Required Report: Required - Public Distribution **Date:** April 03, 2024

Report Number: JA2024-0017

Report Name: Oilseeds and Products Annual

Country: Japan

Post: Tokyo

Report Category: Oilseeds and Products

Prepared By: Daisuke Sasatani

Approved By: Craig Elliott

Report Highlights:

In relation to persistent rising food prices, Japan has seen a decline in overall vegetable oil consumption. Due to the more favorable crush margin for canola compared to soybeans, FAS/Tokyo forecasts a reduction in soybean imports and crush, while seeing an increase in rapeseed imports and crush for both MY 2023/24 and MY 2024/25. Consequently, Japan is expected to decrease domestic soybean meal production, leading to an increase in soybean meal imports. The elevated price of North American identity-preserved, food-grade soybeans coupled with the Japanese yen depreciation has weakened their price competitiveness versus domestically produced ones. This pricing shift is causing Japanese farmers to consider planting more soybeans.

Contents

Oilseeds 3

Production 4

Consumption 6

Trade 9

Stocks 12

Meals 13

Production 14

Consumption 17

Trade 20

Stocks 21

Oils 22

Overall Vegetable Oil Market 23

Production 25

Consumption 25

Trade 28

Stocks 29

Oilseeds

Commodities:
Oilseeds, Soybean
Oilseeds, Rapeseed
Oilseeds, Cottonseed

Production, Supply, and Distribution of Soybean (Oilseed)

Oilseed, Soybean	2022/2023		2023/2024		2024/2025	
Market Year Begins	Oct 2022		Oct 2023		Oct 2024	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	151	152	155	155	0	158
Beginning Stocks (1000 MT)	243	246	178	173	0	150
Production (1000 MT)	238	243	253	247	0	259
MY Imports (1000 MT)	3,332	3,332	3,500	2,970	0	3,020
Total Supply (1000 MT)	3,813	3,821	3,931	3,390	0	3,429
MY Exports (1000 MT)	0	0	0	0	0	0
Crush (1000 MT)	2,600	2,578	2,625	2,260	0	2,280
Food Use Dom. Cons. (1000 MT)	910	894	920	850	0	860
Feed Waste Dom. Cons. (1000 MT)	125	176	160	130	0	139
Total Dom. Cons. (1000 MT)	3,635	3,645	3,705	3,240	0	3,279
Ending Stocks (1000 MT)	178	173	226	150	0	150
Total Distribution (1000 MT)	3,813	3,821	3,931	3,390	0	3,429
Yield (MT/HA)	1.58	1.60	1.63	1.59	0	1.64
(1000 HA), (1000 MT), (MT/HA)						

Production, Supply, and Distribution of Rapeseed (Oilseed)

Oilseed, Rapeseed	2022/2023		2023/2024		2024/2025	
Market Year Begins	Oct 2022		Oct 2023		Oct 2024	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	2	2	2	2	0	2
Beginning Stocks (1000 MT)	207	207	182	182	0	180
Production (1000 MT)	4	4	4	4	0	4
MY Imports (1000 MT)	1,976	1,976	2,050	2,100	0	2,100
Total Supply (1000 MT)	2,187	2,187	2,236	2,286	0	2,284
MY Exports (1000 MT)	0	0	0	0	0	0
Crush (1000 MT)	2,000	1,975	2,050	2,100	0	2,100
Food Use Dom. Cons. (1000 MT)	0	0	0	0	0	0
Feed Waste Dom. Cons. (1000 MT)	5	30	5	6	0	4
Total Dom. Cons. (1000 MT)	2,005	2,005	2,055	2,106	0	2,104
Ending Stocks (1000 MT)	182	182	181	180	0	180
Total Distribution (1000 MT)	2,187	2,187	2,236	2,286	0	2,284
Yield (MT/HA)	2	2.1	2	2.1	0	2
(1000 HA), (1000 MT), (MT/HA)						

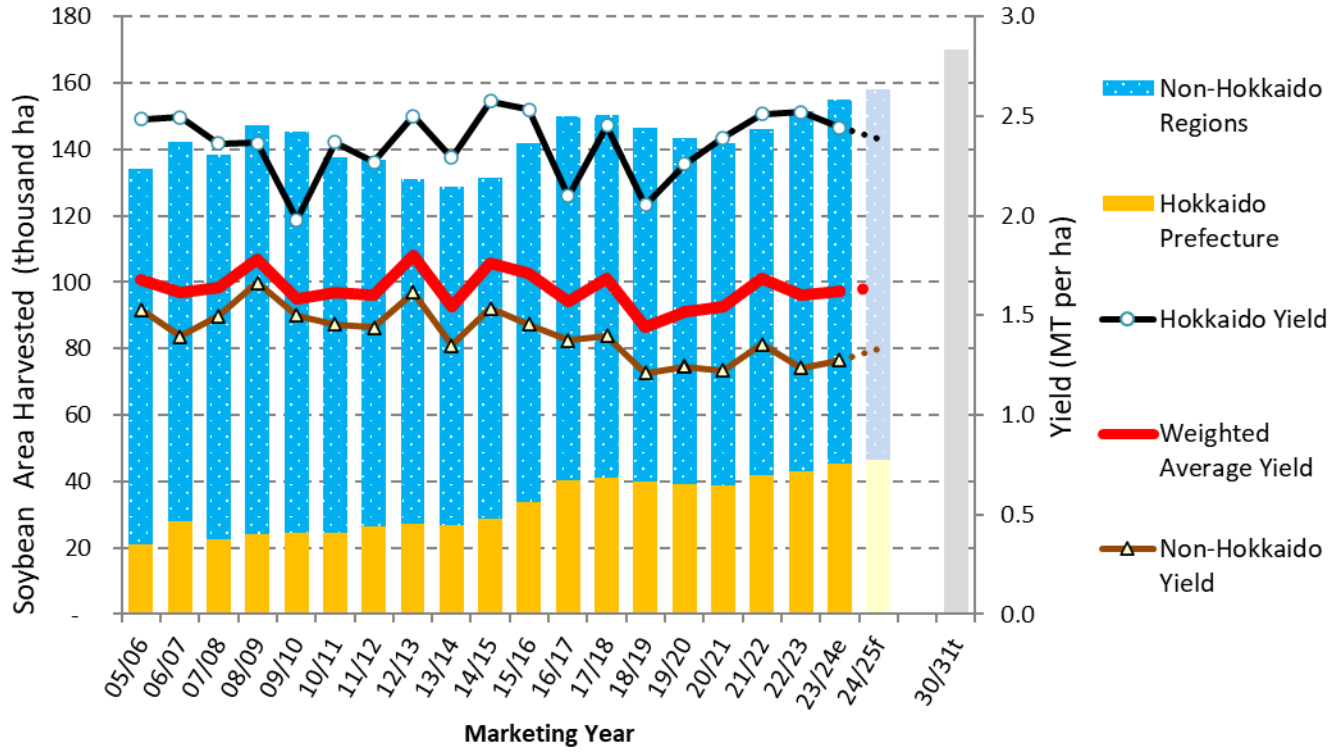
Production, Supply, and Distribution of Cottonseed (Oilseed)

Oilseed, Cottonseed	2022/2023		2023/2024		2024/2025	
Market Year Begins	Oct 2022		Oct 2023		Oct 2024	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted (Cotton) (1000 HA)	0	0	0	0	0	0
Beginning Stocks (1000 MT)	4	4	2	4	0	4
Production (1000 MT)	0	0	0	0	0	0
MY Imports (1000 MT)	93	93	100	90	0	92
Total Supply (1000 MT)	97	97	102	94	0	96
MY Exports (1000 MT)	0	0	0	0	0	0
Crush (1000 MT)	25	28	25	27	0	27
Food Use Dom. Cons. (1000 MT)	0	0	0	0	0	0
Feed Waste Dom. Cons. (1000 MT)	70	65	75	63	0	65
Total Dom. Cons. (1000 MT)	95	93	100	90	0	92
Ending Stocks (1000 MT)	2	4	2	4	0	4
Total Distribution (1000 MT)	97	97	102	94	0	96
(1000 HA), (1000 MT)						

Production

Soybean Area Harvested

Figure 1. Trends in Japan's Soybean Planting Area and Yield



Source: MAFF
Note: MY 2024/25f represents FAS/Tokyo's forecasts. MY 2030/31t represents MAFF's target for 2030.

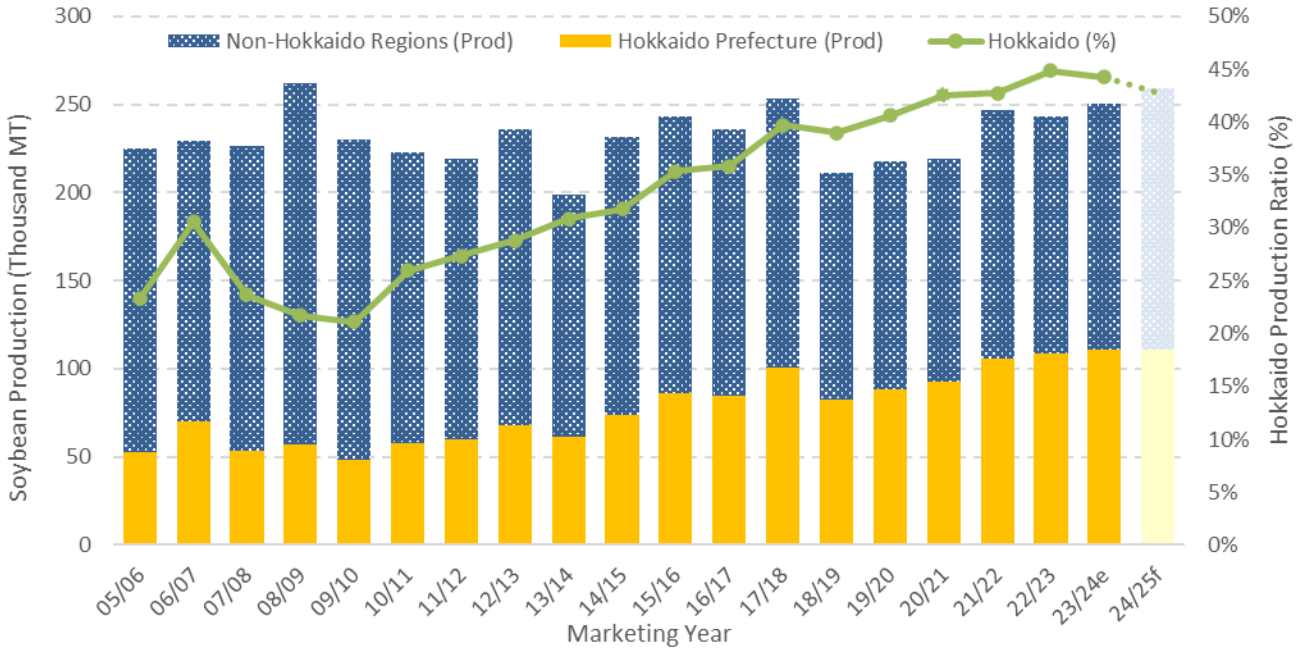
Japan's Ministry of Agriculture, Forestry and Fisheries (MAFF) reported soybean production area for 2023/24 marketing year (MY: October to September) was at 154,800 hectares (ha)[1], a 2.1 percent increase from 151,600 ha in MY 2022/23 (Figure 1) as farmers respond to the high price of food-grade soybeans and proceed to switch from growing rice, other legumes, or sugar beets. In Hokkaido, the northernmost of Japan's four main islands, planted areas increased by 5 percent, but Kyushu (another main island) saw a decrease in planted areas by 1 percent for MY 2023/24. As food-grade soybean prices continue to be elevated, FAS/Tokyo forecasts Japan's MY 2024/25 soybean harvested area to increase by further 2 percent to 158,000 ha. Based on the 2020 Basic Plan for Food, Agriculture and Rural Areas (JA2020-0197), MAFF aims to increase Japan's soybean production area to 170,000 ha by 2030 (Figure 1).

Hokkaido's soybean yield is much higher than that of other prefectures (Figure 1) because the farmers plant on large dry fields, rather than small rice paddies. In addition, some small producers outside of Hokkaido choose high-premium niche varieties, such as *kuromame* (black soybeans), which have an inherently lower yield.

Production

In MY 2022/23, MAFF announced that the domestic soybean production was 242,800 MT, with a yield of 1.60 MT/ha. As typical in Japan, Hokkaido dominated soybean production, with 44 percent of the total MY 2022/23 domestic soybeans (Figure 2).

Figure 2. Trends in Japan's Soybean Production



Source: MAFF
Note: MY 2023/24e represents FAS/Tokyo's estimate based on Zen-noh statistics. MY 2024/25f represents FAS/Tokyo's forecasts.

[1] This is the soybean production area of CY 2023. This does not include *edamame* (immature soybeans) cultivation, which MAFF considers a vegetable rather than grain crop.

For MY 2023/24, Hokkaido experienced rainy weather during harvest season, resulting in a lower-than-expected yield. The quality of soybeans in Hokkaido was disappointing, which resulted in an excess of off-grade soybeans. On the other hand, yields in the Tohoku, Kanto, Kinki, and Kyushu regions improved from the previous year. Based on the November 2023 production and sales estimate by the National Federation of Agricultural Co-operative Associations (*Zen-noh*), FAS/Tokyo estimates[2] Japan's MY 2023/24 soybean yield of 1.59 MT/ha, unchanged from the previous marketing year. Accordingly, FAS/Tokyo estimates the production volume to be 247,000 metric tons (MT) in MY 2023/24.

Assuming the yield in MY 2024/25 will be the 10-year average of 1.64 MT/ha, FAS/Tokyo forecasts Japan's soybean production will reach 259,000 MT in MY 2024/25.

Japan's soybean production is focused on non-genetically engineered (GE) food-grade soybean varieties, of which approximately 80 percent are distributed via the Japan Agricultural Cooperatives (JA) to food manufacturers, such as tofu, *natto*, or *miso* producers (see Utilization of Food-Grade Soybeans in Japan). The remainder is typically sold for household cooking, directly to small businesses, or used for planting. Domestic production does not contribute to the crush figures. Domestically produced soybeans are approximately 30 percent of Japan's food soybean market[3].

Rapeseed

Japan has limited rapeseed production located primarily in Hokkaido, where farmers plant rapeseed as a rotation crop. MAFF announced that the MY 2023/24 rapeseed harvested area[4] was 1,740 ha, the same number as MY 2022/23. MAFF also reported MY 2023/24 rapeseed production at 3,680 MT, unchanged from MY 2022/23. FAS/Tokyo forecasts the MY 2023/24 rapeseed harvest area and production volume will be unchanged at roughly 2,000 ha and 4,000 MT, respectively.

Cottonseed

Japan does not produce cottonseed.

Consumption

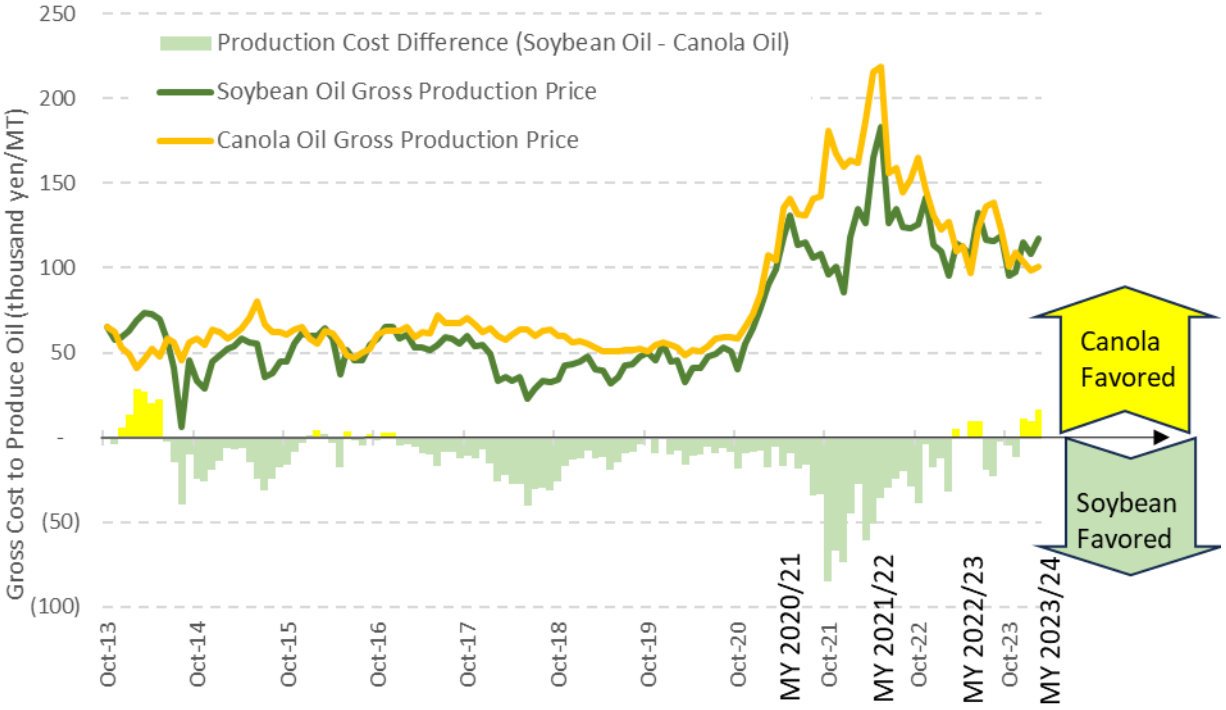
Crush

Soybeans and Rapeseed

Japan's generally stable vegetable oil demand is the primary driver of oilseed consumption in the country. Three crushers (Nisshin Oillio, J-Oil Mills, and Showa Sangyo) produce over 80 percent of Japan's vegetable oil volume primarily from imported soybeans and canola seeds. Two factors largely determine Japan's consumption of soybeans and canola seeds for crushing: relative crush margin and vegetable oil consumption by Japanese consumers.

[2] MAFF will publish its official MY 2022/23 production figures in April 2024.
[3] Food soybean market excludes oil-grade soybeans for crushing.
[4] This figure does not include ornamental planting areas.

Figure 3. Crush Margin of Soybean Oil vs. Canola Oil Production for Japanese Crushers



Sources: Chicago Board of Trade, the Intercontinental Exchange and the Federal Reserve Bank of St. Louis
Note: Gross production cost for crude oil represents the difference between the input (i.e., oilseed future) price and the meal future price. The production cost does not include operational costs.

The crushers adjust the relative proportion of soybeans to canola in response to vegetable oil demand and the relative crush margins for soybeans and rapeseed (Figure 3). The poor MY 2021/22 Canadian canola crop led Japanese crushers to increase soybean procurement. However, this procurement trend stopped around mid-MY 2022/23 as canola seeds price came down relatively faster than soybean prices. At the beginning of MY 2023/24, the crush margin of canola became better than that of soybeans. As a result, FAS/Tokyo forecasts a shift toward increased canola crush at the expense of soybeans in MY 2023/24. As the vegetable oil price has increased[5], FAS/Tokyo forecasts overall vegetable oil consumption to remain low in next two MYs.

Table 1 compares the oil extraction between soybeans and rapeseeds. MAFF reported that in MY 2022/23, Japan crushed 2.578 million MT (MMT) of soybeans to produce 518,430 MT of soybean oil, with a 0.201 oil extraction rate. In MY 2022/23, MAFF also reported that Japan crushed 1.975 MMT of rapeseeds, which was the lowest figure since MY 1997/98. The extraction rate was 0.428 and produced 845,425 MT of rapeseed oil.

As soybean crush margins deteriorate, FAS/Tokyo estimates the Japanese soybean crush will decrease by 12 percent to 2.26 MMT. Conversely, as canola crush margins improve, FAS/Tokyo estimates the Japanese rapeseed crush will increase by 6.3 percent to 2.10 MMT. For MY 2024/25, assuming extreme

[5] This point will be expanded on in the "oils" section.

market conditions to dissipate, but the overall vegetable oil demand to be soft, FAS/Tokyo forecasts the Japanese soybean crush will recover to 2.28 MMT and the rapeseed crush will remain at 2.10 MMT.

Table 1. Conversion Rate of Oilseeds into Oil in Japan (Unit: MMT)

	Soybean Oil			Rapeseed Oil		
	Soybeans	Production	Extr. Rate	Rapeseeds	Production	Extr. Rate
MY 2018/19	2.470 +2.9%	0.485 +3.6%	0.196	2.396 +2.3%	1.024 -0.4%	0.428
MY 2019/20	2.393 -3.1%	0.467 -3.6%	0.195	2.270 -5.3%	0.979 -4.4%	0.431
MY 2020/21	2.364 -1.2%	0.462 -1.1%	0.195	2.357 +3.9%	1.007 +2.9%	0.427
MY 2021/22	2.600 +10.0%	0.519 +12.3%	0.200	2.144 -9.0%	0.904 -10.2%	0.422
MY 2022/23	2.578 -0.8%	0.518 -0.2%	0.201	1.975 -7.9%	0.845 -6.5%	0.428
MY 2023/24f	2.260 -12.3%	0.445 -14.1%	0.197	2.100 +6.3%	0.903 +6.9%	0.430
MY 2024/25f	2.280	0.450	0.197	2.100	0.900	0.429

Source: MAFF
Note: "f" represents FAS/Tokyo's forecasts. FAS/Tokyo's forecasts of MY 2023/24f include MAFF's official data from October 2023 to February 2024. The percent amounts are the annual changes from the previous MYs.

Cottonseed

MAFF reports that in MY 2022/23, Japan crushed 28,134 MT of cottonseed to produce 4,769 MT of cottonseed oil, with an oil extraction rate of 0.170. Cottonseed oil is principally used as a high-end oil for frying (e.g., *tempura* and boutique donuts), as well as a high-end oil for canned fish. Cottonseed meal (12,842 MT) largely went to fertilizer and feed for dairy cows. FAS/Tokyo projects the cottonseed crush will remain at 27,000 MT for MY 2022/23 and MY 2023/24 as Japan's cottonseed oil demand is not price sensitive. Okamura Oil Mill in Osaka is the only cottonseed crusher in Japan.

Food Use Consumption

Processed soy food manufacturers (e.g., tofu, *natto*, *miso*, soymilk, simmered soybeans, etc.) consume most food-grade soybeans in Japan. Over the last decade, Japan's food-grade soybean consumption has remained approximately 0.9 MMT annually. Due to the general perception in Japan that processed soy products are inexpensive staple foods (see Utilization of Food Grade Soybeans in Japan), stealth price hikes (also known as *shrinkflation*) became a common practice.

The "Daily Soybean Oil[6]" publication projected soy food use would decline in 2023 to 894 MMT. The same publication also projected the consumption of tofu varieties to decline slightly, but *natto* varieties maintained a consistent volume in 2023. FAS/Tokyo forecasts food consumption of soybeans will decrease to 850,000 MT in MY 2023/24 and increase to 860,000 MT for MY 2024/25.

[6] Page 2 of the June 30, 2023, issue.

Feed, Seed, and Waste Consumption

Soybean and Rapeseed

According to MAFF's feed statistics, feed manufacturers' soybean consumption decreased to 77,594 MT in MY 2022/23. Year-to-date estimates indicate feed demand for relatively expensive soybeans will further decline in MY 2023/24. Accounting for seeds, waste and local feed consumption not captured by MAFF statistics[7], FAS/Tokyo projects soybean feed, seed and waste consumption will drop to 130,000 MT in MY 2023/24 and then marginally increase for MY 2024/25. Rapeseed feed, seed and waste consumption will remain minimal and consistent.

Cottonseed

Feed manufacturers use cottonseed as a minor ingredient in feed for dairy cows to boost milk fat. From March 2023, MAFF allocated 5 billion yen ($33.3 million[8]) in the 2022 supplementary budget to remove up to 40,000 dairy cows in response to the overproduction of milk (2023 Japan Dairy and Products Annual and 2024 Japan Livestock and Products Semi-Annual). The feed consumption of cottonseed was 65,000 MT in MY 2022/23, decreasing significantly from the previous marketing year. Japanese dairy experts believe the number of milk cows will hit the nadir in the middle of MY 2023/24, then will slowly start to recover. In order to avoid the oversupply of fresh milk, FAS/Tokyo projects cottonseed feed consumption will decrease to 63,000 MT in MY 2023/24 and then recover to 65,000 MT in MY 2024/25.

Trade

Besides some domestic food-grade soybean production, Japan fully relies on oilseed imports and has no tariffs on soybeans, rapeseed, and cottonseed.

Soybeans

In MY 2022/23, Japan imported 3.332 MMT of soybeans, a marginal decrease from 3.455 MMT in MY 2021/22, resulting in the largest import figure in the previous 15 years. In MY 2022/23, major suppliers included the United States (70.4 percent, including both feed-grade and food-grade); Brazil (18.6 percent, feed-grade); Canada (10.4 percent, food-grade) and China (0.6 percent, food-grade). Generally, about 80 percent of imports are feed-grade and 20 percent food-grade. Although Japanese crushers prefer the oil quality from U.S. soybeans, Japanese industry's requirement of 47.5 percent crude protein[9] in soybean meal for high-protein feed (Hi-Pro) helps preserve Brazil's market share due to the higher crude protein content in Brazilian soybeans.

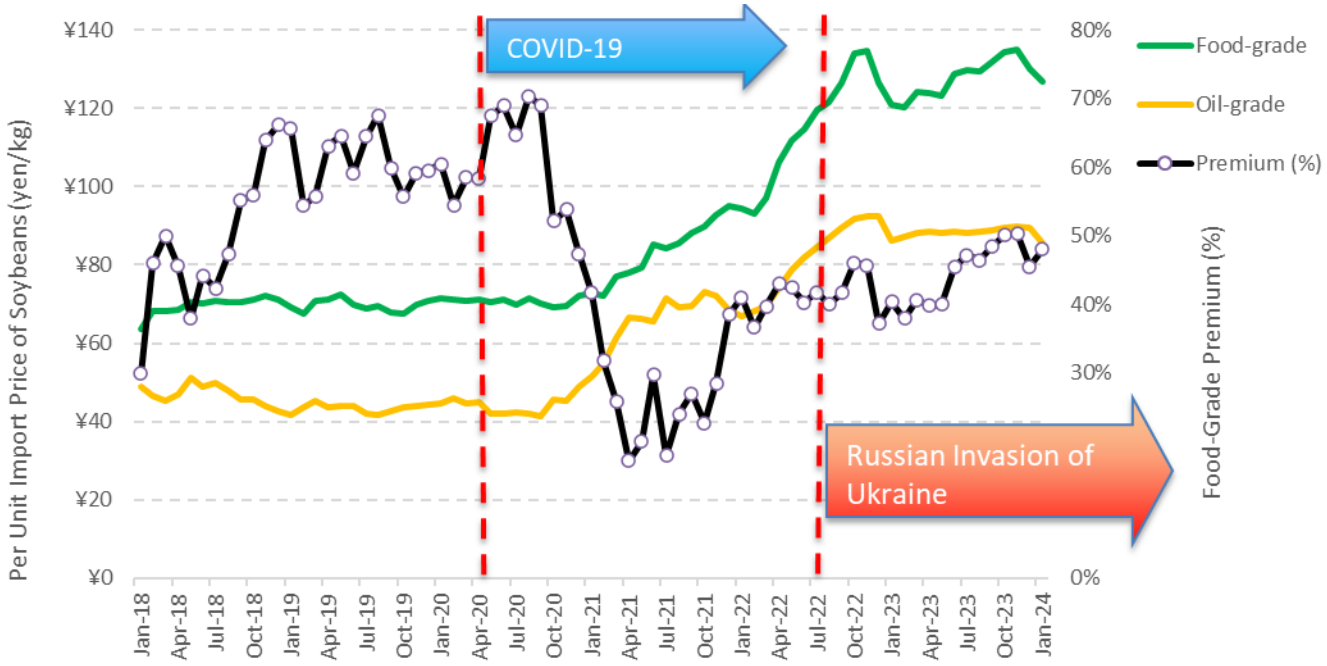
As weak demand remains for both oil-grade and food-grade soybeans, FAS/Tokyo forecasts Japan to import 2.97 MMT and 3.02 MMT soybeans in MY 2023/24 and MY 2024/25, respectively.

As illustrated in Figure 4, soybean import prices to Japan have surged since the beginning of 2021, reflecting the Chicago futures price. Oil-grade soybean import prices were steady at about 40-50 yen per

[7] Feed, seed and waste consumption represents residual consumption and includes off-grade domestic soybeans.
[8] $1 ≈ 150 yen (March 2024)
[9] The majority of domestic soybean meal production is low-protein (Lo-Pro) soybean meal, which requires 44 percent of crude protein content.

kilogram (kg) from 2019 to 2020. After Russia's invasion of Ukraine and the Japanese yen depreciation against major currencies, the import price spiked to around 90 yen per kg in 2022 fall. Food-grade soybean prices have also surged, but Japanese food manufacturers often use North American "identity preserved" (IP) soybeans to target price sensitive mass markets. Japanese buyers pay premiums to ensure North American farmers plant lower-yield food-grade soybean varieties. The food-grade soybean premiums were about 60-70 percent over oil-grade soybean prices between 2019 and mid-2020; however, as oil-grade soybean prices have surged, the percentage of premiums dropped to 20-30 percent from 2021.

Figure 4. Import Unit Prices of Oil-Grade and Food-Grade Soybeans



Source: Japan Customs
Note: Oil-grade soybean prices are based on imported soybean unit price at Mizushima and Kashima Custom Districts and food-grade soybean prices are based on imported Canadian soybean prices.

Japanese food manufacturers produce soy food products using domestic soybeans to target high-end customers. The manufacturers emphasize that their higher priced products use domestic soybeans, differentiating from their more affordable products that use imported IP soybeans. Based on market price statistics, the wholesale price gap between domestic soybeans and North American IP soybeans were about 60-80 percent until 2021 but has since dropped to about 15 percent in 2022. As the price premium of domestic soybeans narrowed, many food manufacturers seek to increase the use of domestic soybeans over imported soybeans, signaling to Japanese farmers to plant more soybeans.

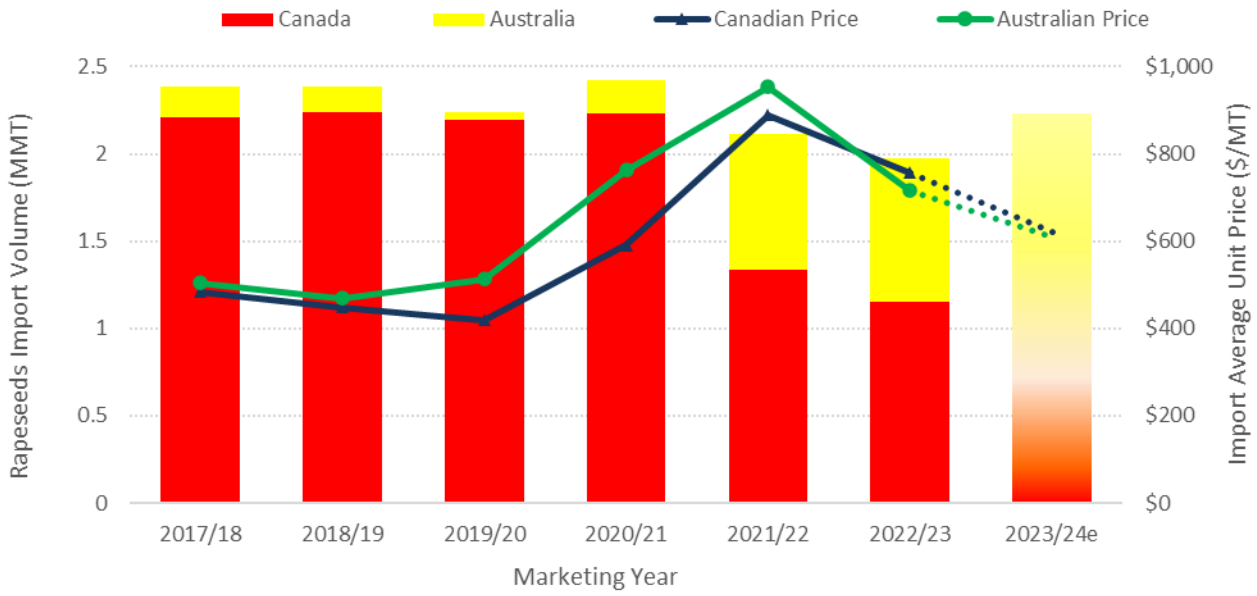
As the price of food-grade soybeans has elevated, Japanese wholesalers and food processors increased stocks of food-grade soybeans around the beginning of MY 2023/24. Due to the weak Japanese yen against other major currencies, the price competitiveness of North American food-grade soybeans has heavily weakened against domestic food-grade soybeans. Thus, North American food-grade IP soybeans will face challenging market conditions in near future. Please see JA2023-0131 for more details about food price inflation in the Japanese market.

Rapeseed

In MY 2022/23, Japan imported 1.976 MMT of rapeseed, declining 6.6 percent from the previous MY. Historically, Japan has relied on Canada for approximately 95-97 percent of its rapeseed imports. Starting from MY 2021/22, Japan increased the purchase of Australian canola seeds due to a historically bad MY 2021/22 canola crop in Canada (see Canada Oilseeds Annual). On the other hand, Australia had bumper canola crops in MY 2021/22 and MY2022/23 (see Australia Oilseeds Annual). Japanese crushers also noted higher oil extraction rates from Australian canola seeds compared to Canadian seeds. In MY 2022/23, 58.2 percent of rapeseed imported to Japan came from Canada and 41.8 percent came from Australia (Figure 5). Year-to-date estimate indicates this trend continues in MY 2023/24.

As the canola crush margin has improved drastically compared to soybean crush margin (Figure 3), FAS/Tokyo projects canola imports will increase to 2.10 MMT in MY 2023/24 and MY 2024/25.

Figure 5. Japan's Rapeseed Imports by Origin



Source: Japan Customs
Note: 2023/24e estimates are the year-to-date estimates from October 2023 to February 2024.

Cottonseed

GE cottonseeds must undergo regulatory approval for food and feed use in Japan (refer to Japan Agricultural Biotechnology Annual for the regulations). Consequently, only select countries can provide cottonseeds to Japanese consumers. In MY 2022/23, Japanese imports of cottonseed dropped to 92,710 MT due to weak feed demand. Australia emerged as the primary supplier, holding a 70.7 percent market share. Australian cottonseeds were utilized for both crushing and feed purposes. Greece was the second largest supplier, commanding a 14.9 percent market share. The Japanese oil crusher benefited from the high oil content of Greece's non-GE variety, though the sufficient availability of Greek cottonseeds could be questionable in MY 2023/24. As U.S. cotton production in MY 2022/23 was the lowest since MY 2015/16, the import share of U.S. cottonseeds dropped to 13.0 percent and the entirety used for feed.

FAS/Tokyo projects Japanese cottonseed imports to contract to 90,000 MT in MY 2023/24 due to weak feed demand by the dairy industry, then an increase to 92,000 MT in MY 2024/25. As the pricing becomes more favorable, industry experts believe Japan will increase Brazilian cottonseeds for both feed and crush in the next two marketing years.

Stocks

MAFF reported that the soybean stock level at the beginning of MY 2022/23 grew to 246,300 MT, of which oil crushers held 242,662 MT and feed manufacturers held the remaining 3,638 MT. However, as the soybean crush has slowed, soybean stocks have also declined to 172,656 MT (169,114 MT at crushers and 3,542 MT at feed millers) at the beginning of MY 2023/24. MAFF also reported that MY 2022/23 rapeseed beginning stocks at crushers were 206,809 MT and the MY 2023/24 rapeseed beginning stocks were 181,923 MT.

FAS/Tokyo forecasts that crushers will draw down on soybean stocks in MY 2022/23, resulting in ending stocks of around 150,000 MT in both MY 2022/23 and MY 2023/24. Rapeseed ending stocks are forecasted around 180,000 MT in MY 2022/23 and MY 2023/24.

MAFF reported MY 2022/23 beginning cottonseed stocks for crush at 873 MT and ending cottonseed stocks at 1,550 MT. There are no official cottonseed stock figures for feed. FAS/Tokyo estimates feed cottonseed stocks at 3,000 MT. FAS/Tokyo forecasts total cottonseed ending stocks will hover around 4,000 MT in both MY 2022/23 and MY 2023/24.

Meals

Commodities:
Meal, Soybean
Meal, Rapeseed
Meal, Fish
Meal, Palm Kernel

Production, Supply, and Distribution of Soybean Meal

Meal, Soybean	2022/2023		2023/2024		2024/2025	
Market Year Begins	Oct 2022		Oct 2023		Oct 2024	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Crush (1000 MT)	2,600	2,578	2,625	2,260	0	2,280
Extraction Rate (PERCENT)	0.755	0.751	0.754	0.752	0	0.752
Beginning Stocks (1000 MT)	92	92	43	102	0	100
Production (1000 MT)	1,962	1,937	1,980	1,700	0	1,715
MY Imports (1000 MT)	1,540	1,540	1,600	1,720	0	1,706
Total Supply (1000 MT)	3,594	3,569	3,623	3,522	0	3,521
MY Exports (1000 MT)	1	1	1	2	0	1
Industrial Dom. Cons. (1000 MT)	200	186	210	190	0	190
Food Use Dom. Cons. (1000 MT)	200	190	200	190	0	190
Feed Waste Dom. Cons. (1000 MT)	3,150	3,090	3,150	3,040	0	3,040
Total Dom. Cons. (1000 MT)	3,550	3,466	3,560	3,420	0	3,420
Ending Stocks (1000 MT)	43	102	62	100	0	100
Total Distribution (1000 MT)	3,594	3,569	3,623	3,522	0	3,521
(1000 MT), (PERCENT)						

Production, Supply, and Distribution of Rapeseed Meal

Meal, Rapeseed	2022/2023		2023/2024		2024/2025	
Market Year Begins	Oct 2022		Oct 2023		Oct 2024	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Crush (1000 MT)	2,000	1,975	2,050	2,100	0	2,100
Extraction Rate (PERCENT)	0.577	0.565	0.576	0.556	0	0.556
Beginning Stocks (1000 MT)	18	18	16	64	0	70
Production (1000 MT)	1,153	1,116	1,181	1,168	0	1,168
MY Imports (1000 MT)	20	20	5	6	0	6
Total Supply (1000 MT)	1,191	1,154	1,202	1,238	0	1,244
MY Exports (1000 MT)	0	0	0	0	0	0
Industrial Dom. Cons. (1000 MT)	225	110	235	110	0	110
Food Use Dom. Cons. (1000 MT)	0	0	0	0	0	0
Feed Waste Dom. Cons. (1000 MT)	950	980	950	1,058	0	1,064
Total Dom. Cons. (1000 MT)	1,175	1,090	1,185	1,168	0	1,174
Ending Stocks (1000 MT)	16	64	17	70	0	70
Total Distribution (1000 MT)	1,191	1,154	1,202	1,238	0	1,244
(1000 MT), (PERCENT)						

Production, Supply, and Distribution of Fishmeal

Meal, Fish	2022/2023		2023/2024		2024/2025	
Market Year Begins	Jan 2023		Jan 2023		Jan 2024	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Catch For Reduction (1000 MT)	950	882	950	900	0	900
Extraction Rate (PERCENT)	0.211	0.219	0.211	0.217	0	0.217
Beginning Stocks (1000 MT)	21	21	18	27	0	25
Production (1000 MT)	200	193	200	195	0	195
MY Imports (1000 MT)	170	182	170	178	0	180
Total Supply (1000 MT)	391	396	388	400	0	400
MY Exports (1000 MT)	3	3	5	5	0	5
Industrial Dom. Cons. (1000 MT)	70	66	75	70	0	70
Food Use Dom. Cons. (1000 MT)	0	0	0	0	0	0
Feed Waste Dom. Cons. (1000 MT)	300	300	285	300	0	300
Total Dom. Cons. (1000 MT)	370	366	360	370	0	370
Ending Stocks (1000 MT)	18	27	23	25	0	25
Total Distribution (1000 MT)	391	396	388	400	0	400
(1000 MT), (PERCENT)						

Production, Supply, and Distribution of Palm Residues (HS Code: 2306.60)

Meal, Palm Kernel	2022/2023		2023/2024		2024/2025	
Market Year Begins	Oct 2022		Oct 2023		Oct 2024	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Crush (1000 MT)	0	0	0	0	0	0
Beginning Stocks (1000 MT)	0	0	0	0	0	0
Production (1000 MT)	0	0	0	0	0	0
MY Imports (1000 MT)	85	85	100	80	0	70
Total Supply (1000 MT)	85	85	100	80	0	70
MY Exports (1000 MT)	0	0	0	0	0	0
Industrial Dom. Cons. (1000 MT)	80	81	95	76	0	66
Food Use Dom. Cons. (1000 MT)	0	0	0	0	0	0
Feed Waste Dom. Cons. (1000 MT)	5	4	5	4	0	4
Total Dom. Cons. (1000 MT)	85	85	100	80	0	70
Ending Stocks (1000 MT)	0	0	0	0	0	0
Total Distribution (1000 MT)	85	85	100	80	0	70
(1000 MT), (PERCENT)						

Note: Due to the difference in the application of HS codes used by Japan and its palm kernel residue suppliers (Malaysia and Indonesia), Malaysia's and Indonesia's export data differ notably from Japan's import data (see JA2020-0110). FAS/Tokyo relies on suppliers' export data to capture Japanese palm kernel residue imports, which are primarily utilized as biomass by Japanese powerplants. Above numbers do not represent total PKS consumption by Japanese power plants (see JA2023-0071).

Production

Soybean and Rapeseed Meal

Japanese oil crushers produce soybean meal and rapeseed meal as by-products, supplying approximately half of soybean meal demand and all of rapeseed meal demand. FAS/Tokyo forecasts a rise in domestic rapeseed production and a decrease in soybean meal production for MY 2023/24 and MY 2024/25 due to the more favorable crush margin for canola compared to soybeans (see Table 2).

Table 2. Soybean and Rapeseed Meal Production from Domestic Crush (Unit: MMT)

	Soybean Meal			Rapeseed Meal			Total SME
	Soybeans	Production	Extr.Rate	Rapeseeds	Production	Extr.Rate	
MY 2018/19	2.470	1.854	0.751	2.396	1.326	0.554	2.798
MY 2019/20	2.393	1.799	0.752	2.270	1.236	0.545	2.679
MY 2020/21	2.364	1.783	0.754	2.357	1.322	0.561	2.724
MY 2021/22	2.600	1.946	0.749	2.144	1.221	0.570	2.815
	+10.0%	+9.2%		-9.0%	-7.6%		
MY 2022/23	2.578	1.937	0.751	1.975	1.116	0.552	2.731
	-0.8%	-0.5%		-7.9%	-8.6%		
MY 2023/24f	2.260	1.700	0.752	2.100	1.168	0.556	2.531
	-12.3%	-12.3%		+6.3%	+4.7%		
MY 2024/25f	2.280	1.715	0.752	2.100	1.168	0.556	2.546

Source: MAFF
Note: "f" indicates forecasts by FAS/Tokyo. FAS/Tokyo's forecasts of MY 2023/24 is based on MAFF's official data from October 2023 to February 2024. The "%" figure indicates annual change from the previous MYs.

Fishmeal

Table 3. Japan's Fishmeal Production and Supply (Unit: thousand MT)

	CY	2019	2020	2021	2022	2023	2024f
	FM-MY	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Domestic Input	Trimmings	665	664	672	620	570	
	Whole Fish	225	239	280	231	312	**900**
	Total	**890**	**903**	**952**	**851**	**882**	
Domestic Production	Fish Oil	74	78	79	67	72	
	Extr. Rate	8.3%	8.7%	8.3%	7.8%	8.1%	
	Fishmeal	**189**	**195**	**205**	**187**	**193**	**195**
	Extr. Rate	21.2%	21.5%	21.5%	21.9%	21.8%	21.7%
Fishmeal Imports	Peru	46	51	45	40	23	
	Chile	21	39	22	20	22	
	U.S.	15	17	14	8	14	
	U.S. (%)	6.8%	8.6%	9.3%	5.0%	7.9%	
	Total	213	203	146	160	178	175
Crustacean Meal Imports		7	6	5	5	4	5
Total Fishmeal Supply		408	404	356	352	375	375

Sources: Japan Marine Oil Association and Japan Customs
Note: Total numbers may not match due to rounding error. "f" indicates FAS/Tokyo's forecasts.

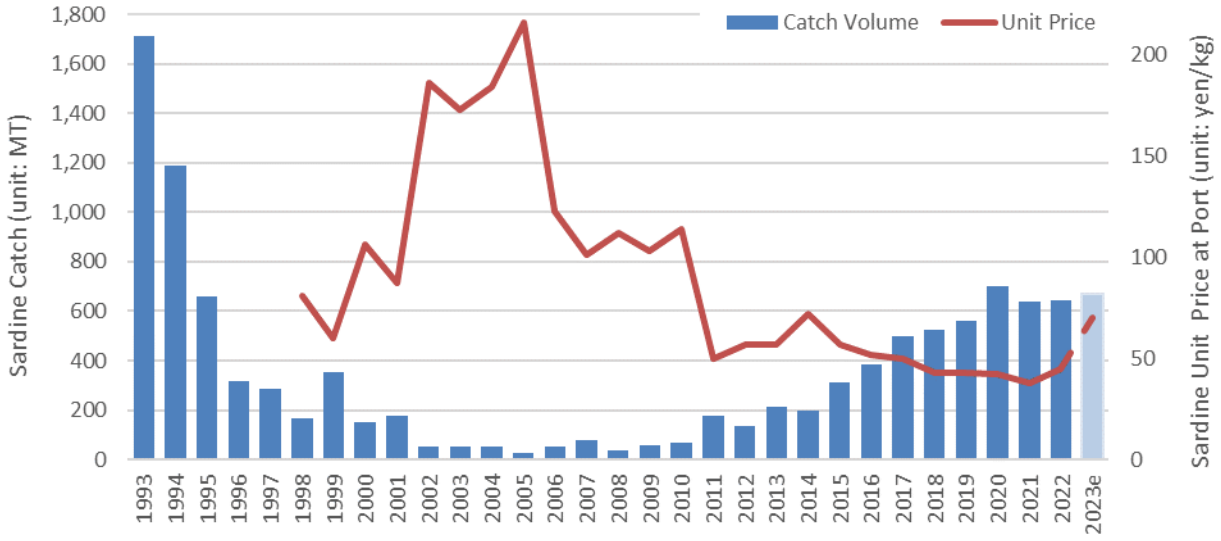
The fishmeal marketing year (FM-MY) 2022/23 runs from January through December 2023 (i.e., the calendar year or CY 2023). Japan utilizes primarily domestic fish trimmings and small whole fish,

predominantly sardines (*Sardinops melanostictus*)[10], as inputs in the production of fish oil and fishmeal (see Table 3). According to the Japan Marine Oil Association, Japan produced 192,800 MT of fishmeal and 71,900 MT of fish oil from 888,200 MT of domestic inputs, including 312,100 MT of whole fish and 570,300 MT of trimmings in CY 2023 (i.e., FM-MY 2022/23). The extraction rate of fishmeal was 21.8 percent.

In CY 2022 and CY 2023, the seafood market experienced a spike in prices, leading to a decline in processed seafood production and consumption in Japan. This decrease in consumption resulted in reduced available trimmings for fishmeal and fish oil production. However, with some Western nations banning seafood products of Russian origin, global seafood prices began to soften at the start of CY 2024. FAS/Tokyo predicts that the availability of fish trimmings will gradually increase in the future.

Meanwhile, sardine resources have been recovering compared to historically poor catches during the early 2000s (Figure 6). In CY 2023, fishmeal producers in Hokkaido increased their use of whole fish sardines. The Japan Fisheries Agency reported a total sardine catch of 641,797 MT in 2022, with FAS/Tokyo estimating a slight increase to about 670,000 MT in 2023. As stocks of other species like Pacific saury and Pacific mackerel declined, some Japanese seafood processors redirected sardine utilization from fishmeal to food products for human consumption such as canned fish. Accordingly, the unit price of sardines has gradually risen since 2022. Nevertheless, the availability of sardines for fishmeal production will remain at a high level for the near future.

Figure 6. Japan's Sardine Catch and Sardine Price



Source: Japan Fisheries Agency
Note: "e" indicates FAS/Tokyo's estimation from MAFF monthly data.

As the inputs for both fish trimmings and whole sardine inputs will slightly increase over the next two marketing years, Japanese fishmeal and oil production are likely to increase. FAS/Tokyo forecasts that Japan will produce 195,000 MT of fishmeal from 900,000 MT of domestic inputs, with an anticipated 10-year average extraction rate of 21.7 percent in both MY 2023/24 and MY 2024/25.

[10] Also known as Japanese pilchard or *ma-iwashi*.

Palm Kernel Meal

Japan does not produce palm kernel meal.

Consumption

Feed and Waste Consumption

Soybean Meal and Rapeseed Meal

In MY 2022/23, MAFF reported that Japanese livestock animals and aquaculture consumed 3,090,095 MT of soybean meal and 979,699 MT of rapeseed meal. As Japanese feed millers increase the production of canola meal that will be fully utilized domestically, FAS/Tokyo forecasts an increase in rapeseed meal feed and waste consumption to 1.06 MMT in both MY 2023/24 and MY 2024/25. FAS/Tokyo also forecasts gradual decreases in soybean meal feed consumption to 3.04 MMT in MY 2023/24 and MY 2024/25.

Table 4. SME Protein Consumption by Livestock and Aquaculture (Unit: thousand MT)

	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24e
Total	**8,461**	**8,527**	**8,600**	**8,690**	**8,665**	**8,507**	**8,547**
of DDGS & CGF&M	775	771	704	704	703	728	735
Animal-based protein subtotal	**664**	**676**	**697**	**770**	**751**	**702**	**714**
of fishmeal	236	263	264	266	264	252	249
of slaughterhouse waste	316	313	334	393	374	344	356
Oilseed-based meals subtotal	**3,925**	**3,984**	**4,067**	**4,083**	**4,061**	**3,955**	**3,953**
of rapeseed meal	801	796	807	818	796	697	753
of soybean meal	2,957	3,020	3,096	3,097	3,098	3,090	3,043
of palm kernel meal	0	0	0	0	0	0	0
of other meal (sesame...)	167	168	164	168	167	168	157

Source: MAFF

Based on MAFF's feed data, FAS/Tokyo estimates Japanese feed millers consumed 8.51 MMT of soybean meal equivalent (SME[11]) protein in MY 2022/23, showing a decline of 1.8 percent from the previous MY 2021/22 (Table 4). This decrease was influenced by three factors: (i) steep feed price increases; (ii) outbreak of Highly Pathogenic Avian Influenza (HPAI), particularly affecting egg layers, led to a 5.6 percent reduction in poultry flocks (2024 Japan Grain and Feed Annual), and; (iii) Japan reduced the dairy cow population by 3 percent due to an oversupply of milk (2024 Japan Livestock and Products Semi-Annual). As these issues have tempered, FAS/Tokyo projects feed demand will gradually recover in both MY 2023/24 and 2024/25.

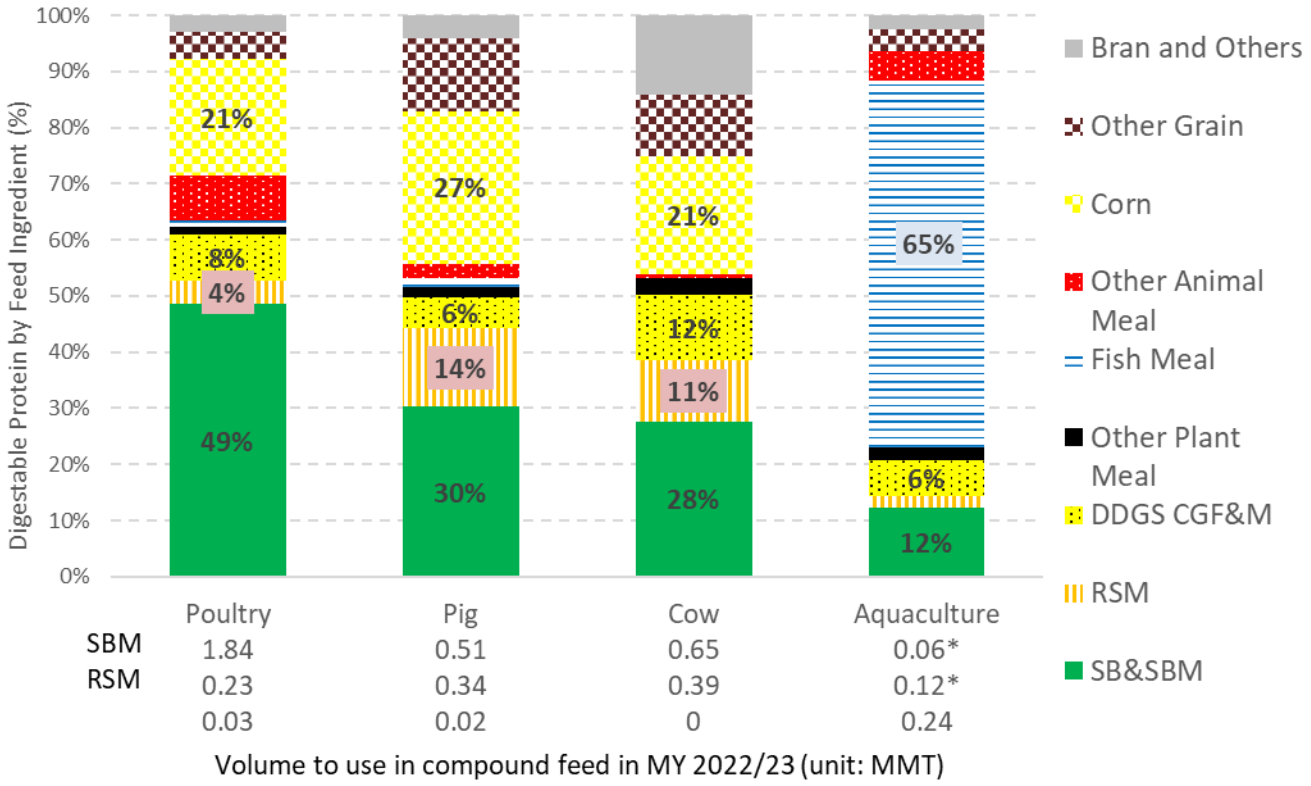
[11] To facilitate the comparison of crude protein levels across different feeds, they are expressed in soybean meal equivalent (SME): 1 MT of rapeseed meal equals 0.7115 MT of SME; 1 MT of fishmeal is 1.445 MT of SME, 1 MT of soybeans is 0.8 MT of SME; and 1 MT of DDGs equals 0.5833 MT of SME.

In MY 2022/23, SME protein consumption comprised 36.3 percent soybean meal, 8.2 percent rapeseed meal, 8.6 percent corn-derived protein by-products (including distillers' dried grains with solubles (DDGS) and corn gluten feed and meal (CGF&M)), 4.0 percent slaughterhouse waste (such as meat and bone meal[12] and feather meal), and 3.0 percent fishmeal.

There was a decrease in soft drink consumption during the COVID-19 pandemic, subsequently reducing the production of cornstarch and its by-product, CGF&M. Additionally, the outbreak of HPAI weakened the supply of feather meal in MY 2022/23. However, with the expected recovery in CGF&M and feather meal consumption over the next two MYs, its anticipated that feed millers will marginally decrease the proportion of oilseed-based meal.

Japanese feed millers value the high protein content of soybean meal but are wary of its high potassium content, which can cause loose stools. To mitigate this issue, the feed millers maintain a certain proportion of canola meal in compound feed. Concerns related to the MY 2022/23 availability of canola meal are expected to be alleviated as oil crushers increase production over the next two MYs.

Figure 7. Proportion of Digestible Protein in Compound Feed by Animal in MY 2021/22



Source: MAFF
Note: *denotes FAS/Tokyo estimates of aquaculture meal consumption during the oilseed MY (October-September).

[12] Since 2001, MAFF allows meat and bone meal derived from chicken and pork for poultry and swine feed. Please see JA2021-0091 for more information.

Figure 7 provides detailed information on the proportion of digestible protein sources in the diets of farmed animals and aquaculture in MY 2022/23. Please see JA2024-0014 for more details about Japanese feed markets from energy perspective.

Fishmeal

In CY 2023 (i.e., FM-MY 2022/23), MAFF reported that fishmeal consumption for livestock was 50,728 MT[13], marking a 10.3 percent decline from CY 2022 and was attributed to the high cost of fishmeal. Meanwhile, FAS/Tokyo estimated that annual aquaculture consumption of fishmeal reached about 250,000 MT in CY 2023, bringing the total fishmeal consumption for feed and waste to around 300,000 MT annually. Looking ahead, FAS/Tokyo forecasts that fishmeal consumption for feed will remain steady at 300,000 MT in both CY 2024 and CY 2025.

Palm Kernel Meal

FAS/Tokyo anticipates that palm kernel meal (PKM) feed consumption will maintain its yearly rate of 4,000 MT. Industry sources suggest that palm kernel meal in Japan is limited in usage as a minor feed ingredient for ruminant animals, e.g. sheep.

Food Use Consumption

Anticipating the continuing elevated cost of North American food-grade soybean varieties, FAS/Tokyo estimates that the consumption of soybean meal for food use declined to 190,000 MT in MY 2022/23. FAS/Tokyo projects that Japan's consumption of soybean meal for food purposes will remain stable at 190,000 MT in both MY 2023/24 and MY 2024/25.

Food-grade soybean meal, distinct from typical feed-grade varieties, is derived from non-GE soybeans and undergoes no heat treatment. In Japan, this specialized product finds primary usage among manufacturers producing soy sauce, isolated plant protein products (such as alternative meats), hydrolyzed vegetable protein (HVP), and beer-like alcoholic beverages (see Utilization of Food-Grade Soybeans in Japan). For further information on recent trends within Japan's expanding market for plant-based meat alternatives, please read JA2023-0061.

Industrial Consumption

The primary industrial use of soybean meal, rapeseed meal, and fishmeal is for organic fertilizer production, which is particularly favored by growers of specialty crops such as tea and tobacco. In Japan, reliable fertilizer input data is not published, but industry experts suggest that demand remains low due to the dominance of chemical fertilizers in the market. Despite the high prices of chemical fertilizers, persisting following the Russian invasion of Ukraine, the elevated costs of soybean meal, rapeseed meal, and fishmeal are a key factor restricting the growth of the organic fertilizer market. FAS/Tokyo anticipates stable consumption levels for soybean meal, rapeseed meal and fishmeal for fertilizer in the near term.

[13] MAFF's feed statistics completely cover feed production for livestock animals, but partially cover feed production for aquaculture. Accordingly, FAS/Tokyo estimates the consumption of fishmeal for aquaculture.

Palm Kernel Shell

Japan utilizes a large volume of palm kernel shells (PKS) and other oil palm-derived residues as biomass for power generation (see 2023 Japan Biomass Annual). Feed-in tariff (FIT)-eligible biomass power plants located near ports use PKS and imported wood pellets as stable feedstocks. Usage in biomass power plants has increased the volume of PKS imports since 2012. The Ministry of Economy, Trade and Industry (METI) has announced plans to require stricter third-party environmental certification from April 2024 for PKS to qualify for the FIT program.

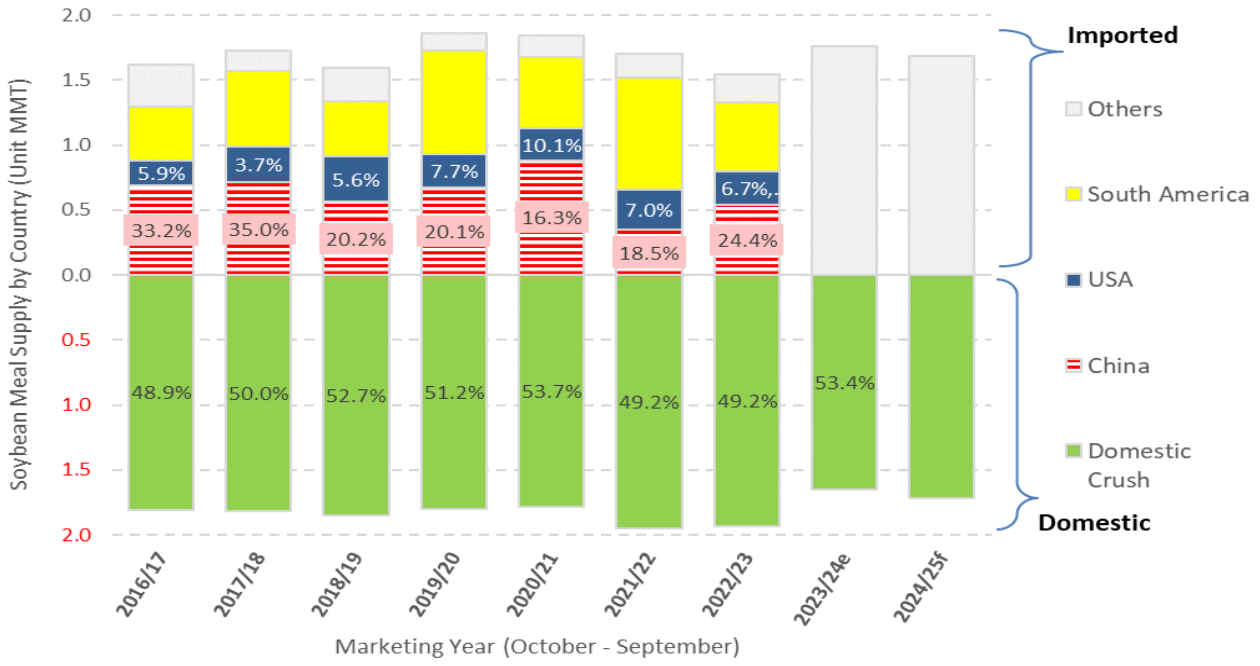
Trade

Japan has no tariff on meal products.

Soybean Meal

In MY 2022/23, Japan Customs reported that Japan imported 1.54 MMT of soybean meal, marking a 9.3 percent decrease from the previous MY (Figure 8). China re-emerged as the primary supplier, holding a 35.0 percent share, trailed closely by Brazil with 34.3 percent and the United States with 16.9 percent. The United States supplied both food-grade non-GE soybean meal and feed-grade LoPro soybean meal to Japan. Notably, Japan did not import soybean meal from Argentina during this period. In total, this imported soybean meal constituted 44.3 percent of Japan's soybean meal supply in MY 2022/23. With domestic soybean production anticipated to decline, FAS/Tokyo forecasts an increase in Japan's soybean imports to 1.72 MMT in MY 2023/24, followed by a slight reduction to 1.71 MMT in MY 2024/25.

Figure 8. Japan's Soybean Meal Share



Source: MAFF, Japan Customs

Rapeseed Meal

According to Japan Customs, in MY 2022/23 Japan imported 20,343 MT of fertilizer-grade high erucic acid rapeseed meal from China and India. FAS/Tokyo forecasts fertilizer-grade rapeseed meal imports to decrease to 6,000 MT annually for the coming years.

PKM and PKS

Japan imports the by-products derived from oil palms in Indonesia and Malaysia, with a focus on PKS for power generation (see JA2020-0110). In MY 2022/23, Malaysia and Indonesia collectively exported 84,730 MT of HS 230660 products, marking a significant decline from the previous year. Notably, Malaysian exporters often designate HS codes arbitrarily, whether HS 230660 or 140490 for PKS. The decrease observed in MY 2022/23 reflects the shift by Malaysian exporters of choosing HS 140490 over HS 230660 when exporting PKS to Japan. It is crucial to highlight that the Japanese consumption of PKS for power generation actually increased during the same period (see Japan Biomass Annual). However, with the anticipated April 2024 implementation of the FIT program's stricter sustainability certification requirements, FAS/Tokyo projects a decline in PKS imports for both MY 2023/24 and MY 2024/25.

Fishmeal

Traditionally, Japan has mainly relied on Peru, Chile, and Ecuador for importing "brown meal" derived from anchovies, while obtaining "white meal" primarily from United States' Alaskan pollock. However, over the past 15 years, Japan has increasingly turned to importing cheaper fishmeal sourced from trimmings and white fish, such as Pangasius, from Southeast and South Asian countries.

According to Japan Customs data, in CY 2023 (i.e., FM-MY 2022/23), Japan imported 178,333 MT of fishmeal (see Table 3). India notably surpassed Peru and Chile to become the largest supplier of fishmeal in CY 2023. Additionally, Japan imported 3,939 MT of krill and other crustacean meal to stimulate the fishes' feeding responses and to increase fish meat coloration.

Due to the significant expense associated with importing fishmeal, FAS/Tokyo anticipates that fishmeal imports will remain steady at around 180,000 MT in both CY 2024 and CY 2025.

Stocks

In MY 2022/23, MAFF reported that soybean meal beginning stocks were 120,750 MT (62,888 MT at crushers and 57,862 MT at feed millers) and ending stocks were 101,982 MT (47,668 MT at crushers and 54,314 MT at feed millers). MAFF also reported the rapeseed meal beginning stocks at 49,080 MT (31,255 MT at crushers and 17825 MT at feed millers) and ending stocks at 63,244 MT (41,317 MT at crushers and 21,927 MT at feed millers). As oil crushers have increased the production of rapeseed meal and decreased the production of soybean meal, feed manufacturers have slowly adjusted their feed formulas and stocks. FAS/Tokyo forecasts both soybean meal and rapeseed meal stocks will remain steady in both MY 2023/24 and 2024/25.

According to MAFF, feed manufacturers held 20,508 MT of fishmeal at the beginning of CY 2023 and increased it to 26,758 MT at the beginning of CY 2024. FAS/Tokyo forecasts fishmeal stocks will remain around 25,000 MT.

Oils

Commodities:
Oil, Soybean
Oil, Rapeseed
Oil, Palm
Oil, Sunflowerseed

Production, Supply, and Distribution of Soybean Oil

Oil, Soybean	2022/2023		2023/2024		2024/2025	
Market Year Begins	Oct 2022		Oct 2023		Oct 2024	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Crush (1000 MT)	2,600	2,578	2,625	2,260	0	2,280
Extraction Rate (PERCENT)	0.197	0.201	0.197	0.197	0	0.197
Beginning Stocks (1000 MT)	18	18	10	28	0	20
Production (1000 MT)	511	518	516	445	0	450
MY Imports (1000 MT)	7	7	10	10	0	10
Total Supply (1000 MT)	536	543	536	483	0	480
MY Exports (1000 MT)	1	1	1	1	0	1
Industrial Dom. Cons. (1000 MT)	35	34	35	32	0	29
Food Use Dom. Cons. (1000 MT)	490	480	480	430	0	430
Feed Waste Dom. Cons. (1000 MT)	0	0	0	0	0	0
Total Dom. Cons. (1000 MT)	525	514	515	462	0	459
Ending Stocks (1000 MT)	10	28	20	20	0	20
Total Distribution (1000 MT)	536	543	536	483	0	480
(1000 MT), (PERCENT)						

Production, Supply, and Distribution of Rapeseed Oil

Oil, Rapeseed	2022/2023		2023/2024		2024/2025	
Market Year Begins	Oct 2022		Oct 2023		Oct 2024	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Crush (1000 MT)	2,000	1,975	2,050	2,100	0	2,100
Extraction Rate (PERCENT)	0.427	0.428	0.427	0.430	0	0.429
Beginning Stocks (1000 MT)	46	46	17	27	0	30
Production (1000 MT)	853	845	875	903	0	900
MY Imports (1000 MT)	13	13	20	10	0	10
Total Supply (1000 MT)	912	904	912	940	0	940
MY Exports (1000 MT)	5	10	5	5	0	5
Industrial Dom. Cons. (1000 MT)	50	50	50	50	0	50
Food Use Dom. Cons. (1000 MT)	840	817	830	855	0	855
Feed Waste Dom. Cons. (1000 MT)	0	0	0	0	0	0
Total Dom. Cons. (1000 MT)	890	867	880	905	0	905
Ending Stocks (1000 MT)	17	27	27	30	0	30
Total Distribution (1000 MT)	912	904	912	940	0	940
(1000 MT), (PERCENT)						

Production, Supply, and Distribution of Palm Oil

Oil, Palm	2022/2023		2023/2024		2024/2025	
Market Year Begins	Oct 2022		Oct 2023		Oct 2024	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (HA)	0	0	0	0	0	0
Beginning Stocks (1000 MT)	8	8	8	8	0	10
Production (1000 MT)	0	0	0	0	0	0
MY Imports (1000 MT)	660	660	660	670	0	670
Total Supply (1000 MT)	668	668	668	678	0	680
MY Exports (1000 MT)	0	0	0	0	0	0
Industrial Dom. Cons. (1000 MT)	110	105	110	105	0	105
Food Use Dom. Cons. (1000 MT)	550	550	550	558	0	560
Feed Waste Dom. Cons. (1000 MT)	0	5	0	5	0	5
Total Dom. Cons. (1000 MT)	660	660	660	668	0	670
Ending Stocks (1000 MT)	8	8	8	10	0	10
Total Distribution (1000 MT)	668	668	668	678	0	680
(HA), (1000 MT)						

Production, Supply, and Distribution of Sunflowerseed Oil

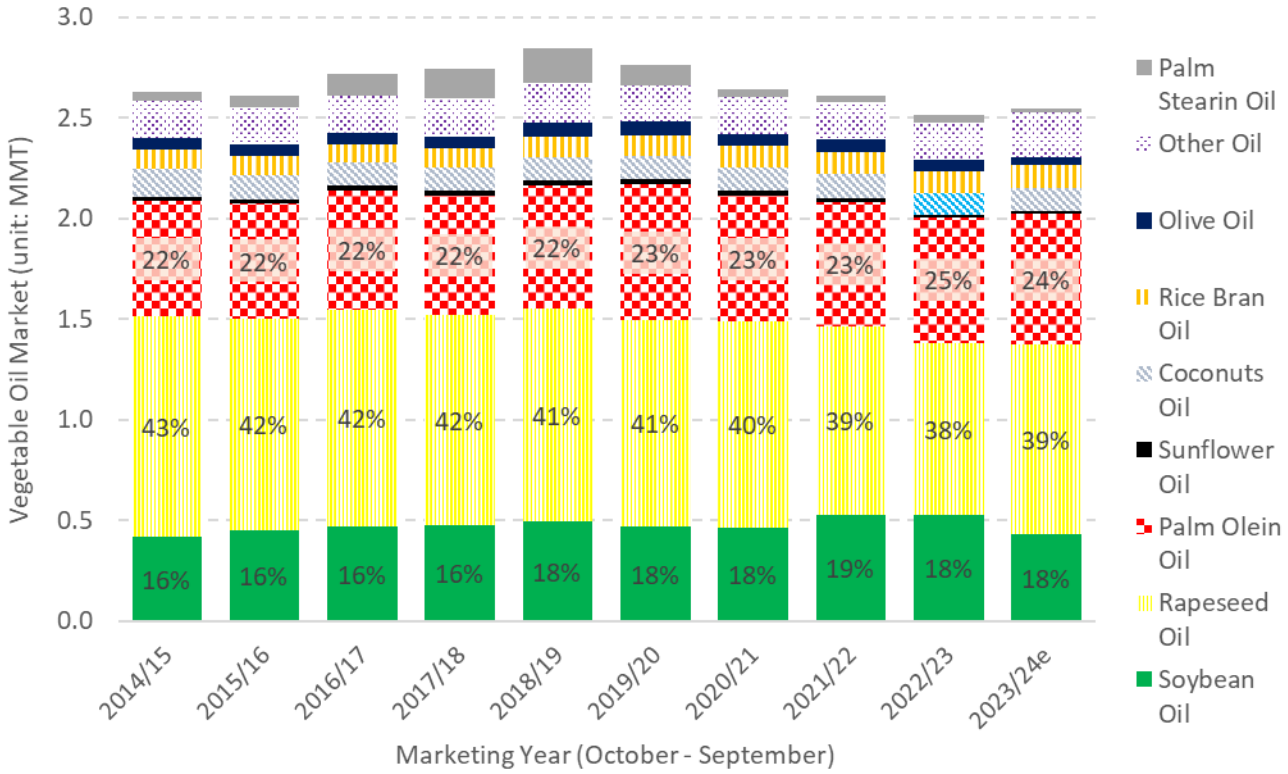
Oil, Sunflowerseed	2022/2023		2023/2024		2024/2025	
Market Year Begins	Oct 2022		Oct 2023		Oct 2024	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Crush (1000 MT)	0	0	0	0	0	0
Extraction Rate (PERCENT)	0	0	0	0	0	0
Beginning Stocks (1000 MT)	3	3	2	1	0	1
Production (1000 MT)	0	0	0	0	0	0
MY Imports (1000 MT)	14	11	30	15	0	18
Total Supply (1000 MT)	17	14	32	16	0	19
MY Exports (1000 MT)	0	0	0	0	0	0
Industrial Dom. Cons. (1000 MT)	0	1	0	2	0	2
Food Use Dom. Cons. (1000 MT)	15	12	30	13	0	15
Feed Waste Dom. Cons. (1000 MT)	0	0	0	0	0	0
Total Dom. Cons. (1000 MT)	15	13	30	15	0	17
Ending Stocks (1000 MT)	2	1	2	1	0	2
Total Distribution (1000 MT)	17	14	32	16	0	19
(1000 MT), (PERCENT)						

Note: “New Post” sunflower seed oil PS&D figures do not include safflower oil.

Overall Vegetable Oil Market

Japanese vegetable oil demand has been a main driver in shaping Japan's oilseeds and products market. With the exception of palm stearin oil, primarily used for power generation between MY 2016/17 and MY 2019/20, the overall vegetable oil market in Japan has been stable (see Figure 9). The domestic crush supplies over 60 percent of the market. Edible vegetable oil consumption reached 2.67 million metric tons (MMT) in MY 2018/19, but gradually declined to 2.48 MMT by MY 2022/23, having been influenced by factors such as the COVID-19 pandemic and high vegetable oil prices. Additionally, Japan's population decline and aging society cast a pessimistic outlook on long-term oil demand.

Figure 9. Japanese Vegetable Oil Production and Imports



Sources: MAFF and Japan Customs
Note: Until MY 2019/20, Japanese power companies utilized imported palm stearin oil as feedstock. FAS/Tokyo omitted palm stearin oil from its calculation of the total edible vegetable oil consumption. The 2023/24 estimate is based on year-to-date estimates from October 2023 to January 2024.

In MY 2022/23, out of the total 2.48 MMT edible vegetable oil market, rapeseed oil maintained a 35 percent share, palm olein oil accounted for 25 percent, and soybean oil held an 18 percent share. Coconut oil retained a stable share of 4.5 percent. Rice bran oil, leveraging domestic rice bran, became popular among Japanese households and increased its share to 4.4 percent. Corn oil and sesame oil, predominantly crushed domestically, expanded their respective market shares to 3.0 percent and 2.3 percent. The high prices for imported olive oil and sunflowerseed oil weakened consumer demand, resulting in reduced market share of 2.2 percent and 0.4 percent, respectively.

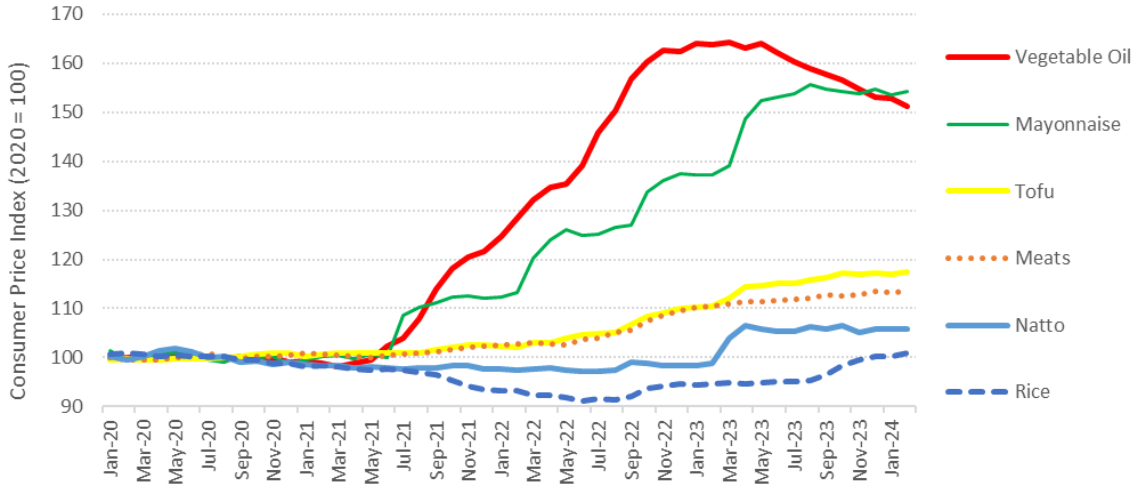
The edible vegetable oil market experienced a 4.2 percent contraction in MY 2022/23 driven by surging retail prices amidst stagnant household disposable income. Dominated by a few large oil crushers, the Japanese vegetable oil market saw prices rise to offset the increased raw material costs. From March 2021 to January 2023, the retail price for vegetable oil soared by 67 percent, far exceeding increases in other staple foods (see Figure 10). This price surge affected various processed foods, leading to subsequent price hikes over a period of time. Furthermore, businesses and households actively sought ways to decrease vegetable oil consumption.

For example, restaurants invested in oil filters, reducing the frequency of necessary oil changes. The popularity of long-life oil products surged, effectively minimizing overall oil consumption. Additionally, households and eateries scaled back on mayonnaise and oil-based dressing usage. In the baking and

snack industries, producers adjusted by offering smaller products, known as *shrinkflation*, leading to a decline in oil usage.

Given this ongoing consumer mindset, FAS/Tokyo forecasts stagnant vegetable oil consumption levels for both MY 2023/24 and 2024/25. For more detailed insights into Japan's food inflation conditions, please refer to JA2023-0027.

Figure 10. Japan's Consumer Price Index of Vegetable Oil and Other Food Items



Source: Ministry of Internal Affairs and Communications

Production

Japanese oil crushers will aim to procure soybeans and canola to match the weak Japanese vegetable oil demand while carefully monitoring the crush margin. As referenced in the oilseeds section, in MY 2022/23, MAFF reported that the domestic crush yielded 0.518 MMT for soybean oil and 0.845 MMT for canola oil. Based on these crush margins, FAS/Tokyo forecasts that Japanese oil crushers will decrease soybean oil production to 0.445 MMT and increase canola oil production to 0.903 MMT in MY 2023/24 (see Table 1). FAS/Tokyo further forecasts soybean oil production to 0.45 MMT and canola oil production to 0.90 MMT in MY 2024/25.

Japan does not crush oil palms or sunflower seeds.

Consumption

Food Use

As soybean oil production declines, FAS/Tokyo predicts that food use consumption for the oil will decrease to 0.43 MMT in both MY 2023/24 and MY 2024/25. Conversely, consumption of canola oil is expected to surge to 0.855 MMT in MY 2023/24 and MY 2024/25.

As market conditions stabilize, FAS/Tokyo anticipates that food use consumption for palm oil will rebound to 0.56 MMT in both MY 2023/24 and MY 2024/25. Japanese oil companies import crude palm oil from Southeast Asia for refinement. The food-grade palm stearin oil, while being high in saturation, is of use when there are solid fat requirements. For example, with pastry dough, chocolate, baked goods, margarine, shortening, and whipped cream substitutes. Palm olein, with good resistance to oxidation and overheating, is utilized in food manufacturing for instant noodles, snacks, and frozen foods. Additionally, palm olein can undergo further fractionation to produce palm "super" olein, which is more liquified and shares similar applications with soybean and canola oil.

FAS/Tokyo forecasts a gradual recovery in sunflower seed oil for food use consumption to 15,000 MT in MY 2024/25 if the Eastern European supply situation can improve. Food processors, currently deterred by the high price of imported sunflowerseed oil, have shifted to cheaper alternatives such as high-oleic canola and palm oils.

Industrial Use

Vegetable oils are gaining traction in various industrial sectors, including lubricants, soaps, and paints. In alignment with Sustainable Development Goals (SDGs), several companies are strategizing to transition from fossil fuel-based oils to plant-based alternatives. However, the lack of affordability for vegetable oils remains a mitigating factor in scaling up their utilization within these industries as Japan does not currently provide any financial supports. As of MY 2023/24, Japan does not use "new" vegetable oils for biofuels on a commercial scale.

Soybean, Rapeseed and Sunflowerseed Oil

Epoxidized soybean oil serves as both a plasticizer and stabilizer in polyvinyl chloride plastics and is commonly employed in food wraps. Additionally, soybean oils have application as natural esters in various contexts. In the forecast for MY 2022/23, FAS/Tokyo anticipates that soybean oil consumption for industrial purposes will gradually decrease to around 30,000 MT over the next two MYs, given its comparatively less favorable pricing dynamics.

Canola oil has market application for industrial usage such as chemical manufacturing, paint production, cosmetics, and pharmaceuticals. FAS/Tokyo projects that canola oil consumption for industrial purposes will maintain 50,000 MT.

Sunflowerseed oil is utilized in cosmetic formulations and other industrial applications, but the disruption caused by Russia’s invasion of Ukraine has strained supplies, prompting Japanese consumers to shift to alternative oils. FAS/Tokyo estimates a decline in industrial consumption of sunflowerseed oil to 1,000 MT in MY 2022/23 and then marginally increase to 2,000 MT in the upcoming years.

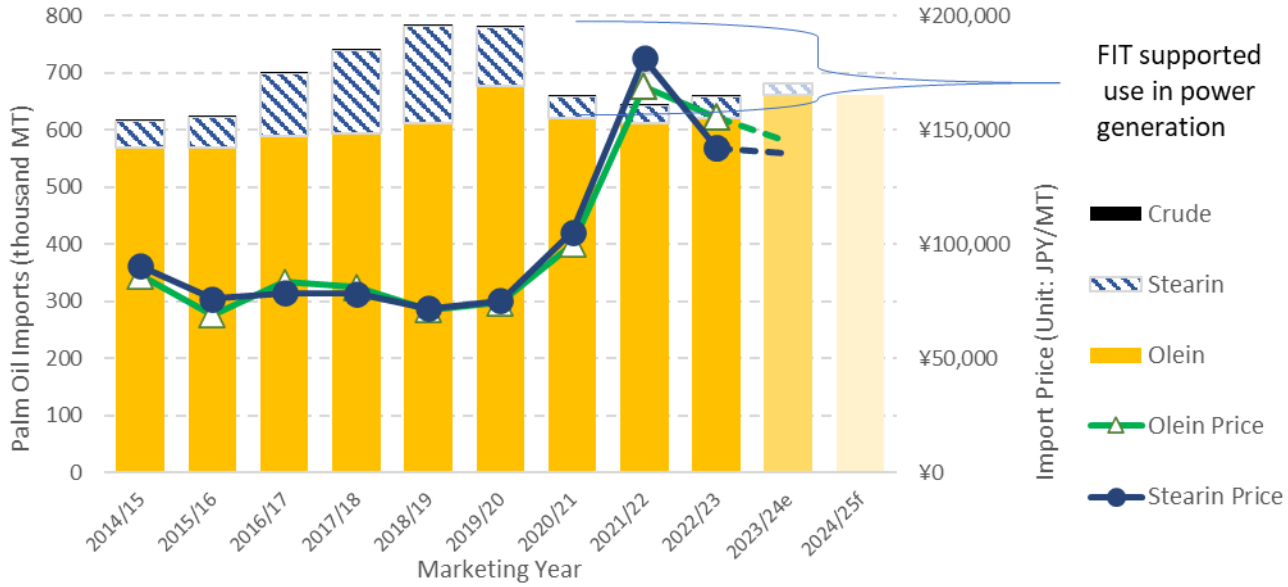
Palm Olein and Stearin Oil

Palm stearin oil, predominantly utilized as a non-edible bioenergy feedstock for power generation, has seen a significant decline in its usage. The reliance of Japan's powerplants on palm stearin is contingent upon high stearin prices, as illustrated in Figure 11. The recent surge in palm stearin prices since MY 2020/21 has led to a reduction in Japan's stearin consumption, rendering the fixed FIT payment of 24 yen/kWh unprofitable for power stations.

Conversely, palm olein oil has application in the production of hygiene and cleaning products, cosmetics, pharmaceuticals, and lubricants.

With palm oil experiencing a marginal decrease in cost, FAS/Tokyo projects that total palm oil industrial usage will remain steady at 105,000 MT over the next two MYs. FAS/Tokyo does not anticipate any significant utilization of palm stearin oil for power generation unless the price drops to 90,000 yen per MT or lower.

Figure 11. Japan's Annual Palm Olein and Stearin Imports



Source: Japan Customs
Note: "e" indicates year-to-date estimation from October 2023 to February 2024.

As of 2024, Japanese companies do not embrace "new" vegetable oil as a feedstock for biodiesel and sustainable aviation fuel (SAF) production. The country's biodiesel production remains minimal, predominantly relying on a scant supply of used cooking oil (UCO). However, there are promising developments on the horizon. Cosmo Oil and JGC Holdings have announced intentions to commence commercial production of ASTM D7566-compliant SAF by 2025, via the hydroprocessed esters and fatty acids (HEFA) process utilizing locally sourced UCO. This production is set to take place in Sakai, Japan. Such an endeavor will be a significant milestone, establishing the inaugural domestic, commercial SAF production facility in Japan. For details about biodiesel and SAF, see the Japan 2023 Biofuels Annual.

Feed Use

FAS/Tokyo reports that Japanese feed manufacturers consistently utilize around 5,000 metric tons of palm oil for feed production, driven by a shortage of used cooking oil (UCO). With the surge in UCO prices, Japan has ramped up UCO exports, notably to Singapore for sustainable aviation fuel (SAF) production. Japanese feed millers have been substituting oil-rich corn with rice and wheat (see Japan

Grain and Feed Annual), leading to an increased demand for oil in compound feed. It is anticipated that feed millers will continue to incorporate palm oil into compound feed over the next two MYs.

Trade

In MY 2022/23, imported edible vegetable oils accounted for approximately 37 percent of Japan's vegetable oil supply. The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the Japan-EU Economic Partnership Agreement (EPA) will gradually eliminate Japan's tariffs on soybean oil, rapeseed oil and sunflowerseed oil. The U.S.-Japan Trade Agreement (USJTA) will eliminate import duties on crude vegetable oil products in line with CPTPP, but USJTA does not apply to many refined vegetable oil products covered by CPTPP. Most of Japan's imports of palm oil, coconut oil, palm kernel oil, and olive oil enter tariff-free due to bilateral EPAs with exporting countries (see Japan: CPTPP and EU Agreements May Reduce Demand For U.S. Oilseeds). For tariff treatment of vegetable oils under USJTA, please see https://www.usdajapan.org/usjta/.

Soybean Oil

Imported soybean oil represents a small fraction of the soybean oil pool. In MY 2022/23, Japan imported 6,670 MT of soybean oil, primarily from Taiwan. Some discount supermarket chains directly sell these imported soybean oils to price-sensitive consumers. Some U.S. companies ship specifically processed soybean oil for industrial purposes. FAS/Tokyo projects soybean oil imports to remain stable at 10,000 MT in MY 2023/24 and MY 2024/25.

Rapeseed Oil

In MY 2022/23, Japan imported 13,298 MT of rapeseed oil, with 66.3 percent originating from Canada. With an expected increase in the domestic canola crush, FAS/Tokyo forecasts rapeseed oil imports will decrease to around 10,000 MT in MY 2023/24 and MY 2024/25.

Palm Oil

In MY 2022/23, Japan imported 660,160 MT of palm olein and stearin oil, marking a 2.4 percent increase from the previous MY. The Malaysian market share jumped to 84.9 percent and the Indonesian share dropped to 15.1 percent. Under the ASEAN-Japan Comprehensive Economic Partnership Agreement, Japan does not impose duty on palm oil from ASEAN member countries. FAS/Tokyo projects palm oil imports to increase to 0.67 MMT in both MY 2023/24 and MY 2024/25.

Sunflowerseed Oil

In MY 2022/23, Japanese imports of sunflowerseed oil dropped to 10,706 MT. Japan imported only 943 MT from Ukraine and zero from Russia. FAS/Tokyo anticipates Japanese imports of sunflowerseed oil to gradually recover to 15,000 MT in MY 2023/24 and 18,000 MT in MY 2024/25.

Separately, Japan imported 3,509 MT of safflower seed oil in MY 2022/23. The United States was the leading supplier with a 73 percent share. Safflower seed and sunflowerseed oils share the same 6-digit HS codes (1512.11 and 1512.99). High-oleic safflower seed oil is consumed as a high-end cooking oil; while linoleic-type safflower seed drying oil is used as paint oil. Under the USJTA, Japan allows tariff-free import of U.S. safflower crude oil that has an acidic value exceeding 0.6.

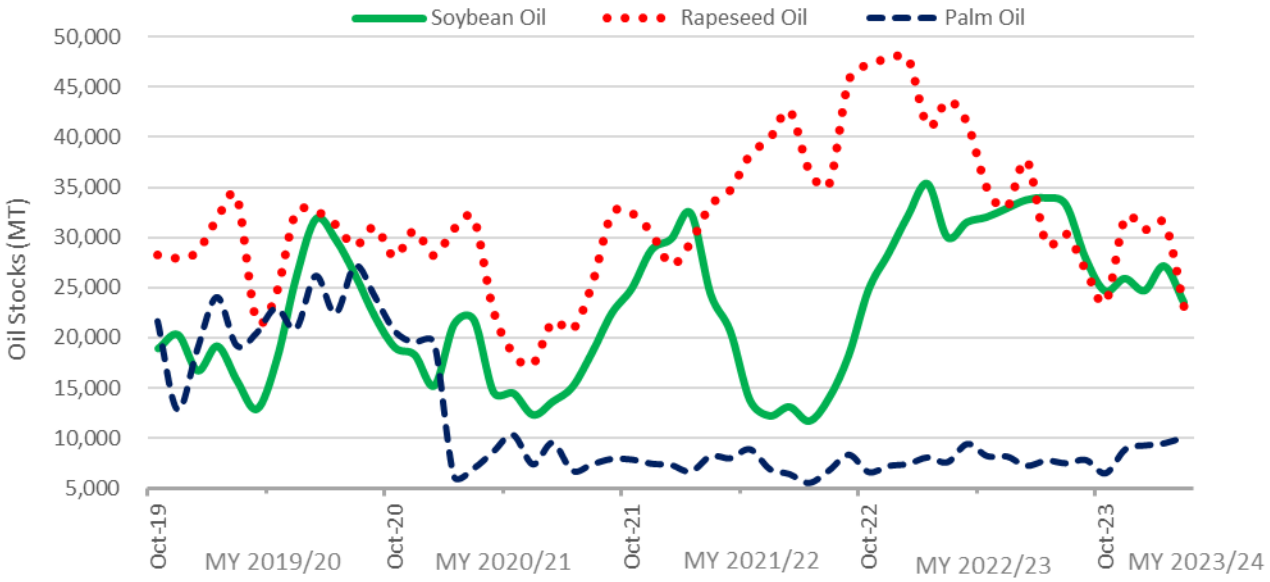
Stocks

MAFF reported that soybean oil stocks were 18,297 MT at the beginning of MY 2022/23 and 28,045 MT at the start of MY 2023/24. MAFF reported canola oil stocks were 45,731 MT at the beginning of MY 2022/23, and 26,744 MT at the start of MY 2023/24. Soybean oil and canola oil stocks have remained at a high level (see Figure 12) as consumer demand has slowed. FAS/Tokyo projects soybean oil stock to stay around 20,000 MT, and canola oil stock will reach around 30,000 MT as oil crushers adjust their stock levels.

On the other hand, palm oil stocks have stayed very low since early 2021 as traders were consolidated (see Figure 12). MAFF reported palm oil stocks were 8,311 MT at the beginning of MY 2022/23 and 7,781 MT at the start of MY 2023/24. FAS/Tokyo projects palm oil stocks will remain around 10,000 MT over the next two MYs.

MAFF reports sunflowerseed oil beginning stocks at 905 MT in MY 2022/23 and dropped to 533 MT in MY 2023/24 as sunflowerseed oil imports slowed. Due to supply shortages, FAS/Tokyo projects sunflowerseed oil stocks will remain at low levels for the next two MYs.

Figure 12. Monthly Fluctuations in Crusher-held Oil Stocks



Source: MAFF

Attachments:

No Attachments