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Report Highlights:

FAS/Tokyo projects reduced corn imports and feed consumption in MY2022/23 due to large outbreaks of Highly Pathogenic Avian Influenza as well as increased competition from domestic feed rice, followed by a recovery of corn consumption in MY2023/24. Post forecasts strong demand for feed wheat and barley in MY2022/23 and MY2023/24 and for food wheat consumption to gradually recover despite price increases. FAS/Tokyo projects flat rice consumption in MY2022/23 due to strong demand for feed rice offsetting lower table rice demand but forecasts a decrease in MY2023/24 consumption as feed rice production declines.

Corn

Table 1. Production, Supply, and Distribution Corn

Corn	2021/2022		2022/2023		2023/2024	
Market Year Begins	Oct 2021		Oct 2022		Oct 2023	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	1	1	2	2	0	2
Beginning Stocks (1000 MT)	1420	1420	1390	1390	0	1321
Production (1000 MT)	6	6	13	11	0	14
MY Imports (1000 MT)	15014	15014	15000	14800	0	15000
TY Imports (1000 MT)	15014	15014	15000	14800	0	15000
TY Imp. from U.S. (1000 MT)	10108	10404	0	0	0	0
Total Supply (1000 MT)	16440	16440	16403	16201	0	16335
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)	11700	11700	11500	11500	0	11600
FSI Consumption (1000 MT)	3350	3350	3500	3380	0	3430
Total Consumption (1000 MT)	15050	15050	15000	14880	0	15030
Ending Stocks (1000 MT)	1390	1390	1403	1321	0	1305
Total Distribution (1000 MT)	16440	16440	16403	16201	0	16335
Yield (MT/HA)	6	6	6.5	5.5	0	7

(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

Production

FAS/Tokyo forecasts Japan's MY2023/24 corn planting area and production to increase to 2,400 hectares and 14,000 metric tons respectively based on projected shifts from rice to grain corn production.

Industry reports estimate the MY2022/23 harvested area increased 85 percent from the previous year, to 1,839 hectares. Based on average yields, FAS/Tokyo estimates production at 11,000 metric tons, up 70 percent from the previous year. Post attributes production expansion to high global corn prices as well as support payments from the Ministry of Agriculture, Forestry and Fisheries (MAFF) which incentivize farmers to switch production from rice to corn. Farmer groups anticipate expanded grain corn production in MY2023/24 as it requires fewer labor hours compared to rice.[1] Processors use domestic grain corn for production of formula feed,[2] snacks, and drinks.

[1] MAFF estimates that labor hours per 0.1 hectare for grain corn is 1.2 hours and for table rice is 24 hours.

[2] FAS/Tokyo defines formula feed to cover both compound feed and mixed feed in this report. Compound feed is feed in which multiple feed ingredients or feed additives are mixed according to the blending design. Mixed Feed is a mixture of 2~3 types of feed ingredients for a specific feeding purpose.

Consumption

FSI Consumption

FAS/Tokyo forecasts Food, Seeds and Industrial (FSI) corn consumption to recover to 3.38 million metric tons in MY2022/23 and to 3.43 million metric tons in MY2023/24 as Japan returns to normal economic activity. Japan did not lift pandemic-related, inbound international tourism restrictions until October 2022.

Corn used to manufacture cornstarch accounts for approximately 90 percent of Japan's FSI corn consumption. Processors used the remaining FSI corn in flakes, grits, meal, flour ethyl alcohol, and distilled alcoholic beverages; annual demand for these products is stable at around 180,000 metric tons. MAFF reported MY2021/22 cornstarch production increased 0.2 percent, reflecting increased demand for beer and cardboard production. FAS/Tokyo projects a gradual recovery of cornstarch demand, including for sweetener production, in the next two marketing years based on projected demand from the Hotel, Restaurants and Institutional (HRI) and tourism sectors.

Feed Consumption

FAS/Tokyo forecasts MY2023/24 feed corn consumption at 11.6 million metric tons, up 0.9 percent from the previous marketing year. FAS/Tokyo anticipates demand will increase as layer inventories gradually recover in MY2023/24.

FAS/Tokyo projects MY2022/23 feed corn consumption to decrease 1.7 percent, to 11.5 million metric tons, from the previous marketing year reflecting declines in poultry and dairy cattle inventories, as well as an increase in feed rice supply. FAS/Tokyo projects overall MY2022/23 formula feed production to contract approximately 2 percent as Japan is experiencing its largest ever Highly Pathogenic Avian Influenza (HPAI) outbreak, resulting in the culling approximately 4.8 percent of poultry inventories.[3] Layers accounted for 94 percent of poultry affected by HPAI and consume approximately 28.5 percent of all feed corn in formula feed. Based on current conditions, industry expects it will take roughly one year to fully recover to normal layer production. In addition, Japanese dairy farmers are reducing dairy herds because of weak milk demand and high feed prices, which has generated operating losses.[4] Dairy cattle consume roughly 12 percent of feed corn in formula feed.

FAS/Tokyo forecasts robust broiler, swine, and beef cattle production in MY2022/23 and MY2023/24 based on bullish domestic demand for chicken and pork as well as a growing *Wagyu* beef export sector (GAIN JA2023-0016, JA2021-0122).

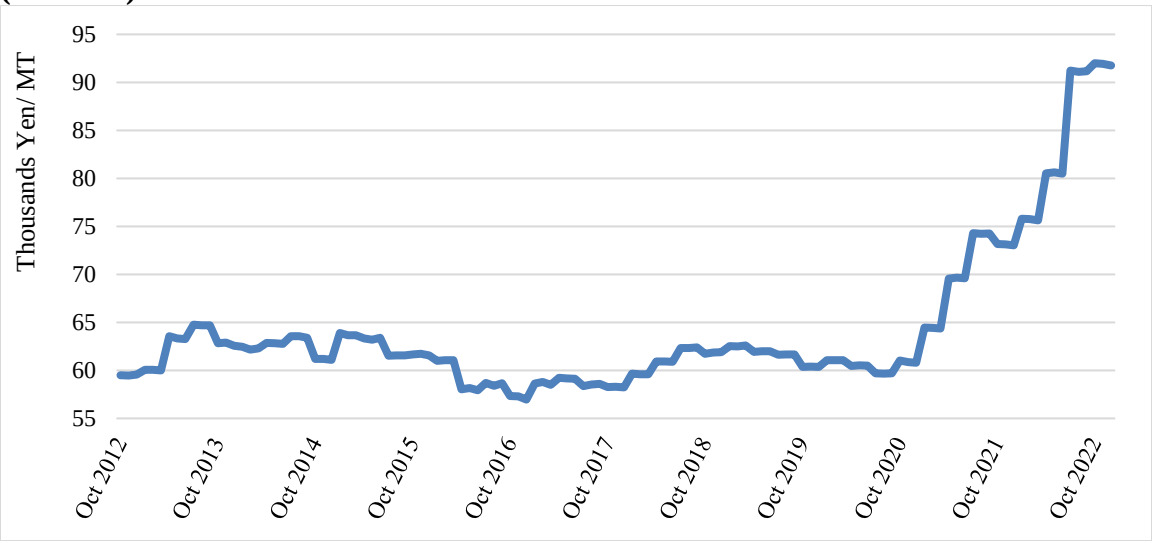
[3] During the 2022/23 season, over 15.5 million birds (14.6 million birds for layers and 0.8 million birds for broilers) were culled or subject to culls as of March 10. For layers, the number culled or subject to cull accounted for 8 percent of the 2022 beginning inventory.

[4] MAFF provides support payments to farmers for early shipment of low-performance dairy cattle for slaughter up to 40,000 heads between March 2023 and March 2024 which is about 3 percent of the 2022 beginning inventory.

Annually, Japan produces 24 million metric tons of formula feed. Due to high corn prices, feed mills substituted some corn with wheat and rice in feed rations in MY2021/22, resulting in a 230,000 metric ton decrease in corn used in formula feed production (Annex Table 1). However, corn still accounted for 47 percent of the total formula feed by volume in MY2021/22. According to MAFF, consumption of corn for on-farm feed has been trending down and fell to 170,787 metric tons in MY2021/22, down 11 percent from the previous marketing year (Annex Table 2). High corn prices accelerated the decline in MY2021/22. Post expects consumption of on-farm feed corn to decline in the next two marketing years as farmers shift to formula feed for convenience.

In addition to surging global prices for feed grains and a weak Yen, feed mills have faced high prices for by-products such as corn gluten feed, corn gluten meal, and wheat bran as domestic cornstarch and wheat flour production stagnated. Feed mills also struggled to procure used cooking oil in competition with sustainable aviation fuel manufactures. MAFF estimates formula feed processors consume 70 percent of used cooking oil in Japan. In response, feed mills raised compound feed prices, which hit a record high in October 2022. In December 2022, prices remained 26 percent higher than December 2021 (Chart 1). In addition to Compound Feed Price Stabilization System compensation payments to livestock, poultry, and swine farmers the Government of Japan (GOJ) provided additional payments to these farmers to alleviate compound feed price hikes for the October - December 2022 period (JA2022-0078). The GOJ has allocated 10.3 billion yen ($76 million)[5] from the Japan Fiscal Year (JFY)[6] 2022 supplementary budget to replenish the depleted the Compound Feed Price Stabilization funds. Post expects high feed costs will accelerate the consolidation of livestock, poultry, and swine sectors in MY2022/23.

Chart 1. Japan Average Compound Feed Factory Shipment Price for All Livestock Animal (Yen/MT)



Source: Agriculture and Livestock Industries Corporation

[5] U.S. Dollar = 135 Yen

[6] Japan Fiscal Year (JFY) runs from April 1 to March 31.

Trade

FAS/Tokyo forecasts MY2023/24 corn imports to increase to 15 million metric tons, up 1.4 percent from Post's MY2022/23 estimates, based on projected increases in feed and FSI demand.

Post projects MY2022/23 imports to drop to 14.8 million metric tons, down 1.4 percent from the previous marketing year, based on reduced feed demand.

Japan imports corn mainly from the United States and Brazil. In MY2021/22, due to high U.S. corn prices, imports from the United States decreased 5.2 percent, to 10.4 million metric tons. Imports from Brazil also dropped 44 percent due to a decline in exportable corn supplies. Imports from Argentina and South Africa jumped 166 percent and 290 percent respectively due to price advantages over U.S. corn. In MY2021/22, Japan imported 108,380 metric tons of corn from Ukraine, the majority of which was contracted before Russia invaded Ukraine. After a year with no imports of corn from Russia, Japan imported 1,947 metric tons or corn in December 2022 and 528 metric tons in January 2023 from Russia.

Japan's tariffs structure on corn can be found at JA2018-3015.

Stocks

FAS/Tokyo forecasts MY2023/24 ending stocks at 1.305 million metric tons. Post expects MY2022/23 ending stocks to be 1.321 million metric tons. For contingency preparedness, MAFF encourages feed mills to store a total of one million metric tons of imported feed grains, predominantly corn, and provides support payments to cover some storage costs for contingency stocks.

Sorghum

Table 2. Production, Supply, and Distribution Sorghum

Sorghum	2021/2022		2022/2023		2023/2024	
Market Year Begins	Oct 2021		Oct 2022		Oct 2023	
Japan	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)	26	26	24	25	0	20
Production (1000 MT)	0	0	0	0	0	0
MY Imports (1000 MT)	258	259	200	215	0	210
TY Imports (1000 MT)	258	259	200	215	0	210
TY Imp. from U.S. (1000 MT)	11	11	0	0	0	0
Total Supply (1000 MT)	284	285	224	240	0	230
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	260	200	220	0	210
FSI Consumption (1000 MT)	0	0	0	0	0	0
Total Consumption (1000 MT)	260	260	200	220	0	210
Ending Stocks (1000 MT)	24	25	24	20	0	20
Total Distribution (1000 MT)	284	285	224	240	0	230
Yield (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 Sorghum begins in October for all countries. TY 2023/2024 = October 2023 - September 2024

Production

Japan’s grain sorghum production is negligible.

Consumption

FAS/Tokyo forecasts MY2023/24 feed consumption to continue its downward trend to 210,000 metric tons.

FAS/Tokyo expects MY2022/23 feed consumption to decrease 15 percent, to 220,000 metric tons, as Post projects feed mills will continue to substitute sorghum with competitively priced feed rice. Broiler and swine consumed 39 percent and 44 percent of sorghum respectively in MY2021/22. Feed mills process almost all sorghum consumed in Japan into feed rations.

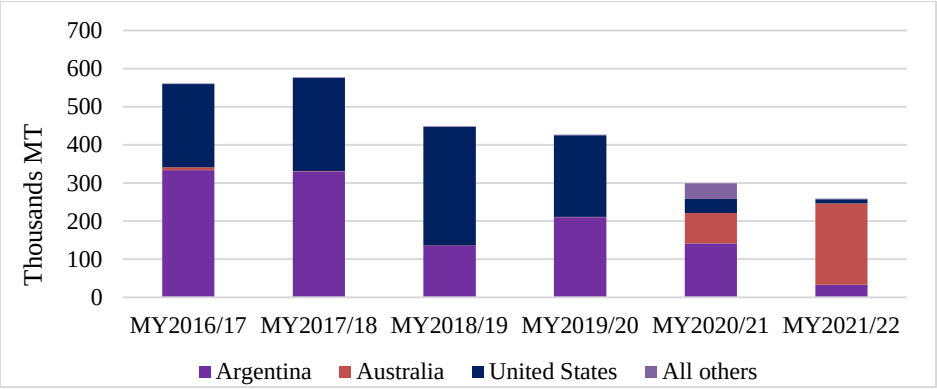
Trade

FAS/Tokyo projects sorghum imports to decease to 215,000 metric tons in MY2022/23 and to 210,000 metric tons in MY2023/24.

In MY2021/22, Australia became Japan’s dominant supplier of sorghum, surpassing Argentina and the United States as China purchased the majority of competitively priced Argentina sorghum.

Information on Japan’s sorghum tariffs can be found at JA2018-2781.

Chart 2. Japan Sorghum Imports



Source: Trade Data Monitor

Stocks

FAS/Tokyo forecasts ending stocks to decrease to 20,000 metric tons in MY2022/23 and MY2023/24. As consumption declines less sorghum is needed in operational stocks.

Barley

Table 3. Production, Supply, and Distribution Barley

Barley	2021/2022		2022/2023		2023/2024	
Market Year Begins	Oct 2021		Oct 2022		Oct 2023	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	63	63	65	63	0	64
Beginning Stocks (1000 MT)	212	212	169	202	0	185
Production (1000 MT)	233	235	240	233	0	237
MY Imports (1000 MT)	1184	1185	1200	1180	0	1200
TY Imports (1000 MT)	1184	1185	1200	1180	0	1200
TY Imp. from U.S. (1000 MT)	15	15	0	0	0	0
Total Supply (1000 MT)	1629	1632	1609	1615	0	1622
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)	1080	1050	1100	1050	0	1070
FSI Consumption (1000 MT)	380	380	380	380	0	380
Total Consumption (1000 MT)	1460	1430	1480	1430	0	1450
Ending Stocks (1000 MT)	169	202	129	185	0	172
Total Distribution (1000 MT)	1629	1632	1609	1615	0	1622
Yield (MT/HA)	3.6984	3.7302	3.6923	3.6984	0	3.7031

(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

Production

FAS/Tokyo forecasts MY2023/24 barley planted areas to expand slightly to 64,000 hectares and production to increase to 237,000 metric tons assuming average yield. Japanese farmers produce barley primarily in paddy fields in rotation with rice and soybeans. Industry sources estimate that in MY2023/24 farmers shifted planting from rice to barley due to low rice prices. Industry expects a larger crop as farmers completed fall 2022 planting within the ideal planting window and to date the barley crop is growing well. Japanese barley growers are also increasing planted areas of new, high-yield varieties.

Starting in JFY2023, to increase domestic production, MAFF will provide an additional support payment to farmers that plant wheat or barley in paddy fields after the rice harvest (JA2023-0013). Post does not forecast a significant increase in barley planted area due to labor shortages.

MAFF reported the MY2022/23 barley harvested area was up 0.2 percent, to 63,270 hectares, and production decreased 0.9 percent, to 232,600 metric tons. Despite limited growth, this is the fourth consecutive year of high yields for Japan’s barley growers. Industry attributes the harvest to favorable weather and higher yielding varieties.

Post raised MY2021/22 production to 235,000 metric tons in line with MAFF’s updated data.

Consumption

FSI Consumption

FAS/Tokyo forecasts MY2022/23 and MY2023/24 FSI barley consumption to remain stable at 380,000 metric tons. Japan's FSI consumption is mainly used for the manufacture of food and drinks. Japanese processors use two-row barley for malt and *shochu* (distilled liquor) production, six-row barley for production of rice extender and barley tea, and hulless barley for production of rice extender and *miso* (fermented soybean paste). Barley consumption has been almost flat as strong production of *shochu* and barley tea offset weak demand for *miso* and rice extender production. Demand for malting barley is stable. Post anticipates this trend will continue over next two marketing years.

Feed Consumption

FAS/Tokyo forecasts MY2023/24 feed barley consumption to increase to 1.07 million metric tons, assuming maintained levels of beef cattle production and barley's price competitiveness with other feed grains.

Post projects MY2022/23 feed consumption to remain 1.05 million metric tons, unchanged from the MY2021/22 estimate. In Japan, beef cattle consume over 80 percent of all feed barley. Since March 2022, feed mills increased barley in swine and dairy formula feed rations at the expense of corn due to price competitiveness. In MY2022/23, Post projects strong demand from beef cattle feeders will continue but softening consumption by dairy cattle will flatten feed barley consumption.

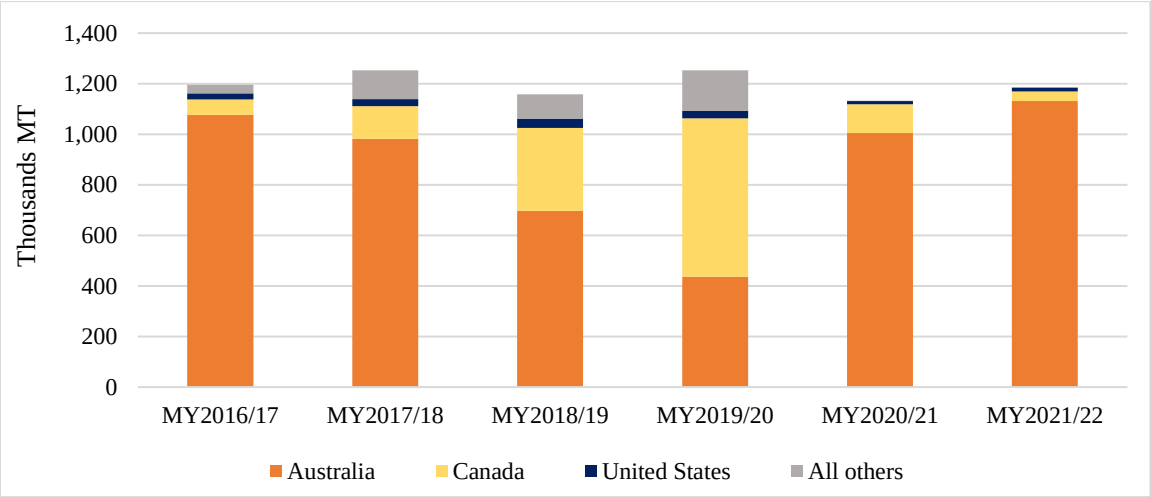
FAS/Tokyo revised MY2021/22 feed consumption down to 1.05 million metric tons as Post overestimated consumption of on-farm barley feed. According to industry sources, on-farm barley feed decreased as more farmers preferred to purchase formula feed due to on-farm labor shortages.

Trade

FAS/Tokyo forecasts MY2023/24 imports at 1.2 million metric tons, up 1.7 percent from Post's MY2022/23 estimate, based on increased feed demand. FAS/Tokyo expects MY2022/23 imports to decrease to 11.8 million metric tons based on a softening of food barley imports.

Despite an 11 percent increase in total barley imports over the first four months of MY2022/23, industry expects demand for food barley imports to slow in the second half of the year as domestic stocks remain high. In MY2021/22, food barley imports fell 15.2 percent, to 155,891 metric tons. FAS/Tokyo expects feed barley imports to remain consistent in MY2022/23, assuming availability from Australia and Canada. In MY2021/22, Japan imported 95 percent of all barley from Australia (Chart 3).

Chart 3. Japan Barley Imports



Source: Trade Data Monitor

Barley is a state-traded product in Japan. Imports and tariff structure of barley are available in GAIN JA2018-3091.

Stocks

FAS/Tokyo forecast ending stocks to decrease to 185,000 metric tons in MY2022/23 and to 172,000 metric tons in MY2023/24 as increased domestic barley stocks are gradually consumed.

Wheat

Table 4. Production, Supply and Distribution Wheat

Wheat	2021/2022		2022/2023		2023/2024	
Market Year Begins	Jul 2021		Jul 2022		Jul 2023	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	220	220	227	227	0	235
Beginning Stocks (1000 MT)	1043	1043	1176	1176	0	1266
Production (1000 MT)	1130	1130	1050	1040	0	1170
MY Imports (1000 MT)	5605	5605	5750	5700	0	5500
TY Imports (1000 MT)	5605	5605	5750	5700	0	5500
TY Imp. from U.S. (1000 MT)	0	2328	0	0	0	0
Total Supply (1000 MT)	7778	7778	7976	7916	0	7936
MY Exports (1000 MT)	302	302	300	300	0	300
TY Exports (1000 MT)	302	302	300	300	0	300
Feed and Residual (1000 MT)	750	750	750	750	0	750
FSI Consumption (1000 MT)	5550	5550	5550	5600	0	5650
Total Consumption (1000 MT)	6300	6300	6300	6350	0	6400
Ending Stocks (1000 MT)	1176	1176	1376	1266	0	1236
Total Distribution (1000 MT)	7778	7778	7976	7916	0	7936
Yield (MT/HA)	5.1364	5.1364	4.6256	4.5815	0	4.9787

(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

Production

FAS/Tokyo forecasts the MY2023/24 wheat harvested area to increase 3.5 percent, to 235,000 hectares, and production to increase 10 percent, to 1.17 million metric tons, assuming a recovery to average yields. Farmers planted the MY2023/24 winter wheat crop, which accounts for over 90 percent of wheat produced in Japan, in the fall of 2022. Following a 3 percent increase in the MY2022/23 harvested area, industry estimates farmers further increased MY2023/24 planted areas by shifting rice and sugar beets acres to wheat. Industry expects a larger crop in MY2023/24 as farmers planted in good conditions and to date the current wheat crop is growing well.

Hokkaido farmers produce wheat in rotation with sugar beets, potatoes, and beans in upland fields,[7] while farmers in other parts of Japan mainly produce wheat in paddies rotated with rice and soybeans. Beginning in MY2023/24, MAFF will gradually reduce the quantity of sugar beets eligible for support payments over the next four marketing years to combat the current oversupply of beet sugar.[8] By 2026/27, MAFF projects the sugar beet planting area to decrease by 4,500 hectares and industry expects Hokkaido farmers to shift production to wheat, beans, and potatoes. Based on MAFF's January planting intention survey data, Post also forecasts the shift in production from rice to wheat in paddies to continue in MY2024/25.

[7] MAFF defines "upland" as arable land excluding paddies and normally refers to land where herbaceous crops are cultivated.
[8] MAFF sets marketing year for sugar beets from October to September.

Farmers could increase wheat production further but domestic supply chains are currently limited in the amount of domestic wheat they can handle each year. The GOJ aims to increase wheat and soybean production under the "Food Security Reinforcement Policy Framework," published in December 2022 and will also fund supply chain infrastructure improvements in JFY2023 (GAIN JA2023-0013).

FAS/Tokyo lowered MY2022/23 production estimate to 1.04 million tons based on the latest MAFF data. Despite a 3 percent increase in the harvested areas, production decreased 8 percent. A lack of sunshine during the grain-filling period and heavy rain and strong winds before harvest reduced yields in Hokkaido by 19 percent. Hokkaido accounted for 62 percent of MY2022/23 wheat production.

Soft wheat accounts for the majority of Japan's wheat production. In MY2021/22, planted areas of hard wheat and semi-hard wheat increased and accounted for 26 percent of wheat planted areas. Industry anticipates farmers will continue to increase the share of hard and semi-hard wheat planted areas as MAFF provides higher support payments to farmer to plant these varieties.

Industry is concerned about lower protein levels in Japan's wheat harvest if farmers reduce fertilizer applications due to high prices.

Consumption

Feed Consumption

FAS/Tokyo forecasts MY2022/23 and MY2023/24 feed consumption to remain at 750,000 metric tons assuming wheat remains competitively priced against other feed grains.

Demand for feed wheat has been robust as a substitute for corn in formula feed rations. Swine consume approximately 59 percent of feed wheat, followed by beef and dairy cattle that consumed 14.7 percent and 13.7 percent respectively in MY2021/22. Formula feed production for swine decreased in MY2021/22 as sporadic outbreaks of Classical Swine Fever reduced swine inventories and high feed costs led farmers to early shipments of hogs for slaughter (Annex Table 2). FAS/Tokyo projects swine production to rebound in MY2022/23 reflecting strong demand for pork (GAIN JA2023-0016). Over the first half of MY2022/23, feed mills have used wheat in formula feed at a similar pace to the previous marketing year (Annex Table 1).

FSI Consumption

FAS/Tokyo forecasts MY2023/24 FSI consumption at 5.65 million metric tons, up 0.9 percent from Post's MY2022/23 estimates. FAS/Tokyo estimates MY2022/23 FSI consumption to increase 0.9 percent, to 5.6 million metric tons, based on marginal increases in flour sales to date. Japan's population has been decreasing annually since 2011 and per capita wheat consumption has fallen since MY2018/19 in favor of higher protein diets as well as shrinking per capita caloric intake driven by an aging population. However, with the normalization of post-pandemic economic activity and a recovery of inbound visitors to Japan, Post projects a gradual increase in food wheat demand from HRI sectors in

MY2022/23 and MY2023/24. An April increase in wheat prices from MAFF will result in higher prices for wheat flour-based products and may dampen consumption growth for food wheat (Chart 4).

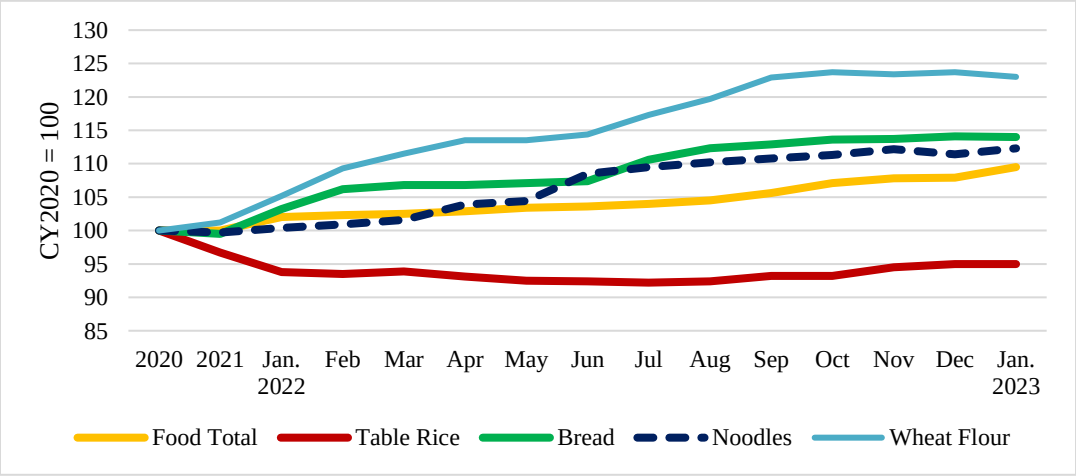
Wheat Price

MAFF, acting as a state-trading enterprise, imports and sells almost all wheat imported into Japan. MAFF imports five classes[9] of wheat and sells it to flour mills at a price it sets semi-annually (April and October) by averaging import prices for the previous six months.

MAFF froze its sales price for imported wheat for the October 2022 – March 2023 period at 72,530 yen/MT ($537) to alleviate the effect of rising wheat flour-based product prices. MAFF announced it would then account for the average price of the previous 12 months when determining the price for the April – September 2023 period (GAIN JA2022-0078). On March 14, however, MAFF announced that it will raise the sales price for the April – September 2023 period by 5.8 percent, to 76,750 yen/MT ($564), reflecting only the purchase price for the most recent six months[10] and will exclude the period[11] immediately after the start of Russia's invasion of Ukraine when wheat prices spiked. MAFF explained that the price would have otherwise increased 13.1 percent, to 82,060 yen/MT ($599).

As a result of decades with minimal inflation or even deflation in Japan's economy, Japanese consumers are accustomed to stable food prices and have a strong resistance to price increases. Food manufacturers often struggle to raise prices and pass increasing production costs to consumers. When MAFF froze its wheat price for the October 2022 – March 2023 period, flour millers and wheat flour-based product manufacturers also decided not to raise prices, despite the cost of flour accounting for a small portion of overall cost increases.

Chart 4. Japan Consumer Price Index for Food, Table Rice, Wheat Flour, Bread, and Noodles



Source: Ministry of Internal Affairs and Communications

[9] U.S. Dark Northern Spring (DNS), U.S. Hard Red Winter (HRW), U.S. Western White (WW), Canadian Western Red Spring (1CW) and Australian Standard White (ASW).
[10] 2nd week of September 2022 – 1st week of March 2023
[11] 2nd week of March – 1st week of September 2022

Trade

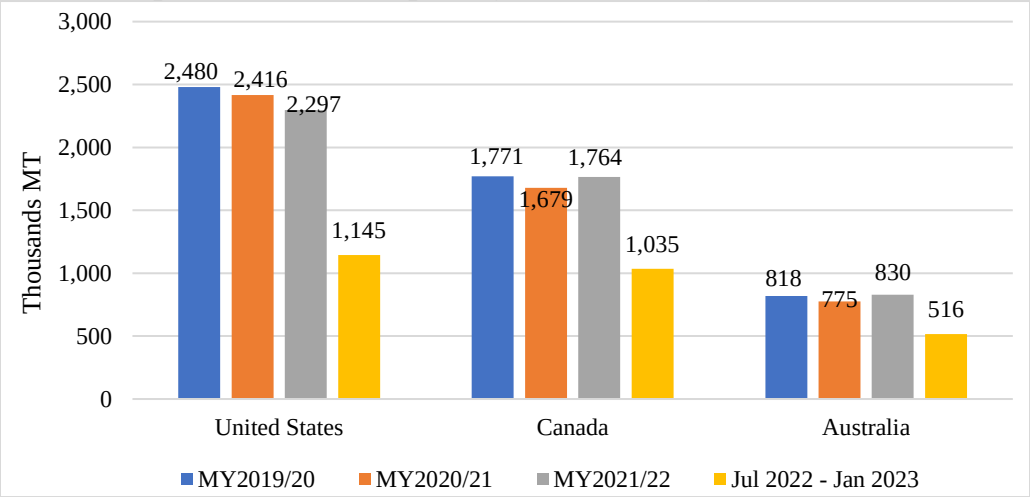
Imports

FAS/Tokyo forecasts MY2023/24 imports to decrease 3.5 percent to 5.5 million metric tons from Post's MY2022/23 estimates based on a projected 12 percent increase in MY2023/24 domestic production.

FAS/Tokyo projects MY2022/23 imports to reach 5.7 million tons, up 1.7 percent from MY2021/22 as domestic production fell 8 percent. Over the first seven months of MY2022/23, Japan's wheat and wheat product imports increased by 2.4 percent year-over-year as strong pasta and food wheat imports more than offset a small decrease in feed wheat imports.

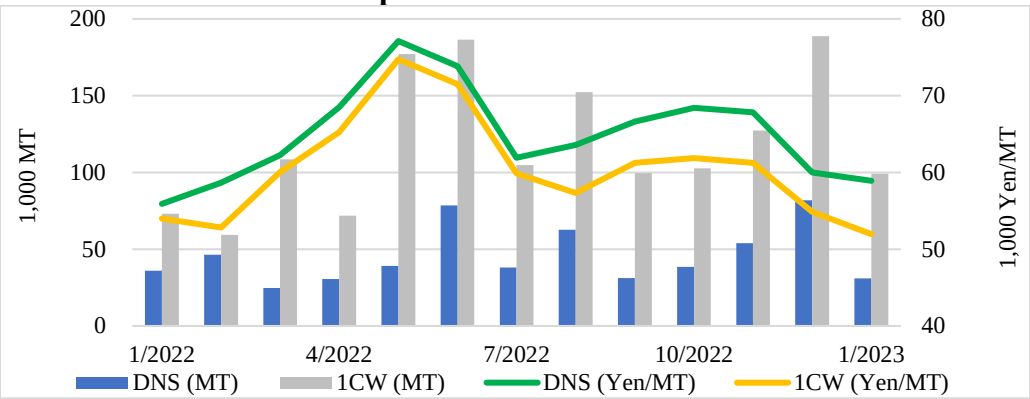
Under the state-trading system, Japan imports five classes of food wheat from the United States, Canada, and Australia. Over the first seven months of MY2022/23, imports from Canada increased 18.3 percent while imports from the United States decreased 8.9 percent. Industry sources attribute the decrease in U.S. wheat imports to price parity between 1CW and DNS, both used for baking bread. As Chart 6 shows, 1CW has been price competitive against DNS and more successfully bid than DNS in MAFF's general wheat import tenders.

Chart 5. Japan FSI Wheat Imports (Thousands MT)



Source: Trade Data Monitor. Imports from other countries which accounted for 0.1 percent of Japan's FSI wheat imports are excluded from the Chart.

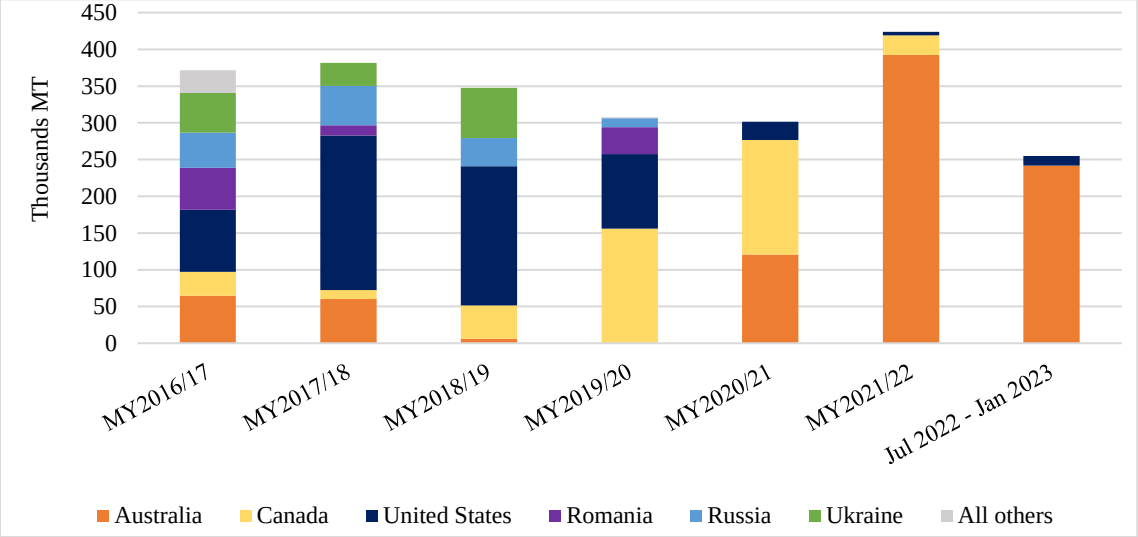
Chart 6. MAFF General Import Tender Results for DNS and 1CW



Source: MAFF

Under the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the Japan-EU Economic Partnership Agreement, MAFF excludes feed wheat from the state-traded system and allows the private sector to import feed wheat directly from parties to these trade agreements. Historically, Japan has imported feed wheat from a number of other countries, including from the Black Sea region. However, since MY2020/21, Japan has purchased feed wheat exclusively from Australia, Canada and the United States (Chart 7). Post expects Japan will continue with sizable feed wheat imports from Australia in MY2023/24 assuming product availability.

Chart 7. Japan Feed Wheat Imports



Source: Trade Data Monitor

Japan's imports and tariff structure for wheat are available in JA2017-2264.

Exports

FAS/Tokyo forecasts MY2023/24 exports to remain stable at 300,000 metric tons. In MY2021/22, Japan exported 302,117 metric tons of wheat and wheat products, of which wheat flour accounts for nearly 80 percent. Hong Kong has been the top destination, followed by Singapore, Malaysia, China, and Taiwan.

Japan does not assess a duty on imported wheat when used to manufacture wheat flour, macaroni, spaghetti, and biscuits for exports.

Stocks

FAS/Tokyo projects ending stocks at 1.266 million metric tons in MY2022/23 and 1.236 million tons in MY2023/24. According to MAFF, flour mills have operating stocks between 1.1 million metric tons and 1.5 million metric tons. These privately held stocks include a contingency stock of approximately 900,000 metric tons of imported food wheat, equivalent to 2.3 months of demand, for which MAFF subsidizes the storage costs for 1.8 months equivalent demand as contingency reserves. In addition, MAFF reports that feed mills have operating stocks between 30,000 metric tons and 50,000 metric tons.

Rice

Table 5. Production, Supply and Distribution Rice

Rice, Milled	2021/2022		2022/2023		2023/2024	
Market Year Begins	Nov 2021		Nov 2022		Nov 2023	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	1520	1520	1500	1497	0	1480
Beginning Stocks (1000 MT)	1937	1937	1979	1950	0	1795
Milled Production (1000 MT)	7665	7636	7450	7480	0	7450
Rough Production (1000 MT)	10529	10489	10234	10275	0	10234
Milling Rate (.9999) (1000 MT)	7280	7280	7280	7280	0	7280
MY Imports (1000 MT)	692	692	685	685	0	685
TY Imports (1000 MT)	669	669	685	685	0	685
TY Imp. from U.S. (1000 MT)	294	294	0	0	0	0
Total Supply (1000 MT)	10294	10265	10114	10115	0	9930
MY Exports (1000 MT)	115	115	120	120	0	128
TY Exports (1000 MT)	115	115	120	120	0	128
Consumption and Residual (1000 MT)	8200	8200	8200	8200	0	8100
Ending Stocks (1000 MT)	1979	1950	1794	1795	0	1702
Total Distribution (1000 MT)	10294	10265	10114	10115	0	9930
Yield (Rough) (MT/HA)	6.927	6.9007	6.8227	6.8637	0	6.9149

(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: This section assumes a milled rice basis unless otherwise noted.

Production

FAS/Tokyo forecasts the MY2023/24 planted area to decrease 1.1 percent, to 1.48 million hectares, from the previous year, and for production to slightly decrease to 7.45 million metric tons assuming average yield. Post attributes the projected decrease in planted area to the exiting of aging farmers from rice production and declining table rice demand. Rice harvested area has decreased year-on-year since MY2014/15.

MAFF reports the MY2022/23 harvested area totaled 1.497 million hectares, 1.5 percent lower than the previous year. The yield decreased 0.9 percent, to 5.0 metric tons per hectare, due to a lack of sunshine during the summer and persistent rains during grain filling periods in major rice producing regions like Niigata Prefecture. As a result, total production decreased 2.4 percent, to 7.48 million metric tons.

Taking advantage of MAFF's support payment program,[12] some farmers shifted production from table rice to rice for feed. In MY2022/23, MAFF reported that the harvested area of feed rice rose 23 percent, to 142,055 hectares, and production increased to an all-time high of 692,000 metric tons. For

[12] To promote farmers to shift production away from table rice, MAFF provides support payments for production of other crops and end rice to limit end uses, such as feed, exports, processing, and flour under the "Direct Payments for Rice Paddy Utilization" program (JA2021-0031).

MY2023/24, Post forecasts decreased feed rice production based on MAFF's January planting intention survey. Instead, many farmers intend to increase planting for wheat, barley, and soybeans.

To encourage farmers to plant high yield rice varieties for feed, MAFF, from MY2024/25 to MY2026/27, will reduce support payments for table rice varieties shipped as feed rice but will maintain the current level of payments for high yield varieties used exclusively for feed rice. Due to concerns over the mixing of feed rice with table rice, many famers grow table rice varieties and ship them as feed rice. The change in support payments may discourage some farmers from producing varieties exclusively for feed rice.

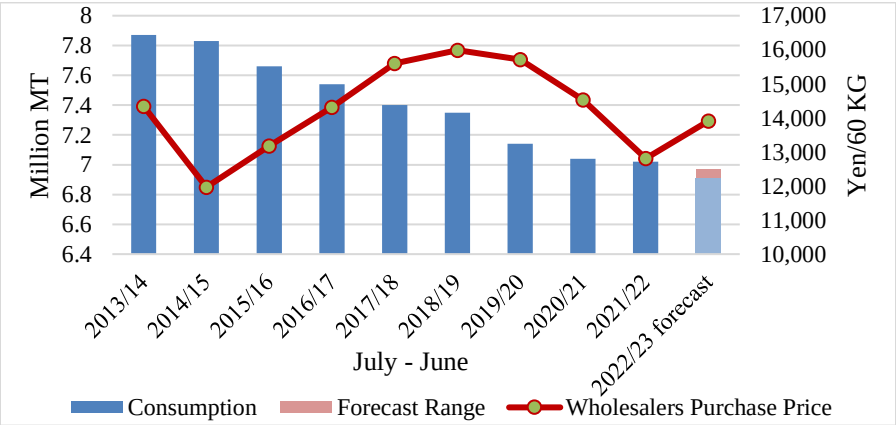
Consumption

FAS/Tokyo forecasts MY2023/24 consumption at 8.1 million metric tons, down 1.2 percent from MY2022/23 based on projected decreased demand for table rice and rice for processing as well as a reduced supply of feed rice. Post expects demand for feed rice to remain strong, but lower production will limit supply.

FAS/Tokyo expects MY2022/23 consumption to remain at 8.2 million metric tons, unchanged from the previous marketing year. Post anticipates an increase in feed use will nullify a decrease in table rice and processing consumption.

Table rice consumption in Japan is on the decline due to a shrinking and aging population as well as contracting per capita rice consumption. MAFF estimates table rice consumption decreased 790,000 metric tons (brown) between 2014/15 and 2020/21[13], a roughly 100,000 metric tons (brown) drop each year. For the 2021/22 MAFF estimates a smaller, 20,000 metric tons (brown) consumption decrease to 7.02 million metric tons (brown). Post attributes the small consumption decrease to low table rice prices relative to prices of bread and noodles (Chart 4). For 2022/23, MAFF forecasts table rice consumption between 6.91 million metric tons (brown) and 6.97 million metric tons (brown).

Chart 8. MAFF Table Rice Consumption Estimates and Forecast



Source: MAFF

[13] MAFF assess rice consumption and stocks based on an annual July to June calendar.

Post estimates consumption of rice for processing decreased slightly in MY2021/22 and MY2022/23 based on MAFF production statistics of rice-based products. Although exports of rice-based products have steadily increased,[14] FAS/Tokyo forecasts consumption of rice for processing to drop in MY2023/24. MAFF estimates Japan consumed 920,000 metric tons (brown)[15] of rice in processed products[16] in MY2020/21 (latest available data), down 30,000 metric tons (brown) from the previous marketing year due to contracted *sake* production.

Feed Consumption

In MY2021/22, feed mills used 1.3 million metric tons (actual tonnage) of rice in formula feed. Layer, broiler, and swine each account for roughly 30 percent of rice consumed in formula feed. Combined with approximately 200,000 metric tons of on-farm rice used in feed, FAS/Tokyo estimates MY2021/22 total feed consumption increased 14 percent, to 1.5 million metric tons (actual tonnage). In MY2021/22, feed mills increased the ratio of rice in compound feed for all livestock and poultry, especially for layer and swine, at the expense of corn. With the increase in feed rice production, Post expects feed consumption to further expand to 1.6 million metric tons (actual tonnage) in MY2022/23. While FAS/Tokyo anticipates a decrease in rice demand for layer feed due to HPAI outbreaks, feed mills are likely to increase rice in broiler and swine feed. In MY2021/22, rice accounted for 10.4 percent and 7 percent of formula feed for broiler and swine respectively. According to MAFF, feed mills can increase rice up to 50 percent of the total formula feed for broilers and 15 percent for swine without affecting livestock physiology or livestock product quality.

Post forecasts feed rice consumption to decrease slightly in MY2023/24 due to projected decreases in production. In addition to domestic production, MAFF sells its five-year old contingency reserve rice and some of its imported rice to feed mills.

Trade

Imports

FAS/Tokyo expects Japan to import 682,000 metric tons of rice in MY2022/23 and MY2023/24 to fill its WTO tariff rate quota (TRQ), commonly referred to as the Minimum Access (MA) quota. In addition to the WTO TRQ, Japan maintains a Country Specific Quota (CSQ) for Australian rice under the CPTPP. As of March 15, there are no successful bids for Australian rice under the CSQ, which is set at 6,480 metric tons in JFY2022. Japan's imports of rice outside the WTO TRQ and CSQ are negligible.

Continued low prices for domestic Japanese rice, high prices for international rice, and MAFF's application of a 61 yen per kilogram markup on simultaneous-buy-sell (SBS) rice has limited demand

[14] MAFF reported that exports of rice crackers, *sake* (rice wine), microwavable packaged rice, and rice flour increased year-on-year and reached a total of 25,003 metric tons (brown rice equivalent) in CY2022, up 8 percent from CY2021.
[15] The 920,000 metric tons (brown) includes 70,000 metric tons (brown rice equivalent) of imported rice flour preparations.
[16] Rice-based products include *sake*, rice crackers, *miso* (fermented soybeans), *shochu* (distilled liquor), and rice flour.

for imported table rice.[17] Japan's food service industry has historically used U.S. medium grain rice imported through SBS tenders blended with higher priced Japanese varieties to save on costs, but the price of U.S. medium grain rice jumped as MY2022/23 production dropped in drought-affected California. In JFY2022, only 13,742 metric tons (actual tonnage) of SBS rice were successfully bid by importers, the third lowest volume since JFY1995 (Annex Table 3).

In JFY2022, MAFF held 14 Ordinary Market Access (OMA) tenders and awarded 714,560 metric tons by March 15. MAFF will hold another OMA tender on March 17 and invite bids for 14,212 metric tons. Through the OMA tenders, MAFF imports medium grain rice from the United States, China, and Australia and long grain rice from Thailand. In JFY2022, imports of U.S. rice through OMA tenders decreased and volumes of rice from Australia, China and Thailand increased (Annex Table 4).

Japan's imports and tariff structure of rice are available at JA2018-2334.

Exports

FAS/Tokyo projects MY2022/23 rice exports to increase by 4.3 percent, to 120,000 metric tons and for MY2023/24 exports to grow another 6.7 percent, to 128,000 metric tons. FAS/Tokyo anticipates commercial table rice exports to increase, supported by a weak Yen.

Japan exported approximately 60,000 metric tons (actual tonnage) of rice as food aid in 2020/21 (latest available data) (Table 6). In MY2021/22, Japan's commercial rice exports increased 24 percent, to 27,657 metric tons (actual tonnage). Hong Kong continued to be the top market with 9,801 metric tons (actual tonnage) of exports, followed by Singapore with 5,561 metric tons (actual tonnage), the United States with 3,798 metric tons (actual tonnage), and then Taiwan with 2,484 metric tons (actual tonnage). Exports to the United States jumped 73 percent as the prices between Japanese rice and U.S. short and medium grain rice narrowed.

Table 6. Japan Food Aid Rice Exports (1,000 MT)

	Domestic Rice	Imported Rice	Total
2016/17	30	40	70
2017/18	70	20	90
2018/19	50	50	100
2019/20	40	50	90
2020/21	40	20	60

Source: MAFF. MAFF assess domestic rice exports based on an annual July to June calendar and imported rice on a November to October calendar.

[17] For background on the MA quota and OMA and SBS tender systems, see the ERS Report: Rice Sector Policies in Japan.

Stocks

FAS/Tokyo projects MY2022/23 ending stocks to decrease to 1.795 million metric tons based on strong feed rice consumption. Post forecasts MY2023/24 ending stocks to fall to 1.702 million metric tons due to smaller beginning stocks.

MAFF reports the private sector held 580,000 metric tons of domestic rice (brown) in October 2022. In addition, MAFF held 600,000 metric tons (brown) of OMA rice stocks in October 2022 and 910,000 metric tons (brown) of GOJ contingency reserve rice in June 2022.

Annex Table 1. Japan Formula Feed Ingredients Composition

MY	Corn	Sorghum	Wheat	Wheat Flour	Barley	Rice	Other Grains	DDGS	Soybean Meal	Rapeseed Meal	Other Ingredients	TOTAL
2017/18	11,423,194	520,789	413,442	203,771	828,412	838,915	138,958	543,956	2,929,230	1,118,223	4,900,850	23,859,742
	47.9%	2.2%	1.7%	0.9%	3.5%	3.5%	0.6%	2.3%	12.3%	4.7%	20.5%	100%
2018/19	11,650,310	464,960	390,898	186,242	822,948	746,394	137,063	516,466	2,989,815	1,111,783	4,932,988	23,949,867
	48.6%	1.9%	1.6%	0.8%	3.4%	3.1%	0.6%	2.2%	12.5%	4.6%	20.6%	100.0%
2019/20	11,796,346	383,653	361,064	175,347	836,561	907,750	139,825	429,848	3,065,662	1,125,880	4,919,902	24,141,838
	48.9%	1.6%	1.5%	0.7%	3.5%	3.8%	0.6%	1.8%	12.7%	4.7%	20.4%	100.0%
2020/21	11,609,634	305,656	406,815	169,629	878,353	1,133,973	137,585	435,612	3,066,096	1,141,458	4,910,010	24,194,821
	48.0%	1.3%	1.7%	0.7%	3.6%	4.7%	0.6%	1.8%	12.7%	4.7%	20.3%	100.0%
2021/22	11,380,437	252,281	465,296	186,302	938,010	1,297,028	134,596	435,299	3,067,818	1,111,666	4,943,862	24,212,595
	47.0%	1.0%	1.9%	0.8%	3.9%	5.4%	0.6%	1.8%	12.7%	4.6%	20.4%	100.0%
2022 Oct	941,410	19,543	42,475	13,855	80,677	121,381	11,110	37,643	260,986	82,558	411,856	2,023,494
	46.5%	1.0%	2.1%	0.7%	4.0%	6.0%	0.5%	1.9%	12.9%	4.1%	20.4%	100.0%
Nov	965,618	19,991	43,912	14,299	83,443	133,282	11,837	39,320	268,808	84,765	426,360	2,091,635
	46.2%	1.0%	2.1%	0.7%	4.0%	6.4%	0.6%	1.9%	12.9%	4.1%	20.4%	100.0%
Dec	1,036,141	23,322	43,613	15,454	89,879	139,315	12,174	41,916	285,510	91,082	461,241	2,239,647
	46.3%	1.0%	1.9%	0.7%	4.0%	6.2%	0.5%	1.9%	12.7%	4.1%	20.6%	100.0%

Source: MAFF, MY: October - September

Annex Table 2. Japan Formula Feed Production by Livestock Animal

	Compound Feed																		Mixed Feed		Formula Feed Total		On-Farm Feed Corn	
	Poultry		Layers		Broilers		Swine		Piglets		Hogs		Dairy Cattle		Beef Cattle		Compound Feed Total							
	1,000 MT	Change %	1,000 MT	Change %	1,000 MT	Change %	1,000 MT	Change %	1,000 MT	Change %	1,000 MT	Change %	1,000 MT	Change %	1,000 MT	Change %	1,000 MT	Change %	1,000 MT	Change %	1,000 MT	Change %	1,000 MT	Change %
MY2017/18	10,289	0.8	5,752	1.5	3,820	-0.3	5,587	0.6	1,620	-0.5	2,286	0.4	2,984	-0.1	4,452	1.0	23,370	0.7	489	4.3	23,858	0.8	223	-6.4
MY2018/19	10,346	0.6	5,821	1.2	3,835	0.4	5,563	-0.4	1,602	-1.1	2,294	0.4	3,006	0.7	4,454	0.0	23,429	0.3	513	5.0	23,942	0.3	213	-4.2
MY2019/20	10,303	-0.4	5,783	-0.6	3,834	0.0	5,698	2.4	1,618	1.0	2,403	4.7	3,053	1.6	4,553	2.2	23,668	1.0	533	3.8	24,200	1.1	205	-3.7
MY2020/21	10,161	-1.4	5,657	-2.2	3,842	0.2	5,708	0.2	1,600	-1.1	2,418	0.6	3,126	2.4	4,589	0.8	23,644	-0.1	539	1.3	24,183	-0.1	192	-6.7
MY2021/22	10,186	0.2	5,688	0.5	3,826	-0.4	5,616	-1.6	1,549	-3.2	2,412	-0.3	3,162	1.2	4,688	2.2	23,712	0.3	502	-7.0	24,213	0.1	171	-10.9
Oct-22	850	0.8	467	1.4	331	1.3	482	-0.4	133	-2.0	215	2.4	256	-1.4	390	2.2	1,983	0.5	40	-9.1	2,022	0.3	13	-15.4
Nov-22	872	-1.1	479	-0.6	340	-0.8	502	-1.6	139	-2.4	224	-0.3	265	-1.8	407	2.0	2,051	-0.7	40	-9.8	2,091	-0.9	12	-20.7
Dec-22	914	-2.8	508	-3.1	346	-1.3	534	-2.2	148	-2.7	231	-2.2	296	-2.1	445	0.9	2,195	-1.8	44	-11.3	2,239	-2.0	13	-22.4

Source: MAFF, MY: October - September

Annex Table 3. Japan SBS Rice Import Tender Results (Actual Tonnage)

	JFY2016	JFY2017	JFY2018	JFY2019	JFY2020	JFY2021	JFY2022
United States	56,438	58,783	33,612	55,343	42,101	8,420	2,378
Thailand	6,283	5,968	7,614	7,521	6,874	6,054	5,971
Australia	6,861	30,702	8,495	260	0	0	0
India	425	527	639	1,020	2,189	1,327	1,658
Argentina	0	0	272	272	500	672	1,440
China	2,396	2,240	1,214	2,060	2,120	1,110	200
All others	911	1,780	1,666	10,067	6,489	3,803	2,095
Total	**73,314**	**100,000**	**53,512**	**76,543**	**60,273**	**21,386**	**13,742**

Source: MAFF

Annex Table 4. Japan OMA Rice Import Tender Results (MT)

	JFY2016	JFY2017	JFY2018	JFY2019	JFY2020	JFY2021	JFY2022*
Long Grain Rice							
Thailand	327,275	228,846	273,616	264,692	279,341	273,548	398,560
Medium Grain Rice							
United States	278,000	266,000	286,000	265,000	278,500	298,800	208,000
Australia	0	36,000	0	0	0	24,000	36,000
China	0	48,000	60,000	72,000	60,000	60,000	72,000
Total	278,000	350,000	346,000	337,000	338,500	382,800	316,000
Total	**605,275**	**578,846**	**619,616**	**601,692**	**617,841**	**656,348**	**714,560**

Source: MAFF

*As of March 15, 2023

Attachments:

No Attachments