

## World Agriculture & Trade

### U.S. & Mexican Avocado Sectors: A Comparison

Mexico is the world's largest avocado producer and second-largest exporter, accounting for about 67 percent of global production and 24 percent of world trade in 1995/96. Mexico currently exports about 7 percent of total production, mainly to Europe, Canada, and Japan. The U.S. is the second-largest producer of avocados (about 15 percent of world production) and the sixth-largest exporter (5 percent of global trade). The U.S. exports about 5 to 7 percent of production, with the EU, Japan, and Canada the most important markets.

Mexican per capita consumption is about 7 kilograms per person, compared with U.S. consumption of less than 1 kilogram. U.S. per capita consumption more than doubled between the early 1970's and the early 1980's, but has remained fairly constant since then. California has by far the highest per capita avocado consumption in the U.S., for two principal reasons: it is the main region of U.S. production and it has a large Hispanic population with an established preference for avocados.

The 19 northeastern states where Mexican avocados will be permitted under the recent APHIS ruling are estimated to consume 10,000-15,000 tons of fresh avocados annually and account for about 8 percent of domestic use. Avocados are used primarily in fresh salads, as toppings on soups, and as the main ingredient in guacamole. Avocados are rich in potassium and vitamin A and free of cholesterol, but relatively high in fat and calories.

In both countries, production is highly concentrated in one state and on one variety. Mexico produces mainly the Hass variety, with over 85 percent grown in the state of Michoacán near Mexico City. In the U.S. over 90 percent of all avocado trees are in California, with roughly half of U.S. production located in San Diego County. California produces mostly the Hass variety, which has a pebbly, dark green skin. Most of the remaining U.S. output is from Florida, mainly a variety of West Indian origin with a smooth, lighter green skin.

Hawaii also grows a small amount of avocados.

Avocado production requires a great deal of water. In San Diego County, avocado production relies on high-cost irrigation. In Michoacán, where only about half the orchards have irrigation systems, abundant rainfall gives Mexican producers an advantage in lower water costs.

At a national level, Mexican yields are typically 7 to 9 metric tons per hectare, although a mature orchard with 8-year-old trees generally averages 15 tons per hectare. California yields are slightly lower at about 5 metric tons per hectare.

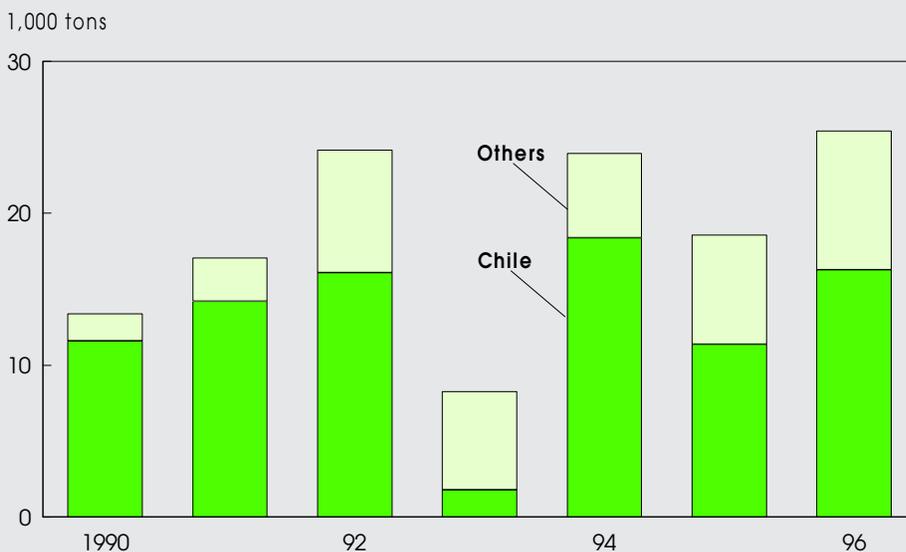
Production of avocados can fluctuate a great deal from one year to the next, due to the crop's sensitivity to cold, leading to wide variations in price and in consumption levels. Some avocados also go through a bearing cycle that varies the production over several years. California is capable of producing substantial volumes of avocados year-round, although the peak season is usually from March to August, with the lowest levels from

September to December. Florida markets about 90 percent of its harvest between August and December.

In Michoacán, the primary harvest season is October to February, although production is year-round. Therefore, there is some complementarity in the Mexican and U.S. production cycles, although Mexico could pose new competition during January and February, when California has been nearly the sole supplier.

Mexico's avocado growers have been looking forward to the opportunity to export to the U.S. for several years. In fact, a number of new trees was planted with this goal in mind in the late 1980's and early 1990's, and these are now starting to bear fruit. Producer organization has undergone a series of changes, with the Michoacán Avocado Commission now the principal voice for growers. In an effort to improve export promotion, the Mexican industry is reportedly working with the Michoacán state government and the federal government to develop standards for product quality and labeling. Reportedly about 15

#### Chile Has Dominated U.S. Avocado Imports in the 1990's



Source: *Foreign Agricultural Trade of the U.S.*, Economic Research Service, Economic Research Service, USDA

growers in Michoacán may eventually be able to ship avocados to the U.S., but only 2 or 3 may be able to take advantage of the opening initially. Michoacán growers estimate that 13,000 hectares in four municipalities in the state, capable of exporting 80,000 tons, could be approved by APHIS to export avocados to the U.S.

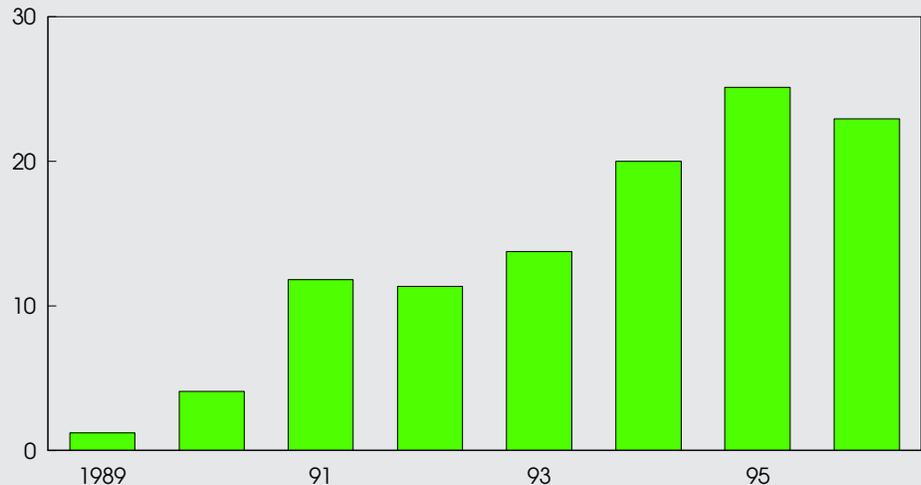
Poor weather in Mexico reduced the 1996/97 crop by approximately 20 percent, to 635,000 tons. Heavy rainfall, hailstorms, and cool temperatures in Michoacán during the flowering season caused fruit to fall early, and reduced both yields per tree and size of the fruit. For the 1997/98 season—the first for which the recent APHIS ruling will apply—Mexican growers interviewed by USDA's Foreign Agricultural Service expect output to bounce back 30 percent as higher yields often follow a low-yield year.

The California Avocado Commission's March estimate for 1996/97 state output was that the avocado crop would be up 3 percent. Total California shipments from November 1996 to March 1, 1997 were up 12 percent from the previous year, with prices down 3 percent. For the Hass variety, shipments were up 10 percent and prices down 5 percent. The first official USDA production estimate for 1996/97 will be released in July.

As with other seasonal crops, prices for Mexican avocados drop during the peak harvest season—November to February. However, these prices reflect the whole crop as marketed in Mexico City's main wholesale market. Export-quality fruit commands a higher price for its appearance and the special handling required. Mexican prices remain low during March and April as the crop continues to be marketed. Mexican avocado producers have a great deal of flexibility in timing of harvest because avocados can be stored on the tree, often for several weeks or months. Avocados ripen once they have been picked, softening within 3 to 4 days for fruit picked late in the season and 3 to 4 weeks for fruit picked early in the season.

### U.S. Processed Avocado Imports from Mexico Have Grown Rapidly in the 1990's

\$ million



Source: U.S. Customs Service.  
Economic Research Service, USDA

### Mexico's Competitiveness In the U.S.

Under the new APHIS rules, Mexico and Chile will find themselves in direct competition in the U.S. market during November and December. The U.S. imported 25,000 tons of fresh avocados worth \$23 million from all sources during calendar 1996, about 15 percent of domestic demand.

In the past few years, Chile has been supplying about two-thirds of U.S. avocado imports, mainly during September-December. During the 1990's, Chile exported an average 13,000 tons of fresh avocados to the U.S., with 40 percent entering during November and December. Chilean avocados face a U.S. tariff of 12.9 cents per kilogram, as opposed to the 7.9 cents/kg tariff for Mexico, and Mexico's tariff will be phased out by 2003 under NAFTA.

Some Mexican fresh avocados have already been entering the U.S. in recent years, coming by truck through Laredo, Texas. However, these avocado imports, which reached nearly 1,800 tons in 1996, have been bound by truck for

Alaska (where imports from Mexico have been permitted since 1993) or for Canada, or headed to U.S. ports for other re-export destinations.

In the last few years, while the partial lifting of the ban on fresh avocados was being developed, Mexican exporters have relied on pre-export processing to market their avocado products in the U.S. Processed avocado products include avocado pulp, avocado paste, and guacamole in consumer-ready packaging. Avocado pulp comes in tubs for use in restaurants and food processing.

Imports of processed avocados from Mexico have grown strongly in the last few years. The U.S.'s phytosanitary ban does not apply to processed avocados, as the husk and large seed have been removed. In fact, the value of processed avocado imports from Mexico is now equivalent to U.S. fresh avocado imports from all sources. Processed avocados face a 1997 tariff of 7.9 cents per kg, which will be eliminated by 2003. About 3 percent of Mexico's avocado crop goes to processing outlets.  
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