

THIS REPORT CONTAINS ASSESSMENTS OF COMMODITY AND TRADE ISSUES MADE BY USDA STAFF AND NOT NECESSARILY STATEMENTS OF OFFICIAL U.S. GOVERNMENT POLICY

Voluntary - Public

Date: 7/13/2015

GAIN Report Number: JA5023

Japan

Post: Tokyo

Strawberry Market Situation

Report Categories:

Strawberries

Approved By:

Benjamin Petlock

Prepared By:

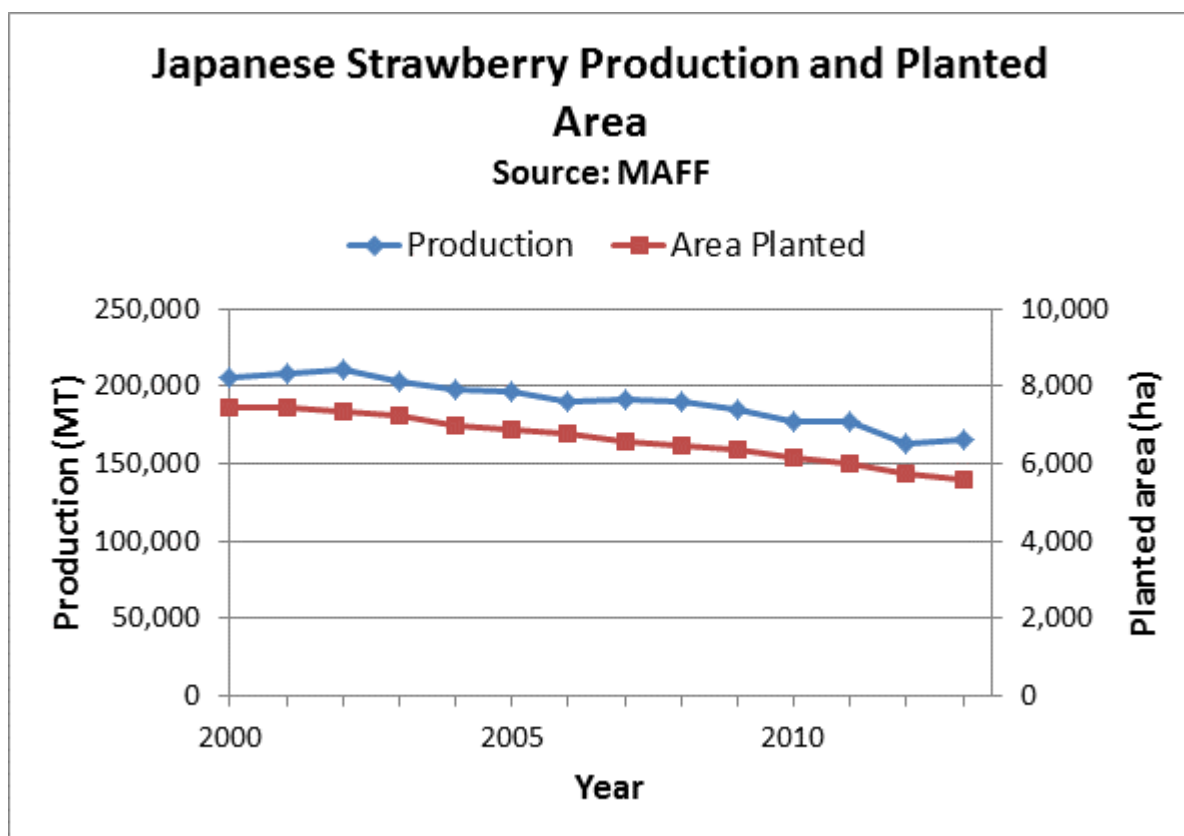
Nobuko Sugimoto

Report Highlights:

Despite recent declines in production, strawberries remain one of the most popular fruits in Japan. Domestic strawberries are generally consumed fresh. Introducing new cultivars to the market is highly competitive and largely led by local prefectures. Overall, Japanese strawberries are sweet, juicy, and soft and are sold under the brand names. During the summer season, 98 percent of the fresh strawberries are imported from the United States and are destined primarily for confectionery use. Frozen strawberries are mainly imported from China (around 50 percent import market share) and used for processed foods.

Production

Japan's production of fresh strawberries has gradually declined over the last 10 years, mainly due to demographic changes, such as aging farmers and a lack of successors. In 2013, Japan produced 165,600 metric tons (MT) of fresh strawberries, a decrease of 20 percent since 2000. For 2015, Post estimates that production will continue to decrease to around 164,000 MT. Production acreage has also declined by 25 percent since 2000, to around 5,500 hectares (ha). Japan's main harvest season for strawberries lasts from December through May, with production mainly concentrated on the Pacific coasts of Japan's main island, Honshu, and southernmost island, Kyushu, due to mild weather conditions. During the summer season, Japan's northern prefectures also produce 'summer harvest' strawberries to try to satisfy year-round demand. Although production of summer harvest strawberries is still quite small compared to that of the winter type varieties, production could increase slightly given the overall popularity of domestically-grown strawberries.



Japan's Major Strawberry Producing Prefectures (2013)

Prefecture	Area Harvested (ha)	Production (MT)	Proportion (%)
Total	5,600	165,600	100.0
Tochigi	605	26,000	15.7
Fukuoka	456	17,500	10.6
Kumamoto	338	11,900	7.2
Shizuoka	320	11,500	6.9
Nagasaki	279	10,700	6.5
Aichi	293	10,000	6.0
Saga	230	9,320	5.6
Other	3,079	68,680	41.0

Source: Minister of Agriculture, Forestry and Fisheries (MAFF)

Despite the downward trends in both production and harvested area, Japan's average strawberry yield has nearly doubled over the last 40 years, from 14 MT/ha in 1973 to 30 MT/ha in 2013. This increase in productivity has mainly been due to the conversion of almost all of Japan's strawberry farming from field production to greenhouses, enabling farmers to produce high quality fruit by controlling temperature, water, pests, disease, and pollination. There are two methods of planting strawberry seedlings in greenhouse production: lower bed and elevated bench types (photos shown below). For lower bed type production, soil is raised to create a planting bed that is around 40-50 cm high from the ground. In elevated bench production, benches are raised approximately 70-90 cm high from the ground with seedlings planted in artificial soil media (e.g. coconut fiber and peat). Generally, Japanese farmers use lower bed production systems to grow strawberries given their low initial investment costs. However, some growers prefer elevated benches, as this method requires less intensive manual labor during harvesting, in addition to being popular with customers at "pick-your-own" farms.

As Japanese strawberries tend to be softer than U.S. cultivars, the fruit is gently handled during production and packaging. When using lower bed systems, some farmers may place an additional Styrofoam sheet on top of the plastic mulch coverings in order to protect a berry from being crushed by its own weight. Also, farmers usually pack fruit by hand to avoid bruising.

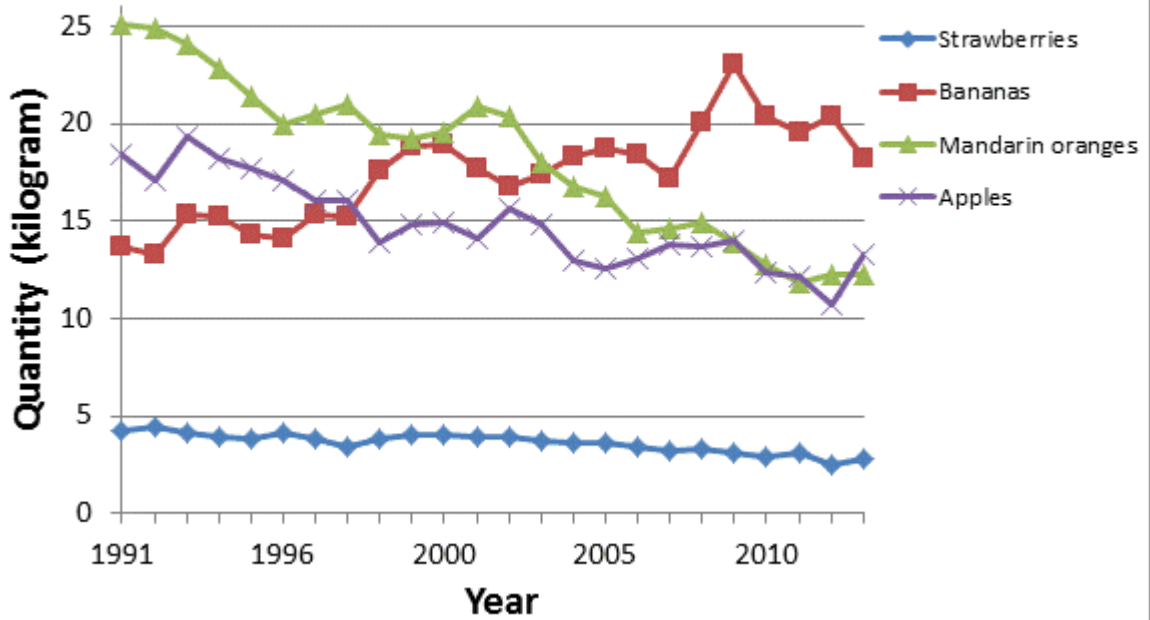


Left: lower bed type, soils are mounted to create beds; Right: elevated bench type to ease labor. Photos taken with permission of the Strawberry Research Institute, Tochigi Prefectural Agricultural Experiment Station and the Shizuoka Prefectural Agriculture Experiment Station.

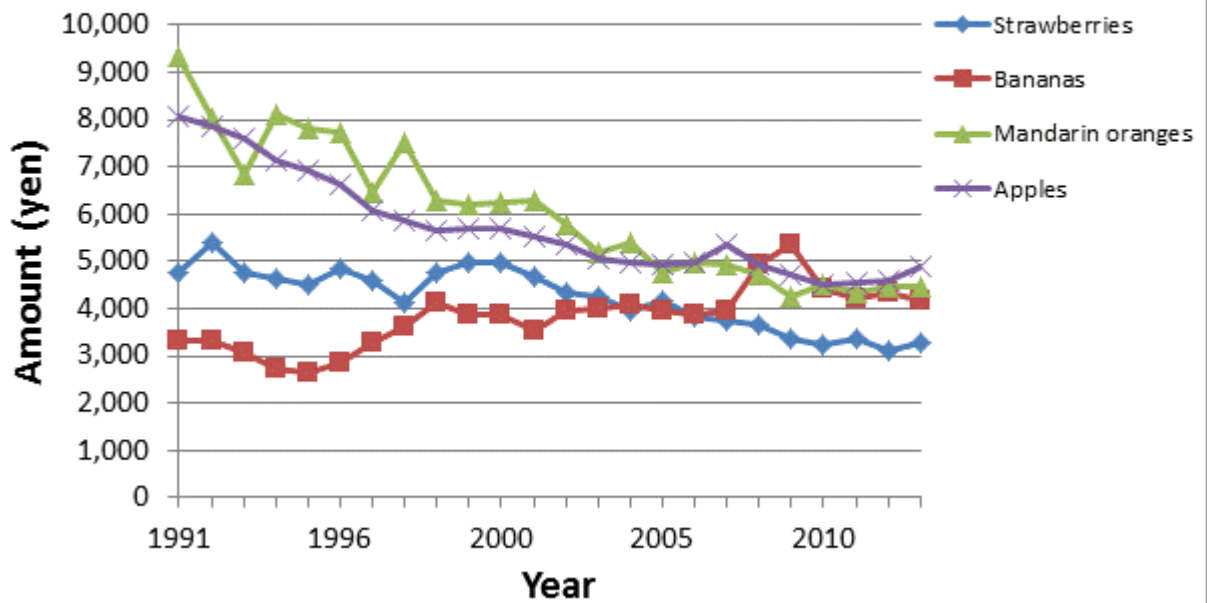
Consumption

Although household consumption and expenditures are well below that of bananas, mandarin oranges, and apples, fresh strawberries are one of the top selling fruits in Japan, accounting for three percent and nine percent of Japanese fresh fruit consumption and expenditures, respectively. Domestic strawberries are mostly consumed as fresh, but an estimated two to three percent are used by the confectionary industry. Despite their popularity, according to the Family Income and Expenditure Survey, Ministry of Internal Affairs and Communications (MIC), annual strawberry consumption per household (consisting of two or more persons per household) was 27.9 kilograms in 2013, a decrease of 30 percent from 2000. During the same period, household expenditures for strawberries also decreased to 3,287 yen in 2013, a decline of 33 percent since 2000. This trend is consistent with the overall decline in Japan's per capita fruit consumption, one of the lowest among developed countries at 0.14 kilograms per day, almost half the level of U.S. consumption (0.27 kg). In addition, as fruit is considered a dessert and not a staple in Japanese meals, competition with sweets and confectionaries is intense. Despite the decline in fresh consumption, demand for strawberries by the confectionary and processed food sectors has remained constant. Imported fresh strawberries are mainly used in cake decoration, whereas imported frozen strawberries are used by the processing sector for drinks, snacks, and jams.

Annual Household Fruit Consumption in Japan Source: MIC



Annual Household Fruit Expenditures in Japan Source: MIC





*Examples of the many processed foods, such as drinks and snacks, that use strawberries.
Photo taken with permission of the Strawberry Research Institute, Tochigi Prefectural Agricultural Experiment Station.*

Marketing: Development and Branding of New Varieties is a Key Element of Japanese Strawberries

Domestic and imported strawberries are sometimes differentiated for marketing purposes, with this contrast even appearing in the Japanese language itself. The term ‘ichigo’, often used for domestic strawberries, conveys the image of freshness, juiciness, and sweetness. On the other hand, ‘strawberry’ (pronounced ‘su-to-ro-berii’) is often expressed when referring to fruit used in processed foods or confectionaries, such as strawberry chocolates or strawberry ice cream.

Given the widespread popularity of domestic strawberries, competition between prefectures is intense, with regions regularly introducing new cultivars into the market. Prefectures select which new cultivars to breed based on fruit quality (e.g. flavor and size) and growers’ requests (e.g. less intensive labor, yield, disease resistance, etc.). After development, prefectures will then market their own specific cultivars under a brand name for use at retail. For example, Tochigi strawberries, the most popular variety in Japan (with 32 percent of the market share), are marketed as ‘Tochiotome’. Similarly, Saga, Fukuoka, and Shizuoka prefectures have their own branded strawberries (‘Sagahonoka’, ‘Amaou’, and ‘Benihoppe’ respectively) that are also popular varieties.

Strawberry Variety	Market Share (%)	Fruit Character			
		°Brix	Acidity	Firmness	Other
Tochiotome	32	High	Medium	High	Good shelf-life
Sagahonoka	16	High	Low	Medium	Good for transportation
Amaou	13	High	Medium	Medium	Large fruit, low aroma
Sachinoka	9	High	Medium	High	Low aroma
Benihoppe	9	High	Medium	High	Bright skin color, internal red flesh, very juicy
Others	21				

Prefectures also develop premium varieties that are sold at upscale supermarkets and department stores (“depachika”). In addition to prefectures, private companies and growers produce their own unique varieties, such as the white strawberry (pictured below) and the large-sized ‘Bijinhome’ which can weigh as much as 100 grams, nearly 10 times the average weight of a medium-sized strawberry. As premium and unique strawberries are higher in price, these tend to be more popular with Japanese consumers as gifts for other people as opposed to being consumed as a staple food. Sending fruit as gifts is a Japanese traditional custom and branding is one of the strategic ways that producers can differentiate their strawberries from other varieties to increase their market share.



The ‘Hatsukoi no Kaori’[®] white strawberry cultivar -photo printed with permission of Miyoshi Agri Tech Co., Ltd.

Trade (Imports)

U.S. fresh strawberries are sold when domestic production enters its off-season (July through November), with most imported fruit destined for confectionery use (over 80 percent of total use), such as cake decoration. As U.S. strawberries have a good balance of sweetness and acidity, are more firm, have a long shelf-life, and are nicely shaped, they are very popular for cakes and other confectionaries.

Although the aforementioned ‘summer variety’ is increasing in popularity with farmers, production

of this year-round fruit is still too small to meet the demand for confectionary use. As a result, industry sources expect that U.S. strawberries will continue to be preferred by Japanese importers given their lower price and fruit size. Although Japan's imports of total fresh U.S. strawberries have been stable, with an average of 3,300 MT annually over the last five years, 2014 imports were down slightly at 3,285 MT (valued at approximately 32.3 million U.S. dollars). Despite this small decline, the United States still maintains the largest share of Japan's fresh strawberry imports, at around 98 percent. However, similar to Japanese breeding trends, some U.S. producers are developing larger-sized varieties, and according to some importers, this development could be a concern should U.S. fruit become too big for Japanese confectionary use.

Imported frozen strawberries are mainly used in processed foods such as jams, dairy products, and snacks. In 2014, approximately 50 percent of Japan's frozen strawberry imports were from China, due to lower unit prices (1,989 USD/MT), with imports of U.S. frozen strawberries accounting for 17 percent of the import market (unit price 2,840 USD/MT; 5,182 MT; valued at 14.7 million US dollars). Imports of frozen strawberries from Chile, Egypt, and Peru are also trending upwards, mainly due to their own relative lower unit prices.

Japan: Imports of fresh strawberries					
<i>Calendar Year / quantity in metric tons</i>					
	2010	2011	2012	2013	2014
World	3,259	3,395	3,509	3,517	3,354
United States	3,110	3,200	3,338	3,425	3,285
<i>Market share:</i>	95%	94%	95%	97%	98%
Korea South	148	188	156	78	61
Mexico	1	7	15	13	5

Source: Global Trade Atlas

Japan: Imports of frozen strawberries					
<i>Calendar Year / quantity in metric tons</i>					
	2010	2011	2012	2013	2014
World	25,603	27,564	26,746	29,052	30,247
United States	5,671	5,241	5,227	5,731	5,182
<i>Market share:</i>	22%	19%	20%	20%	17%
China	16,999	17,911	16,353	16,459	14,559
Chile	1,297	2,294	2,585	2,830	4,694
Egypt	792	820	981	1,579	2,887
Poland	344	477	404	615	538
Mexico	148	254	308	543	650
Argentina	69	206	69	162	242
Peru	10	120	450	768	1,056

Source: Global Trade Atlas

Japanese Fresh Strawberry Prices – Import and Wholesale

Import CIF Prices*		Wholesale Prices**	
2014	(US \$/KG)	2014	(US \$/KG) ***
January	10.27	January	12.48
February	---	February	11.37
March	9.10	March	8.60
April	11.05	April	8.29
May	9.86	May	7.90
June	9.41	June	8.51
July	9.46	July	17.69
August	9.44	August	16.61
September	9.43	September	22.12
October	9.76	October	24.21
November	9.14	November	16.03
December	9.30	December	17.77
Source: GTA		Source: MAFF	

* Import prices are U.S. import CIF prices.

** Wholesale prices are average wholesale prices at the major wholesale markets. (Seikabutsu Ryutsu Tokei)

*** Converted from Japanese Yen utilizing the 2014 average exchange rate of 105.82 yen per U.S. dollar.

Trade (Exports)

The Japanese government aims to increase exports of agricultural, forestry and fishery products to one trillion yen (fresh produce to 25 billion yen) by 2020, 60 percent higher than 2014 levels. For fresh produce, Japanese producers are targeting export markets in the EU, Russia, Southeast Asia, and the Middle East. In 2014, Japan exported 205 MT of domestically produced strawberries (valued at approximately four million U.S. dollars), primarily to Hong Kong (85 percent), as well as Taiwan (12 percent), Singapore (one percent), and Thailand (one percent). As Japanese strawberries are known for their flavor, growers harvest fruit at their optimal ripe stage. However, this timing also shortens the shelf-life of Japanese strawberries. The soft texture of Japanese strawberries also provides another hurdle to exporters. To address these challenges, producers and researchers are developing improved shipping methods, as well as breeding new varieties for a longer shelf-life.

Japan: Import Duties 2015		
Tariff Code (HS)	Description	Duty Rate (%)*
0810.10-000	Fresh strawberry	6
0810.10-100	Frozen strawberry, containing added sugar	9.6
0810.10-100	Frozen strawberry, other	12
<i>Source: Customs Tariff Schedules of Japan</i>		
<i>* all duties are charged on a CIF basis</i>		

Acknowledgements

The Strawberry Research Institute, Tochigi Prefectural Agricultural Experiment Station
The Shizuoka Prefectural Agriculture Experiment Station