U.S. Produce Imports from Mexico

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U.S.-Mexico fruit and vegetable trade at a glance

• In 2016, U.S. fruit and vegetable imports from Mexico reached about 10 million metric tons—with a total value of about $12.4 billion.

• This trade accounted for about:
  – 43 percent of total U.S. fruit and vegetable imports (from all countries)
  – 54 percent of U.S. agricultural imports from Mexico
  – 4 percent of U.S. merchandise imports from Mexico

• In this presentation, we will focus on different types of fresh or frozen fruit and vegetables, which accounted for about 92 percent of U.S. fruit and vegetable imports from Mexico in 2016.

• The United States also participates in U.S.-Mexico agricultural trade as an exporter:
  – U.S. agricultural exports to Mexico equaled about $17.8 billion in 2016.
  – Grains, oilseeds, meat, and related products accounted for about three-fourths of this trade.
  – Fruit and vegetables accounted for about 7 percent.

Source: Prepared by USDA, Economic Research Service, using data from U.S. Census Bureau, as cited by USDA, Foreign Agricultural Service. Linda Calvin & Steven Zahniser
U.S. produce imports: Mexico is the largest foreign supplier of vegetables and fruit (when bananas are excluded)

**Source:** Prepared by USDA, Economic Research Service, using data from U.S. Department of Commerce.

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Availability of farm labor in Mexico is one of many factors driving U.S. produce imports

- **Demand**
  - Consumer demand for year-round supplies of fresh produce
  - A desire for a healthier diet
  - Partial shift in consumption from canned and frozen product to fresh produce
  - Increased per capita consumption of certain fruit and vegetables
  - New interest in tropical fruit (avocados, papayas, mangos)

- **Supply**
  - Favorable climates in other countries for growing fruit and vegetables, often complementing U.S. growing seasons
  - Greater availability of farm labor in Mexico and other countries
  - Trade liberalization (NAFTA, CAFTA-DR, Peru, Colombia)
  - Regulatory coordination and trade facilitation (changes in phytosanitary rules for avocados form one example)
  - New technologies (protected cultures, including greenhouses and shade houses, and new varieties, among other factors)
  - New commodities grown in Mexico (berries)
  - Food safety challenges (raspberries, cantaloupe)
  - New transportation infrastructure reduces transport costs from some areas: Increased use of Laredo and Weslaco Ports of Entry
  - Increased participation of U.S. producers, buyers, and investors in produce sectors of Mexico and other countries as a way to reduce weather risks, to obtain product to “fill out” the calendar year, and to lower labor costs

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Tomatoes: The leading U.S. vegetable import from Mexico in 2016 (volume)

- Tomatoes: 29%
- Cucumbers: 12%
- Chili peppers: 10%
- Squash: 7%
- Bell peppers: 7%
- Onions and shallots: 6%
- All others: 29%

Avocados: The leading U.S. fruit import from Mexico in 2016 (volume)

- Avocados: 22%
- Watermelons: 18%
- Limes (fresh or dried): 15%
- Mangoes: 8%
- Papayas: 5%
- Strawberries, fresh: 5%
- All others: 27%


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Tomatoes
Protected culture technology has transformed Mexican shipments to the United States

• Protected culture (PC) is a broad term than covers high-tech greenhouses to low-tech shade houses.
• Began in the mid-1990s in Canada
• Applied commercially first in Canada, then in the United States, and finally in Mexico which is now the powerhouse in the industry
• Primary commodities are tomatoes, bell peppers, and cucumbers
• Canadian and U.S. greenhouses are very high-tech and expensive
• Mexican operations are a mix of high-tech greenhouses and lower-tech shade houses
• Analytical challenge: low-quality data on U.S. greenhouse production
U.S. tomato market: Import share has risen from 17 to 54 percent

<table>
<thead>
<tr>
<th></th>
<th>Field production</th>
<th>Imports (field and PC)</th>
<th>Exports (field and PC)</th>
<th>Per capita consumption</th>
<th>Import share of consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Million lbs</strong></td>
<td></td>
<td><strong>Lbs.</strong></td>
<td></td>
<td><strong>Percent</strong></td>
<td></td>
</tr>
<tr>
<td><strong>1990-92</strong></td>
<td>3,561</td>
<td>675</td>
<td>320</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td><strong>2014-16</strong></td>
<td>3,286</td>
<td>3,605</td>
<td>217</td>
<td>21</td>
<td>54</td>
</tr>
<tr>
<td><strong>Percent change</strong></td>
<td>-8</td>
<td>434</td>
<td>-32</td>
<td>35</td>
<td>212</td>
</tr>
</tbody>
</table>

California and Florida fresh-market tomato production: Florida’s production has declined since the early 1990s

Source: Prepared by USDA, Economic Research Service, using data from ERS and USDA, NASS.
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U.S. field tomato production (round and roma) and field and PC imports, 1990-2016: Imports from Mexico now exceed U.S. production

Source: Prepared by USDA, Economic Research Service, using data from ERS and USDA, NASS.
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PC and field roma tomatoes now account for the majority of U.S. tomato imports from Mexico

Cucumbers
U.S. cucumber production decreased by 22 percent since 1990-92

<table>
<thead>
<tr>
<th></th>
<th>Field Production</th>
<th>Imports (Field and Consumption PC)</th>
<th>Exports (Field and Consumption PC)</th>
<th>Per Capita Consumption</th>
<th>Import Share of Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990-92 average</td>
<td>876</td>
<td>403</td>
<td>82</td>
<td>5</td>
<td>34</td>
</tr>
<tr>
<td>2014-16 average</td>
<td>687</td>
<td>1,801</td>
<td>31</td>
<td>8</td>
<td>73</td>
</tr>
<tr>
<td>Percent change</td>
<td>-22</td>
<td>347</td>
<td>-63</td>
<td>62</td>
<td>118</td>
</tr>
</tbody>
</table>

U.S. imports of field-produced cucumbers from Mexico exceed imports of PC-cucumbers


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Bell peppers
## U.S. bell pepper market: Imports soar 514 percent

<table>
<thead>
<tr>
<th></th>
<th>Field production (field and PC)</th>
<th>Imports (field and PC)</th>
<th>Exports (field and PC)</th>
<th>Per capita consumption</th>
<th>Import share of consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990-92 average</td>
<td>630</td>
<td>211</td>
<td>169</td>
<td>2.8</td>
<td>26</td>
</tr>
<tr>
<td>2014-16 average</td>
<td>865</td>
<td>1,294</td>
<td>109</td>
<td>7.2</td>
<td>64</td>
</tr>
<tr>
<td>Percent change</td>
<td>37</td>
<td>514</td>
<td>-36</td>
<td>161</td>
<td>146</td>
</tr>
</tbody>
</table>

1/ Fresh production, per capita consumption, and import share of consumption based on 1990-91 average.

Source: Prepared by USDA, Economic Research Service, using data from ERS, USDA AMS, and USDA, NASS.

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U.S. bell pepper field production: After initial increases, Florida and California’s fresh-market production has declined 1/

1/ There are data problems for California bell peppers in the mid 1990s and those numbers are not shown.

Source: Prepared by USDA, Economic Research Service, using data from ERS, USDA/AMS, and USDA/NASS.

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U.S. bell pepper imports from Mexico: About evenly balanced between field and PC product


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Berries
U.S. berry supply: Strawberries still the leading berry consumed in the United States


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# U.S. berry market overview: Mexico supplies almost all imports, except blueberries

<table>
<thead>
<tr>
<th></th>
<th>StrawB</th>
<th>RaspB</th>
<th>BlueB</th>
<th>BlackB</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Percent change (1990-92 to 2014-16)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. production</td>
<td>161</td>
<td>516</td>
<td>544</td>
<td>74</td>
</tr>
<tr>
<td>Per-capita consumption</td>
<td>128</td>
<td>1,164</td>
<td>931</td>
<td>NA</td>
</tr>
<tr>
<td>Imports</td>
<td>1,084</td>
<td>4,792</td>
<td>1,334</td>
<td>2,687</td>
</tr>
<tr>
<td><strong>Percent (2014-16)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Import share of consumption</td>
<td>14</td>
<td>55</td>
<td>53</td>
<td>NA</td>
</tr>
<tr>
<td>MX share of imports</td>
<td>100</td>
<td>98</td>
<td>9</td>
<td>95</td>
</tr>
</tbody>
</table>

1/ Growth in blackberry production is based on data from 2008 and 2016 only.


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U.S. strawberry shipments: Imports of Mexican strawberries for the winter season increased between 1990 and 2016

Source: Prepared by USDA, Economic Research Service, using data from USDA/AMS.
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Growth in U.S. strawberry supplies: Florida production is leveling off

Source: Prepared by USDA, Economic Research Service, using data from USDA/AMS.
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Mexican raspberries expand the U.S. consumption calendar

Source: Prepared by USDA, Economic Research Service, using data from USDA/AMS.

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Raspberry imports from Mexico approach U.S. production level


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U.S. per capita blueberry consumption increased 931 percent between 1990-92 and 2014-16

Source: Prepared by USDA, Economic Research Service, using data from USDA/AMS.

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Mexico’s share of U.S. blueberry imports increased to 9 percent


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Mexico is the leading source—foreign or domestic—of blackberries in the United States

Source: Prepared by USDA, Economic Research Service, using data from USDA/AMS.

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Avocados
Avocados: Mexican production supplied 91 percent of U.S. consumption in 2016


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U.S. avocado production is higher during the summer, when imports from Mexico are lower

Source: Prepared by USDA, Economic Research Service, using data from USDA/AMS.

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Questions and discussion

Thank you!

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