

Crops

Baseline projections are made in a setting in which producers of the major U.S. field crops receive some safety net assistance when prices are low--marketing loan benefits--as provided by the 1996 Farm Act. Producers of program crops, including wheat, feed grains, soybeans, rice, and upland cotton, are projected to receive these benefits for much of the first half of the baseline. In the initial years of the projections, many crops are adjusting to a number of years of large global production combined with near-term weakness in international demand associated with the global financial crisis, before moving back to a longer-term growth trend. In the longer run, more favorable global economic growth supports increases in trade and U.S. agricultural exports, although gains are somewhat muted by continued strong export competition and only moderate growth in import demand in some markets, particularly China.

The 1996 Farm Act provides producers nearly full planting flexibility to adjust supply in response to changes in returns per acre. However, marketing loan benefits also enter into acreage response decisions in the baseline projections, especially for soybeans. Marketing loan provisions of the 1996 Farm Act provide a minimum revenue per unit of production when market prices are below the loan rate. Consequently, these provisions affect planting decisions when market prices are near or below marketing assistance loan rates. The baseline assumes that loan rates for corn, wheat, soybeans, and upland cotton are based on the formula specified in the 1996 Farm Act, except loan rates for soybeans and upland cotton remain at their legislative maximums for the 2000/01 crops.

Production flexibility contract payments continue to decline over the next 3 years, 2000 through 2002. The remainder of the baseline assumes a constant level for each contract crop. Because these payments are not linked to production, they are deemed “decoupled” and considered to have minimal effects on acreage decisions.

Land Use

Land use decisions for the baseline reflect the 1996 Farm Act’s nearly complete planting flexibility based on market prices, supplemented by benefits from the marketing loan provisions in years of depressed prices. Because prices for many commodities remain below their loan rate early in the baseline, marketing loan benefits influence planting decisions during those years.

Area planted to the eight major U.S. field crops (corn, sorghum, barley, oats, wheat, rice, upland cotton, and soybeans) is expected to rise to 257 million acres in 2009 (table 8), slightly less than the recent high level of plantings attained in 1996. Compared to 1996, fewer acres are planted to wheat and feed grains, but soybean plantings are larger. Aggregate crop area declines in the early years of the baseline because of lower per-acre returns (including marketing loan benefits) caused by weaker demand and larger global supplies, and does not begin to grow until 2003. Then strengthening returns lead to increasing acreage planted through the remainder of the baseline. Harvested acreage for the major crops mirrors total area planted, generally declining in the next several years before rising for the rest of the baseline.

Total feed grain area initially declines in the baseline and then increases modestly over the remainder of the projection period. Corn plantings fall for a few years in response to continued low returns, reflecting strong foreign competition and weak exports due in part to reduced Asian demand. Soybean planted area begins the baseline with record plantings of 74 to 75 million acres, as marketing loan benefits are expected to support soybean net returns (and thereby acreage) that are still comparatively better than other commodities in many areas. Then strengthening corn and wheat prices are expected to limit U.S. soybean plantings. Wheat plantings decline through 2002 as gains in yield and reductions in stocks accommodate demand growth, but additional acreage is required thereafter. Rice area is projected to decline to 3.2 million acres, as returns per acre are not sufficient to maintain acreage at the 1999 level of 3.6 million acres. Upland cotton area is projected to range from 13 to 14 million acres for 2001-2009 with competing crops anticipated to attract some acreage away from cotton through 2003.

The Conservation Reserve Program (CRP) is projected to increase from 32.5 million acres in 2000 to 36.4 million acres in 2003 and beyond, the maximum specified by the 1996 Farm Act (see CRP discussion, page 35 and table 7, page 39). Slightly over half of this increase comes from land with wheat, corn, and soybean planting history.

Crop Supply and Demand Overview

During the first 3 to 5 years of the baseline, many of the major crops adjust to a near-term weak price outlook. Even with marketing loan benefits, cropland plantings initially decline in response to low producer returns, which reflect large global supplies and strong foreign competition for many crops along with near-term weakness in world demand associated with the global financial crisis. Later in the projection period, acreage returns to production in response to growing world demand, with strengthening prices and producer returns. However, with strong export competition and moderate import demand growth in some markets tempering trade pressures, yield gains for many crops are sufficient to provide much of the needed production growth, thereby mitigating pressure on total land use.

Export markets continue to be important in projected consumption growth for many U.S. field crops. Gains in disappearance for U.S. wheat and cotton are driven by exports, with U.S. trade showing larger absolute gains and growth rates than domestic demand. Increases in use for feed grains and soybean oil also have growth rates for exports higher than for domestic markets, although absolute increases in domestic use are larger than trade gains, reflecting the relative sizes of the utilization categories. In contrast, projected consumption increases of U.S. soybeans, soybean meal, and rice are primarily driven by domestic demand. Domestic use for these crops registers larger absolute increases and growth rates than exports. Stocks-to-use ratios decline for corn, wheat, soybeans, and rice, with nominal prices rising.

Feed grain area declines through 2002, with yields accounting for most gains in production. Low feed grain prices are projected for the initial baseline years due to abundant feed grain supplies relative to use. Although domestic use continues to grow, exports recover slowly in the early years from recent low levels. In the later years of the baseline, feed grain plantings rise in response to higher producer returns resulting from growth in exports and steady gains in the domestic market. Larger livestock and poultry inventories boost feed use, while food, seed, and

industrial (FSI) use increases mainly due to higher corn sweetener and ethanol use. U.S. export gains are expected to be larger in the middle of the baseline, as competitors' stocks are reduced early in the baseline and competitors' production and competition increases later in the baseline. By the end of the baseline, stocks-to-use ratios are low and prices strengthen.

U.S. soybean planted area is expected to reach a record level of 75 million acres in 2000. The marketing assistance loan rate is assumed to remain unchanged at \$5.26 per bushel for the 2000/01 crop, with marketing loan benefits supporting soybean net returns per acre that are comparably better than many other commodities. Later in the projections, strengthening corn and wheat prices are expected to limit soybean plantings and restore the stocks-to-use ratio to a more typical level. By 2009, soybean production is expected to exceed 3.1 billion bushels on 70.5 million acres harvested. U.S. soybean farm prices are projected to rise to \$6.55 by the end of the baseline as supplies come into closer balance with demand. In the early part of the baseline, lower world market prices are expected to discourage foreign soybean production and the U.S. is expected to capture a larger market share of the world soybean market. Later, as U.S. soybean prices once again increase, foreign soybean output is expected to resume growth and the U.S. market share contracts. Ample soybean supplies and low soybean prices accelerate domestic crushing from 2000 to 2003, with soybean meal exports rising as high as 9.5 million tons; then a resurgence in foreign meal output scales U.S. exports back to 9 million tons by 2009. U.S. soybean oil prices are anticipated to decline from 2000 to 2002 but thereafter gradually recover as domestic supplies and demand begin to converge.

Less wheat area is needed in the early years of the baseline as reductions in stocks and gains in yield initially are sufficient to accommodate demand growth. Wheat area expands later in the baseline in response to increased demand, higher prices, and higher producer returns. Wheat acreage is expected to rise to 69 million acres by 2009. Total demand for U.S. wheat rises throughout the projection period. Per capita food use continues to rise, but at a declining rate. Feed and residual use decreases late in the baseline period as wheat prices rise relative to other feed grain prices. U.S. wheat exports rise steadily over the projection period but face greater competition from the European Union (EU) starting in 2004/05, as stronger international wheat prices and lower internal EU prices allow the EU to export wheat without subsidies.

U.S. rice plantings are projected to decline through 2007 and then expand slightly, as domestic prices are not sufficient to maintain acreage at recent levels. Contraction in U.S. rice area, coupled with small increases in yields, is expected to maintain rice production at 192 to 197 million hundredweight over the baseline. Steady growth in domestic use of rice is projected in the baseline, driven by food use, although gains will be substantially slower than in recent years. U.S. rice exports are expected to decline slowly throughout the baseline as rising domestic use accounts for a larger share of production. The U.S. exports mostly to high-quality markets, and U.S. prices are projected to rise faster than world prices, making U.S. rice exports less competitive in some markets. Slow, but steady growth in the domestic market with steady production levels is expected to cause the U.S. farm price for rice to rise from its low of \$5.60 per hundredweight in 2000/01 to \$8.54 per hundredweight in 2009/10.

Upland cotton area is projected to drop from about 14 million acres to about 13 million acres in the early years of the baseline, before rising gradually through the end of the projections.

Domestic mill use declines by 7 percent over the baseline due, in part, to the phase-out of the MFA quotas scheduled for 2005. In contrast, cotton exports are expected to increase 16 percent over the baseline, aided by Step 2 payments, with market share rising in the second half of the projections. Ending stocks of upland cotton initially decline but the stocks-to-use ratio remains fairly stable at 21 to 22 percent from 2002/03 to 2009/10.

Feed Grains

After an initial decline in 2000/01, feed grain production increases through the remainder of the baseline. Yield gains account for most of the increase in production, particularly in the early years. Corn is expected to continue increasing its share of total feed grain production and use. After declining in the initial years of the baseline through 2002, corn acres then slowly increase over the remainder of the projection period. However, no significant turnaround in plantings of the other feed grains is foreseen. Net returns of the other feed grains improve from the low levels in 1998/99, but continue low relative to corn through the remainder of the baseline.

Feed grain exports in the baseline are expected to grow faster than during the 1980s and 1990s, but return to the 1979 record level only by the end of the projections. Despite improved growth in global imports, the United States is projected to face strong competition throughout the baseline. Given the strength of domestic demand and the assumed new industrial usage program, total feed grain use is projected to be record high over the entire baseline.

U.S. ending stocks are projected to drop throughout the baseline period to around 20 million tons. This is below the average ending stocks of the 1990s, which was 41 million tons and much less than the 85.1 million average of the 1980s when much higher stockholding was common due to government programs. The decline in the stocks-to-use ratio increases corn prices throughout the baseline, and prices exceed \$3 per bushel by 2009/10. Without a major shock from exports, increases in productivity are expected to account for about 60 percent of demand growth, with the remaining increase in supply coming from increased plantings.

Corn

The corn sector starts the baseline in a low price environment, reflecting large supplies relative to demand. At the onset of the baseline, domestic corn use is already at record high levels, and continues growing throughout the period. For many importers, the favorable impact of low prices is overwhelmed by economic hardships, so a resumption of growth for U.S. exports will largely hinge on improved economic prospects and an easing of competition from other exporters.

Corn area is projected to be fairly stable in the baseline and remain relatively large. Planted area initially declines in response to continued low prices, but as demand strengthens and prices improve, corn plantings increase later in the baseline. Corn primarily competes with soybeans for land, and is also used extensively in rotations with soybeans. Relative net returns are expected to favor soybeans over corn in the early part of the baseline. Although prices for both crops are projected to be low in the next few years, the loan rate for soybeans is relatively more favorable than that of corn. Marketing loan benefits make soybeans more attractive in some

areas as a decline in total corn plantings is initially projected with an increase in soybean acres. Most reductions in corn area are likely in more marginal producing areas, such as the South, where production risks are greater. Increasing prices are expected to bolster corn plantings beginning in 2003.

Strong yield gains for corn are projected to continue over the entire period, led by improvements in genetics as well as gains from farming practices, such as timely planting and effective input use. Corn production is projected to increase from 2000 through the end of the baseline, surpassing the previous record of 10.1 billion bushels by 2003.

Feed and residual use grows throughout the projection period, reflecting record meat production and a record number of grain-consuming animal units in the U.S. livestock sector. No significant contraction is apparent as steadily increasing production of broilers and moderate gains in hog output outweigh cyclical movements in cattle numbers. In addition, feed and residual use of the other grains, including wheat, remains low relative to earlier periods, reinforcing corn's dominant role as the leading feed grain.

Food, seed, and industrial (FSI) use of corn, which starts at a record high, increases sharply in the initial years of the projections to reflect an industrial usage program assumed for the baseline. FSI continues to grow over the entire baseline, rising at an average pace of 2 percent a year. For the two largest components, high fructose corn syrup (HFCS) and ethanol, expansion is projected to be slower than in most of the previous decade. Policies remain a critical determinant for the volume of corn used for ethanol and other proposals could drastically change the use of ethanol in fuels. Other segments of FSI use, such as food and starch use, are fairly mature and gains are largely related to population growth.

Projected exports show strong growth compared with the 1980s and 1990s, but remain below earlier peaks until the end of the baseline. Competing countries' exports are expected to keep U.S. corn exports steady the first year and allow only a modest rise in the second year of the baseline, despite lower prices. As competitors' corn stocks are reduced early in the baseline, U.S. exports recover from recent depressed levels. Annual gains are larger in the middle years and then generally increase more slowly toward the end of the baseline as foreign competitors increase corn production.

Ending stocks of corn gradually decline to around 600 million bushels. Given rising use, this results in progressively lower stocks-to-use ratios. Prices strengthen from recent lows to over \$3 by the end of the projections.

Sorghum

Sorghum production is projected to grow to 635 million by 2009. This reflects an increase in plantings from 9.0 million acres to 9.7 million acres, and trend yield growth of 0.6 bushels per year. Low prices in the beginning of the baseline are expected to reduce planted acreage. By 2006, sorghum yields exceed the current record of 72.7 bushels per acre.

Since growth in both supply and demand are about equal, ending stocks are projected to remain about the same throughout the projection period. Steady gains occur in exports, largely fueled by projected increases in shipments to Mexico. Only modest increases in feed and residual use are projected, keeping it lower than most earlier periods. An increase in ethanol use because of the industrial usage program pushes food, seed and industrial use up early in the baseline. Steady increases in the industrial use of sorghum, stemming from more use for ethanol, are projected to keep this category record high. Prices for sorghum are projected to stay in line with historical price relationships, within 89 to 93 percent of the corn price.

Barley

Barley production increases modestly over the baseline, reaching 355 million bushels by 2009. Planted acreage remains close to its historical lows, increasing 6 percent over the period, but with no major turnaround in barley's ability to compete for land. Yields per acre are expected to increase 9 percent over the period, in line with trend increases.

In contrast to sorghum, most of the increase in barley supply goes to feed and residual use. Food and industrial use, dominated by malting for brewing beer, is expected to show no growth. Barley exports are projected at a relatively high 70 million bushels per year, around the maximum quantity of subsidized feed grain exports permitted under the UR agreement. Imports are expected to grow to 55 million bushels and remain constant. The average barley price is projected to rise through the baseline, reaching \$2.80 per bushel by 2009/10.

Oats

The declining long-term trend in oat acreage is projected to bottom out after 3 years and then stabilize. The crop will remain important in some rotations, and as a cover crop. Production is projected to range from 145 to 150 million bushels over most of the period, while total use starts at 254 million bushels, increasing to 273 million. Imports rise from 105 million bushels to 125 million, making up the difference between production and use. Imported oats are particularly important to food and specialty feed use. Food use grows very slowly in line with population increases. Feed and residual use ranges from 155 million bushels to 165 million. Again, reflecting the general level of corn prices, oat prices begin the projection period at low levels and then increase to \$1.80 per bushel by 2009/10.

Wheat

For the first several years in the baseline less wheat area is needed as burdensome stocks are reduced, but growth of wheat demand is greater than gains in yields for the rest of the projections, requiring additional area to be planted to wheat. During the early years of the baseline, stocks-to-use ratios are expected to exceed 40 percent but prices strengthen as these ratios decline throughout the remainder of the baseline. Once supplies are brought into balance with disappearance, prices received by farmers are expected to strengthen and result in higher market net returns for wheat producers in 2003/04 and later years. Farmers are expected to respond to increasing prices by moving more land into wheat production. Acreage seeded to wheat is projected to increase to 69 million acres by 2009.

Domestic use of wheat is projected to increase gradually through most of the baseline. Food use is the domestic use component with growth potential. Consumption of wheat for food is expected to increase about 10 million bushels each year because of population growth and small increases in per capita food use of wheat products as personal incomes rise during the baseline period. Feed and residual use is expected to remain stable at about 225 million bushels annually until 2007/08. Rising wheat prices, relative to competing feed grains, beyond that point will reduce wheat feed and residual use to about 200 million bushels.

Global wheat import demand and U.S. exports are projected to grow faster than in the 1980s and 1990s. Marketing opportunities for the United States increase early in the baseline as competition from the EU declines because of limits on the amount of subsidized wheat it can export. By 2004/05, however, the combination of higher global wheat prices and declining internal EU prices will allow the EU to export wheat without subsidies. This, together with tighter supplies and rising prices, limits growth in U.S. exports for a few years. Then, U.S. wheat exports strengthen again in the last years of the baseline reflecting, in part, an assumption that the EU raises their set-aside rate to limit the buildup of coarse grain stocks. World wheat trade will benefit from improved economic conditions in Asian importing nations during the baseline period.

Rice

U.S. rice plantings are projected to decline moderately through most of the baseline, as domestic prices will not be high enough to maintain acreage at 1999 levels. The bulk of the contraction is expected to occur on the Gulf Coast where rice acreage has declined for two decades due to high costs and urban sprawl. Some shifting from rice to soybeans in the Delta is projected as well. After 2007, U.S. plantings are expected to expand slightly, primarily in the Delta. From 1997 to 1999, U.S. rice acreage expanded to near-historic levels with the Delta accounting for the bulk of the expansion.

Contraction in U.S. rice area coupled with small increases in yields will maintain rice production between 192 million to 197 million hundredweight over the baseline period, well below the 1999 record of more than 210 million. U.S. yield growth is projected to be about 0.5 percent annually due to better farm management practices and some improvements in rice varieties. This growth is less than achieved in the 1980s and early 1990s when modern high-yielding varieties were being adopted.

U.S. rice imports are projected to expand 3 percent annually in the baseline, reaching 14.4 million hundredweight by 2009/10. Imports' share of domestic use is expected to fractionally expand over the decade. This is a significant slowdown from growth rates of the 1980s and most of the 1990s. U.S. rice imports are predominantly high quality, specialty varieties not currently grown in the United States--mostly Thai Jasmine as well as Basmati from India and Pakistan.

Exports are projected to slowly decline as rising domestic use accounts for a larger share of production. The export share of total use is projected to drop from 42 percent in 1999/2000 to 33 percent in 2009/10. Total domestic use is projected to rise about 2.2 percent a year, reaching

almost 135 million hundredweight by 2009/10. Food use will account for virtually all of the growth in domestic use, exceeding 114 million hundredweight by 2009/10. A growing share of the U.S. population from Asia and Latin America, a greater emphasis on healthier life styles, and greater use of rice in processed foods account for most of the expansion in domestic food use of rice.

The pace of food use expansion is projected at about 2.5 percent, slower than the growth of more than 4 percent annually achieved during the 1980s and the first half of the 1990s. A larger share of meals eaten away from home, increasing popularity of precooked meals, a premium on minimal preparation time, competition from other side dishes at restaurants, and the growing popularity of meals that can be eaten on the run are behind the modest slowdown in expansion in food use of rice.

Brewers' use of rice, which has been virtually stagnant since the late 1980s, is projected to expand only fractionally over the next decade, reaching 16.3 million hundredweight by 2009/10. Stronger expansion in brewers' use of rice is unlikely because growth in per capita beer consumption is not foreseen and the greater popularity of light beers use less rice than regular beers. Seed use, essentially a function of planted area, will slowly decline through 2007 as rice plantings contract.

U.S. rice exports are projected to slowly decline over the baseline. With U.S. rice production essentially steady, expanding domestic use reduces supplies available for export. U.S. prices are projected to rise faster than world prices, making U.S. rice exports less competitive in some international markets.

The United States exports mostly to high-quality markets, rarely competing with the low cost Asian exporters in lower quality milled rice markets. However, Thailand and India compete with the United States in certain high quality, indica markets such as the Middle East and South Africa. And China competes with the U.S. for japonica sales to Japan. Australia, Egypt, and the EU also compete in the international japonica market. In addition, 20 to 30 percent of U.S. rice exports are rough rice, mostly going to Latin America.

Domestic prices are expected to slowly rise over the next decade as international prices recover and U.S. ending stocks contract. International prices are expected to rise due to expanding world rice trade and some shifting to higher quality rice by importers. Ending stocks slowly decline from 57 million hundredweight in 2001/02 to 30.5 million in 2009/10. This allows the stocks-to-use ratio to drop from 27.7 percent in 2001/02 to 14.4 percent in 2009/10, about equal to the average for the past 5 years.

Steady demand growth in the domestic market with a nearly constant level of production will cause season-average U.S. rice farm prices to rise annually, from a projected \$5.60 per hundredweight to \$8.54 per hundredweight. Rice producers' net returns are projected to decline an average of about 9 percent a year through 2005/06, falling to \$42 per acre. Returns are then projected to rise through the end of the baseline, primarily driven by higher prices, although they remain well below levels achieved in 1996/97 to 1998/99.

Upland Cotton

With the continuation of planting flexibility as established in the 1996 farm legislation, upland cotton area will remain responsive to price and income signals. In 2000, upland planted area is expected to remain near last season's level in response to cotton's expected favorable returns relative to other commodities. Production is expected to range between 17 and 18 million bales, assuming a yield of 640 pounds per harvested acre and normal acreage abandonment.

Demand for upland cotton in 2000/01 is expected to expand more than 10 percent as the world rebounds further from the recent financial crisis, with demand for raw cotton and cotton textile products improving. U.S. upland cotton demand is projected to increase to 17 million bales, but remain below the historically high levels of the mid-1990s.

Ending stocks for upland cotton in 2000/01 are projected to rise modestly from the beginning level to 4.9 million, the highest since 1988/89, as production more than offsets expected demand. Market returns over variable costs are expected to rebound from the low levels of 1999/2000, but will likely remain below those of the two preceding seasons.

For crop years 2001 through 2009, upland area is projected to range between 12.8 million and 13.8 million acres as competing crops are anticipated to attract some acreage away from cotton that has moved to cotton over the previous two seasons. Increases in productivity are expected to nearly keep pace with growth in use. Projected area incorporates average abandonment of about 7.5 percent per year and average yield increases of 4 pounds per year. Upland cotton yields reach 676 pounds per harvested acre by 2009, below the 705-pound record produced in 1994. With yields rising modestly, projected production during crop years 2001 through 2009 ranges from 16 to 17.5 million bales. Growth in production and demand are projected to about offset each other.

Demand for U.S. upland cotton is projected to decline slightly during the first several years of the baseline. However, with decreases in U.S. production, stocks are worked down to more normal levels. By 2005/06, steady growth of 1 percent annually pushes demand for U.S. upland cotton back to 17.4 million bales by the end of the baseline period.

Upland mill use is expected to remain fairly stable, near 10 million bales, during the first half of the baseline as structural adjustments in the U.S. textile and apparel industry continue in preparation for the full phase-out of the MFA quotas scheduled for 2005. By 2005/06, the liberalization of restrictions on cotton textile import quotas is likely to result in larger imports, primarily apparel, from lower-wage developing countries. Increases in cotton textile imports are projected to more than offset larger textile exports. As a result, U.S. upland mill use is projected to decline about 1 percent per year beginning in 2005/06, declining to 9.4 million bales by the end of the baseline.

Exports of upland cotton are projected to range between 6.5 and 8 million bales during the baseline. Modest declines in exports are projected during the first several years. After stabilizing in 2004/05, however, upland exports increase over 4 percent annually for the remainder of the projections. More than offsetting the decline in mill use, U.S. exports are

projected to supply a large share of the long-term growth expected in foreign consumption. World trade is projected to expand, averaging about 2 percent annually over the baseline period. U.S. market share falls to about 24 percent in 2004/05 before rising steadily to reach 27 percent by 2009/10. Step 2 payments--reauthorized in October 1999--are assumed to continue throughout the baseline period, aiding the increase in U.S. cotton exports.

Ending stocks of upland cotton decline from the 4.8 million bales projected at the end of 2001/02, falling to 3.4 million bales by 2003/04 before rising slightly during the last half of the baseline to 3.9 million. As a result, the stocks-to-use ratio after 2001/02 ranges from 20 to 22 percent.

Soybeans

U.S. soybean planted area is expected to set a new record level in 2000 of 75 million acres, somewhat above the 1999 record of 74 million acres. Marketing loan benefits are expected to support soybean net returns (and thereby acreage) that are comparatively better than other commodities in many areas. Then, strengthening corn and wheat prices limit U.S. soybean plantings. This reduction in soybean plantings restores the stocks-to-use balance to a more typical level, allowing for subsequent increases in area planted consistent with demand growth. By 2009, soybean production is expected to exceed 3.1 billion bushels on 70.5 million acres harvested.

Projected declines in soybean prices through 2001/02 assume normal trend growth in soybean yields by U.S. and foreign producers. Continued expansion of narrow-row seeding practices and soybean variety improvements will promote annual yield growth of 0.4 to 0.5 bushels per acre in the United States. Total demand does not increase enough to prevent stocks accumulating to over 600 million bushels. After falling to a low of \$4.15 per bushel in 2001/02, prices do not exceed the loan rate again until 2004/05. U.S. soybean farm prices are projected to rise to \$6.55 by the end of the baseline as supplies come into closer balance with demand. For the next few years, loan deficiency payments or marketing loan gains (which cover the deficit between the posted county price and the CCC loan rate) will supplement soybean revenue from farm marketings. However, soybean net returns are not expected to match the 1997/98 level until about 2006/07.

Early in the baseline, lower world market prices discourage foreign soybean production. Projected U.S. soybean exports increase to a record 1.05 billion bushels, helping the United States capture a larger share of the world soybean market. When prices firm, foreign soybean output should resume growth, with U.S. exports slipping to near 1 billion bushels by the end of the baseline.

Similarly, ample soybean supplies and low soybean prices substantially accelerate domestic crushing from 2000/01 to 2003/04. Subsequent yearly increases are expected to moderate. The crush pace will be largely determined by world demand for soybean meal and the livestock that consume it. The average price for soybean meal is projected to decline in 2000/01 and remain relatively low for several years. Consequently, U.S. soybean meal exports should gain at the expense of foreign competition, climbing to about 9.5 million short tons in 2003/04. In ensuing

years, U.S. soybean meal prices are anticipated to strengthen because of slowing supply growth and continued growth in domestic soybean meal consumption (particularly spurred by rising poultry and pork exports). A resurgence in foreign meal output scales back U.S. exports to 9 million tons by 2009/10.

Soybean prices are pressured early in the baseline by the lowest values for soybean oil since 1971. U.S. soybean oil prices are anticipated to decline to 15.3 cents per pound in 2002/03. As domestic supplies and demand begin converging again, oil prices gradually recover. Domestic disappearance of soybean oil is expected to rise at a relatively steady rate, reaching approximately 19.5 billion pounds by 2009/10. U.S. exports are expected to peak near at 3 billion pounds in the middle years of the baseline, but then decline as moderating crush and domestic needs begin to tighten U.S. soybean oil supplies available for export and world palm oil production strengthens.

Sugar

The U.S. sugar baseline through FY 2010 is affected by 7 major factors: (1) larger sugar crop acreage due to low producer prices in the short-to-medium term for alternative crops to both sugar beets and sugarcane; (2) productivity growth in producing refined beet sugar and raw cane sugar; (3) moderating sweetener consumption growth in the next few years; (4) the minimum level of the sugar tariff-rate quota mandated by the World Trade Organization (WTO); (5) the increase of duty-free imports from Mexico as specified in the side-letter agreement to the North American Free Trade Agreement (NAFTA); (6) high-tier tariff imports of sugar from Mexico; and (7) the U.S. sugar program as set out in the 1996 Farm Act.

Low Prices for Alternative Crops to Sugar Beets and Sugarcane

Low prices for soybeans, corn, wheat, barley, and rice, as well as cattle have reduced producer returns for these alternatives commodities which compete with sugar crops for land use, leading to increases in acreage for the sugar crops for the fiscal year (FY) 2000. Beet sugar production is forecast at a record high and raw cane sugar production is projected to increase over 7 percent from the previous year.

Low prices for alternative crops are expected to persist through FY 2000 and will likely influence sugar beet and sugarcane acreage in FY 2001. It is expected that total sugar beet acreage will be slightly above the total for FY 2000. Sugarcane acreage is expected to increase in Louisiana and in Florida.

Sugar Productivity Increases

Well-established trend growth patterns in sugar per harvested acre are expected to continue throughout the baseline. For sugar beets, it is projected that sugar per acre will grow at about 0.015 ton per year. The yield in FY 2010 is projected to be 3.26 tons per acre, or about 6.9 percent higher than the realized 3.05 tons per acre in FY 1999. Sugar from desugared molasses is expected to constitute about 7.6 percent of total beet sugar in FY 2010, up from the 5 to 6 percent range projected in the earlier years of the baseline.

Louisiana sugarcane yields are expected to continue climbing at least through FY 2003. Yields have been climbing steadily since the mid-1990s, as a greater portion of crop has been constituted by the high-yielding variety LCP85-384. It is estimated that LCP85-384 constitutes about 60 percent of the crop in FY 2000. This portion should continue to climb, eventually producing an anticipated yield of 38 tons an acre, an increase of over 8 tons per acre since FY 1999.

Sugar per acre is projected to increase in both Louisiana and Florida. The increase in the Louisiana sugarcane yield produces a direct increase to sugar yield per acre. Continuing improvements in other growing and milling operations produce a growth of 0.027 tons per acre each year. The projected sugar yield in FY 2010 is 4.55 tons per acre, an increase of over 20 percent from that projected for FY 2000. The Florida sugar yield is expected to grow about 0.026 tons a year. However, Florida sugarcane yields are not likely to increase much as acreage shifts from the rich muck area to acreage on lower-yielding sandy soils.

Moderating Sugar Deliveries

Sugar deliveries have grown about 11.8 percent since FY 1992 for a compounded yearly growth rate of over 1.6 percent. This rate is expected to steadily decline throughout the projection period, converging to slightly over 1.3 percent 2010. Sugar deliveries are projected to be 11.805 million short tons, raw value (STRV) by FY 2010. Although the rate of increase is declining, refined sugar consumption per capita in FY 2010 is projected at about 74 pounds, an increase of over 5 pounds from 68.9 pounds per capita in FY 1999.

WTO Minimum Access TRQ for Sugar

For FY 2000, estimated sugar import needs covered by the WTO are less than the minimum access requirement (see box, page 53). During the remainder of the baseline period, U.S. sugar production is projected sufficiently high to make the 14.5 percent ending stocks-to-use ratio target difficult to attain, given the minimum access requirement. Also, additional imports from Mexico (described below) make target attainment even less likely. Therefore, for FY 2001 through FY 2010, it is assumed in the baseline that the sugar TRQ will be at the minimum access quantity of 1.256 million STRV.

Low-Duty Sugar from Mexico

For the first 6 years of NAFTA, Mexico is entitled to duty-free access for sugar exports to the United States in the amount of its projected net surplus production, up to a maximum of 25,000 metric tons, raw value (MTRV). Under the terms of a side-letter agreement to the NAFTA, Mexico will have duty-free access to the U.S. market from FY 2001 to FY 2007 for the amount of its surplus, up to a maximum of 250,000 MTRV. Mexico can ship its sugar in either raw or refined form. In FY 2008, Mexico will have duty-free access with no quantitative restrictions.

On October 1, 1999, USTR allocated 27,558 STRV (25,000 MTRV) of the refined sugar TRQ for FY 2000 to Mexico to fulfill obligations under the NAFTA. Separate from NAFTA, an

additional 3,256 STRV of refined sugar were allocated to Mexico as part of its refined sugar allocation under the WTO minimum access.

Beyond FY 2000, the baseline assumes that Mexico will be a net surplus producer in excess of 250,000 MTRV from FY 2000 through FY 2007. It is projected that Mexico will export the 250,000 MTRV (276,000 STRV) in each year. In FY 2008 Mexico will be entitled to ship sugar in the United States duty-free without quantitative restriction. It is projected that Mexico will ship all its available exportable sugar to the United States in quantities above 1 million short tons.

High-tier Tariff Sugar from Mexico

The NAFTA specifies a declining high-tier tariff schedule for raw and refined sugar over the transition period to duty-free sugar trade in 2008. For FY 2000 the raw sugar tariff is 12.09 cents a pound, and the refined sugar tariff is 12.81 cents a pound. The raw sugar tariff drops about 1.5 cents each year, and the refined sugar tariff drops about 1.6 cents a year. Both rates reach zero in FY 2008.

The economic incentive for Mexico to export high-tier tariff sugar exists if a price threshold (defined below) is less than or equal to the U.S. sugar price. The threshold is equal to the sum of the world price of sugar (No.11 New York Contract), the high-tier NAFTA tariff rate, unit marketing costs (about 1.1 cents a pound for raw sugar), plus any marketing premium deemed desirable by the Mexican Government as a precondition for its issuing "certificates of origin" which are necessary for the entry of the sugar into the United States. The idea behind the marketing premium concept is that the Mexican Government does not want sugar exports to undermine the U.S. sugar market to the longer-term detriment of Mexican sugar interests. It is projected that the marketing premium is equal to \$30 a metric ton, or 1.36 cents a pound. This premium is assumed to hold through FY 2007.

The threshold price is compared to the U.S. price for entry in Gulf ports. This U.S. price runs about 1 cent lower than the No. 14 New York contract price. If the threshold is below the U.S. Gulf price, then Mexico is presumed to export sugar to the United States up to that point where the marginal returns from exporting to the U.S. and the world markets are equalized. If the return to exporting to the United States is, at all levels, higher than shipping to the rest of the world, then Mexico ships all exportable sugar to the U.S. market.

The world price is presumed to equal 6.5 cents a pound in FY 2000, 7.5 cents a pound in FY 2001, 8.0 cents a pound in FY 2002, and then at 8.5 cents a pound for the remainder of the baseline. As the NAFTA high-tier tariff decreases over the course of the baseline, the incentive to ship to the United States becomes greater, especially after FY 2003 when the world price is assumed to stabilize at 8.5 cents a pound.

An important concern for projecting high-tier tariff imports is the amount of sugar available in Mexico for export. If the supply of exportable sugar is sufficiently high, then Mexican sugar enters until the U.S. sugar price is the same as (or very close to) the threshold price. The result is that U.S. price is only separated from the world price by Mexican marketing costs, the price

The FY 2000 Minimum Access Sugar TRQ

As part of the Uruguay Round Agreement on Agriculture (URAA) negotiated in the General Agreement on Tariffs and Trade (GATT), the United States agreed to maintain or bind a minimum annual low-duty import level of 1.256 million STRV. Of the total, 24,251 STRV are reserved for refined sugar. The minimum access requirement became part of the framework of the World Trade Organization that replaced the GATT under terms set out in the URAA.

The administrative approach for setting the sugar TRQ during FY 1997 through FY 1999 used supply and utilization projections published in USDA's September *World Agricultural Supply and Demand Estimates (WASDE)* report to determine the level of the sugar TRQ for the fiscal year set to begin in the following October. The TRQ level was set so that the projected ending stocks-to-use ratio would match a target level of about 14.5 percent. The raw and refined sugar TRQs, however, would have to be at least equal to, or greater than, a minimum level of 1.256 million STRV.

FY 2000 projections complicated implementing of the administrative approach. With total use projected at 10.425 million STRV, ending stocks would have to equal 1.512 million STRV in order to achieve an ending stocks-to-use ratio of 14.5 percent. Total supply excluding the TRQ is projected at 11.096 million STRV (the sum of projected beginning stocks, production, and non-TRQ imports), which is 671,000 STRV above projected total use. The difference between target ending stocks of 1.512 million STRV and 671,000 STRV would be the level of the sugar TRQ at 841,000 STRV, which is below the GATT minimum of 1.256 million STRV.

The raw sugar TRQ for FY 2000 was announced on November 2, 1999. It was set at 1,501,348 STRV, but only 1,251,123 STRV were made available to the U.S. Trade Representative (USTR) for entry into the U.S. Customs Territory. The unallocated TRQ quantity of 250,225 STRV is being held in reserve to be made available to USTR for allocation if the USDA determines that it is needed. It is not anticipated that it will be needed. The refined sugar TRQ for FY 2000 was announced on October 1, 1999, and set at 66,139 STRV.

premium, and a declining NAFTA high-tier tariff rate. If Mexican export potential is limited and the threshold price is initially below the U.S. price, then the additional imports from Mexico may not reduce the U.S. price enough to equal the threshold price.

Export potential can be limited on both the supply and demand sides in Mexico. It is currently projected that Mexican sugarcane acreage will increase about 1 percent a year, and that Mexican sugar yield per hectare will continue its upward trend growth of about 1.3 percent a year. Lower than projected growth is possible given that several large sugar concerns in Mexico are heavily indebted and a significant number of sugar factories operate at high costs.

A larger area of concern is the degree to which the Mexican soft drink and food processing industries shift from using sugar to high fructose corn syrup (HFCS). The baseline assumes that restrictions (i.e., countervailing duties) on HFCS imports into Mexico from the United States will

continue. It is projected that HFCS will constitute 25 percent of the sweetener demand by the soft drink industry, and 20 percent by the food processing sector. However, these shares could increase dramatically in a very short period of time. The resulting reductions in sugar demand could lead to more sugar being available for export on a one-to-one basis.

U.S. Sugar Loan Program

Under the 1996 Farm Act, the U.S. sugar program provides for USDA to make loans available to processors of domestically grown sugarcane at a rate of 18 cents per pound and to processors of domestically grown sugarbeets at a rate of 22.9 cents per pound for refined beet sugar. Sugar loans are issued as nonrecourse loans as long as the raw sugar TRQ is set higher than 1.5 million STRV. The nonrecourse aspect means that when the loan matures, the USDA must accept sugar pledged as collateral as payment in full in lieu of cash repayment of the loan, at the discretion of the processor. Sugar beet and sugarcane processors who receive loans are required to make minimum payments at levels established by USDA for all sugar beets and sugarcane received from growers.

As discussed in the box (page 53), the raw sugar TRQ for FY 2000 was established at 1.502 million STRV, above the nonrecourse trigger. On November 5, 1999 the USDA announced that nonrecourse loans will be available in FY 2000 for eligible sugar beet and sugarcane processors. For FY 2001 through 2010, it is projected that the raw sugar TRQ that includes the duty-free sugar from Mexico under NAFTA will be higher than the 1.5 million STRV trigger, implying that the USDA will make nonrecourse loans available for eligible sugar beet and sugarcane processors.

Tobacco

Tobacco leaf grown in the United States is primarily used for domestic manufacture of cigarettes and for exports to other countries for cigarette production abroad. As U.S. cigarette output declined in recent years, manufacturers have needed less leaf and their purchase intentions have plummeted. Additionally, exports of leaf have declined slightly and loan stocks have accumulated. The result has been lower marketing quotas for flue-cured and burley tobacco. This trend is likely to continue. Cigarette consumption is expected to decline and expenses associated with litigation and settlement will push prices up. In the next 2 years, Federal excise taxes will increase 15 cents per pack, putting additional pressure on prices. Manufacturers are shifting cigarette production overseas for markets in other countries, instead of producing the cigarettes domestically. In addition, greater use of imported tobacco leaf in U.S. cigarette production could compound the erosion in demand for U.S. tobacco.

Significant stocks of flue-cured and burley tobacco, along with stagnant exports and declining purchase intentions will continue to force quotas down. Marketing quotas for flue-cured and burley are set by totaling (1) intended purchases by domestic cigarette manufacturers from the previous crop; (2) average exports for the most recent 3 marketing years; and (3) an adjustment to maintain loan stocks at the specified reserve-stock level of 15 percent of basic quota, or a minimum of 100 million pounds of flue-cured or 50 million pounds of burley. This amount may be adjusted by up or down by a maximum of 3 percent by the Secretary of Agriculture.

In the near-term, the combination of reduced manufacturer purchase intentions and high stocks will dampen quotas for both flue-cured and burley. Cigarette consumption is likely to continue declining for the next decade, further eroding demand for leaf. Quotas will continue to fall. Imports are expected to remain steady for 4 years and then increase annually through 2009. Export markets for both flue-cured and burley are expected to tighten as quality and competitiveness of foreign-produced tobacco rises and global cigarette consumption falls.

Tobacco yields remain constant throughout the baseline. Poundage quotas reduce incentives to raise production per acre. Prices for U.S. grown tobacco rise in correspondence with increases in the support price which is based in part on changes in production costs.

Horticulture

The farm value of U.S. horticultural production is projected to reach \$40 billion in 2000, up an estimated 1 percent from 1999 and 9 percent above 1998. Increases are expected in many industries with the major exception of the nut sector, where value will likely decline significantly in 2000 following a record year in 1999. The value of horticultural production is projected to increase between about \$1.2 billion and \$1.6 billion annually during 2001-2009. This is annual growth rate of between 2 to 4 percent.

Export markets continue to be an important component to the success of the U.S. horticultural sector. For many of the individual fruit and vegetable industries, the growth in per capita domestic consumption appears to have slowed somewhat in the past few years, adding to the importance of export demand in realizing increased production and revenues in the future. Export sales are projected to generate an average of 23 percent of U.S. horticultural production value during 2000-2009, up from the 1990-99 average of 21 percent. Calendar-year exports for 1999 are forecast down less than 1 percent from 1998, but are expected to rebound in 2000, approaching \$9 billion. Export growth is projected at about 4 percent per year from 2001-09. At that pace, U.S. horticultural exports would be about \$13.1 billion by 2009. However, the U.S. will remain a net importer of horticultural products, with total import value increasing an average of 4 percent annually through 2009.

Growth in exports will largely be tied to continuing overall world economic growth. As countries become wealthier and average incomes rise, demand for high-valued commodities including fruits and vegetables are expected to increase. The effect of income growth is even more pronounced in developing countries, where individuals and families are more likely to spend larger shares of their new income on food items. Generally, as this income expands, so too does the variety of food items that are purchased. During the baseline period, per capita income is expected to grow at an even faster rate in transition and developing economies than in the U.S. and other developed economies. In addition, many Western-style food service industries that feature various produce commodities on their menus are expected to continue expanding in several developing areas--particularly the Pacific Rim and South America. This will likely mean an increasing share of horticultural exports will be destined for these regions over the next decade.

Potato production for 1999 is forecast up 1 percent from a year earlier, and 3 percent above 1997. Despite the larger crop, prices are expected to improve somewhat in the coming year as demand for potatoes for processing remains strong and the overall quality of the crop is improved from a year ago. Improving economies in Asian-Pacific Rim countries should also help boost processed potato exports in the year 2000 and beyond. Domestic demand for potatoes and potato products is expected to increase by 1.9 percent annually through 2009, while domestic production is expected to increase an average of 2 percent a year. Despite the similar projected growth rates in domestic consumption and production, exports are expected to continue to increase as are imports of frozen french fries from Canada.

Domestic demand for other fresh-market vegetables is expected to increase an average of 2.4 percent annually during 2000-2009. Per capita consumption is projected to increase about 1.6 percent a year, while annual population growth is projected at slightly less than 1 percent. Increasing consumer awareness of the importance of fresh produce in a healthy diet, combined with increasing product diversity and availability, should help boost domestic consumption. During this 10-year period, U.S. production of fresh vegetables is expected to increase an average 2.1 percent per year. Exports should continue to increase, but will likely be outpaced by imports. Imports will continue to play an increasingly important role in domestic supply of fresh vegetables.

Fruit and nut production in 2000 is expected to increase by nearly 8 percent from 1999, led primarily by a recovery in the orange crop, which is 23 percent above a year earlier when excessive rains and heat hit Florida and a December freeze damaged the California crop. For the remainder of the baseline (2001-2009), however, fruit and nut production is expected to increase an average of about 2 percent per year. Growth in citrus production may slightly outpace growth for non-citrus fruits. On the demand side, domestic per capita consumption of fresh fruits and nuts is expected to increase by less than 1 percent per year. This points to the importance of continuing growth in fruit and nut exports, which are projected to increase about 5 percent annually during 2000-2009. However, despite increased exports, the U.S. will remain a net importer of fresh fruits.

The domestic use of fruits and vegetables for processing (excluding potatoes, sweet potatoes, pulses, and mushrooms) is projected to increase during 2000-2009 by an average of 1.4 percent a year, with processed fruit consumption gaining at a slightly faster pace than processed vegetables. The processed fruit category includes juices and wine, which account for a little over 50 percent of total fruit production. Processed fruit and vegetable exports are likely to continue to increase between 5 and 7 percent annually for the next decade. Export potential for virtually all processed fruit and vegetable categories looks strong with perhaps the best prospects for wine and processing tomatoes. Although production for processing tomatoes is projected to decline in 2000, this is due primarily to record-shattering production in 1999 and a likely accumulation of stocks on hand at planting in the spring of 2000. Production of processing tomatoes may decrease slightly again in 2001, but this is not certain. Strong domestic demand and surging export demand will likely spur increased production for the remainder of the baseline period (2002-2009), and may boost processed tomato production above current baseline forecasts.

Table 8. Planted and harvested acreage for major field crops, baseline projections

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<i>Million acres</i>												
Planted acreage, 8 major crops												
Corn	80.2	77.6	77.0	76.5	76.0	78.5	79.0	79.5	79.5	79.5	80.0	80.0
Sorghum	9.6	9.3	9.0	9.0	9.3	9.3	9.3	9.4	9.5	9.6	9.6	9.7
Barley	6.3	5.2	5.4	5.4	5.4	5.4	5.5	5.5	5.6	5.6	5.7	5.7
Oats	4.9	4.7	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Wheat	65.8	63.0	62.0	62.0	61.0	61.5	63.0	64.0	65.0	66.5	68.0	69.0
Rice	3.3	3.6	3.4	3.3	3.3	3.3	3.3	3.2	3.2	3.2	3.2	3.2
Upland cotton	13.1	14.3	14.4	13.8	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.4
Soybeans	72.0	74.1	75.0	74.0	72.8	71.5	70.5	70.3	70.8	71.3	71.8	71.5
Total	255.2	251.8	250.8	248.6	245.2	246.9	248.1	249.5	251.3	253.5	256.2	257.0
Harvested acreage, 8 major crops												
Corn	72.6	70.9	70.3	69.9	69.4	71.9	72.4	72.9	72.9	72.9	73.4	73.4
Sorghum	7.7	8.5	7.8	7.8	8.1	8.1	8.1	8.2	8.3	8.4	8.4	8.5
Barley	5.9	4.8	5.0	5.0	5.0	5.0	5.1	5.1	5.2	5.2	5.3	5.3
Oats	2.8	2.5	2.5	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Wheat	59.0	54.1	54.1	54.1	53.3	53.7	55.0	55.9	56.7	58.2	59.5	60.4
Rice	3.3	3.6	3.3	3.3	3.3	3.3	3.2	3.2	3.2	3.1	3.1	3.2
Upland cotton	10.4	13.1	13.2	12.8	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.4
Soybeans	70.4	72.8	74.0	73.0	71.8	70.5	69.5	69.3	69.8	70.3	70.8	70.5
Total	232.1	230.3	230.2	228.4	225.2	226.8	227.7	229.1	230.7	232.8	235.3	236.1

Table 9. Selected supply, use, and price variables for major field crops, baseline projections

	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Yields 1/												
Corn	134.4	134.5	135.5	137.2	138.9	140.6	142.3	144.0	145.7	147.4	149.1	150.8
Sorghum	67.3	70.1	69.5	70.1	70.7	71.3	71.9	72.5	73.1	73.7	74.3	74.9
Barley	60.0	59.2	61.2	61.8	62.4	63.0	63.6	64.2	64.8	65.4	66.0	66.6
Oats	60.2	59.7	59.9	60.2	60.5	60.8	61.1	61.4	61.7	62.0	62.3	62.6
Wheat	43.2	42.7	41.8	42.1	42.4	42.7	43.0	43.3	43.6	43.9	44.2	44.5
Rice	5,669	5,929	5,920	5,951	5,983	6,016	6,048	6,081	6,116	6,150	6,180	6,209
Upland cotton	619	581	640	644	648	652	656	660	664	668	672	676
Soybeans	38.9	36.7	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.4	43.8	44.2
Production 2/												
Corn	9,761	9,537	9,525	9,590	9,640	10,110	10,305	10,500	10,620	10,745	10,945	11,070
Sorghum	520	596	540	545	575	580	580	595	605	620	625	635
Barley	352	282	305	310	310	315	325	325	335	340	350	355
Oats	166	147	150	150	150	145	145	145	150	150	150	150
Wheat	2,547	2,308	2,260	2,278	2,260	2,293	2,365	2,420	2,472	2,555	2,630	2,688
Rice	188.1	211.7	196.7	196.9	196.2	195.8	195.3	195.1	193.5	192.2	193.4	195.9
Upland cotton	13,476	15,846	17,600	17,200	15,900	16,200	16,400	16,600	16,900	17,100	17,400	17,500
Soybeans	2,741	2,673	2,960	2,955	2,940	2,925	2,920	2,945	3,000	3,050	3,100	3,115
Exports 2/												
Corn	1,981	1,925	1,925	1,950	2,025	2,100	2,175	2,250	2,300	2,350	2,400	2,475
Sorghum	197	200	215	215	215	220	220	220	225	230	235	240
Barley	28	30	70	70	70	70	70	70	70	70	70	70
Oats	2	2	2	2	2	2	2	2	2	2	2	2
Wheat	1,042	1,100	1,125	1,150	1,200	1,250	1,300	1,325	1,375	1,425	1,475	1,525
Rice	83.6	82.0	87.0	87.0	87.5	87.0	85.0	82.0	79.0	76.0	73.0	71.0
Upland cotton	4,056	5,325	6,900	7,300	7,000	6,500	6,500	6,800	7,100	7,400	7,700	8,000
Soybeans	801	865	1,005	1,025	1,040	1,050	1,050	1,040	1,030	1,015	1,005	1,015
Soybean meal	7,200	7,400	7,900	8,700	9,100	9,500	9,400	9,300	9,200	9,125	9,050	9,000
Ending stocks 2/												
Corn	1,796	2,039	2,029	1,854	1,449	1,324	1,204	1,089	954	804	714	584
Sorghum	65	81	71	66	71	66	61	66	66	66	66	66
Barley	142	127	110	108	111	114	117	115	118	116	114	112
Oats	81	65	66	66	65	63	60	61	61	65	63	65
Wheat	946	1,002	1,007	1,002	923	815	718	639	550	507	478	445
Rice	22.0	49.4	54.2	56.9	56.1	53.1	49.2	45.8	41.3	36.0	32.3	30.5
Upland cotton	3,836	4,327	4,900	4,750	3,650	3,400	3,400	3,400	3,500	3,600	3,800	3,900
Soybeans	348	395	540	605	595	520	415	320	260	245	265	265
Prices 3/												
Corn	1.95	1.80	1.85	1.95	2.20	2.30	2.40	2.45	2.60	2.75	2.85	3.10
Sorghum	1.70	1.55	1.65	1.75	2.00	2.10	2.20	2.25	2.40	2.50	2.60	2.80
Barley	1.98	2.00	1.90	1.90	2.10	2.25	2.30	2.35	2.45	2.55	2.65	2.80
Oats	1.10	1.10	1.10	1.15	1.30	1.40	1.50	1.55	1.60	1.65	1.70	1.80
Wheat	2.65	2.50	2.50	2.55	2.75	3.05	3.30	3.50	3.75	4.00	4.20	4.35
Rice	8.83	5.75	5.60	5.67	5.88	6.15	6.52	6.90	7.35	7.81	8.25	8.54
Soybeans	5.00	4.90	4.25	4.15	4.35	4.65	5.10	5.55	6.05	6.40	6.35	6.55
Soybean oil	0.199	0.168	0.160	0.153	0.153	0.160	0.175	0.198	0.215	0.233	0.250	0.263
Soybean meal	138.5	152.5	145.0	150.0	157.5	165.0	176.5	185.0	197.5	202.5	192.5	192.5

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 10. Corn baseline

Item	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Acreage (million acres):												
CRP acres:												
Cropping history 1/	5.1	5.2	5.7	6.1	6.3	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Planted acres	80.2	77.6	77.0	76.5	76.0	78.5	79.0	79.5	79.5	79.5	80.0	80.0
Harvested acres	72.6	70.9	70.3	69.9	69.4	71.9	72.4	72.9	72.9	72.9	73.4	73.4
Yields (bushels per acre):												
Yield/harvested acre	134.4	134.5	135.5	137.2	138.9	140.6	142.3	144.0	145.7	147.4	149.1	150.8
Supply and use (million bushels):												
Beginning stocks	1,308	1,796	2,039	2,029	1,854	1,449	1,324	1,204	1,089	954	804	714
Production	9,761	9,537	9,525	9,590	9,640	10,110	10,305	10,500	10,620	10,745	10,945	11,070
Imports	19	10	10	10	10	10	10	10	10	10	10	10
Supply	11,088	11,344	11,574	11,629	11,504	11,569	11,639	11,714	11,719	11,709	11,759	11,794
Feed & residual	5,489	5,500	5,650	5,800	5,925	6,000	6,075	6,150	6,200	6,250	6,300	6,350
Food, seed, & industrial	1,822	1,880	1,970	2,025	2,105	2,145	2,185	2,225	2,265	2,305	2,345	2,385
Domestic	7,311	7,380	7,620	7,825	8,030	8,145	8,260	8,375	8,465	8,555	8,645	8,735
Exports	1,981	1,925	1,925	1,950	2,025	2,100	2,175	2,250	2,300	2,350	2,400	2,475
Total use	9,292	9,305	9,545	9,775	10,055	10,245	10,435	10,625	10,765	10,905	11,045	11,210
Ending stocks	1,796	2,039	2,029	1,854	1,449	1,324	1,204	1,089	954	804	714	584
Stocks/use ratio, percent	19.3	21.9	21.3	19.0	14.4	12.9	11.5	10.2	8.9	7.4	6.5	5.2
Prices (dollars per bushel):												
Farm price	1.95	1.80	1.85	1.95	2.20	2.30	2.40	2.45	2.60	2.75	2.85	3.10
Loan rate	1.89	1.89	1.89	1.77	1.63	1.63	1.70	1.83	1.89	1.89	1.89	1.89
Variable costs of production (dollars):												
Per acre	153.89	154.38	157.64	159.30	162.09	165.17	168.19	171.35	174.47	177.63	180.85	184.24
Per bushel	1.15	1.15	1.16	1.16	1.17	1.17	1.18	1.19	1.20	1.21	1.21	1.22
Returns over variable costs (dollars per acre):												
Net returns 2/	127.01	133.45	132.33	117.85	143.49	158.21	173.33	181.45	204.35	227.72	244.08	283.24

1/ The cropping history allocation is based on 1998 plantings on farms with CRP acreage, and is used as a general indicator influencing land available for plantings.

2/ Net returns include estimates of marketing loan benefits.

Table 11. Sorghum baseline

Item	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Acreage (million acres):												
CRP acres:												
Cropping history 1/	1.2	1.2	1.3	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Planted acres	9.6	9.3	9.0	9.0	9.3	9.3	9.3	9.4	9.5	9.6	9.6	9.7
Harvested acres	7.7	8.5	7.8	7.8	8.1	8.1	8.1	8.2	8.3	8.4	8.4	8.5
Yields (bushels per acre):												
Yield/harvested acre	67.3	70.1	69.5	70.1	70.7	71.3	71.9	72.5	73.1	73.7	74.3	74.9
Supply and use (million bushels):												
Beginning stocks	49	65	81	71	66	71	66	61	66	66	66	66
Production	520	596	540	545	575	580	580	595	605	620	625	635
Imports	0	0	0	0	0	0	0	0	0	0	0	0
Supply	569	661	621	616	641	651	646	656	671	686	691	701
Feed & residual	262	325	270	260	280	285	285	290	300	305	305	310
Food, seed, & industrial	45	55	65	75	75	80	80	80	80	85	85	85
Domestic	307	380	335	335	355	365	365	370	380	390	390	395
Exports	197	200	215	215	215	220	220	220	225	230	235	240
Total use	504	580	550	550	570	585	585	590	605	620	625	635
Ending stocks	65	81	71	66	71	66	61	66	66	66	66	66
Stocks/use ratio, percent	12.9	14.0	12.9	12.0	12.5	11.3	10.4	11.2	10.9	10.6	10.6	10.4
Prices (dollars per bushel):												
Farm price	1.70	1.55	1.65	1.75	2.00	2.10	2.20	2.25	2.40	2.50	2.60	2.80
Loan rate	1.74	1.74	1.71	1.56	1.44	1.45	1.52	1.66	1.72	1.73	1.73	1.73
Variable costs of production (dollars):												
Per acre	73.46	74.20	75.87	76.57	77.87	79.33	80.77	82.26	83.73	85.21	86.73	88.33
Per bushel	1.09	1.06	1.09	1.09	1.10	1.11	1.12	1.13	1.15	1.16	1.17	1.18
Returns over variable costs (dollars per acre):												
Net returns 2/	49.03	54.79	49.92	46.10	63.53	70.40	77.41	80.87	91.71	99.04	106.45	121.39

1/ The cropping history allocation is based on 1998 plantings on farms with CRP acreage, and is used as a general indicator influencing land available for plantings.

2/ Net returns include estimates of marketing loan benefits.

Table 12. Barley baseline

Item	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Acreage (million acres):												
CRP acres:												
Cropping history 1/	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Planted acres	6.3	5.2	5.4	5.4	5.4	5.4	5.5	5.5	5.6	5.6	5.7	5.7
Harvested acres	5.9	4.8	5.0	5.0	5.0	5.0	5.1	5.1	5.2	5.2	5.3	5.3
Yields (bushels per acre):												
Yield/harvested acre	60.0	59.2	61.2	61.8	62.4	63.0	63.6	64.2	64.8	65.4	66.0	66.6
Supply and use (million bushels):												
Beginning stocks	119	142	127	110	108	111	114	117	115	118	116	114
Production	352	282	305	310	310	315	325	325	335	340	350	355
Imports	30	30	35	45	50	55	55	55	55	55	55	55
Supply	501	454	467	465	468	481	494	497	505	513	521	524
Feed & residual	161	125	115	115	115	125	135	140	145	155	165	170
Food, seed, & industrial	170	172	172	172	172	172	172	172	172	172	172	172
Domestic	331	297	287	287	287	297	307	312	317	327	337	342
Exports	28	30	70	70	70	70	70	70	70	70	70	70
Total use	360	327	357	357	357	367	377	382	387	397	407	412
Ending stocks	142	127	110	108	111	114	117	115	118	116	114	112
Stocks/use ratio, percent	39.4	38.8	30.8	30.3	31.1	31.1	31.0	30.1	30.5	29.2	28.0	27.2
Prices (dollars per bushel):												
Farm price	1.98	2.00	1.90	1.90	2.10	2.25	2.30	2.35	2.45	2.55	2.65	2.80
Loan rate	1.56	1.59	1.60	1.51	1.34	1.34	1.41	1.51	1.56	1.57	1.56	1.56
Variable costs of production (dollars):												
Per acre	77.84	78.35	80.06	80.86	82.27	83.84	85.38	86.98	88.55	90.14	91.77	93.48
Per bushel	1.30	1.32	1.31	1.31	1.32	1.33	1.34	1.35	1.37	1.38	1.39	1.40
Returns over variable costs (dollars per acre):												
Net returns 2/	54.76	57.22	60.70	55.72	48.77	57.91	60.90	63.89	70.21	76.63	83.13	93.00

1/ The cropping history allocation is based on 1998 plantings on farms with CRP acreage, and is used as a general indicator influencing land available for plantings.

2/ Net returns include estimates of marketing loan benefits.

Table 13. Oats baseline

Item	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Acreage (million acres):												
CRP acres:												
Cropping history 1/	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Planted acres	4.9	4.7	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Harvested acres	2.8	2.5	2.5	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Yields (bushels per acre):												
Yield/harvested acre	60.2	59.7	59.9	60.2	60.5	60.8	61.1	61.4	61.7	62.0	62.3	62.6
Supply and use (million bushels):												
Beginning stocks	74	81	65	66	66	65	63	60	61	61	65	63
Production	166	147	150	150	150	145	145	145	150	150	150	150
Imports	108	100	105	105	105	110	110	115	115	120	120	125
Supply	348	328	320	321	321	320	318	320	326	331	335	338
Feed & residual	170	165	155	155	155	155	155	155	160	160	165	165
Food, seed, & industrial	95	96	97	98	99	100	101	102	103	104	105	106
Domestic	265	261	252	253	254	255	256	257	263	264	270	271
Exports	2	2	2	2	2	2	2	2	2	2	2	2
Total use	267	263	254	255	256	257	258	259	265	266	272	273
Ending stocks	81	65	66	66	65	63	60	61	61	65	63	65
Stocks/use ratio, percent	30.3	24.7	26.0	25.9	25.4	24.5	23.3	23.6	23.0	24.4	23.2	23.8
Prices (dollars per bushel):												
Farm price	1.10	1.10	1.10	1.15	1.30	1.40	1.50	1.55	1.60	1.65	1.70	1.80
Loan rate	1.11	1.13	1.16	1.13	0.99	0.96	1.02	1.10	1.15	1.16	1.16	1.16
Variable costs of production (dollars):												
Per acre	50.53	50.61	51.88	52.41	53.33	54.32	55.28	56.30	57.29	58.30	59.33	60.42
Per bushel	0.84	0.85	0.87	0.87	0.88	0.89	0.90	0.92	0.93	0.94	0.95	0.97
Returns over variable costs (dollars per acre):												
Net returns 2/	22.91	25.80	26.59	24.64	25.32	30.80	36.37	38.87	41.43	44.00	46.58	52.26

1/ The cropping history allocation is based on 1998 plantings on farms with CRP acreage, and is used as a general indicator influencing land available for plantings.

2/ Net returns include estimates of marketing loan benefits.

Table 14. Wheat baseline

Item	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Acreage (million acres):												
CRP acres:												
Cropping history 1/	7.6	7.5	8.0	8.5	8.8	8.9	8.9	8.9	8.9	8.9	8.9	8.9
Planted acres	65.8	63.0	62.0	62.0	61.0	61.5	63.0	64.0	65.0	66.5	68.0	69.0
Harvested acres	59.0	54.1	54.1	54.1	53.3	53.7	55.0	55.9	56.7	58.2	59.5	60.4
Yields (bushels per acre):												
Yield/harvested acre	43.2	42.7	41.8	42.1	42.4	42.7	43.0	43.3	43.6	43.9	44.2	44.5
Supply and use (million bushels):												
Beginning stocks	722	946	1,002	1,007	1,002	923	815	718	639	550	507	478
Production	2,547	2,308	2,260	2,278	2,260	2,293	2,365	2,420	2,472	2,555	2,630	2,688
Imports	103	105	105	110	115	115	115	115	115	115	115	115
Supply	3,373	3,359	3,367	3,395	3,377	3,331	3,295	3,253	3,226	3,220	3,252	3,281
Food	903	915	925	935	945	955	965	975	985	995	1,005	1,015
Seed	81	92	85	83	84	86	87	89	91	93	94	96
Feed & residual	401	250	225	225	225	225	225	225	225	200	200	200
Domestic	1,385	1,257	1,235	1,243	1,254	1,266	1,277	1,289	1,301	1,288	1,299	1,311
Exports	1,042	1,100	1,125	1,150	1,200	1,250	1,300	1,325	1,375	1,425	1,475	1,525
Total use	2,427	2,357	2,360	2,393	2,454	2,516	2,577	2,614	2,676	2,713	2,774	2,836
Ending stocks	946	1,002	1,007	1,002	923	815	718	639	550	507	478	445
Stocks/use ratio, percent	39.0	42.5	42.7	41.9	37.6	32.4	27.9	24.4	20.6	18.7	17.2	15.7
Prices (dollars per bushel):												
Farm price	2.65	2.50	2.50	2.55	2.75	3.05	3.30	3.50	3.75	4.00	4.20	4.35
Loan rate	2.58	2.58	2.58	2.41	2.18	2.18	2.21	2.36	2.58	2.58	2.58	2.58
Variable costs of production (dollars):												
Per acre	67.59	67.87	69.36	70.09	71.33	72.70	74.04	75.44	76.81	78.20	79.62	81.10
Per bushel	1.56	1.59	1.66	1.66	1.68	1.70	1.72	1.74	1.76	1.78	1.80	1.82
Returns over variable costs (dollars per acre):												
Net returns 2/	55.10	55.11	51.02	44.00	45.27	57.53	67.86	76.11	86.69	97.40	106.02	112.47

1/ The cropping history allocation is based on 1998 plantings on farms with CRP acreage, and is used as a general indicator influencing land available for plantings.

2/ Net returns include estimates of marketing loan benefits.

Table 15. Rice baseline

Item	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Acreage (thousand acres):												
Planted	3,345	3,600	3,350	3,335	3,305	3,280	3,255	3,235	3,190	3,150	3,155	3,180
Harvested	3,317	3,571	3,323	3,308	3,279	3,254	3,229	3,209	3,164	3,125	3,130	3,155
Yields (pounds per acre):												
Yield/harvested acre	5,669	5,929	5,920	5,951	5,983	6,016	6,048	6,081	6,116	6,150	6,180	6,209
Supply and use (million cwt):												
Beginning stocks	27.9	22.0	49.4	54.2	56.9	56.1	53.1	49.2	45.8	41.3	36.0	32.3
Production	188.1	211.7	196.7	196.9	196.2	195.8	195.3	195.1	193.5	192.2	193.4	195.9
Imports	10.5	10.8	11.1	11.4	11.7	12.1	12.5	12.8	13.2	13.6	14.0	14.4
Total supply	226.5	244.4	257.2	262.5	264.8	264.0	260.8	257.2	252.5	247.1	243.4	242.6
Domestic use	103.9	106.5	109.5	112.1	114.7	117.4	120.1	122.9	125.7	128.6	131.6	134.6
Exports	83.6	82.0	87.0	87.0	87.5	87.0	85.0	82.0	79.0	76.0	73.0	71.0
Residual	17.0	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Total use	204.5	195.0	203.0	205.6	208.7	210.9	211.6	211.4	211.2	211.1	211.1	212.1
Ending stocks (million cwt.)	22.0	49.4	54.2	56.9	56.1	53.1	49.2	45.8	41.3	36.0	32.3	30.5
Stocks/use ratio, percent	10.7	25.3	26.7	27.7	26.9	25.2	23.3	21.6	19.5	17.0	15.3	14.4
Milling rate, percent	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
Prices (dollars per cwt.):												
World price	7.37	5.00	5.00	5.10	5.25	5.41	5.63	5.86	6.09	6.27	6.46	6.59
Average market price	8.83	5.75	5.60	5.67	5.88	6.15	6.52	6.90	7.35	7.81	8.25	8.54
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	350	357	366	370	377	384	391	399	407	414	422	431
Per cwt.	6.17	6.02	6.19	6.22	6.29	6.38	6.47	6.56	6.65	6.74	6.83	6.94
Returns over variable costs (dollars per acre):												
Net returns 1/	151	73	63	61	57	52	47	42	43	66	88	100

1/ Net returns include estimates of marketing loan benefits.

Table 16. Upland cotton baseline

Item	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Acreage (million acres):												
CRP acres:												
Cropping history 1/	1.0	1.0	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Planted acres	13.1	14.3	14.4	13.8	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.4
Harvested acres	10.4	13.1	13.2	12.8	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.4
Yields (pounds per acre):												
Yield/harvested acre	619	581	640	644	648	652	656	660	664	668	672	676
Supply and use (thousand bales):												
Beginning stocks	3,822	3,836	4,327	4,900	4,750	3,650	3,400	3,400	3,400	3,500	3,600	3,800
Production	13,476	15,846	17,600	17,200	15,900	16,200	16,400	16,600	16,900	17,100	17,400	17,500
Imports	431	65	5	5	5	5	5	5	5	5	5	5
Supply	17,729	19,747	21,932	22,105	20,655	19,855	19,805	20,005	20,305	20,605	21,005	21,305
Domestic use	10,254	10,040	10,100	10,050	10,000	9,950	9,900	9,800	9,700	9,600	9,500	9,400
Exports	4,056	5,325	6,900	7,300	7,000	6,500	6,500	6,800	7,100	7,400	7,700	8,000
Total use	14,310	15,365	17,000	17,350	17,000	16,450	16,400	16,600	16,800	17,000	17,200	17,400
Ending stocks	3,836	4,327	4,900	4,750	3,650	3,400	3,400	3,400	3,500	3,600	3,800	3,900
Stocks/use ratio, percent	26.8	28.2	28.8	27.4	21.5	20.7	20.7	20.5	20.8	21.2	22.1	22.4
Prices (dollars per pound): 2/												
Loan rate	0.5192	0.5192	0.5192	0.5192	0.5192	0.5192	0.5192	0.5192	0.5192	0.5192	0.5192	0.5192
Variable costs of production (dollars):												
Per acre	274.49	281.27	292.55	296.91	303.30	310.53	317.67	324.97	332.36	339.75	347.30	355.08
Per pound	0.44	0.48	0.46	0.46	0.47	0.48	0.48	0.49	0.50	0.51	0.52	0.53
Returns over variable costs (dollars per acre):												
Net returns 3/	217.00	156.16	174.97	187.45	185.68	177.04	175.58	174.19	174.61	171.41	168.53	163.81

1/ The cropping history allocation is based on 1998 plantings on farms with CRP acreage, and is used as a general indicator influencing land available for plantings.

2/ USDA is prohibited from publishing cotton price projections.

3/ Net returns include estimates of marketing loan benefits.

Table 17. Soybean and products baseline

Item	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Soybeans												
Acreage (million acres)												
Planted	72.0	74.1	75.0	74.0	72.8	71.5	70.5	70.3	70.8	71.3	71.8	71.5
Harvested	70.4	72.8	74.0	73.0	71.8	70.5	69.5	69.3	69.8	70.3	70.8	70.5
Yield/harvested acre (bushels)	38.9	36.7	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.4	43.8	44.2
Supply (million bushels)												
Beginning stocks, Sep. 1	200	348	395	540	605	595	520	415	320	260	245	265
Production	2,741	2,673	2,960	2,955	2,940	2,925	2,920	2,945	3,000	3,050	3,100	3,115
Imports	3	3	4	8	6	10	10	11	8	10	11	11
Total supply	2,944	3,024	3,359	3,503	3,551	3,530	3,450	3,371	3,328	3,320	3,356	3,391
Disposition (million bushels)												
Crush	1,590	1,610	1,655	1,715	1,760	1,805	1,830	1,855	1,880	1,900	1,925	1,950
Seed and residual	205	154	159	158	156	155	155	156	158	160	161	161
Exports	801	865	1,005	1,025	1,040	1,050	1,050	1,040	1,030	1,015	1,005	1,015
Total disposition	2,596	2,629	2,819	2,898	2,956	3,010	3,035	3,051	3,068	3,075	3,091	3,126
Carryover stocks, Aug. 31												
Total ending stocks	348	395	540	605	595	520	415	320	260	245	265	265
Stocks/use ratio, percent	13.4	15.0	19.2	20.9	20.1	17.3	13.7	10.5	8.5	8.0	8.6	8.5
Prices (dollars per bushel)												
Loan rate	5.26	5.26	5.26	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	5.09
Soybean price, farm	5.00	4.90	4.25	4.15	4.35	4.65	5.10	5.55	6.05	6.40	6.35	6.55
Variable costs of production (dollars):												
Per acre	79.44	79.51	79.76	80.65	82.00	83.61	85.19	86.80	88.42	90.01	91.63	93.29
Per bushel	2.04	2.17	1.99	1.99	2.00	2.01	2.03	2.04	2.06	2.07	2.09	2.11
Returns over variable costs (dollars per acre):												
Net returns 1/	132.18	122.71	140.64	128.73	129.97	130.94	131.95	149.07	171.73	187.75	186.50	196.22
Soybean oil (million pounds)												
Beginning stocks, Oct. 1	1,382	1,526	2,020	2,130	2,335	2,470	2,575	2,475	2,305	2,100	1,905	1,750
Production	18,081	18,115	18,620	19,295	19,800	20,315	20,605	20,905	21,215	21,470	21,780	22,095
Imports	83	79	65	60	60	65	70	75	80	85	90	95
Total supply	19,547	19,720	20,705	21,485	22,195	22,850	23,250	23,455	23,600	23,655	23,775	23,940
Domestic disappearance	15,600	15,900	16,275	16,700	17,075	17,450	17,775	18,150	18,500	18,825	19,150	19,475
Exports	2,421	1,800	2,300	2,450	2,650	2,825	3,000	3,000	3,000	2,925	2,875	2,800
Total demand	18,021	17,700	18,575	19,150	19,725	20,275	20,775	21,150	21,500	21,750	22,025	22,275
Ending stocks, Sep. 30	1,526	2,020	2,130	2,335	2,470	2,575	2,475	2,305	2,100	1,905	1,750	1,665
Soybean oil price (dollars per lb)	0.199	0.168	0.160	0.153	0.153	0.160	0.175	0.198	0.215	0.233	0.250	0.263
Soybean meal (thousand short tons)												
Beginning stocks, Oct. 1	218	330	250	250	250	250	250	225	225	225	225	225
Production	37,792	38,270	39,335	40,725	41,825	42,900	43,475	44,050	44,600	45,175	45,750	46,350
Imports	100	50	65	75	75	100	100	100	100	100	100	100
Total supply	38,110	38,650	39,650	41,050	42,150	43,250	43,825	44,375	44,925	45,500	46,075	46,675
Domestic disappearance	30,580	31,000	31,500	32,100	32,800	33,500	34,200	34,850	35,500	36,150	36,800	37,450
Exports	7,200	7,400	7,900	8,700	9,100	9,500	9,400	9,300	9,200	9,125	9,050	9,000
Total demand	37,780	38,400	39,400	40,800	41,900	43,000	43,600	44,150	44,700	45,275	45,850	46,450
Ending stocks, Sep. 30	330	250	250	250	250	250	225	225	225	225	225	225
Soybean meal price (dollars per ton)	138.50	152.50	145.00	150.00	157.50	165.00	176.50	185.00	197.50	202.50	192.50	192.50
Crushing yields (pounds per bushel)												
Soybean oil	11.37	11.25	11.25	11.25	11.25	11.26	11.26	11.27	11.29	11.30	11.32	11.33
Soybean meal	47.54	47.54	47.50	47.50	47.50	47.50	47.50	47.50	47.50	47.50	47.50	47.50
Crush margin (dollars per bushel)	0.56	0.61	0.99	1.13	1.11	1.07	1.06	1.07	1.07	1.04	1.05	1.00

1/ Net returns include estimates of marketing loan benefits.

Table 18. U.S. Sugar: Supply, disappearance, and prices, fiscal years 1/

Item	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeets													
Planted area	1,000 acres	1,499	1,560	1,565	1,490	1,504	1,506	1,495	1,484	1,487	1,487	1,485	1,485
Harvested area	1,000 acres	1,452	1,525	1,531	1,458	1,471	1,473	1,463	1,452	1,455	1,455	1,453	1,453
Yield	Tons/acre	22.5	21.9	21.4	21.6	21.7	21.8	21.9	22.0	22.1	22.2	22.3	22.4
Production	Mil. s. tons	32.6	33.4	32.8	31.4	31.9	32.1	32.0	31.9	32.1	32.3	32.4	32.6
Sugarcane													
Harvested area	1,000 acres	896	951	963	941	941	938	931	930	930	930	930	930
Yield	Tons/acre	36.7	37.7	36.2	37.0	37.8	37.7	37.5	37.5	37.5	37.5	37.5	37.5
Production	Mil. s. tons	32.8	35.8	34.9	34.8	35.5	35.4	34.9	34.9	34.9	34.9	34.9	34.9
Supply:													
Beginning stocks	1,000 s. tons	1,679	1,638	1,837	2,193	2,189	2,326	2,826	3,253	3,553	3,769	3,906	3,960
Production	1,000 s. tons	8,375	8,905	8,903	8,698	8,869	8,908	8,872	8,889	8,953	9,005	9,052	9,104
Beet sugar	1,000 s. tons	4,423	4,650	4,698	4,506	4,579	4,616	4,613	4,611	4,651	4,682	4,708	4,736
Cane sugar	1,000 s. tons	3,952	4,255	4,205	4,192	4,290	4,292	4,259	4,277	4,301	4,323	4,344	4,368
Total imports	1,000 s. tons	1,805	1,720	2,017	2,027	2,158	2,645	2,771	2,790	2,805	2,837	2,870	2,899
TRQ less Mexico	1,000 s. tons	1,222	1,197	1,256	1,256	1,256	1,256	1,256	1,256	1,256	1,256	1,256	1,256
Duty-free NAFTA 2/	1,000 s. tons	31	28	276	276	276	276	276	276	276	1,096	1,124	1,153
High-tier NAFTA tariff	1,000 s. tons	67	5	0	0	121	609	744	768	794	0	0	0
Other imports	1,000 s. tons	486	490	485	495	505	505	495	490	480	485	490	490
Total supply	1,000 s. tons	11,857	12,262	12,757	12,917	13,217	13,879	14,469	14,932	15,311	15,611	15,828	15,964
Use:													
Domestic disappearance	1,000 s. tons	10,066	10,250	10,385	10,542	10,700	10,858	11,016	11,174	11,332	11,490	11,647	11,805
Exports	1,000 s. tons	230	175	180	185	190	195	200	205	210	215	220	220
Miscellaneous	1,000 s. tons	(77)	0	0	0	0	0	0	0	0	0	0	0
Total use	1,000 s. tons	10,219	10,425	10,565	10,727	10,890	11,053	11,216	11,379	11,542	11,705	11,867	12,025
Ending stocks	1,000 s. tons	1,638	1,837	2,193	2,189	2,326	2,826	3,253	3,553	3,769	3,906	3,960	3,939
Stocks/use ratio	Percent	16.0	17.6	20.8	20.4	21.4	25.6	29.0	31.2	32.7	33.4	33.4	32.8
Raw sugar prices:													
N.Y. (No. 14)	Cents/lb.	22.07	20.82	19.73	19.85	19.51	17.98	16.73	15.92	15.40	15.14	15.14	15.37
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	35.50	37.86	35.87	36.10	35.47	34.55	34.55	34.55	34.55	34.55	34.55	34.55
Sugarcane	Dol./ton	28.20	28.39	26.90	27.07	26.60	25.91	25.91	25.91	25.91	25.91	25.91	25.91

1/ Fiscal year is October 1 through September 30.

2/ Starting in FY 2008 under NAFTA, Mexico can ship duty-free sugar to the United States with no quantitative limit.

Table 19. Flue-cured tobacco baseline

Item	Unit	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Acreage, yield, and production:													
Planted area	1,000 acres	385	304	222	311	307	298	289	278	267	256	244	233
Harvested area	1,000 acres	385	304	222	311	307	298	289	278	267	256	244	233
Yield	lbs./acre	2,144	2,164	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250
Production	Mil. lbs.	825	658	500	700	690	670	650	625	600	575	550	525
Supply:													
Beg. stocks	Mil. lbs.	1,253	1,234	1,118	863	828	803	778	753	723	673	613	533
Marketings	Mil. lbs.	815	658	500	700	690	670	650	625	600	575	550	525
Total 1/	Mil. lbs.	2,068	1,893	1,618	1,563	1,518	1,473	1,428	1,378	1,323	1,248	1,163	1,058
Imports	Mil. lbs.	(200)	(200)	(200)	(200)	(220)	(240)	(260)	(280)	(300)	(300)	(310)	(320)
Use:													
Domestic	Mil. lbs.	492	450	435	420	405	390	375	360	360	350	350	345
Exports	Mil. lbs.	341	325	320	315	310	305	300	295	290	285	280	275
Total 1/	Mil. lbs.	834	775	755	735	715	695	675	655	650	635	630	620
Ending stocks:													
Total	Mil. lbs.	1,234	1,118	863	828	803	778	753	723	673	613	533	438
Price:													
Avg. to growers	\$/cwt	175.5	173.6	179.0	182	185	188	191	194	196	198	201	204
Support	\$/cwt	163.0	163.0	165.0	167	170	173	176	179	190	193	196	199

1/ Domestic tobacco only.

Table 20. Burley tobacco baseline

Item	Unit	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Acreage, yield, and production:													
Planted area	1,000 acres	307	305	171	143	155	183	186	179	170	160	160	160
Harvested area	1,000 acres	307	305	171	143	155	183	186	179	170	160	160	160
Yield	lbs./acre	1,895	1,750	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100
Production	Mil. lbs.	582	535	300	300	325	385	390	375	357	336	336	336
Supply:													
Beg. stocks	Mil. lbs.	832	894	959	840	694	579	539	519	499	476	437	408
Marketings	Mil. lbs.	582	535	360	300	325	385	390	375	357	336	336	336
Total 1/	Mil. lbs.	1,414	1,429	1,319	1,140	1,019	964	929	894	856	812	773	744
Imports	Mil. lbs.	(160)	(165)	(175)	(175)	(175)	(185)	(195)	(205)	(210)	(215)	(220)	(220)
Use:													
Domestic	Mil. lbs.	351	330	320	310	300	290	280	270	260	260	250	250
Exports	Mil. lbs.	169	140	150	145	140	135	130	125	120	115	115	115
Total 1/	Mil. lbs.	520	470	470	455	440	425	410	395	380	375	365	365
Ending stocks:													
Total	Mil. lbs.	894	959	849	694	579	539	519	499	476	437	408	379
Price:													
Avg. to growers	\$/cwt	190	190	193	196	200	203	205	209	212	216	219	223
Support	\$/cwt	178	179	182	185	188	191	194	197	200	203	206	209

1/ Domestic tobacco only.

Table 21. Fruit, vegetable, and greenhouse/nursery baseline, production and prices

Item	Unit	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Production value:													
Fruits													
Fruits and nuts													
Citrus	\$ Mil.	2,600	2,566	2,713	2,840	2,897	2,956	3,013	3,085	3,152	3,228	3,302	3,369
Noncitrus	\$ Mil.	7,238	8,053	8,225	8,557	8,817	9,122	9,431	9,748	10,070	10,397	10,729	11,067
Nuts	\$ Mil.	1,351	2,666	1,794	2,005	2,007	2,137	2,169	2,334	2,275	2,528	2,380	2,692
Total	\$ Mil.	11,189	13,284	12,732	13,403	13,722	14,215	14,612	15,167	15,496	16,153	16,411	17,128
Vegetables													
Fresh 1/	\$ Mil.	7,925	7,766	8,311	8,582	8,883	9,272	9,814	10,296	10,692	11,034	11,372	11,741
Processed 2/	\$ Mil.	1,380	1,620	1,433	1,470	1,550	1,571	1,601	1,627	1,652	1,678	1,703	1,727
Potatoes	\$ Mil.	2,633	2,841	2,956	2,935	2,970	3,034	3,105	3,167	3,217	3,258	3,297	3,335
Sweet potatoes	\$ Mil.	187	202	213	216	221	226	231	236	241	246	251	256
Pulses	\$ Mil.	670	629	769	759	785	799	814	828	843	857	871	885
Mushrooms	\$ Mil.	802	867	916	939	961	982	1,002	1,020	1,038	1,055	1,071	1,086
Total	\$ Mil.	13,598	13,925	14,597	14,901	15,370	15,885	16,566	17,174	17,683	18,129	18,565	19,031
Greenhouse/Nursery	\$ Mil.	12,115	12,565	13,015	13,465	13,915	14,365	14,815	15,265	15,715	16,165	16,615	17,065
Production:													
Fruits													
Citrus	1,000 MT	16,121	12,430	14,636	15,785	15,963	16,150	16,231	16,501	16,633	16,881	17,057	17,120
Noncitrus	1,000 MT	14,954	15,976	16,032	16,298	16,505	16,710	16,926	17,135	17,343	17,555	17,767	17,978
Nuts	1,000 MT	416	558	506	494	574	508	573	538	525	605	539	603
Total	1,000 MT	31,491	28,965	31,174	32,576	33,041	33,368	33,730	34,174	34,501	35,042	35,362	35,701
Vegetables													
Fresh 1/	1,000 MT	18,516	18,816	19,483	19,832	20,253	20,685	21,117	21,535	21,937	22,327	22,715	23,101
Processed 2/	1,000 MT	14,174	17,149	15,126	15,267	15,732	15,918	16,129	16,332	16,541	16,762	16,981	17,196
Potatoes	1,000 MT	21,581	21,840	22,262	23,070	23,592	23,982	24,347	24,752	25,206	25,693	26,188	26,682
Sweet potatoes	1,000 MT	562	567	618	611	616	619	622	625	629	632	636	640
Pulses	1,000 MT	1,791	1,807	1,768	1,958	1,946	1,987	2,025	2,063	2,102	2,140	2,180	2,220
Mushrooms	1,000 MT	371	391	404	416	427	438	449	460	470	481	491	502
Total	1,000 MT	56,995	60,569	59,660	61,152	62,565	63,628	64,690	65,767	66,885	68,036	69,192	70,340
Prices:													
Grower													
Fruits and nuts	1990-92=100	110	118	120	122	125	127	130	132	135	137	140	142
Vegetables	1990-92=100	119	111	123	130	132	134	137	139	141	143	146	148
Potatoes	\$/MT	123	130	133	127	126	127	128	128	128	127	126	125
Dry beans	\$/MT	437	386	498	432	453	451	449	449	448	447	445	443
Retail													
Fruits and vegetables	1982-84=100	198	203	209	216	223	229	235	242	249	254	261	268
Fresh fruit	1982-84=100	247	266	269	276	284	292	300	309	318	327	336	345
Fresh vegetables	1982-84=100	216	209	217	225	233	240	248	255	262	269	276	283
Processed fruits & veg.	Dec 1997=100	102	104	109	114	117	120	123	126	129	131	134	137

1/ Includes artichokes, asparagus, snap beans, broccoli, brussels sprouts, cabbage, carrots, cauliflower, celery, sweet corn, eggplant, escarole-endive, garlic, lettuce, bell peppers, onions, spinach, tomatoes, and melons.

2/ Includes asparagus, lima beans, snap beans, broccoli, beets, cabbage, carrots, cauliflower, sweet corn, cucumbers, green peas, spinach, and tomatoes.

Table 22. Fruit, vegetable, and greenhouse/nursery baseline, trade

Item	Unit	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Imports													
Fruit and nuts 1/													
Fresh	\$ Mil.	2,792	3,173	2,949	3,084	3,196	3,307	3,419	3,532	3,644	3,756	3,868	3,980
Processed	\$ Mil.	3,138	3,638	3,684	3,824	3,979	4,136	4,295	4,454	4,616	4,781	4,950	5,125
Nuts	\$ Mil.	630	624	649	675	682	681	740	762	789	797	797	856
Total	\$ Mil.	6,559	7,435	7,282	7,584	7,857	8,125	8,454	8,748	9,049	9,333	9,615	9,961
Vegetables 2/													
Fresh	\$ Mil.	2,191	2,074	2,266	2,370	2,492	2,615	2,738	2,863	2,993	3,128	3,266	3,403
Processed	\$ Mil.	958	1,054	978	1,007	1,055	1,111	1,155	1,196	1,245	1,285	1,326	1,376
Potatoes	\$ Mil.	369	377	374	388	405	428	453	480	506	532	558	584
Sweet potatoes	\$ Mil.	29	26	26	26	26	27	27	27	27	27	28	28
Pulses	\$ Mil.	72	66	71	74	78	81	85	89	92	96	100	104
Mushrooms	\$ Mil.	151	153	172	174	176	177	179	181	182	184	186	188
Total	\$ Mil.	3,770	3,751	3,887	4,040	4,232	4,439	4,637	4,836	5,046	5,253	5,463	5,683
Greenhouse/Nursery	\$ Mil.	1,079	1,155	1,236	1,322	1,415	1,514	1,620	1,733	1,855	1,984	2,123	2,272
Exports													
Fruit and nuts 1/													
Fresh	\$ Mil.	1,756	1,826	2,001	2,260	2,348	2,435	2,523	2,610	2,698	2,786	2,874	2,962
Processed	\$ Mil.	1,873	1,930	2,036	2,149	2,281	2,425	2,581	2,751	2,938	3,143	3,369	3,618
Nuts	\$ Mil.	1,168	1,145	1,203	1,247	1,291	1,335	1,379	1,423	1,467	1,511	1,554	1,598
Total	\$ Mil.	4,797	4,900	5,240	5,656	5,920	6,195	6,482	6,784	7,103	7,440	7,797	8,179
Vegetables 2/													
Fresh	\$ Mil.	1,019	1,007	1,112	1,064	1,141	1,124	1,195	1,191	1,252	1,256	1,308	1,318
Processed	\$ Mil.	1,081	1,047	1,130	1,159	1,214	1,272	1,329	1,387	1,447	1,507	1,568	1,630
Potatoes	\$ Mil.	757	764	784	812	852	888	922	956	992	1,028	1,065	1,102
Sweet potatoes	\$ Mil.	11	10	10	11	11	12	13	14	14	15	16	17
Pulses	\$ Mil.	385	294	307	383	383	393	402	411	420	430	439	448
Mushrooms	\$ Mil.	15	22	25	26	28	29	30	32	33	34	36	37
Total	\$ Mil.	3,268	3,144	3,368	3,455	3,628	3,719	3,891	3,992	4,158	4,270	4,432	4,553
Greenhouse/Nursery	\$ Mil.	284	301	310	319	329	338	349	359	370	381	392	404

1/ Fresh fruit includes bananas, excludes melons. Processed fruit includes juices and wine.

2/ Fresh vegetables includes melons. Processed includes seed and juices.