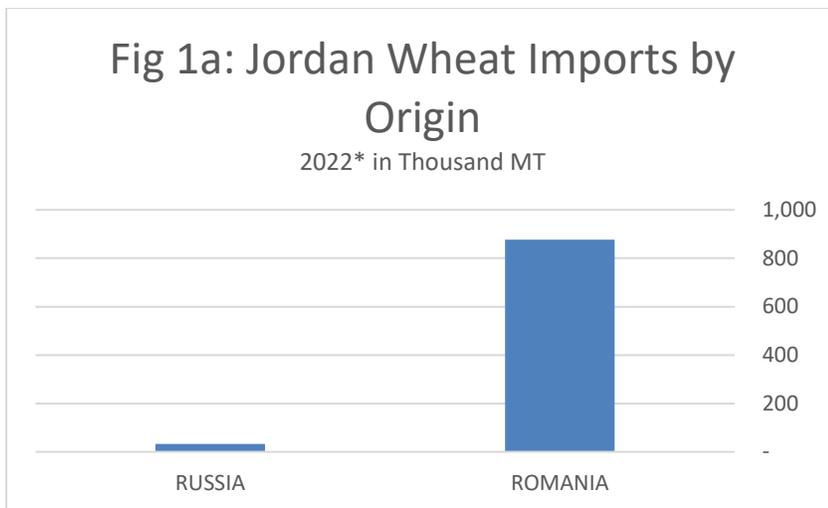
In general, Jordan's wheat production is negligible. In MY 2022/23, due to average rainfall, production is expected to stay at 30 TMT, providing close to one week of the country's annual consumption needs. Wheat yield is declining due to prevailing drought conditions over the last few years. The decline is driven by climate change, desertification, and seed genetics dilution.

Consumption:

In MY2023/24, FAS Amman forecasts consumption at 960 TMT, unchanged from MY 2022/23. Jordan's population in 10 years has almost doubled from 6.2 in 2010 to 11.3 million inhabitants in 2023. 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 GOJ and they have managed to reform (from product subsidy to a direct beneficiary subsidy) the bread subsidy without causing political unrest. More information on this topic can be found in the policy section of this report.

Trade:

In MY 2023/24, wheat imports are expected to rise to 1.25 MMT to meet the expansion of storage to mitigate challenges associated with the Black Sea war and COVID-19. The government has to build up reserves to at least 15 months' worth of consumption. This endeavor allowed the country to weather the food crisis more easily. The GoJ decides upon purchase orders based on international wheat future prices and availability. The top wheat origin is expected to remain unchanged from MY 2020/21 with Romania as the leading port of supply. During this time of conflict in the region, Romanian wheat is being consolidated and transshipped through neighboring countries, including Russia, Ukraine, Hungary, Bulgaria and Serbia. The war on Ukraine will change the export map into a new shape. Jordan is not expected to import any wheat from the United States in MY2023/24 except if innovative marketing ideas are implemented.

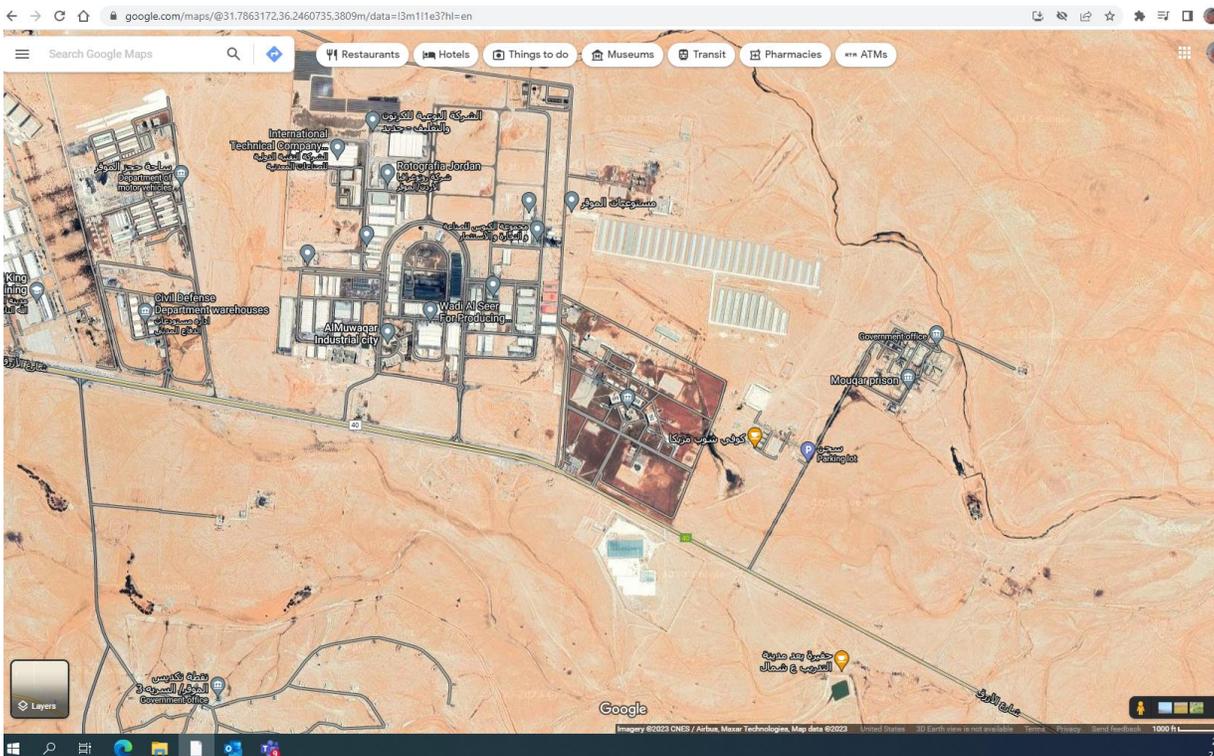


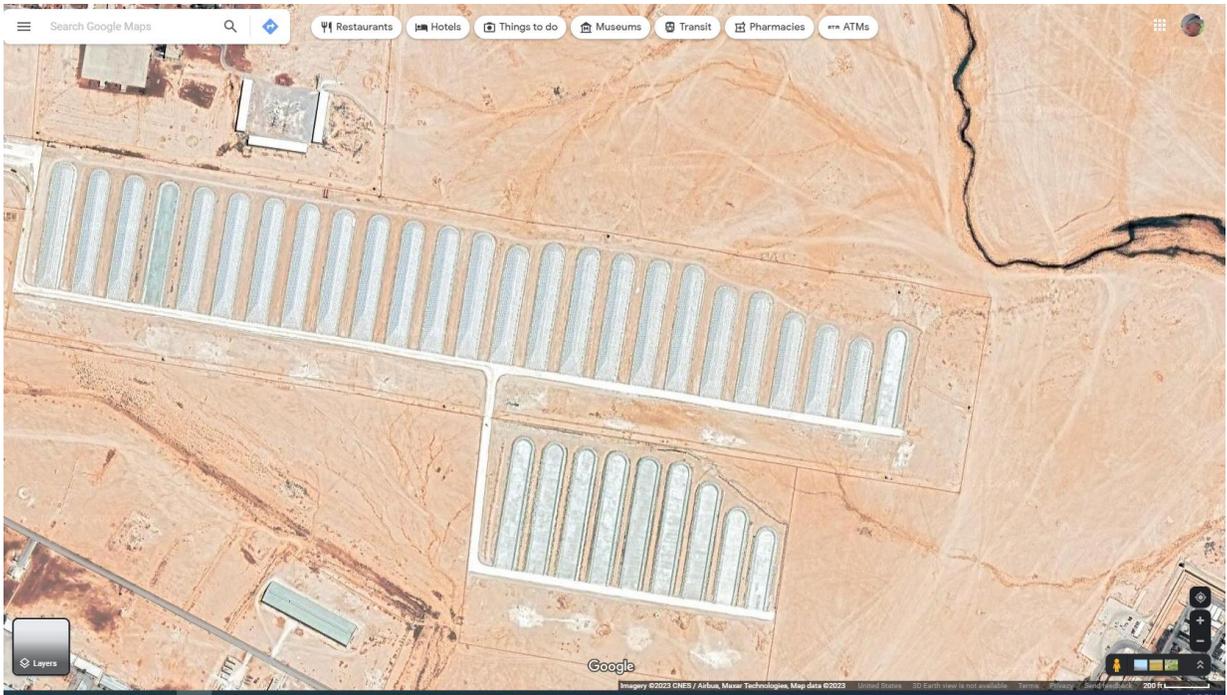
Source: Jordan Department of Statistics (JDOS) *First 10 months

Stock

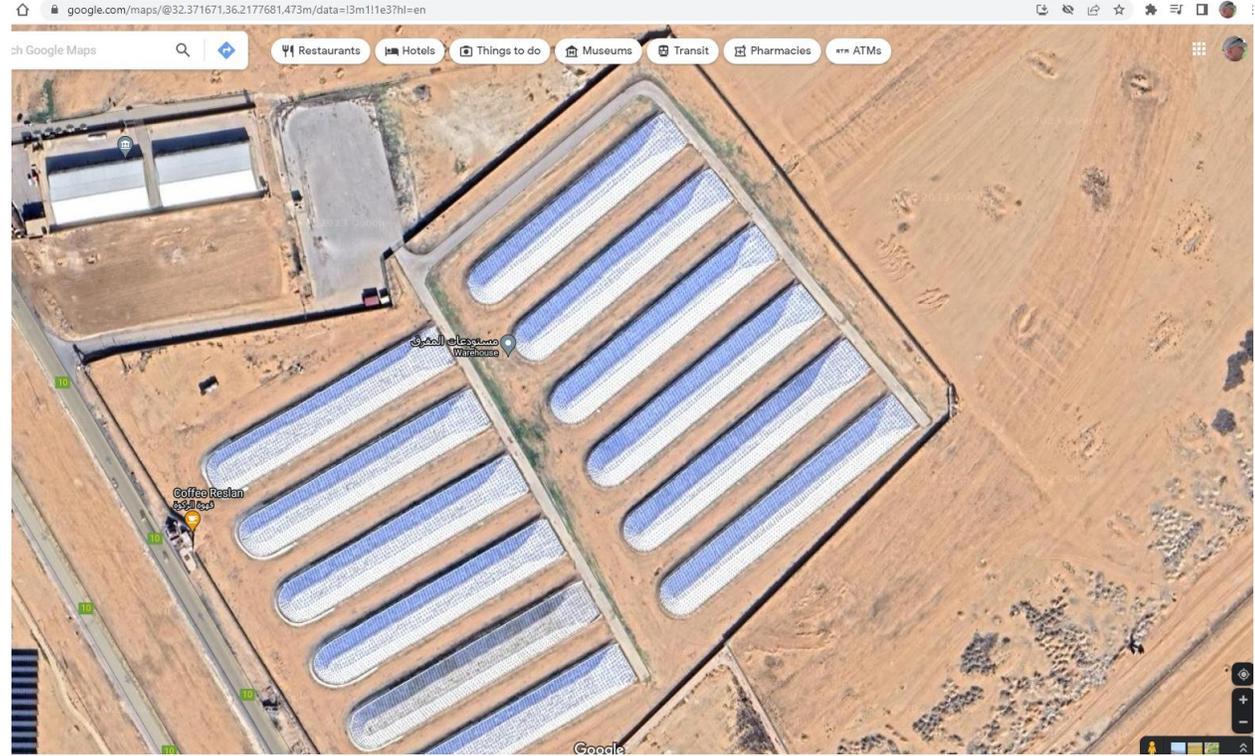
In MY MY2023/24, Post forecasts beginning stocks at 1131 TMT inside the country and 200-300 TMT is contracted for (purchased) at sea and uploaded at the port of origin. Jordan is building up a strategic inventory enough for two years to confront market instability relating to Black Sea turmoil. MY 2024 ending stock is expected at 1.35 MMT.

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 immediately utilized to capacity. An additional 300 TMT 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 to serve the region. The Jordan Monarch has repeatedly announced his country to be a regional hub for food security.





Bunkers near Amman in the middle of Jordan



Bunkers in Northeast Jordan

Policy:

The GoJ's [Ministry of Industry, Trade and Supply \(MIT\)](#) is the sole customer of wheat from international suppliers through a competitive process by the local representatives of international companies. The process includes purchasing the lowest price within the preset specifications. On many

occasions MIT turned down the purchase process whenever the technical staff is convinced the offered price is higher than the average market or that near future prices would be better.

Jordan's wheat bread, known as "unified bread" (in Arabic as *mowahad*), is now minimally subsidized by the government, the subsidy is directed towards eligible Jordanian citizens rather than to the product (bread). The GoJ has reformed the subsidy system to target benefits 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 waste in consumption and subsidy abuse by placing the responsibility of the subsidy on the specifically targeting poor families to make their own bread buying decisions with their cash payments.

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

Marketing:

MIT sells wheat to mills at the government's preset price (currently at \$196.30), which is based on a moving average of the inventoried wheat's cost, including purchasing, storage, and transportation costs (current 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 flour is sold to bakers at two prices: the all-purpose flour is sold at a market price, which is the markup cost on milling fees from the wheat sold by the government (at the beginning of 2022 at a market price of wheat is \$212 per MT), and the subsidized flour is sold at \$261-282 per MT. MIT lowers the price of the subsidized flour (for subsidized bread) in the case when there is an increase in the fuel price at a proportional rate (to make up on bakers for the average fuel price increase used in baking). Fluctuations in the price of oil do not affect the subsidized price.

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

Table 1.
Production, Supply and Distribution:

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

Commodities:

Barley

Production:

Production of barley is negligible. Prevailing drought is severely affecting barley production. Most barley is used for animal grazing during its early growth stages.

Consumption:

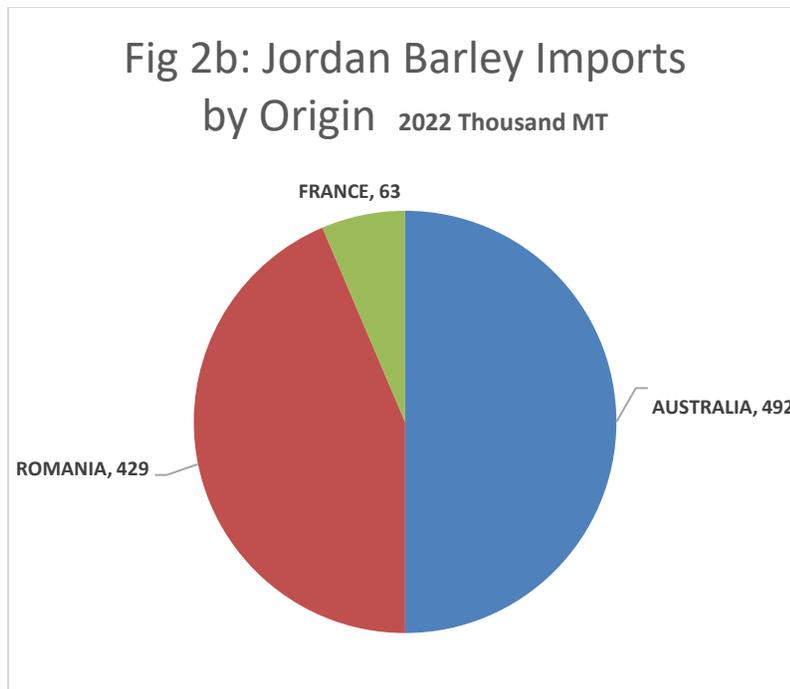
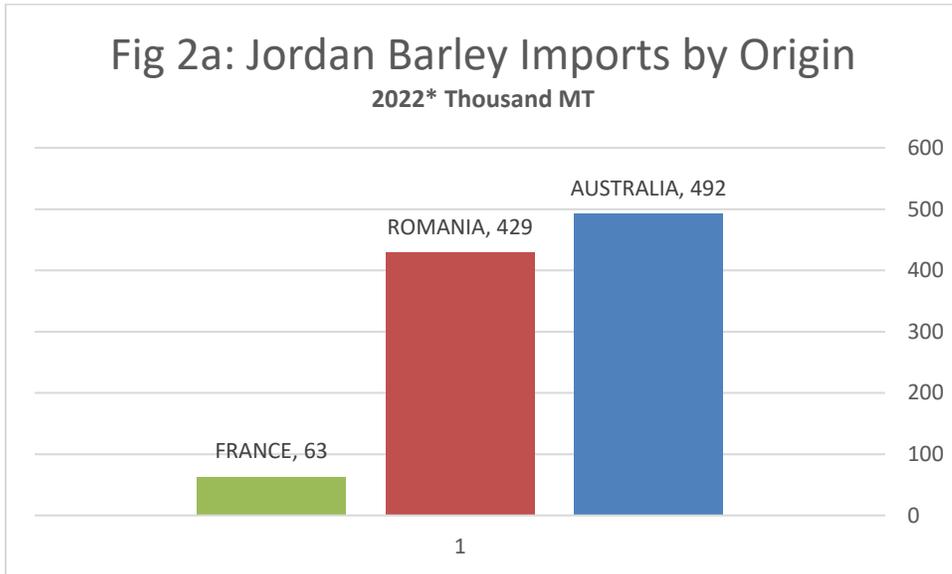
The current rainy season looks promising, so sheep will have more time grazing on rangeland, therefore post forecasts barley consumption will decrease in MY 2023/24 to 1000 TMT due to abused of the subsidy system.

The local (Awasi) sheep are known for their exquisite palatability in the 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 barley is used for sheep feed and to a lesser extent in dairy cattle and poultry rations. Barley use has dropped significantly after the GoJ adopted an animal tag system 10 years ago. Each shepherd receives subsidized barley according to the actual number of tagged animals. GoJ is subsidizing each MT of imported barley at \$50.

Trade:

In MY 2023/24, total barley imports are expected at 1000 TMT, lower than MY 2022/23. Despite Government of Jordan policy to build up a reserve inside Jordan to face future drought, Black Sea war

and consequent market fluctuations, a decrease in imports is expected in response to FMD outbreak that will limit the production of both grazing sheep and dairy cows. Barley suppliers are Black Sea basin countries with Romania being the top supplier. No barley imports from the U.S. have been recorded for two decades.



Source: JDoS-*First 10 months

The GoJ's purchasing price for barley is decided by a GoJ committee in response to current variables that does include but not limited to prevailing weather. The GoJ sets the selling price of the subsidized barley, currently \$247 per ton, and the non-subsidized barley is \$388 per ton. Any dairy farmer who does buy it at \$388 per ton, the same price is paid if the sheep herder wants to buy more than his allocated ration.

On a monthly basis a government committee from Ministry of Agriculture (MoA), Ministry of Industry and Trade (MIT) and other GoJ agencies convene to decide upon the subsidy as allocated by the GoJ approved budget, the current economic conditions, the prevailing weather, the season and any other consideration then set the barley price to herders, usually MIT calculate the expenses of government services associated with transportation, storage and other logistics associated with barley delivery, then calculate the moving average of the cost including the purchase price, then discount 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% of the barley trade size.

Stocks:

Post expects in MY 2023/2024 an increase in GOJ's inventory as a government policy, beginning stocks are expected to increase to at 665,000 MT and end at 740,000 MT. The GoJ policies aim to increase the inventory for food security reasons heightened by market volatility, especially price and freight costs fluctuations due to Black Sea war impacts on international markets, yet consumption could decrease due to FMD outbreak.

Barley's inventory volume is within the GoJ's policy of strategic stocks that requires meeting 12 months of consumption needs, both inside Jordan and contracted for.

Policy:

The Ministry of Agriculture (MoA) has announced it will cut down an extra one million head of sheep and goats registered to receive the subsidized barley. MoA considered the 4.9 million head number an abuse to the subsidy system and farmers must prove their real herds head count, according to records and the animal tag system is less than 3.9. In return, MoA is committing itself to make it up to farmers by increasing the subsidized ration per head from 20 kg to 25 kg during the winter seasons, breeding season, and no grazing (November through end of February).

Only sheep and goats owners receive subsidized barley at a discounted price. This program excludes cattle and poultry farmers from receiving subsidized barley.

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 database.

**Table 2.
Production, Supply and Distribution:**

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

**Commodities:
Corn**

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:

In MY 2023/24, corn consumption is forecast at 705 TMT, a decrease from USDA forecast in MY 2022/23 consumption of 785 TMT, driven by fears of FMD outbreak, specifically in dairy cattle. The poultry industry is optimistic of the local demand outlook and is trying to meet local demand. The explosive growth has resulted in three consecutive years of oversupply of poultry with persistent low prices that put many small and medium sized farmers out of business.

Jordan’s poultry industry is considered the biggest agri-business sector, with an investment value of around \$4.5 billion. Local broiler production is currently around 200 TMT per year, while egg production increased more than 60 percent over the last two years, currently producing almost a billion eggs. Aqua agriculture is relatively small but growing rapidly

Trade:

Post forecasts imports at 700 TMT in MY 2023/24, one third decrease compared to MY 2022/23, U.S. origin corn imports are forecast at 100-200 TMT. After Post engaged with GoJ to improve sampling and

testing of corn into a more trade friendly system, a GoJ interagency committee has been formed to review the current system. The result was relaxation on Broken Kernels Percentage (BKP), and accepting FGIS certificate on BKP. The decree has been incentivized by the shortage of supply. Should the process go in the right direction, it would increase imports of U.S. corn.

The Jordanian market is still dominated by Argentina, supplying 60 percent of all corn, with the United States supplying only 5 percent (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 America's corn, although less desirable by farmers due to their own beliefs; is less nutritive, yet it comes in a more desirable form; a clear, non-dusty grain. Argentine exporters are more versatile, accommodating shipments of 10-15 TMT that the market requires.

Stock

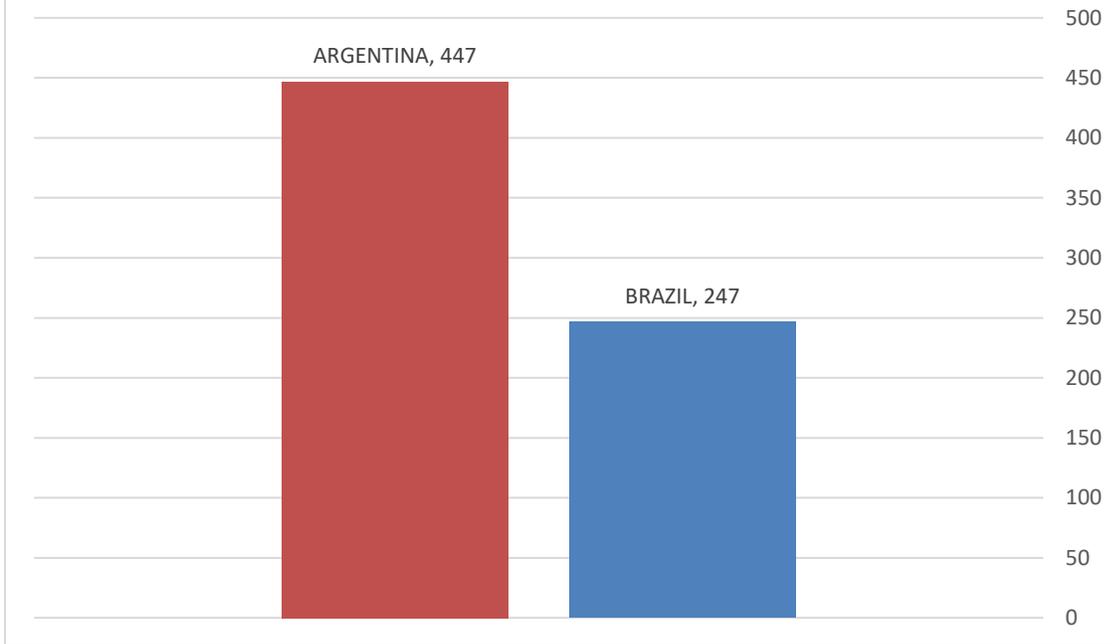
The norm was only a nominal amount of corn is stored on-farm by poultry farmers to meet their monthly needs, the fear of market instability due to Russia war on Ukraine has increased GoJ interest in building more adequate grain storage. Some investors have recently enlarged their storage facilities.

Policy:

There are no restrictions on corn trade in Jordan, and specifications for corn are similar to U.S. standards, except for the quality trait, BKP that considered as a basic in Jordan. Post recently met with the GOJ on the BKP issue, and the Ministry of Agriculture agreed to begin accepting FGIS certificates for U.S. corn shipments. Corn consignments that exceed the established maximum residue limits for aflatoxins, which are equivalent to U.S. standards, will be rejected.

Fig 3: Jordan Corn Imports by Origin

2022* in TMT



Source: JDoS *First 10 months

Marketing:

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

**Table 3.
Production, Supply and Distribution:**

Corn	2021/2022		2022/2023		2023/2024	
	Oct 2021		Oct 2022		Oct 2023	
Market Year Begins						
Jordan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	1	0	1	0	0	1
Beginning Stocks (1000 MT)	40	40	25	70	0	100
Production (1000 MT)	10	10	10	10	0	10
MY Imports (1000 MT)	715	1000	800	1000	0	700
TY Imports (1000 MT)	715	1000	800	1000	0	700
TY Imp. from U.S. (1000 MT)	0	100	0	0	0	100
Total Supply (1000 MT)	765	1050	835	1080	0	810
MY Exports (1000 MT)	5	20	20	25	0	25
TY Exports (1000 MT)	5	20	20	25	0	25
Feed and Residual (1000 MT)	725	950	780	950	0	700
FSI Consumption (1000 MT)	10	10	5	5	0	5
Total Consumption (1000 MT)	735	960	785	955	0	705
Ending Stocks (1000 MT)	25	70	30	100	0	80
Total Distribution (1000 MT)	765	1050	835	1080	0	810
Yield (MT/HA)	10	0	10	0	0	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

Commodities:
Rice

Production:

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

Consumption:

Rice consumption in MY 2023/24 is forecasted to stay at 215 TMT; a 2 percent increase from MY 2022/23. 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 about 20 kg of rice per person. The preferred variety is medium grain (Camolino), which constitutes over 50 percent of imports, followed by long grain white rice, and Basmati and Jasmine rice.

Trade:

In MY 2023/24, imports are expected to remain at 220 TMT, unchanged from MY 2022/23. U.S. market share for rice has plunged down at nearly 70 percent, supplying 31 TMT in MY2022/23, uncertainty is binding the future market share, due to the spike in container freight costs, the shortage in supply, and the emerging Russian market share. Prices have also increased as a result of drought in California, which is the preferred source of medium grain rice.

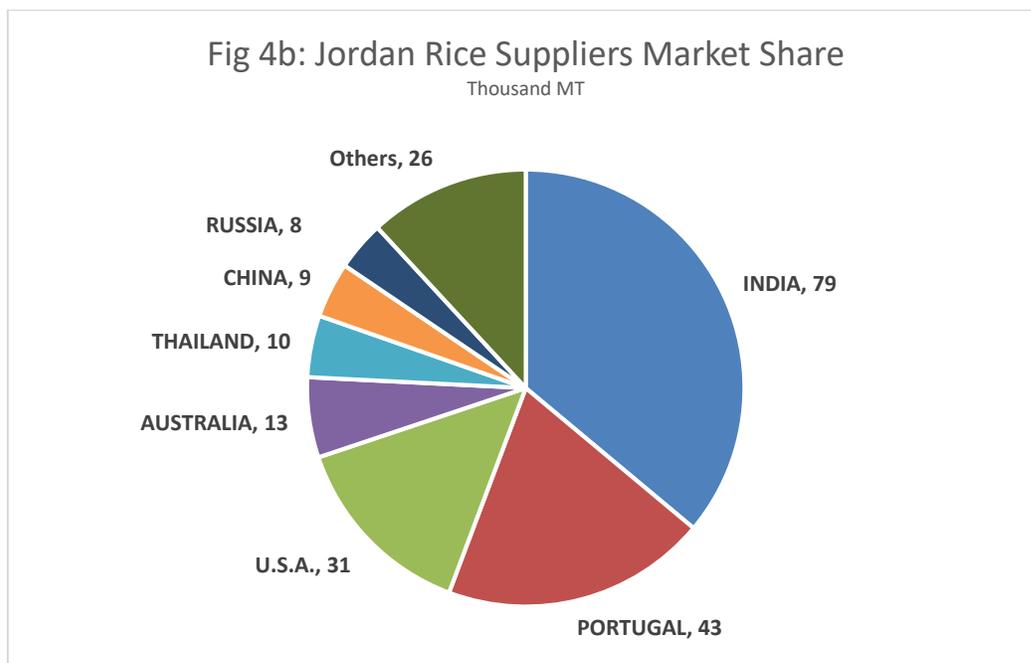
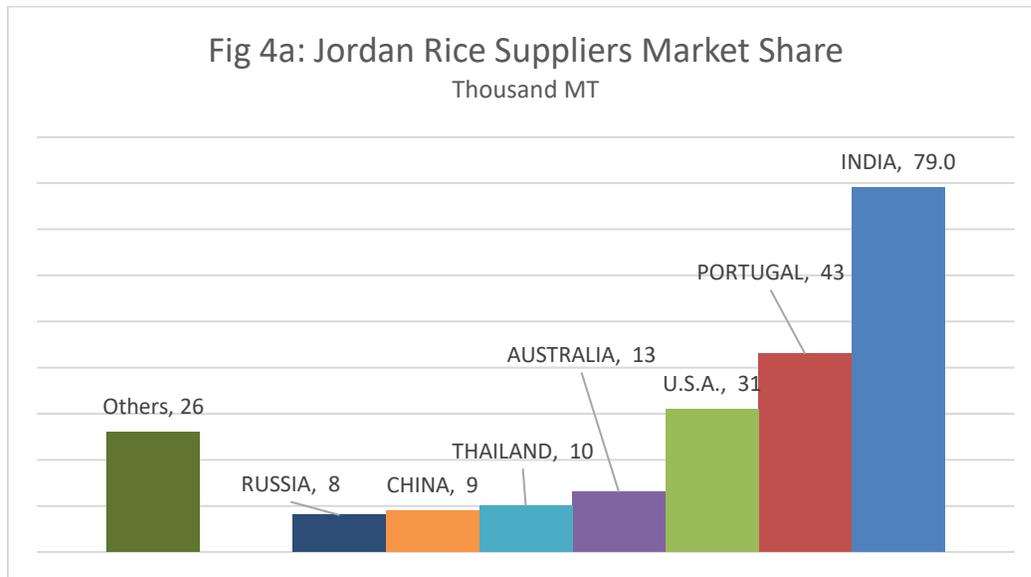
Indian rice is taking more market share from all suppliers due to price competitiveness; more economic pressure is on Jordanian families and consumers. Consumption fluctuates due to the time of year (Ramadan is a big time for rice consumption) and economic situation among consumers. Rice is a more expensive relative to alternative commodities, that is why the elasticity of demand and consumption is relatively not linear.

Although the price is relatively higher, the U.S. industry's market development efforts have paid off to keep U.S. market share from deteriorating in difficult economic times. U.S. rice industry marketing efforts have generated loyalty among Jordanian consumers who have developed a strong preference for U.S. origin rice. This loyalty was demonstrated by the increase of demand by traders who continue to seek to import from the U.S. and it is the reason of possible counterfeiting of other origins' rice with the U.S. This has taken place by companies' labeling rice as U.S. when it is from other sources.

Major rice suppliers include India, whose market share has tripled during the last few years. Others include Portugal, Australia, and Russia (figure 4). Most Asian rice is long grain that falls into two categories. The first is long grain white rice, which is of lower price and constitutes most of the Asian imports. The second category is the aromatic and basmati rice that commands a premium over the medium rice; however, it is less preferred in local recipes. The regular long grain market share has grown from less than 25 to almost 30 percent over the last five years. The proximity of European medium rice makes it California Rice's major competitor. However, improvement in California drought conditions is expected to improve possibility of Cal Rose shipments in Jordan, and recently, medium grain from the Southeast U.S. is being considered by importers.

Stocks:

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



Source: JDoS

Policy:

There are no restrictions on rice trade in Jordan, and specifications are similar to U.S. grading, MRL, and BKP standards.

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.



The U.S. Ambassador touring a private business inventory of U.S. rice.

**Table 4.
Production, Supply and Distribution:**

Rice, Milled	2021/2022		2022/2023		2023/2024	
Market Year Begins	Jan 2021		Jan 2022		Jan 2023	
Jordan	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	0	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	0	220
TY Imports (1000 MT)	220	220	220	219	0	220
TY Imp. from U.S. (1000 MT)	22	64	0	31	0	70
Total Supply (1000 MT)	236	236	236	240	0	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	0	210
Ending Stocks (1000 MT)	16	21	16	20	0	25
Total Distribution (1000 MT)	236	236	236	240	0	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

Attachments:

No Attachments