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Report Highlights:

FAS Tokyo projects Japan's overall demand for feed grain to remain robust in MY2021/22 and MY2022/23 as livestock production expands. FAS Tokyo anticipates corn imports to decrease in MY2021/22 and MY2022/23 as feed millers increase the ratio of low-cost rice at the expense of corn in compound feed. FAS Tokyo estimates reduced food wheat imports for MY2021/2022 as Japan's contracting population and declining per capita wheat consumption, coupled with increasing domestic production, limits demand for imported wheat. FAS Tokyo projects an increase in MY2021/22 and MY2022/23 rice consumption as growing rice for feed consumption outpaces declines in table rice consumption. The Black Sea region is not a significant supplier of grain and feed to Japan.

Executive Summary

FAS Tokyo forecasts Japan's import dependent grain and feed market to remain largely stable despite uncertain grain supplies from the Black Sea region, ongoing global supply chain disruptions, and high global prices for grain. The Black Sea region is not a significant supplier of grains to Japan and Japanese importers do not anticipate substantial changes to total grain imports due to supply uncertainty in the region (Appendix Table 3). For contingency purposes, the Government of Japan stores approximately one million tons of rice and partially incentivizes storage costs for feed grains and imported food wheat. The Government of Japan does not intend to expand contingency grain reserves.

FAS Tokyo anticipates feed demand to remain robust throughout MY2021/22 and MY2022/23 to meet the needs of growing poultry flocks and swine herds (JA2022-0023 and JA2021-0122). In Japan, poultry and swine consume over 65 percent of compound feed. The poultry and swine sectors are rebuilding flocks and herds following sporadic avian influenza and classical swine fever outbreaks in 2021. Cattle inventories have increased over the last five years with support from MAFF to increase cattle herds and service the bullish *Wagyu* (Japanese cattle breed) beef exports.

FAS Tokyo anticipates corn imports to decline to 15.2 million tons in MY2021/22 and MY2022/23 as high corn prices push feed mills to increase rice in favor of corn in compound feed rations. Similarly, sorghum demand is expected to decrease in favor of rice. FAS Tokyo forecasts feed demand for barley and wheat to remain steady in MY2021/22 and MY2022/23.

FAS Tokyo projects wheat imports to fall to 5.3 million tons in MY2021/22 and MY2022/23 as declining population and contracting per capita consumption, coupled with increased wheat production, lowers demand for imported food wheat.

Table rice consumption continues to decline in Japan, resulting in high stocks and low prices in MY2020/21. Consequently, FAS Tokyo anticipates rice for feed consumption to grow and more than offset declines in table rice consumption in MY2021/22 and MY 2022/23.

Corn

Corn Production, Supply and Distribution

Corn	2020/2021		2021/2022		2022/2023	
Market Year Begins	Oct 2020		Oct 2021		Oct 2022	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	1	1	1	1	0	1
Beginning Stocks (1000 MT)	1386	1386	1469	1419	0	1375
Production (1000 MT)	4	5	5	6	0	9
MY Imports (1000 MT)	15479	15478	15600	15200	0	15200
TY Imports (1000 MT)	15479	15478	15600	15200	0	15200
TY Imp. from U.S. (1000 MT)	11210	10972	0	0	0	0
Total Supply (1000 MT)	16869	16869	17074	16625	0	16584
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)	11900	12000	12300	11800	0	11750
FSI Consumption (1000 MT)	3500	3450	3550	3450	0	3500
Total Consumption (1000 MT)	15400	15450	15850	15250	0	15250
Ending Stocks (1000 MT)	1469	1419	1224	1375	0	1334
Total Distribution (1000 MT)	16869	16869	17074	16625	0	16584
Yield (MT/HA)	4	5	5	6	0	9

(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 2022/2023 = October 2022 - September 2023

Production

Japanese corn for grain production is negligible but has steadily increased in recent years. In MY2021/22, Japanese corn production totaled 6,477 tons on 992 hectares, up 23 percent and 26 percent respectively from the previous year. FAS/Tokyo forecasts MY2022/23 production and area harvested to expand to 8,500 tons and 1,300 hectares respectively. The Ministry of Agriculture, Forestry and Fisheries (MAFF), in response to surging prices for imported corn, increased support payments for grain corn produced in paddy fields. Growers typically use the corn on farm for animal feed or sell it locally.

Consumption

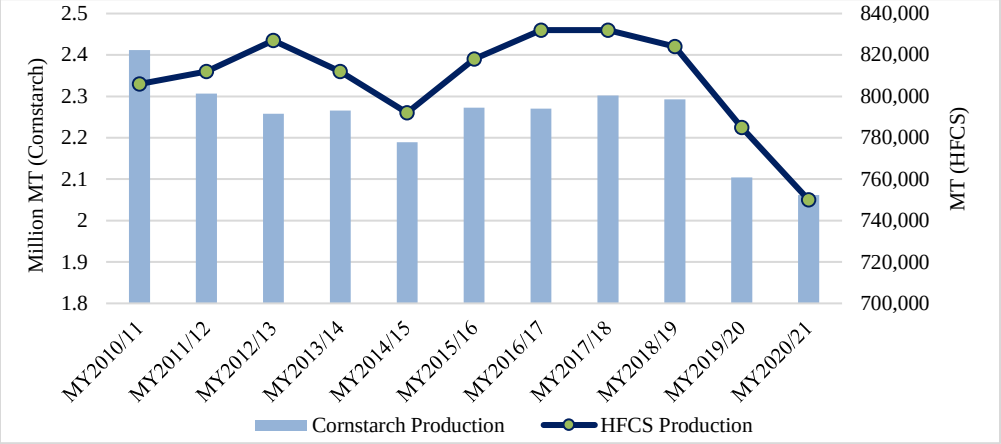
FSI Consumption

FAS Tokyo revised both the MY2020/21 and MY2021/22 Food, Seeds and Industrial (FSI) consumption estimate down to 3.45 million tons as corn starch demand remains sluggish. MY2020/21 corn starch production declined two percent from the previous year, an approximately 60,000 tons corn equivalent decrease (Chart 1). FAS Tokyo forecasts the MY2022/23 FSI consumption to increase slightly to 3.5 million tons reflecting a gradual recovery of cornstarch demand in line with an overall economic recovery in Japan.

In Japan, cornstarch accounts for approximately 90 percent of FSI consumption. Manufacturers use over half of the cornstarch to produce high fructose corn syrup (HFCS), half of which is then used for the manufacture of soft drinks. COVID-19 related restrictions have reduced demand for soft drinks in Japan, resulting in declining cornstarch production. FAS Tokyo anticipates cornstarch demand to remain weak in MY2021/22, but to gradually recover in MY2022/23 in line with an overall return to normal

economic activity. However, industry sources expect the preference of Japanese consumers for low-sugar and sugar-free drinks to hamper a full recovery in cornstarch demand to MY2018/19 levels.

Chart 1. Japan Cornstarch and HFCS Production



Source: MAFF

Feed Consumption

FAS Tokyo lowers its MY2021/22 corn for feed consumption estimate to 11.8 million tons as feed mills continue to increase rice as a substitute for expensive corn in compound feed production. FAS Tokyo forecasts MY2022/23 feed consumption to decline further to 11.75 million tons as feed mills continue to increase the ratio of rice in compound feed. Feed millers reduced corn in feed rations by 1.6 percent, to 11.6 million tons in MY2020/21 (Appendix Table 1).

Japanese feed mills have increased purchases of rice for feed at the expense of corn as its price per energy unit costs have become more price competitive.

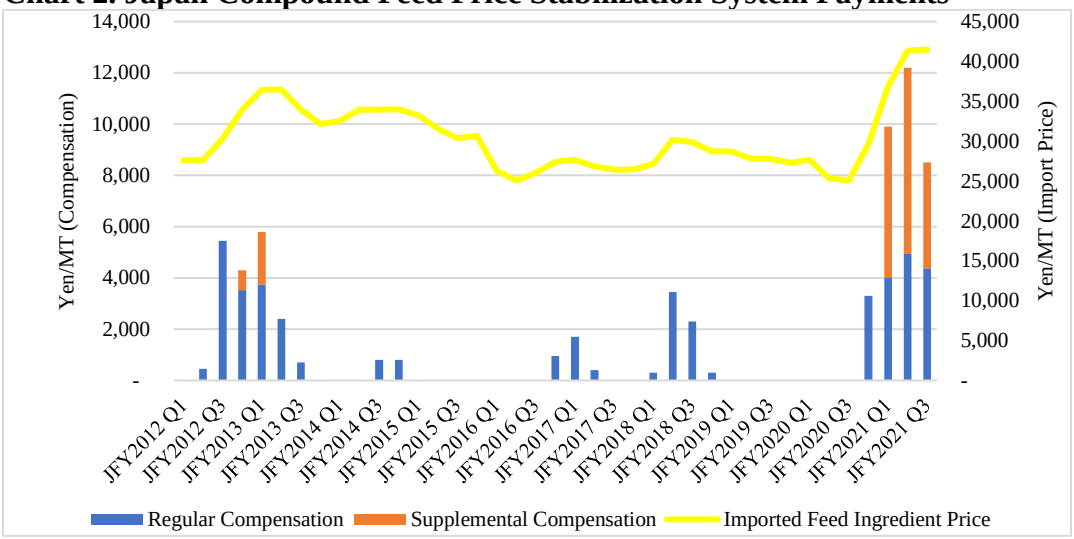
Feed Prices

Japan's feed self-sufficiency ratios for concentrates and roughage are 12 percent and 76 percent respectively, so feed millers rely heavily on imported feed grains. Over the last decade, corn has accounted for between 42 percent and 49 percent of the approximately 24 million tons of compound and mixed feed produced annually in Japan.

Increases in corn and oilseed prices, a weak Japanese Yen, and rising freight costs have led to a surge in feed prices. In October 2021, the average retail price of compound feed hit a record high, 20 percent higher than the previous year and has plateaued since then. To mitigate the impact of this cost increase, the "Compound Feed Price Stabilization System[1]" has provided livestock producers regular compensation payments since the January - March 2021 quarter and supplemental compensation since April - June 2021 quarter (Chart 2). Despite surging prices, livestock production continues to drive robust feed demand. However, overtime the compound feed price supports become less effective at keeping prices down and lingering high prices may have significant effects to Japan's livestock sectors.

[1] See JA2021-0128 for Compound Feed Price Stabilization System details.

Chart 2. Japan Compound Feed Price Stabilization System Payments



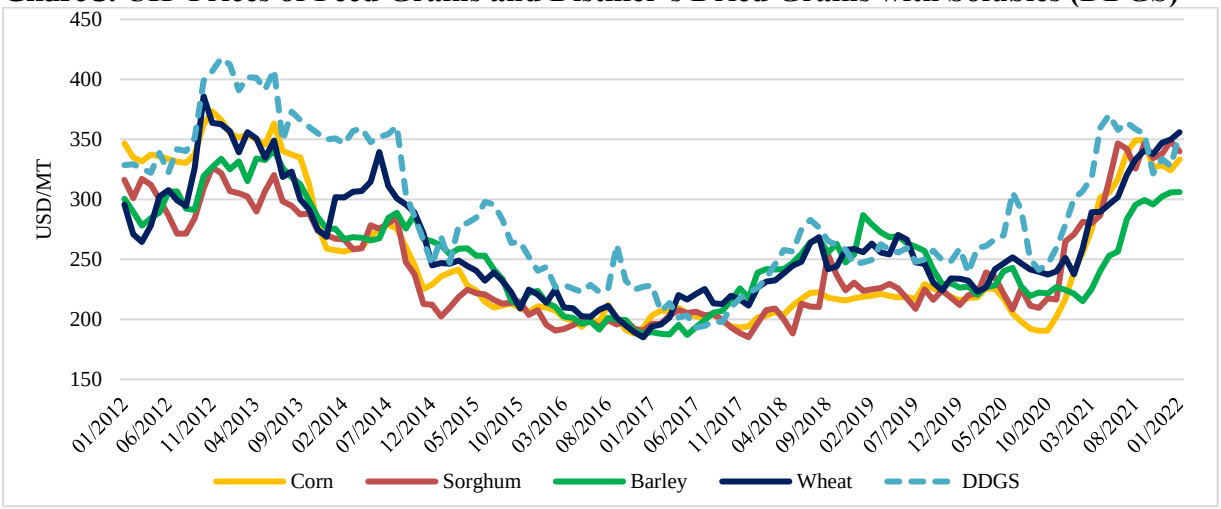
Source: MAFF

Trade

FAS Tokyo projects MY2021/22 imports at 15.2 million tons, reflecting projected declines for corn in feed consumption. FAS Tokyo forecasts MY2022/23 imports to remain at 15.2 million tons as a slight increase in FSI consumption balances out lower feed demand.

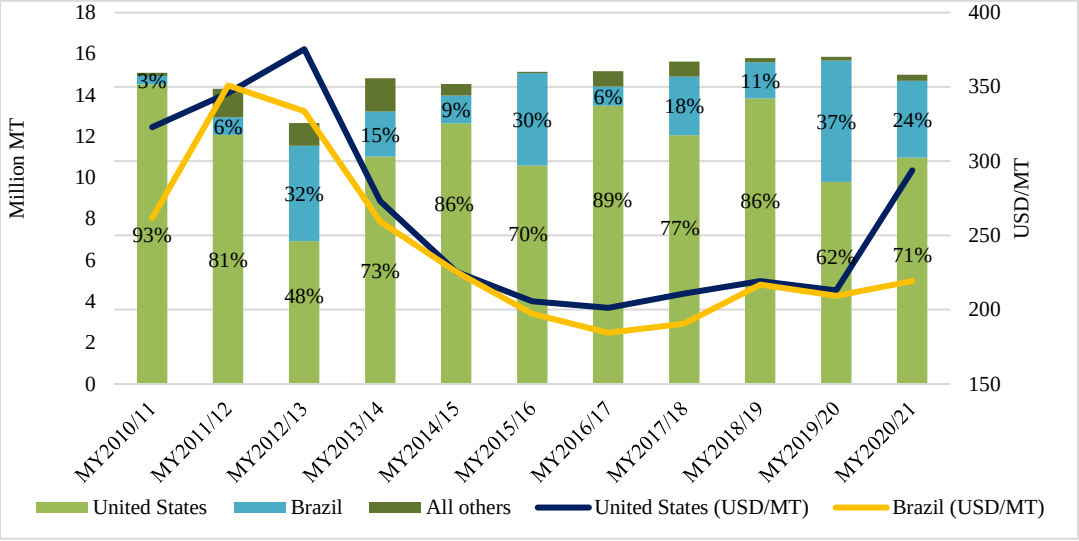
MY2020/21 corn imports decreased 2.6 percent to 15.48 million tons from the previous year as high prices and diminished economic activity decreased demand from feed mills and cornstarch manufacturers. In August 2021, the price of imported corn hit its highest amount since November 2012 and continues to hover near record prices (Chart 3). Despite a surge in U.S. corn prices, U.S. corn market share increased 9 percent, up to 71 percent in MY2020/21 (Chart 4). A weak Brazilian Real made Brazilian corn price competitive, but strong demand in Brazil and a smaller harvest curtailed Brazil's export availability and forced Japan to rely on increases U.S. corn purchases in MY2020/21.

Chart 3. CIF Prices of Feed Grains and Distiller's Dried Grains with Solubles (DDGS)



Source: Trade Data Monitor

Chart 4. Japan Total Corn Imports



Source: Trade Data Monitor

Stocks

FAS Tokyo estimates MY2021/22 ending stocks at 1.375 million tons and forecasts MY2022/23 ending stocks at 1.334 million tons, including approximately 850,000 tons of imported feed corn held by the private sector for which MAFF subsidizes storage costs as contingency reserves.

Sorghum

Sorghum Production, Supply and Distribution

Sorghum	2020/2021		2021/2022		2022/2023	
Market Year Begins	Oct 2020		Oct 2021		Oct 2022	
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)	37	37	26	26	0	26
Production (1000 MT)	0	0	0	0	0	0
MY Imports (1000 MT)	299	299	320	250	0	200
TY Imports (1000 MT)	299	299	320	250	0	200
TY Imp. from U.S. (1000 MT)	30	37	0	0	0	0
Total Supply (1000 MT)	336	336	346	276	0	226
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)	310	310	320	250	0	200
FSI Consumption (1000 MT)	0	0	0	0	0	0
Total Consumption (1000 MT)	310	310	320	250	0	200
Ending Stocks (1000 MT)	26	26	26	26	0	26
Total Distribution (1000 MT)	336	336	346	276	0	226
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 2022/2023 = October 2022 - September 2023

Production
Grain sorghum production is negligible.

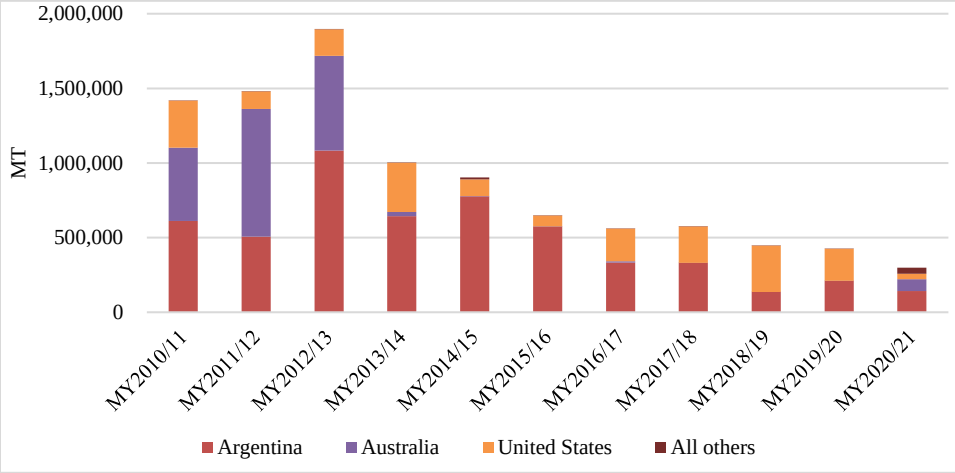
Consumption
MY2020/21 sorghum use in compound feed declined due to high prices and a resulting shift from sorghum to rice (Annex Table 1). FAS Tokyo projects this trend to continue throughout MY2021/22 and MY2022/23 and for consumption to decrease to 250,000 tons and then to 200,000 tons.

Feed millers account for almost all sorghum use in Japan. Typically, feed mills use sorghum as a substitute for corn when price competitive. In addition to comparatively high import prices, sorghum shipments incur additional costs as it typically arrives in Japan on bulk vessels in mixed consignments and is then delivered to feed mills in smaller vessels.

Trade

FAS Tokyo anticipates MY2021/22 and MY2022/23 imports at 250,000 tons and 200,000 tons respectively, in line with reduced demand for sorghum in feed. MY2020/21 sorghum imports fell 30 percent, to 299,443 tons, as high sorghum prices shrunk demand. In MY2020/21, Japan imported sorghum from Australia for the first time since MY2013/14, and Mexico and Brazil for the first time since MY2014/15 (Chart 5). Japan’s imports from the United States dropped 83 percent, to 24,291 tons, in MY2020/21 as U.S. sorghum exports to China reduced availability for Japanese importers.

Chart 5. Japan Sorghum Imports



Source: Trade Data Monitor

Stocks

FAS Tokyo projects MY2021/22 and MY2022/23 ending stocks to decline to 26,000 tons.

Barley

Barley Production, Supply and Distribution

Barley	2020/2021		2021/2022		2022/2023	
Market Year Begins	Oct 2020		Oct 2021		Oct 2022	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	64	64	65	63	0	65
Beginning Stocks (1000 MT)	318	318	251	212	0	165
Production (1000 MT)	222	222	240	233	0	230
MY Imports (1000 MT)	1131	1132	1250	1200	0	1200
TY Imports (1000 MT)	1131	1132	1250	1200	0	1200
TY Imp. from U.S. (1000 MT)	16	0	0	0	0	0
Total Supply (1000 MT)	1671	1672	1741	1645	0	1595
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)	1050	1080	1150	1100	0	1100
FSI Consumption (1000 MT)	370	380	380	380	0	380
Total Consumption (1000 MT)	1420	1460	1530	1480	0	1480
Ending Stocks (1000 MT)	251	212	211	165	0	115
Total Distribution (1000 MT)	1671	1672	1741	1645	0	1595
Yield (MT/HA)	3.4688	3.4688	3.6923	3.6984	0	3.5385

(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 2022/2023 = October 2022 - September 2023

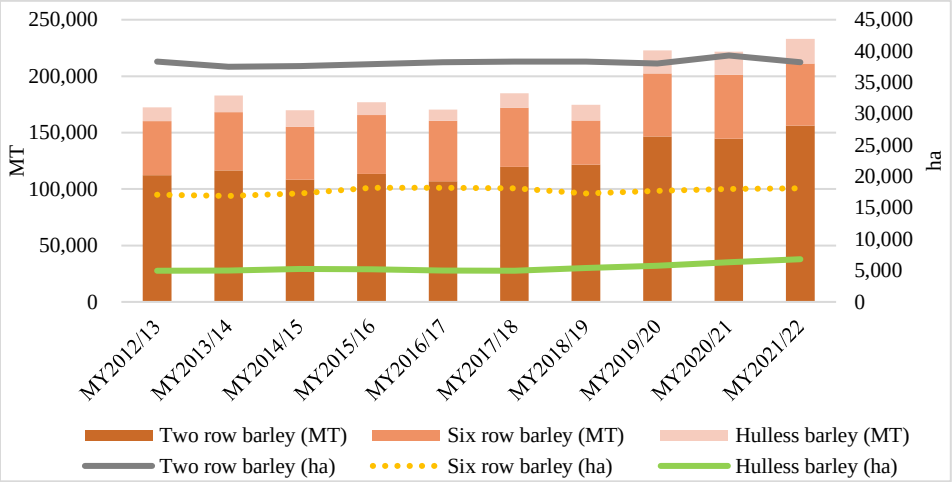
Production

FAS Tokyo forecasts MY2022/23 barley area harvested to expand to 65,000 hectares and for production to total 230,000 tons, assuming a four percent yield decrease from record yields in MY2021/22. In MY2021/22, the area harvested decreased by 0.8 precent, to 63,110 hectares, but production increased 18.4 percent, to 233,000 tons, due predominantly to high yields for two row barley.

Pre-plant auction results for MY2022/23 crop in October 2021 indicate that producers plan to expand barley acreage. Japanese barley growers have had high yields for the last consecutive three years (Chart 6) and increased supplies lowered pre-planting auction prices for the MY2022/23 crop. Despite price declines, producers are shifting acreage from rice to barley in MY2022/23 due to the drop in prices for table rice and increases in MAFF support payments for barley production. Most barley is produced in paddy fields as part of a three-crop rotations along with rice and soybeans. In western Japan it is cultivated as a second crop after the rice harvest.

Favorable weather conditions, new seed varieties, and improved input application techniques have all contributed to improved barley harvests in recent years. Industry reporting shows that barley growers completed the 2021/22 MY planting season on time and under favorable weather conditions.

Chart 6. Japan Barley Acreage and Production



Source: MAFF

Consumption

FAS Tokyo estimates MY2021/22 feed consumption to increase to 1.1 million tons based on projected marginal expansion of beef cattle inventories (JA2022-0023). FAS Tokyo forecasts MY2022/23 feed consumption to remain at 1.1 million tons.

Based on a five percent increase in barley used in feed rations, FAS Tokyo revised the MY2020/21 feed and residual consumption up to 1.08 million tons (Appendix Table 1). Barley is an essential ingredient for fattening and marbling beef cattle for Japanese *Wagyu* producers. MAFF support payment programs to increase cattle herds and bullish *Wagyu* beef exports have pushed expansion of beef cattle inventories over the last five years.

FAS Tokyo forecasts MY2021/22 and MY2022/23 FSI consumption to remain at 380,000 tons. FAS Tokyo raised the MY2020/21 FSI consumption estimate to 380,000 tons based on a 28 percent increase in Calendar Year (CY) 2021 barley tea production. In addition, to utilize increased domestic production, food manufactures are increasing incorporation of barley into an array of products, such as cereal, granola, energy bars, noodles, and flours to spur consumption.

In Japan, barley is used to make malt, *shochu* (distilled liquor), barley *miso* (fermented bean paste) barley tea, and rice extender. “Domestic Barley,” labels are a popular marketing tool for Japanese barley product manufactures and helps to drive demand for domestic barley. The number of craft beer products labeled with “malt produced from domestic barley” have also been on the rise as manufacturers try to differentiate their products in a growing marketplace. Japan imports nearly 90 percent of the malt needed for beer and spirits production. While overall beer consumption has been trending down, craft beer production has been growing in recent years, and industry sources expect demand for malt made from domestic barley to gradually increase in coming years (JA2021-0137).

Trade

FAS Tokyo anticipates MY2021/22 imports to rise to 1.2 million tons as feed barley imports more than offset expected reductions in food barley imports. FAS Tokyo forecasts MY2022/23 imports to remain at 1.2 million tons.

In MY2020/21, an increase in domestic production lowered import demand, falling nearly 10 percent, to 1.13 million tons (Table 1). Food barley imports dropped 34 percent, and imports from the United States more than halved. Since mid-2016, demand for beta glucan rich glutinous barley has been on the rise. Initially, Japan imported glutinous barley, mainly from the United States and Canada, to meet demand. However, over the last 5 years Japan has also been increasing production of glutinous varieties, suppressing demand for imports.

FAS Tokyo forecasts feed barley imports to remain robust in MY2021/22 and MY2022/23. Australia and Canada are the dominant feed barley suppliers to Japan. When supply from these two countries is limited, Japan diversifies suppliers to secure amounts necessary to feed *Wagyu*. In MY2020/21, imports from Australia jumped 72 percent over the previous year, aided by high Chinese tariffs on Australian barley, Australia's recovery from drought leading to a return to normal production, and a below average barley harvest in Canada.

Table 1. Japan Barley Imports (MT)

	MY2015/16	MY2016/17	MY2017/18	MY2018/19	MY2019/20	MY2020/21	Change
Total	**1,155,082**	**1,196,213**	**1,252,841**	**1,157,869**	**1,253,340**	**1,131,879**	**-9.7%**
Barley for feed	923,980	949,919	960,658	916,018	980,906	952,315	-2.9%
Australia	566,195	917,666	797,920	249,708	520,463	893,379	71.7%
Canada	23,531	0	50,579	570,001	299,918	58,936	-80.3%
Russia	40,820	16,558	4,592	16,061	0	0	-
Ukraine	186,049	10,233	87,389	67,011	0	0	-
Romania	37,753	1,159	19,130	13,227	62,043	0	-
All others	69,632	4,303	1,048	10	98,482	0	-
Barley for FSI	231,102	246,294	292,183	241,851	272,434	179,564	-34.1%
Australia	174,900	159,562	183,888	126,725	136,118	111,449	-18.1%
Canada	47,658	60,403	78,144	79,069	106,385	54,560	-48.7%
United States	6,431	24,069	27,972	35,910	29,813	13,537	-54.6%
All others	2,113	2,260	18	147	118	18	-84.7%

Source: Trade Data Monitor

Stocks

FAS Tokyo projects MY2021/22 ending stocks to decline to 165,000 tons and to further decrease to 115,000 tons in MY2022/23.

Wheat

Wheat Production, Supply and Distribution

Wheat	2020/2021		2021/2022		2022/2023	
Market Year Begins	Jul 2020		Jul 2021		Jul 2022	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	213	213	213	220	0	225
Beginning Stocks (1000 MT)	1205	1205	1048	1148	0	1028
Production (1000 MT)	1000	1000	1100	1130	0	1150
MY Imports (1000 MT)	5493	5493	5600	5300	0	5300
TY Imports (1000 MT)	5493	5493	5600	5300	0	5300
TY Imp. from U.S. (1000 MT)	2429	2469	0	0	0	0
Total Supply (1000 MT)	7698	7698	7748	7578	0	7478
MY Exports (1000 MT)	300	300	300	300	0	300
TY Exports (1000 MT)	300	300	300	300	0	300
Feed and Residual (1000 MT)	650	650	625	750	0	700
FSI Consumption (1000 MT)	5700	5600	5675	5500	0	5500
Total Consumption (1000 MT)	6350	6250	6300	6250	0	6200
Ending Stocks (1000 MT)	1048	1148	1148	1028	0	978
Total Distribution (1000 MT)	7698	7698	7748	7578	0	7478
Yield (MT/HA)	4.6948	4.6948	5.1643	5.1364	0	5.1111

(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 2022/2023 = July 2022 - June 2023

Production

FAS Tokyo forecasts MY2022/23 area harvested to expand to 225,000 hectares and for production to rise to 1.15 million tons, assuming a marginal decrease in yield after a record yield in MY2021/22. In MY2021/22, the area harvested increased 7,500 hectares to 220,000 hectares, and production was up 12 percent, to 1.12 million tons, due to a 10 percent yield increase. In addition to favorable weather, improved varieties and input applications have led to bumper crops.

Three consecutive years of large harvests have increased supplies and lowered pre-planting auction prices for the MY2022/23 crop. Despite auction price declines, industry sources indicate that producers have increased planned wheat acreage in MY2022/23 due to increased MAFF support payments for wheat grown in paddy fields combined with a drop in table rice prices. Paddy fields accounted for 5,000 of the 7,500 hectares increase in area harvested in MY2021/22.

Hokkaido, the northern island of Japan, is the major wheat producing region, accounting for nearly 60 percent of national acreage and 66 percent of national production. In Hokkaido, producers grow wheat in a three-crop rotation with potatoes and sugar beets or a four-crop rotation with the addition of beans, mostly in upland fields. Producers plant most the remaining acres throughout Japan in paddy fields in rotation with rice and soybeans. Paddy and upland fields make up 55 percent and 45 percent respectively of national wheat acreage. This composition has not changed over the last decade while wheat acreage has increased five percent, to 220,000 hectares. FAS Tokyo expects wheat acres to continue to grow as producers look to meet demand for domestic wheat and take advantage of MAFF support programs.

Consumption

FAS Tokyo lowered the MY2021/22 FSI consumption estimate to 5.5 million tons based on Japan's declining population, diminishing per capita consumption, and weak demand from the food service and tourism industries. FAS Tokyo forecasts MY2022/23 FSI consumption to remain at 5.5 million tons as high wheat prices lead to dampened demand for retail food products, nullifying a projected recovery in food service and tourism demand. FAS Tokyo revised MY2020/21 FSI consumption estimate down to 5.6 million tons based on a drop in wheat flour sales.

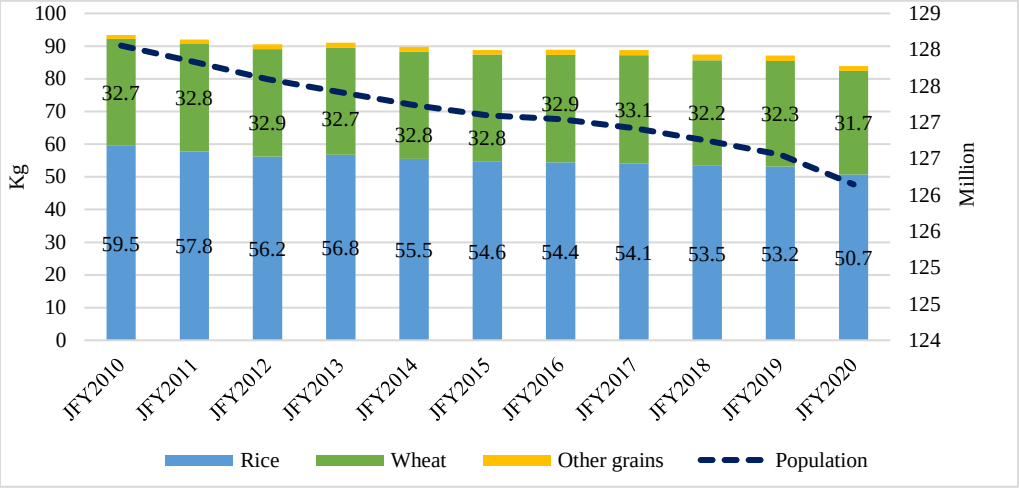
Wheat flour sales decreased 2.5 percent, to 4.48 million tons, in MY2020/21 following a 0.5 percent decrease in MY2019/20. Japan's population has been decreasing annually at 0.2 percent since 2011, and per capita wheat consumption has dwindled since MY2018/19 in favor of higher protein diets (Chart 7). In addition, weak demand from the food service and tourism sectors further suppressed FSI demand. The pasta boom that developed during Japan's COVID-19 related movement restrictions and restaurant closures has since cooled. Pasta consumption surged by 20 percent in CY2019 and CY2020, but CY2021 consumption returned to CY2018 levels.

Prospects for a MY2021/22 FSI consumption recovery are bleak as rising wheat prices coincide with the Government of Japan reinstituting a COVID-19 quasi state of emergency in many prefectures in late January 2022.

Food wheat is a state-traded product and MAFF sells imported wheat to flour mills at prices MAFF sets semi-annually. MAFF bases their price on international wheat prices, freight costs, and exchange rates over the previous six months. MAFF raised the average sales price for the April – September 2022 window for the five classes of wheat to 72,530 yen ($636)[2] /ton, a 17.3 percent increase from the previous six months, and a 39.7 percent increase from a year ago.[3] MAFF explains this increase will raise the retail price of a loaf bread by 1.5 percent and wheat flour by 4.4 percent. Manufacturers usually change their product prices three months after MAFF revises the sales price. Retail prices of flour-based products have been on the rise since December 2021 (Chart 8). Industry sources expect retail prices to continue to rise as uncertainty about the availability of Black Sea wheat on global market grows. FAS Tokyo anticipates this to further suppress FSI demand in MY2021/22 and MY2022/23.

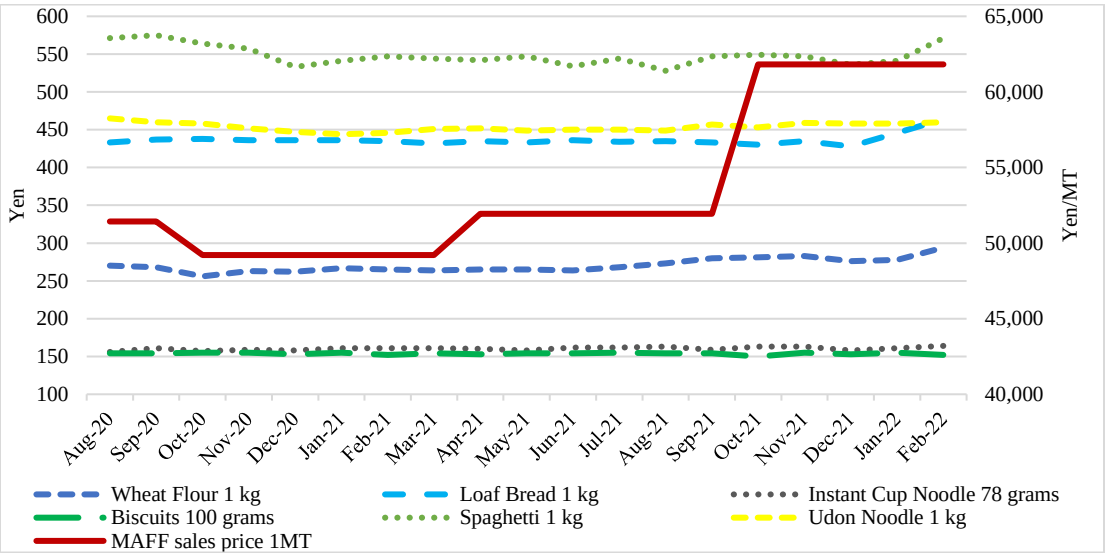
[2] The exchange rate used in this report is 114 yen/USD.
[3] U.S. Dark Northern Spring, U.S. Hard Red Winter, U.S. Western White, Canadian Western Red Spring and Australian Standard White.

Chart 7. Japan Per Capita Grain Consumption and Total Population



Source: MAFF, Ministry of Internal Affairs and Communications

Chart 8. MAFF Wheat Sales Price and Retail Prices of Wheat Flour-Based Products in Japan



Source: MAFF, Ministry of Internal Affairs and Communications

FAS Tokyo raised MY2021/22 feed consumption to 750,000 tons based on feed millers' robust use of wheat in the national compound feed formula so far this year (Appendix Table 1). FAS Tokyo anticipates MY2022/23 feed consumption to decrease to slightly 700,000 tons as inexpensive rice replaces some wheat in compound feed.

Trade

FAS Tokyo lowered the MY2021/22 imports to 5.3 million tons based on a five percent decrease in imports over the first seven months of the marketing year. Although strong, feed wheat imports are not on pace to offset weak food wheat and pasta imports. FAS Tokyo forecasts MY2022/23 imports to remain level at 5.3 million tons as FSI consumption remains sluggish.

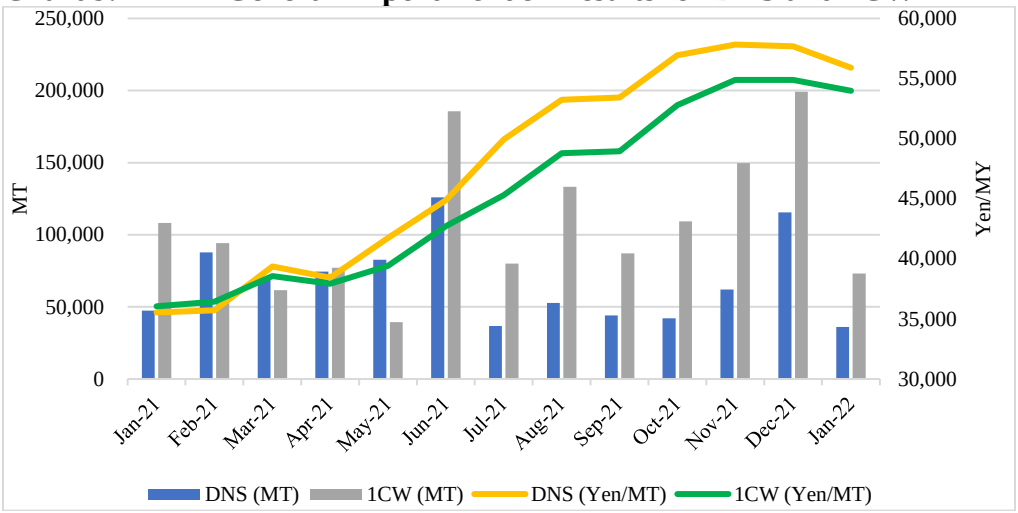
Japan imports of food wheat are predominantly from the United States, Canada, and Australia through the MAFF state-trading system. The five major classes of wheat account for most imports.[4] Over the first seven months of MY2021/22, food wheat imports fell 7.8 percent as declining consumption and increased domestic production lowered import demand (Table 2). Imports from the United States decreased 10 percent. Industry sources indicate that the decrease in U.S. wheat imports is due to the price difference between 1CW and DNS, both used for making bread. As Chart 9 shows, 1CW has been price competitive against DNS since March 2021 and more successfully bid than DNS in MAFF's general import tenders.

Table 2. Japan Food Wheat Imports for July – January (MT)

	MY2019/20	MY2020/21	MY2021/22	Change
Total	2,910,132	2,847,482	2,625,126	-7.8%
United States	1,432,273	1,404,520	1,257,957	-10.4%
Canada	989,081	962,951	874,768	-9.2%
Australia	483,925	476,861	488,843	2.5%
All others	4,853	3,150	3,558	13.0%

Source: Trade Data Monitor

Chart 9. MAFF General Import Tender Results for DNS and 1CW



Source: MAFF

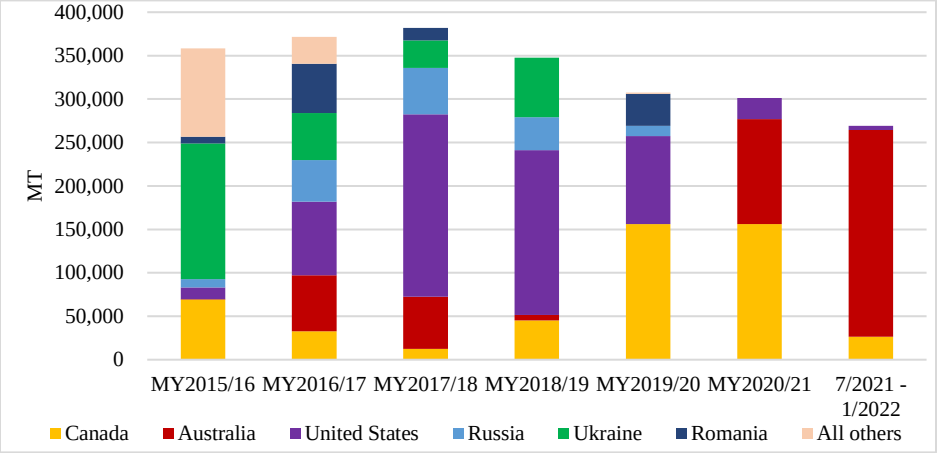
Unlike food wheat, Japan purchases feed grade wheat from a wider range of suppliers, including Ukraine and Russia (Chart 10). Imports from drought-recovered Australia increased in MY2020/21 and dominated the market for the first seven months of the marketing year. Industry expects rising prices of Australian wheat to slow down imports for the reminder of the marketing year.

FAS Tokyo anticipates MY2022/23 exports to remain steady at 300,000 tons. Hong Kong, Singapore, Malaysia, and China are Japan's major destinations. While wheat flour accounts for nearly 80 percent of

[4] 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).

Japan's exports, exports of pasta have gradually increased over the last six years. Japan does not assess a duty on imported wheat when it used in the manufacture of wheat flour, pasta, and biscuits for export.

Chart 10. Japan Feed Wheat Imports



Source: Trade Data Monitor

Stocks

FAS Tokyo estimates MY2020/21 ending stocks to be 1.018 million tons. FAS Tokyo expects MY2021/22 ending stocks to decrease slightly, to 978,000 tons. These privately-held stocks include a contingency stock of approximately 880,000 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.

Rice

Rice Production, Supply and Distribution

Rice, Milled	2020/2021		2021/2022		2022/2023	
Market Year Begins	Nov 2020		Nov 2021		Nov 2022	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	1533	1533	1526	1520	0	1510
Beginning Stocks (1000 MT)	1980	1980	1870	1937	0	1952
Milled Production (1000 MT)	7573	7570	7560	7640	0	7550
Rough Production (1000 MT)	10402	10398	10385	10495	0	10371
Milling Rate (.9999) (1000 MT)	7280	7280	7280	7280	0	7280
MY Imports (1000 MT)	647	647	685	685	0	685
TY Imports (1000 MT)	662	662	685	685	0	685
TY Imp. from U.S. (1000 MT)	314	320	0	0	0	0
Total Supply (1000 MT)	10200	10197	10115	10262	0	10187
MY Exports (1000 MT)	80	110	70	110	0	120
TY Exports (1000 MT)	80	110	70	110	0	120
Consumption and Residual (1000 MT)	8250	8150	8200	8200	0	8250
Ending Stocks (1000 MT)	1870	1937	1845	1952	0	1817
Total Distribution (1000 MT)	10200	10197	10115	10262	0	10187
Yield (Rough) (MT/HA)	6.7854	6.7828	6.8054	6.9046	0	6.8682

(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 2022/2023 = January 2023 - December 2023

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

Production

FAS Tokyo forecasts MY2022/23 area harvested to be 1.51 million hectares, down 10,000 hectares from MY2021/22, and production to be 7.55 million tons, down 90,000 tons. The exit of aging farmers from rice production and MAFF's push to shift acreage out of table rice are driving acreage declines.

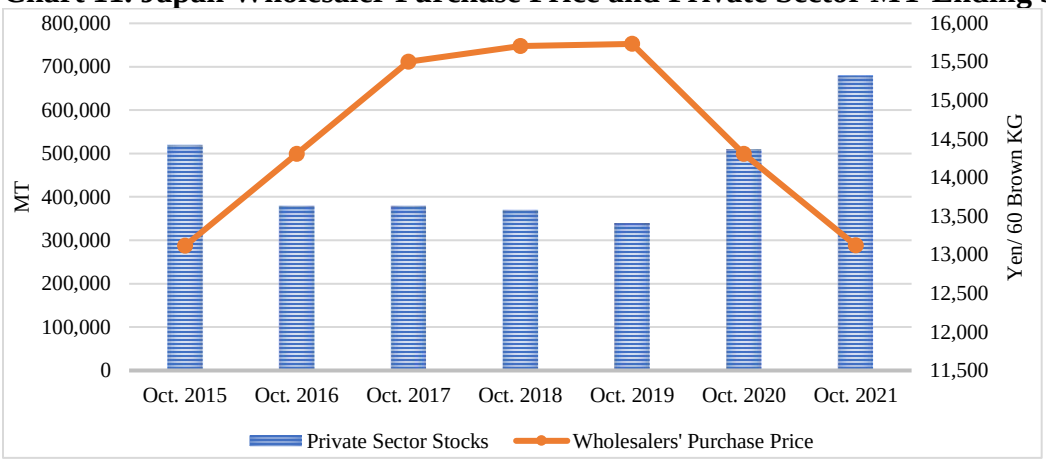
FAS Tokyo estimates the MY2021/22 national average yield to be 6.9 MT/ha, three percent higher than last year, with above average yields throughout Japan except in the Hokuriku region. The yield in Hokuriku was down 3.5 percent from the previous year as typhoons and a lack of sunshine hampered grain filling in August and September. Niigata Prefecture, in Hokuriku and Japan's largest rice producing prefecture, saw a 5.2 percent yield decrease. Producers in southwestern Japan (Kyushu, Shikoku, and Chugoku regions) dealt with typhoons, a prolonged rainy season, and a lack of sunshine in August, but weather recovered in time for improved yields. Hokkaido, the second largest rice producing prefecture, experienced favorable weather, promoting a 2.8 percent yield increase. The yield in Tohoku region was down slightly down from the previous year's bumper crop but still above average. FAS Tokyo raises its estimate for MY2021/22 production to by 0.9 percent, to 7. 6 million tons, despite a 0.8 percent decrease in are harvested to 1.53 million hectares. The quality of MY2021/22 crops is improved over the previous four years and MAFF classified 83.1 percent of the harvest as first grade.

Dwindling table rice consumption increased MY2019/20 private sector ending stocks to 510,000 tons (brown) (Chart 11). In response, MAFF raised support payments for producers to shift production from table rice to wheat, barley, soybeans, horticulture products, rice for exports, and rice for processing in

Japanese Fiscal Year (JFY) 2021.[5] Producers responded by shifting from table rice to feed rice. In MY2021/22, table rice area planted decreased by 63,000 hectares, to 1.3 million hectares, and the planted areas of feed rice increased 45,000 hectares, to 116,000 hectares (Chart 12). In many cases, producers planted table rice varieties and switched shipping destinations from table rice to feed rice despite an effort by MAFF to encourage high-yield varieties for feed rice to lower prices.

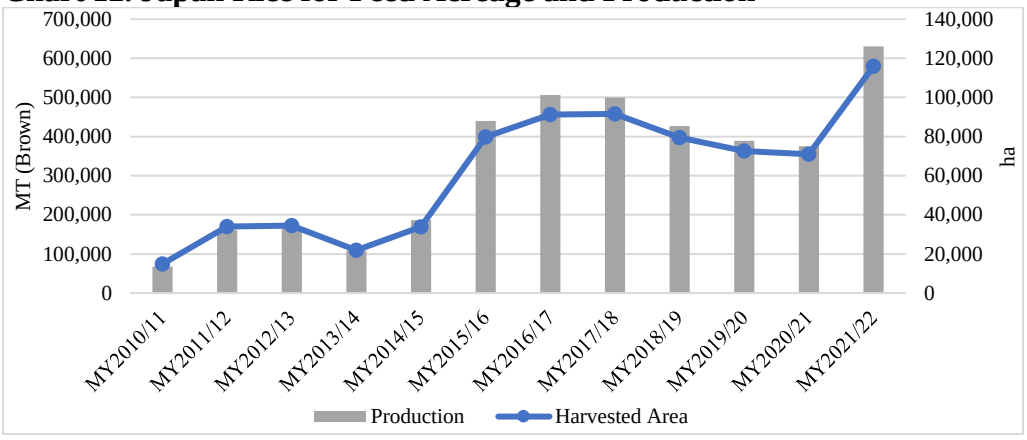
As table rice consumption continues to decline, MY2020/21private sector ending stocks increased further to 680,000 tons (brown). In JFY2022, MAFF again revised support payments to encourage acreage shifts to wheat, barley, soybeans, horticulture products, rice for exports, and rice for processing. However, many producers are unwilling to invest in equipment and inputs necessary to produce new crops, industry sources expect feed rice to remain the preferred alternative. In addition, demand for feed rice is on the rise and easy to commercialize. Accordingly, FAS Tokyo expects acreage to continue shifting from table rice to feed rice in MY2022/23, helping to maintain total rice acreage. In addition to increasing support payments to shift acres out of table rice, MAFF also increased support payments to store MY2021/22 crops in the JFY2022 budget (JA2022-0008).

Chart 11. Japan Wholesaler Purchase Price and Private Sector MY Ending Stocks



Source: MAFF

Chart 12. Japan Rice for Feed Acreage and Production



Source: MAFF

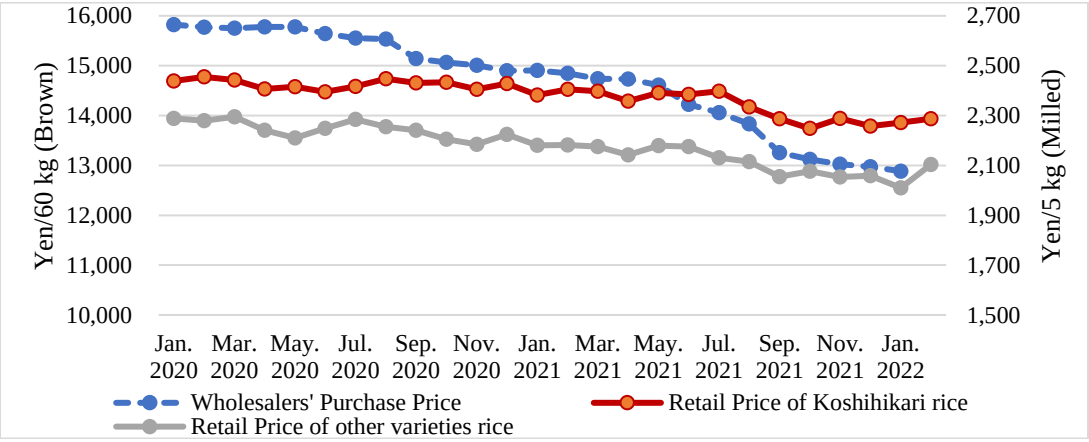
[5] Japanese Fiscal Year (JFY) runs from April 1 to March 31.

Consumption

FAS Tokyo projects MY2021/22 total rice consumption to be 8.2 million tons, as increases in feed consumption offset declines in table rice consumption. FAS Tokyo forecasts MY2022/23 total consumption to rise to 8.25 million tons as rice for feed demand again outpaces the decline in table rice consumption. FAS Tokyo revised MY2020/21 consumption down to 8.15 million tons as MY2020/21 private sector ending stocks were larger than estimated.

Japan's shrinking population and per capita table rice consumption continues to drive declines in overall consumption of table rice (Chart 7). Bearish food service and tourism demand amid the COVID-19 pandemic has accelerated declines in table rice consumption, resulting in high stocks and lower prices (Chart 13). One bright spot for rice consumption is the growth in popularity of microwavable packaged rice, which rose 4.6 percent in CY2021. Manufacturers use approximately 950,000 tons (actual tonnage) of rice and imported rice flour preparations to produce products such as *sake* (rice wine), rice crackers, *miso*, rice flour, and glutinous rice cakes. Production for these products has been steady due to increased exports.

Chart 13. Japan Table Rice Wholesaler Purchase Price and Retail Price for Table Rice



Source: MAFF

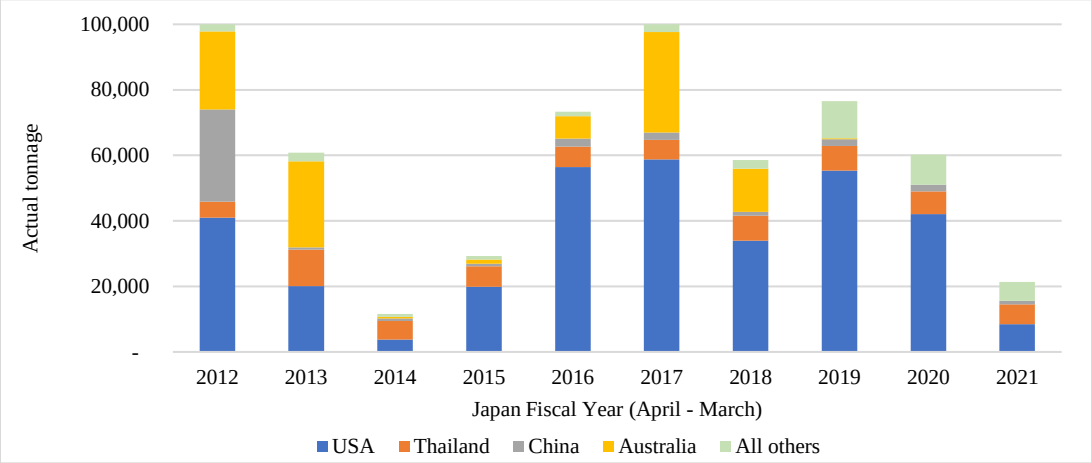
Rice for feed demand has been on the rise due to price competitiveness against corn. Rice used in compound feed production increased 26 percent, to 1.15 million tons (actual tonnage), in MY2020/21. Feed mills use a mix of domestic rice for feed, government contingency reserve rice[6], and imported WTO Minimum Access (MA) rice to meet demand. FAS Tokyo expects rice supplies available for feed to increase to as much as 1.4 million tons (actual tonnage) in MY2021/22 based on increases in feed rice production and increasing availability of MA rice as rice product manufacturers shift from MA rice to competitively priced domestic rice for processing and undersized grain rice.[7] FAS Tokyo anticipates the availability of rice for feed to further increase to as much as 1.5 million tons (actual tonnage) in MY2022/23 as these trends continue.

[6] MAFF sells five-year old government contingency reserve rice for manufacturing processed products and feed.
[7] MAFF sells MA rice for manufacturing processed products and feed.

Trade

Imports
FAS Tokyo expects Japan to import 682,000 tons of rice in MY2021/22 and MY2022/23 in line with its WTO commitment. Imports of Australian rice, for which Japan sets a country specific quota through the Comprehensive and Progression Transpacific Partnership (CPTPP), are limited. As of March 14, MAFF has awarded successful bids for 320 of the 6,240-ton quota for JFY2021. In JFY2021, with low prices for Japanese rice and high global rice prices, MAFF awarded only 21,386 tons (actual tonnage) of rice through the WTO simultaneous buy and sell (SBS) tender system (Chart 14). MAFF transferred the remaining 78,614 tons of the 100,000-ton SBS quota to imports under the Ordinary Market Access (OMA) tenders to fulfill the 682,000-ton WTO TRQ.

Chart 14. Japan SBS Rice Imports Tender Results

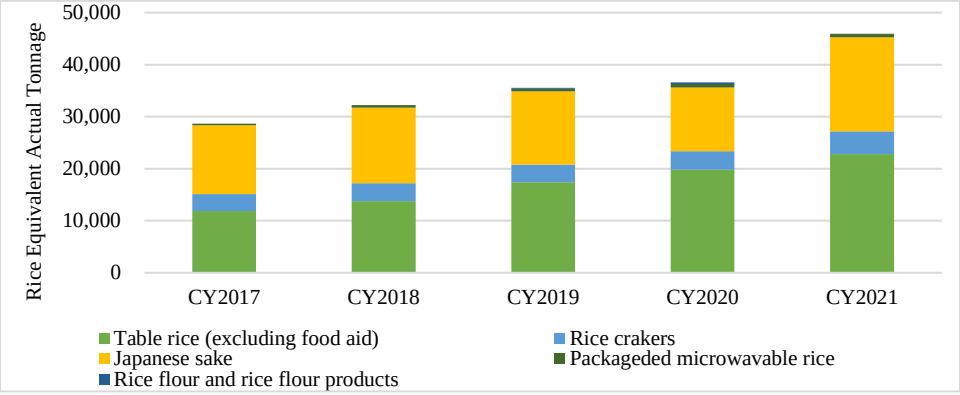


Source: MAFF

Exports
FAS Tokyo raised MY2020/21 exports to 110,000 tons based on revised estimates of approximately 90,000 tons of food aid exports and 20,000 tons of commercial exports. FAS Tokyo estimates food aid exports at 90,000 tons based on the average food aid exports between MY2015/16 and MY2019/20. FAS Tokyo forecasts MY2022/23 exports to rise to 120,000 tons as commercial exports continue to grow.

Japan's commercial rice exports grew 15 percent, to 22,833 tons (actual tonnage), in CY2021. Exports to the top three destinations, Hong Kong, Singapore, and the United States increased 28 percent, 35 percent, and 13 percent respectively. In line with the global economic recovery, *sake* (rice wine) exports surged by 47 percent, to 32,053 kiloliters (18,054 tons rice equivalent), in CY2021. Top destinations for *sake* were the United States, China, and Hong Kong.

Chart 15. Japan Export of Rice, Rice Products, and *Sake*



Source: MAFF

Stocks

FAS Tokyo expects MY2021/22 ending stocks to be 1.952 million tons. FAS Tokyo forecasts MY2022/23 stocks to drop to 1.817 million tons, reflecting an increase in consumption. The ending stocks include government contingency reserves of 910,000 tons (actual tonnage) and MA rice stocks.

Appendix 1. Compound Feed Production (MT)

MY	Corn	Sorghum	Wheat	Wheat Flour	Barley	Rice	Other Grains	DDGS	Soybean Meal	Rapeseed Meal	Other Ingredients	TOTAL
2006/07	11,968,822	1,207,666	95,022	128,407	841,067	501,410	339,008	0	3,403,270	905,696	5,059,301	24,449,669
	49.0%	4.9%	0.4%	0.5%	3.4%	2.1%	1.4%	0.0%	13.9%	3.7%	20.7%	100%
2007/08	12,151,595	1,061,836	99,070	140,704	864,290	604,450	247,691	0	3,363,196	954,442	5,187,245	24,674,519
	49.2%	4.3%	0.4%	0.6%	3.5%	2.4%	1.0%	0.0%	13.6%	3.9%	21.0%	100%
2008/09	12,032,218	1,599,366	131,179	142,216	886,989	240,408	196,327	0	3,292,571	1,024,726	5,157,186	24,703,186
	48.7%	6.5%	0.5%	0.6%	3.6%	1.0%	0.8%	0.0%	13.3%	4.1%	20.9%	100%
2009/10	11,663,020	1,605,491	203,985	133,065	904,803	396,061	230,738	96,210	3,428,260	1,032,870	4,977,265	24,671,768
	47.3%	6.5%	0.8%	0.5%	3.7%	1.6%	0.9%	0.4%	13.9%	4.2%	20.2%	100%
2010/11	11,287,696	1,380,159	245,857	145,289	889,928	537,274	245,270	284,154	3,326,471	1,020,434	4,892,547	24,255,079
	46.5%	5.7%	1.0%	0.6%	3.7%	2.2%	1.0%	1.2%	13.7%	4.2%	20.2%	100%
2011/12	10,688,501	1,461,639	732,039	152,292	882,497	589,640	191,402	400,836	3,178,883	1,095,688	4,897,908	24,271,325
	44.0%	6.0%	3.0%	0.6%	3.6%	2.4%	0.8%	1.7%	13.1%	4.5%	20.2%	100%
2012/13	10,154,181	1,856,711	942,885	176,433	910,896	397,406	169,561	443,993	2,862,672	1,183,477	4,943,907	24,042,122
	42.2%	7.7%	3.9%	0.7%	3.8%	1.7%	0.7%	1.8%	11.9%	4.9%	20.6%	100%
2013/14	10,794,681	1,006,553	649,448	160,815	870,127	732,983	151,688	512,652	2,827,948	1,143,199	4,860,209	23,710,303
	45.5%	4.2%	2.7%	0.7%	3.7%	3.1%	0.6%	2.2%	11.9%	4.8%	20.5%	100%
2014/15	10,530,414	901,173	366,510	161,019	805,315	1,172,993	148,034	476,786	2,848,515	1,196,650	4,773,182	23,380,591
	45.0%	3.9%	1.6%	0.7%	3.4%	5.0%	0.6%	2.0%	12.2%	5.1%	20.4%	100.0%
2015/16	10,868,266	650,398	398,723	177,880	798,662	1,206,845	136,642	405,308	3,018,163	1,115,233	4,784,547	23,560,667
	46.1%	2.8%	1.7%	0.8%	3.4%	5.1%	0.6%	1.7%	12.8%	4.7%	20.3%	100%
2016/17	10,963,813	537,868	451,748	198,078	822,410	1,113,796	137,883	501,962	2,929,498	1,188,101	4,839,950	23,685,108
	46.3%	2.3%	1.9%	0.8%	3.5%	4.7%	0.6%	2.1%	12.4%	5.0%	20.4%	100%
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 Oct	947,966	22,665	42,939	14,196	75,847	104,252	11,529	36,269	257,772	96,701	409,086	2,019,222
	46.9%	1.1%	2.1%	0.7%	3.8%	5.2%	0.6%	1.8%	12.8%	4.8%	20.3%	100.0%
Nov	989,172	23,911	42,407	14,545	77,704	116,625	11,841	38,279	270,197	101,091	425,705	2,111,477
	46.8%	1.1%	2.0%	0.7%	3.7%	5.5%	0.6%	1.8%	12.8%	4.8%	20.2%	100.0%
Dec	1,068,384	24,664	43,956	16,293	86,065	125,763	12,556	41,735	290,055	107,164	462,813	2,279,448
	46.9%	1.1%	1.9%	0.7%	3.8%	5.5%	0.6%	1.8%	12.7%	4.7%	20.3%	100.0%

Source: MAFF
MY: October – September

Appendix Table 2. Japan SBS Rice Import Tender Results (As of March 14, 2022)

		JFY2012	JFY2013	JFY2014	JFY2015	JFY2016	JFY2017	JFY2018	JFY2019	JFY2020	JFY2021
USA	SBS	40,974	20,046	3,804	19,909	56,438	58,783	33,936	55,343	42,101	8,420
	OMA	281,000	300,000	316,000	300,000	278,000	266,000	286,000	265,000	278,500	298,800
	Total	321,974	320,046	319,804	319,909	334,438	324,783	319,936	320,343	320,601	307,220
	Share	47.4%	47.1%	47.2%	47.2%	49.3%	47.8%	47.2%	47.2%	47.3%	46.2%
Thailand	SBS	4,870	11,173	5,596	6,276	6,283	5,968	7,614	7,521	6,874	6,054
	OMA	245,564	300,933	290,174	299,458	327,275	228,846	273,616	276,692	240,341	260,848
	Total	250,434	312,106	295,770	305,734	333,558	234,814	281,230	284,213	247,215	266,902
	Share	36.9%	45.9%	43.6%	45.1%	49.2%	34.6%	41.5%	41.9%	36.5%	40.1%
Australia	SBS	23,873	26,244	559	1,285	6,861	30,702	13,203	260	-	-
	OMA	35,000	12,000	12,000	-	-	36,000	-	-	-	24,000
	Total	58,873	38,244	12,559	1,285	6,861	66,702	13,203	260	-	24,000
	Share	8.7%	5.6%	1.9%	0.2%	1.0%	9.8%	1.9%	0.0%	-	3.6%
	CSQ							1,120	3,459	595	320
China	SBS	28,164	714	780	736	2,396	2,240	1,214	2,060	2,120	1,110
	OMA	13,000		48,000	49,000	-	48,000	60,000	60,000	99,000	60,000
	Total	41,164	714	48,780	49,736	2,396	50,240	61,214	62,060	101,120	61,110
	Share	6.1%	0.1%	7.2%	7.3%	0.4%	7.4%	9.0%	9.2%	14.9%	9.2%
All others	SBS	2,119	2,662	867	1,109	1,336	2,307	2,577	11,359	9,178	5,802
	OMA	5,000	6,000	-	-	-	-	-	-	-	-
	Total	7,119	8,662	867	1,109	1,336	2,307	2,577	11,359	9,178	9,179
	Share	1.0%	1.3%	0.1%	0.2%	0.2%	0.3%	0.4%	1.7%	1.4%	1.4%
Total	SBS	100,000	60,839	11,606	29,315	73,314	100,000	58,544	76,543	60,273	21,386
	OMA	579,564	618,933	666,174	648,458	605,275	578,846	619,616	601,692	617,841	643,648
	Total	679,564	679,772	677,780	677,773	678,589	678,846	678,160	678,235	678,114	665,034
	CSQ							1,120	3,459	595	320

Source: MAFF

Appendix Table 3. Japan Grain Imports and Top Three Suppliers

	MT			Share %	USD			Share %
	MY2018/19	MY2019/20	MY2020/21	MY2020/21	MY2018/19	MY2019/20	MY2020/21	MY2020/21
Corn								
Total	16,050,191	15,887,903	15,479,904		3,527,063,208	3,377,963,598	4,315,039,456	
United States	13,848,736	9,788,421	10,971,520	70.9	3,035,929,267	2,085,304,300	3,223,478,714	74.7
Brazil	1,744,395	5,889,741	3,716,629	24.0	378,449,015	1,233,248,788	814,729,082	18.9
Argentina	256,986	29,026	496,584	3.2	54,206,388	5,892,463	171,511,929	4.0
Sorghum								
Total	448,592	426,457	299,443		100,315,045	93,378,687	88,240,733	
Argentina	136,219	210,173	141,670	47.3	28,393,749	43,869,013	38,683,240	43.8
Australia	305	745	79,070	26.4	179,459	319,386	26,768,002	30.3
United States	310,254	214,276	37,127	12.4	71,116,216	48,697,797	10,405,269	11.8
Barley								
Total	1,157,869	1,253,340	1,131,879		329,186,374	321,020,343	299,152,517	
Australia	696,726	436,036	1,004,828	88.8	194,603,850	116,288,276	260,689,423	87.1
Canada	328,777	626,848	113,496	10.0	92,095,938	151,228,032	30,862,451	10.3
United States	35,910	29,813	13,537	1.2	19,465,355	16,594,729	7,577,560	2.5
Wheat								
Total	5,385,173	5,328,281	5,052,526		1,604,454,830	1,506,509,264	1,513,397,680	
United States	2,543,185	2,512,681	2,434,938	48.2	731,099,822	680,046,875	716,191,746	47.3
Canada	1,802,139	1,855,825	1,761,927	34.9	539,937,891	532,601,761	533,081,379	35.2
Australia	1,031,960	950,904	850,016	16.8	328,998,475	288,883,932	260,608,295	17.2
Rice								
Total	631,890	707,996	647,264		455,386,972	526,833,164	494,913,757	
United States	304,853	342,234	296,739	45.9	269,310,171	311,045,981	276,635,048	55.9
Thailand	246,851	278,369	277,705	42.9	113,360,828	137,068,629	149,343,583	30.2
China	61,296	74,128	62,047	9.6	54,932,343	65,588,950	57,001,521	11.5

Source: Trade Data Monitor

Attachments:

No Attachments