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Vegetables and Pulses Outlook: Special Article

Longrun Outlook: Projections for Vegetable and Pulse Markets*

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The farm value of vegetables and pulses is forecast to grow 1.2 percent per year on average over the next decade (based on calendar years), from $20 billion in 2012 to $22 billion in 2022. This growth is largely driven by the 1.4-percent annual increase in fresh-market vegetable farm value. Potato farm value is projected to climb 1.3 percent per year through 2022, the same average increase as processing vegetables. Prices received by vegetable growers over the next decade are expected to rise less than 1 percent annually. Vegetable farm receipts as a share of total U.S. horticultural farm receipts remain around 32 percent, smaller than the 44-percent share for fruits and nuts, but larger than 24 percent for nursery and greenhouse crops.

Production Projected To Reach 131 Billion Pounds in a Decade

U.S. production of all vegetables and pulses, which amounted to 125 billion pounds in 2012, is projected to expand to more than 131 billion pounds in 2022—an average 0.5-percent annual increase. While production of fresh-market vegetables is expected to grow 1.6 percent on average per year in the next decade, production growth rates for processing vegetables and potatoes are much slower at zero and negative 0.4 percent, respectively. Consumers' preference for fresh produce such as pre-cut salads is a factor favoring fresh-market vegetables. The faster growth of vegetable production for the fresh market is in part also influenced by low natural gas prices. Lower heating costs for commercial greenhouses that grow vegetables will spur more production of fresh-market crops such as vine tomatoes, colored sweet peppers, cucumbers, lettuce, eggplant, and herbs, especially during the winter months.

Greater production of fresh-market vegetables is partly attributed to the estimated 0.2-percent expansion of vegetable acreage—from 6.75 million acres in 2012 to 6.9 million acres in 2022. Average annual acreage planted for U.S. vegetable

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Table 1--Production and crop value for vegetables and pulses, 2010-22

Crop group	2010	2012p	2014	2016	2018	2020	2022
				-- Billion pounds --			
Production:							
All vegetables	120.7	125.1	124.7	126.3	127.9	129.6	131.2
Fresh market	56.9	41.4	45.9	46.5	47.1	47.7	48.3
Processing	37.8	39.6	37.7	38.2	38.7	39.1	39.6
Potatoes	33.0	39.1	36.2	36.6	36.9	37.3	37.7
Pulses 1/	5.5	4.9	4.8	5.0	5.2	5.4	5.6
Exports 2/	18.4	20.3	21.6	22.9	24.3	25.8	27.3
Imports 2/	22.1	23.7	25.3	27.1	29.0	31.0	33.1
Farm value:				*-- Billion $ --*			
All vegetables	20.4	19.9	19.7	20.4	21.0	21.7	22.4
Fresh market 3/	14.2	12.3	12.6	13.0	13.4	13.8	14.1
Processing 3/	1.9	1.9	2.0	2.1	2.1	2.2	2.2
Potatoes	3.2	3.6	3.6	3.7	3.8	4.0	4.1
Pulses 1/	1.2	2.1	1.4	1.6	1.7	1.8	1.9
Exports	5.3	6.1	6.5	6.9	7.3	7.7	8.2
Imports	8.8	10.0	11.3	12.3	13.3	14.5	15.8

p = Preliminary. Years 2014 to 2022 are projections.
1/ Includes dry beans, dry edible peas, and lentils.
2/ Measured by farm or fresh weight. 3/ Estimated from production value or farm cash receipts.
Sources: USDA, National Agricultural Statistics Service; projections by USDA, Economic Research Service.

production between 2002 and 2011 was 6.6 million acres. This area expands slightly to 6.74 million acres on average from 2012 to 2022. The national vegetable crop is anticipated to rise in the next decade as average yield grows from 18,500 pounds per acre in 2012 to 19,000 pounds by 2022. Most acreage used for production of processing vegetables, potatoes, and pulses are field or outdoor areas.

Projections of production and farm value of vegetables are based on average growth rates of the past decade. An assumption of stable per capita consumption of aggregate vegetables and population growth are used as guides for the long-run projections of production and farm values.

Per Capita Consumption Averages 406 Pounds in Coming Decade

The domestic supply of vegetables is projected to grow at an annual rate of 1 percent through 2022, slightly higher than U.S. population growth. This pace is expected to keep per capita consumption of vegetables at an average 406 pounds from 2013 to 2022.

The volume of imports and exports of fresh vegetables and processed vegetable products (measured by farm weight) are forecast to both expand by about 3 percent annually through 2022. The import share of U.S. vegetable consumption is estimated at 18.5 percent in 2012 and 24 percent by 2022. The export share of U.S. vegetable production grows somewhat slower from 16 percent to 21 percent. Estimated domestic consumption of vegetables amounts to 128.5 billion pounds in 2012 and 137 billion pounds by 2022, an annual increase of 0.6 percent.

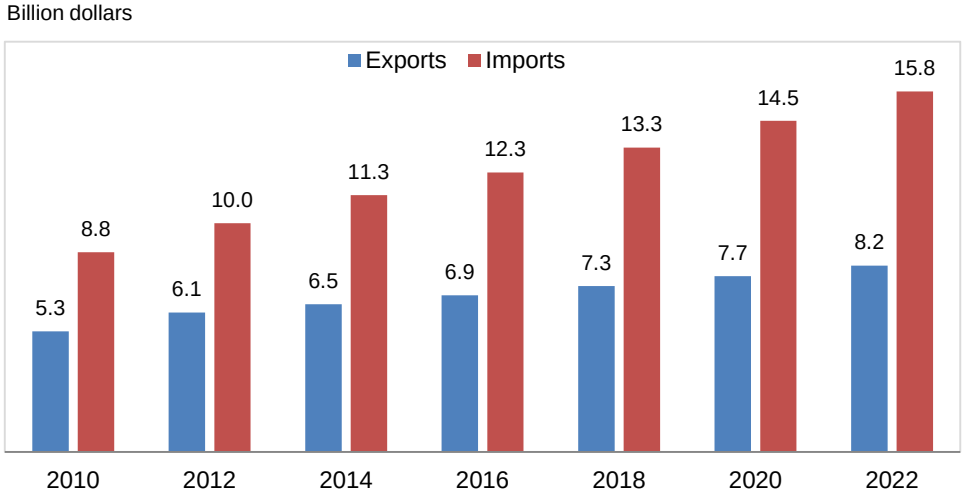
Vegetable Imports Continue To Outpace Exports

The U.S. trade deficit with respect to vegetables and pulses is expected to grow from $4.5 billion in 2012 to $7.6 billion in 2022 (based on fiscal October-September years). This trend stems from an average import value growth of 4.6 percent per year versus 2.9 percent on average for vegetable exports. Fresh-market and processed vegetables are

forecast to be imported at about equal paces, whereas U.S. exports of processed vegetables are expected to outpace fresh vegetable exports. Among the leading imports are processed potato products and fresh greenhouse tomatoes. Among the leading exports are processed tomato (sauce, paste) and potato products such as frozen fries.

The stronger 3.2-percent average export growth for processed vegetables relative to the 2.5-percent export pace for fresh vegetables is in part driven by more stable energy costs benefitting U.S.-based vegetable processors and manufacturers during the coming decade (in contrast to higher fuel prices in the previous decade). Nevertheless, since these relatively higher export growth rates subtract from the average 1-percent pace of domestic vegetable production, imported vegetable crops and products are expected to continue at a brisk pace over the long run.

Figure 1
Vegetables and pulses: Projections 2014-22



Source: USDA, Economic Research Service.

For More Information

Vegetable supply and use projections and additional information about the long-term outlook for agricultural commodities and trade are reported in:

USDA Agricultural Projections to 2022, OCE-131, February 2013 http://www.ers.usda.gov/publications/oce-usda-agricultural-projections/oce131.aspx