

Japan Grows an Appetite for Imported Vegetables

By Hayden Stewart

Overseas farmers are rushing to fill the yawning gap between Japan's domestic supply and demand for fresh vegetables. While Japanese consumers grow wealthier and increasingly demand a wider variety of vegetables on a year-round basis, the nation's farmers are producing less and less. To date, imports account for around 10% of domestic vegetable consumption, but this figure is expected to balloon threefold over the next decade.

The graying of society is primarily responsible for declining vegetable production in Japan. Many farmers have retired and 63% of those remaining are beyond retirement age. Pundits expect them to discontinue working within the next 10 years.

Production of vegetables is suffering because it is relatively labor intensive and requires agile workers. Says a spokesman for the Ministry of Agriculture, Forestry and Fisheries (MAFF), "The aging of Japan's farming population makes it difficult to care for vegetables while they are growing."

Annual vegetable production is already down 10% from a peak of 16.8 million tons in 1986, and the figure continues to fall another 2% to 3% every year.

Imports are compensating for the shortage of domestic vegetables and supplying consumers with a wide variety of year-round produce as well. Last year, total imports reached 1.66 million tons, up 28.8% from 1993. From January through March of this year, imports were up another 30% over the same period in 1994.

Imports of processed vegetables like frozen, canned, and salted goods exceed shipments of fresh vegetables, although imports of fresh vegetables are growing quicker. Imports of fresh produce grew by 66% in 1994 to 652,000 tons.

Price competitive

Jimmy Uehara is the president of J. Brain, a consulting company which

advises foreign growers about the Japanese vegetable market and even pairs them with importers. "Now is the right time to enter the market for fresh vegetables," he says.

Vegetable prices are much lower overseas than in Japan, says Uehara. The strong yen is one factor, but overseas growers are also very efficient, achieving economies of scale by tending to a few hundred acres at one location.

Tomatoes are a case in point. A senior agricultural attaché with the U.S. embassy, who asked to speak anonymously, points out that fast-food chains in the United States commonly add a slice of tomato to their burgers and sandwiches. He estimates that each slice costs the restaurant about ¥3 at today's exchange rates. In Japan, by contrast, the official argues that an equivalent slice of tomato costs closer to ¥20 and that few chains can afford to offer such adornments for their customers. (Japan currently bans imports of tomatoes from the United States, although the U.S. embassy is confident that this restriction will be lifted "in the near future.")

For asparagus, mushrooms, bell peppers, and other high-end produce, the differences between Japanese and overseas prices are wide enough that growers can pay to ship their produce by air freight and still make a profit. Growers of bell peppers in the Netherlands, for example, began air freighting their vegetables to Japan in March 1992. Hara Hitoshi, president of the All Japan Vegetable Importers Association, reports that Japanese consumers are responding positively.

Even by Japanese standards, Dutch bell peppers are expensive at ¥128 each (60% of this price reflects the cost of air freight), but Hara argues that the vegetables are tasty and have novelty value. Indeed, they come in eight different colors. Dutch bell peppers are also available from April through November: by contrast, Japanese bell peppers are har-

vested during the winter season.

High-end produce may gain a niche in the Japanese market, but imports of inexpensive vegetables tend to fluctuate with the level of domestic output. Hara notes that when Japan's harvest is poor and domestic prices are very high, it is possible to import lettuce, carrots, and other low-priced vegetables.

Amongst vegetables, imports of onions possibly fluctuate the most with swings in domestic output. Since 1992, exports to Japan have increased nearly 600% to 206,845 metric tons with the U.S., New Zealand, Australia, and Taiwan being the main suppliers. Yet Eugene Bowen, commercial minister with the New Zealand embassy in Tokyo, concedes that shipments are likely to decrease as soon as Japan enjoys a bountiful harvest.

Mastering shipping techniques

Widening price differentials between Japan and foreign countries help vegetable exporters to Japan, but the most successful companies are also mastering their shipping techniques.

As is the case with Dutch bell peppers, foreign growers would like to transport their vegetables to Japan by ship because it is less expensive than air freight. Unfortunately, a one-or-two week voyage by ship is often impossible, since most vegetables spoil within three or four weeks of harvesting.

One company working hard to reduce high shipping fees is Sunglobe, which supplies shredded lettuce prepared in California. By preshredding before importation, the company does not pay to transport the inedible parts of a lettuce head and can also offer a higher value-added product, says Yuki Isamu, a company spokesman. This also ensures that shipments do not contain pests and thereby guarantees swift passage through customs.

Advances in transportation are having

the biggest impact on imports of broccoli. Until four years ago, Japan imported only a nominal amount of this vegetable. Since it became possible to transport broccoli by ship, imports have grown to around 50% of domestic consumption. "In the beginning, when we began to experiment with ocean freight, we sometimes lost entire shipments," says Nakamura Akio, general manager of sales at Dole Japan. "Now broccoli is one of our best-selling vegetables."

Dole and other companies have mastered packaging and swiftly transporting broccoli. Immediately after a head of broccoli is cut, Dole packages the vegetable into a plastic container with chips of ice. "It is important to keep the box's temperature around 1°C," adds Nakamura, "gas freezing can damage the broccoli's taste." The boxes are then packed into 40-foot refrigerated containers (reefers) for shipment to Japan. As a reefer is loaded onto a ship, Dole sells the broccoli to its 200 wholesalers throughout Japan, most of whom then contract with retail stores to sell the broccoli. The trip to Japan from Dole's fields in California takes about 12 days. When the vegetables arrive in Japan, they clear plant quarantine inspection, customs, and are delivered to Dole's wholesalers. If everything goes well, upon reaching supermarket shelves, the broccoli should remain fresh for another two or three days.

Government regulations

Aside from shipping strategies, foreign growers must also contend with strict government regulations.

Foreign growers recognize the necessity of protecting consumer health and the environment, so they do not oppose strict supervision by either MAFF or the Ministry of Health and Welfare (MHW). Indeed, the U.S. embassy claims to have a cooperative relationship with these ministries, although characterizing their policies as "conservative."

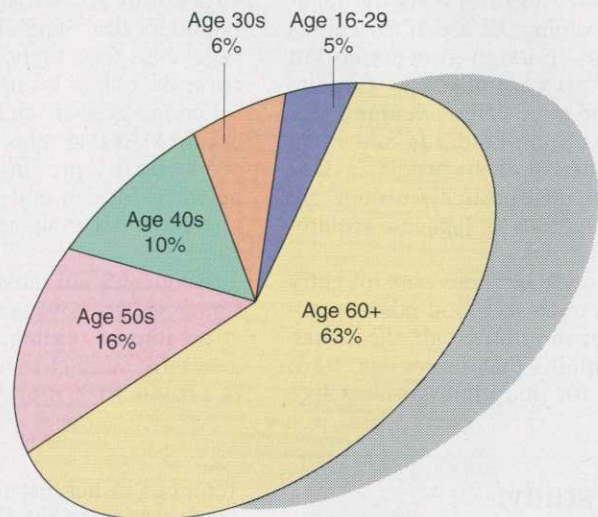
Before companies can import vegetables, MAFF ensures that the produce does not carry organisms which are either alien to Japan's environment or can damage crops. For this reason, the ministry bans imports from regions of

the world where unwelcome organisms live on the vegetable in question. For instance, companies can bring Dutch bell peppers to Japan, but MAFF prohibits imports from the United States where the tobacco mosaic virus lives.

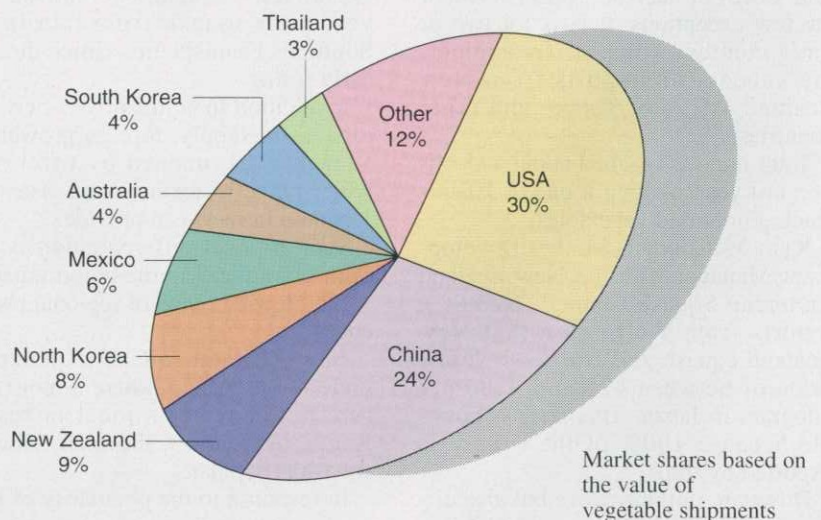
When MAFF blocks the import of a vegetable, foreign growers and their governments can appeal to the ministry with information to prove the produce's safety. The U.S. government and the

California Tomato Association, for instance, are asking MAFF to allow imports of U.S.-grown tomatoes which, the ministry fears, may also contain tobacco mosaic virus. The U.S. embassy reports that scientists are injecting tomatoes with the virus to prove that the vegetable cannot carry the organism: "It just dies." MAFF is currently examining this evidence, and the U.S. official is optimistic that

Japanese Main-time Farmers by Age Group



Vegetable Imports by Country in 1994



California growers can soon export their tomatoes to Japan.

After receiving permission to sell their produce in Japan, importers can still have trouble when their vegetables arrive in this country. Quarantine officials from MAFF inspect the produce for insects and other unwelcome organisms, while representatives from the MHW test the vegetables for the presence of chemicals beyond maximum allowable levels.

If they export produce to Japan, MHW regulations mandate that foreign growers must adhere to domestic regulations concerning the use of agricultural chemicals. Foreign growers do not object to this regime. Says Eugene Bowen, for one, "New Zealand has rigid inspection standards and is an environmentally clean producer. Our standards against pesticide residue are at least as rigorous as Japanese requirements."

Inspections at Japanese ports of entry for unwelcome insects and other organisms are problematic, all the same. Bowen explains that Japan has "zero tolerance" for ubiquitous insects like

the aphid (*aburamushi*) which "demonstrably exist on Japanese produce."

If Japanese quarantine officials find unwelcome organisms on vegetables, the importer has three alternatives: The vegetables can be fumigated, destroyed, or reshipped to a third country. Importers argue that these options are not flexible. Transportation is expensive and vegetables have a short shelf-life anyway, so reshipping is difficult. Moreover, Yuki Isamu adds that fumigation is disastrous: it kills the pest, but also makes lettuce and other delicate vegetables rot within a day or two. Importers like Sunglobe must sell their vegetables for a higher price in order to cover the risk of losing a shipment.

Foreign growers and governments are asking MAFF to relax its regulations by scientifically proving the similarities between foreign and domestic ubiquitous pests—with no apparent success to date.

Companies are most agitated by consumer views, however. Despite Japan's strict import regime, consumers here generally suspect that foreign produce is grown with more chemicals than

domestic vegetables.

Several companies are calling on the Japanese government to educate consumers. "There is a lot of misperception going around," says Jimmy Uehara. "The government must carefully execute a nationwide educational program to let everyone know the quantity and type of chemicals which Japanese and foreign farmers use."

The Food and Marketing Bureau of MAFF formed an advisory group of representatives of consumers, distributors and other related groups to discuss labeling methods for vegetables. The group is expected to conclude its deliberations by autumn this year.

Consumer attitudes notwithstanding, companies are excited about the rapid growth of vegetable imports. "We do not see any insurmountable problems," says Dole's Nakamura. "The market is big and getting bigger. How could we fail?"

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A case study: New Zealand squash

Most vegetables spoil within three or four weeks of harvest; squash is one of the few exceptions. It lasts for two or three months, which partly explains the success of imports from New Zealand, Mexico, Tonga, and other countries.

Total imports reached about ¥15 billion last year, making it one of Japan's leading imported vegetables.

Kym McConnell, Market Development Manager with the New Zealand Buttercup Squash Council (NZBSC), reports from Wellington that New Zealand squash sells for a wholesale price of between ¥75 and ¥180 per kilogram in Japan. This price is possible because 100% of the squash is exported by ship.

However, not only price but also dif-

ferences in harvest time help squash imports. Japanese production of squash is stable, but farmers cut these vegetables in the wintertime. Producers in New Zealand, by contrast, harvest their squash from late in the Southern Hemisphere winter through early spring.

In addition to competitive prices and off-season supply, foreign growers of squash also succeed by offering a wider range of textures and taste than Japanese farmers can provide.

Such product differentiation is crucial because Japanese consumers exhibit a wide range of regional preferences.

New Zealand squash is generally preferred in Kansai where a moist texture better reflects local tastes. In Kanto, by contrast, the drier Mexican squash is popular.

In response to the popularity of New

Zealand squash in the Kansai region, the NZBSC established a local office in Osaka to promote the consumption of squash, and even created a budget for activities in Japan. Last year, these funds were used for supermarket promotions.

McConnell is less upbeat about consumer attitudes. "From our research, we found 48% of consumers associate New Zealand squash with post-harvest chemicals and less than 10% believed foreign squash was grown safely," he says.

"These results clearly emphasize the inherent belief that foreign imports are not as safe as Japanese products. It is particularly disappointing as New Zealand squash contains no post-harvest chemicals and we have very strict growing standards monitored by the NZBSC. All our squash is safe for the environment and safe for consumers."