## An Economic Overview of Horticultural Products in the United States

The Horticultural and Tropical Products (HTP) division of FAS covers trade in fruit, vegetables, and edible tree nuts, including fresh, dried, frozen, and otherwise processed or prepared fruit, vegetable, and nut products. HTP encompasses nursery and greenhouse products, including cut flowers. Trade in wine and wine products, ginseng, hops, and essential oils is also covered with the HTP division as well as a broad category of miscellaneous horticultural products that includes food preparations, beer, and many other products.

## Value of Cash Receipts in the United States

## Fruits

- Fruit and berry production in the United States generated $\$ 11.2$ billion farm cash receipts in 2000, a 19 percent increase since 1995.
- The fruit commodities with highest sales value are: grapes, $\$ 3.1$ billion; oranges, $\$ 2.1$ billion; apples, $\$ 1.4$ billion; strawberries, $\$ 1$ billion; and avocados, $\$ 489$ million.
- Approximately 48 percent of fruit production is in California.

Nuts

- Nut production generated $\$ 1.5$ billion in cash receipts in 2000.
- Almonds, walnuts, pecans, and pistachios account for 97 percent of sales.
- California harvested 83 percent of all tree nuts in 2000, which is almost all of the almonds, walnuts, and pistachios.
- Georgia, Texas, and New Mexico grow pecans and together account for nearly two-thirds of total U.S. pecan production.
U.S. fruit and tree nuts: Farm cash receipts totaled $\$ 12.7$
billion in 2000


Source: Economic Research Service, USDA.
http://www.ers.usda.gov/Briefing/FruitAndTreeNuts/Gallery/frtcashrecp2000.gif

Vegetables and Melons

- Vegetable and melon value of sales was $\$ 12.8$ billion in 2002 , accounting for 12.7 percent of total crop receipts.
- California is the largest producer of vegetables, both for fresh and processed use.
- Other large producing states in terms of acreage are North Dakota, Idaho, and Michigan.
- The Upper Midwest states (Michigan, Wisconsin, and Minnesota) and the Pacific states (California, Washington, and Oregon) mainly grow vegetables for processing, while vegetables for fresh use are mainly grown in California, Florida, Georgia, and Texas.
- More than half of all vegetable production is on irrigated land.

Nursery and Greenhouse products

- Nursery, greenhouse, floriculture, and sod value of sales was $\$ 14.6$ billion in 2002 , or 14.6 percent of total crop sales.


## Total Horticultural Sector

- Total horticultural sales (including vegetables, melons, potatoes, sweet potatoes, fruits, tree nuts, berries, nursery, greenhouse, floriculture, and sod) were valued at $\$ 28.5$ billion in 2002.


## Processing Sector

- About half of all fruit grown in the United States is for processing.
- Processed fruits can include: fruit juice, canned fruit, dried fruit, frozen fruit, and wine.
- Juice is the number one method of fruit consumption in the United States, comprising 43 percent of fruit consumption.

Table 1: Percentage of fresh and processed fruit consumption in the United States

| Fruit | Fresh | Processed |
| :--- | :--- | :--- |
| Grapes | 11.8 | 88.2 |
| Oranges | 16.5 | 83.5 |
| Apples | 60.1 | 39.9 |
| Grapefruit | 41.4 | 58.6 |
| Peaches | 47.1 | 52.9 |
| Pears | 57.6 | 42.4 |
| Lemons | 61.7 | 38.3 |
| Strawberries | 76.9 | 23.1 |

Source: ERS 2004

- Approximately 40 percent vegetables and melons grown in the United States are for processing.
- Processing of vegetables can include: canning, freezing, and dehydrating.
- Washington, Oregon, and Idaho provide the majority share of frozen vegetables.
- The top vegetables used for processing are: sweet corn, tomatoes, green peas, snap beans, and cucumbers.
- Commodities grown for one use cannot be substituted for the other, due to different quality requirements for fresh use and processing use.
- Approximately 222,500 people were employed in the processed fruit and vegetable sector in 2000, earning an average hourly wage of $\$ 12.11$ per hour.

Table 2: Percentage of vegetable acreage used for fresh and processed consumption

| Vegetable | Fresh | Processed |
| :--- | :--- | :--- |
| Sweet Corn | 38.9 | 61.1 |
| Tomatoes | 29.9 | 70.1 |
| Green Peas | 8.9 | 91.1 |
| Snap Beans | 35.7 | 64.3 |
| Cucumber | 37.3 | 62.7 |

Source: NASS Census of Agriculture 2002

## Land Use

- Total cropland in the United States is 455 million acres, which is 20 percent of the total land in the United States.
- About 2 percent of the total cropland is used for fruits, vegetables, and nuts.
- Acres harvested (according to the 2002 Census of Agriculture, NASS)
- Fruit, including melons and berries: 5,379,495 acres
- Nuts: 1,729,183 acres
- Vegetables: 3,698,744 acres
- Total Fruits, Nuts, and Vegetables: 10,541,947 acres
- Land in Orchards: 5,330,439 acres
U.S. fruit and tree nuts: Share of total acreage in 1997


Source: 1997 Census of Agriculture, NASS, USDA.

- Based on acreage, California is the top producer of fruits, vegetables, and nuts in the U.S. with 48 percent of total acreage, followed by Florida, 24 percent; Washington, 8 percent; Michigan, 4 percent; and New York, 3 percent.
- Nursery, greenhouse, floriculture, aquatic plants, mushrooms, flower seeds, vegetable seeds, and harvested sod used 1.3 billion square feet in 2002.
- The most prominent in the horticulture and specialty products category n 2002 were: bedding and garden plants, 389 million square feet; cut flowers and florist greens, 230 million square feet; and foliage plants ( 183 million square feet).



## Trade Balance

- In 2003, the United States imported $\$ 21.9$ and exported $\$ 12.3$ billion in horticultural products.
- The trade deficit in these products has been increasing annually and reached $\$ 9.5$ billion in 2003.
- The United States is the second largest importer and exporter of fruits, nuts, vegetables, and other horticultural products. The European Union is the largest importer and exporter of horticultural products.


## Exports

- Total exports of fruits, nuts, vegetables, and other horticultural products were valued at over $\$ 12.3$ billion in 2003.
- The United States is the second largest exporter of horticultural products, behind the EU, which exported over $\$ 26$ billion in 2003.
- Canada is the largest importer of U.S. fruits and vegetables, importing nearly $\$ 4$ billion in horticultural products from the United States in 2003. The top products exported from the United States to Canada are food preparations (\$284 million),
essential oils (\$259 million), strawberries (\$136 million), lettuce (\$126 million), and grapes ( $\$ 120$ million).
- Japan is the second largest importer of U.S. horticultural products; in 2003 the United States exported $\$ 1.5$ billion in horticultural products to Japan.
- In terms of product groups, miscellaneous horticultural products, including food preparations are the largest horticultural export with exports valued over \$2 billion in 2003. Edible tree nuts are the second largest export product group ( $\$ 1.6$ billion) followed by fresh vegetables, excluding potatoes ( $\$ 1.2$ billion).
- Specific top horticultural exports include almonds, shelled and in-shell (\$1 billion), essential oils ( $\$ 963$ million), food preparations ( $\$ 951$ million), and wine (\$690 million).

Table 3. Percent of Domestic Supplies for Export, 2000

| Fresh fruit | Percent of domestic <br> supplies for export | Processed fruit | Percent of domestic <br> supplies for export |
| :--- | :--- | :--- | :--- |
| Grapefruit | 37.5 | Canned sweet cherries 60.4 |  |
| Blueberries | 37.4 | Raisins | 36 |
| Lemons | 36.1 | Prunes | 31.9 |
| Cherries | 32.6 | Dried apples | 26.7 |
| Plums | 29.1 | Dates | 20.5 |

Source: Economic Research Service, 2004
Table 3. cont.

$\left.$| Tree nuts | Percent of domestic <br> supplies for export |  | Vegetables |
| :--- | :--- | :--- | :--- | | Percent of domestic |
| :--- |
| supplies for export | \right\rvert\,

Source: Economic Research Service, 2004
Imports

- The European Union is the leading exporter of horticultural products to the United States, followed by Mexico. In 2003, the United States imported $\$ 6.4$ billion from the EU and $\$ 4.7$ billion from Mexico in horticultural products.
- The U.S. has a horticultural trade deficit of $\$ 4$ billion with the EU and $\$ 3.6$ billion with Mexico.
- In 2003, the United States imported $\$ 3.3$ billion in fresh fruits and melons, nearly $\$ 3$ billion in fresh vegetables including potatoes, $\$ 889$ million in nursery products, $\$ 877$ million in frozen vegetables, $\$ 825$ million in processed and prepared vegetables, $\$ 788$ million in fruit juices, and $\$ 731$ million in edible tree nuts. The United States also imported over $\$ 4.6$ billion in miscellaneous
horticultural products (including beer and food preparations) and another $\$ 1.2$ billion in essential oils.
- In terms of total specific horticultural products, wine, beer, and bananas are the top imports into the United States, valued at $\$ 3.3$ billion, $\$ 2.2$ billion, and $\$ 1.0$ billion in 2003 respectively.


## U.S. Overall Horticultural Trade



Source: Bureau of the Census, DOC
Horticultural Trade Includes: Vegetables, Fruits, Nuts, Essential Oils, Nursery Products, Cut Flowers,Vegetables, Fruits, Nuts, Essential Oils, Nursery Products, Cut Flowers, Wine and Beer.
U.S. fruit and tree nut exports: Top destinations, 2001


Source: Bureau of Census. U.S. Deoartment of Commerce.
http://www.ers.usda.gov/Briefing/FruitAndTreeNuts/Gallery/chartsandgraphs/exportdestn.gif
U.S. fruit and tree nuts:

Average export share of domestic supplies


Source: Economic Research Service, USDA and Bureau of Census, U.S. Department of $C$ ommerce.

Top Ten U.S. Horticultural Exports by Value


Source: Bureau of the Census, DOC
Note - U.S. fiscal year is October
-September.
http://www.ers.usda.gov/Briefing/FruitAndTreeNuts/Gallery/ftnutexpshare.htm
Prepared by Sandie Kipe, Foreign Agricultural Service, Horticultural and Tropical Products Division. For additional information on production and trade of horticultural and tropical products, contact Nancy Hirschhorn at 202-720-2974.

