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THE U.S. MARKET FOR AVOCADO

Market Survey #19

INTRODUCTION

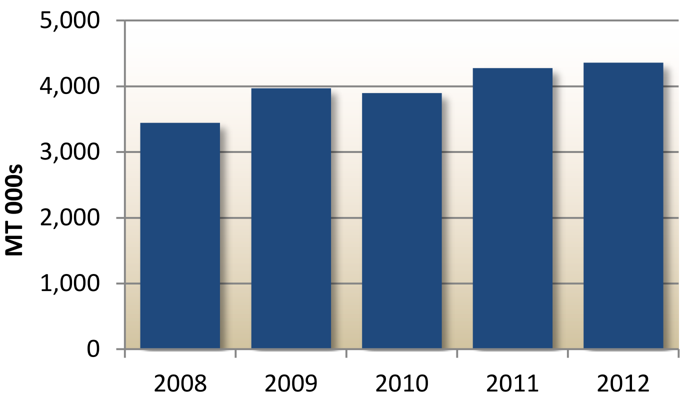
Avocado (*Persea americana*) is the fruit of a tree native to Latin American and the Caribbean. It is cultivated in many countries with tropical climates across Asia, Africa and Latin America, as well as in Flordia and California in the United States (U.S.). The Hass variety is the dominant and most popular commercial type grown due to year-round production, longer shelf-life and its rich, nut-like flavor. The Hass variety is exported in large volumes to the U.S., which is the world's biggest importer of avocado. Other common varieties include Reed Fuerte, Zutano and Bacon (grown in California) and Choquette, Hall, and Lulu (grown in Florida).

PRODUCTION

Central and South American countries dominate global avocado production, with Indonesia and the U.S. also notable producers. World avocado production grew at an average rate of nearly seven percent per year between 2008 and 2013. This compares to four percent per year between 2004 and 2007.

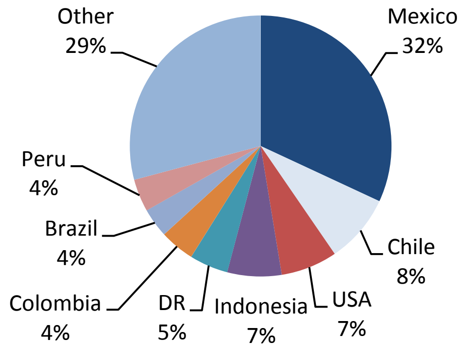
Mexico is the world's leading avocado producer. In 2012, it produced 1,300 metric tons (MT), equivalent to 30 percent of global production. This is nearly four times that of **Indonesia**, the second highest producer. Production in Chile, the second largest producer in 2009, has dropped by 45 percent in the past 3 years as a result of poor weather and drought.[1] Africa accounted for 16 percent of global production in 2012, a slight increase from 15 percent in 2008. Other major producers include **Brazil**, **Colombia**, **Dominican Republic**, and **Peru.**

Figure 1: World Avocado Production 2012



Source: FAOSTAT

Figure 2: Global Avocado Production 2012 (Total Production 4,360,000 MT)



Source: FAOSTAT

US production of avocado is centered in California and Florida, and to a limited extent in Hawaii. Ninety percent of U.S. avocado production originates in California, the majority of which is planted to the Hass

[1] Fresh Fruit Portal, 2012, Avocados from Chile – Season Forecasts 2012/13

variety. Californian avocados are produced and marketed year round[2], although the peak growing season is from April to September. Florida typically grows Booth, Lula, and Taylor varieties, as the Hass variety does not fair well in the colder Florida winter. These varieties have smoother skins and do not transport as well as the Hass variety. Florida avocados are produced from June through March.

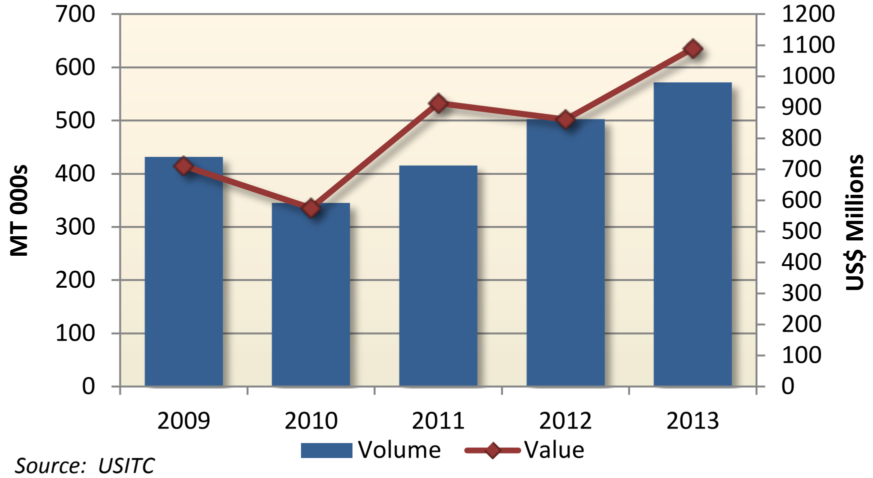
In 2012, the U.S. produced 245,000 MT of avocado, approximately seven percent of global production. U.S. production per year has been highly variable. This reflects alternative high and low bearing years, which is a characteristic of avocado production.[3] Over the past decade, production has averaged 212,000 MT, with a high in 2005 of 283,000 MT and a low of 105,000 MT in 2010.

U.S. MARKET

The U.S. is a negligible avocado exporter, so practically all of the 245,000 MT of domestic production is consumed domestically. Combining domestic production with imports of 571,827 MT in 2012, total domestic consumption equals 816,827 MT – equivalent to 19 percent of global consumption.

A ban on the import of avocado had been in place since 1914 to protect against agricultural pests and diseases (specially avocado seed weevils).[4] These restrictions began to be eased in 1997 and by 2007 all restrictions had been removed. Since then the U.S. has grown into the largest global importer of avocado. U.S. imports now account for around 12 percent of total global production. In 2013, the U.S. imported 571,827 MT, valued at $1.08 billion.[5] Over 98 percent of U.S. avocado imports are sourced from just three countries: Mexico, Chile, and the Peru (see Table 1 on page 3).

Figure 3: US Imports of Avocados

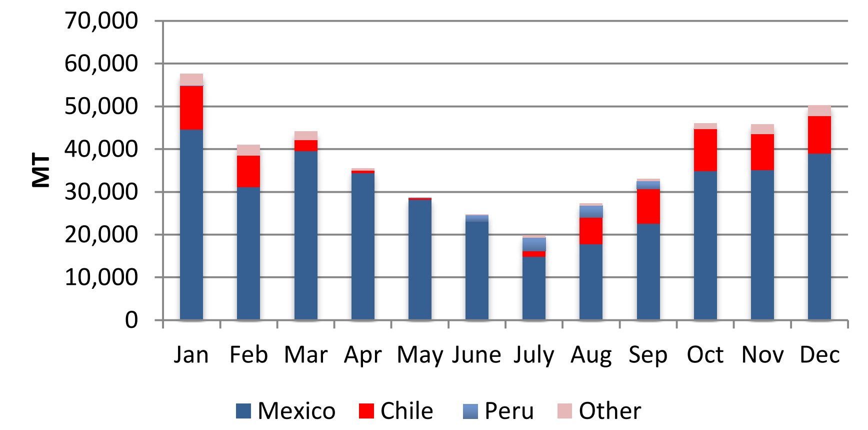


Source: USITC

SEASONALITY

Avocados are produced in the U.S. year-round, but the peak growing season is from April to September. Imports in these months are correspondingly low. However, given that domestic production doesn't satisfy domestic demand, imports still average 382 MT per month, almost exclusively from Mexico and Peru. In comparison, from October to March, imports average 2,247 MT, and it is during this time period that Chile supplies the market.

Figure 4: US Monthly Imports of Avocados (Average 2009-2013)



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[2] http://www.californiaavocado.com/fun-avocado-facts/
[3] http://ageconsearch.umn.edu/bitstream/99786/2/Forecasting%20Price%20pg%2037-46.pdf
[4] https://www.farmfoundation.org/news/articlefiles/864-orden.pdf
[5] http://www.agmrc.org/commodities__products/fruits/avocado-profile/

SUPPLIERS

Mexico, the world's largest producer of avocados, has dramatically increased its avocado exports to the U.S. market. Imports of Mexican avocados increased from 300,607 MT in 2009 to 509,771 MT in 2013. The U.S. is the top export market for Mexico, with 78 percent of total exports. Mexico's share of the U.S. market increased from 70 percent in 2009 to 89 percent in 2013. The vast majority of Mexican avocado exports are managed directly by packers, who have significant U.S. investment in operations and marketing.[6] Mexico's position in supplying the U.S. market reflects its global production dominance, year round production schedule, and proximity to U.S. markets.

Table 1: US Avocado Imports by Origin

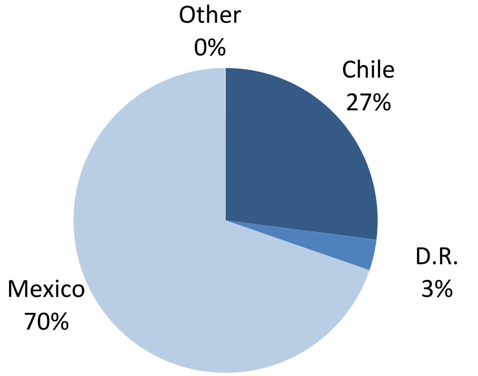
Supplier	2009		2010		2011		2012		2013	
	MTs	$000s	MTs	$000s	MTs	$000s	MT	$000s	MTs	$000s
Mexico	300,607	574,468	266,645	490,184	318,938	770,226	431,319	762,311	509,771	991,952
Chile	116,709	122,680	63,408	69,194	69,770	96,065	40,191	47,339	23,438	34,982
Peru	11	30	137	278	9,156	27,621	15,160	32,341	21,617	44,208
D. Republic	14,146	13,327	14,820	15,044	16,686	18,095	15,160	18,095	16,979	18,242
N. Zealand	269	675	0	0	756	966	36	56	0	0
Other	8	11	0	0	0	0	0	0	22	29
Total	**431,750**	**711,191**	**345,010**	**574,699**	**415,306**	**912,999**	**502,866**	**860,142**	**571,827**	**1,089,413**

Source: USITC

Peru has emerged as a new supplier to the U.S. market after being granted market access in 2010. Peru exported 21,617 MT of avocados to the U.S. in 2013, valued at $44 million dollars. Peruvian avocado production peaks in the summer at the same time as Californian production and Peru has been able to position itself as a supplier when Californian production falls short of demand. The Peruvian Avocado Commission estimates that U.S. imports could double in 2014.[7]

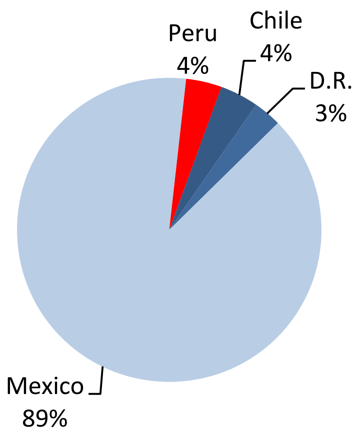
The US-**Chile** Free Trade Agreement (FTA) signed in 2003 grants Chile a duty free quota that increases from 49,000 MT in 2004 by 5 percent yearly over 12 years through 2016, after which access will be fully duty free.[8] Despite this increased access, Chile's role in the U.S. avocado market has been diminishing. U.S. imports have fallen by 80 percent since 2009, from 116,709 MT to 23,438 MT in 2013. Chile now accounts for only 4 percent of the U.S. market. This reflects a fall in domestic production as a result of poor weather and drought. Exports are expected to remain low in 2014 and 2015 as production continues to lag.

Figure 4: US Imports of Avocados Market Share by Volume, 2009



Source: USITC

Figure 5: US Imports of Avocados Market Share by Volume, 2013



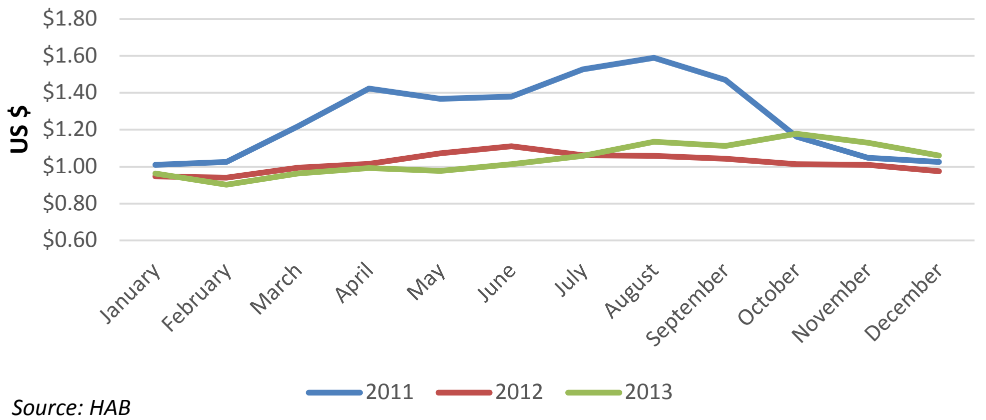
Source: USITC

[6] Global Agricultural Information Network, 2014, Mexican Avocado Exports Continue to Grow.
[7] http://www.thepacker.com/fruit-vegetable-news/Peruvian-avocado-exports-to-US-could-double-248409831.html
[8] USDA Foreign Agriculture Service, 2013, Chile Annual Avocado Report, Global Agriculture Information Network

PRICES

Over the past five years, the average annual price for Hass avocados [9] per unit on the U.S. market has been $1.11. Retail prices are highly seasonal, with demand spiking in warmer weather. [10] The retail price was highest in 2011 at $1.60 due to a surge in domestic demand related to a heat wave.

Figure 6: U.S. Avocado Retail Price (Per Unit)



Source: HAB

STANDARDS, LAWS AND, REGULATIONS

Postharvest handling: Avocados are cut by hand using a sharp knife or clippers using ladders up to 30 feet high. Pickers use nylon bags fastened around their shoulders, with each bag holding between 30 and 50 pounds of fruit. After picking, the harvested avocados are placed in picking bins that can hold up to 800 pounds. These picking bins are transferred to the packinghouse where they are put in cold storage for 24 hours to remove field heat and preserve quality.[11] The avocados are then washed, graded and sorted.

Packing: Avocados are packed into double-layered cartons called lugs. Each lug weighs 25 pounds.

Phytosanitary requirements: Avocado imports are governed by the same rules for avocados grown in South Florida under the United States Standards for Florida Avocados[12], with inspections carried out by the Fruit and Vegetable Division of the USDA Agricultural Marketing Service. Due to concerns over plant health, Michoacán is the only Mexican state authorized to export avocados into the U.S and USDA registration of authorized pest-free municipalities is required. Michoacán now produces around 85 percent of Mexico's total output.

Grades and Standards: There are four grades for avocados as established by USDA.[13] All avocados imported into the U.S. must be at least grade No. 2.

- "U.S. No. 1" consists of avocados of similar varietal characteristics which are mature but not overripe, well formed, clean, well colored, well trimmed and which are free from decay, anthracnose, and freezing injury and are free from damage.
- U.S. No. 2" consists of avocados of similar varietal characteristics which are mature but not overripe, fairly well formed, clean, fairly well colored, well trimmed and which are free from decay and freezing injury and are free from serious damage.
- U.S. Combination" consists of a combination of U.S. No. 1 and U.S. No. 2 avocados: Provided, That at least 60 percent, by count, of the avocados in each container meet the requirements of the U.S. No. 1 grade.
- "U.S. No. 3" consists of avocados of similar varietal characteristics which are mature but not overripe, which are not badly misshapen, and which are free from decay and are free from serious damage caused by anthracnose and are free from very serious damage.

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[9] This analysis was unable to collect comprehensive data on other avocados
[10] http://www.thepacker.com/fruit-vegetable-news/Avocado-demand-strong-as-Mexican-season-winds-down-123635079.html
[11] http://www.californiaavocado.com/seedling-to-supermarket
[12] CFR 51.3050 through 51.3069
[13] USDA, 1997, United States Standards for Grades of Avocados: http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5050342

Tariffs and charges: Mexico enjoys duty-free entry on avocados as a result of the North American Free Trade Agreement (NAFTA). Central American countries, including Honduras, also enjoy duty-free access through the Dominican Republic-Central America-United States Free Trade Agreement (CAFTA-DR). Chile is granted a duty free quota on exports to the U.S. through a free trade agreement, which will be fully duty free by 2016. Peru enjoys duty-free access through the U.S. Peru Trade Promotion Agreement. The tariff on avocado imports to the U.S. from non-preferential trade partners is $0.132 per kg.[14]

The Hass Avocado Board (HAB) collects a charge of $0.025 a pound to fund marketing and promotion efforts. The charge is levied on both imports (collected by customs agents) and domestic production (collected by packers).[15]

OUTLOOK

In recent years, consumption of avocado has been increasing steadily in the U.S. Between 1989 and 2011 consumption per capita increased from 1.1 to 4.5 pounds. Demand has been driven by an increasing U.S. Hispanic population and the mainstreaming of a previously "ethnic" food source. The U.S. Hispanic population grew by 2.1 percent in 2013 to 54 million and is expected to double to 128 million in 2050.[16] An increasing awareness of the health benefits of avocados and a strong marketing campaign by U.S. producers and Mexican exporters has also driven demand.[17] All of these factors combined are expected to stay strong in the future and, as a result, the U.S. market for avocado is estimated to grow annually by 8.1 percent over the next 5 years.

On the supply side, U.S. production is expected to continue to grow, although not enough to satisfy domestic demand. As a result, Mexico will continue to increase its dominance in the marketplace. Production in Mexico is forecast to increase to match demand (estimated at 1,500,000 MT in 2015), driven by improved phytosanitary pest control programs, new orchards coming into production, and an increase in the number of certified orchards.[18] Together, these developments translate into few opportunities for new suppliers and a continuation of the status quo in the avocado market.

[14] http://hts.usitc.gov
[15] http://www.freshfruitportal.com/2013/04/15/hass-avocado-board-looks-to-even-greater-category-growth/?country=united%20states
[16] http://www.pewhispanic.org/2008/02/11/us-population-projections-2005-2050/
[17] http://www.agmrc.org/commodities__products/fruits/avocado-profile/
[18] Global Agricultural Information Network, 2014, Mexican Avocado Exports Continue to Grow.