

Crops

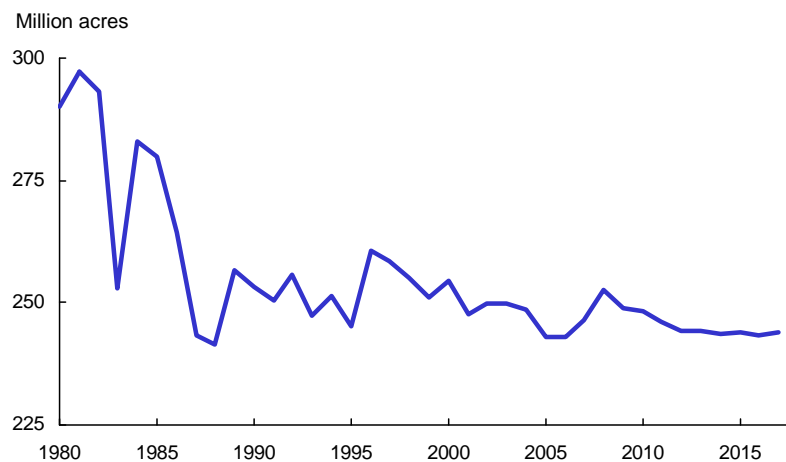
Strong expansion of corn-based ethanol production in the projections affects virtually every aspect of the field crops sector, ranging from domestic demand and exports to prices and the allocation of acreage among crops. Additionally, steady U.S. and global economic growth assumed in the projections provides a favorable setting for other uses of field crops, which, following the initially large ethanol expansion, supports longer run increases in consumption and trade and keeps prices at historically high levels.

Although tempered somewhat by higher feed prices, global livestock production rises in the projections in response to growing incomes and demand for meats, which supports gains in world consumption and trade for feed grains. Following a moderate depreciation of the U.S. dollar in the first several years of the projections, the dollar (U.S. agricultural export-weighted basis) is then projected to appreciate. The strengthening U.S. dollar, combined with trade competition from Brazil, Argentina, and the Black Sea region, constrains U.S. exports for some crops. Additionally, strong domestic use of corn due to increased ethanol production and the shift of land to corn from soybeans limit U.S. exports in the early years of the projections, particularly for corn and soybeans.

Assumptions for field crops reflect provisions of the Farm Security and Rural Investment Act of 2002 (2002 Farm Act), which is assumed to continue through the projection period. However, with high prices projected, benefits from price-sensitive programs are reduced. For example, marketing loan benefits and counter-cyclical payments for feed grains are minimal, even accounting for stochastic factors. High prices also lead to a reduction in area enrolled in the Conservation Reserve Program (CRP) through 2011. The CRP is then assumed to expand toward its 39.2 million acre maximum, reaching 37 million acres in 2017. CRP rental rates will increase as farmers' bids for participation in the program rise to reflect higher crop prices.

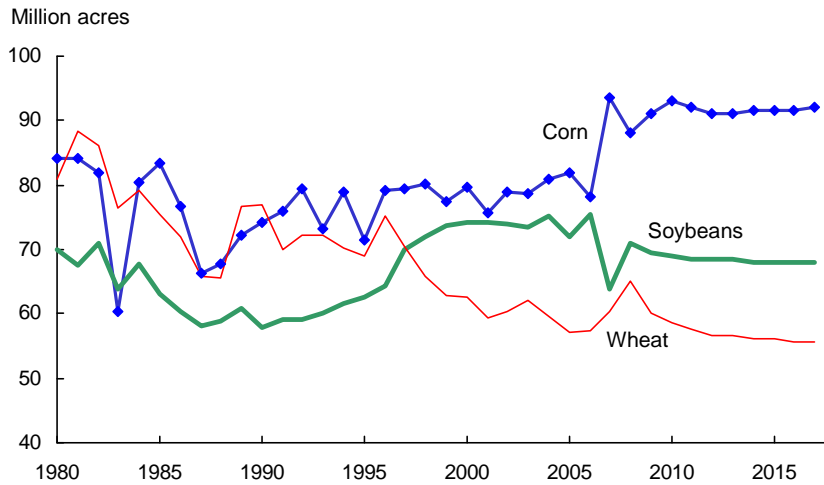
Projected plantings for the eight major field crops in the United States increase from about 246.5 million acres in 2007 to over 252 million in 2008 as the market responds to current high prices prompted by strong demand and lower global supplies of oilseeds and wheat. Although plantings for these eight crops then fall, they level off near 244 million acres during most of the projection period, as continued high prices and producer net returns hold land in production.

U.S. planted area: Eight major crops 1/



1/ The eight major crops are corn, sorghum, barley, oats, wheat, rice, upland cotton, and soybeans.

U.S. planted area: Corn, wheat, and soybeans



Plantings of different crops are influenced by expected net returns. Net returns are determined by market prices, yields, and production costs, with returns augmented by marketing loan benefits when prices are low.

- Corn, wheat, and soybeans account for about 88 percent of acreage for the eight major field crops over the projection period. In 2008, there is some shift in the cropping mix toward wheat and soybeans and away from corn due to short-term global supply reductions for those crops. However, longer term shifts move acreage back to corn, reflecting the growth in domestic corn-based ethanol production that raises corn prices and producer returns.
- Following a decline in 2008, corn acreage increases and remains above 90 million acres over the remainder of the projections as the expansion in ethanol production increases corn demand, prices, and net returns.
- Soybean plantings decline to less than 70 million acres after 2008 reflecting more favorable returns to corn production.
- Wheat plantings rise sharply in 2008 in response to high prices resulting from tight global supplies. Wheat acreage falls back to about 56 million acres in the longer run due to competition from other crops.

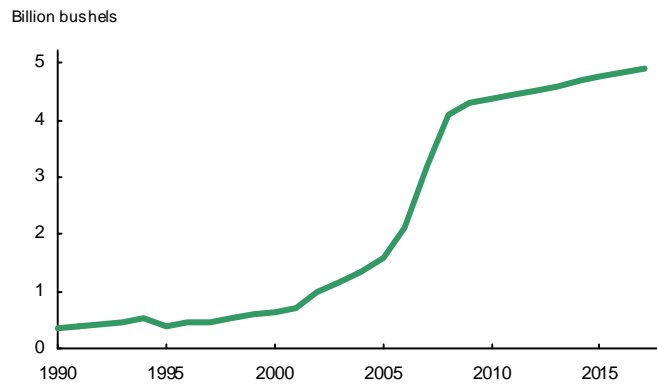
Strong Ethanol Expansion Projected

Ethanol production in the United States has increased rapidly over the past several years, from less than 3 billion gallons in 2003 to over 6 billion gallons in 2007. Expansion in the industry is projected to continue, particularly over the next few years, exceeding 12 billion gallons by 2010. Although more moderate growth is projected in subsequent years, over 14 billion gallons of ethanol are produced annually by the end of the projection period. These projections assume the tax credit available to blenders of ethanol and the 54-cent-per-gallon tariff on imported ethanol used as fuel remain in effect. Provisions of the Energy Independence and Security Act of 2007 are not reflected in this report since the projections were completed prior to enactment of that legislation (see box, *Energy Independence and Security Act of 2007*, pages 23-24).

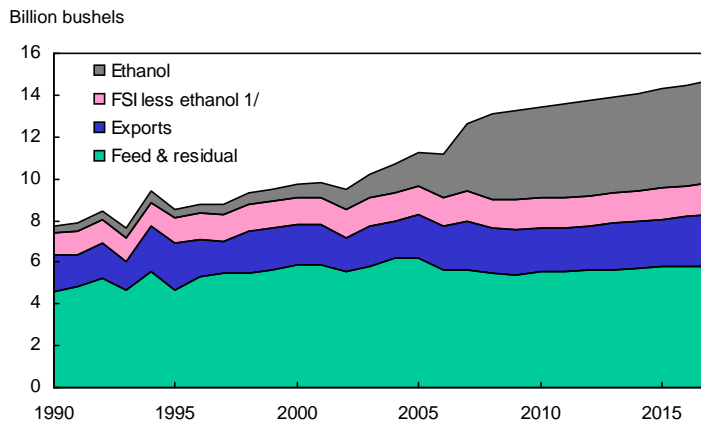
Most ethanol production in the United States uses corn as the feedstock. The large ongoing expansion results in almost a third of the corn crop used to produce ethanol by 2009/10, remaining near that share in subsequent years. Nonetheless, even by 2017, ethanol production (by volume) represents only about 8.5 percent of annual gasoline use in the United States.

Market adjustments to the increased demand for corn to produce ethanol extend well beyond the corn sector. Movements in relative prices trigger supply and demand adjustments for other crops. Higher feed costs affect the livestock sector, slowing increases in or reducing production of all meats over the next several years.

U.S. corn: Use for ethanol production



U.S. corn use



1/ Food, seed, and industrial less ethanol.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 was enacted on December 19, 2007, after projections in this report were completed. Although the projections do not reflect the new energy act, major features of the legislation that relate to the Renewable Fuel Standard are illustrated in the following charts. Also, general qualitative effects are highlighted below.

The first chart shows the new Renewable Fuel Standard (RFS) from the 2007 Energy Act. The overall standard calls for total renewable fuel “sold or introduced into commerce in the United States” to reach 36 billion gallons by 2022. Within this standard, ethanol derived from corn starch is to reach 15 billion gallons. The remainder is to consist of “advanced biofuel” with specific volumes designated for cellulosic biofuel and biomass-based diesel.

The second and third charts compare the corn-based ethanol and biodiesel projections in this report with those designated in the RFS of the 2007 Energy Act. Ethanol derived from corn starch in the RFS reaches 15 billion gallons in 2015, about 2 billion gallons higher than projected for 2015 in this report. With the RFS for ethanol derived from corn starch holding at that level beyond 2015, the gap between it and the 2008 long-term projections narrows to about 1.5 billion gallons by 2018. The RFS for biomass-based diesel reaches 1 billion gallons in 2012 and “shall not be less than” that amount in later years. This compares with soybean-oil based biodiesel production of about 600 million gallons in the 2008 long-term projections.

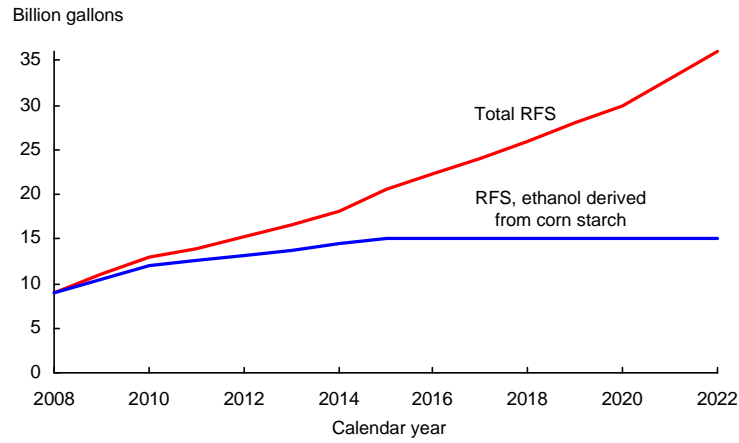
Although a complete quantitative analysis of the effects of the 2007 Energy Act’s RFS for ethanol derived from corn starch and biomass-based diesel is not presented here, general qualitative effects would include:

- Increased demand for corn and soybean oil raises prices for those commodities. Soybean prices would be higher as well.
- Higher commodity prices raise overall acreage planted to crops, with a greater combined share of the total going to corn and soybeans. Acreage planted to competing crops, such as cotton and wheat, would be expected to be lower, raising their prices.
- With a greater share of output going to biofuels, higher crop prices would lower other uses of crops, including exports and domestic feed use of feed grains. In contrast, soybean meal would be more plentiful as increased soybean crush for biodiesel production would raise soybean meal production as well.
- Higher feed prices would lead to further adjustments in the livestock sector than those presented and discussed in the Livestock chapter of this report.

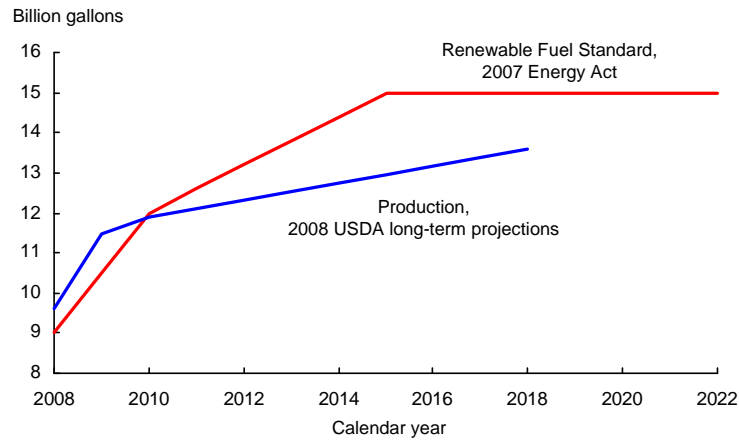
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Energy Independence and Security Act of 2007 (Continued)

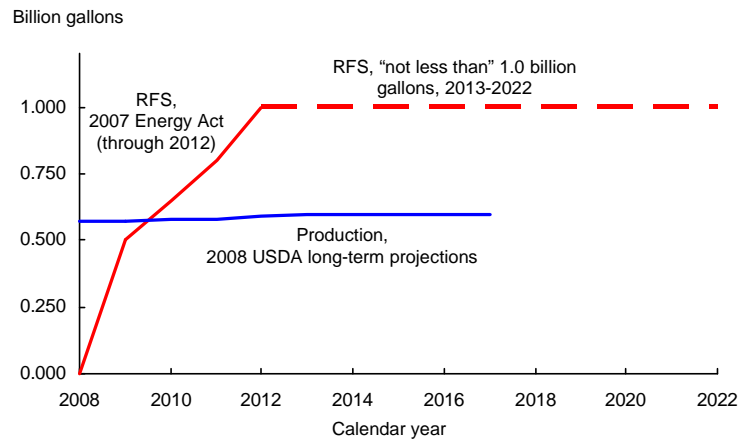
Renewable Fuel Standard, 2007 Energy Act



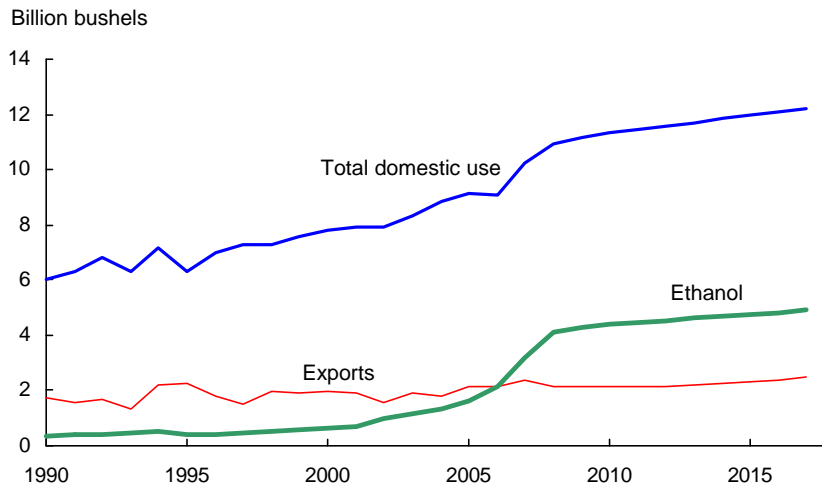
Ethanol derived from corn starch



Biodiesel



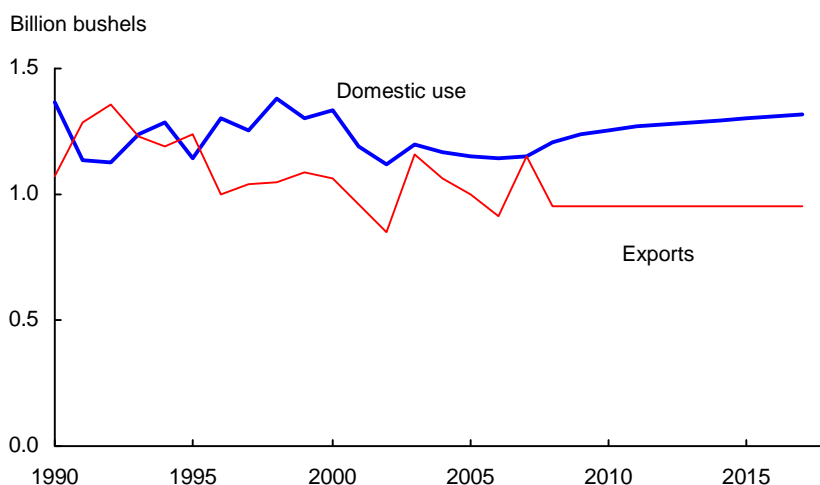
U.S. corn: Domestic use, ethanol, and exports



Domestic corn use grows throughout the projection period, primarily reflecting increases in corn used in the production of ethanol. Global economic growth underlies increases in U.S. corn exports after 2011/12.

- Large increases are projected in corn used for ethanol production over the next several years. Relatively high prices for crude oil contribute to favorable returns for ethanol production, which combine with government programs to provide economic incentives for a continuation of the ongoing expansion in ethanol production capacity.
- Feed and residual use of corn declines in the initial years and then rises only moderately as increased feeding of distillers grains, a coproduct of dry mill ethanol production, helps meet livestock feed demand.
- Gains in food and industrial uses of corn (other than for ethanol production) are projected to be smaller than increases in population. Consumer dietary concerns and other changes in tastes and preferences limit increases in the combined use of corn for high fructose corn syrup, glucose, and dextrose to about half the rate of population gain.
- U.S. corn exports fall over the next several years as global corn trade declines from the record 2007/08 level and as more corn is used domestically in the production of ethanol. After growth in ethanol production in the United States slows, U.S. corn exports rise in response to stronger global demand for feed grains to support growth in meat production.
- Additionally, U.S. corn exports to Mexico are boosted because of the elimination of tariffs on corn imports from the United States. This shifts some U.S. exports to corn from sorghum and corn products, which already had tariff-free status.
- Strong ethanol demand in the projections pushes U.S. corn stocks lower than current levels.

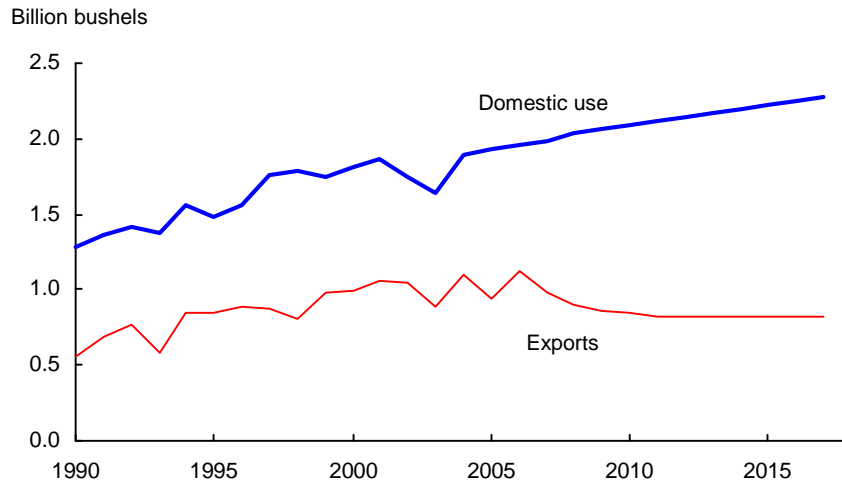
U.S. wheat: Domestic use and exports



Overall demand in the U.S. wheat sector grows very slowly through the projection period.

- Domestic demand for wheat reflects a relatively mature market. Food use of wheat is projected to show moderate gains, generally in line with population increases.
- Feed use of wheat, a lower-value use of the crop, rises in the initial years of the projections from the levels of recent years as higher corn prices encourage increases in wheat feeding. As price relationships between wheat and corn stabilize, wheat feeding levels off after 2010/11.
- U.S. wheat exports are steady over the projections period as competition continues from the European Union (EU), Canada, Argentina, Australia, and the Black Sea region. In particular, wheat prices are projected at levels high enough that the EU can export wheat without subsidies, thus permitting higher EU exports. Consequently, the U.S. market share declines through the projections to under 20 percent by 2017/18. Market shares for Australia, Argentina, the EU, and the Black Sea region increase, while the market share for Canada continues to decline.
- Wheat stocks rebound from low 2007/08 levels as higher prices encourage additional acreage and production. Then in the later years of the projections, stocks decline as wheat acreage falls.

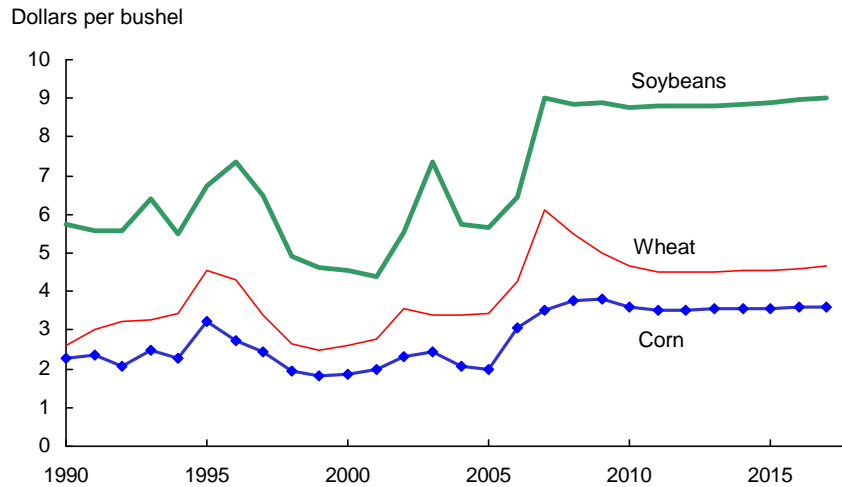
U.S. soybeans: Domestic use and exports



Domestic use of soybeans continues to rise slowly. U.S. soybean exports fall, however, as acreage declines and as more soybeans are processed domestically.

- Longrun growth in domestic soybean crush is mostly driven by increasing demand for domestic soybean meal for livestock feed. Some gains in crush also reflect increases in domestic soybean oil demand for biodiesel production through 2013/14. Increases in export demand for soybean oil and soybean meal also add to crush demand.
- U.S. soybean exports fall below 900 million bushels as competition from Brazil strengthens and U.S. acreage shifts to corn to support ethanol production. Consequently, the U.S. market share of global soybean trade declines from 35 percent in 2007/08 to about 21 percent at the end of the projections.
- Although U.S. exports of soybean oil and soybean meal increase modestly, the United States loses market share in global trade of these products against the strengthening competition from South American producers.
- Following a decline in 2007/08 from historically high stocks, a rebound in soybean acreage in 2008 keeps stocks from falling further. After 2008, shifts in acreage to corn from soybeans keep soybean stocks from rebuilding and the stocks-to-use ratio declines.

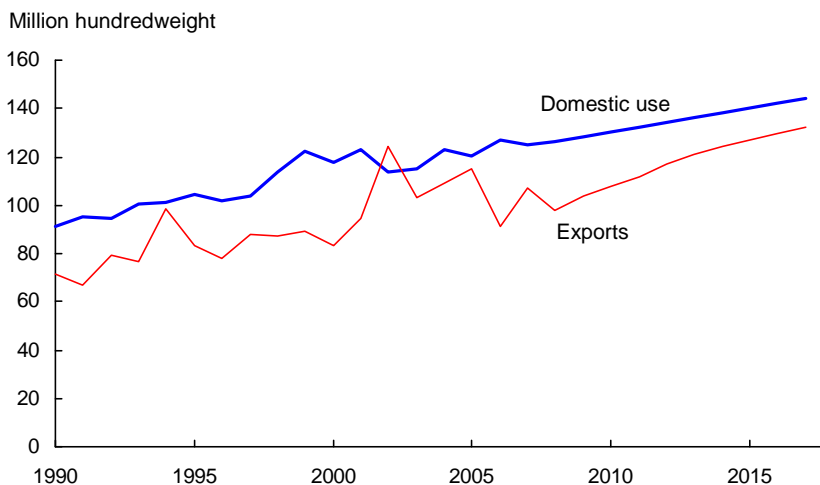
U.S. farm-level prices: Corn, wheat, and soybeans



Projected farm-level prices for corn, wheat, and soybeans reflect, in part, movements in U.S. stocks-to-use ratios.

- Corn prices continue to rise through 2009/10 as increases in ethanol production strengthen corn demand. As ethanol expansion slows, stocks rebuild somewhat and corn prices decline. Then in the longer run, corn stocks-to-use ratios fall slowly as gains in corn used for ethanol production and moderate export growth outpace increases in production (resulting from generally higher acreage and gains in yields). Consequently, corn prices resume moderate growth and remain historically high.
- With competition from corn keeping soybean acreage lower, stocks are held relatively constant, the stocks-to-use ratio falls, and soybean prices remain high throughout the projections.
- Wheat prices decline from current levels in the early years of the projections as higher production facilitates the rebuilding of stocks. As wheat acreage declines in the latter years of the projections, stocks decline and push wheat prices up.

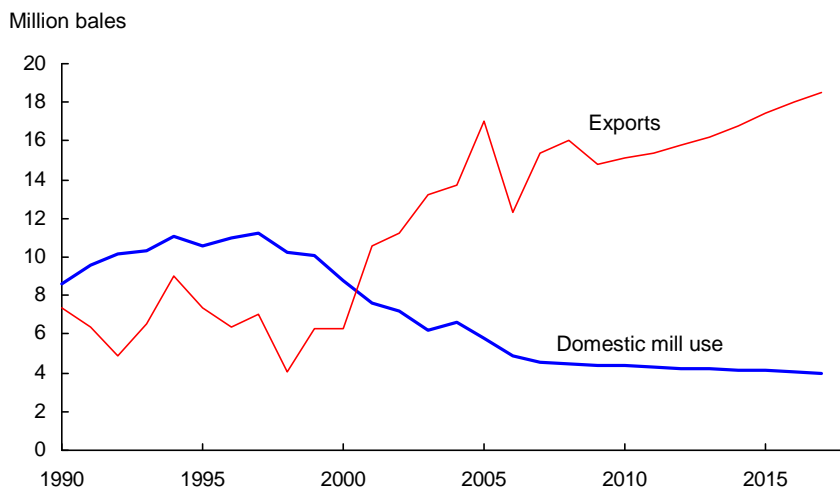
U.S. rice: Domestic use and exports



Continued expansion in domestic food use of rice is projected over the next decade. U.S. rice exports show moderate increases.

- Domestic use of rice is projected to grow somewhat faster than population growth, although well below the rates in the 1980s and 1990s when per capita use rose rapidly. Imports of aromatic varieties of rice from Asia account for a growing share of domestic use in the projections.
- U.S. rice exports are projected to increase at a moderate pace after 2008/09, as the U.S. price difference over Asian competitors falls, increasing U.S. competitiveness in global rice markets. Exports of rough rice to Latin America are expected to continue increasing, and account for most of the U.S. export expansion.
- Stocks of rice initially fall, but then gradually increase after 2008/09 as rice acreage rises.
- Global rice prices are projected to increase 2.5 to 3 percent per year, exceeding \$10.50 per hundredweight (rough basis) at the end of the projection period. These price increases largely reflect a tightening global stocks situation due to slow yield growth and little ability to expand area in most producing countries. This effect is partially offset by declining global per capita disappearance, largely due to dietary shifts away from staple foods in Asia as incomes rise.
- U.S. rice prices rise through the projection period, reaching about \$12.50 per hundredweight by 2017. The U.S. price difference over Asian competitors declines, but still remains relatively high at \$2.00 at the end of the projection period.

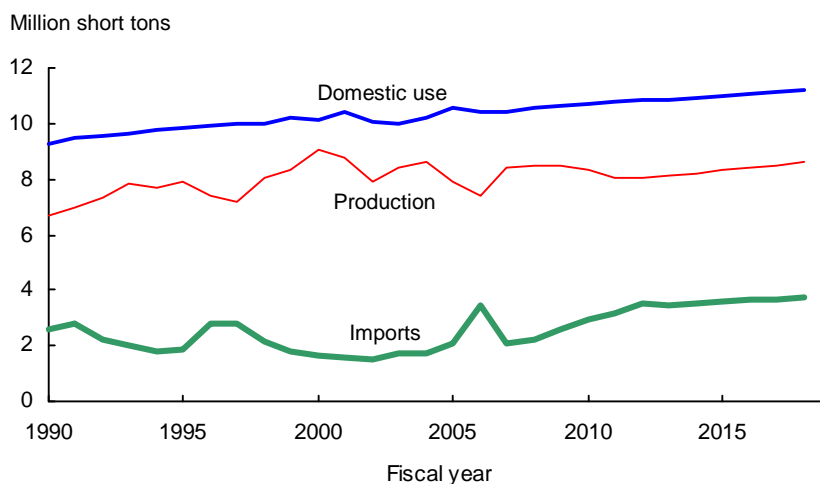
U.S. upland cotton: Domestic mill use and exports



U.S. mill use of upland cotton declines in the projections while upland cotton exports rise after 2009/10.

- At the end of the projection period, domestic mill use is projected at less than 40 percent of its 1997/98 level. Textile and apparel import quotas that had been established under the Multifiber Arrangement (MFA) were eliminated at the start of calendar year 2005. As a result of this and other factors, apparel imports by the United States increase through the projections, reducing domestic apparel production and lowering the apparel industry's demand for fabric and yarn produced in the United States. Some increase in U.S. yarn and fabric exports is projected due to trade liberalization, but the net effect is for declining domestic mill use.
- U.S. upland cotton exports decline in 2009/10 from levels in the previous 2 years that were facilitated by high stock levels. Exports then grow moderately, accounting for about 80 percent of U.S. cotton production throughout much of the projection period.
- Growth in the textile industry in China slows from the rapid expansion of recent years, reducing growth in China's cotton imports. As a result, world cotton consumption and trade slow as well. With global trade growth slowing, gains in U.S. cotton exports after 2009/10 keep the U.S. cotton trade share at about one-third, down from 41 percent in 2003/04 and 2004/05.
- Cotton stocks decline in the first several years of the projections as some acreage shifts to corn. Beyond 2009/10, cotton acreage increases and stocks rebuild through the end of the projections.

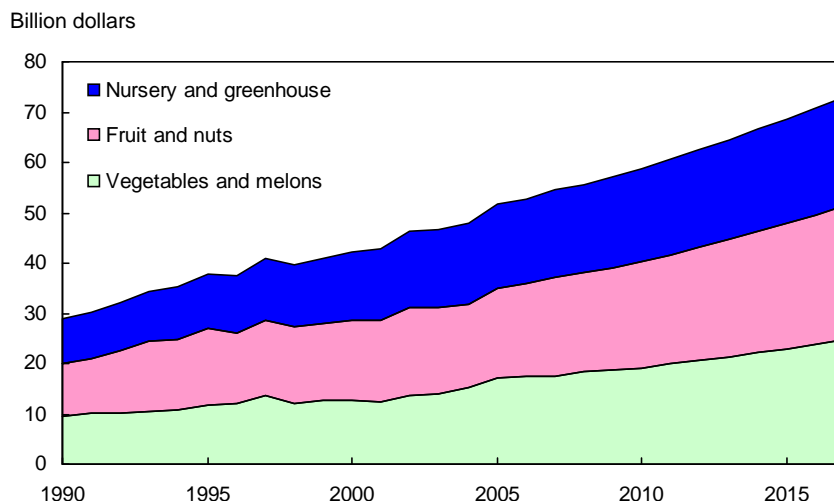
U.S. sugar: Domestic production, use, and imports



The U.S. sugar price support program includes the loan rate program and marketing allotments as set out in the 2002 Farm Act. Sugar projections for the United States also are strongly interrelated with projections for Mexico. Starting January 1, 2008, there are no duties or quantitative restraints on sugar or high fructose corn syrup (HFCS) trade between the United States and Mexico, in compliance with the North American Free Trade Agreement (NAFTA).

- Use of HFCS by Mexico's beverage industry is projected to increase beyond current levels, implying a higher exportable surplus of sugar in Mexico. Returns in Mexico from exporting sugar to the United States are projected to be higher than either delivering sugar to domestic food manufacturers for use in sugar-containing-product exports or exporting sugar to other countries at world prices. Over the period from fiscal year (FY) 2009 through 2018, annual U.S. sugar imports from Mexico are projected to average 1.568 million short tons, raw value (STRV), about 15 percent of human consumption of sugar in the United States.
- U.S. sugar imports are projected to exceed the trigger (1.532 million STRV) for suspension of marketing allotments in all years of the projections. U.S. sugar prices are driven down to the minimum level to avoid forfeiture to the Commodity Credit Corporation (CCC). It is assumed that the USDA uses all available measures to reduce CCC program costs. In spite of flat sugar prices, historical growth trends in productivity measures underlying domestic U.S. sugar production projections (sugar per acre, and beet and cane yields) are assumed to continue.
- Long term sugar projections assume that the raw sugar tariff-rate quota (TRQ) is established each year at 1.231 million STRV, the World Trade Organization (WTO) minimum access level. The refined sugar TRQ is established each year at 94,251 STRV. The refined TRQ includes 71,826 STRV of specialty (mostly organic) sugar. Sugar imported under the Dominican and Central American Free Trade Agreement is projected at 121,761 STRV in FY 2009 and increases by 2,237 STRV each year. The yearly raw sugar TRQ shortfall is assumed to equal 70,000 STRV.
- Overall sweetener consumption in the United States is assumed to grow at about the same rate as population. Imports of sugar-containing product are expected to grow faster than population, so per capita consumption of domestically delivered sugar decreases slightly during the projections period.

Value of U.S. horticultural production



The total farmgate production value of U.S. horticultural crops for 2007 was \$55 billion, with about a third contributed by each of vegetables, fruits and nuts, and nursery and greenhouse crops. The total production value grows by 3.2 percent annually over the next decade, reaching \$73.7 billion in 2017.

- U.S. imports of horticultural products (fruit and nuts, vegetables, greenhouse and nursery products, essential oils, beer, and wine) are projected to continue outpacing exports, with net imports expected to increase about \$12 billion from 2007 to 2017. The appreciation of the U.S. dollar after 2011 is an important factor affecting trade, slowing export demand for U.S. horticultural products and raising U.S. import demand.
- U.S. horticultural imports are expected to grow by about 4 percent annually through 2017. Imports play an important role in domestic supply during the winter and, increasingly, during other times of the year. Reduced trade barriers offer U.S. consumers increased variety, with freer trade also enhancing global competition.
- The EU is the top source of U.S. horticultural imports, accounting for \$9 billion out of a total \$32.4 billion in 2007. Mexico is the second biggest source of U.S. horticultural imports (\$7.4 billion in 2007) followed by Canada (\$3.5 billion). Chile and Brazil are also large sources of horticultural product imports by the United States. Key import commodities include potatoes, tomatoes, bananas, grapes, frozen concentrated orange juice, apple juice, melons, tree nuts (especially cashews), wine, beer, and essential oils.
- U.S. horticultural exports are expected to grow by 3 percent a year through 2017, with the major export markets including Canada, the EU, Mexico, Japan, and Southeast Asia. Exports of almonds, other tree nuts, and noncitrus fruits will lead export growth of fruit and nuts. Exports of fresh vegetables will be stronger than processed vegetables. Exports of wine and essential oils are also expected to increase.

Table 4. Summary policy variables for major field crops, 2006-2017

	Direct payment rate	Marketing assistance loan rate	Target price
	<i>Dollars¹</i>		
Corn	0.28	1.95	2.63
Sorghum	0.35	1.95	2.57
Barley	0.24	1.85	2.24
Oats	0.024	1.33	1.44
Wheat	0.52	2.75	3.92
Rice	2.35	6.50	10.50
Upland cotton	0.0667	0.52	0.724
Soybeans	0.44	5.00	5.80

1/ Units are dollars per bushel except for upland cotton (per pound) and rice (per hundredweight).

Table 5. Conservation Reserve Program acreage assumptions

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	<i>Million acres</i>											
Crop allocation												
Corn	6.2	6.3	6.0	5.9	5.7	5.7	5.7	5.8	5.9	6.1	6.3	6.4
Sorghum	0.9	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0
Barley	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9
Oats	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Wheat	8.6	8.8	8.3	8.2	8.0	7.9	8.0	8.0	8.2	8.5	8.8	8.9
Upland cotton	1.6	1.6	1.5	1.5	1.4	1.4	1.4	1.4	1.5	1.5	1.6	1.6
Soybeans	5.7	5.8	5.5	5.4	5.3	5.2	5.2	5.3	5.4	5.6	5.8	5.8
Subtotal	24.3	24.8	23.5	23.1	22.5	22.2	22.4	22.5	23.1	23.9	24.7	25.0
Other	11.7	12.0	11.3	11.1	10.9	10.7	10.8	10.9	11.2	11.5	11.9	12.0
Total	36.0	36.8	34.8	34.2	33.4	32.9	33.2	33.4	34.3	35.4	36.6	37.0

Table 6. Planted and harvested acreage for major field crops, long-term projections

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<i>Million acres</i>												
Planted acreage, eight major crops												
Corn	78.3	93.6	88.0	91.0	93.0	92.0	91.0	91.0	91.5	91.5	91.5	92.0
Sorghum	6.5	7.7	7.0	6.5	6.0	6.0	5.9	5.9	5.8	5.8	5.7	5.7
Barley	3.5	4.0	4.5	4.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Oats	4.2	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Wheat	57.3	60.4	65.0	60.0	58.5	57.5	56.5	56.5	56.0	56.0	55.5	55.5
Rice	2.8	2.7	2.8	2.9	3.0	3.0	3.1	3.1	3.1	3.2	3.2	3.2
Upland cotton	14.9	10.6	10.5	11.2	11.5	11.7	11.8	11.9	12.0	12.1	12.2	12.3
Soybeans	75.5	63.7	71.0	69.5	69.0	68.5	68.5	68.5	68.0	68.0	68.0	68.0
Total	243.0	246.5	252.6	248.9	248.3	246.0	244.1	244.2	243.7	243.9	243.4	244.0
Harvested acreage, eight major crops												
Corn	70.6	86.1	80.6	83.6	85.6	84.6	83.6	83.6	84.1	84.1	84.1	84.6
Sorghum	4.9	6.7	6.0	5.5	5.1	5.1	5.0	5.0	4.9	4.9	4.9	4.9
Barley	3.0	3.5	3.9	3.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Oats	1.6	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Wheat	46.8	51.0	55.3	51.0	49.7	48.9	48.0	48.0	47.6	47.6	47.2	47.2
Rice	2.8	2.7	2.8	2.9	2.9	3.0	3.0	3.1	3.1	3.1	3.2	3.2
Upland cotton	12.4	10.3	9.7	10.3	10.6	10.8	10.9	10.9	11.0	11.1	11.2	11.3
Soybeans	74.6	62.8	70.1	68.6	68.1	67.6	67.6	67.6	67.1	67.1	67.1	67.1
Total	216.7	224.6	230.0	227.0	226.6	224.6	222.7	222.8	222.4	222.5	222.3	222.9

Table 7. Selected supply, use, and price variables for major field crops, long-term projections

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Yields¹												
Com	149.1	153.0	155.3	157.3	159.3	161.3	163.3	165.3	167.3	169.3	171.3	173.3
Sorghum	56.2	76.8	66.1	66.5	67.0	67.4	67.9	68.3	68.8	69.2	69.7	70.1
Barley	61.1	60.4	65.0	65.6	66.2	66.8	67.4	68.0	68.6	69.2	69.8	70.4
Oats	59.8	60.9	63.1	63.5	63.9	64.3	64.7	65.1	65.5	65.9	66.3	66.7
Wheat	38.7	40.5	42.5	42.8	43.1	43.4	43.7	44.0	44.3	44.6	44.9	45.2
Rice	6,868	7,247	7,222	7,284	7,351	7,419	7,481	7,543	7,608	7,666	7,725	7,784
Upland cotton	806	845	860	875	885	895	905	915	925	935	945	955
Soybeans	42.7	41.3	42.1	42.6	43.0	43.5	43.9	44.4	44.8	45.3	45.7	46.2
Production²												
Com	10,535	13,168	12,515	13,150	13,635	13,645	13,650	13,820	14,070	14,240	14,405	14,660
Sorghum	278	515	395	365	340	345	340	340	335	340	340	345
Barley	180	212	255	230	200	200	200	205	205	210	210	210
Oats	94	92	100	100	100	105	105	105	105	105	105	105
Wheat	1,812	2,067	2,350	2,185	2,140	2,120	2,100	2,110	2,110	2,125	2,120	2,135
Rice	193.7	197.9	201.0	210.0	215.5	221.2	226.8	232.4	236.3	240.0	243.8	247.6
Upland cotton	20,823	18,050	17,400	18,800	19,500	20,100	20,600	20,800	21,200	21,600	22,100	22,500
Soybeans	3,188	2,594	2,950	2,920	2,930	2,935	2,970	3,000	3,005	3,035	3,065	3,095
Exports²												
Com	2,125	2,350	2,150	2,150	2,125	2,125	2,150	2,200	2,250	2,325	2,400	2,475
Sorghum	157	275	150	150	150	155	160	165	170	175	180	185
Barley	20	50	25	25	25	25	25	25	25	25	25	25
Oats	3	2	3	3	3	3	3	3	3	3	3	3
Wheat	909	1,150	950	950	950	950	950	950	950	950	950	950
Rice	91.3	107.0	98.0	104.0	108.0	112.0	117.0	121.0	124.0	127.0	129.5	132.0
Upland cotton	12,338	15,400	16,000	14,800	15,100	15,400	15,800	16,200	16,800	17,400	18,000	18,500
Soybeans	1,118	975	905	865	850	825	820	825	815	820	825	825
Soybean meal	8,850	8,300	8,700	8,850	8,950	9,050	9,100	9,100	9,100	9,100	9,100	9,100
Ending stocks²												
Com	1,304	1,897	1,327	1,202	1,402	1,502	1,447	1,377	1,372	1,327	1,262	1,237
Sorghum	32	57	52	52	52	52	52	52	52	52	52	52
Barley	69	51	86	91	90	89	88	92	90	93	91	89
Oats	51	45	47	49	51	53	55	57	54	51	48	45
Wheat	456	312	606	703	742	749	732	716	696	683	661	645
Rice	39.3	27.1	25.9	26.4	27.3	28.5	29.1	30.0	30.6	30.5	30.5	30.5
Upland cotton	9,368	7,519	4,469	4,069	4,119	4,519	5,069	5,469	5,719	5,819	5,869	5,869
Soybeans	573	210	219	210	202	193	199	204	204	203	201	204
Prices³												
Com	3.04	3.50	3.75	3.80	3.60	3.50	3.50	3.55	3.55	3.55	3.60	3.60
Sorghum	3.29	3.30	3.50	3.55	3.35	3.25	3.25	3.30	3.30	3.30	3.35	3.35
Barley	2.85	3.85	4.30	4.25	4.00	3.85	3.80	3.85	3.85	3.85	3.90	3.90
Oats	1.87	2.40	2.45	2.45	2.30	2.25	2.25	2.25	2.25	2.25	2.30	2.30
Wheat	4.26	6.10	5.50	5.00	4.65	4.50	4.50	4.50	4.55	4.55	4.60	4.65
Rice	9.74	11.00	11.15	11.30	11.46	11.58	11.71	11.84	11.98	12.12	12.32	12.53
Soybeans	6.43	9.00	8.85	8.90	8.75	8.80	8.80	8.80	8.85	8.90	8.95	9.00
Soybean oil	0.310	0.395	0.385	0.385	0.383	0.383	0.383	0.383	0.385	0.385	0.385	0.385
Soybean meal	205.4	250.0	240.0	242.5	237.0	238.0	238.0	238.5	238.5	240.0	241.5	243.0

1/ Bushels per acre except for upland cotton and rice (pounds per acre).

2/ Million bushels except for upland cotton (thousand bales), rice (million hundredweight), and soybean meal (thousand tons).

3/ Dollars per bushel except for soybean oil (per pound), rice (per hundredweight), and soybean meal (per ton).

Table 8. U.S. corn long-term projections

Item	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Area (million acres):												
Planted acres	78.3	93.6	88.0	91.0	93.0	92.0	91.0	91.0	91.5	91.5	91.5	92.0
Harvested acres	70.6	86.1	80.6	83.6	85.6	84.6	83.6	83.6	84.1	84.1	84.1	84.6
Yields (bushels per acre):												
Yield/harvested acre	149.1	153.0	155.3	157.3	159.3	161.3	163.3	165.3	167.3	169.3	171.3	173.3
Supply and use (million bushels):												
Beginning stocks	1,967	1,304	1,897	1,327	1,202	1,402	1,502	1,447	1,377	1,372	1,327	1,262
Production	10,535	13,168	12,515	13,150	13,635	13,645	13,650	13,820	14,070	14,240	14,405	14,660
Imports	12	15	15	15	15	15	15	15	15	15	15	15
Supply	12,514	14,487	14,427	14,492	14,852	15,062	15,167	15,282	15,462	15,627	15,747	15,937
Feed & residual	5,598	5,650	5,450	5,425	5,525	5,550	5,600	5,650	5,700	5,750	5,775	5,825
Food, seed, & industrial	3,488	4,590	5,500	5,715	5,800	5,885	5,970	6,055	6,140	6,225	6,310	6,400
Ethanol for fuel	2,117	3,200	4,100	4,300	4,375	4,450	4,525	4,600	4,675	4,750	4,825	4,900
Domestic use	9,086	10,240	10,950	11,140	11,325	11,435	11,570	11,705	11,840	11,975	12,085	12,225
Exports	2,125	2,350	2,150	2,150	2,125	2,125	2,150	2,200	2,250	2,325	2,400	2,475
Total use	11,210	12,590	13,100	13,290	13,450	13,560	13,720	13,905	14,090	14,300	14,485	14,700
Ending stocks	1,304	1,897	1,327	1,202	1,402	1,502	1,447	1,377	1,372	1,327	1,262	1,237
Stocks/use ratio, percent	11.6	15.1	10.1	9.0	10.4	11.1	10.5	9.9	9.7	9.3	8.7	8.4
Prices (dollars per bushel):												
Farm price	3.04	3.50	3.75	3.80	3.60	3.50	3.50	3.55	3.55	3.55	3.60	3.60
Loan rate	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
Variable costs of production (dollars):												
Per acre	203	227	237	244	248	251	255	257	261	264	268	271
Per bushel	1.36	1.48	1.53	1.55	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.57
Returns over variable costs (dollars per acre):												
Net returns	250	309	345	354	326	313	317	329	333	337	349	352

Note: Marketing year beginning September 1 for corn.

Table 9. U.S. sorghum long-term projections

Item	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Area (million acres):												
Planted acres	6.5	7.7	7.0	6.5	6.0	6.0	5.9	5.9	5.8	5.8	5.7	5.7
Harvested acres	4.9	6.7	6.0	5.5	5.1	5.1	5.0	5.0	4.9	4.9	4.9	4.9
Yields (bushels per acre):												
Yield/harvested acre	56.2	76.8	66.1	66.5	67.0	67.4	67.9	68.3	68.8	69.2	69.7	70.1
Supply and use (million bushels):												
Beginning stocks	66	32	57	52	52	52	52	52	52	52	52	52
Production	278	515	395	365	340	345	340	340	335	340	340	345
Imports	0	0	0	0	0	0	0	0	0	0	0	0
Supply	343	547	452	417	392	397	392	392	387	392	392	397
Feed & residual	109	180	190	150	120	120	110	105	95	95	90	90
Food, seed, & industrial	45	35	60	65	70	70	70	70	70	70	70	70
Domestic	154	215	250	215	190	190	180	175	165	165	160	160
Exports	157	275	150	150	150	155	160	165	170	175	180	185
Total use	311	490	400	365	340	345	340	340	335	340	340	345
Ending stocks	32	57	52	52	52	52	52	52	52	52	52	52
Stocks/use ratio, percent	10.3	11.6	13.0	14.2	15.3	15.1	15.3	15.3	15.5	15.3	15.3	15.1
Prices (dollars per bushel):												
Farm price	3.29	3.30	3.50	3.55	3.35	3.25	3.25	3.30	3.30	3.30	3.35	3.35
Loan rate	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
Variable costs of production (dollars):												
Per acre	117	126	132	136	139	141	143	145	147	150	152	155
Per bushel	2.07	1.64	2.00	2.05	2.07	2.09	2.11	2.12	2.14	2.17	2.18	2.21
Returns over variable costs (dollars per acre):												
Net returns	68	127	99	100	86	78	78	80	80	78	81	80

Note: Marketing year beginning September 1 for sorghum.

Table 10. U.S. barley long-term projections

Item	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Area (million acres):												
Planted acres	3.5	4.0	4.5	4.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Harvested acres	3.0	3.5	3.9	3.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Yields (bushels per acre):												
Yield/harvested acre	61.1	60.4	65.0	65.6	66.2	66.8	67.4	68.0	68.6	69.2	69.8	70.4
Supply and use (million bushels):												
Beginning stocks	108	69	51	86	91	90	89	88	92	90	93	91
Production	180	212	255	230	200	200	200	205	205	210	210	210
Imports	12	20	25	25	25	25	25	25	25	25	25	25
Supply	300	301	331	341	316	315	314	318	322	325	328	326
Feed & residual	56	50	65	70	45	45	45	45	50	50	55	55
Food, seed, & industrial	156	150	155	155	156	156	156	156	157	157	157	157
Domestic	211	200	220	225	201	201	201	201	207	207	212	212
Exports	20	50	25	25	25	25	25	25	25	25	25	25
Total use	231	250	245	250	226	226	226	226	232	232	237	237
Ending stocks	69	51	86	91	90	89	88	92	90	93	91	89
Stocks/use ratio, percent	29.9	20.4	35.1	36.4	39.8	39.4	38.9	40.7	38.8	40.1	38.4	37.6
Prices (dollars per bushel):												
Farm price	2.85	3.85	4.30	4.25	4.00	3.85	3.80	3.85	3.85	3.85	3.90	3.90
Loan rate	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85
Variable costs of production (dollars):												
Per acre	100	109	114	117	119	121	123	124	126	128	130	132
Per bushel	1.63	1.80	1.75	1.79	1.80	1.81	1.82	1.82	1.84	1.85	1.86	1.87
Returns over variable costs (dollars per acre):												
Net returns	74	124	166	162	146	136	134	138	138	139	142	143

Note: Marketing year beginning June 1 for barley.

Table 11. U.S. oats long-term projections

Item	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Area (million acres):												
Planted acres	4.2	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Harvested acres	1.6	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Yields (bushels per acre):												
Yield/harvested acre	59.8	60.9	63.1	63.5	63.9	64.3	64.7	65.1	65.5	65.9	66.3	66.7
Supply and use (million bushels):												
Beginning stocks	53	51	45	47	49	51	53	55	57	54	51	48
Production	94	92	100	100	100	105	105	105	105	105	105	105
Imports	106	110	100	100	100	100	100	100	100	100	100	100
Supply	252	252	245	247	249	256	258	260	262	259	256	253
Feed & residual	125	130	120	120	120	125	125	125	130	130	130	130
Food, seed, & industrial	74	75	75	75	75	75	75	75	75	75	75	75
Domestic	199	205	195	195	195	200	200	200	205	205	205	205
Exports	3	2	3	3	3	3	3	3	3	3	3	3
Total use	202	207	198	198	198	203	203	203	208	208	208	208
Ending stocks	51	45	47	49	51	53	55	57	54	51	48	45
Stocks/use ratio, percent	25.2	21.7	23.7	24.7	25.8	26.1	27.1	28.1	26.0	24.5	23.1	21.6
Prices (dollars per bushel):												
Farm price	1.87	2.40	2.45	2.45	2.30	2.25	2.25	2.25	2.25	2.25	2.30	2.30
Loan rate	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Variable costs of production (dollars):												
Per acre	95	105	110	113	115	117	118	120	121	123	125	127
Per bushel	1.59	1.72	1.74	1.78	1.80	1.81	1.83	1.84	1.85	1.87	1.89	1.90
Returns over variable costs (dollars per acre):												
Net returns	17	42	45	43	32	28	27	27	26	25	27	26

Note: Marketing year beginning June 1 for oats.

Table 12. U.S. wheat long-term projections

Item	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Area (million acres):												
Planted acres	57.3	60.4	65.0	60.0	58.5	57.5	56.5	56.5	56.0	56.0	55.5	55.5
Harvested acres	46.8	51.0	55.3	51.0	49.7	48.9	48.0	48.0	47.6	47.6	47.2	47.2
Yields (bushels per acre):												
Yield/harvested acre	38.7	40.5	42.5	42.8	43.1	43.4	43.7	44.0	44.3	44.6	44.9	45.2
Supply and use (million bushels):												
Beginning stocks	571	456	312	606	703	742	749	732	716	696	683	661
Production	1,812	2,067	2,350	2,185	2,140	2,120	2,100	2,110	2,110	2,125	2,120	2,135
Imports	122	90	100	100	105	105	110	110	115	115	120	120
Supply	2,505	2,613	2,762	2,891	2,948	2,967	2,959	2,952	2,941	2,936	2,923	2,916
Food	934	940	950	959	968	977	986	995	1,004	1,013	1,022	1,031
Seed	81	86	81	79	78	76	76	76	76	75	75	75
Feed & residual	125	125	175	200	210	215	215	215	215	215	215	215
Domestic	1,140	1,151	1,206	1,238	1,256	1,268	1,277	1,286	1,295	1,303	1,312	1,321
Exports	909	1,150	950	950	950	950	950	950	950	950	950	950
Total use	2,049	2,301	2,156	2,188	2,206	2,218	2,227	2,236	2,245	2,253	2,262	2,271
Ending stocks	456	312	606	703	742	749	732	716	696	683	661	645
Stocks/use ratio, percent	22.3	13.6	28.1	32.1	33.6	33.8	32.9	32.0	31.0	30.3	29.2	28.4
Prices (dollars per bushel):												
Farm price	4.26	6.10	5.50	5.00	4.65	4.50	4.50	4.50	4.55	4.55	4.60	4.65
Loan rate	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75
Variable costs of production (dollars):												
Per acre	86	94	98	101	103	105	106	107	109	111	112	114
Per bushel	2.21	2.32	2.31	2.37	2.39	2.41	2.43	2.44	2.46	2.48	2.51	2.52
Returns over variable costs (dollars per acre):												
Net returns	79	153	135	113	97	91	91	91	92	92	94	96

Note: Marketing year beginning June 1 for wheat.

Table 13. U.S. soybean and products long-term projections

Item	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Soybeans												
Area (million acres):												
Planted	75.5	63.7	71.0	69.5	69.0	68.5	68.5	68.5	68.0	68.0	68.0	68.0
Harvested	74.6	62.8	70.1	68.6	68.1	67.6	67.6	67.6	67.1	67.1	67.1	67.1
Yield/harvested acre (bushels)	42.7	41.3	42.1	42.6	43.0	43.5	43.9	44.4	44.8	45.3	45.7	46.2
Supply (million bushels)												
Beginning stocks, September 1	449	573	210	219	210	202	193	199	204	204	203	201
Production	3,188	2,594	2,950	2,920	2,930	2,935	2,970	3,000	3,005	3,035	3,065	3,095
Imports	9	6	6	4	4	4	4	4	4	4	4	4
Total supply	3,647	3,173	3,166	3,143	3,144	3,141	3,167	3,203	3,213	3,243	3,272	3,300
Disposition (million bushels)												
Crush	1,806	1,825	1,865	1,895	1,920	1,950	1,975	2,000	2,020	2,045	2,070	2,095
Seed and residual	149	163	177	173	172	173	174	174	174	175	176	177
Exports	1,118	975	905	865	850	825	820	825	815	820	825	825
Total disposition	3,074	2,963	2,947	2,933	2,942	2,948	2,969	2,999	3,009	3,040	3,071	3,097
Carryover stocks, August 31												
Total ending stocks	573	210	219	210	202	193	199	204	204	203	201	204
Stocks/use ratio, percent	18.6	7.1	7.4	7.2	6.9	6.5	6.7	6.8	6.8	6.7	6.5	6.6
Prices (dollars per bushel)												
Loan rate	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Soybean price, farm	6.43	9.00	8.85	8.90	8.75	8.80	8.80	8.80	8.85	8.90	8.95	9.00
Variable costs of production (dollars):												
Per acre	97	105	109	113	114	115	116	117	119	120	122	123
Per bushel	2.27	2.55	2.60	2.64	2.65	2.65	2.65	2.65	2.65	2.65	2.66	2.66
Returns over variable costs (dollars per acre):												
Net returns	178	266	263	267	262	268	270	273	278	283	287	293
Soybean oil (million pounds)												
Beginning stocks, October 1	3,010	2,912	2,017	1,882	1,967	1,967	1,987	1,947	1,872	1,782	1,757	1,772
Production	20,484	20,715	21,215	21,575	21,880	22,240	22,545	22,850	23,100	23,405	23,710	24,020
Imports	40	40	50	60	70	80	90	100	110	120	130	140
Total supply	23,533	23,667	23,282	23,517	23,917	24,287	24,622	24,897	25,082	25,307	25,597	25,932
Domestic disappearance	18,721	20,100	20,150	20,300	20,550	20,775	21,100	21,400	21,650	21,900	22,150	22,400
For methyl ester ¹	2,794	4,200	4,200	4,200	4,250	4,250	4,350	4,400	4,400	4,400	4,400	4,400
Exports	1,900	1,550	1,250	1,250	1,400	1,525	1,575	1,625	1,650	1,650	1,675	1,700
Total demand	20,621	21,650	21,400	21,550	21,950	22,300	22,675	23,025	23,300	23,550	23,825	24,100
Ending stocks, September 30	2,912	2,017	1,882	1,967	1,967	1,987	1,947	1,872	1,782	1,757	1,772	1,832
Soybean oil price (dollars per lb)	0.310	0.395	0.385	0.385	0.383	0.383	0.383	0.383	0.385	0.385	0.385	0.385
Soybean meal (thousand short tons)												
Beginning stocks, October 1	314	351	300	300	300	300	300	300	300	300	300	300
Production	43,021	43,384	44,385	45,085	45,735	46,385	46,985	47,560	48,135	48,710	49,310	49,910
Imports	155	165	165	165	165	165	165	165	165	165	165	165
Total supply	43,489	43,900	44,850	45,550	46,200	46,850	47,450	48,025	48,600	49,175	49,775	50,375
Domestic disappearance	34,288	35,300	35,850	36,400	36,950	37,500	38,050	38,625	39,200	39,775	40,375	40,975
Exports	8,850	8,300	8,700	8,850	8,950	9,050	9,100	9,100	9,100	9,100	9,100	9,100
Total demand	43,138	43,600	44,550	45,250	45,900	46,550	47,150	47,725	48,300	48,875	49,475	50,075
Ending stocks, September 30	351	300	300	300	300	300	300	300	300	300	300	300
Soybean meal price (dollars per ton)	205.44	250.00	240.00	242.50	237.00	238.00	238.00	238.50	238.50	240.00	241.50	243.00
Crushing yields (pounds per bushel)												
Soybean oil	11.34	11.35	11.38	11.39	11.40	11.41	11.42	11.43	11.44	11.45	11.46	11.47
Soybean meal	47.64	47.54	47.60	47.60	47.60	47.60	47.60	47.60	47.60	47.60	47.60	47.60
Crush margin (dollars per bushel)	1.98	1.43	1.24	1.25	1.25	1.23	1.23	1.25	1.23	1.22	1.21	1.20

Note: Marketing year beginning September 1 for soybeans; October 1 for soybean oil and meal. 1/ Soybean oil used for methyl ester for production of biodiesel, history from the U.S. Department of Commerce.

Table 14. U.S. rice long-term projections, rough basis

Item	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Area (thousand acres):												
Planted	2,838	2,748	2,800	2,900	2,950	3,000	3,050	3,100	3,125	3,150	3,175	3,200
Harvested	2,821	2,731	2,783	2,883	2,932	2,982	3,032	3,081	3,106	3,131	3,156	3,181
Yields (pounds per acre):												
Yield/harvested acre	6,868	7,247	7,222	7,284	7,351	7,419	7,481	7,543	7,608	7,666	7,725	7,784
Supply and use (million cwt):												
Beginning stocks	43.0	39.3	27.1	25.9	26.4	27.3	28.5	29.1	30.0	30.6	30.5	30.5
Production	193.7	197.9	201.0	210.0	215.5	221.2	226.8	232.4	236.3	240.0	243.8	247.6
Imports	20.6	21.5	22.0	22.7	23.3	24.0	24.8	25.5	26.3	27.1	27.9	28.7
Total supply	257.3	258.7	250.1	258.5	265.3	272.5	280.1	287.0	292.6	297.6	302.2	306.8
Domestic use and residual	126.7	124.7	126.2	128.1	130.0	132.0	134.0	136.0	138.0	140.1	142.2	144.3
Exports	91.3	107.0	98.0	104.0	108.0	112.0	117.0	121.0	124.0	127.0	129.5	132.0
Total use	218.0	231.7	224.2	232.1	238.0	244.0	251.0	257.0	262.0	267.1	271.7	276.3
Ending stocks (million cwt.)	39.3	27.1	25.9	26.4	27.3	28.5	29.1	30.0	30.6	30.5	30.5	30.5
Stocks/use ratio, percent	18.0	11.7	11.5	11.4	11.5	11.7	11.6	11.7	11.7	11.4	11.2	11.0
Milling rate, percent	71.0	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5
Prices (dollars per cwt.):												
World price	7.31	8.10	8.35	8.60	8.86	9.08	9.31	9.54	9.78	10.02	10.27	10.53
Average market price	9.74	11.00	11.15	11.30	11.46	11.58	11.71	11.84	11.98	12.12	12.32	12.53
Loan rate	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Variable costs of production (dollars):												
Per acre	437	470	492	508	516	523	530	536	544	552	560	568
Per cwt.	6.36	6.49	6.81	6.97	7.01	7.05	7.08	7.11	7.15	7.20	7.25	7.30
Returns over variable costs (dollars per acre):												
Net returns	232	327	313	315	327	336	346	357	367	377	391	407

Note: Marketing year beginning August 1 for rice.

Table 15. U.S. upland cotton long-term projections

Item	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Area (million acres):												
Planted acres	14.9	10.6	10.5	11.2	11.5	11.7	11.8	11.9	12.0	12.1	12.2	12.3
Harvested acres	12.4	10.3	9.7	10.3	10.6	10.8	10.9	10.9	11.0	11.1	11.2	11.3
Yields (pounds per acre):												
Yield/harvested acre	806	845	860	875	885	895	905	915	925	935	945	955
Supply and use (thousand bales):												
Beginning stocks	5,981	9,368	7,519	4,469	4,069	4,119	4,519	5,069	5,469	5,719	5,819	5,869
Production	20,823	18,050	17,400	18,800	19,500	20,100	20,600	20,800	21,200	21,600	22,100	22,500
Imports	10	10	10	10	10	10	10	10	10	10	10	10
Supply	26,814	27,428	24,929	23,279	23,579	24,229	25,129	25,879	26,679	27,329	27,929	28,379
Domestic use	4,907	4,560	4,450	4,400	4,350	4,300	4,250	4,200	4,150	4,100	4,050	4,000
Exports	12,338	15,400	16,000	14,800	15,100	15,400	15,800	16,200	16,800	17,400	18,000	18,500
Total use	17,245	19,960	20,450	19,200	19,450	19,700	20,050	20,400	20,950	21,500	22,050	22,500
Ending stocks	9,368	7,519	4,469	4,069	4,119	4,519	5,069	5,469	5,719	5,819	5,869	5,869
Stocks/use ratio, percent	54.3	37.7	21.9	21.2	21.2	22.9	25.3	26.8	27.3	27.1	26.6	26.1
Prices (dollars per pound):												
Farm price ¹	0.465	---	---	---	---	---	---	---	---	---	---	---
Loan rate	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Variable costs of production (dollars):												
Per acre	366	412	429	444	450	456	462	468	474	481	488	494
Per pound	0.45	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.52	0.52
Returns over variable costs (dollars per acre):												
Net returns	157	148	248	265	258	252	258	269	270	262	263	264

Note: Marketing year beginning August 1 for upland cotton.

1/ USDA is prohibited from publishing cotton price projections.

Table 16. U.S. sugar long-term projections 1/

Item	Units	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sugarbeets													
Planted area	1,000 acres	1,367	1,263	1,230	1,180	1,172	1,148	1,135	1,137	1,140	1,143	1,144	1,147
Harvested area	1,000 acres	1,304	1,241	1,203	1,155	1,147	1,124	1,111	1,114	1,117	1,119	1,121	1,123
Yield	Tons/acre	26.1	25.4	26.3	26.6	26.8	27.1	27.3	27.5	27.7	27.9	28.1	28.3
Production	Mil. s. tons	34.1	31.6	31.6	30.7	30.7	30.4	30.3	30.6	30.9	31.2	31.5	31.8
Sugarcane													
Harvested area	1,000 acres	847	833	835	820	750	752	753	754	755	756	757	758
Yield	Tons/acre	33.0	34.7	34.2	34.3	34.5	34.6	34.7	34.8	34.9	35.0	35.1	35.2
Production	Mil. s. tons	28.0	28.9	28.6	28.1	25.9	26.0	26.1	26.2	26.3	26.4	26.5	26.6
Supply:													
Beginning stocks	1,000 s. tons	1,698	1,787	1,849	1,850	1,846	1,850	1,846	1,845	1,843	1,841	1,839	1,838
Production	1,000 s. tons	8,434	8,451	8,466	8,311	8,071	8,074	8,109	8,206	8,302	8,399	8,491	8,591
Beet sugar	1,000 s. tons	5,002	4,791	4,811	4,688	4,712	4,679	4,683	4,747	4,811	4,875	4,934	5,000
Cane sugar	1,000 s. tons	3,432	3,659	3,655	3,622	3,359	3,394	3,426	3,458	3,491	3,524	3,557	3,591
Total imports	1,000 s. tons	2,080	2,194	2,614	2,945	3,177	3,486	3,475	3,530	3,585	3,638	3,693	3,748
TRQ imports	1,000 s. tons	1,624	1,339	1,377	1,380	1,382	1,385	1,390	1,392	1,395	1,397	1,402	1,405
Total supply	1,000 s. tons	12,211	12,431	12,928	13,105	13,095	13,410	13,430	13,580	13,730	13,878	14,023	14,176
Use:													
Exports	1,000 s. tons	422	250	250	250	250	250	250	250	250	250	250	250
Domestic deliveries	1,000 s. tons	10,124	10,300	10,394	10,440	10,531	10,567	10,630	10,693	10,756	10,818	10,883	10,945
Miscellaneous	1,000 s. tons	-122	0	0	0	0	0	0	0	0	0	0	0
Total use	1,000 s. tons	10,424	10,550	10,644	10,690	10,781	10,817	10,880	10,943	11,006	11,068	11,133	11,195
CCC Dispositions	1,000 s. tons	--	33	435	569	464	746	706	794	883	970	1,052	1,146
Ending stocks	1,000 s. tons	1,787	1,849	1,850	1,846	1,850	1,846	1,845	1,843	1,841	1,839	1,838	1,836
Raw sugar price:													
New York (No. 14)	Cents/lb.	20.79	20.67	20.68	20.68	20.67	20.66	20.66	20.66	20.66	20.66	20.66	20.66
Raw sugar loan rate	Cents/lb.	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00
Beet sugar loan rate	Cents/lb.	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90
Grower prices:													
Sugarbeets	Dol./ton	38.73	35.13	34.66	34.29	34.55	34.80	35.05	35.32	35.59	35.86	36.13	36.39
Sugarcane	Dol./ton	28.46	28.84	29.16	29.29	29.57	29.69	29.81	29.94	30.06	30.18	30.30	30.42

1/ Fiscal years, October 1 through September 30.

Table 17. Horticultural crops long-term projections: Production, values, and prices, calendar years

Item	Unit	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Production, farm value:													
Fruit and nuts													
Citrus	\$ Mil.	2,738	2,440	2,819	2,575	2,495	2,571	2,661	2,755	2,866	2,982	3,087	3,196
Noncitrus ¹	\$ Mil.	11,341	11,492	11,893	12,307	12,736	13,180	13,640	14,115	14,607	15,117	15,644	16,189
Tree nuts	\$ Mil.	3,454	3,540	3,647	3,802	3,963	4,131	4,307	4,489	4,680	4,879	5,086	5,301
Total fruit and nuts	\$ Mil.	17,534	17,472	18,359	18,684	19,195	19,882	20,608	21,360	22,154	22,977	23,817	24,687
Vegetables													
Fresh market ²	\$ Mil.	10,379	11,481	11,174	11,584	12,009	12,450	12,907	13,381	13,872	14,381	14,909	15,457
Processing ³	\$ Mil.	2,088	2,296	2,282	2,355	2,431	2,509	2,590	2,673	2,760	2,848	2,940	3,035
Potatoes ⁴	\$ Mil.	3,226	3,307	3,417	3,530	3,647	3,768	3,894	4,023	4,156	4,294	4,437	4,584
Other ⁵	\$ Mil.	2,659	2,733	2,810	2,889	2,970	3,053	3,138	3,226	3,316	3,409	3,505	3,603
Total vegetables	\$ Mil.	18,351	19,818	19,683	20,358	21,057	21,780	22,529	23,303	24,104	24,933	25,791	26,679
Nursery and greenhouse ⁶	\$ Mil.	16,892	17,230	17,574	17,996	18,428	18,870	19,323	19,787	20,262	20,748	21,246	21,756
Total, horticultural crops ⁷	\$ Mil.	53,254	55,006	56,110	57,542	59,192	61,054	62,991	64,990	67,070	69,219	71,424	73,702
Production, farm weight:													
Fruit and nuts													
Citrus	Mil. lbs.	23,490	20,528	24,960	25,334	25,841	26,358	27,017	27,692	28,246	28,811	29,243	29,682
Noncitrus ¹	Mil. lbs.	40,378	40,436	40,746	41,058	41,372	41,689	42,008	42,330	42,654	42,981	43,310	43,642
Tree nuts	Mil. lbs.	3,186	3,628	3,664	3,745	3,827	3,911	3,997	4,085	4,175	4,267	4,361	4,457
Total fruit and nuts	Mil. lbs.	67,054	64,592	69,370	70,137	71,040	71,958	73,022	74,107	75,075	76,059	76,914	77,780
Vegetables and melons													
Fresh market ²	Mil. lbs.	42,738	43,000	44,052	44,555	45,063	45,578	46,098	46,624	47,157	47,696	48,241	48,793
Processing ³	Mil. lbs.	38,915	42,800	40,500	40,865	41,232	41,603	41,978	42,356	42,737	43,121	43,510	43,901
Potatoes ⁴	Mil. lbs.	44,135	44,797	45,155	45,517	45,881	46,248	46,618	46,991	47,367	47,746	48,128	48,513
Other ⁵	Mil. lbs.	8,000	8,120	8,242	8,365	8,491	8,618	8,748	8,879	9,012	9,147	9,284	9,424
Total vegetables	Mil. lbs.	133,788	138,717	137,950	139,301	140,667	142,047	143,441	144,849	146,272	147,710	149,162	150,630
Total, produce and nuts ⁷	Mil. lbs.	201,095	203,564	207,576	209,696	211,966	214,265	216,725	219,219	221,611	224,033	226,342	228,677
Producer price indexes ⁸													
Fruit and nuts													
Citrus	2000=100	160.3	163.4	155.3	139.7	132.8	134.1	135.4	136.8	139.5	142.3	145.2	148.1
Noncitrus	2000=100	144.5	146.2	150.2	154.2	158.4	162.7	167.1	171.6	176.2	181.0	185.9	190.9
Tree nuts	2000=100	157.4	141.7	144.5	147.4	150.3	153.3	156.4	159.5	162.7	166.0	169.3	172.7
Total fruit and nuts	2000=100	168.0	173.8	170.1	171.2	173.6	177.6	181.4	185.2	189.6	194.1	199.0	204.0
Vegetables													
Fresh market	2000=100	111.5	122.5	116.4	119.3	122.3	125.4	128.5	131.7	135.0	138.4	141.8	145.4
Processing	2000=100	101.8	101.8	106.9	109.4	111.9	114.4	117.1	119.8	122.5	125.3	128.2	131.2
Potatoes	2000=100	144.9	146.4	150.0	153.8	157.6	161.6	165.6	169.7	174.0	178.3	182.8	187.4
Total vegetables	2000=100	121.4	126.4	126.3	129.3	132.5	135.7	139.0	142.4	145.8	149.4	153.0	156.7
Total produce and nuts	2000=100	138.9	142.6	142.6	144.9	147.7	151.2	154.8	158.4	162.2	166.2	170.3	174.5

1/ Includes melons; excludes olives. 2/ Includes sweet potatoes and fresh-market mushrooms; excludes melons. 3/ Includes pulses (dry edible beans, peas, and lentils), processing mushrooms, and olives. 4/ Includes seed, feed, own farm use, or unutilized potatoes. 5/ Specialty and minor vegetables; farm weight is from California (California Department of Food and Agriculture). 6/ Includes floral crops and greenhouse vegetables, such as tomatoes, cucumbers, and colored peppers. Data source is USDA, Economic Research Service. 7/ Includes honey, maple syrup, hops, peppermint and spearmint oils, and Hawaiian tropical crops. 8/ Computed from unit values of production, or production value divided into production volume. Data source: USDA, National Agricultural Statistics Service

Table 18. Horticultural crops long-term projections: Exports and imports, fiscal years

Item	Unit	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Exports													
Fruit and nuts													
Fresh fruits	\$ Mil.	2,842	3,005	3,077	3,147	3,218	3,291	3,366	3,444	3,523	3,605	3,689	3,775
Citrus	\$ Mil.	673	668	670	672	674	676	678	680	683	685	687	689
Noncitrus	\$ Mil.	2,169	2,337	2,407	2,474	2,544	2,615	2,688	2,763	2,841	2,920	3,002	3,086
Processed fruits	\$ Mil.	1,739	2,013	2,054	2,095	2,137	2,179	2,223	2,267	2,313	2,359	2,406	2,454
Fruit juices	\$ Mil.	893	1,020	1,045	1,071	1,098	1,126	1,154	1,183	1,212	1,242	1,274	1,305
Tree nuts	\$ Mil.	2,926	2,938	3,026	3,117	3,210	3,306	3,406	3,508	3,613	3,721	3,833	3,948
Total fruit and nuts	\$ Mil.	7,507	7,956	8,157	8,358	8,565	8,777	8,995	9,219	9,449	9,685	9,928	10,177
Vegetables													
Fresh	\$ Mil.	1,629	1,771	1,824	1,877	1,932	1,988	2,045	2,105	2,166	2,228	2,293	2,360
Processed ¹	\$ Mil.	2,185	2,389	2,444	2,495	2,548	2,601	2,656	2,711	2,768	2,827	2,886	2,946
Frozen	\$ Mil.	656	771	789	805	822	839	857	875	893	912	931	951
Total vegetables	\$ Mil.	3,814	4,160	4,268	4,372	4,479	4,589	4,701	4,816	4,934	5,055	5,179	5,306
Other horticulture													
Nursery and greenhouse	\$ Mil.	310	355	373	381	390	399	408	417	427	437	447	457
Essential oils	\$ Mil.	1,041	1,141	1,199	1,236	1,274	1,314	1,354	1,396	1,439	1,484	1,530	1,578
Wine	\$ Mil.	787	905	996	1,035	1,077	1,120	1,165	1,211	1,260	1,310	1,363	1,417
Beer	\$ Mil.	210	231	245	246	248	249	250	251	253	254	255	256
Other ²	\$ Mil.	3,006	3,162	3,320	3,446	3,577	3,713	3,854	4,001	4,153	4,310	4,474	4,644
Total horticulture	\$ Mil.	16,675	17,911	18,557	19,075	19,610	20,160	20,727	21,312	21,915	22,536	23,176	23,836
Fresh ³	\$ Mil.	4,471	4,776	4,902	5,024	5,150	5,279	5,412	5,548	5,689	5,833	5,982	6,134
Processed ³	\$ Mil.	3,924	4,402	4,498	4,590	4,684	4,780	4,879	4,979	5,081	5,186	5,292	5,401
Export share of production ⁴	Percent	31	33	33	33	33	33	33	33	33	33	32	32
Imports													
Fruit and nuts													
Fresh fruits	\$ Mil.	4,687	5,406	6,035	6,342	6,601	6,805	7,016	7,233	7,457	7,689	7,928	8,175
Citrus	\$ Mil.	398	499	539	571	600	630	661	694	729	765	804	844
Noncitrus	\$ Mil.	4,289	4,907	5,496	5,771	6,001	6,175	6,355	6,539	6,728	6,924	7,124	7,331
Processed fruits	\$ Mil.	2,601	3,418	4,034	4,276	4,404	4,510	4,618	4,729	4,842	4,958	5,077	5,199
Fruit juices	\$ Mil.	1,056	1,618	1,973	2,171	2,279	2,339	2,399	2,462	2,526	2,591	2,659	2,728
Tree nuts	\$ Mil.	1,071	1,079	1,241	1,315	1,381	1,431	1,482	1,536	1,591	1,648	1,707	1,769
Total fruit and nuts	\$ Mil.	8,360	9,903	11,309	11,933	12,386	12,746	13,116	13,497	13,890	14,296	14,713	15,143
Vegetables													
Fresh	\$ Mil.	3,979	4,165	4,415	4,636	4,844	5,062	5,290	5,528	5,777	6,037	6,309	6,592
Processed ¹	\$ Mil.	2,754	3,149	3,401	3,605	3,785	3,929	4,087	4,250	4,420	4,597	4,781	4,972
Frozen	\$ Mil.	1,072	1,202	1,298	1,376	1,445	1,500	1,560	1,622	1,687	1,755	1,825	1,898
Total vegetables	\$ Mil.	6,733	7,314	7,816	8,241	8,630	8,992	9,377	9,778	10,197	10,634	11,089	11,564
Other horticulture													
Nursery and greenhouse	\$ Mil.	1,424	1,531	1,607	1,672	1,730	1,787	1,846	1,907	1,970	2,035	2,102	2,172
Essential oils	\$ Mil.	2,469	2,427	2,499	2,574	2,646	2,721	2,797	2,875	2,956	3,038	3,123	3,211
Wine	\$ Mil.	4,043	4,544	4,817	5,058	5,290	5,534	5,788	6,055	6,333	6,624	6,929	7,248
Beer	\$ Mil.	3,376	3,686	3,981	4,220	4,431	4,586	4,747	4,913	5,085	5,263	5,447	5,638
Other ²	\$ Mil.	2,738	2,986	3,195	3,386	3,573	3,751	3,939	4,136	4,342	4,560	4,788	5,027
Total horticulture	\$ Mil.	29,142	32,391	35,225	37,084	38,687	40,116	41,609	43,161	44,774	46,450	48,192	50,003
Fresh ³	\$ Mil.	8,666	9,571	10,450	10,978	11,446	11,868	12,306	12,761	13,234	13,726	14,237	14,767
Processed ³	\$ Mil.	5,356	6,568	7,435	7,881	8,189	8,439	8,704	8,979	9,262	9,555	9,858	10,171
Import share of consumption	Percent	44	47	48	49	49	50	50	50	50	50	50	50

1/ Includes dry edible beans, peas, lentils, and potatoes. 2/ Includes hops, ginseng, sauces, condiments, food preparations, yeast, starches, etc. 3/ Includes fruits and vegetables only. 4/ Percent shares are based on values.

Exports are free alongside ship (FAS) value at U.S. port of exportation. Imports are customs value at U.S. port of entry.

Data source: U.S. Department of Commerce, Bureau of the Census.