Commodity Spotlight

Exporters Target U.S. Asparagus Market

The U.S. is one of the world’s largest producers and consumers of fresh asparagus. In the past, fresh asparagus was consumed in the U.S. only in the first half of the year when U.S. product was available. Now, thanks to soaring imports—up 74 percent in the 1990’s—fresh asparagus is available year-round.

But imports arrive not only during the off-season. They also come in during the U.S. season beginning in January, reducing the early-season price premium. Because U.S. demand is flat, the growth of fresh and processed asparagus imports poses serious challenges to the U.S. industry. Total per capita asparagus consumption has been nearly constant in the 1990’s at 1 pound—0.6 pound fresh consumption.

In 1980, the U.S. imported just 8 percent of the fresh asparagus supply, but by 1996 that share had increased to 40 percent. Mexico has always been the largest source of U.S. imports, but many new countries are entering the market. Asparagus is a labor-intensive, high-value crop that is very attractive to countries with ample labor supplies and the appropriate growing conditions. Peru, in particular, has become one of the world’s largest producers and exporters of asparagus. Recent investment in China hints at considerable growth potential there too.

U.S. asparagus production has declined since 1989, due in part to some California producers switching to more profitable annual crops. U.S. production is expected to increase in 1997, however, following poor weather in 1995 and 1996 which reduced production in California. Also, recent plantings in California are starting to mature, further boosting supply in the next few years. Under these conditions, U.S. producers should expect downward pressure on prices. With the rapid growth of asparagus imports from other countries, off-season suppliers may also experience downward price pressure.

**U.S. Output**

**Trending Lower**

In 1996, U.S. asparagus production was nearly 200 million pounds, 20 percent below the record 250 million in 1989. About 56 percent of U.S. asparagus production was marketed in fresh form last year, compared with only 37 percent from 1975 to 1979. During the 1990’s, the relative shares of processed and fresh production have remained fairly constant.

California has traditionally been the largest U.S. asparagus producer, but weather problems over the last 2 years allowed Washington to surpass it as the nation’s leading producer. In 1996, Washington accounted for 42 percent of total production compared with California’s 38 percent. Michigan’s share was 15 percent. New Jersey, Illinois, Indiana, Maryland, Minnesota, and Oregon accounted for a combined 6 percent of production.

With the exception of 1992, U.S. asparagus production has declined steadily from 1989 to 1996, due mostly to lower output in California. Acreage in California’s Imperial County, with the earliest U.S. asparagus production, declined as production grew in the neighboring Mexican state of Sonora, which has an overlapping shipping season (January to March). Between 1989 and 1996, imports during the month of January almost doubled, lowering early-season prices and putting competitive pressure on producers.

The Imperial County industry appears to have stabilized, however, with acreage virtually unchanged in the last 3 years. In the Salinas area, asparagus acreage has declined as farmers switched to more profitable annual crops.

The Stockton-Delta area, with 57 percent of the state’s expected harvested acres in 1997, is expected to remain the leading growing region in California, due to lower production costs relative to the Salinas area and Imperial County. Recent plantings in the Stockton-Delta area could raise total California harvested area to about 34,000 acres in 1998 (when current plantings mature), up 18 percent from 1996.

California is the most important state for fresh production, with virtually the entire crop sold in the fresh market, accounting for two-thirds of total U.S. fresh production in 1996. Washington accounted for almost one-fourth of fresh production, while New Jersey and Michigan each accounted for about 3 percent.

The bulk of California’s crop is shipped to the fresh market from late February through May, with the largest shipments in March and April. Small amounts of asparagus are available beginning in January from Imperial County. California producers receive higher returns than those of other states because they sell more to the fresh market and are the earliest domestic producers.

Processed output includes canned (35 percent of total production) and frozen (9 percent). Washington State is the largest producer of asparagus for the processed market, with 64 percent of the total processed asparagus pack in 1996. Michigan accounted for most of the rest.

Agronomic conditions for asparagus are very good in Washington, and average state yields are high. Producers depend
on high yields rather than on the early season that gives their Californian counterparts an edge in the fresh market. About 55 percent of Washington’s crop is canned, and less than 10 percent is frozen. Washington specializes in whole spears, which command a higher value in the marketplace but are more labor-intensive than other processed products.

Most Michigan production is processed, with about two-thirds of the processed asparagus canned and one-third frozen. Michigan is second to Washington in canned production, but recently surpassed it as the largest producer of frozen asparagus. Unlike Washington’s processed asparagus, most of Michigan’s asparagus is processed into cuts and tips, which are lower value and less labor-intensive products.

**Higher Fresh Imports**

*Keep Consumption Steady*

With the exception of 1984 and 1994, U.S. imports of fresh asparagus have grown each year since 1980, turning the U.S. from a net exporter up through 1982 to a net importer by 1990. Since the late 1980’s, increasing imports of fresh asparagus have offset declining U.S. fresh-market production, while exports have been flat.

Domestic consumption of fresh asparagus has been fairly constant, fluctuating between 148 and 153 million pounds. The rise in consumption that occurred in the off-season merely offset the decline in consumption during the traditional spring season. Seasonal demand has flattened somewhat in recent years, but consumption still peaks in the spring. If California output rebounds in future years, prices will be lower and spring consumption may return closer to the 1990 level.

Imports usually peak in February, when the supply from Mexico is at its highest level. Imports drop sharply during the spring as U.S. production picks up, then begin increasing again in July when most U.S. supplies dry up. Shipments from the Bajio region of Mexico’s state of Guanajuato are at peak levels in late summer. Imports from Peru are strongest from September through December, but continue into the new year. Imports from Chile peak in October.

Traditionally, most fresh asparagus imports come from Mexico. In 1980, almost all imports came from Mexico, but its share has trended downward, sinking to 53 percent in 1996 as Peru and Chile began filling the off-season void. Most of Mexico’s export production is shipped from the northwestern state of Sonora from December through early April.

In 1996, just over half of Mexico’s fresh asparagus exports to the U.S. were in February and March. Once the Stockton Delta area of California reaches full production and U.S. prices fall, Mexican exports decrease drastically.

U.S. fresh asparagus imports from Mexico have varied over the last few years. In 1994, imports from Mexico fell as disease problems in the Bajio curbed output and an overvalued currency raised prices to U.S. buyers. With the peso devaluation in late 1994, exports increased in 1995 but fell again in 1996 due to the Bajio’s chronic disease problems.

Mexico’s sizable shipments to the U.S. occur despite relatively high U.S. tariffs. The North American Free Trade Agreement (NAFTA) should improve Mexico’s position as a source of U.S. imports. Before implementation of NAFTA, the U.S. assessed a 25-percent tariff on fresh green asparagus imports from Mexico. Now the tariff schedule varies by time of year. For the month of January, the tariff was reduced immediately in 1994 to 17.5 percent from 25 percent and is being phased out over 15 years. For February 1 to June 30, the most sensitive period for U.S. producers, the 25-percent tariff declines to zero over a 15-year period. From July 1 to December 31, the 25-percent tariff is being phased out over 5 years.

Mexico has a transportation advantage over other countries and will eventually be on the same tariff footing as most other foreign competitors who pay no duty (i.e., countries benefitting from the Caribbean Basin Initiative and Andean Trade Preference Act). Chile and Argentina are the only other Latin American asparagus exporters that still pay duties. In 1996, the duty on asparagus from these countries was 23.8 percent during most of the year. The only exception was a 5-percent duty assessed on asparagus arriving by air between September 15 and November 15.

---

**Fresh Asparagus Imports Have Increased While U.S. Output Declined Since 1989**

<table>
<thead>
<tr>
<th>Year</th>
<th>Fresh production</th>
<th>Imports</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>80</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>1991</td>
<td>100</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>1993</td>
<td>120</td>
<td>50</td>
<td>30</td>
</tr>
<tr>
<td>1995</td>
<td>140</td>
<td>60</td>
<td>40</td>
</tr>
</tbody>
</table>

Economic Research Service, USDA
Peru is the second-largest foreign supplier of fresh-market asparagus to the U.S. Between 1989 and 1996, U.S. imports of fresh asparagus from Peru grew from 2 million pounds to 23 million, reaching 31 percent of total U.S. fresh asparagus imports. Three-quarters of Peru’s fresh exports to the U.S. are shipped during September through December when there is very little U.S. production.

Peru has rapidly emerged as one of the world’s largest producers and exporters, aided by climatic conditions permitting year-round asparagus production. Peru also enjoys duty-free access to the U.S. market through U.S. trade concessions under the Andean Trade Preference Act, which was implemented for Peru in 1993. Total Peruvian asparagus exports to all countries grew from 10 million pounds in 1980 to 187 million in 1996. Export growth is expected to slow now that there are more competitors for the maturing U.S. off-season market.

Peru’s green asparagus dominates production in the Ica region south of Lima, while white asparagus predominates in La Libertad on the northern coast. (“White” asparagus is produced by covering the plant with soil, preventing sunlight from reaching it.) Most of Peru’s asparagus production is exported—primarily canned white asparagus packed in glass, sold mainly to the European market. Fresh green exports have grown rapidly, destined mainly for the U.S. and representing 18 percent of Peru’s total asparagus export volume in 1996. The frozen industry is also growing rapidly, with more green frozen product being shipped to the U.S. market.

Chile is the third-largest supplier to the U.S. In 1989 Chile provided 12 percent of U.S. fresh asparagus imports, slipping to just 8 percent in 1996. Chile’s competitiveness declined due to rising labor costs and the appreciation of its currency relative to the dollar. Furthermore, among the major suppliers only Chile is still subject to the full duty during most of the year. In 1996, 87 percent of Chile’s asparagus shipments to the U.S. arrived during the September 15-November 15 period when the duty is only 5 percent.

After a reduction in Chile’s asparagus acreage earlier in the 1990’s, acreage is expanding again, in part because asparagus complements the labor-use patterns of fruit producers and because its relative profitability is now higher. If NAFTA were extended to Chile, the change in tariff regime would improve Chile’s competitive position.

Other Latin American countries such as Colombia, Guatemala, Ecuador, Argentina, and Costa Rica have also increased exports to the U.S. Colombian exports of fresh asparagus to the U.S. grew from 8,800 pounds in 1990 to 2.7 million in 1996. Despite rapid growth in these countries, their shares of the market remain very small. Collectively they accounted for only 8 percent of imports in 1996.

Most South and Central American fresh asparagus enters the U.S. through Miami. Season-average wholesale prices in Miami dropped from $21.87 per box in

---

**Latin American Fresh Asparagus Complements and Competes with U.S. Output . . .**

<table>
<thead>
<tr>
<th>Month</th>
<th>Mexico</th>
<th>U.S.</th>
<th>Chile</th>
<th>Others*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mar.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>May</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>July</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sept.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Nov.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

1996 shipments.
* All other importing countries.

. . . and Imports Have Reduced Early-Season U.S. Grower Prices

<table>
<thead>
<tr>
<th>Year</th>
<th>$/cwt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980-89</td>
<td>120</td>
</tr>
<tr>
<td>1990-96</td>
<td>180</td>
</tr>
</tbody>
</table>

1992 dollars. From 1980 to 1989, U.S. asparagus shipments after July were insufficient to establish a price. From 1990 to 1996, shipments during August-October were very small.
1991/92 to $18.49 during the 1995/96 season. At this level, most exporters are reportedly barely breaking even. When the U.S. tariff (during July 1-December 31) on Mexican imports is removed in 1998, South and Central American exporters will likely face additional competitive pressures.

While the U.S. fresh asparagus import profile has changed dramatically in recent years, the export market has seen less change. After rapid export growth in the 1980’s, U.S. fresh asparagus exports showed modest increases from 1991 to 1994 but dipped in the last 2 years as California production declined. Japan and Canada are the most important markets, accounting for 44 and 32 percent of U.S. exports.

Peru’s position in frozen green asparagus strengthened in the 1990’s at the expense of Mexico (now at 10 percent of total imports) and Chile (6 percent). On the other hand, China, which accounted for 23 percent of U.S. imports in 1996, looms on the horizon with great potential. Japanese investment in China’s asparagus sector is providing an infusion of new technology and capital for both canned and frozen product, which may have important competitive implications for the global processed asparagus market by the turn of the century. In addition, many industry observers feel China has the potential to develop a fresh green asparagus export industry.

U.S. exports of frozen asparagus, which totaled 0.5 million pounds in 1996, are destined primarily for Canada (88 percent of total exports). Other markets include Sweden, Australia, Japan, and South Korea. The U.S. has become less competitive in the Japanese market as Peru’s frozen asparagus exports have soared. Just over one-third of U.S. asparagus was used for canning in 1996. Canned production has trended up slightly from an average of 68 million pounds in the 1980’s to 73 million in the 1990’s. During this period, lower imports and higher exports offset gains in U.S. production, with domestic consumption marginally lower. Per capita consumption of canned asparagus has remained relatively constant during the 1990’s at an average of 0.3 pounds.

The U.S. is a net exporter of canned asparagus, all green, while canned imports are primarily white (white asparagus is more labor-intensive). U.S. trade in canned asparagus is relatively small. In the 1990’s, only 4 percent of canned asparagus consumption was imported, down from 8 percent during the 1980’s. China is the primary source of U.S. canned asparagus imports, with a 57 percent share in 1996 compared with Peru’s 19 percent. Canada and New Zealand were the third- and fourth-largest sources of imports, with shares of 7 and 4 percent.

Canned exports have increased from 5 percent of total U.S. canned supply in the 1980’s to 7 percent in the 1990’s. In 1996, U.S. exports totaled 7 million pounds, the highest level of canned asparagus exports since 1970. During the 1990’s, Australia developed into the largest market for U.S. canned asparagus exports, absorbing 33 percent of the total in 1996, while England moved into second place. Other markets include Japan (9 percent of total exports), Iceland (8 percent), and Canada (4 percent).

Outlook for The U.S. Industry

The U.S. asparagus industry faces a mature domestic market and a global industry with strong competitors in fresh and frozen product and potential competitors in canned product. The U.S. industry’s share of global production declined in the 1990’s, due to an acreage decline and weather problems in California. An expected acreage increase this year, combined with a return to more normal weather patterns, should help California production rebound in the near term. However, increased volume should generate lower prices, which may cause acreage to decline again.

Given the proliferation in fresh produce items now available to consumers—the average U.S. supermarket handles 340 fresh produce items—increased investment in promotion and product innovation may be essential to stimulate demand for fresh asparagus relative to the attractive substitutes. Promotion and product innovation are complicated, however, when there are several domestic and foreign suppliers to a market. When one producing group invests to expand consumer demand, all suppliers, including importers, may benefit.

Linda Calvin (202) 501-8449 and Roberta Cook, University of California-Davis (916) 752-1531 calvin@econ.ag.gov; rlcook@ucdavis.edu