

## Crops

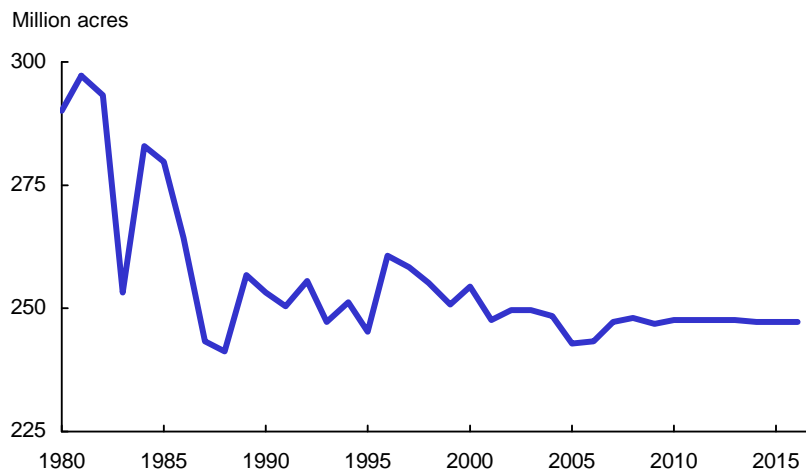
Strong expansion of corn-based ethanol production in the projections affects virtually every aspect of the field crops sector, ranging from domestic demand and exports to prices and the allocation of acreage among crops (see box, page 22). Additionally, steady U.S. and global economic growth assumed in the projections provide 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 stronger 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.

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 for 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 2009, but the CRP is then assumed to rise to 39.2 million acres by the end of the projection period, with higher CRP rental rates. About two-thirds of the land in the reserve is allocated to the eight major field crops (corn, sorghum, barley, oats, wheat, rice, upland cotton, and soybeans), based on historical plantings.

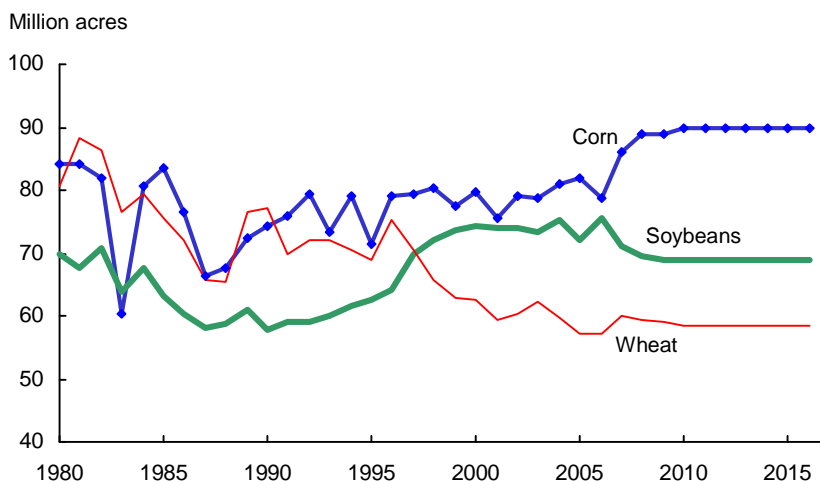
Projected plantings for the eight major field crops in the United States increase from about 243 million acres in 2006 to more than 247 million during most of the projection period, as higher prices and producer net returns bring land into production.

**Planted area: Eight major crops 1/**



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

### 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. The cropping mix shifts more to corn and away from soybeans as growth in global supply and demand is reflected in prices and net returns. In particular, growth in domestic ethanol production from corn increases demand, raising corn prices and returns.
- Corn acreage rises sharply in the projections, reaching 90 million acres by 2010 as rapid expansion in ethanol production increases corn demand, prices, and producer returns. As growth in ethanol use stabilizes, annual increases in corn production from yield gains outpace increases in corn use for ethanol, allowing corn stocks to grow modestly and corn prices to ease somewhat. This supports renewed expansion in domestic corn feeding and exports. Stable, but moderate growth in corn ethanol demand combine with growth in feeding and exports to support producer returns and stabilize acreage at this higher level. Corn plantings are also facilitated by adjustments in soybean area.
- Wheat plantings rebound to 60 million acres in 2007 in response to high prices, but then fall back to 58-59 million acres due to competition from other crops.
- Soybean plantings decline to less than 69 million acres as more favorable returns to corn production draw land from soybeans.

## **U.S. Biofuel Overview**

The Energy Policy Act of 2005 mandates that renewable fuel use in gasoline (with credits for biodiesel) reach 7.5 billion gallons by calendar year 2012. However, high oil prices combined with blender tax credits and import tariffs (see box, page 24, on tax credits and tariffs), elimination of methyl tertiary butyl ether (MTBE) as an additive in gasoline blending, State programs, and other factors have provided economic incentives for a biofuel expansion that exceeds the Act's mandate.

### **Biofuel Large in Agriculture but Relatively Small in Energy Sector**

Most of the ongoing and projected biofuel expansion in the United States is for ethanol. Ethanol production is assumed to expand sharply through 2009/10, reflecting ongoing plant construction in response to strong profit incentives. Although more moderate growth is assumed in subsequent years, over 12 billion gallons of ethanol are produced annually by the end of the projection period. Most of this expansion is dry mill production which primarily uses corn as the feedstock. Consequently, more than 30 percent of the corn crop is used to produce ethanol by 2009/10. Nonetheless, even by the end of the projection period, ethanol production (by volume) represents less than 8 percent of annual gasoline use in the United States.

Biodiesel production capacity and output have increased rapidly in the past 2 years and are projected to rise rapidly again in 2007/08. Slower growth is then projected for several years, with biodiesel output leveling off beyond 2010/11 as higher soybean oil prices reduce profitability. At its projected high of 700 million gallons, biodiesel uses about 23 percent of soybean oil production, but accounts for less than 2 percent of highway diesel fuel use in the United States.

Cellulosic-based production of renewable fuels is assumed to meet the minimum specified in the Energy Policy Act of 2005 of 250 million gallons in 2013 and subsequent years.

### **Biofuel Conversion Factors**

New dry mill ethanol plants are assumed in the projections to have a production yield of 2.80 gallons of ethanol from a bushel of corn, raising the industry average to 2.76 gallons per bushel at the end of the projection period. It takes slightly more than a pound of refined soybean oil to produce a pound of biodiesel, close to a one-to-one physical conversion factor. This implies that about 7.35 pounds of soybean oil are used to produce 1 gallon of biodiesel.

### **Acreage Expands and Shifts to Corn**

Strong demand for ethanol production results in higher corn prices and provides incentives to increase corn acreage. Much of this increase occurs by adjusting crop rotations between corn and soybeans, causing a decline in soybean plantings. Other sources of land for increased corn plantings include cropland used as pasture, reduced fallow, acreage returning to production from expiring CRP contracts, and shifts from other crops such as cotton.

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## **U.S. Biofuel Overview (Continued)**

### **Demand Effects**

As the ethanol industry absorbs a larger share of the corn crop, higher prices will affect both domestic uses and exports, providing for more intense competition between and among the domestic industries and foreign buyers in the demand for feed grains. U.S. feed use of corn typically accounts for 50-60 percent of total corn use and the United States typically accounts for 60-70 percent of world corn exports. Market adjustments to higher prices result in a reduced share of corn used directly for domestic livestock feeding and a lower U.S. share of global corn trade. Corn used for animal feeding declines and represents 40-50 percent of total use in the projections, while the U.S. share of global corn trade falls to 55-60 percent.

### **Use of Coproducts of Ethanol Production**

Although higher prices will lower direct corn feed use, distillers grains, a coproduct of dry mill ethanol production, can be used in livestock rations, particularly in diets of ruminants such as beef and dairy cattle. Distillers grains are less suitable in rations for monogastric animals, such as hogs and poultry. Thus, the growth of ethanol production and increased supply of distillers grains result in different adjustments across U.S. livestock industries. For each 56-pound bushel of corn used in the production of ethanol, about 17.5 pounds of dried distillers grains are produced.

Distillers grains produced in a dry mill ethanol plant are relatively wet, with as much as 65-70 percent moisture content. This coproduct can be used in livestock feed in this wet form or can be dried and used in a form with lower moisture content. Using wet distillers grains avoids costs of drying the product, but involves increased per-unit handling costs. Wet distillers grains also must be used relatively quickly, thus limiting how far they can be transported. Dried distillers grains incur costs of drying, but facilitate the shipment of this coproduct over greater distances, including for exports.

Whether used in a wet or dried form, distillers grains used in livestock feed replace some direct corn use, as well as soybean meal in some animal rations. Based on assumptions regarding the use of distillers grains in the livestock sector, each bushel of corn used to produce ethanol results in a reduction of about a fifth of a bushel of corn feed use. (See box, page 52, for further discussion of livestock sector uses of distillers grains.)

### **Crop Prices and Farm Program Costs**

Increased demand for corn to produce ethanol leads to higher prices for corn and other crops, which, in turn, results in smaller government outlays under current farm commodity programs. For example, with the prices projected in this report, program costs for price-sensitive marketing loan benefits and counter-cyclical payments for feed grains are minimal, even with stochastic considerations included.

In contrast, higher market prices result in increases in CRP rental rates and overall costs for the CRP. Government costs for crop insurance also increase because of higher market prices for several of the major insured commodities. Additionally, government tax revenues are reduced due to higher total blender tax credits for biofuels.

### **Short Crop Sensitivity**

Ethanol demand is very inelastic (unresponsive to price changes) in the range of prices projected in this report. Although the projections assume no shocks to commodity markets from production shortfalls due to weather, pests, or other factors, an important issue is how agricultural markets might respond should a production shortfall occur. With inelastic demands representing a greater share of the market and smaller levels of stocks projected, increased price variability and market volatility are likely.

### **Biofuel Tax Credits and Import Tariffs**

Under current law, tax credits are available to blenders of biofuels equal to 51 cents per gallon for ethanol and \$1 per gallon for biodiesel (50 cents for biodiesel made from recycled vegetable oil and animal fats). Additionally, an import tariff of 54 cents per gallon is assessed on imported ethanol, with duty-free status on up to 7 percent of the U.S. ethanol market for imports from designated Central American and Caribbean countries. The ethanol tax credit is scheduled to expire at the end of calendar year 2010 and the ethanol import tariff was recently extended through the end of calendar year 2008. The biodiesel tax credit is scheduled to expire at the end of calendar year 2008.

The long-term projections in this report assume the biofuel tax credits and the ethanol tariff continue beyond their currently legislated expiration dates. However, an analysis was also conducted under the alternative assumption that those provisions expire as scheduled. The table on page 25 shows some of the key differences, focusing on domestic markets for corn, soybeans, and soybean products.

Without the biofuel tax credits and ethanol tariff, demands for corn and soybean oil to produce ethanol and biodiesel are reduced. Prices for corn, soybeans, and soybean products are lower, so other domestic demands and exports are increased. Since ethanol changes in the corn market are relatively larger than biodiesel impacts in the soybean and soybean products markets, acreage is reduced for corn, with some of that land shifting to soybeans. With lower prices, stochastic budget costs for farm programs and direct government payments would be higher.

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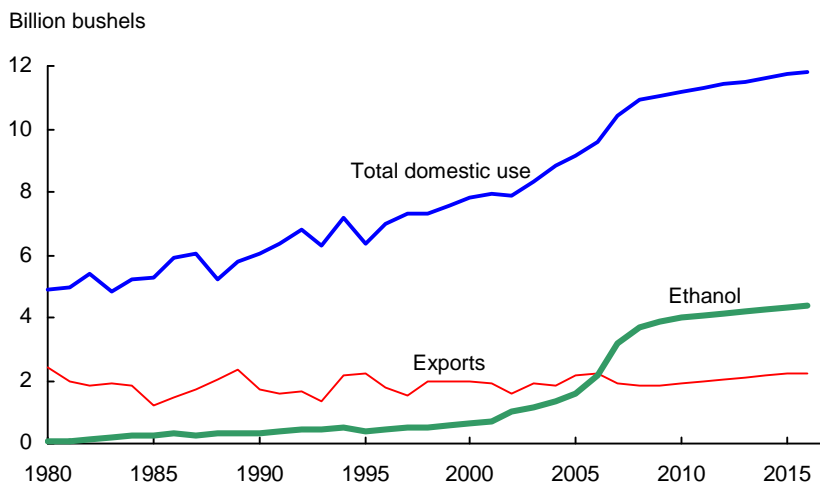
## Biofuel Tax Credits and Import Tariffs (Continued)

Corn and soybean projections under alternative biofuel policy assumptions

Item	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
<b>Ethanol and biodiesel tax credit and ethanol import tariff assumed to be extended</b>										
Corn plantings	86.0	89.0	89.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
Fuel alcohol use	3,200	3,700	3,900	4,000	4,075	4,150	4,200	4,250	4,300	4,350
Feed & residual	5,825	5,775	5,725	5,750	5,775	5,800	5,850	5,900	5,950	5,975
Exports	1,925	1,850	1,850	1,925	2,000	2,050	2,100	2,150	2,200	2,250
Ending stocks	660	620	580	640	670	700	725	750	765	805
Farm price, corn	3.50	3.60	3.75	3.55	3.50	3.45	3.40	3.35	3.35	3.30
Soybean plantings	71.0	69.5	69.0	69.0	69.0	69.0	69.0	68.8	68.8	68.8
Exports	1,150	980	845	845	850	850	855	865	875	875
Ending stocks	355	237	235	237	234	232	235	233	229	230
Farm price, soybeans	7.00	7.25	7.30	7.00	6.90	6.80	6.80	6.75	6.75	6.75
Biodiesel use, soybean oil	4,410	4,594	4,778	4,961	5,145	5,145	5,145	5,145	5,145	5,145
Food use, soybean oil	16,090	16,231	16,348	16,464	16,580	16,880	17,180	17,480	17,780	18,080
Exports, soybean oil	975	875	700	700	775	775	775	775	750	725
Ending stocks, soybean oil	2,088	1,888	1,878	1,883	1,883	1,903	1,883	1,818	1,738	1,703
Soybean oil price	0.300	0.315	0.320	0.315	0.310	0.305	0.305	0.305	0.305	0.305
Soybean meal price	200.00	205.00	205.00	195.00	192.50	190.00	188.50	186.50	185.00	185.00
<b>Ethanol and biodiesel tax credit and ethanol import tariff assumed to end</b>										
Corn plantings	86.0	89.0	88.3	88.9	88.5	87.7	87.7	87.6	87.6	87.6
Fuel alcohol use	3,200	3,600	3,700	3,600	3,500	3,525	3,550	3,575	3,600	3,625
Feed & residual	5,825	5,806	5,781	5,852	5,922	5,956	6,010	6,065	6,119	6,149
Exports	1,925	1,876	1,887	1,979	2,086	2,139	2,193	2,246	2,299	2,352
Ending stocks	660	663	620	749	883	919	962	1,002	1,045	1,124
Farm price, corn	3.50	3.50	3.60	3.35	3.20	3.15	3.10	3.05	3.05	3.00
Soybean plantings	71.0	69.5	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
Exports	1,150	980	870	885	890	895	900	915	925	925
Ending stocks	355	236	247	247	247	243	243	238	232	235
Farm price, soybeans	6.95	7.10	7.20	6.85	6.60	6.45	6.40	6.35	6.35	6.30
Biodiesel use, soybean oil	3,675	2,205	1,103	735	551	368	368	368	368	368
Food use, soybean oil	16,675	17,245	17,598	17,965	18,299	18,683	19,033	19,433	19,833	20,132
Exports, soybean oil	1,200	2,200	3,000	3,400	3,600	3,725	3,675	3,575	3,475	3,475
Ending stocks, soybean oil	2,013	1,863	1,978	2,008	2,058	2,103	2,108	2,068	1,988	1,928
Soybean oil price	0.2975	0.3075	0.310	0.3025	0.290	0.285	0.285	0.285	0.285	0.285
Soybean meal price	200.00	203.00	203.50	193.50	190.00	186.00	182.50	180.00	177.00	175.00
<b>Difference</b>										
Corn plantings	0.0	0.0	-0.7	-1.1	-1.5	-2.3	-2.3	-2.4	-2.4	-2.4
Fuel alcohol use	0	-100	-200	-400	-575	-625	-650	-675	-700	-725
Feed & residual	0	31	56	102	147	156	160	165	169	174
Exports	0	26	37	54	86	89	93	96	99	102
Ending stocks	0	43	40	109	213	219	237	252	280	319
Farm price, corn	0.00	-0.10	-0.15	-0.20	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30
Soybean plantings	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.2	1.2	1.2
Exports	0	0	25	40	40	45	45	50	50	50
Ending stocks	0	-1	12	10	13	11	8	5	3	5
Farm price, soybeans	-0.05	-0.15	-0.10	-0.15	-0.30	-0.35	-0.40	-0.40	-0.40	-0.45
Biodiesel use, soybean oil	-735	-2,389	-3,675	-4,226	-4,594	-4,778	-4,778	-4,778	-4,778	-4,777
Food use, soybean oil	585	1,014	1,250	1,501	1,719	1,803	1,853	1,953	2,053	2,052
Exports, soybean oil	225	1,325	2,300	2,700	2,825	2,950	2,900	2,800	2,725	2,750
Ending stocks, soybean oil	-75	-25	100	125	175	200	225	250	250	225
Soybean oil price	-0.0025	-0.0075	-0.010	-0.0125	-0.020	-0.020	-0.020	-0.020	-0.020	-0.020
Soybean meal price	0.00	-2.00	-1.50	-1.50	-2.50	-4.00	-6.00	-6.50	-8.00	-10.00

Units for plantings are million acres; corn and soybean uses, million bushels; farm prices, dollars per bushel; soybean oil uses, million pounds; soybean oil price, dollars per pound; and soybean meal price, dollars per ton.

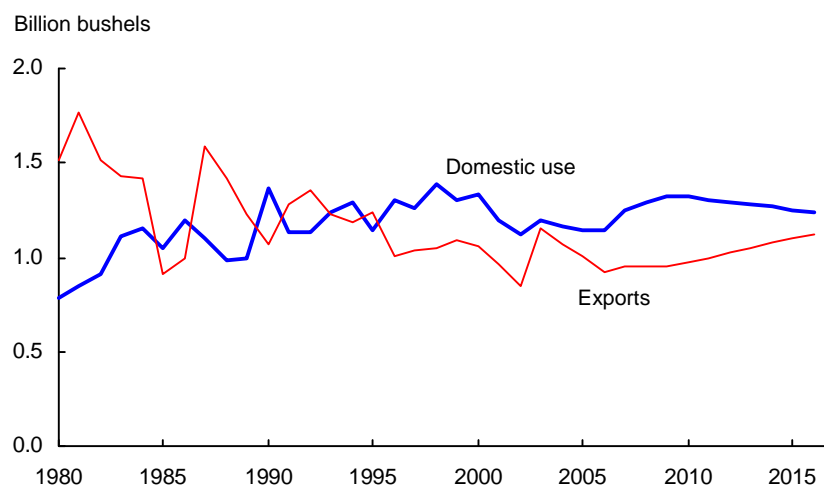
### Corn: Domestic use and exports



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 2009/10.

- Large increases are projected in corn used for ethanol production over the next several years. Relatively high prices for oil contribute to favorable returns for ethanol production, which combine with government programs to provide economic incentives for the large 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 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, which already has tariff-free status.

### Wheat: Domestic use and exports

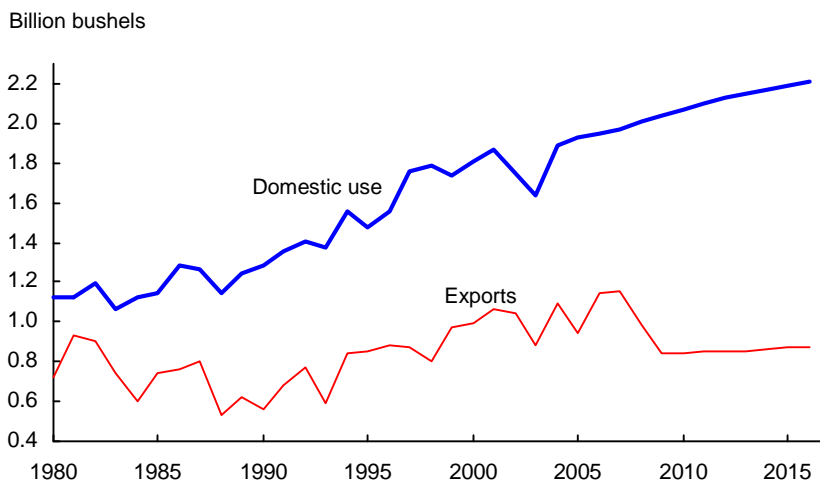


Overall demand in the U.S. wheat sector grows very slowly through the projection period.

- Domestic demand for wheat reflects a relatively mature market. Food use of wheat is projected to show moderate gains. Growth is somewhat slower than population increases, reflecting adjustments by some consumers to reduce carbohydrates in diets.
- Feed use of wheat, a low-value use of the crop, rises sharply in the initial years of the projections as higher corn prices encourage increases in wheat feeding, particularly in the summer quarter. As corn prices fall, wheat feeding declines after 2010/11 due to relatively higher wheat prices compared with corn.
- U.S. wheat exports are steady over the next several years, but increase after 2009/10 as income and population in developing countries grow, raising global wheat consumption and trade. Competition continues from the European Union (EU), Canada, Argentina, Australia, and the Black Sea region. The U.S. market share initially declines but then holds relatively constant near 22 percent once U.S. exports resume their growth. Market shares for Australia, Argentina, and the Black Sea region increase, while shares for Canada and the EU decline.



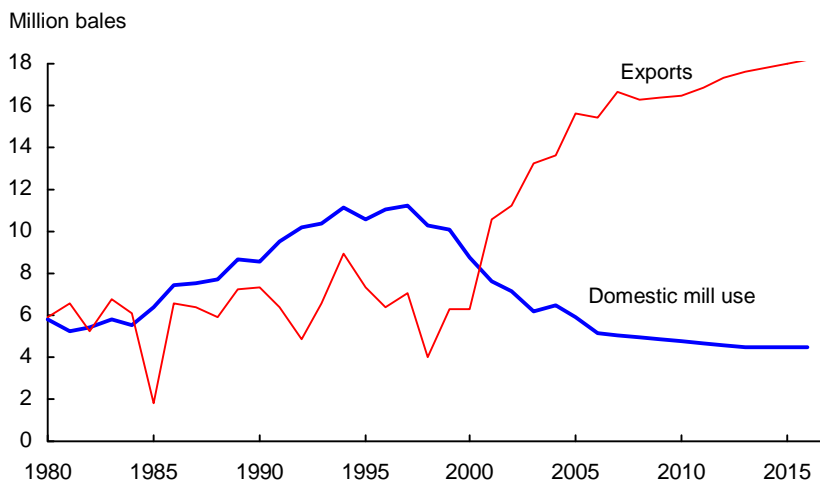
### Soybeans: Domestic use and exports



Domestic use of soybeans continues to rise slowly, but U.S. soybean exports initially fall and then grow very slowly.

- 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 increasing domestic soybean oil demand for biodiesel production through 2011/12.
- U.S. soybean exports fall below 900 million bushels as U.S. acreage is shifted to corn to support ethanol production and competition from Brazil strengthens. Consequently, the U.S. market share of global soybean trade declines to less than 25 percent.
- U.S. exports of soybean oil and soybean meal face strengthening competition from South American producers. U.S. exports of soybean oil are also limited by increases in domestic consumption, while soybean meal exports benefit from rising domestic supplies.

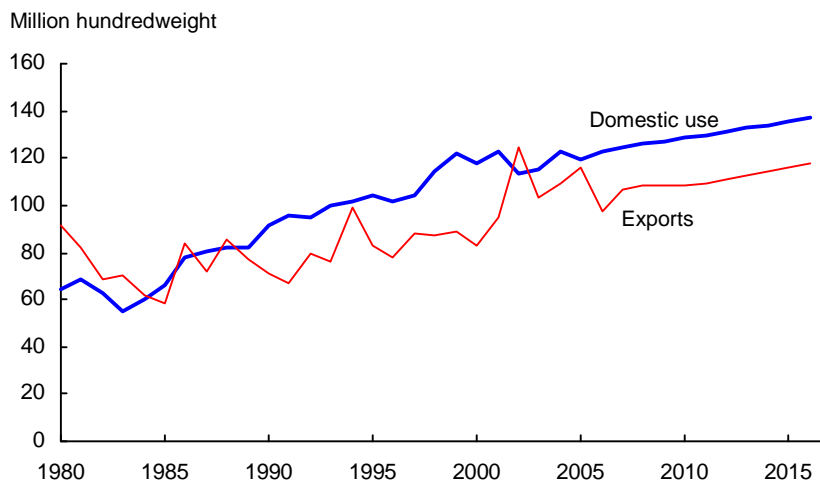
### Upland cotton: Domestic mill use and exports



U.S. mill use of upland cotton declines in the projections while upland cotton exports rise after 2008/09.

- 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 2008/09 as supplies are reduced due to acreage shifts to corn. Exports then grow moderately, accounting for 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 2008/09 keep the U.S. cotton trade share at 37-38 percent, down from over 40 percent in 2003/04 and 2004/05.

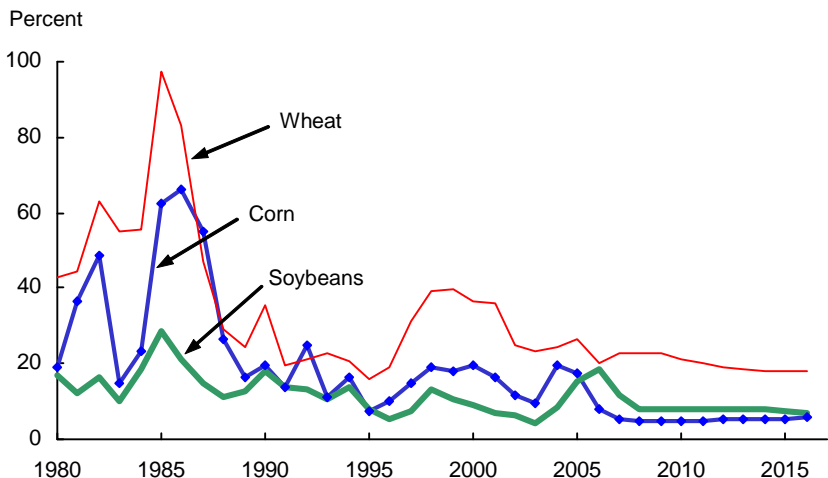
### Rice: Domestic use and exports



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

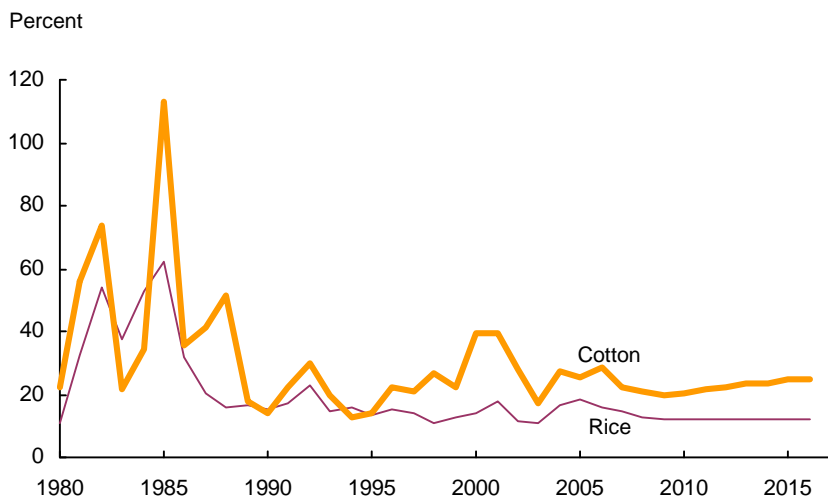
- Growth in domestic use of rice is projected at only slightly faster than population growth, well below the rates of growth in the 1980s and 1990s when per capita use rose rapidly. Imports of aromatic varieties of rice from Asia account for a growing share of domestic use in the projections.
- U.S. rice exports are projected to increase at a moderate pace over the next decade as the U.S. price difference over Asian competitors falls, increasing U.S. competitiveness in global rice markets. Rough rice exports to Latin America are expected to continue increasing and account for most of the U.S. export expansion.
- Global rice prices are projected to increase about 2 percent per year, exceeding \$8.60 per hundredweight (rough basis) at the end of the projection period and remaining above the loan rate of \$6.50 throughout. Despite slower production growth in Asia and growing worldwide import demand for rice, increases in global prices are limited by moderate consumption growth, reflecting dietary shifts away from staple foods in Asia as incomes rise. U.S. rice prices drop slightly early in the projection period, and then slowly increase to nearly \$10 per hundredweight by 2016. The U.S. price difference over Asian competitors declines for most of the projection period.

**Stocks-to-use ratios: Corn, wheat, and soybeans**



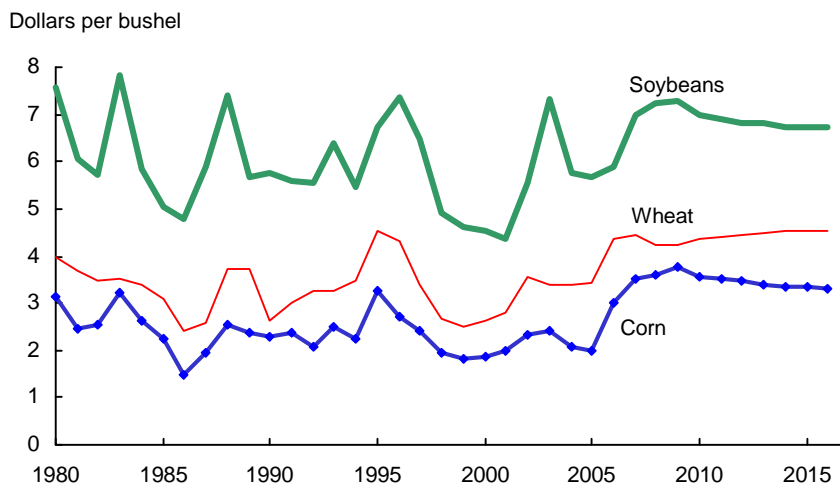
Strong ethanol demand sharply lowers U.S. corn stocks in the projections. Shifts in acreage to corn from soybeans push soybean stocks down from their record levels of recent years. After the ethanol expansion slows later in the projections, stocks rebuild somewhat for corn and stabilize at lower levels for soybeans. Wheat stocks rebound from 2006/07 levels as higher prices encourage additional acreage and production. As wheat exports strengthen in subsequent years, stocks decline.

**Stocks-to-use ratios: Cotton and rice**



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. Similarly, stocks of rice fall as acreage initially declines, but rice stocks gradually increase after 2010/11 as rice acreage rises.

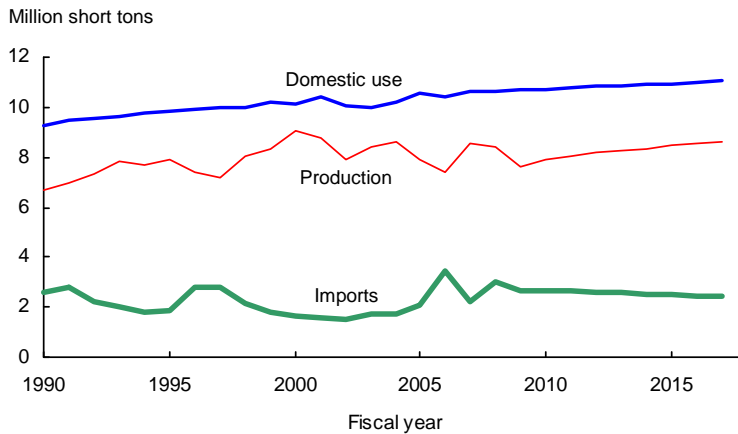
### Corn, wheat, and soybean prices



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

- Corn prices rise sharply through 2009/10 as increases in ethanol production strengthen corn demand. In the longer run, higher acreage and gains in yields are sufficient to meet slower ethanol production gains and moderate export growth, resulting in rising stocks-to-use ratios and falling prices for corn. Nonetheless, corn prices remain high.
- Acreage reductions for soybeans and declines in stocks from initially large levels lead to large soybean price increases through the early years of the projections. In the longer run, soybean prices are projected to fall back somewhat due to supply response in South America.
- Wheat prices are held high in the early years of the projections despite somewhat higher production as higher corn prices support wheat prices by encouraging increased wheat feed use. Later in the projections, wheat exports increase moderately, lowering the stocks-to-use ratio and raising wheat prices further.

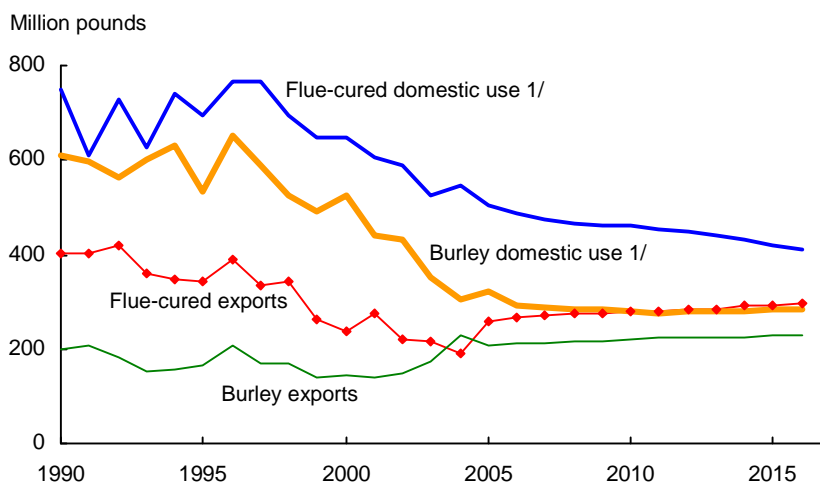
### Sugar: Domestic production, use, and imports



Sugar projections for the United States and Mexico are strongly interrelated. For additional discussion of projections for Mexico, see *Sugar and Sweeteners Outlook*, February 2007, available at <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1386>.

- On July 27, 2006, the United States and Mexico announced an agreement that resolves disputes related to each nation's interpretation of sweetener provisions of the North American Free Trade Agreement (NAFTA). Effective on January 1, 2008, there will be no duties or quantitative restraints on sugar or high fructose corn syrup (HFCS) trade between the two countries. Mexico's over-quota tariff on U.S. sugar will be eliminated on January 1, 2008, as required by the NAFTA. The United States and Mexico confirmed that on July 3, 2006, they submitted a joint letter to the World Trade Organization (WTO) Dispute Settlement Body in which both countries accepted in principle the elimination of Mexico's soft drink and distribution taxes.
- Mexico's beverage industry is assumed to shift to higher use of HFCS in 2008 and subsequent years in the projection period. This implies a higher exportable surplus of sugar from Mexico. Returns from exporting sugar to the United States are 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. As a result, Mexican sugar exports are projected to rise to 889,000 metric tons, raw value (MTRV) in 2008. After 2008, Mexican sugar exports decrease about 40,000 MTRV per year as more production is used to satisfy expanding Mexican sweetener demand. (In Mexico, per capita sweetener consumption is assumed to grow about 0.9 percent a year.)
- The U.S. sugar price support program includes the loan rate program and marketing allotments. With high imports of sugar projected, the import trigger (1.532 million short ton, raw value--STRV) for suspension of allotments is likely to be exceeded in all years of the projections. Downward price pressures implied by NAFTA sugar imports indicate forfeitures to the Commodity Credit Corporation (CCC) throughout the projection period, which average 164,000 STRV per year. Historical growth trends in U.S. sugar sector productivity measures (sugarbeet yields, sugarcane yields, and sugar per acre) are assumed to continue throughout the projections.
- The raw sugar tariff-rate quota (TRQ) is established each year in the projections at 1,117,195 MTRV, the WTO minimum access level. The refined sugar TRQ is established each year at 57,000 MTRV. The yearly raw sugar TRQ shortfall is assumed to equal about 45,000 MTRV.
- The sugar projections assume that sweetener consumption in the United States grows at the same rate as does population. Because growth in imports of sugar-containing products is higher than population growth, per capita consumption of domestically delivered sugar decreases slightly during the projection period.

### U.S. flue-cured and burley tobacco: Domestic use and exports

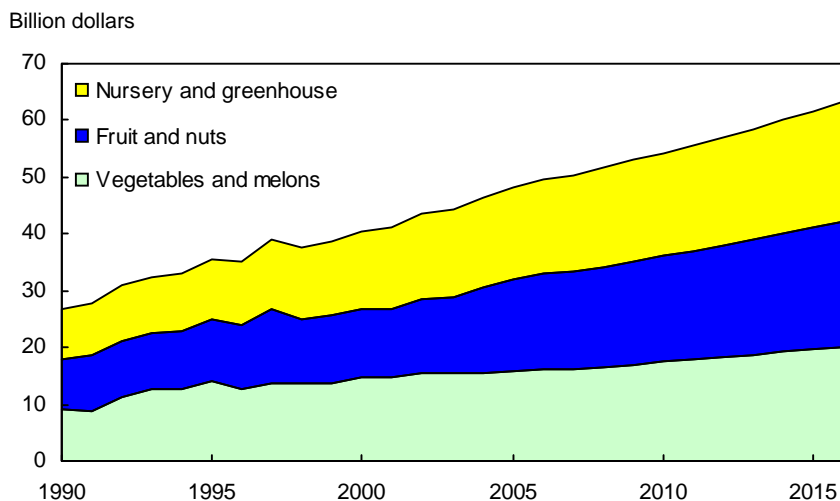


1/ Domestic use includes domestically grown and imported tobacco.

The tobacco sector is continuing to adjust to the post-program era. Legislation enacted in October 2004 ended the U.S. tobacco marketing quota and price support program beginning with the 2005 crop year. During the first season without a program (2005/06), nearly half of the tobacco producers pulled out of production. Remaining growers grew similar levels as previously. During the second season after the program, many of those remaining growers expanded operations and tobacco acreage and production increased. Production during the 2006 crop year is expected to be about 13 percent greater than the first post-program crop.

- Tobacco leaf production expands starting in 2006 as costs decline due to the elimination of costs associated with acquiring quota and as economies of scale are achieved on fewer, larger farms. Additionally, production shifts to areas such as the Coastal Plain of North Carolina and western Kentucky, where producers can achieve more economically viable scales of operation. Pennsylvania has become a major burley producing State. Leaf prices recovered slightly in 2006/07 and are projected to remain favorable for growers with marketing contracts.
- Tobacco exports are projected to increase moderately over the next decade. U.S. leaf remains competitive on the global market although the tobacco industry also faces competition from foreign producers, particularly Brazil.
- Declining cigarette consumption in the United States is an important factor underlying projected decreases in domestic use of tobacco leaf. Cigarette sales in the United States are expected to continue to fall 2-3 percent per year for the projection period. Per capita consumption declines as restrictions on smoking become more widespread and as the cost of cigarettes increases due to higher prices and taxes. Exports of cigarettes will likely stabilize near current levels.

## Value of horticultural production



The total farmgate production value of horticultural crops for 2006 is \$50 billion, with about a third of the total accruing to each of the following three categories: fruits and nuts; vegetables and melons; and nursery, greenhouse, and other crops. The production value grows by 2.5 percent annually over the next decade, reaching \$64 billion.

- 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 \$7 billion from 2006 to 2016. The dollar's appreciation after 2008 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 2016. 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 \$8.4 billion out of a total \$29.2 billion in 2006. Mexico is the second biggest source of U.S. horticultural imports, which amounted to \$6.7 billion in 2006. Chile, Canada, 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 2016, with the major export markets including Canada, 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, 2005-2016

	Direct payment	Marketing assistance	Target price
	rate	loan rate	
	<i>Dollars<sup>1</sup></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

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
	<i>Million acres</i>											
Crop allocation												
Corn	6.0	6.2	6.4	5.9	5.7	5.8	6.0	6.2	6.4	6.6	6.6	6.8
Sorghum	0.9	0.9	1.0	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0
Barley	0.8	0.9	0.9	0.8	0.8	0.8	0.8	0.9	0.9	0.9	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	0.5	0.5
Wheat	8.4	8.7	9.0	8.2	7.9	8.1	8.3	8.7	8.9	9.1	9.2	9.4
Upland cotton	1.5	1.6	1.6	1.5	1.4	1.5	1.5	1.6	1.6	1.6	1.7	1.7
Soybeans	5.5	5.7	5.9	5.4	5.2	5.3	5.5	5.7	5.9	6.0	6.1	6.2
Subtotal	23.6	24.4	25.2	23.1	22.2	22.7	23.5	24.4	25.2	25.7	26.0	26.4
Other	11.4	11.7	11.8	10.5	10.0	10.3	10.7	11.1	11.5	11.7	11.9	12.8
Total	35.0	36.1	37.1	33.6	32.2	33.0	34.1	35.6	36.7	37.4	37.9	39.2

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

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<i>Million acres</i>												
Planted acreage, eight major crops												
Corn	81.8	78.6	86.0	89.0	89.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
Sorghum	6.5	6.3	6.0	5.8	5.8	5.8	5.7	5.7	5.6	5.6	5.5	5.5
Barley	3.9	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Oats	4.2	4.2	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Wheat	57.2	57.3	60.0	59.5	59.0	58.5	58.5	58.5	58.5	58.5	58.5	58.5
Rice	3.4	2.8	3.1	3.0	3.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Upland cotton	14.0	15.0	13.7	13.5	13.5	13.6	13.7	13.7	13.8	13.8	13.8	13.8
Soybeans	72.0	75.6	71.0	69.5	69.0	69.0	69.0	69.0	69.0	68.8	68.8	68.8
Total	243.0	243.3	247.4	247.9	246.9	247.6	247.6	247.6	247.6	247.4	247.3	247.3
Harvested acreage, eight major crops												
Corn	75.1	71.0	78.8	81.8	81.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8
Sorghum	5.7	5.3	5.1	4.9	4.9	4.9	4.9	4.9	4.8	4.8	4.7	4.7
Barley	3.3	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Oats	1.8	1.6	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Wheat	50.1	46.8	51.0	50.6	50.2	49.7	49.7	49.7	49.7	49.7	49.7	49.7
Rice	3.4	2.8	3.1	3.0	3.0	3.0	3.0	3.1	3.1	3.1	3.1	3.1
Upland cotton	13.5	12.5	12.4	12.3	12.3	12.4	12.5	12.5	12.5	12.5	12.6	12.6
Soybeans	71.3	74.5	69.9	68.4	67.9	67.9	67.9	67.9	67.9	67.7	67.7	67.7
Total	224.2	217.5	225.2	225.9	225.0	225.6	225.7	225.8	225.7	225.5	225.5	225.5

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

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
<b>Yields<sup>1</sup></b>												
Corn	147.9	151.2	153.1	155.0	156.9	158.8	160.7	162.6	164.5	166.4	168.3	170.2
Sorghum	68.7	54.2	64.8	65.2	65.6	66.0	66.4	66.8	67.2	67.6	68.0	68.4
Barley	64.8	61.0	64.8	65.4	66.0	66.6	67.2	67.8	68.4	69.0	69.6	70.2
Oats	63.0	59.5	62.9	63.3	63.7	64.1	64.5	64.9	65.3	65.7	66.1	66.5
Wheat	42.0	38.7	42.5	42.8	43.1	43.4	43.7	44.0	44.3	44.6	44.9	45.2
Rice	6,636	6,847	6,916	6,991	7,060	7,130	7,192	7,256	7,321	7,379	7,437	7,496
Upland cotton	825	788	800	810	820	830	840	850	855	860	865	870
Soybeans	43.0	43.0	41.5	42.0	42.4	42.9	43.3	43.8	44.2	44.7	45.1	45.6
<b>Production<sup>2</sup></b>												
Corn	11,112	10,745	12,065	12,680	12,835	13,150	13,305	13,465	13,620	13,780	13,935	14,095
Sorghum	394	288	330	320	320	325	325	325	325	325	320	320
Barley	212	180	195	195	200	200	200	205	205	205	210	210
Oats	115	94	120	120	120	120	125	125	125	125	125	125
Wheat	2,105	1,812	2,170	2,165	2,165	2,155	2,170	2,185	2,200	2,215	2,230	2,245
Rice	223.2	193.3	213.0	211.1	213.6	216.0	219.0	221.3	223.7	225.8	227.9	230.1
Upland cotton	23,260	20,510	20,700	20,800	21,000	21,400	21,900	22,100	22,300	22,400	22,700	22,800
Soybeans	3,063	3,204	2,900	2,870	2,880	2,910	2,940	2,970	3,000	3,025	3,055	3,085
<b>Exports<sup>2</sup></b>												
Corn	2,147	2,200	1,925	1,850	1,850	1,925	2,000	2,050	2,100	2,150	2,200	2,250
Sorghum	195	165	160	150	150	150	150	150	150	150	150	150
Barley	28	20	20	20	20	20	20	20	20	20	20	20
Oats	2	2	3	3	3	3	3	3	3	3	3	3
Wheat	1,009	925	950	950	950	975	1,000	1,025	1,050	1,075	1,100	1,125
Rice	115.8	97.0	107.0	108.0	108.0	108.0	109.0	111.0	113.0	114.5	116.0	117.5
Upland cotton	17,437	15,450	16,700	16,300	16,400	16,500	16,900	17,300	17,600	17,800	18,000	18,150
Soybeans	947	1,145	1,150	980	845	845	850	850	855	865	875	875
Soybean meal	7,950	8,500	9,000	9,950	10,100	10,200	10,450	10,500	10,500	10,600	10,600	10,700
<b>Ending stocks<sup>2</sup></b>												
Corn	1,971	935	660	620	580	640	670	700	725	750	765	805
Sorghum	65	39	34	34	34	34	34	34	34	34	34	34
Barley	108	93	93	93	98	97	96	100	99	97	100	98
Oats	53	49	51	53	50	47	49	51	48	50	52	49
Wheat	571	418	493	517	517	482	462	442	427	422	422	427
Rice	43.0	34.5	34.2	30.4	28.3	27.9	28.8	29.4	29.7	29.9	30.2	30.4
Upland cotton	5,981	5,912	4,850	4,400	4,150	4,300	4,650	4,900	5,150	5,300	5,550	5,750
Soybeans	449	565	355	237	235	237	234	232	235	233	229	230
<b>Prices<sup>3</sup></b>												
Corn	2.00	3.00	3.50	3.60	3.75	3.55	3.50	3.45	3.40	3.35	3.35	3.30
Sorghum	1.86	3.00	3.30	3.35	3.50	3.30	3.25	3.20	3.15	3.10	3.10	3.05
Barley	2.53	2.89	3.50	3.60	3.70	3.55	3.45	3.45	3.40	3.35	3.35	3.35
Oats	1.63	1.85	2.40	2.45	2.50	2.35	2.25	2.20	2.15	2.10	2.10	2.10
Wheat	3.42	4.35	4.45	4.25	4.25	4.35	4.40	4.45	4.50	4.55	4.55	4.55
Rice	7.62	9.25	8.95	8.95	9.20	9.35	9.41	9.43	9.50	9.60	9.70	9.83
Soybeans	5.66	5.90	7.00	7.25	7.30	7.00	6.90	6.80	6.80	6.75	6.75	6.75
Soybean oil	0.234	0.260	0.300	0.315	0.320	0.315	0.310	0.305	0.305	0.305	0.305	0.305
Soybean meal	174.2	177.5	200.0	205.0	205.0	195.0	192.5	190.0	188.5	186.5	185.0	185.0

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	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Area (million acres):												
Planted acres	81.8	78.6	86.0	89.0	89.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
Harvested acres	75.1	71.0	78.8	81.8	81.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8
Yields (bushels per acre):												
Yield/harvested acre	147.9	151.2	153.1	155.0	156.9	158.8	160.7	162.6	164.5	166.4	168.3	170.2
Supply and use (million bushels):												
Beginning stocks	2,114	1,971	935	660	620	580	640	670	700	725	750	765
Production	11,112	10,745	12,065	12,680	12,835	13,150	13,305	13,465	13,620	13,780	13,935	14,095
Imports	9	10	15	20	25	20	20	20	20	20	20	20
Supply	13,235	12,725	13,015	13,360	13,480	13,750	13,965	14,155	14,340	14,525	14,705	14,880
Feed & residual	6,136	6,050	5,825	5,775	5,725	5,750	5,775	5,800	5,850	5,900	5,950	5,975
Food, seed, & industrial	2,981	3,540	4,605	5,115	5,325	5,435	5,520	5,605	5,665	5,725	5,790	5,850
Fuel alcohol use <sup>1</sup>	1,603	2,150	3,200	3,700	3,900	4,000	4,075	4,150	4,200	4,250	4,300	4,350
Domestic use	9,117	9,590	10,430	10,890	11,050	11,185	11,295	11,405	11,515	11,625	11,740	11,825
Exports	2,147	2,200	1,925	1,850	1,850	1,925	2,000	2,050	2,100	2,150	2,200	2,250
Total use	11,264	11,790	12,355	12,740	12,900	13,110	13,295	13,455	13,615	13,775	13,940	14,075
Ending stocks	1,971	935	660	620	580	640	670	700	725	750	765	805
Stocks/use ratio, percent	17.5	7.9	5.3	4.9	4.5	4.9	5.0	5.2	5.3	5.4	5.5	5.7
Prices (dollars per bushel):												
Farm price	2.00	3.00	3.50	3.60	3.75	3.55	3.50	3.45	3.40	3.35	3.35	3.30
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	194	207	216	222	225	228	230	233	236	239	242	245
Per bushel	1.31	1.37	1.41	1.43	1.43	1.43	1.43	1.44	1.44	1.44	1.44	1.44
Returns over variable costs (dollars per acre):												
Net returns	132	247	319	336	363	336	332	328	323	318	321	316

Note: Marketing year beginning September 1 for corn. 1/ Corn used in ethanol production is accounted for in fuel alcohol use. Distillers grains, a coproduct of ethanol production, is not accounted for in the balance sheet for corn.

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

Item	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Area (million acres):												
Planted acres	6.5	6.3	6.0	5.8	5.8	5.8	5.7	5.7	5.6	5.6	5.5	5.5
Harvested acres	5.7	5.3	5.1	4.9	4.9	4.9	4.9	4.9	4.8	4.8	4.7	4.7
Yields (bushels per acre):												
Yield/harvested acre	68.7	54.2	64.8	65.2	65.6	66.0	66.4	66.8	67.2	67.6	68.0	68.4
Supply and use (million bushels):												
Beginning stocks	57	65	39	34	34	34	34	34	34	34	34	34
Production	394	288	330	320	320	325	325	325	325	325	320	320
Imports	0	0	0	0	0	0	0	0	0	0	0	0
Supply	451	354	369	354	354	359	359	359	359	359	354	354
Feed & residual	141	95	120	120	120	125	125	125	125	125	120	120
Food, seed, & industrial	50	55	55	50	50	50	50	50	50	50	50	50
Domestic	191	150	175	170	170	175	175	175	175	175	170	170
Exports	195	165	160	150	150	150	150	150	150	150	150	150
Total use	386	315	335	320	320	325	325	325	325	325	320	320
Ending stocks	65	39	34	34	34	34	34	34	34	34	34	34
Stocks/use ratio, percent	16.8	12.4	10.1	10.6	10.6	10.5	10.5	10.5	10.5	10.5	10.6	10.6
Prices (dollars per bushel):												
Farm price	1.86	3.00	3.30	3.35	3.50	3.30	3.25	3.20	3.15	3.10	3.10	3.05
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	125	132	137	140	142	144	146	148	150	152	154	156
Per bushel	1.81	2.43	2.11	2.14	2.16	2.18	2.20	2.21	2.23	2.25	2.27	2.29
Returns over variable costs (dollars per acre):												
Net returns	23	31	77	79	88	74	70	66	62	57	57	52

Note: Marketing year beginning September 1 for sorghum.

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

Item	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Area (million acres):												
Planted acres	3.9	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Harvested acres	3.3	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Yields (bushels per acre):												
Yield/harvested acre	64.8	61.0	64.8	65.4	66.0	66.6	67.2	67.8	68.4	69.0	69.6	70.2
Supply and use (million bushels):												
Beginning stocks	128	108	88	88	88	93	92	91	95	94	92	95
Production	212	180	195	195	200	200	200	205	205	205	210	210
Imports	5	15	20	25	25	25	25	25	25	25	25	25
Supply	346	303	303	308	313	318	317	321	325	324	327	330
Feed & residual	52	40	40	45	45	50	50	50	55	55	55	60
Food, seed, & industrial	158	155	155	155	155	156	156	156	156	157	157	157
Domestic	210	195	195	200	200	206	206	206	211	212	212	217
Exports	28	20	20	20	20	20	20	20	20	20	20	20
Total use	238	215	215	220	220	226	226	226	231	232	232	237
Ending stocks	108	88	88	88	93	92	91	95	94	92	95	93
Stocks/use ratio, percent	45.4	40.9	40.9	40.0	42.3	40.7	40.3	42.0	40.7	39.7	40.9	39.2
Prices (dollars per bushel):												
Farm price	2.53	2.90	3.50	3.50	3.60	3.40	3.25	3.25	3.20	3.15	3.15	3.15
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	94	100	104	106	108	109	111	112	114	115	117	119
Per bushel	1.45	1.63	1.60	1.63	1.64	1.64	1.65	1.66	1.67	1.67	1.68	1.69
Returns over variable costs (dollars per acre):												
Net returns	71	77	123	122	130	117	108	108	105	102	102	103

Note: Marketing year beginning June 1 for barley.

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

Item	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Area (million acres):												
Planted acres	4.2	4.2	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Harvested acres	1.8	1.6	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Yields (bushels per acre):												
Yield/harvested acre	63.0	59.5	62.9	63.3	63.7	64.1	64.5	64.9	65.3	65.7	66.1	66.5
Supply and use (million bushels):												
Beginning stocks	58	53	49	51	53	50	47	49	51	48	50	52
Production	115	94	120	120	120	120	125	125	125	125	125	125
Imports	91	105	85	90	90	90	90	90	90	95	95	95
Supply	264	251	254	261	263	260	262	264	266	268	270	272
Feed & residual	135	125	125	130	135	135	135	135	140	140	140	145
Food, seed, & industrial	74	75	75	75	75	75	75	75	75	75	75	75
Domestic	209	200	200	205	210	210	210	210	215	215	215	220
Exports	2	2	3	3	3	3	3	3	3	3	3	3
Total use	211	202	203	208	213	213	213	213	218	218	218	223
Ending stocks	53	49	51	53	50	47	49	51	48	50	52	49
Stocks/use ratio, percent	25.1	24.3	25.1	25.5	23.5	22.1	23.0	23.9	22.0	22.9	23.9	22.0
Prices (dollars per bushel):												
Farm price	1.63	1.85	2.40	2.45	2.50	2.35	2.25	2.20	2.15	2.10	2.10	2.10
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	63	67	70	72	73	74	75	76	77	78	80	81
Per bushel	1.00	1.13	1.12	1.14	1.15	1.16	1.17	1.17	1.18	1.19	1.20	1.21
Returns over variable costs (dollars per acre):												
Net returns	40	43	81	83	86	77	70	67	63	59	59	59

Note: Marketing year beginning June 1 for oats.

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

Item	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Area (million acres):												
Planted acres	57.2	57.3	60.0	59.5	59.0	58.5	58.5	58.5	58.5	58.5	58.5	58.5
Harvested acres	50.1	46.8	51.0	50.6	50.2	49.7	49.7	49.7	49.7	49.7	49.7	49.7
Yields (bushels per acre):												
Yield/harvested acre	42.0	38.7	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	540	571	418	493	517	517	482	462	442	427	422	422
Production	2,105	1,812	2,170	2,165	2,165	2,155	2,170	2,185	2,200	2,215	2,230	2,245
Imports	82	105	100	105	105	110	110	115	115	120	120	125
Supply	2,727	2,488	2,688	2,763	2,787	2,782	2,762	2,762	2,757	2,762	2,772	2,792
Food	915	920	930	935	940	945	950	955	960	965	970	975
Seed	78	80	80	81	80	80	80	80	80	80	80	80
Feed & residual	153	145	235	280	300	300	270	260	240	220	200	185
Domestic	1,146	1,145	1,245	1,296	1,320	1,325	1,300	1,295	1,280	1,265	1,250	1,240
Exports	1,009	925	950	950	950	975	1,000	1,025	1,050	1,075	1,100	1,125
Total use	2,155	2,070	2,195	2,246	2,270	2,300	2,300	2,320	2,330	2,340	2,350	2,365
Ending stocks	571	418	493	517	517	482	462	442	427	422	422	427
Stocks/use ratio, percent	26.5	20.2	22.5	23.0	22.8	21.0	20.1	19.1	18.3	18.0	18.0	18.1
Prices (dollars per bushel):												
Farm price	3.42	4.35	4.45	4.25	4.25	4.35	4.40	4.45	4.50	4.55	4.55	4.55
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	80	86	89	91	93	94	95	97	98	100	101	102
Per bushel	1.91	2.21	2.10	2.14	2.15	2.17	2.18	2.20	2.22	2.23	2.25	2.27
Returns over variable costs (dollars per acre):												
Net returns	63	83	100	90	90	95	97	99	101	103	103	103

Note: Marketing year beginning June 1 for wheat.



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

Item	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
<b>Soybeans</b>												
Area (million acres):												
Planted	72.0	75.6	71.0	69.5	69.0	69.0	69.0	69.0	69.0	68.8	68.8	68.8
Harvested	71.3	74.5	69.9	68.4	67.9	67.9	67.9	67.9	67.9	67.7	67.7	67.7
Yield/harvested acre (bushels)	43.0	43.0	41.5	42.0	42.4	42.9	43.3	43.8	44.2	44.7	45.1	45.6
Supply (million bushels)												
Beginning stocks, Sep. 1	256	449	565	355	237	235	237	234	232	235	233	229
Production	3,063	3,204	2,900	2,870	2,880	2,910	2,940	2,970	3,000	3,025	3,055	3,085
Imports	3	4	4	4	4	4	4	4	4	4	4	4
Total supply	3,322	3,657	3,469	3,229	3,121	3,149	3,181	3,208	3,236	3,264	3,292	3,318
Disposition (million bushels)												
Crush	1,739	1,780	1,820	1,870	1,895	1,920	1,950	1,975	1,995	2,015	2,035	2,060
Seed and residual	188	166	144	143	146	147	147	151	151	152	152	153
Exports	947	1,145	1,150	980	845	845	850	850	855	865	875	875
Total disposition	2,874	3,091	3,114	2,993	2,886	2,912	2,947	2,976	3,001	3,032	3,062	3,088
Carryover stocks, Aug. 31												
Total ending stocks	449	565	355	237	235	237	234	232	235	233	229	230
Stocks/use ratio, percent	15.6	18.3	11.4	7.9	8.1	8.1	7.9	7.8	7.8	7.7	7.5	7.4
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	5.66	5.90	7.00	7.25	7.30	7.00	6.90	6.80	6.80	6.75	6.75	6.75
Variable costs of production (dollars):												
Per acre	91	97	101	103	104	105	106	107	108	109	110	111
Per bushel	2.11	2.25	2.43	2.46	2.46	2.45	2.45	2.44	2.44	2.43	2.43	2.43
Returns over variable costs (dollars per acre):												
Net returns	153	157	190	201	205	195	193	191	193	193	195	197
<b>Soybean oil (million pounds)</b>												
Beginning stocks, Oct. 1	1,699	2,968	2,688	2,088	1,888	1,878	1,883	1,883	1,903	1,883	1,818	1,738
Production	20,393	20,115	20,750	21,365	21,670	21,975	22,335	22,645	22,895	23,140	23,390	23,700
Imports	35	55	125	135	145	155	165	175	185	195	205	215
Total supply	22,127	23,138	23,563	23,588	23,703	24,008	24,383	24,703	24,983	25,218	25,413	25,653
Domestic disappearance	18,009	19,200	20,500	20,825	21,125	21,425	21,725	22,025	22,325	22,625	22,925	23,225
Exports	1,150	1,250	975	875	700	700	775	775	775	775	750	725
Total demand	19,159	20,450	21,475	21,700	21,825	22,125	22,500	22,800	23,100	23,400	23,675	23,950
Ending stocks, Sep. 30	2,968	2,688	2,088	1,888	1,878	1,883	1,883	1,903	1,883	1,818	1,738	1,703
Soybean oil price (dollars per lb)	0.234	0.260	0.300	0.315	0.320	0.315	0.310	0.305	0.305	0.305	0.305	0.305
<b>Soybean meal (thousand short tons)</b>												
Beginning stocks, Oct. 1	172	320	300	300	300	300	300	300	300	300	300	300
Production	41,241	42,415	43,285	44,535	45,135	45,710	46,435	46,960	47,435	48,010	48,485	49,060
Imports	140	165	165	165	165	165	165	165	165	165	165	165
Total supply	41,553	42,900	43,750	45,000	45,600	46,175	46,900	47,425	47,900	48,475	48,950	49,525
Domestic disappearance	33,283	34,100	34,450	34,750	35,200	35,675	36,150	36,625	37,100	37,575	38,050	38,525
Exports	7,950	8,500	9,000	9,950	10,100	10,200	10,450	10,500	10,500	10,600	10,600	10,700
Total demand	41,233	42,600	43,450	44,700	45,300	45,875	46,600	47,125	47,600	48,175	48,650	49,225
Ending stocks, Sep. 30	320	300	300	300	300	300	300	300	300	300	300	300
Soybean meal price (dollars per ton)	174.17	177.50	200.00	205.00	205.00	195.00	192.50	190.00	188.50	186.50	185.00	185.00
Crushing yields (pounds per bushel)												
Soybean oil	11.73	11.30	11.40	11.43	11.44	11.45	11.46	11.47	11.48	11.49	11.50	11.51
Soybean meal	47.44	47.66	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)	1.22	1.27	1.18	1.23	1.24	1.25	1.23	1.22	1.19	1.19	1.16	1.16

Note: Marketing year beginning September 1 for soybeans; October 1 for soybean oil and meal.

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

Item	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Area (thousand acres):												
Planted	3,384	2,841	3,100	3,040	3,045	3,050	3,065	3,070	3,075	3,080	3,085	3,090
Harvested	3,364	2,823	3,080	3,020	3,025	3,030	3,045	3,050	3,055	3,060	3,065	3,070
Yields (pounds per acre):												
Yield/harvested acre	6,636	6,847	6,916	6,991	7,060	7,130	7,192	7,256	7,321	7,379	7,437	7,496
Supply and use (million cwt):												
Beginning stocks	37.7	43.0	34.5	34.2	30.4	28.3	27.9	28.8	29.4	29.7	29.9	30.2
Production	223.2	193.3	213.0	211.1	213.6	216.0	219.0	221.3	223.7	225.8	227.9	230.1
Imports	17.1	18.0	18.5	19.1	19.6	20.2	20.8	21.5	22.1	22.8	23.4	24.1
Total supply	278.1	254.3	266.0	264.4	263.6	264.5	267.7	271.6	275.2	278.2	281.3	284.4
Domestic use and residual	119.3	122.8	124.8	126.0	127.3	128.6	129.9	131.2	132.5	133.8	135.1	136.5
Exports	115.8	97.0	107.0	108.0	108.0	108.0	109.0	111.0	113.0	114.5	116.0	117.5
Total use	235.1	219.8	231.8	234.0	235.3	236.6	238.9	242.2	245.5	248.3	251.1	254.0
Ending stocks (million cwt.)	43.0	34.5	34.2	30.4	28.3	27.9	28.8	29.4	29.7	29.9	30.2	30.4
Stocks/use ratio, percent	18.3	15.7	14.8	13.0	12.0	11.8	12.1	12.1	12.1	12.1	12.0	12.0
Milling rate, percent	70.3	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
Prices (dollars per cwt.):												
World price	6.21	7.00	7.20	7.45	7.70	7.85	8.01	8.13	8.25	8.37	8.50	8.63
Average market price	7.62	9.25	8.95	8.95	9.20	9.35	9.41	9.43	9.50	9.60	9.70	9.83
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	399	421	437	447	454	459	465	470	476	482	488	495
Per cwt.	6.01	6.16	6.32	6.40	6.43	6.44	6.46	6.48	6.51	6.54	6.57	6.60
Returns over variable costs (dollars per acre):												
Net returns	126	212	182	179	196	208	212	214	219	226	233	242

Note: Marketing year beginning August 1 for rice.

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

Item	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Area (million acres):												
Planted acres	14.0	15.0	13.7	13.5	13.5	13.6	13.7	13.7	13.8	13.8	13.8	13.8
Harvested acres	13.5	12.5	12.4	12.3	12.3	12.4	12.5	12.5	12.5	12.5	12.6	12.6
Yields (pounds per acre):												
Yield/harvested acre	825	788	800	810	820	830	840	850	855	860	865	870
Supply and use (thousand bales):												
Beginning stocks	5,482	5,981	5,912	4,850	4,400	4,150	4,300	4,650	4,900	5,150	5,300	5,550
Production	23,260	20,510	20,700	20,800	21,000	21,400	21,900	22,100	22,300	22,400	22,700	22,800
Imports	9	10	10	10	10	10	10	10	10	10	10	10
Supply	28,751	26,501	26,622	25,660	25,410	25,560	26,210	26,760	27,210	27,560	28,010	28,360
Domestic use	5,837	5,150	5,050	4,950	4,850	4,750	4,650	4,550	4,450	4,450	4,450	4,450
Exports	17,437	15,450	16,700	16,300	16,400	16,500	16,900	17,300	17,600	17,800	18,000	18,150
Total use	23,274	20,600	21,750	21,250	21,250	21,250	21,550	21,850	22,050	22,250	22,450	22,600
Ending stocks	5,981	5,912	4,850	4,400	4,150	4,300	4,650	4,900	5,150	5,300	5,550	5,750
Stocks/use ratio, percent	25.7	28.7	22.3	20.7	19.5	20.2	21.6	22.4	23.4	23.8	24.7	25.4
Prices (dollars per pound):												
Farm price <sup>1</sup>	0.477	---	---	---	---	---	---	---	---	---	---	---
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	361	372	390	400	406	410	414	419	423	428	433	438
Per pound	0.44	0.47	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.50	0.50	0.50
Returns over variable costs (dollars per acre):												
Net returns <sup>2</sup>	196	144	144	147	156	161	162	166	165	160	155	153

Note: Marketing year beginning August 1 for upland cotton.

1/ USDA is prohibited from publishing cotton price projections.

2/ Net returns include estimates of marketing loan benefits.

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

Item	Units	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Sugarbeets</b>													
Planted area	1,000 acres	1,300	1,362	1,260	1,222	1,197	1,186	1,190	1,194	1,196	1,197	1,198	1,199
Harvested area	1,000 acres	1,243	1,306	1,231	1,121	1,151	1,143	1,153	1,160	1,163	1,164	1,164	1,165
Yield	Tons/acre	22.2	25.8	23.2	23.4	23.7	23.9	24.1	24.3	24.5	24.7	24.9	25.1
Production	Mil. s. tons	27.5	33.6	28.6	26.3	27.2	27.3	27.7	28.2	28.5	28.7	29.0	29.2
<b>Sugarcane</b>													
Harvested area	1,000 acres	858	860	844	790	824	822	824	824	825	824	825	825
Yield	Tons/acre	28.7	31.8	34.3	34.5	34.5	34.6	34.7	34.8	34.9	35.0	35.1	35.2
Production	Mil. s. tons	24.6	27.3	28.9	27.3	28.4	28.4	28.6	28.7	28.8	28.8	28.9	29.0
<b>Supply:</b>													
Beginning stocks	1,000 s. tons	1,332	1,761	1,870	2,379	2,013	1,986	1,948	1,926	1,916	1,914	1,914	1,914
Production	1,000 s. tons	7,399	8,518	8,402	7,853	8,205	8,254	8,389	8,506	8,607	8,697	8,785	8,875
Beet sugar	1,000 s. tons	4,444	4,901	4,453	4,114	4,282	4,307	4,400	4,483	4,553	4,612	4,669	4,726
Cane sugar	1,000 s. tons	2,955	3,617	3,949	3,739	3,923	3,947	3,989	4,022	4,055	4,085	4,116	4,149
Total imports	1,000 s. tons	3,443	2,206	2,752	2,433	2,512	2,490	2,412	2,351	2,301	2,259	2,215	2,166
TRQ imports	1,000 s. tons	2,588	1,821	1,437	1,244	1,244	1,244	1,244	1,244	1,244	1,244	1,244	1,244
Total supply	1,000 s. tons	12,174	12,485	13,024	12,712	12,730	12,731	12,749	12,782	12,824	12,869	12,914	12,955
<b>Use:</b>													
Exports	1,000 s. tons	203	200	200	200	200	200	200	200	200	200	200	200
Domestic deliveries	1,000 s. tons	10,326	10,415	10,445	10,499	10,544	10,583	10,623	10,666	10,710	10,755	10,800	10,845
Miscellaneous	1,000 s. tons	-116	0	0	0	0	0	0	0	0	0	0	0
Total use	1,000 s. tons	10,413	10,615	10,645	10,699	10,744	10,783	10,823	10,866	10,910	10,955	11,000	11,045
Ending stocks	1,000 s. tons	1,761	1,870	2,379	2,013	1,986	1,948	1,926	1,916	1,914	1,914	1,914	1,909
CCC Acquisitions	1,000 s. tons	0	46	497	-362	-20	-35	-21	-5	3	5	4	0
Private Ending Stocks	1,000 s. tons	1,761	1,824	1,836	1,833	1,826	1,822	1,822	1,817	1,812	1,807	1,803	1,798
CCC Ending Stocks	1,000 s. tons	0	46	543	180	160	125	104	99	102	107	111	111
Stocks/use ratio	Percent	16.9	17.6	22.4	18.8	18.5	18.1	17.8	17.6	17.5	17.5	17.4	17.3
<b>Raw sugar price:</b>													
New York (No. 14)	Cents/lb.	22.62	20.79	20.77	20.77	20.77	20.77	20.75	20.75	20.75	20.75	20.74	20.74
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
<b>Grower prices:</b>													
Sugarbeets	Dol./ton	41.30	36.16	33.33	31.71	32.97	33.45	33.98	34.38	34.67	34.90	35.12	35.36
Sugarcane	Dol./ton	27.90	29.91	30.57	30.71	30.83	30.96	31.07	31.19	31.30	31.41	31.52	31.63

1/ Fiscal years, October 1 through September 30.

Table 17. Flue-cured tobacco long-term projections

Item	Unit	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Area, yield, and production:													
Planted area	1,000 acres	176	208	214	213	218	217	222	221	226	225	227	229
Harvested area	1,000 acres	176	208	214	213	218	217	222	221	226	225	227	229
Yield	lbs./acre	2,182	2,185	2,200	2,250	2,250	2,300	2,300	2,350	2,350	2,400	2,400	2,400
Production	Mil. lbs.	383	455	470	480	490	500	510	520	530	540	545	550
Supply:													
Beginning stocks	Mil. lbs.	1,050	1,089	936	826	736	663	598	548	508	483	468	463
Marketings	Mil. lbs.	383	455	470	480	490	500	510	520	530	540	545	550
Imports	Mil. lbs.	161	165	165	170	172	175	175	175	170	165	160	155
Total <sup>1</sup>	Mil. lbs.	1,594	1,708	1,571	1,476	1,398	1,338	1,283	1,243	1,208	1,188	1,173	1,168
Use:													
Domestic	Mil. lbs.	505	485	475	465	460	460	455	450	440	430	420	410
Exports	Mil. lbs.	258	267	270	275	275	280	280	285	285	290	290	295
Total <sup>1</sup>	Mil. lbs.	764	752	745	740	735	740	735	735	725	720	710	705
Ending stocks:													
Total	Mil. lbs.	1,089	936	826	736	663	598	548	508	483	468	463	463
Price:													
Avg. to growers	\$/cwt	147	155	168	170	175	180	180	180	180	180	180	180

1/ Includes both domestically grown and imported tobacco leaf.

Table 18. Burley tobacco long-term projections

Item	Unit	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Area, yield, and production:													
Planted area	1,000 acres	100	104	111	116	118	124	128	135	140	146	148	151
Harvested area	1,000 acres	100	104	111	116	118	124	128	135	140	146	148	151
Yield	lbs./acre	2,031	2,097	2,200	2,200	2,250	2,250	2,300	2,300	2,325	2,325	2,325	2,325
Production	Mil. lbs.	203	217	245	255	265	280	295	310	325	340	345	350
Supply:													
Beginning stocks	Mil. lbs.	777	639	547	477	412	353	303	263	233	218	218	218
Marketings	Mil. lbs.	203	217	245	255	265	280	295	310	325	340	345	350
Imports	Mil. lbs.	191	190	185	180	175	170	165	165	165	165	165	165
Total <sup>1</sup>	Mil. lbs.	1,171	1,047	977	912	852	803	763	738	723	723	728	733
Use:													
Domestic	Mil. lbs.	323	290	287	285	282	280	277	280	280	280	282	285
Exports	Mil. lbs.	209	210	213	215	218	220	223	225	225	225	228	230
Total <sup>1</sup>	Mil. lbs.	532	500	500	500	500	500	500	505	505	505	510	515
Ending stocks:													
Total	Mil. lbs.	639	547	477	412	353	303	263	233	218	218	218	218
Price:													
Avg. to growers	\$/cwt	156	165	170	175	180	185	190	190	190	190	190	190

1/ Includes both domestically grown and imported tobacco leaf.

Table 19. Horticultural crops long-term projections: Production, values, and prices, calendar years

Item	Unit	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Acreage <sup>1</sup> :													
Fruit and nuts													
Citrus	1,000 acres	946	878	882	886	891	895	900	904	909	913	918	923
Noncitrus <sup>2</sup>	1,000 acres	2,095	2,099	2,103	2,108	2,112	2,116	2,120	2,125	2,129	2,133	2,137	2,142
Tree nuts	1,000 acres	946	956	965	975	985	995	1,005	1,015	1,025	1,035	1,045	1,056
Total fruit and nuts	1,000 acres	3,987	3,933	3,951	3,969	3,987	4,006	4,025	4,043	4,062	4,081	4,101	4,120
Vegetables and melons													
Fresh market <sup>3</sup>	1,000 acres	2,028	2,038	2,048	2,058	2,069	2,079	2,089	2,100	2,110	2,121	2,131	2,142
Processing	1,000 acres	1,286	1,273	1,260	1,248	1,235	1,223	1,211	1,199	1,187	1,175	1,163	1,151
Potatoes	1,000 acres	1,087	1,119	1,120	1,121	1,122	1,123	1,125	1,126	1,127	1,128	1,129	1,130
Pulses	1,000 acres	2,763	2,829	2,458	2,495	2,532	2,570	2,609	2,648	2,688	2,728	2,769	2,810
Total vegetables	1,000 acres	7,164	7,259	6,887	6,922	6,958	6,996	7,033	7,072	7,111	7,152	7,192	7,234
Total horticulture crops <sup>4</sup>	1,000 acres	11,343	11,382	11,026	11,078	11,131	11,184	11,239	11,295	11,352	11,409	11,468	11,528
Production, farm value:													
Fruit and nuts													
Citrus	\$ Mil.	2,303	2,680	2,720	2,761	2,802	2,844	2,887	2,930	2,974	3,019	3,064	3,110
Noncitrus	\$ Mil.	9,955	10,244	10,541	10,847	11,161	11,485	11,818	12,161	12,513	12,876	13,250	13,634
Tree nuts	\$ Mil.	3,967	4,110	4,258	4,411	4,570	4,734	4,905	5,082	5,264	5,454	5,650	5,854
Total fruit and nuts	\$ Mil.	16,226	17,033	17,519	18,018	18,533	19,063	19,610	20,172	20,752	21,349	21,964	22,597
Vegetables and melons													
Fresh market	\$ Mil.	10,945	11,251	11,139	11,451	11,771	12,101	12,440	12,788	13,146	13,514	13,893	14,282
Processing <sup>5</sup>	\$ Mil.	2,052	2,062	2,072	2,082	2,093	2,103	2,114	2,124	2,135	2,146	2,156	2,167
Potatoes <sup>6</sup>	\$ Mil.	2,903	2,965	3,028	3,092	3,158	3,226	3,295	3,366	3,439	3,514	3,590	3,668
Total vegetables	\$ Mil.	15,900	16,278	16,238	16,625	17,022	17,430	17,849	18,279	18,720	19,174	19,639	20,117
Nursery/greenhouse <sup>7</sup>													
Floriculture	\$ Mil.	5,363	5,452	5,561	5,673	5,786	5,902	6,020	6,140	6,263	6,388	6,516	6,646
Nursery and other	\$ Mil.	10,839	11,110	11,388	11,672	11,964	12,263	12,570	12,884	13,206	13,536	13,875	14,221
Total, horticultural crops	\$ Mil.	48,767	50,314	51,149	52,433	53,752	55,107	56,498	57,927	59,395	60,902	62,451	64,042
Production, farm weight:													
Fruit and nuts													
Citrus	Mil. lbs.	23,148	23,168	23,377	23,586	23,793	24,000	24,207	24,415	24,624	24,833	25,043	25,252
Noncitrus	Mil. lbs.	36,655	36,988	37,322	37,654	37,986	38,316	38,646	38,979	39,312	39,646	39,980	40,315
Tree nuts	Mil. lbs.	2,966	3,010	3,056	3,101	3,148	3,195	3,243	3,292	3,341	3,391	3,442	3,494
Total fruit and nuts	Mil. lbs.	62,769	63,166	63,755	64,342	64,927	65,511	66,096	66,685	67,277	67,871	68,465	69,061
Vegetables and melons													
Fresh market	Mil. lbs.	49,555	49,059	49,502	49,944	50,383	50,821	51,259	51,700	52,142	52,585	53,029	53,472
Processing <sup>5</sup>	Mil. lbs.	36,528	36,860	37,193	37,524	37,854	38,183	38,513	38,844	39,176	39,509	39,842	40,175
Potatoes <sup>6</sup>	Mil. lbs.	42,393	43,479	44,046	44,471	44,898	45,328	45,761	46,198	46,638	47,082	47,529	47,979
Total vegetables	Mil. lbs.	128,476	129,398	130,741	131,939	133,136	134,333	135,533	136,742	137,956	139,176	140,400	141,627
Total, horticultural crops	Mil. lbs.	191,523	192,840	194,769	196,551	198,331	200,109	201,892	203,687	205,490	207,301	209,117	210,936
Producer prices <sup>8</sup>													
Fruit and nuts													
Citrus	2000=100	136.8	159.0	160.0	160.9	161.9	162.9	163.9	165.0	166.0	167.1	168.2	169.3
Noncitrus	2000=100	129.9	132.5	135.1	137.8	140.5	143.4	146.3	149.2	152.3	155.4	158.5	161.8
Tree nuts	2000=100	194.2	198.2	202.3	206.5	210.7	215.1	219.6	224.1	228.7	233.5	238.3	243.2
Total fruit and nuts	2000=100	161.8	168.8	172.0	175.3	178.6	182.1	185.7	189.3	193.0	196.9	200.8	204.8
Vegetables													
Fresh market	2000=100	109.1	113.3	111.2	113.3	115.4	117.7	119.9	122.2	124.6	127.0	129.4	132.0
Processing	2000=100	102.3	101.9	101.5	101.1	100.7	100.3	100.0	99.6	99.3	98.9	98.6	98.3
Potatoes	2000=100	135.8	135.2	136.3	137.9	139.5	141.1	142.8	144.5	146.2	148.0	149.8	151.6
Total vegetables	2000=100	116.7	118.7	117.2	118.9	120.6	122.4	124.2	126.1	128.0	130.0	132.0	134.0
All fruit, nuts, vegetables	2000=100	134.4	138.3	138.7	141.1	143.4	145.9	148.4	150.9	153.5	156.2	158.9	161.7

1/ Bearing acreage for fruit and nuts; harvested area for vegetables. 2/ Includes olives; excludes melons. 3/ Includes melons, sweet potatoes, mushrooms, and dual-use crops which do not separate fresh-market from processing. 4/ Includes other crops (floriculture, hops, peppermint and spearmint oils, and Hawaiian tropical crops). 5/ Includes pulses (dry edible beans, peas, and lentils) and processing agaricus mushrooms. 6/ Includes seed, feed, own farm use, or unutilized potatoes. 7/ Includes some fresh-market vegetables grown in greenhouses, such as tomatoes, cucumbers, and colored peppers. From USDA, Economic Research Service. 8/ Computed from unit values of production, or production value divided by production volume.

Data source: USDA, National Agricultural Statistics Service

Table 20. Horticultural crops long-term projections: Exports and imports, fiscal years

Item	Unit	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Exports</b>													
<b>Fruit and nuts</b>													
Fresh fruits	\$ Mil.	2,559	2,842	3,000	3,071	3,144	3,220	3,297	3,377	3,459	3,544	3,631	3,720
Citrus	\$ Mil.	627	673	700	702	704	706	708	711	713	715	717	719
Noncitrus	\$ Mil.	1,931	2,169	2,300	2,369	2,440	2,513	2,589	2,666	2,746	2,829	2,914	3,001
Processed fruits	\$ Mil.	1,535	1,738	1,800	1,836	1,873	1,910	1,948	1,987	2,027	2,068	2,109	2,151
Fruit juices	\$ Mil.	766	892	900	923	946	969	993	1,018	1,044	1,070	1,097	1,124
Tree nuts	\$ Mil.	2,429	2,926	3,300	3,399	3,501	3,606	3,714	3,826	3,940	4,059	4,180	4,306
Total fruit and nuts	\$ Mil.	6,523	7,506	8,100	8,306	8,518	8,736	8,960	9,190	9,426	9,670	9,920	10,177
<b>Vegetables</b>													
Fresh	\$ Mil.	1,567	1,630	1,700	1,751	1,804	1,858	1,913	1,971	2,030	2,091	2,154	2,218
Processed <sup>1</sup>	\$ Mil.	1,958	2,181	2,300	2,346	2,393	2,441	2,490	2,539	2,590	2,642	2,695	2,749
Total vegetables	\$ Mil.	3,526	3,810	4,000	4,097	4,196	4,298	4,403	4,510	4,620	4,733	4,848	4,967
<b>Other horticulture</b>													
Nursery/greenhouse	\$ Mil.	295	310	330	340	349	360	370	381	392	403	415	427
Essential oils	\$ Mil.	1,031	1,041	1,100	1,134	1,169	1,206	1,243	1,281	1,321	1,362	1,404	1,448
Wine	\$ Mil.	728	786	850	884	919	956	994	1,034	1,076	1,119	1,163	1,210
Beer	\$ Mil.	195	207	220	221	222	223	224	226	227	228	229	230
Other <sup>2</sup>	\$ Mil.	2,577	3,006	3,800	3,952	4,110	4,274	4,445	4,623	4,808	5,001	5,201	5,409
Total horticulture	\$ Mil.	14,875	16,665	18,400	18,934	19,485	20,053	20,640	21,245	21,870	22,515	23,180	23,867
Fresh produce	\$ Mil.	4,126	4,472	4,700	4,822	4,948	5,077	5,210	5,348	5,489	5,634	5,784	5,938
Processed	\$ Mil.	10,453	11,884	13,370	13,772	14,188	14,616	15,059	15,517	15,989	16,477	16,981	17,502
Processed share <sup>3</sup>	Percent	70	71	73	73	73	73	73	73	73	73	73	73
Export share of production	Percent	31	33	36	36	36	37	37	37	37	37	37	38
<b>Imports</b>													
<b>Fruit and nuts</b>													
Fresh fruits	\$ Mil.	4,219	4,689	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524
Citrus	\$ Mil.	335	398	500	525	551	579	608	638	670	704	739	776
Noncitrus	\$ Mil.	3,884	4,291	4,500	4,631	4,765	4,903	5,045	5,191	5,342	5,497	5,656	5,820
Processed fruits	\$ Mil.	2,343	2,603	2,800	2,867	2,936	3,006	3,079	3,153	3,228	3,306	3,385	3,466
Fruit juices	\$ Mil.	1,005	1,056	1,100	1,129	1,158	1,188	1,219	1,251	1,283	1,317	1,351	1,386
Tree nuts	\$ Mil.	1,155	1,070	1,100	1,140	1,181	1,223	1,267	1,313	1,360	1,409	1,460	1,512
Total fruit and nuts	\$ Mil.	7,718	8,363	8,900	9,157	9,421	9,693	9,973	10,262	10,558	10,864	11,179	11,502
<b>Vegetables</b>													
Fresh	\$ Mil.	3,518	3,979	4,300	4,494	4,696	4,907	5,128	5,359	5,600	5,852	6,115	6,390
Processed <sup>1</sup>	\$ Mil.	2,621	2,755	2,900	3,016	3,137	3,262	3,393	3,528	3,669	3,816	3,969	4,128
Total vegetables	\$ Mil.	6,139	6,734	7,200	7,510	7,832	8,169	8,520	8,887	9,269	9,668	10,084	10,518
<b>Other horticulture</b>													
Nursery/greenhouse	\$ Mil.	1,374	1,423	1,500	1,557	1,616	1,678	1,741	1,807	1,876	1,947	2,021	2,098
Essential oils	\$ Mil.	2,435	2,469	2,500	2,568	2,637	2,708	2,781	2,856	2,933	3,013	3,094	3,177
Wine	\$ Mil.	3,720	4,043	4,400	4,602	4,814	5,036	5,267	5,509	5,763	6,028	6,305	6,595
Beer	\$ Mil.	2,978	3,375	3,500	3,623	3,749	3,881	4,016	4,157	4,302	4,453	4,609	4,770
Other <sup>2</sup>	\$ Mil.	2,515	2,782	3,200	3,360	3,528	3,704	3,890	4,084	4,288	4,503	4,728	4,964
Total horticulture	\$ Mil.	26,879	29,189	31,200	32,376	33,598	34,868	36,189	37,563	38,991	40,476	42,020	43,626
Fresh produce	\$ Mil.	7,738	8,668	9,300	9,644	10,000	10,371	10,755	11,155	11,570	12,001	12,449	12,914
Processed	\$ Mil.	17,767	19,098	20,400	21,175	21,981	22,820	23,693	24,600	25,545	26,527	27,549	28,613
Processed share <sup>3</sup>	Percent	66	65	65	65	65	65	65	65	66	66	66	66
Import share of consumption	Percent	44	47	49	49	50	50	50	51	51	52	52	52

1/ Includes dry edible beans, peas, lentils, and potatoes. 2/ Includes other beverages, hops, ginseng, sauces, condiments, food preparations, yeast, starches, etc.

3/ Includes beverages; excludes fresh fruits and vegetables, and nursery/greenhouse crops.

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.