

AGRICULTURAL OUTLOOK



Executive Editor

Jeanne McLaughlin
(202) 694-5195
rmclaughlin@ers.usda.gov

Associate Editors

Nora Brooks
(202) 694-5322

Richard Magleby
(202) 694-5615

Managing Editor

Mary Reardon
(202) 694-5136

Art Director

Cynthia Ray

Statistics Coordinator

David Johnson
(202) 694-5324

Photo Researcher

Shashunga Clayton

Briefs

- 2** *Specialty Crops:* Forecast for Citrus: A Mixed Bag for Growers
- 4** *Specialty Crops:* Consumers Face Higher Prices for Fresh-Market Grapes
- 5** *Livestock, Dairy, & Poultry:* Dairy Industry in 2002 to Encounter Uncertain Climate of Demand

Commodity Spotlight

- 8** *Cotton Production Up, Demand Down*
Leslie Meyer & Stephen MacDonald
- 12** *Sweet Peppers: Saved by the Bell*
Gary Lucier & Bing-Hwan Lin

World Agriculture & Trade

- 16** *EU Preferential Trading Agreements: Heightened Competition for U.S.*
Gene Hasha

Risk Management

- 21** *U.S. Crop Insurance: Premiums, Subsidies, & Participation*
Robert Dismukes & Monte Vandever

Statistical Indicators

- | | |
|--|---|
| 26 Summary | 43 World Agriculture |
| 27 U.S. & Foreign Economic Data | 44 U.S. Agricultural Trade |
| 29 Farm Prices | 48 Farm Income |
| 31 Producer & Consumer Prices | 53 Food Expenditures |
| 33 Farm-Retail Price Spreads | 53 Transportation |
| 35 Livestock & Products | 54 Indicators of Farm Productivity |
| 39 Crops & Products | 55 Food Supply & Use |

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Cotton outlook . . . Bell pepper consumption . . . EU preferential trading . . . U.S. crop insurance . . . Dairy market trends

Cotton Production Up, Demand Down

Cotton is experiencing greater weakness in world prices than grains and other crops. World cotton prices, down 39 percent from a year earlier as of October 2001, have suffered from slackening demand, coinciding with rebounding world production. Larger crops of cotton in the world's major producing countries in 2001/02 have resulted from favorable weather and government policies, among other factors. The largest production gains occurred in China, up 3.5 million bales, and in the U.S., up 3 million bales. The global economy is forecast to rebound in 2002/03 and foreign cotton mill use to expand. With the largest share of world stocks in a decade, the U.S. will be in a unique position to supply the growing need for cotton fiber around the globe.



Sweet Peppers: Saved by the Bell

Over the past two decades, consumption of sweet bell peppers has been on the rise in the U.S. Given continued strong demand, U.S. growers harvested 12 percent more bell pepper acreage in 2000 than a year earlier. Bell peppers are produced and marketed year-round, with domestic shipments peaking during May and June and import shipments highest in winter months (20 percent of fresh-market demand is satisfied by imports). Grown commercially in most states, bell peppers are shipped by 6,271 farms into fresh and processing markets. From 1998 to 2000, annual farm cash receipts for sweet bell peppers averaged \$535 million—with an estimated retail value of over \$1.7 billion.

EU Preferential Trade Agreements: Heightened Competition for U.S.

Although the European Union (EU) has pursued global multilateral trade negotiations within the World Trade Organization (WTO) and extends most-favored-nation treatment to the U.S. and other WTO members, it also participates in more non-global preferential trading agreements (PTAs) than any other WTO member.

Over two-thirds of EU imports come from countries with such agreements, which do not include the U.S. PTAs provide lower tariffs and other favorable import terms for preferred trading partners, and recent reciprocal agreements also provide advantages for EU exports. For the EU, preferential agreements enhance control over imports and help maintain domestic commodity prices. The EU is the world's largest agricultural importer and second-largest exporter—an important U.S. market as well as a competitor. EU PTAs disadvantage U.S. exports to EU markets while providing advantages to EU exports in the markets of EU preferred partners.

U. S. Crop Insurance: Premiums, Subsidies, Participation

U.S. crop insurance programs, which have traditionally been limited to yield insurance products, now include a variety of insurance products. The type of insurance and the coverage level that producers choose, as well as the riskiness of producing a particular crop in a particular area, determine the premium. Since the early 1980s, the Federal government has been subsidizing premiums, effectively lowering the cost of crop yield and revenue insurance coverage to producers. Producers pay only a portion of the actu-

arial or risk-based premium plus a small administrative fee. Increases in premium subsidies in 2001 and the addition of premium discounts in 1999 and 2000 have increased participation in insurance programs, and producers have moved to higher coverage levels.

Dairy Industry in 2002 to Encounter Uncertain Climate of Demand

Recent years have seen strong demand for dairy products; prices were generally robust except when rapid expansion in milk production temporarily overcame demand. But in 2002, softening economic conditions probably will result in less vigorous demand growth for cheese, butter, and dairy products overall. Milk production is expected to grow by almost 3 percent in 2002, more than projected growth in demand. A price drop seems certain, with the extent of the fall highly uncertain and largely related to softness of demand.

Consumers Face Higher Prices For Fresh-Market Grapes

U.S. grape growers are producing a smaller crop in 2001, but consumer demand for high-quality fresh-market grapes is still being met—at slightly higher prices. USDA forecasts a 16-percent decline in this year's output over the record crop in 2000. Harvests are down in most grape producing states, including California, which continues to lead the U.S. in grape production. This year's crop forecast would be 4 percent larger than in 1999.

Forecast for Citrus: A Mixed Bag for Growers

The first estimates for the 2001/02 citrus crop are more sweet than tart with more oranges, grapefruit, and tangerines available for harvesting but fewer lemons. The estimate indicates a larger U.S. citrus crop than last year but smaller than 2 years ago. For Florida, the most prolific citrus producing state, an increase of 4 percent over last season is projected, accounting for nearly all the expected increase in the U.S. citrus crop.

Briefs

Specialty Crops

Forecast for Citrus: A Mixed Bag for Growers

The first estimates for the 2001/02 citrus crop, released October 12, are more sweet than tart; more oranges, grapefruit, and tangerines should be available for harvesting, but fewer lemons. The crop estimate indicates a bigger U.S. citrus crop than last year although smaller than 2 years ago.

Not only will the most prolific citrus producing state, Florida, contribute 77 percent of this year's crop—mostly oranges for processing, grapefruit, and tangerines—but its crop will also be larger. An increase of 4 percent over last season is projected, accounting for nearly all the expected increase in the U.S. citrus crop.

Together, California and Arizona produce 20 percent of the U.S. citrus crop. These two states account for most of the fresh market oranges, all the lemons, and some grapefruit and tangerines. The Texas citrus crop is small relative to that of Florida or California/Arizona, but it continues to grow, producing mostly grapefruit. Louisiana grows citrus for sale in local markets, but production is so minor that USDA's National Agricultural Statistics Service (NASS) does not include it in its citrus data.

Fewer Oranges & Lemons From California & Arizona

California and Arizona's citrus crop is forecast to be 6 percent smaller than last season. The orange crop, which is expected to account for 61 percent of the states' citrus, is forecast down 9 percent from last season and 16 percent below that of two seasons ago. The size of the fruit is the largest on record for September. Barring adverse weather conditions such as a severe freeze, this year's orange crop should reach 2.1 million tons, of which 59 percent are expected to be navel oranges, with Valencia oranges accounting for the remainder.

The record fruit size and reported high quality of this year's oranges should com-

mand favorable prices for growers. These attributes should pique both domestic and international demand for fresh oranges this season. Given the smaller crop, the average price for fresh oranges could top \$8 per 75-pound box. Prices should not, however, be nearly as high as during the 1998/1999 season, when a severe winter freeze drastically reduced the crop, pushing prices to an average of \$17.97 per box.

The California/Arizona lemon crop is estimated to total 992,000 tons, about 1 percent smaller than last year's very large crop. It would be the second-largest crop since the 1995/96 season. Typically 50 to 60 percent of the crop goes to the fresh market, with the remainder processed, mostly into juice.

Last season, growers received an average of \$5 per 76-pound box of lemons, the lowest since 1986/87. The reduction in the crop this year should help boost prices. While as of September, California lemons were reported to be smaller than average—which can put downward pressure on prices—cooler weather since then should help increase size. Arizona lemons, which are harvested early in the season, are reported to be large, which should strengthen prices early on. Both states' crops are reported to be of good quality.

Florida Crop Up Despite Drought & Low Temperatures

Florida's citrus crop is projected to total 12.9 million tons, up 4 percent from last season. The orange crop comprises about 80 percent of the state's total citrus crop; grapefruit is 16 percent; tangerines, tangelos, Temples, and K-early citrus make up the remaining 4 percent. Lime production is not projected until April 2002.

Orange production is estimated to increase 3 percent over last season, but to be slightly lower than 1999/2000. As always, about 95 percent of Florida oranges will go to making juice. The 2001/02 crop experienced freezing temperatures during the past winter, with general winter temperatures colder than normal. Very dry conditions persisted throughout much of the winter and spring. Most groves are irrigated, however, minimizing the effects of the dry conditions.

Early-to mid-season oranges will account for 57 percent of the crop this year, estimated at 5.9 million tons. Not only was the crop large, but it matured on time, permitting harvesting to begin in early October. These ample, timely supplies are likely to slake demand for imported orange juice to supplement domestic production. The Valencia crop, which is harvested after the early- to mid-season varieties are nearly finished, should be about 5 percent larger than last season.

Yields of frozen concentrated orange juice (FCOJ) for Florida oranges are projected to be 1.55 gallons per 90-pound box, 2 percent lower than last season. Based on the early projections for fruit production and yields, estimates for orange juice production for the 2001/02 season will increase 2 percent to 1.4 million gallons. With record beginning stocks of juice, supplies this season should reach 2.3 million gallons. Consumption is projected to rise almost 8 percent to 5.6 gallons per person.

In 2000/01, about 58 percent of Florida's processing oranges went to making FCOJ, according to Florida Citrus Processor Association data. The remaining 42 percent was processed into not-from-concentrate orange juice (NFC). Demand for NFC grew rapidly throughout the second half of the 1990s, as consumers demonstrated that they are willing to pay a premium for the perceived higher quality of NFC.

The current economic tightening will be the first real test of public loyalty to the product. Tightening consumer budgets

As the season progresses and weather factors contribute to the condition and size of the fruit, estimates are likely to change.

could result in a switch back to FCOJ, which averaged about \$2.12 a gallon lower at the retail level in 2000/01. However, Coca-Cola reentered the NFC market in 2001 with its new product, Simply Orange. The two major NFC brands already in the market—PepsiCo's Tropicana and Florida Natural from the cooperative with the same name—are competing for market share with the new product, with promotions that include lower prices. As a result of the competition, consumers are benefiting from lower retail prices for NFC. This could, in turn, keep demand up despite the weaker economy.

Brazil is the world's largest orange and orange juice producer—and the world's largest FCOJ exporter. While U.S. processors mostly market their own juice in the U.S., they often mix Brazilian FCOJ with Florida juice to maintain the product's consistency as well as to boost supplies at times of low U.S. production. Brazilian FCOJ is also shipped directly to major northeastern U.S. ports, where it is usually reconstituted and marketed. As a result, Brazilian orange juice is the major competition for the U.S. industry.

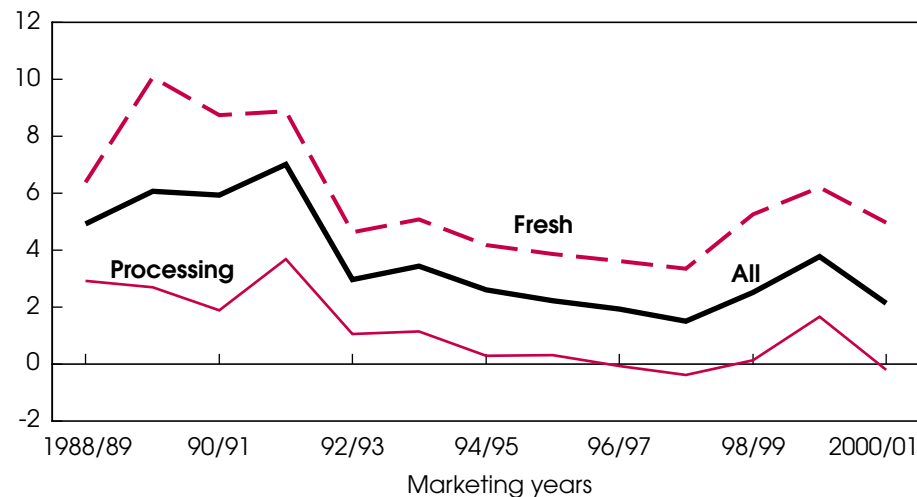
The 2001/02 Brazilian orange crop is estimated to be 10 percent smaller than last season. With less fruit per tree and with bearing acreage down from a year ago in Brazil, world prices of orange juice may be higher this year. Since Florida is expected to produce more orange juice and need fewer imports, the effect of the expected higher price of Brazilian juice could help Florida growers with increased demand for their oranges.

Bigger Crops of Grapefruit & Tangerines

The Florida grapefruit crop, which is 77 percent of the U.S. grapefruit crop, is projected to increase 4 percent to 2 million tons this season. If realized, the crop would be 10 percent smaller than in 1999/2000. The crop is broken down into 850,000 tons of white grapefruit and 1.2 million tons of red and pink grapefruit (excluding 127,500 tons projected to be abandoned due to lack of demand). Including grapefruit production in California, Arizona, and Texas, this season's crop is expected to reach 2.6 million tons, 4 percent larger than last year.

In 2000/01, Low Grower Prices Again Soured Prospects for Florida's Grapefruit Industry

\$ per 85-lb. box



Economic Research Service, USDA

In recent years, lack of demand has made it difficult for Florida growers to get favorable prices for their grapefruit. In 2000/01, Florida growers received an average \$4.97 per 85-pound box of grapefruit for the fresh market, the lowest since 1997/98. While fresh-market grapefruit prices were down this past season, growers received negative returns for their processing grapefruit, meaning they did not cover their costs of production. With slightly over half of last year's production going to processing, overall prices averaged \$2.13 per box.

Grapefruit juice beginning stocks coming into the new marketing year are 30 percent lower than last year. This could foreshadow strong demand for processing fruit, boosting grower prices.

Demand for the new crop looks strong. Florida's industry is introducing new promotional programs to stimulate domestic demand. International demand may also increase this season. Production in Cuba, the U.S. industry's major competition, was greatly reduced this fall because of Hurricane Michelle. As a result, Florida grapefruit may be replacing Cuban grapefruit. With the higher demand, growers are likely to see higher prices this year.

While total demand for grapefruit juice was down last season, exports were higher—19 percent over the previous season. Exports to the number-one export market, Canada, were higher, but shipments to the number-two market, Mexico, were down. Exports to the third-largest market, Barbados, grew substantially, bringing the shipments it received back in line with previous years. Caribbean countries are important markets for U.S. grapefruit juice, much of which is consumed by tourists. Reduced travel this year by Americans could reduce foreign demand for grapefruit juice. If export demand should fall and domestic demand does not pick up this year, growers may abandon picking before this year's harvest is completed because of low returns.

The new-season tangerine crop is estimated to be 449,000 tons, up 22 percent from last season. Florida production, which accounts for 74 percent of the U.S. crop, is tied with its 1999/00 record. While California is also expected to be the same as 1999/2000, Arizona's crop is expected to be down 8 percent from last year and 29 percent lower than two seasons ago.

Early varieties of tangerines are expected to comprise 69 percent of Florida's crop. Early varieties consist of Sunburst, Fallglo, Robinson, and Dancy. Sunburst tan-

Briefs

gerines make up about 80 percent of the early varieties produced in Florida. The number of trees producing Sunburst and Fallglo declined this season; however, the number of fruit per tree for both varieties is higher, generating expectations for the second-largest crop on record. Unlike Florida's oranges and grapefruit, this season's early tangerines are average to below average in size so far.

Honey tangerines are Florida's dominant late variety. Production is forecast to increase 7 percent this season. The number of bearing trees increased slightly, but fruit set declined 13 percent from last season. Honey tangerines are expected to be large this season, with fewer numbers needed to fill a 95-pound box.

While this season's larger crop may be expected to put downward pressure on grower prices, the expected smaller U.S. fresh orange crop could be a plus for tangerine growers, keeping prices in line with last season. A deciding factor in tangerine movement in the U.S. market is the availability and quality of imported Spanish clementines this winter. If Spain has a large crop this season, more Spanish clementines will reach the U.S. market, competing directly with the U.S. tangerine crop and affecting grower prices.

AO

*Susan Pollack (202) 694-5251
pollack@ers.usda.gov*

Continued strong international demand for U.S. fresh grapes, particularly in Asian markets, is also contributing to the decline in domestic consumption. Despite reduced production, the high quality of this year's crop have kept exports of fresh grapes for the 2001/02 season thus far up 15 percent over the same period a year ago (May to August). U.S. export prospects in many Asian markets appear strong as these markets continue to recover from the economic crisis that began in 1998. Shipments thus far to many of these markets are higher than a year earlier.

Because of the smaller U.S. crop, imports of fresh grapes will likely increase during 2001/02 to help meet consumer demand, especially if no major problems arise to curtail this year's grape production in Chile, the dominant foreign supplier to the U.S. market. Imports are heaviest during January through April, when domestic production is in its off-season.

About 87 percent of the nation's grape crop is processed—more than half for wine, more than a fourth for raisins, and the remainder for juice and canning. In California, where production is expected to be down for wine and raisin varieties but up for table varieties, 52 percent are wine varieties, 34 percent are raisin varieties, and only 14 percent are table varieties. In Washington, where the grape crop is a far-distant second to California, all grapes are processed—about two-thirds for juice and one-third for wine.

In California, the nation's largest producer of domestic wines, wine varieties accounted for well over half the state's total grape acreage last year. Nonbearing acreage for wine grapes during 2000 declined 15 percent from the previous year to 110,000 acres as more acreage reached its productive stage. Bearing acreage for wine grapes rose 8 percent to 458,000 acres. California vineyards can expect to harvest a crop of wine grapes in 2001 that is 8 percent below a year ago, at 6.2 billion pounds. Similar to last year, the most popular wine grape varieties are

Specialty Crops

Consumers Face Higher Prices for Fresh-Market Grapes

U.S. grape growers are producing a smaller crop in 2001, but consumer demand for high-quality fresh-market grapes is still being met—at slightly higher prices. USDA forecasts a 16-percent decline in this year's grape production over the record crop in 2000. Harvests are down in most grape producing states, including California, which continues to lead the U.S. in grape production with 91 percent of the crop. The production forecast of 12.9 billion pounds for this year, if realized, will be 11 percent larger than in 1998 and 4 percent above 1999.

California's production is expected to decline 16 percent from the record 14.1 billion pounds harvested last year. In the rest of the country, the total crop has dropped 9 percent, reflecting reduced production in all the other grape-producing states except Washington, Oregon, and Arkansas. Grape crops in Washington and Oregon are forecast 4 percent and 24 percent larger, whereas output in Arkansas is expected to be unchanged.

Reduced production this year, the high quality of the crop, and lessened competition from smaller 2001 crops of citrus and stone fruit (peaches, plums, and nec-

tarines) have plumped up the prices of fresh-market grapes for both growers and retailers. Grower prices for fresh-market grapes from May through October averaged \$708 per ton, up 19 percent from the same period a year ago. In the same token, retail prices for fresh Thompson seedless grapes from June to September averaged 25 percent higher than the same period last year.

Grapes continue to be the fourth in popularity with U.S. consumers among fresh fruits. During the 1990s, approximately 85 percent of U.S. fresh-market consumption was domestically produced. Influenced mostly by the lower production and higher prices, domestic consumption of U.S. fresh grapes is expected lower during the 2001/02 season (May to April) compared with a year ago. U.S. consumption—estimated at 7.5 pounds per capita in 2000/01—should decline approximately 4 percent in 2001/02.

Changes in the Grape Line-up

This year, for the first time, USDA's total grape output data include new production estimates for minor producers Texas and Virginia, while estimates are discontinued for South Carolina.

Chardonnay and French Colombard for white wine and Cabernet Sauvignon, Zinfandel, and Merlot for red wine.

Among these popular varieties, increases in bearing acreage last year were most significant for Cabernet Sauvignon (up 21 percent), Merlot (up 15 percent), and Chardonnay (up 10 percent). Bearing acreage in California for French Colombard declined 5 percent. Rapid increases in acreage for wine grapes during the 1990's reflect a boost in U.S. wine demand, heightened by publicity associating moderate wine consumption, particularly red wine, with health benefits.

The wine sector in Washington also grew rapidly during the 1990's—total wine grape acreage more than doubled between 1993 and 1999 (from 11,100 acres to 24,000) and bearing acreage grew 67 percent (from 10,200 acres to 17,000). Into the new decade, expansion continues in the state's wine sector, with bearing acreage rising 18 percent in 2000 from a year ago to 20,000 acres. Although bearing acreage numbers are not yet reported for 2001, wine grape growers in the state expect to harvest a larger crop this year as new acreage comes into production.

U.S. wine exports rose 6 percent in 2000 to a record 73.9 million gallons, with the United Kingdom, Canada, Japan, the Netherlands, and Switzerland accounting for 72 percent of shipments. While more U.S. grapes were crushed for wine last year, continued strong domestic demand helped generate a 10-percent rise in imports over 1999. Imports came mainly

from Italy, France, Australia, Chile, and Spain. Shipments from these main suppliers, except Spain, were up. During the first 8 months of 2001, U.S. wine imports and exports were up 7 percent and 12 percent, indicating a continuing strong market for wine both here and abroad.

The supply of raisins in the U.S. during 2000/01 increased despite a 31-percent downturn in imports last year, because domestic shipments were higher and carry-in stocks were large. Boosted by increased supplies and lower grower prices, U.S. raisin exports returned to more normal levels during 2000/01 following a sharp drop the previous season when export volume was at its lowest since 1986/87. Exports rose 39 percent from the previous season, far larger than the increase in supplies. While exports recovered, stocks at the end of the year remained large, indicating that domestic consumption had declined during 2000/01—by 4 percent. The large ending stocks in 2000/01, along with depressed prices, are expected to lower production in 2001/02.

In August and September of this year, mild temperatures in California provided good drying conditions for sun-dried raisins. As of September, more than 80 percent of the raisin crop, reportedly of generally good quality, had been harvested. While domestic supplies are likely to remain large in 2001/02 despite lower production, exports are likely to decline due to large world surplus of cheaper raisins entering the new season. **AO**

*Agnes Perez (202) 694-5255
aperez@ers.usda.gov*

nary. Farm milk prices averaged the highest ever in 1998, were very close to that record in 2001, and were the fourth highest ever in 1999. In the face of these generally high prices, commercial use of milkfat grew about 2.2 percent a year during the last 4 years, a rate much faster than population growth and than most earlier years. Sales of skim rose less rapidly, but still managed very respectable growth of about 1.8 percent per year.

Cheese, butter, and fluid cream, products used heavily by restaurants, were the leading lights among dairy products; consumer expenditures for eating away from home rose briskly during this period. Meanwhile, sales of fluid milk, ice cream, and other perishable products showed little growth. Most of these products are primarily used at home, and their demand may have been hurt as consumers dined out more often.

Demand in 2002 is uncertain. Consumer reaction to a weakening economy following the exuberance of the last couple of years is particularly difficult to gauge, because the economic expansion was unprecedented in terms of both strength and length.

Some of the food spending patterns of recent years are likely to persist, at least through 2002. In particular, restaurant spending will probably stay heavier than during earlier periods of economic weakness. But spending at eating establishments is unlikely to grow as much as in recent years. Most adjustments probably will be in the average expenditure on a meal eaten away from home rather than in the number of such meals. As consumers become more sensitive to menu prices, restaurants likely will respond with tighter controls on the amounts of ingredients used in dishes. They also may halt the growth in portion size or offer smaller alternatives. However, large portions will remain a relatively inexpensive way of generating perceptions of value.

Cheese demand in 2002 probably will be only modestly affected by adjustments in the restaurant sector. Cheese is used heavily by all segments of the industry, so shifts among eating places do not necessarily have much effect. Only gradual erosion in total restaurant use is likely. Weak-

Livestock, Dairy, & Poultry

Dairy Industry in 2002 to Encounter Uncertain Climate of Demand

The dairy industry experience next year will likely be considerably different from 1998-2001. Recent years have seen strong demand for dairy products. Prices were generally robust except when rapid expansion in milk production temporarily overcame demand. In 2002, softening economic conditions probably will result in less robust demand growth for cheese,

butter, and dairy products overall. Meanwhile, production growth could be strong if some of the problems of 2001 are not repeated.

Not only has commercial use of both milkfat and skim solids set records every year during 1998-2001, but the strength of recent demand growth has been extraordi-

Briefs

Heifer Math & the Western Dairy Industry

The very high recent prices for replacement heifers and cows resulted from a combination of shortrun incentives to expand dairy herds and the longrun growth of the western dairy industry. Replacement prices are likely to remain relatively high for the foreseeable future because of the difficulty in increasing the number of good replacement heifers from current levels. Very high heifer prices are forcing management changes on at least some western dairy operations.

Information from the 1995 dairy management study of the National Animal Health Monitoring System (NAHMS) provides insight on replacement heifer supplies. From 100 cows, just over 93 calves will generally be born alive, half of them heifers. About 8 of these 47 heifers will die before reaching 26 months—the average age of calving and entering the milking herd. Of the 39 potential replacement heifers, some will not be kept because of inferior genetic potential and others will be culled because of poor performance, reproductive or health problems, or other reasons. Conservative assumptions of 10 percent culled for inferior genetics and 10 percent for other factors imply that 32 or fewer replacement heifers could be available from the 100 cows.

A supply of 30 to 32 heifers per year is adequate to replace the 24 cows that NAHMS said were culled on average and the 4 that died, while allowing a few extra to increase the total cow herd. However, that heifer supply cannot easily support some traditional western patterns. Individual western dairy herds with replacement rates of 35 to 40 percent were not uncommon. Similarly, a significant number of western operations chose not to save many of their heifers for the replacement herd. Although 2002's lower milk prices probably will lessen demand for heifers somewhat, longrun adjustments likely will require some changes in the way some western dairy herds are managed.

In 1975, the Pacific and Mountain regions held less than 14 percent of the U. S. milk cows. Supplying western areas with enough heifers from other regions to make up for the local deficit and to fuel their expansion was not a major strain. But

this was not the case 25 years later, when these regions accounted for almost 31 percent of milk cows.

Large western dairy farms typically have had relatively high variable costs per cow, particularly cash variable costs. High costs per cow were not a problem because very high milk production per cow lowered costs per cwt of milk to very competitive levels. However, this need for high milk per cow dominated western management philosophy. One major aspect of this emphasis was very strict cow culling, with cows often given little chance to recover from an adverse event before being sent to slaughter. This management technique has kept average milk per cow high at the cost of sometimes needlessly losing the difference in a cow's value as a milk cow and as a slaughter animal.

The emphasis on milk per cow also meant keeping a cow's interval between calvings as short as possible. With short calving intervals, cows spend a larger share of their productive life at peak or near-peak milk production. In order to keep a tight calving interval, many western farms gave a cow only one (or sometimes no) opportunity to be bred with artificial insemination before being turned in with a bull. A much larger share of the heifers from natural service bulls will not have the genetic potential to be good replacements.

Another common practice of western dairy management was single-minded attention to the milking herd. Raising crops, raising calves, or managing a sophisticated breeding program were considered distractions from producing milk. A significant number of these farms simply did not engage in these activities.

The western dairy industry is now too big to continue having such a large proportional gap between heifers used and heifers produced. Western management will continue to evolve. The pace of ongoing management adjustments undoubtedly has been spurred by very high recent prices for replacement heifers. However, such fundamental management changes do not come easily or quickly, and heifer prices probably will stay relatively high for years to come.

ness in retail sales also is likely to develop only slowly. Consumer belt-tightening probably will consist of both eliminating at-home "treats" and replacing away-from-home treats with less costly at-home treats.

Demand for butter and fluid cream may be affected more than cheese demand. Table use of these products is spread across a diverse group of restaurants. But kitchen use is much heavier in upper tier establishments—the types that may be affected most. In addition, retail sales may be trimmed by a more sedate consumer attitude.

Ice cream demand may actually improve because of ice cream's unusual image as an inexpensive luxury. Similarly, fluid milk demand probably would benefit from any shift to eating more meals at home. However, these gains are unlikely to offset weakening demand for other products. Overall, dairy demand is expected to grow next year, but the increase probably will be smaller than in recent years.

Milk production could rebound next year from 2001's drop of about 1 percent if some of the pitfalls experienced this year can be avoided. Milk per cow was hit by

stressful winter weather and by more-than-normal heat stress in summer.

While 2001 forage quality was not bad overall, supplies of top forage were tight. Forage quality also contributed to less milk per cow. Supplies of high quality alfalfa hay were very tight by the second half of the 2000-01 forage season. Alfalfa production is forecast to rise a bit in 2001, but the increase is less than 2 percent and most areas had widespread quality problems with some cuttings. Silage quality also reportedly is mixed.

Milk-feed price ratios will favor increased use of concentrate feeds in 2002. This incentive should support considerable recovery in milk per cow if weather and forage quality cooperate. Milk per cow is projected to rise about 3 percent in 2002. Even with this recovery, milk per cow would remain slightly below the longrun trend.

Milk cow numbers will end 2001 just slightly below the start of the year. Cow numbers probably would have been stronger in 2001 if expanding farms had not faced some key problems. Uncertainty about adequate forage supplies played a role, but obtaining replacement animals to fill the new barns was a major stumbling block. Prices of replacement heifers and cows were very high, if adequate numbers could even be found when wanted.

Because of the replacement situation, some new facilities probably are operating somewhat below capacity, and construction of others has been delayed. Next year, these facilities are likely to fill, strengthening cow numbers. Cow numbers are projected to slip fractionally in

2002, compared with a 1-percent decline in 2001.

The delayed effects of relatively low returns in 2000 increased the number of farms leaving dairying in late 2000 and early 2001, but the jumps in milk prices last spring quickly slowed the rate again. Possibly the biggest incentive to leave dairying in recent months has been the very high prices for replacement cows. The 2002 exit rate probably will be relatively modest, as reductions in returns will be cushioned by savings from 2001 returns.

Milk production is expected to grow by almost 3 percent in 2002, more than projected growth in demand. A price drop seems certain, with the extent of the fall highly uncertain and largely related to softness of demand. Farm milk prices are projected to decline about \$2 per cwt from this year's average \$15.35-\$15.45.

AO

James Miller (202) 694-5184
jjmiller@ers.usda.gov

Upcoming Reports-USDA's Economic Research Service

The following reports are issued electronically at the times indicated.

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December

- 11** *World Agricultural Supply and Demand Estimates* (8:30 a.m.)
- 12** *Cotton and Wool Outlook* (4 p.m.)*
Oil Crops Outlook (4 p.m.)**
- 13** *Rice Outlook* (4 p.m.)**
Feed Outlook (9 a.m.)**
Wheat Outlook (9 a.m.)**
- 14** *Vegetables and Specialties/ Melons Outlook Newsletter*[†]
- 19** *Agricultural Outlook* (3 p.m.)*
- 27** *Livestock, Dairy, and Poultry Situation and Outlook***
Foreign Agricultural Trade of the United States (FATUS)/ U.S. Agricultural Trade Update (4 p.m.)

*Release of summary, 3 p.m.

**Available electronically only.

[†]Third issue of the new electronic-only newsletter released every other month, which will replace the *Vegetables and Specialties Situation and Outlook* series.

What's ahead?

- ◆ Pressures for change in Eastern Europe's livestock sector
- ◆ How U.S. farm policy meshes with WTO commitments
- ◆ Biotechnology adoption: some policy implications

... in upcoming issues of *Agricultural Outlook*

Commodity Spotlight



Cotton Production Up, Demand Down

Cotton is experiencing greater weakness in world prices than grains and other crops. World cotton prices have fallen 39 percent from a year earlier as of October 2001, while comparable measures for wheat, corn, and soybeans range from a drop of 6 percent to a rise of 11 percent. Cotton prices, like other commodities, have suffered from global slackening of demand for commodities since the mid-1990s, but the current slowing of the world economy has coincided with rebounding world production, driving world cotton prices toward historic lows.

Demand Hurt by Economic Downturn

While a slowing world economy curbed expansion in global consumer demand for clothing, larger crops of cotton in the world's six major producing countries in 2001/02 resulted from favorable weather, government policies, and imperfectly integrated markets. Planted area in the Northern Hemisphere rose 9 percent from the year before, and with generally favorable weather contributing to yields, Northern Hemisphere production climbed 12 percent.

As cotton's problems have become apparent during this fall's Northern Hemisphere harvest, Southern Hemisphere farmers are now expected to cut cotton plantings by 11 percent in 2001/02. But since Southern Hemisphere countries account for little more than 10 percent of world production, their drop will not offset expansion in the North. Global cotton production is expected to rise 8.5 million bales in 2001/02, to its highest ever at 96.9 million bales. Meanwhile, consumption is forecast to decline slightly to 91.6 million bales, and world stocks outside China are expected to grow to their largest share of consumption since the mid-1980s.

A major source of cotton's current difficulty lies in the shifting world macro-economic outlook. During 1994-97, world GDP growth recovered from earlier weakness to range from 3.7 percent to 4.2 percent (International Monetary Fund estimates), and world cotton consumption resumed normal growth after a 6-year hiatus. The Asian financial crisis and its aftershocks in Brazil and Russia again deflected cotton consumption downward, but world economic growth only dipped to 2.8 percent in 1998. By 2000, world GDP growth had grown to nearly 5 percent as a surging U.S. economy played its traditional role as the global "locomotive." This role was particularly evident in cot-

ton consumption: 80 percent of the rise in world cotton consumption between 1995 and 1999 reflected increased purchases by U.S. consumers.

In part, expanding U.S. cotton consumption represented a long-term trend where a long-standing consumer and technical promotion program unique to the U.S. stimulated a growing preference for cotton. During the last 20 years, U.S. households were responsible for almost half of the 29-million-bale increase in world cotton consumption. There was also a short-term stimulus to U.S. consumption as U.S. economic expansion outpaced the rest of the world in the years leading up to 2000. In 2001, U.S. expansion has stalled, and U.S. end-use of cotton dropped for the first time since 1996. With no replacement for U.S. demand in a slowing world economy, world cotton consumption fell in 2000/01 and is expected to fall again in 2001/02.

U.S. Cotton Production Jumps to New Record

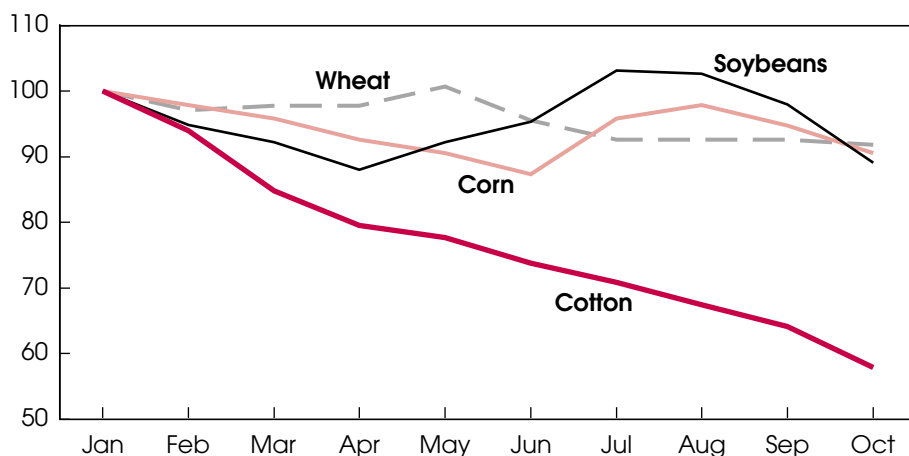
Unfortunately for the world's cotton producers, the recent economic slowdown was largely unanticipated by economic forecasters. A year ago, prospects seemed relatively bright for cotton prices and production with another year of strong U.S. and world economic growth generally anticipated for 2001. Textile spinning capacity had been growing in recent years in China, Pakistan, India, Thailand, Brazil, and Central Asia, in some cases after a long hiatus, as textile exporters sought to capitalize on expanding demand. With these favorable prospects for cotton and with grain prices languishing well below their highs of a few years earlier, cotton production expanded in a number of countries in 2001/02.

Also, circumstances peculiar to the world's largest producers added to local incentives to produce cotton, with one of the largest gains, a 3-million-bale increase, occurring in the U.S. Although U.S. cotton prices were declining during planting time this spring, so were prices for other commodities, limiting the outlook for profitable alternatives. Furthermore, the U.S. marketing loan and crop insurance programs provided further incentives to plant cotton rather than other

Commodity Spotlight

World Cotton Prices Lose Ground in 2001

Index: Jan. 2001=100



Cotton price is Northern Europe. Other prices are U.S. Gulf Ports.

Economic Research Service, USDA

crops. As a result, U.S. cotton acreage in 2001 rose 4 percent to 16.2 million acres, the second highest in nearly 4 decades.

While drought occurred in parts of the Southwest in 2001, generally favorable growing conditions for other cotton producing regions likely provided a record U.S. cotton crop this season. The latest USDA production estimate is 20.2 million bales, 17 percent above 2000 and 3 percent above the previous record set in 1994.

During the last decade cotton production shifted back to the eastern half of the U.S. as boll-weevil eradication improved the profitability of growing cotton in the region. In 2001, the Delta and Southeast regions likely produced 60 percent of U.S. cotton, up from about 50 percent just 10 years ago. In fact, the Delta is expected to produce a 6.8-million-bale cotton crop this season, the second largest on record behind the region's 1994 crop of 6.9 million. Similarly in the Southeast, production is forecast to surpass 5 million bales for the first time since the 1937 season. In contrast, the Southwest (4.7 million bales) and the West (3.3 million bales) have been relatively stable over the past decade.

Foreign Cotton Production Also Up

China, with the largest increase of any country in 2001/02, is expected to produce a 23.5-million-bale crop, up 3.2 million from a year earlier. Like the U.S., China is experiencing a return of cotton to the area (the eastern provinces) that domi-

nated its industry in earlier years. Factors contributing to this second-largest increase ever include:

- rebounding prices as China's cotton market reform passed through its initial shock,
- the introduction of Bt cotton to China's eastern provinces, and
- China's continued prohibition of imports combined with an effort to restrain grain output.

China's cotton area plummeted to a 37-year low in 1999/2000 as guaranteed government procurement was formally rescinded and an aggressive government effort to reduce textile capacity suggested continued sluggish demand. However, textile exports and cotton consumption began soaring in China during 1999/2000 and producers began receiving higher prices through both legal and illegal marketing channels. At the same time, the cost savings of Bt cotton were becoming apparent in eastern provinces like Shandong, Henan, and Hebei. In 2001/02, China's cotton area is estimated 29 percent higher than 2 years earlier, and with favorable weather, yields are forecast at their second highest ever.

World Cotton Consumption Tracks Global GDP Growth: Both Slow in 2001/02

Percent growth in GDP

Percent growth in cotton



2001 estimated.

Economic Research Service, USDA

Commodity Spotlight

India's cotton producers, in response to higher prices for cotton and price depressing supplies of Indian rice, planted 618,000-additional hectares to cotton. With the return this year of a favorable monsoon to Gujarat, the largest cotton producing state, yields are expected to be their highest since 1996/97, and India's production is expected to increase 1.3 million bales to 12.2 million.

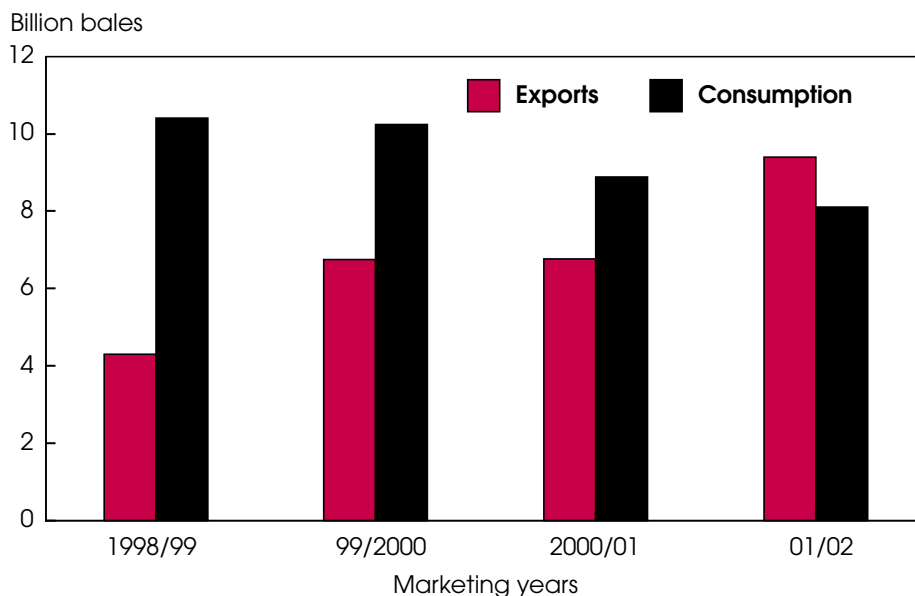
In **Pakistan**, although a prolonged drought has entered its third year, cotton production is expected to increase as planted area shifts from rice to cotton, a less water-intensive crop. An increase of only 100,000 bales from the year before is foreseen in Pakistan's cotton crop, to 8.3 million bales.

In **Central Asia**, yields appear to have increased in 2001/02 despite the continued drought. Last year Uzbekistan's westernmost districts suffered from poor irrigation supplies, so area shifted closer to irrigation sources in 2001/02, and output is forecast 300,000 bales higher at 4.7 million. Larger crops have also been realized in Kazakhstan, Tajikistan, and Turkmenistan. Cotton production in Central Asia has stabilized since 1996, following a 50-percent reduction over the preceding 8 years. Area has actually trended upward in the region despite the steady decline in world prices, as state monopolies determine producer payments independent of world events.

West Africa's Franc Zone has also seen increasing area since the mid-1990's, but largely because of a 1994 exchange rate correction. In 2001/02, area is estimated up 19 percent from the year before and record output is expected. Last year saw one of the sharpest declines in the region's output ever, in part due to poor weather, and in part due to a strike by producers in Mali, the largest Franc Zone producer. World prices rose slightly last year, and producers and marketing boards in the region pursued increased output.

Ironically, many of Mali's producers refused to plant cotton in 2000/01 due to low prices, but returned in force to the crop in 2001/02. Mali's area is estimated up 89 percent from the year before and, with favorable rains and yields, West Africa's largest cotton producer is expected

U.S. Cotton Exports to Exceed Domestic Consumption in 2001/02



2001/02 forecast.

Economic Research Service, USDA

ed to harvest 620,000 bales, or 129 percent more than the year before. Overall, Africa's Franc Zone is expected to produce 1.2 million bales more cotton in 2001/02 than during the year before, and the region's exports are expected to overtake Uzbekistan's for the first time ever.

U.S. Cotton Mill Use Declines As Textile Imports Expand

The buildup of foreign cotton supplies and foreign textile capacity has come at a particularly inopportune time for the U.S. textile industry. Cotton mill use in the U.S. is expected to decrease 9 percent in 2001/02. While the U.S. spinning industry has declined in general over the last 4 years, the bulk of the reduction is attributable to cotton. In calendar year 2000, for example, cotton accounted for 29 percent of total fiber spun in the U.S., down from about 33 percent just 5 years earlier.

Increases during the last 5 years in domestic cotton consumption—which includes mill use plus the net trade of cotton products—have been satisfied mainly by imported products. U.S. cotton textile and apparel imports in calendar year 2000 rose for the 12th consecutive year to 7.5 billion pounds, a new record. On a per capita basis, imports amounted to over 27

pounds per person in 2000, double the level of just 7 years ago.

During the last several years, domestic mills have been under tremendous price pressure from imports as the U.S. dollar has reached heights not seen in over a decade. As a result of the dollar's strength, many U.S. mills have had to restructure their businesses by limiting their output, relocating their operations, or closing plants. In 2001 for example, an unprecedented number of textile industry participants shuttered their doors as financial losses mounted and improved prospects seemed limited.

While U.S. imports and exports of cotton products have been rising for over a decade, only part of the increase can be attributable to trade agreements—such as the Caribbean Basin Initiative and the North American Free Trade Agreement—which encourage extensive use of U.S. raw fiber or semi-processed products. About 80 percent of the U.S. trade deficit in textiles and apparel is with countries not covered by these agreements, and liberalization under the World Trade Organization (WTO) has expanded the access of these other countries in recent years.

Commodity Spotlight

Based on estimates by the International Textiles and Clothing Bureau, the U.S. has increased the size of its import quotas by about 35 percent since 1995 in order to meet its WTO obligations. However, imports from other countries increased more than 50 percent. With the strong U.S. economy, soaring value of the U.S. dollar on foreign exchange markets, and expansion of developing country exports into new products, calendar year 2000 was the first year in which net imports of cotton products exceeded U.S. mill use of cotton. In addition, preliminary 2001 data suggest that the gap between U.S. mill use and net imports will widen further.

Future Cotton Prospects Uncertain

Although U.S. mill use of cotton is trending lower, foreign mill use is expected to rise for the third consecutive year in 2001/02, albeit at a 0.7-percent rate com-

pared with the 1.7-percent rate of the preceding 25 years. Cotton consumption is expected to decline slightly in India, the world's second-largest industrial user, but higher mill use is expected in Pakistan and Southeast Asia. Brazil's consumption of cotton is expected to decline due to electricity rationing, and no change is foreseen for China, home of the world's largest textile industry.

As for further into the future, current low cotton prices could bode well for reduced world cotton output in 2002/03, although the magnitude may depend on the level of government support around the world. Similarly, low prices and forecasts for a rebounding global economy in 2002 and 2003 suggest world consumption could return to more normal growth, but considerable uncertainty remains about the economic outlook.

In the U.S., raw cotton exports will become increasingly more important if U.S. mill use continues its recent downward trend that has resulted in a buildup in U.S. stocks. With the U.S. holding a larger share of global stocks than at any time during the past decade, U.S. cotton exports could approach shipment levels attained in only a handful of prior years. And if the global economy rebounds in 2002/03 as forecast and world cotton mill use expands, the U.S. will be in a unique position to supply the growing need for cotton fiber around the globe. **AO**

Leslie Meyer (202) 694-5307

lmeyer@ers.usda.gov

Stephen MacDonald (202) 694-5305

stephenm@ers.usda.gov

For more information:

www.ers.usda.gov/publications/agoutlook/dec2000/ao277c.pdf

www.ers.usda.gov/briefing/cotton



Commodity Spotlight



USDA photo: Bill Tarpenning

Sweet Peppers: Saved by the Bell

On any given day, 24 percent of Americans consume at least one food containing bell peppers. This compares with such popular foods as french fries (13 percent), catsup (16 percent), and fresh-market tomatoes (28 percent), according to data from USDA's 1994-96 Continuing Survey of Food Intakes by Individuals. Daily consumption may be even higher today than during the survey period—a reflection of the popularity of the foods in which bell peppers are used. Fresh-market bell peppers are used on any given day by 10 percent of consumers while processed peppers (frozen, canned, dried) appear on the plates of 16 percent of U.S. consumers daily.

Over the past two decades, consumption of most types of peppers has been on the rise in the U.S. However, after an apparent peak in the mid-1990s, the use of pungent chile peppers in America leveled off, while demand for their mild cousins, sweet peppers, climbed to a record high in 2000.

Bell peppers (green, red, purple, and yellow) are the most common sweet pepper and can be found in virtually every retail produce department and in many backyard gardens. Rapid growth in consump-

tion of sweet bell peppers has benefited both consumers (peppers contain a healthy dose of vitamin C) and producers (gross receipts from bell peppers have risen 32 percent over the past 5 years). From 1998 to 2000, annual farm cash receipts for sweet bell peppers averaged \$535 million—with an estimated retail value of over \$1.7 billion.

The genus *Capsicum* and species *annuum* includes most peppers grown in the U.S. These can be further grouped into two broad categories—chile peppers, which are pungent (hot), and sweet peppers, which are nonpungent (mild). The U.S. produces 4 percent of the world's capsicum peppers (sweet and hot), ranking sixth behind China, Mexico, Turkey, Spain, and Nigeria. Bell (sweet) peppers are a leading commercial and home garden vegetable in the U.S. Given continued strong demand, U.S. growers harvested 12 percent more bell pepper acreage in 2000 than a year earlier. Bell peppers, grown commercially in most states, are shipped by 6,271 farms (1997 Census of Agriculture) into the fresh and processing markets.

Although bell peppers are grown in 48 States, the U.S. industry is largely concentrated in California and Florida, together accounting for 78 percent of out-

put in 2000. New Jersey, Georgia, and North Carolina round out the top five producing states. According to the 1997 Census, about 4 percent of farms that produced sweet bell peppers accounted for 74 percent of the pepper area harvested. Each of these farms harvested at least 50 acres of sweet peppers. Concentration of output was up from 1992, when the top 4 percent of sweet pepper farms harvested 69 percent of pepper area.

Nonpungent types like bell peppers contain no capsaicin—the compound that gives the kick to chile peppers. Red bell peppers are actually the mature stage of green bell peppers that have been allowed to ripen on the vine. Pimiento peppers, also sweet, are grown mostly for use in various processed products. Brighter colored peppers tend to be sweeter than green peppers because the sugar content increases as the pepper matures. As with onions, cooking (especially sautéing) green bell peppers releases stored sugars, making them sweet and removing bitterness.

Most Bell Peppers Picked Green, Sold Fresh

The U.S. produced 1.7 billion pounds of bell peppers for all uses during 1998-2000. There are no data specifically detailing fresh and processed production, but ERS estimates suggest less than 10 percent of production is earmarked for processed products. Bell pepper production has been trending higher, reaching a record high in 2000. Peppers are produced and marketed year-round, with domestic shipments peaking during May and June and import shipments highest during the winter months.

Although the majority of chile peppers such as jalapeno and Anaheim are processed, most bell peppers are sold commercially in the fresh market. A typical field of fresh-market peppers is harvested by hand every week or so over the course of about a month. Most of the crop is sold as mature green peppers, but growers receive a premium for a limited amount of other colors. The premium reflects the fact that bright colored bell peppers are more costly to produce (field losses are higher and yields are lower) than those harvested at the green stage. Shippers apply a food-grade wax to the

Commodity Spotlight

majority of commercially produced peppers to reduce moisture loss and scuffing during marketing. This can also extend storage life, which under ideal conditions can range up to 3 weeks.

The major processing uses of sweet peppers include dehydrated products (such as paprika), jarred pickled bell peppers, sweet banana peppers, cherry peppers; and sliced or diced, red or green bell peppers for use in pizzas and other frozen foods. Use of processed peppers by pizza chains has declined over the last several years; most chains currently prefer to top pizzas with fresh vegetables, including fresh bell peppers.

For the most part, bell pepper varieties used in processing are identical to those entering the fresh-market. As such, the bell pepper market can be considered a dual-use market, with the same product able to move into either market. According to industry data, about 50 million pounds of frozen sweet bell peppers are packed annually. But data for canned and dehydrated bell peppers are very limited.

California Is Top Supplier

According to the 1997 Census of Agriculture, 460 farms produced sweet bell peppers in California—up 16 percent from 1992. During 1998-2000, the Golden State produced 46 percent of the nation's bell peppers, and the state's production is now 89 percent higher than in 1988-90. Although output is substantial in many counties, about 41 percent of California's bell peppers are shipped from San Benito, Riverside, and San Joaquin Counties. California's shipping season runs from April to December, with peak volume hitting the market May through July.

Florida follows California in bell pepper production, with 36 percent of the nation's output during 1998-2000. In 1997, there were 128 farms reported to be growing bell peppers in Florida, 36 percent fewer farms than in 1992. During this time, bell pepper acreage remained constant, with more than half of output coming from Palm Beach and Collier Counties. Florida's shipments run from October through the following July, with peak volume occurring during March and

April. During the winter season, imports, largely from Mexico, provide the only other source of field-grown bell peppers. Small volumes of both domestically produced and imported hothouse peppers are also available during the winter months (at higher prices).

New Jersey, with 6 percent of production, is a distant third in bell pepper production. Two-thirds of output comes from Gloucester, Salem, and Cumberland Counties. The 537 New Jersey farms that ship bell peppers market them July through early November, with peak volume in August. During summer and early fall, New Jersey is an important supplier of peppers to New York City. Farms growing bell peppers in that state have declined 10 percent since 1992, but output has more than doubled since 1988-90.

With 5 percent of U.S. production, Georgia is a fall and late-spring bell pepper supplier that helps fill market gaps. Georgia's bell pepper shipments are greatest in June, when it shares the national market with California. Production is dispersed over several counties, led by Atkinson (15 percent) and Colquitt (13 percent).

Like Georgia, North Carolina markets bell peppers during June, when Florida's crop is waning and California's summer production has not yet begun. Some 174 farms in North Carolina account for 4 per-

cent of national bell pepper output, with Sampson County producing nearly half the state's crop. Although North Carolina's season stretches from June to September, most volume is shipped during June and July.

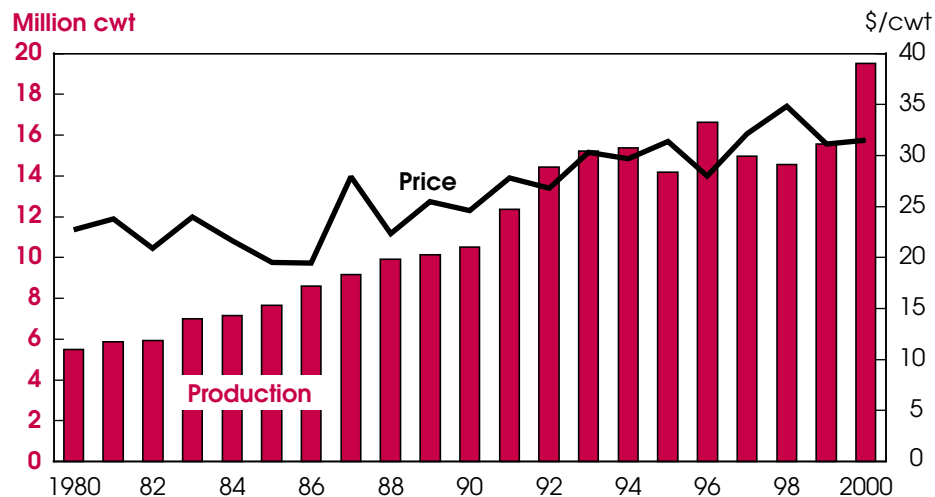
U.S. Trade: Peppers In, Peppers Out

Trade plays a key role in the U.S. fresh bell pepper market. About 7 percent of U.S. fresh-market supplies are exported, and 20 percent of fresh-market demand is satisfied by imports. Canada accounts for 98 percent of U.S. fresh-market export volume. The U.S. supplies about 79 percent of all fresh-market bell peppers imported by Canada, with Mexico supplying another 14 percent.

Until recently, U.S. imports of fresh-market bell peppers came primarily from Mexico. Two-thirds of all imports enter the country during December-April, with volume lightest in July and October (3 percent each month). About 45 percent of all fresh bell pepper imports enter through the land port of Nogales, Arizona. Most of the import volume during the summer and early fall likely consists of hothouse product from the Netherlands and Canada.

U.S. fresh-market exports and imports have both been trending upward in the past two decades. Average export volume

Salad Days for Bell Peppers as U.S. Farm Prices, Production Trend Upward



Source: National Agricultural Statistics Service, USDA.
Economic Research Service, USDA

Commodity Spotlight

during the 1990s rose 74 percent over the 1980s, while average imports were up 67 percent. The most opportune time for Mexican exports to the U.S. is January through April, when Mexican production is greatest. For Mexico, this market window is covered by a small tariff (1.1 cents per kg in 2001), which is being phased out over 10 years, starting in 1994. Imports from Canada enter duty-free, while the general tariff rate faced by many other U.S. trade partners, such as the Netherlands, is 4.7 cents per kg.

Given the well-supplied U.S. market and generally low tariffs, the North American Free Trade Agreement offered little additional economic incentive for Mexican bell pepper exporters following implementation of the agreement on January 1, 1994. However, the steep peso devaluation that began in December 1994 and the dollar's strength throughout the 1990s altered the balance of trade and likely provided part of the impetus for increased fresh-market bell pepper exports to the U.S. The rest of the incentive for rising imports of fresh bell peppers was demand-related as U.S. consumers generally began to favor high-quality (and higher priced) hothouse vegetables like peppers, tomatoes, and cucumbers.

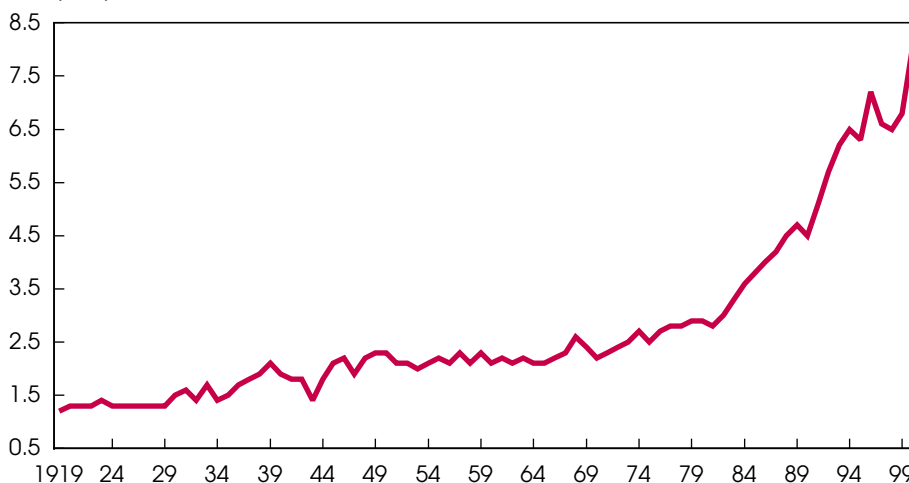
The U.S. imported almost \$13 million in dried (unground) bell peppers in 2000, mainly from Chile (\$7 million) and China (\$3 million). In volume, this was over 7 million pounds of dried peppers—the equivalent of over 140 million pounds of fresh bell peppers. The U.S. also imported \$2 million in canned sweet bell pepper products in 2000 at a volume of 5 million pounds (fresh-weight equivalent of 12 million pounds). Most canned bell pepper imports come from Turkey, Egypt, and Spain.

Market Price Trends Are Up

Between 1960 and 2000, season-average bell pepper shipping-point prices (unadjusted for inflation) gained an average 67 cents per cwt a year. The price of bell peppers averaged \$31.50 per cwt (f.o.b. shipping point) during the 2000 season, up 1 percent from 1999 but 28 percent above 1990 as consumption continued to trend higher in the 1990s. During the mid-

U.S. Bell Peppers Ring Up Increases in Per Capita Use

Lbs. per person



Economic Research Service, USDA

1980s, pepper prices hit a lull, reflecting excess production as growers overreacted to increasing demand. However, demand soon “caught up” with the increasing supply and prices resumed their long-term upward trend. In 2001, nominal shipping-point prices for bell peppers have averaged 10-20 percent below a year earlier since the first quarter—weather-related reductions in supply caused prices to double during the first 3 months of the year.

Like prices of many agricultural crops, constant-dollar bell pepper prices (after adjusting for inflation) have trended lower over the last several decades. However, with rising demand keeping up with supplies recently, constant-dollar prices have risen 7 percent between 1988-1990 and 1998-2000.

The U.S. retail price for fresh-market bell peppers averaged \$1.41 per pound in 1999. This was the last full year that national bell pepper retail prices were reported by the U.S. Department of Labor. Largely reflecting continued strong demand, the retail price for fresh-market peppers rose 25 percent between 1994 and 1999. The marketing price spread—the difference between farm and retail price—for fresh-market bell peppers is very similar to that of tomatoes and onions. On average, grower/shippers received 34 percent of the retail value of bell peppers during the 1990s, up from 32

percent during the 1980s. The remaining portion of retail value covers marketing costs such as transportation, retail labor, and other selling costs.

Per Capita Use of Bell Peppers Rises

Americans consumed an estimated 2.2 billion pounds of bell peppers in 2000. On a per capita basis, this works out to about 8 pounds—80 percent higher than in 1990 and nearly 4 times the 1960 level. This level of consumption is similar to broccoli and snap beans. Since the early 1970's, per capita bell pepper use has gradually moved upward, reaching a record high in 2000. Consumer attraction to bell peppers likely reflects:

- the wider range of foods that include bell peppers as an ingredient;
- wider availability of high-quality hot-house and colored peppers;
- the economic prosperity of the nation over the past decade;
- increased away-from-home dining;
- consumer recognition of the nutritional qualities of vegetables; and
- increased diversity in the nation's population.

Commodity Spotlight

The best known main dish featuring bell peppers is perhaps stuffed peppers. However, bell peppers are used in a wide variety of foods such as green salads, pizza toppings, casseroles, pasta sauces, plate garnishes, dipping vegetables, salsas, relish trays, sautéed vegetable medleys, soups and stews, stir fry, and even as fried rings (*a la* onion rings). Some peppers are sliced, seeded, and bagged and sold in bulk, primarily to the food-service industry. In canned (glass-pack) form, such items as pickled sweet red bell peppers and sweet golden pickled banana peppers can be found in most retail stores.

The 1990s also saw the popularity of hot-house vegetables explode. Initially, a wide range of colored bell peppers was imported from the Netherlands. Other countries then entered the market, followed by several domestic hothouse producers. While some domestic producers have since left the hothouse pepper market to concentrate on other vegetables, imports remain popular, with volume from Canada surging at double-digit rates since 1997. Import volume from Canada was 4 times greater in 2000 than in 1996 and was up 43 percent from a year earlier during the first 7 months of 2001.

High U.S. employment rates and low price inflation of the past 10 years have encouraged consumer spending on a wide range of foods. This includes both food away from home and higher priced retail items such as imported and domestically grown hothouse peppers. The continued increase in meals away from home boosted consumption of foods such as pizza, pasta, mild salsas, and other ethnic foods containing bell peppers. Consumers procure some of these foods much more commonly from eating establishments (e.g. pizza) than make them at home—a boon to commodities like peppers which are rarely served as major plate vegetables.

Although many consumers may not know of the specific nutritional attributes of bell peppers, they may eat more simply because of an increased awareness over the past decade of the dietary value of vegetables in general. Bell peppers are high in vitamin C (one medium green bell pepper contains 177 percent of the RDA

for vitamin C), and as they mature and sweeten (turn color), the vitamin A content rises by a factor of 9 while the vitamin C content doubles. Peppers are also excellent sources of dietary fiber and provide small amounts of several other vitamins and minerals.

Over the past two decades, immigration trends may have boosted the popularity of bell peppers. A more diverse population has helped broaden the American dining experience by providing cuisine new to many and adding new flavors to the restaurant industry. U.S. consumers have been exposed to the cuisines of the world over the past 20 years, with many now represented in new restaurants and new retail foods, many of which feature vegetable-rich recipes, including bell peppers.

Who Eats Bell Peppers?

Bell peppers, like most foods, are largely consumed at home (63 percent). This partly reflects stepped up use of bell peppers as ingredients in processed foods, rather than simply their use in home cooking. In the away-from-home market, fast food accounts for 13 percent of bell pepper consumption, with other restaurants using another 18 percent. Many ethnic restaurants (e.g., Italian, Chinese, Lebanese, Korean, and Indian) use some form of bell peppers in their cuisine.

With the exception of the southern region, bell peppers are relatively popular in most of the country. Consumers in the East, West, and Midwest eat the most on a per capita basis. However, consumers residing in the South eat 28 percent fewer bell peppers per person than those in the East, where bell peppers are most popular. As defined by the U.S. Census, the South, with 35 percent of the nation's population, is the most populous region, yet this region accounted for only 29 percent of all bell pepper consumption.

The USDA food-intake survey also gauged bell pepper consumption by racial group. Consumption figures revealed some interesting variations by race, with white and Hispanic consumers generally exhibiting a greater preference for bell

peppers than other races. According to the survey, black consumers eat considerably fewer bell peppers than other races. Black consumers, who make up 13 percent of the U.S. population, accounted for less than 9 percent of U.S. bell pepper consumption—consuming fully one-third less per capita than other groups. This may partly explain the lower consumption in the South, where more than 50 percent of U.S. blacks reside.

Wealthier consumers appear to favor bell peppers most. While households with incomes at least 3.5 times greater than poverty level represent 39 percent of the U.S. population, they consume 44 percent of fresh and 48 percent of processed bell peppers. The 19 percent of the population earning the lowest incomes consume much less than their share of processed bell peppers but consume fresh bell peppers in proportion to their share of the population.

Bell peppers appear to be slightly more popular among men than women, with men consuming 53 percent of all bell peppers. Men aged 20-39, accounting for 16 percent of the population, consumed 24 percent of all bell peppers, with only minor differences between consumption levels of fresh and processed products. Children aged 2-11 eat very few fresh or processed bell peppers, and teenaged boys and girls also consumed proportionally fewer peppers. This suggests that a taste for bell peppers is acquired with maturity.

Although bell peppers were domesticated in the Americas before Columbus helped to make them popular in Europe, it has only been over the past 30 years that consumption in the U.S. has become widespread. Bell peppers are proving to be both a popular vegetable and a versatile seasoning. With a more diverse population, the enduring popularity of favorite foods such as pizza and pasta, and a strong trend toward away-from-home meals, production and consumption of bell peppers are expected to continue expanding over the next few years. **AO**

Gary Lucier (202) 694-5253 and
Bing-Hwan Lin (202) 694-5458
glucier@ers.usda.gov
blin@ers.usda.gov

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EU Preferential Trading Agreements: Heightened Competition for U.S.

The European Union (EU) is the world's largest agricultural importer and the second-largest exporter, making it an important market for the U.S. as well as a competitor. Although the EU has pursued global multilateral trade negotiations within the World Trade Organization (WTO) and extends most-favored-nation (MFN) treatment to WTO members, it also participates in more non-global preferential trading agreements than does any other WTO member. Over two-thirds of EU imports come from countries with such agreements. The only countries having no preferential access to EU markets are the U.S. and nine others: Australia, Canada, Hong Kong, Japan, the Republic of Korea, New Zealand, Singapore, China and Taiwan.

Preferential trading agreements (PTAs) provide lower tariffs and other more favorable terms for imports from preferred trading partners. The EU's many preferential agreements create a mosaic of tariffs, quotas, and other import restrictions that vary considerably even among preferred partners. EU preferential agreements disadvantage U.S. exports to EU markets while providing advantages to EU exports in the markets of their preferred partners.

In what is called trade diversion, exporters without preferences may see their exports displaced by exports from higher cost preferred partners. Some preferred partners also may be displaced by other preferred partners benefiting from even lower tariffs and fewer restrictions. Preferential agreements, while advantageous to participants, can limit competition through trade diversion and could detract from global multilateral trade negotiations.

Recent Changes & The Implications

Recent EU trading arrangements have departed from historical practices, and further changes are likely. Since March 2001, the EU's "Everything But Arms" (EBA) policy provides free entrance to the EU market for 42 least developed countries (LDCs): no tariffs, quotas, or other restrictions are applied to agricultural products. Although some EU agricultural producers consider the EBA a threat, preliminary analyses by the EU Commission indicate that export potential from the least developed countries is low except for rice, sugar, and bananas, for which 7 years of gradual transition give time for necessary adjustments.

Other changes in EU preferential agreements could have negative impacts on U.S. agricultural exports. Unlike early agreements beyond Europe with former colonies and developing countries, which provided no reciprocal advantages to EU exports, the more recent agreements do provide such advantages. The potential for displacement of low-cost exports from the U.S. by EU exports has increased.

Recent and proposed conversions from nonreciprocal to reciprocal arrangements with Mediterranean and African, Caribbean, and Pacific countries are partially motivated by legal challenges to nonreciprocal agreements. Nonetheless, recently negotiated preferences for EU exports have been significant, including olive oil, wines, and spirits to Mexico, and 800,000 tons of wheat annually to Mediterranean countries. Additional free trade agreements with Chile and MERCOSUR (Argentina, Paraguay, Uruguay, and Brazil) are under negotiation and could provide preferences to EU products.

Also a concern for the U.S. is the impact of expanding EU preferential agreements on prospects for liberalizing trade through multilateral trade negotiations. As a huge market, the EU has enormous bargaining power in bilateral negotiations, allowing EU preferential agreements generally to continue strong protection for EU agriculture. The EU is pursuing freer nonagricultural trade while avoiding liberalization of its highly protected agricultural markets. In multilateral trade negotiations, however, the EU finds it harder to resist the collective influence of countries seeking liberalized world agricultural trade.

The Special Case of EU Agricultural Trade

The EU is largely an open market for nonagricultural products (except for textiles and clothing), with an average tariff of only 4.2 percent in 1999. EU agricultural markets, however, are restricted and highly managed. Starting in the 1960s, the EU chose to protect domestic producers by restricting trade through the Common Agricultural Policy (CAP).

CAP support for EU producers includes the maintenance of prices of domestically produced or "sensitive" agricultural prod-

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EU Trading Arrangements

EU trading arrangements include multilateral most-favored-nation (MFN) treatment, which the EU extends to all World Trade Organization (WTO) members, and preferential trading agreements with specific countries or blocks of countries. Products from MFN countries, including the U.S., made up about one-third of EU's imports in 1998-2000, while products from countries with preferential agreements accounted for the other two-thirds.

Multilateral most-favored-nation (MFN). Treatment. Bound maximum tariffs and other trading conditions apply to imports from all WTO members. EU tariffs are prohibitively high on many sensitive agricultural products, while low or zero tariffs are applied to many agricultural products in short supply. Despite the nomenclature, MFN treatment generally is the least favorable treatment provided imports.

Preferential trade agreements (nonreciprocal). Preferential tariffs below MFN tariffs and other trading conditions are provided unilaterally by the EU without reciprocal preferences for EU exports. Nonreciprocal trade agreements or preferences include:

Generalized System of Preferences (GSP). Reduced tariffs are provided on selected products to 146 developing countries. The GSP provides reductions in *ad valorem* tariffs of 15 percent for "very sensitive" products and reductions of 30, 65, and 100 percent for "sensitive," "semi-sensitive," and "non-sensitive" products. No quotas are imposed. Many agricultural products are more than "very sensitive," however, i.e. no reductions are provided.

Least-developed-country (LDC) preferences. The GSP always has provided the LDCs with larger tariff reductions on a larger set of products. Since March 2001, the "**Everything But Arms**" (EBA) policy provides 42 LDCs duty-free access to EU markets without quota or other restrictions for all agricultural primary and processed products. EU imports of sugar, bananas, and rice are subject to transition arrangements until 2009.

Africa, Caribbean, and Pacific (ACP) preferences. Tariff reductions are provided to 77 former EU colonies that are larger and for more products than those of the GSP or those provided for the LDC before the EBA. Many larger tariff reductions are available only within quotas. Special protocols provide for EU imports of sugar, beef and veal, from a few ACP countries at high EU prices. The WTO waiver for

ACP preferences expired in 2000. A new waiver has been requested but has been controversial and remains pending. The EU intends to negotiate new reciprocal ACP arrangements by 2008.

Preferential trade agreements (reciprocal). Bilateral agreements, referred to in the General Agreement on Tariffs and Trade (GATT) as free trade agreements (FTA), provide preferential tariffs below MFN tariffs and other preferential treatment for the exports of the EU as well as for the preferred partner. The provisions of these agreements, including agricultural product coverage, vary considerably, but most provide significant tariff reductions although only within quotas. FTAs with neighboring countries extend the EU internal market throughout Western Europe for industrial products, but exclude agriculture. EU's FTAs include:

Europe Agreements with Hungary, Poland, the Czech Republic, the Slovak Republic, Bulgaria, Romania, Estonia, Latvia, Lithuania, and Slovenia, provide for reciprocal free trade (zero tariffs) in industrial goods in preparation for EU membership. "Double zero" provisions eliminate export subsidies in bilateral trade and provide duty-free access for some products within quotas. Similar agreements provide some agricultural preferences to countries in southeast Europe, but without the prospect of membership. Sensitive agricultural products are excluded.

Euro-Mediterranean Agreements (EMA) are FTAs with the Palestinian Liberation Organization (1997), Tunisia (1998), and Israel and Morocco (2000). Agreements with Jordan and Egypt await implementation. The EMAs provide for free trade in nonagricultural products, while agricultural trade is limited by quotas largely to historical flows. The EMA replace nonreciprocal agreements from the 1970s, which remain in force for Algeria, Lebanon, and Syria pending EMA negotiations. The EU envisions a Euro-Mediterranean free-trade area by 2010.

Other agreements include bilateral FTAs with **South Africa** (1999) and **Mexico** (2000) that provide for free trade in nonagricultural goods. Some agricultural concessions are provided within quotas, but sensitive products are excluded. The FTA with Mexico covers 62 percent of historical agricultural trade. FTAs are under negotiation with **Chile** and **MERCOSUR** (Brazil, Argentina, Paraguay, and Uruguay).

ucts considerably above world prices (sometimes more than double). The CAP also isolates many domestic prices from movements in world prices. Sensitive products include grains, sugar beets, nontropical fruit, vegetables, wine, olives, poultry, eggs, pork and pasture-based livestock, including dairy products, beef, and sheep meat. Also sensitive are processed forms of

these products, such as flour, starch, pasta, and preserved fruit and vegetables.

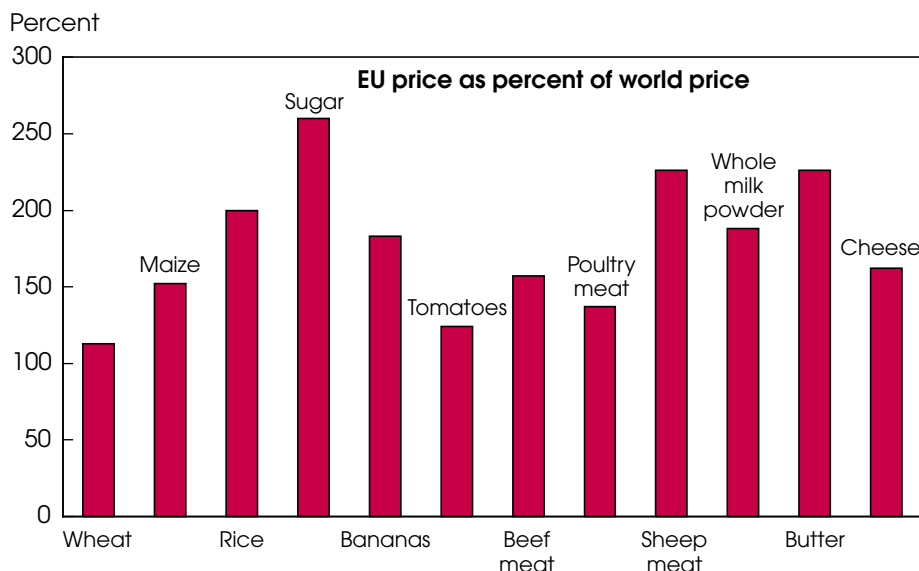
The EU does not support prices of agricultural products for which EU production is inadequate—including tropical products, oilseeds and their products, and cotton and numerous nongrain feed ingredients—allowing these to be imported close to world prices. Reductions in EU grain sup-

port prices during the 1990s and a weak *euro* also have brought EU grain prices much closer to world prices, and EU grain imports have increased in recent years.

The CAP focuses principally on management of supplies to achieve targeted price levels. Export subsidies facilitate the disposal of surpluses. When domestic supplies of CAP products are insufficient, the

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EU Prices for Agricultural Products Are Above World Prices



Based on 1999-2000 price data from the Commission of the European Union.

Economic Research Service, USDA

CAP carefully controls the quantity and pricing of imports to be consistent with price targets. Control mechanisms employed include high and variable applied tariffs, quotas (mostly negotiated within preferential agreements), minimum import price requirements, and seasonal restrictions. Preferential agreements are integral to CAP import management.

GATT Reforms— What Has Been the Result?

The General Agreement on Tariffs and Trade (GATT), adopted in 1947 and administered by the WTO since 1995, provides rules that govern most world trade. The foremost GATT principle is most-favored-nation (MFN) treatment, which requires WTO members to accord to all members the best trading conditions provided to any country. Implicitly, the MFN principle requires that all trading arrangements be global, precluding trade diversion. However, GATT rules provide two exemptions to MFN obligations.

One exception allows for free trade agreements (FTAs) among “adjacent countries” to “recognize the desirability of increasing freedom of trade.” Trade barriers cannot be increased for any country, however, and all barriers within a free trade area

must be eliminated on “substantially all trade” and “within a reasonable amount of time.” But the EU has excluded sensitive high-priced CAP products by interpreting “substantially all trade” to mean substantially all historical trade, effectively allowing continuation of past trade restrictions and precluding increased trade.

The GATT provides a second exemption from MFN obligations which allows developed countries to provide a Generalized System of Preferences (GSP) for imports from developing countries, including special measures for the least developed countries. The GSP differs from free trade agreements in that concessions are provided unilaterally, without reciprocal concessions, and are nonbinding and revocable.

All nonglobal trading arrangements must conform to GATT requirements for FTAs or the GSP, unless three-fourths of WTO members consent to a waiver. The EU has established numerous trading arrangements under WTO waivers, including the agreement with African, Caribbean, and Pacific countries.

In the Uruguay Round of the GATT, disciplines were imposed on export subsidies

and domestic support to agriculture, while quantitative restrictions and other nontariff barriers were eliminated, in principle. Tariffs, once bound at agreed MFN levels, cannot be increased without compensation to all affected countries. Throughout eight rounds of multilateral trade negotiations, however, the EU has maintained very high MFN tariffs on many agricultural products. In practice, GATT reforms have so far little affected EU management of agricultural imports.

Operating the CAP: Mechanisms to Manage Trade

Provisions of EU preferential agreements, except for “Everything But Arms,” carefully accommodate the CAP, even providing for subsequent CAP changes. Maintenance of high CAP prices depends fundamentally on high MFN tariffs to restrict trade, allowing other CAP mechanisms to effectively facilitate and control desired imports. The value of preferences and the impacts on trade depend on the CAP mechanisms discussed below and the provisions of preferential agreements.

High MFN tariffs. The GATT requirement that imports be allowed at bound MFN tariffs means that high prices must be protected from cheap imports by tariffs at least as large as the gap between EU and world prices. Otherwise, lower priced imports would pour in, undermining domestic prices. Because EU agricultural prices are very high, EU agricultural tariffs also are high. The average maximum MFN tariff is 30 percent, 7 times the nonagricultural average, and for sensitive products subject to WTO quotas, the average is 78 percent. Eight percent of agricultural tariffs are over 100 percent. EU MFN tariffs for sensitive products often are greater than the normal gaps between EU and world prices and are mostly prohibitive.

Largely prohibitive MFN tariffs mean that little trade occurs without alternative arrangements. Tariffs actually applied on sensitive EU imports often are considerably less than MFN rates. EU price targets still can be achieved because many MFN tariffs are considerably larger than the gap between EU and world prices. The amount of MFN tariff in excess of the price gap, often referred to as “water” in the tariff, insures that other measures, including quo-

tas and minimum import price requirements, can be employed to manage trade effectively. Adequate “water” also allows applied tariffs (and possibly also export subsidies) to be varied inversely with world prices, insulating EU prices from world market influences. Such price stabilization requires that MFN tariffs be at least as large as the price gap even when world prices are very low.

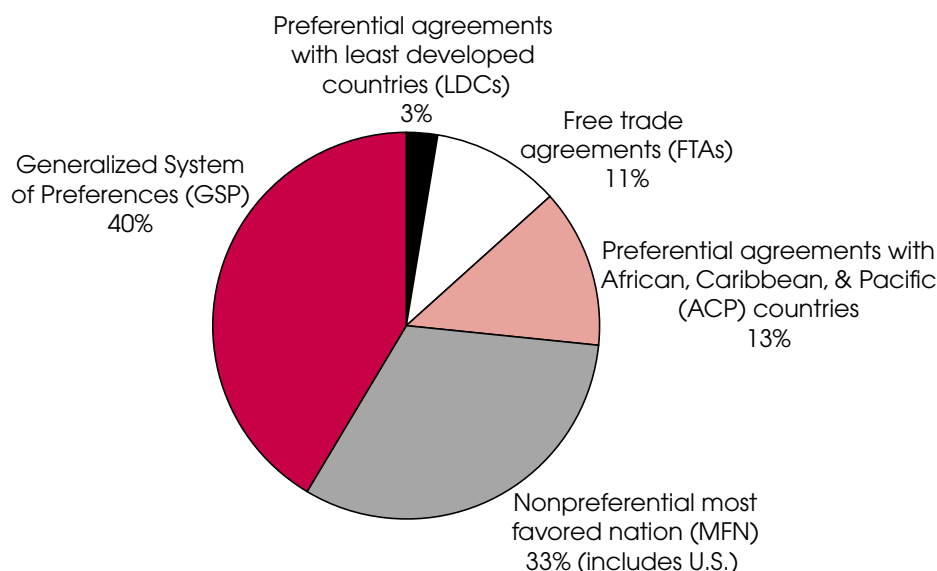
Tariff-rate quotas. EU imports of sensitive products commonly occur within tariff-rate quotas (TRQ), which allow some amount of imports at a tariff far enough below the MFN rate to facilitate trade. On additional imports, a tariff up to the MFN rate may be applied. Although the GATT bans absolute quotas, the EU’s prohibitive MFN tariffs still effectively limit trade to the TRQ amount, achieving the same result. While the EU’s commitments to GATT required the EU to establish 87 TRQs, WTO data indicate that the EU actually has some 3,000 TRQs in operation, mostly for agricultural and fishery products negotiated within preferential agreements.

Serious controversies surround the administration of TRQs. Most EU TRQs allocate market access to specific suppliers. EU banana quota allocations have been highly controversial because WTO dispute panels deemed them discriminatory and contrary to GATT requirements. For agricultural products, TRQ allocations have been the principal determinant of who supplies EU imports of many products.

Minimum import price (MIP) requirements. The EU directly manages some domestic prices by requiring that prices for imports, including applicable tariffs, be no lower than CAP prices—competition from cheap imports simply is not allowed. MIP requirements are applied to many fruit and vegetable imports. Imports observing MIP requirements may face relatively low tariffs. Again, the potential application of high MFN tariffs compels importers to observe MIP requirements. A few PTAs provide for some reduced MIPs.

Seasonal restrictions. The EU varies applied tariffs and tariff reductions, quota amounts, and MIP requirements during the year for seasonal and perishable commodities such as fruits and vegetables.

Two-Thirds of EU's Agricultural Imports Come from Countries With Preferential Agreements



Based on World Trade Atlas data for 1998-2000.

Economic Research Service, USDA

Seasonal restrictions protect producers during harvesting but allow for off-season imports. Some PTAs contain less seasonally restrictive conditions than others.

Product exclusion. The EU’s ultimate protection for sensitive products has been simply to exclude them from PTAs, providing no import concessions. Although the Europe Agreements (EA) provide for imports of some sensitive products from Eastern European countries within quotas, the EU provides no tariff concessions for grains, grain products, or the main meat and dairy products in the GSP. Sensitive products also are excluded in the PTAs with Mediterranean countries, South Africa, and Mexico.

How Valuable Are Tariff Reductions?

All EU preferential agreements impose reduced tariffs below MFN levels for all imports of some products. However, the EU often provides much larger tariff reductions or even zero duties on imports within the tariff-rate quotas of particular PTAs. Zero tariffs are accorded the least developed countries (LDCs). Tariff con-

cessions to former African, Caribbean and Pacific colonies also are significant, particularly for fruits and vegetables. Special quotas for 52,000 tons of beef for 6 former colonies and 1.2 million tons of sugar for 13 other former colonies are provided with minimal duties, making them among the most valuable of all concessions provided by any EU preferential agreement.

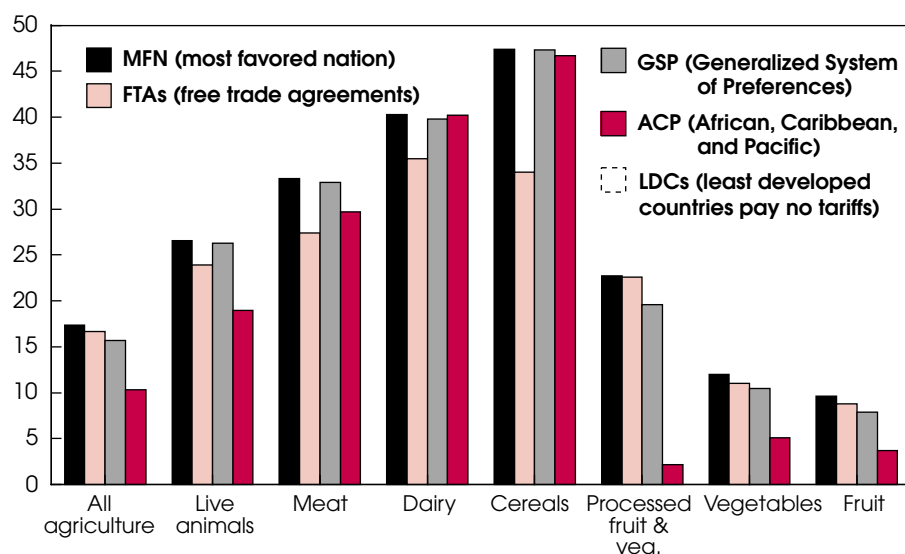
Tariff concessions for FTAs outside quotas are limited. The GSP provides average reductions of only 2 percent or less for sensitive and very sensitive products and perhaps 4 percent for semi- and nonsensitive products. No GSP reductions are provided for the most sensitive products. EU agreements also generally provide reductions for *ad valorem* tariffs only, leaving potentially prohibitive specific tariffs. Tariffs outside of special quotas are particularly high for meat, dairy, and cereals, remaining above 25 percent for all trading arrangements except for the LDCs.

The value of EU tariff reductions is difficult to assess. For sensitive products with prohibitive MFN tariffs, a limited tariff reduction may not be enough to increase trade. Significant tariff reductions within

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EU Out-of-Quota Tariffs Vary Among Products and Trading Arrangements

Percent



Based on WTO data for 1999. Percents are simple averages of tariffs across items and countries.
Economic Research Service, USDA

quotas may guarantee access, but only for the limited quota amounts. MIP requirements force suppliers to compete on quality rather than price and also impose quantity restrictions indirectly, because excessive imports would suppress EU prices, making imports at minimum prices unattractive.

The potential value of a tariff reduction is the amount by which the gap between EU and world prices exceeds the applicable tariff. Reduced tariffs potentially provide two options to preferred partners. They may capture some portion of the potential value as profit, or they may sell at a lower price and increase market share. The exporter's ability to capture the value of preferences is not assured, however. The EU often allocates import licenses to EU companies, leaving outside exporters to

compete for importers. In the process, suppliers may bid away to importers some or all of the value of preferences.

The Impacts on Trade

Consumers benefit when lower priced imports displace domestically produced products. Despite consumer benefits, governments do restrict trade, usually because potentially displaced producers organize politically, and agricultural trade is among the most restricted. In the EU case, very high MFN tariffs clearly allow GATT-legal policy mechanisms to restrict and control trade.

Ultimately, EU preferential trading arrangements cannot be said either to create trade or to restrict trade. The basic objective of EU agricultural policy—the

maintenance of targeted domestic price levels—determines the appropriate level of imports and has not been affected by the various EU preferential agreements. Preferential agreements are extensions of the CAP, allowing trade or restricting it depending on current policy objectives.

If EU preferential agreements do not generate trade, then what value are they to the preferred partners? EU preferential trading agreements do divert trade, and the preferred partners are the beneficiaries. They probably also capture some part of the value of the reduced tariff. Their advantage over less preferred partners helps assure some access to the world's largest market even if preferred partners bid away the value of preferences to importers.

Trade diversion is limited to some extent because large supplies of some products not produced by the EU can be obtained only from dominant world producers, who may not have preferential arrangements. Countries having no agricultural preferences still account for almost one-third of EU imports, while GSP countries, the least preferred of preferred partners, account for another 40 percent of EU imports. The U.S. is a major producer and thus a natural supplier of soybeans, tobacco, and almonds. The EU also depends heavily on imports for tropical products, cotton, and counter-seasonal fruits, nuts, and vegetables. The trade, therefore, is somewhat inevitable.

For the EU, preferential agreements provide enhanced control over the sources of imports. Recent reciprocal agreements also provide advantages for EU exports. The impacts of the "Everything But Arms" policy remain to be seen. **AO**

Gene Hasha (202) 694-5193
ghasha@ers.usda.gov

For further information

USDA's Economic Research Service

Regional Trade Agreements and U.S. Agriculture
www.ers.usda.gov/publications/aer771/aer771.pdf

Profiles of Tariffs in Global Agricultural Market
www.ers.usda.gov/publications/aer796/

The European Union's Common Agricultural Policy: Pressures for Change
www.ers.usda.gov/publications/wrs992/

Agricultural Policy Reform in the WTO—The Road Ahead
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Commission of the European Union

EU Trade Concession to Least Developed Countries—Everything But Arms Proposal: Possible Impacts on the Agricultural Sector
www.europa.eu.int/comm/trade/pdf/eba_ias.pdf

World Trade Organization

Trade Policy Review: The European Union
www.attac.org/fra/orga/doc/omc.pdf

Risk Management



USDA photo: Ken Hammond

U.S. Crop Insurance: Premiums, Subsidies, & Participation

Premium subsidies, a prominent feature of the U.S. crop insurance program since the early 1980s, have increased recently, lowering the cost of crop yield and revenue insurance coverage to producers. Premium discounts were added to existing premium subsidies in 1999 and again in 2000, and the Agricultural Risk Protection Act of 2000 (ARPA) revised subsidy rates and increased government funding of premium subsidies for 2001-05. These increases in premium subsidies were preceded by an expansion in recent years in the variety of insurance coverage available to producers and the maximum insurance guarantee levels. How have producers responded to the changes in available coverage and to the reduction in insurance prices?

Crop insurance programs, traditionally yield-based, added products in the mid-1990s that insure revenue rather than yields, broadening producers' choice of insurance options. The premium discounts of 1999 and 2000 and the revised premium subsidy rates reduced producer costs of both crop yield and revenue insurance products at "buy-up" coverage levels. Buy-up coverage levels are greater than the basic, fully subsidized catastrophic (or CAT) coverage level, which is 50 percent

of expected yield, indemnified at 55 percent of expected price.

Buy-up coverage guarantees up to 75, or in some cases 85 percent, of expected yield or revenue. Producers choose the level of insurance protection, which, along with riskiness of a producer's situation, determines the premium. Producers pay only a portion of the actuarial or risk-based premium plus a small administrative fee. The U.S. government, through the Federal Crop Insurance Corporation, pays the balance of the premium. Premium subsidy rates specify the percentages of total premium paid by the government. These percentages vary by coverage level, and decline as coverage levels increase.

The premium discount instituted in 1999, an additional subsidy that reduced producer costs of buy-up coverage by 30 percent that year, led to an increase in producer purchases of crop insurance. Buy-up participation rates—the shares of planted acres insured at buy-up levels—for each of the top four insured crops (corn, soybeans, wheat and cotton) increased in 1999, reaching about 50 percent of the planted acres of corn and soybeans and about 60 percent of the planted

acres of wheat and cotton. Total acres insured at buy-up levels increased by 19 percent from 1998 to 1999 despite fewer planted acres of corn and wheat.

The premium discount had a greater effect on costs at higher coverage levels, which led many producers to increase their coverage from 1998 to 1999. Total buy-up insurance coverage—yield and revenue insurance—measured by liability, increased 13 percent, despite declines in prices in 1999 at which indemnities would be paid for many major field crops. Moreover, the proportion of acres insured at coverage levels above 65 percent increased from 9 percent in 1998 to 24 percent in 1999. This includes about 2 percent of acres insured at the 80- and 85-percent coverage levels, which were first offered in 1999.

The increase in buy-up participation continued in 2000, despite a decrease in the premium discount rate from 30 percent in 1999 to 25 percent in 2000. Overall buy-up acres increased 9 percent from 1999 to 2000, reflecting moderate increases in planted acres of corn and cotton (3 percent and 5 percent, respectively) as well as increases in buy-up participation rates. The buy-up participation rate for cotton increased from 60 to 65 percent of planted acres, due in part to a reduction in premium rates for cotton insurance in many counties. The soybean participation rate also increased, from 49 to 56 percent of planted acres. For wheat, the buy-up participation rate changed little from 1999 to 2000, while a decline in planted acres reduced the number of acres insured.

Buy-up liability increased 15 percent from 1999 to 2000, reflecting a move to higher coverage levels and revenue products. The effects of the Agriculture Risk Protection Act of 2000 (ARPA), which raised subsidy rates in general and narrowed the difference between available coverage levels, reinforced this trend. Preliminary data for 2001 from USDA's Risk Management Agency (RMA) suggest a continued increase in buy-up participation and movement to higher coverage levels. RMA forecasts a 6-percent increase in insured acres and a 9-percent increase in liability. Also, the proportion of acreage at coverage levels of 70, 75, 80, and 85 percent continues to increase.

Risk Management

How Much Do Yield & Revenue Insurance Cost?

Premiums are the prices of crop insurance coverage. They are based on the expected loss or indemnity of crop yield or revenue for an insured producer. Premiums are expressed as rates, which are percentages of the total amount of insurance, called liability.

Premium rates vary with riskiness of a producer's situation. Most crop yield and revenue insurance plans classify a producer's risk by crop grown, location, expected yield (based on recent history), and production practice (irrigated or dry-land). Premium rates for crop insurance vary considerably across the U.S., ranging from as low as 2 or 3 percent for producers with above-average yield expectations in low-risk areas to as high as 25 or 30 percent for producers with below-average yield expectations in high-risk areas. In 2000, the average premium rate for all crop insurance policies was about 7 percent.

To calculate dollars of premium, the premium rate is multiplied by dollars of coverage or liability. For a crop insurance policy, liability is determined by the expected yield or revenue multiplied by the percent coverage level. Because expected yields are in units of crop (i.e., bushels) they are converted to dollars by multiplying by the price at which an insurance indemnity would be paid, called the price election. If a producer has averaged 150 bushels per acre of corn over the previous 4 years and the producer selects 65-percent coverage for a crop yield insurance policy, the producer's yield guarantee would be 97.5 bushels. If the producer chooses the maximum price, say \$2 per bushel, then liability would be \$195 per acre. Suppose that the premium rate for 65-percent coverage for this producer is 6 percent, then the total premium would be \$11.70 per acre.

The price paid by producers is the total premium minus the premium subsidy. The dollar amount of the premium subsidy is calculated by multiplying the subsidy rate times the total

premium. The premium subsidy rate for 65-percent coverage is 59 percent in 2001; following the above example, the dollar amount of the subsidy is \$6.90; the producer would pay \$4.80 of the \$11.70 total premium.

Increases in subsidy rates, including premium discounts, and large increases in subsidy rates at higher coverage levels, have reduced producers' insurance costs, especially on higher coverage levels. For example, prior to 1999 the typical premium subsidy on 65-percent APH/MPCI yield insurance coverage was about 42 percent; in 1999 when premium discounts were added, the effective subsidy rate was 59 percent. For the producer in the above example, the cost of 65-percent coverage would have been reduced from \$6.79 to \$4.80 per acre.

The typical premium subsidy rate for 75-percent APH/MPCI yield coverage was about 24 percent prior to 1999. In 1999, premium discounts increased it to 47 percent. In 2001, under the ARPA subsidy structure, the premium subsidy rate on 75-percent coverage increased to 55 percent. Since the liability and premium rate at the 75-percent coverage level would be higher than at the 65-percent level, total premium would be higher. To illustrate, if the liability is \$225 and the premium rate is 9 percent, then total premium would be \$20.25. Under the 24-percent premium subsidy, the producer would pay \$15.39, and under the 55-percent subsidy the producer would pay \$9.11 for 75-percent coverage.

Actual costs to a producer depend on particular features of crop insurance coverage—for example, whether crop acreage is divided into optional units (with different portions of the operation insured separately) and whether features such as prevented-planting coverage or hail and fire coverage are included. To obtain exact price information a producer should contact a crop insurance agent.

Participation in Revenue Insurance is Growing...

Since the introduction of revenue insurance pilot programs for some crops in the 1996 crop year, participation has grown steadily, representing more than 60 percent of buy-up insured corn and wheat acres in 2001 and more than 36 percent of buy-up insured soybean acres. What can explain the significant growth of revenue insurance participation in such a short time?

First, the availability of revenue insurance has expanded rapidly since its introduction. In 1996, revenue insurance was available only in a limited number of

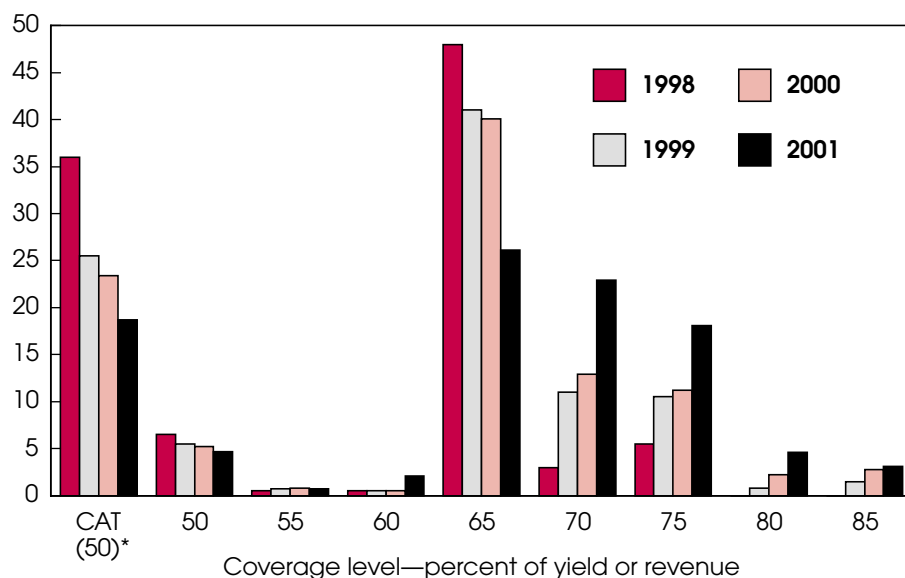
counties in 8 states. Availability greatly increased in 1997 when Crop Revenue Coverage (CRC) was offered in 22 states. However, availability alone cannot explain the large shift in coverage, since some widely available insurance products experience low participation. What other factors have led so many producers to select revenue insurance?

The most obvious explanation is the fact that revenue coverage insures revenue rather than yield. Farmers are ultimately interested in dollars, not bushels, and revenue coverage guarantees a specific revenue level, regardless of whether low revenue results from low yields or from low crop prices.

CRC, by far the most widely available and popular form of revenue insurance, offers a feature that actually increases the revenue guarantee if the harvest price is higher than the "base price," the price used to establish coverage prior to planting. Farmers who believe prices are likely to rise in years when they have yield losses may find this feature appealing. Revenue Assurance with the "harvest price option" (RA-HPO) provides very similar coverage. Income Protection (IP), another revenue insurance product, does not have this feature. Each revenue insurance product has its own terminology for the various components of its coverage. The expected price (similar to price election for yield insurance) established prior to

A Growing Proportion of Insured Acreage is Protected at Higher Coverage Levels

Percent of insured acres



Includes yield and revenue insurance.

*CAT is the basic catastrophic coverage level: 50 percent of expected yield, indemnified at 55 percent of expected price. All other coverage levels are buy-up.

Economic Research Service, USDA

planting in order to determine coverage is called the “base price” for CRC and the “projected price” for both IP and RA.

Another possible explanation for the popularity of revenue insurance is that the price used to establish the coverage level of CRC has often been higher than the crop prices used to establish the value of the crop under Actual Production History/Multiple-Peril Crop Insurance (APH/MPCI) coverage, which is RMA’s traditional yield insurance product. For revenue insurance, this higher price results in higher revenue coverage.

CRC, RA, and IP establish their coverage using futures market prices, which have tended to be higher than the maximum price elections established by the RMA for yield-based coverage. For corn, the CRC price has consistently been higher than the APH/MPCI price, but the situation has varied over the years for wheat and soybeans.

Insurance sign-up levels for soybeans in 2001 provide some evidence that the crop price component of coverage can play a

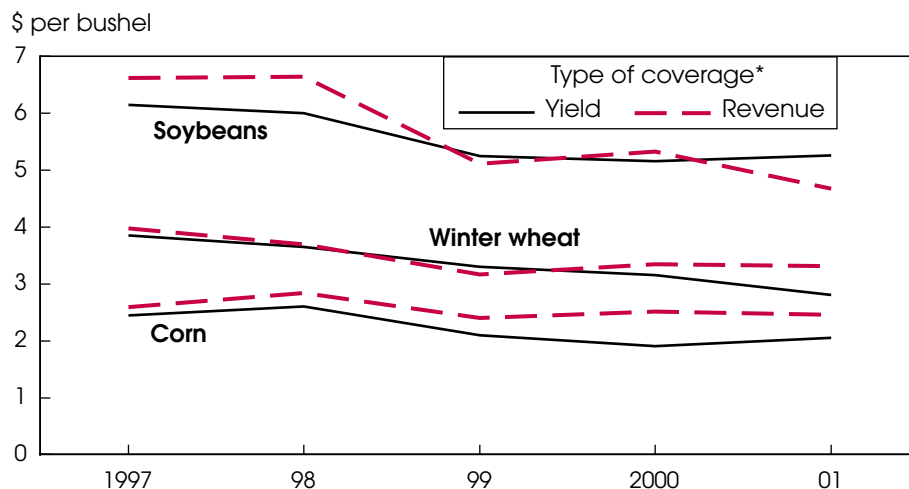
role in farmers’ choice of insurance product. In 2000, the maximum price election for soybean APH coverage was \$5.16 per

bushel, while the CRC base price (an average of prices for the November soybean futures during February) was \$5.32 per bushel. That year, APH/MPCI buy-up covered 34 percent of insured soybean acres, while CRC, RA, and IP covered 39 percent of insured acres.

In 2001 the APH/MPCI price for soybeans was set at \$5.26, equal to the government loan rate, which is the price farmers would effectively receive for any bushel they produce if they claim a government loan deficiency payment or marketing loan gain. In contrast, the CRC base price in 2001 was \$4.67 per bushel, reflecting lower market prices. The share of soybean acres insured under CRC, RA, and IP dropped to 36 percent, while the share for APH/MPCI buy-up coverage increased to 42 percent.

This shift away from revenue coverage in 2001 occurred despite changes in the premium subsidy structure by ARPA, which made subsidy rates for all revenue plans equal to subsidy rates for APH/MPCI buy-up coverage. Prior to ARPA, premium subsidies applied only to the yield component of revenue insurance, but now the subsidy rate applies to the entire premium. Prior to ARPA, at the popular 65-percent coverage level the effective premium subsidy rates for CRC and

Coverage Price Components for Yield and Revenue Insurance Differ Among Commodities



Coverage price component is the price level used to determine the dollar amount of coverage.

*For yield: the price election for Multiple-Peril Crop Insurance. For revenue: the base price for Crop Revenue Coverage, the most widely available and popular revenue insurance product.

Economic Research Service, USDA

Risk Management

RA-HPO policies were 7 to 10 percentage points lower than those for yield coverage and other revenue policies.

Even with premium subsidy rates equalized, CRC coverage is more expensive than yield-based coverage. Though it varies by crop and by year, CRC often costs 15 to 20 percent more than APH/MPCI coverage with the same guarantee level. One reason for the higher cost is that CRC must cover losses for some situations in which yield insurance does not pay, notably where revenue guarantee levels rise due to higher harvest prices—the feature offered by CRC and RA-HPO. When CRC uses a higher price, as often occurs, premiums are also higher. IP and RA use different premium rating methods, and their premiums may differ from those of CRC.

The popularity of revenue coverage does not appear to be due to any actuarial advantage favoring farmers. During the relatively short period during which revenue products have been offered, indemnity payments for revenue insurance products have been roughly equal to total premium. Moreover, in those counties where both revenue and yield insurance have been sold for the same crops in 1996–2000, the loss ratio (indemnities divided by total premium) for CRC has been slightly below that of APH/MPCI buy-up yield coverage in each of these years.

However, this is a very short time period from an actuarial perspective. In particular, none of these years experienced a widespread catastrophe large enough to result in significant price increases, a case where CRC and RA-HPO may pay significantly higher indemnities than yield insurance.

...As Are Government Costs

While increases in premium subsidy rates and the addition of premium discounts have reduced producer costs and increased participation, they have increased government expenditures. As producers have moved to higher coverage levels and to products with higher premiums, subsidies have increased both as a total dollar amount and a proportion of total premium.

Between crop years 1995 and 1998, premium subsidy rates were constant, and subsidies accounted for 50–57 percent of total premium. Shifts in participation and crop prices, however, changed premium subsidy amounts. In 1995, the first year after enactment of the crop insurance reform that introduced CAT coverage (premium entirely subsidized), premium subsidy expenditures were about \$890 million. The annual premium subsidy amount rose to \$980 million in 1996 as increased buy-up participation and increased crop prices lifted total premium, even though CAT participation declined. In 1997, premium subsidies dropped to about \$900 million as crop prices fell and as CAT participation continued to decline while buy-up participation held steady. In 1998, total premium subsidies increased with a rise in buy-up insured acres.

In 1999 and 2000, premium discounts boosted the government's share of total premium. The 1999 premium discount of 30 percent added \$440 million in premium subsidies, resulting in a total of about \$1.4 billion in government expenditures on insurance premiums. In 2000, the 25-percent discount added \$390 million in premium subsidies for a total of \$1.3 billion.

At the time of its passage, ARPA was estimated to increase spending on premium subsidies by \$8.2 billion during the 2001–05 period, compared with the estimated spending level for that period under previous legislation (not counting the emergency premium discounts in 1999 and 2000).

Aggregate premium subsidies (including discounts) have reached 60 percent of total premium. Although the proportion of total premium paid by producers has declined, producer-paid premiums have gone up, and producers are obtaining more insurance. Buy-up acreage will likely represent just over 80 percent of insured acres in 2001, up from 64 percent in 1997. **AO**

Robert Dismukes (202) 694-5294 and
Monte Vandever (202) 694-5271
dismukes@ers.usda.gov
montev@ers.usda.gov

December Releases—National Agricultural Statistics Service

The following reports are issued electronically at 3 p.m. (ET) unless otherwise indicated.

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December

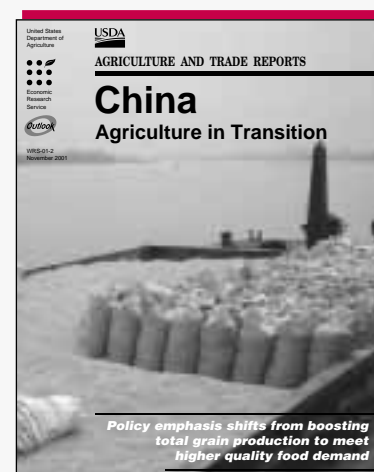
- 4** Weather - Crop Summary (noon)
Dairy Products
Egg Products
- 5** Broiler Hatchery
- 6** Dairy Products Prices (8:30 a.m.)
Milkfat Prices (8:30 a.m.)
Poultry Slaughter
- 11** Cotton Ginnings (8:30 a.m.)
Crop Production (8:30 a.m.)
Weather - Crop Summary (noon)
- 12** Broiler Hatchery
- 13** Turkey Hatchery
- 14** Dairy Products Prices (8:30 a.m.)
Milk Production
Potato Stocks
- 18** Weather - Crop Summary (noon)
- 19** Ag Chemical Usage - Floriculture and Nursery
Broiler Hatchery
- 20** National Hop Report (noon)
Cold Storage
- 21** Cotton Ginnings (8:30 a.m.)
Dairy Products Prices (8:30 a.m.)
Milkfat Prices (8:30 a.m.)
Catfish Processing
Cattle on Feed
Chickens and Eggs
Livestock Slaughter
Monthly Agnews
- 27** Weather - Crop Summary (noon)
Broiler Hatchery
- 28** Dairy Products Prices (8:30 a.m.)
Peanut Stocks and Processing
Quarterly Hogs and Pigs
- 31** Agricultural Prices

Emerging changes in international agriculture: the role of China, Brazil, and Argentina

Two new reports from USDA's Economic Research Service

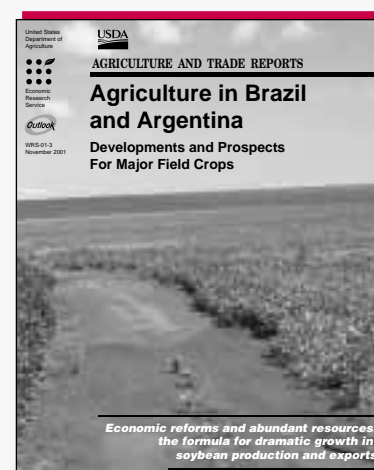
China: Agriculture in Transition

External competition and domestic changes in consumer preferences are reshaping China's agricultural production and policy. This report's up-to-date market analysis and policy information on major agricultural commodities will be valuable in addressing some key questions. Why, for example, were grain imports low in 2000 despite relatively low production? How will changes in China's livestock sector affect agricultural trade? Accession to the World Trade Organization is expected to accelerate the changes in China's agricultural production, policy, and trade.



Agriculture in Brazil and Argentina: Developments and Prospects for Major Field Crops

Policy reforms in the 1990s, combined with abundant resources and new developments in agricultural research, spurred dramatic growth in Argentina's and Brazil's crop output and exports. Their increasing competitiveness in world oilseed and grain markets may foreshadow continued gains, as their economies become more integrated into global markets. In each country, the development of infrastructure, the dynamics of the livestock sector, and the stability of the economy will determine the pace of further growth in production and exports.



Watch for these reports in the China, Brazil, and Argentina briefing rooms
On the Economic Research Service website

www.ers.usda.gov/briefing

Statistical Indicators

Summary Data

Table 1—Key Statistical Indicators of the Food & Fiber Sector

	Annual			2000	2001				2002	
	2000	2001	2002	IV	I	II	III	IV	I	II
Prices received by farmers (1990-92=100)	96	103	--	97	99	106	107	--	--	--
Livestock & products	97	108	--	99	103	110	111	--	--	--
Crops	96	99	--	95	96	102	103	--	--	--
Prices paid by farmers (1990-92=100)										
Production items	116	120	--	118	120	120	119	--	--	--
Commodities and services, interest, taxes, and wage rates (PPITW)	120	124	--	121	124	124	123	--	--	--
Cash receipts (\$ bil.)	194	206	--	57	49	46	52	60	--	--
Livestock	99	109	--	25	27	27	28	27	--	--
Crops	94	97	--	32	22	19	24	32	--	--
Market basket (1982-84=100)										
Retail cost	171	--	--	173	175	177	--	--	--	--
Farm value	97	--	--	100	102	106	--	--	--	--
Spread	210	--	--	212	215	215	--	--	--	--
Farm value/retail cost (%)	20	--	--	20	20	21	--	--	--	--
Retail prices (1982-84=100)										
All food	168	174	178	170	172	173	174	175	177	177
At home	168	174	178	170	172	173	174	175	177	177
Away from home	169	174	179	171	172	173	175	176	177	178
Agricultural exports (\$ bil.) ¹	50.9	53.5	57.0	14.4	13.8	12.5	12.8	14.2	14.2	--
Agricultural imports (\$ bil.) ¹	38.9	38.5	39.0	9.7	9.9	10.0	8.9	9.3	9.5	--
Commercial production										
Red meat (mil. lb.)	46,150	45,486	44,833	11,634	11,096	11,145	11,367	11,878	11,226	11,143
Poultry (mil. lb.)	36,427	37,099	38,125	9,050	9,007	9,437	9,315	9,340	9,250	9,705
Eggs (mil. doz.)	7,035	7,151	7,270	1,786	1,756	1,775	1,785	1,835	1,800	1,790
Milk (bil. lb.)	167.7	165.5	169.9	40.7	41.3	42.7	40.6	40.9	42.3	43.9
Consumption, per capita										
Red meat and poultry (lb.)	219.5	217.2	216.3	55.5	53.1	53.4	54.3	56.4	53.2	54.0
Corn beginning stocks (mil. bu.) ²	1,717.5	1,898.7	--	3,585.9	1,717.5	8,522.2	6,043.0	3,924.0	1,898.7	--
Corn use (mil. bu.) ²	9,794.2	9,880.0	--	1,870.7	3,165.0	2,480.1	2,122.2	2,026.9	--	--
Prices ³										
Choice steers--Neb. Direct (\$/cwt)	69.65	72.64	74-80	72.26	79.11	75.13	70.33	65-67	66-70	74-80
Barrows and gilts--IA, So. MN (\$/cwt)	44.70	46.23	42-45	40.78	42.83	52.05	51.05	38-40	41-43	45-49
Broilers--12-city (cents/lb.)	56.20	59.30	58-63	57.60	57.80	59.20	61.10	58-60	56-60	58-62
Eggs--NY gr. A large (cents/doz.)	68.90	68.40	62-67	83.10	75.80	63.30	61.40	72-74	66-70	56-60
Milk--all at plant (\$/cwt)	12.33	15.05- 15.15	12.75- 13.65	12.70	13.37	15.30	16.53	14.95- 15.25	12.85- 13.45	11.95- 12.85
Wheat--KC HRW ordinary (\$/bu.)	3.08	--	--	3.44	3.45	3.41	3.18	--	--	--
Corn--Chicago (\$/bu.)	1.97	--	--	2.01	2.03	1.96	2.10	--	--	--
Soybeans--Chicago (\$/bu.)	4.86	--	--	4.70	4.48	4.48	4.89	--	--	--
Cotton--avg. spot 41-34 (cents/lb)	57.47	--	--	61.24	52.66	39.86	35.58	--	--	--
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Farm real estate values ⁴										
Nominal (\$ per acre)	713	740	798	844	887	926	974	1,020	1,080	1,130
Real (1996 \$)	795	806	848	879	904	926	955	988	1,031	1,057
U.S. civilian employment (mil.) ⁵	128.1	129.2	131.1	132.3	133.9	136.3	137.7	139.4	140.9	--
Food and fiber (mil.)	23.1	23.5	24.1	24.5	24.2	24.1	24.2	24.4	24.1	--
Farm sector (mil.)	1.9	1.8	1.9	2.0	2.0	1.9	1.8	1.8	1.7	--
U.S. gross domestic product (\$ bil.)	6,318.9	6,642.3	7,054.3	7,400.5	7,813.2	8,318.4	8,781.5	9,268.6	9,872.9	--
Food and fiber--net value added (\$ bil.)	924.8	957.6	1,026.6	1,048.2	1,078.9	1,101.9	1,132.7	1,180.6	1,264.5	--
Farm sector--net value added (\$ bil.) ⁶	75.5	70.2	77.8	73.5	85.7	82.6	74.0	66.9	82.0	--

-- = Not available. Annual and quarterly data for the most recent year contain forecasts. 1. Annual data based on Oct.-Sept. fiscal years ending with year indicated. 2. Sept.-Nov. first quarter; Dec.-Feb. second quarter; Mar.-May third quarter; Jun.-Aug. fourth quarter; Sept.-Aug. annual. Use includes exports and domestic disappearance. 3. Simple averages, Jan.-Dec. 4. As of January 1. 5. Civilian labor force taken from "Monthly Labor Review," Table 18--Annual Data: Employment Status of the Population, Bureau of Labor Statistics, U.S. Department of Labor. 6. The value-added data presented here are consistent with accounting conventions of the National Income and Product Accounts, U.S. Department of Commerce.

U.S. & Foreign Economic Data

Table 2—U.S. Gross Domestic Product & Related Data

	Annual			2000				2001		
	1998	1999	2000	I	II	III	IV	I	II	III
<i>Billions of current dollars (quarterly data seasonally adjusted at annual rates)</i>										
Gross Domestic Product	8,781.5	9,268.6	9,872.9	9,668.7	9,857.6	9,937.5	10,027.9	10,141.7	10,202.6	10,247.7
Gross National Product	8,778.1	9,261.8	9,860.8	9,650.7	9,841.0	9,919.4	10,032.1	10,131.3	10,190.9	--
Personal consumption expenditures	5,856.0	6,250.2	6,728.4	6,581.9	6,674.9	6,785.5	6,871.4	6,977.6	7,044.6	7,059.0
Durable goods	693.2	760.9	819.6	820.7	813.8	825.4	818.7	838.1	844.7	842.2
Nondurable goods	1,708.5	1,831.3	1,989.6	1,942.5	1,978.3	2,012.4	2,025.1	2,047.1	2,062.3	2,057.8
Food	852.6	899.8	957.5	937.8	953.5	967.2	971.4	982.0	987.0	997.5
Clothing and shoes	284.8	300.9	319.1	314.4	317.0	321.6	323.5	325.7	322.4	315.7
Services	3,454.3	3,658.0	3,919.2	3,818.7	3,882.8	3,947.7	4,027.5	4,092.4	4,137.6	4,158.9
Gross private domestic investment	1,538.7	1,636.7	1,767.5	1,709.0	1,792.4	1,788.4	1,780.3	1,722.8	1,669.9	1,622.6
Fixed investment	1,465.6	1,578.2	1,718.1	1,678.1	1,717.0	1,735.9	1,741.6	1,748.3	1,706.5	1,669.2
Change in private inventories	73.1	58.6	49.4	30.9	75.4	85.5	38.7	-25.5	-36.6	-46.6
Net exports of goods and services	-151.7	-250.9	-364.0	-333.9	-350.8	-380.6	-390.6	-363.8	-347.4	-277.3
Government consumption expenditures and gross investment	1,538.5	1,632.5	1,741.0	1,711.8	1,741.1	1,744.2	1,766.8	1,805.2	1,835.4	1,843.5
<i>Billions of 1996 dollars (quarterly data seasonally adjusted at annual rates)¹</i>										
Gross Domestic Product	8,508.9	8,856.5	9,224.0	9,102.5	9,229.4	9,260.1	9,303.9	9,334.5	9,341.7	9,333.4
Gross National Product	8,508.4	8,853.0	9,216.4	9,089.1	9,217.7	9,247.2	9,311.7	9,329.1	9,335.5	--
Personal consumption expenditures	5,683.7	5,968.4	6,257.8	6,171.7	6,226.3	6,292.1	6,341.1	6,388.5	6,428.4	6,447.8
Durable goods	726.7	817.8	895.5	892.1	886.5	904.1	899.4	922.4	938.1	942.0
Nondurable goods	1,686.4	1,766.4	1,849.9	1,823.8	1,844.9	1,864.1	1,866.8	1,878.0	1,879.4	1,882.1
Food	819.4	847.8	881.3	871.2	881.5	886.2	886.4	887.3	886.1	887.3
Clothing and shoes	290.4	312.1	335.3	328.2	333.3	339.8	339.9	342.7	344.1	341.7
Services	3,273.4	3,393.2	3,527.7	3,472.2	3,509.6	3,540.2	3,588.8	3,605.1	3,629.8	3,642.6
Gross private domestic investment	1,558.0	1,660.1	1,772.9	1,722.9	1,801.6	1,788.8	1,778.3	1,721.0	1,666.2	1,619.6
Fixed investment	1,480.0	1,595.4	1,716.2	1,683.4	1,719.2	1,730.1	1,732.1	1,740.3	1,696.4	1,659.5
Change in private inventories	76.7	62.1	50.6	28.9	78.9	51.7	42.8	-27.1	-38.3	-50.4
Net exports of goods and services	-221.1	-316.9	-399.1	-371.1	-392.8	-411.2	-421.1	-404.5	-406.7	-395.0
Government consumption expenditures and gross investment	1,483.3	1,531.8	1,572.6	1,560.4	1,577.2	1,570.0	1,582.8	1,603.4	1,623.0	1,630.1
GDP implicit price deflator (% change)	1.2	1.4	2.3	3.9	2.2	1.9	1.8	3.3	2.1	2.1
Disposable personal income (\$ bil.)	6,355.6	6,618.0	7,031.0	6,859.1	6,993.7	7,081.3	7,189.8	7,295.0	7,363.2	7,580.3
Disposable pers. income (1996 \$ bil.)	6,168.6	6,320.0	6,539.2	6,431.6	6,523.7	6,566.5	6,634.9	6,679.0	6,719.2	6,923.9
Per capita disposable pers. income (\$)	23,491	24,242	25,528	24,987	25,426	25,682	26,013	26,335	26,520	27,238
Per capita disp. pers. income (1996 \$)	22,800	23,150	23,742	23,430	23,717	23,814	24,006	24,111	24,200	24,880
U.S. resident population plus Armed Forces overseas (mil.) ²	270.5	272.9	275.4	274.4	275.0	275.6	276.3	--	--	--
Civilian population (mil.) ²	269.0	271.5	273.9	273.0	273.5	274.2	274.9	--	--	--
	Annual			2000				2001		
	1998	1999	2000	Sep	Apr	May	Jun	Jul	Aug	Sep
<i>Monthly data seasonally adjusted</i>										
Total industrial production (1992=100)	138.2	144.8	153.6	155.1	149.6	149.2	147.5	147.6	146.3	144.7
Leading economic indicators (1996=100)	105.4	108.8	109.9	109.8	108.7	109.3	109.5	109.8	109.7	109.1
Civilian employment (mil. persons)	131.5	133.5	135.2	135.3	135.4	135.1	134.9	135.4	134.4	135.2
Civilian unemployment rate (%)	4.5	4.2	4.0	3.9	4.5	4.4	4.5	4.5	4.9	4.9
Personal income (\$ bil. annual rate)	7,426.0	7,777.3	8,319.2	8,423.0	8,697.0	8,709.3	8,737.6	8,772.5	8,779.3	8,780.1
Money stock-M2 (daily avg.) (\$ bil.) ³	4,385.9	4,653.3	4,945.1	4,870.0	5,146.3	5,170.7	5,214.3	5,253.5	5,287.1	5,398.1
Three-month Treasury bill rate (%)	4.81	4.66	5.85	6.00	3.92	3.67	3.48	3.54	3.39	2.87
AAA corporate bond yield (Moody's) (%)	6.53	7.04	7.62	7.62	7.20	7.29	7.18	7.13	7.02	7.17
Total housing starts (1,000) ⁴	1,616.9	1,640.9	1,568.7	1,508	1,626	1,610	1,634	1,660	1,548	1,574
Business inventory/sales ratio ^{5 6}	1.44	1.41	1.40	1.40	1.44	1.42	1.43	1.42	1.42	--
Retail & food services sales (\$ bil.) ^{6 7}	2,906.7	3,149.2	3,388.82	286.2	291.1	291.7	291.7	292.2	292.9	286.4
Food and beverage stores (\$bil.)	421.6	441.4	465.29	39.0	39.7	40.0	39.9	40.0	40.2	40.4
Clothing & accessory stores (\$ bil.)	149.4	159.7	168.48	14.3	14.3	14.2	14.1	14.3	14.2	13.4
Food services & drinking places (\$ bil.)	272.6	286.3	306.07	25.8	26.4	26.7	26.9	26.9	27.0	26.4

-- = Not available. 1. In October 1999, 1996 dollars replaced 1992 dollars. 2. Population estimates based on 1990 census. 3. Annual data as of December of year listed. 4. Private, including farm. 5. Manufacturing and trade. 6. In July 2001, all numbers were revised due to a changeover from the Standard Industrial Classification System to the North American Industry Classification System. 7. Annual total. *Information contact: David Johnson (202) 694-5324*

Table 3—World Economic Growth

	Calendar year									
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
<i>Real GDP, annual percent change</i>										
World	1.5	3.1	2.8	3.5	3.4	1.9	2.7	3.7	1.3	1.2
less U.S.	1.1	2.7	2.8	3.4	3.0	1.0	2.3	3.8	1.3	1.5
Developed economies	0.9	2.7	2.3	3.1	3.0	2.1	2.5	3.1	0.9	0.7
less U.S.	0.1	2.1	2.1	2.8	2.3	1.0	1.9	3.0	0.9	0.8
United States	2.7	4.0	2.7	3.6	4.4	4.4	3.6	3.3	1.1	0.6
Canada	2.3	4.7	2.7	1.5	4.4	3.3	4.6	4.3	1.4	0.8
Japan	0.3	0.6	1.5	5.1	1.6	-2.5	0.2	2.4	-0.8	-0.8
Australia	4.1	4.5	4.5	3.8	4.7	4.5	4.4	2.3	2.5	3.5
European Union	-0.4	2.8	2.4	1.6	2.5	2.8	2.6	3.5	1.6	1.4
Transition economies	-6.3	-8.1	-1.3	-0.8	1.4	-1.4	3.4	6.3	4.4	3.9
Eastern Europe	1.2	3.9	5.6	4.0	2.7	2.6	2.4	3.8	2.8	3.4
Poland	3.8	5.2	7.0	6.0	6.8	4.8	4.1	4.2	1.5	2.5
Former Soviet Union	-9.6	-14.1	-5.4	-4.0	0.5	-4.4	4.2	8.2	5.6	4.3
Russia	-8.7	-12.6	-4.1	-3.4	0.9	-4.9	5.0	8.3	4.9	4.1
Developing economies	5.8	6.3	5.3	5.8	5.3	1.2	3.4	5.5	2.2	3.0
Asia	8.0	8.8	8.3	7.4	5.8	0.4	6.3	7.2	3.4	4.1
East Asia	9.1	9.7	8.7	7.7	7.0	1.9	7.4	8.1	3.8	4.4
China	13.5	12.8	10.5	9.6	8.8	7.8	7.1	8.0	7.5	7.1
Taiwan	7.0	7.1	6.4	6.1	6.7	4.6	5.4	5.9	-2.7	0.0
Korea	5.5	8.2	8.9	6.8	5.0	-6.7	10.7	9.0	2.5	3.1
Southeast Asia	7.9	8.3	8.3	7.3	4.0	-7.5	3.5	5.9	1.4	2.7
Indonesia	7.3	7.5	8.2	7.8	4.7	-13.2	0.7	4.8	2.9	3.7
Malaysia	9.9	9.2	9.8	10.0	7.3	-7.4	5.8	8.4	0.8	2.7
Philippines	2.1	4.4	4.7	5.8	5.2	-0.8	3.2	4.0	3.0	2.4
Thailand	8.4	9.0	8.9	5.9	-1.7	-10.2	4.2	4.4	1.3	2.9
South Asia	4.5	6.6	7.1	6.3	4.2	6.1	6.1	5.5	4.2	4.6
India	5.0	7.3	7.7	7.0	4.6	6.8	6.5	6.1	4.5	4.8
Pakistan	1.9	3.9	5.1	3.9	1.0	2.5	4.0	3.4	2.6	3.2
Latin America	4.3	5.3	1.4	3.7	5.2	1.8	0.0	3.1	0.8	1.1
Mexico	2.0	4.4	-6.2	5.2	6.8	4.9	3.5	3.4	-0.1	1.4
Caribbean/Central	4.8	4.1	3.8	3.6	6.4	6.8	6.9	4.9	1.7	3.0
South America	4.8	5.6	3.1	3.3	4.8	1.0	-1.1	3.0	1.0	1.0
Argentina	5.9	5.8	-2.8	5.5	8.1	3.9	-3.2	-0.3	-2.9	-3.6
Brazil	4.9	5.9	4.2	2.8	3.2	-0.1	0.8	3.9	1.7	1.8
Colombia	5.4	5.8	5.2	2.1	3.4	0.5	-4.3	2.2	1.8	2.5
Venezuela	0.3	-2.3	3.7	-0.5	6.5	-0.7	-6.1	3.2	4.9	2.7
Middle East	4.0	-0.3	4.4	4.7	4.4	2.7	-0.8	5.0	-1.4	2.6
Israel	5.6	6.9	7.0	5.1	3.2	2.6	2.2	5.9	0.7	2.3
Saudi Arabia	-0.6	0.5	0.5	1.4	1.9	2.3	-1.1	3.5	3.0	2.5
Turkey	8.0	-5.5	7.2	7.0	7.5	3.1	-4.7	7.2	-9.0	2.6
Africa	1.0	3.2	2.9	5.2	2.8	3.1	2.6	3.6	3.6	3.4
North Africa	0.5	3.9	1.5	6.5	2.6	5.6	3.9	4.0	4.4	4.1
Egypt	2.9	3.9	4.7	5.0	5.5	5.6	6.0	5.2	3.3	4.2
Sub-Saharan	1.4	2.6	3.9	4.3	3.0	1.3	1.7	3.3	3.0	2.8
South Africa	1.2	3.2	3.1	4.2	2.5	0.6	1.2	3.1	2.6	2.4
<i>Consumer prices, annual percent change</i>										
Developed economies	3.1	2.6	2.6	2.4	2.1	1.5	1.4	2.3	2.4	1.7
Transition economies	635.8	274.2	133.8	42.5	27.3	21.8	43.9	20.0	16.4	10.7
Developing economies	49.2	55.3	23.2	15.4	9.9	10.5	6.8	6.0	5.9	5.1
Asia	10.8	16.0	13.2	8.3	4.8	7.7	2.5	1.9	2.8	3.3
Latin America	194.6	200.3	36.0	21.2	12.9	9.9	8.8	8.1	6.2	4.9
Middle East	29.4	37.3	39.1	29.6	27.7	27.6	23.2	19.2	18.9	14.5
Africa	39.0	54.7	35.3	30.2	14.2	10.8	11.5	13.6	12.6	8.0

-- = Not available.

The last 3 years are either estimates or forecasts. Sources: Oxford Economic Forecasting; International Financial Statistics, IMF.

Information contact: Andy Jerardo (202) 694-5323, ajerardo@ers.usda.gov

Farm Prices

Table 4—Indexes of Prices Received & Paid by Farmers, U.S. Average

	Annual			2000			2001			
	1999	2000	2001	Oct	May	Jun	Jul	Aug	Sep	Oct
<i>1990-92=100</i>										
Prices received										
All farm products	95	96	103	93	108	107	107	109	105	95
All crops	96	96	99	91	105	101	102	107	101	87
Food grains	90	86	91	88	95	91	88	90	92	90
Feed grains and hay	86	86	91	80	91	91	95	96	92	84
Cotton	85	82	68	92	70	67	66	59	64	57
Tobacco	102	107	105	107	--	--	107	104	108	109
Oil-bearing crops	83	85	80	81	77	80	86	87	81	74
Fruit and nuts, all	111	97	106	112	96	117	121	126	121	121
Commercial vegetables	110	123	131	125	146	119	119	142	132	102
Potatoes and dry beans	100	93	100	76	105	107	125	114	102	96
Livestock and products	95	97	108	97	110	112	112	111	110	106
Meat animals	83	94	100	92	103	104	102	100	96	92
Dairy products	110	94	116	96	118	123	124	126	130	124
Poultry and eggs	110	107	117	111	115	117	119	120	122	121
Prices paid										
Commodities and services, interest, taxes, and wage rates (PPITW)	115	120	124	121	123	124	123	123	123	123
Production items	111	116	120	117	120	120	120	120	119	119
Feed	100	102	108	101	106	107	108	111	110	109
Livestock and poultry	95	110	111	111	110	113	114	113	112	113
Seeds	121	124	131	125	134	134	134	134	134	134
Fertilizer	105	110	126	115	131	125	120	116	111	107
Agricultural chemicals	121	120	121	120	121	120	118	118	121	121
Fuels	93	134	126	149	133	133	117	117	127	116
Supplies and repairs	121	124	127	125	127	127	127	127	129	129
Autos and trucks	119	119	118	118	118	118	117	117	116	116
Farm machinery	135	139	141	140	143	143	143	143	140	140
Building material	120	121	121	121	122	122	121	121	121	121
Farm services	116	119	121	120	119	121	122	122	122	122
Rent	113	110	116	110	114	116	116	116	116	116
Interest payable per acre on farm real estate debt	106	112	116	112	116	116	116	116	116	116
Taxes payable per acre on farm real estate	120	123	123	123	123	123	123	123	123	123
Wage rates (seasonally adjusted)	135	140	145	143	144	144	143	143	143	143
Prod. items, interest, taxes & wage rates (PITW)	113	118	122	119	122	122	122	122	121	121
Ratio, prices received to prices paid (%)*	83	80	84	77	88	86	87	89	85	77
Prices received (1910-14=100)	606	611	657	591	684	677	678	693	668	602
Prices paid, etc. (1910-14=100)	1,531	1,594	1,646	1,612	1,644	1,650	1,643	1,642	1,642	1,635
Parity ratio (1910-14=100) (%)*	40	38	40	37	42	41	41	42	41	37

-- = Not available.

Values for the two most recent months are revised or preliminary. *Ratio of index of prices received for all farm products to index of prices paid for commodities and services, interest, taxes, and wage rates. Ratio uses the most recent prices paid index.

Data for this table are taken from the publication *Agricultural Prices* which is produced monthly by USDA's National Agricultural Statistics Service (NASS) and is available at <http://usda.mannlib.cornell.edu/reports/nassr/price/pap-bb/>. For historical data or for categories not listed here, call the NASS

Information Hotline at 1-800-727-9540, or access the NASS Home Page at <http://www.usda.gov/nass>.

Table 5—Prices Received by Farmers, U.S. Average

	Annual ¹			2000		2001				
	1998	1999	2000	Oct	May	Jun	Jul	Aug	Sep	Oct
Crops										
All wheat (\$/bu.)	2.65	2.48	2.65	2.68	2.99	2.74	2.63	2.73	2.85	2.86
Rice, rough (\$/cwt)	8.89	5.93	5.75	5.61	5.15	5.01	5.25	5.10	4.78	4.69
Corn (\$/bu.)	1.94	1.82	1.85	1.74	1.82	1.77	1.88	1.90	1.91	1.79
Sorghum (\$/cwt)	2.97	2.80	3.15	3.01	3.21	3.63	3.72	3.50	3.46	3.31
All hay, baled (\$/ton)	84.60	76.90	83.00	84.90	106.00	95.80	96.30	97.70	98.60	99.40
Soybeans (\$/bu.)	4.93	4.63	4.75	4.45	4.32	4.46	4.79	4.83	4.53	4.10
Cotton, upland (¢/lb.)	60.20	45.00	56.00	55.50	42.20	40.40	40.00	36.00	38.50	34.40
Potatoes (\$/cwt)	5.56	5.77	4.95	4.32	6.31	6.47	7.83	6.84	6.05	5.50
Lettuce (\$/cwt) ²	16.10	13.30	17.50	16.20	18.50	12.00	16.40	26.90	26.20	11.90
Tomatoes, fresh (\$/cwt) ²	35.20	25.80	31.40	42.10	37.50	27.00	24.90	28.20	20.80	25.10
Onions (\$/cwt)	13.80	9.78	11.40	10.20	19.00	17.60	16.80	14.80	13.20	10.40
Beans, dry edible (\$/cwt)	19.00	16.40	15.30	15.60	16.60	16.30	16.80	17.50	18.10	19.10
Apples for fresh use (¢/lb.)	17.30	21.30	17.90	21.80	15.40	15.30	14.40	16.90	18.70	24.20
Pears for fresh use (\$/ton)	291.00	294.00	264.00	362.00	364.00	399.00	570.00	533.00	463.00	413.00
Oranges, all uses (\$/box) ³	4.29	5.54	--	1.50	4.80	4.30	6.23	5.57	6.53	5.12
Grapefruit, all uses (\$/box) ³	2.00	3.27	--	4.77	1.94	5.27	8.81	3.69	6.89	5.29
Livestock										
Cattle, all beef (\$/cwt)	59.60	63.40	68.60	66.70	73.60	73.50	71.90	70.70	69.00	67.50
Calves (\$/cwt)	78.80	87.70	104.00	102.00	111.00	109.00	107.00	106.00	106.00	101.00
Hogs, all (\$/cwt)	34.40	30.30	42.30	41.40	50.40	52.20	51.70	50.60	45.10	41.00
Lambs (\$/cwt)	72.30	74.50	79.40	76.80	79.00	71.60	65.00	55.40	53.40	--
All milk, sold to plants (\$/cwt)	15.46	14.38	12.40	12.50	15.40	16.10	16.20	16.40	17.00	16.20
Milk, manuf. grade (\$/cwt)	14.24	12.84	10.54	10.60	14.30	15.10	15.00	15.40	16.20	15.10
Broilers, live (¢/lb.)	39.30	37.10	33.60	35.00	40.00	41.00	42.00	42.00	43.00	41.00
Eggs, all (¢/doz.) ⁴	66.80	62.20	61.80	66.80	55.30	55.80	55.10	57.60	56.70	62.60
Turkeys (¢/lb.)	38.00	40.80	40.70	46.10	38.30	38.50	38.60	38.80	40.40	44.00

-- = Not available.

Values for the two most recent months are revised or preliminary. 1. Season-average price by crop year for crops. Calendar year average of monthly prices for livestock. 2. Excludes Hawaii. 3. Equivalent on-tree returns. 4. Average of all eggs sold by producers including hatching eggs and eggs sold at retail.

Data for this table are taken from the publication *Agricultural Prices* which is produced monthly by USDA's National Agricultural Statistics Service (NASS) and is available at <http://usda.mannlib.cornell.edu/reports/nassr/price/pap-bb/>. For historical data or for categories not listed here, call the NASS Information Hotline at 1-800-727-9540, or access the NASS Home Page at <http://www.usda.gov/nass>.

Producer & Consumer Prices

Table 6—Consumer Price Indexes for All Urban Consumers, U.S. Average (not seasonally adjusted)

	Annual			2000		2001				
	1998	1999	2000	Oct	May	Jun	Jul	Aug	Sep	Oct
<i>1982-84=100</i>										
Consumer Price Index, all items	163.0	166.6	172.1	174.0	177.7	178.0	177.5	177.5	178.3	177.7
CPI, all items less food	163.6	167.0	172.9	174.9	178.6	179.0	178.2	178.2	179.0	178.2
All food	160.7	164.1	167.8	169.1	172.5	173.0	173.5	173.9	174.1	174.9
Food away from home	161.1	165.1	169.0	170.3	173.1	173.6	174.1	174.7	175.1	175.6
Food at home	161.1	164.2	167.9	169.1	172.8	173.3	173.9	174.2	174.3	175.2
Meats ¹	141.6	142.3	150.7	152.9	158.9	160.2	160.8	160.7	161.5	161.8
Beef and veal	136.5	139.2	148.1	148.9	161.7	162.5	162.1	161.0	161.1	161.0
Pork	148.5	145.9	156.5	160.7	160.4	162.6	164.8	166.3	167.8	167.2
Poultry	157.1	157.9	159.8	162.1	162.3	164.5	166.6	167.5	165.4	169.6
Fish and seafood	181.7	185.3	190.4	192.8	194.6	191.5	191.0	189.7	189.1	189.5
Eggs	135.4	128.1	131.9	136.1	131.1	130.8	129.6	133.0	131.4	132.3
Dairy and related products ²	150.8	159.6	160.7	161.9	164.7	166.9	168.3	168.9	169.4	170.8
Fats and oils ³	146.9	148.3	147.4	149.7	154.7	156.7	157.8	158.5	158.5	159.5
Fresh fruits	246.5	266.3	258.3	262.6	274.0	268.3	263.8	258.9	266.0	268.7
Fresh vegetables	215.8	209.3	219.4	218.6	226.2	226.4	226.3	224.9	228.2	229.1
Potatoes	185.2	193.1	196.3	191.5	192.2	205.0	213.4	224.5	218.3	216.3
Cereals and bakery products	181.1	185.0	188.3	190.1	193.2	194.2	194.9	195.9	195.1	195.2
Sugar and sweets	150.2	152.3	154.0	153.9	155.8	155.7	156.1	156.1	156.6	156.4
Nonalcoholic beverages ⁴	133.0	134.3	137.8	137.4	138.1	138.6	138.9	140.0	139.2	139.9
Apparel										
Footwear	128.0	125.7	123.8	125.3	124.4	122.1	121.3	121.9	122.9	124.9
Tobacco and smoking products	274.8	355.8	394.9	396.7	418.7	421.0	441.2	424.6	444.0	429.9
Alcoholic beverages	165.7	169.7	174.7	175.9	178.5	179.1	179.7	180.0	180.4	180.8

1. Beef, veal, lamb, pork, and processed meat. 2. Included butter through December 1997. 3. Includes butter as of January 1998. 4. Includes fruit juices as of January 1998.

This table is compiled with data provided by the Bureau of Labor Statistics (BLS). BLS operates a website at <http://www.bls.gov> and a Consumer Prices Information Hotline at (202) 691-7000.

Table 7—Producer Price Indexes, U.S. Average (not seasonally adjusted)

	Annual			2000		2001				
	1998	1999	2000	Oct	May	Jun	Jul	Aug	Sep	Oct
	<i>1982=100</i>									
All commodities	124.4	125.5	132.7	135.4	136.8	135.5	133.9	133.5	133.4	130.2
Finished goods ¹	130.6	133.0	138.0	140.1	142.7	142.2	140.7	141.1	141.7	139.6
All foods ²	132.4	132.2	133.0	133.8	138.3	138.0	137.4	138.9	139.2	137.8
Consumer foods	134.3	135.1	137.2	138.0	142.3	142.0	141.2	142.6	142.9	141.8
Fresh fruits and melons	90.0	103.6	91.4	95.6	101.7	100.6	84.9	86.2	94.9	100.3
Fresh and dry vegetables	139.5	118.0	126.7	143.9	129.9	120.5	105.4	122.2	125.1	110.8
Dried and dehydrated fruits	124.4	121.2	122.9	125.3	118.3	118.4	119.4	118.4	118.5	118.5
Canned fruits and juices	134.4	137.8	140.0	139.7	144.4	144.3	144.5	144.0	144.2	143.7
Frozen fruits, juices and ades	116.1	123.0	120.9	116.8	115.3	112.3	113.9	114.4	112.2	112.0
Fresh vegetables except potatoes	137.9	117.7	135.0	165.0	144.9	129.4	109.7	127.2	132.3	112.3
Canned vegetables and juices	121.5	120.9	121.2	121.6	121.4	121.9	122.6	124.1	125.4	126.1
Frozen vegetables	125.4	126.1	126.0	126.9	128.4	127.7	128.7	128.6	128.1	129.5
Potatoes	122.5	126.9	100.5	93.4	131.8	147.6	140.0	171.7	151.3	140.1
Eggs for fresh use (1991=100)	90.1	77.9	84.9	90.7	72.1	71.8	69.9	75.9	71.7	77.0
Bakery products	175.8	178.0	182.3	184.1	188.1	188.1	188.7	188.7	188.7	189.3
Meats	101.4	104.6	114.3	112.2	124.8	123.1	123.2	123.6	120.8	118.2
Beef and veal	99.5	106.3	113.7	112.3	125.1	122.5	119.0	119.4	117.6	116.2
Pork	96.6	96.0	113.4	109.1	126.3	124.7	130.7	131.6	125.7	119.5
Processed poultry	120.7	114.0	112.9	116.4	116.7	117.6	116.3	118.7	121.6	121.3
Unprocessed and packaged fish	183.0	190.9	198.1	194.4	192.7	182.2	185.8	185.1	191.9	182.9
Dairy products	138.1	139.2	133.7	134.4	146.9	150.4	150.9	152.0	153.5	150.6
Processed fruits and vegetables	125.8	128.1	128.6	128.2	129.1	128.8	128.8	129.2	129.7	130.1
Shortening and cooking oil	143.4	140.4	132.4	133.0	130.6	131.1	132.5	143.3	136.7	134.4
Soft drinks	134.8	137.9	144.1	144.3	147.7	147.4	147.2	149.7	149.3	148.6
Finished consumer goods less foods	126.4	130.5	138.4	141.6	144.8	144.1	141.4	141.6	142.7	139.0
Alcoholic beverages	135.2	136.7	140.6	142.8	145.2	145.5	145.3	145.6	145.3	145.9
Apparel	126.6	127.1	127.4	127.6	126.9	126.7	126.4	126.6	126.4	126.2
Footwear	144.7	144.5	144.9	145.1	146.0	145.7	146.6	146.6	145.6	145.7
Tobacco products	283.4	374.0	397.2	403.8	447.3	447.8	447.4	447.4	447.6	447.6
Intermediate materials ³	123.0	123.2	129.2	130.8	131.3	131.4	130.3	129.8	130.1	127.6
Materials for food manufacturing	123.1	120.8	119.2	119.1	125.0	125.7	126.1	128.1	127.5	126.1
Flour	109.2	104.3	103.8	107.8	109.5	110.9	110.3	108.9	109.6	111.0
Refined sugar ⁴	119.8	121.0	110.6	106.2	109.1	109.2	108.6	109.9	111.5	111.3
Crude vegetable oils	131.1	90.2	73.6	68.0	68.6	71.0	73.0	83.8	78.4	70.8
Crude materials ⁵	96.7	98.2	120.6	130.3	131.3	120.6	116.1	113.4	108.0	97.7
Foodstuffs and feedstuffs	103.8	98.7	100.2	99.5	110.3	109.8	109.6	108.9	108.5	104.7
Fruits and vegetables and nuts ⁶	117.2	117.4	111.1	121.5	119.0	114.6	99.4	106.9	113.1	110.6
Grains	93.4	80.1	78.3	76.3	79.7	77.6	81.0	83.1	81.7	78.5
Slaughter livestock	82.3	86.4	96.5	93.1	107.2	106.0	102.9	100.1	97.6	93.5
Slaughter poultry, live	141.4	129.9	124.7	130.8	132.0	131.9	133.8	132.6	139.5	137.2
Plant and animal fibers	110.4	86.5	93.9	101.4	69.6	63.5	62.7	59.4	56.6	48.3
Fluid milk	112.6	106.3	92.0	93.8	115.2	121.2	122.0	122.7	125.7	121.2
Oilseeds	114.4	90.8	93.8	89.9	88.2	91.3	97.3	98.6	90.6	86.7
Leaf tobacco	104.6	101.6	--	106.4	--	--	--	105.2	110.2	112.0
Raw cane sugar	117.2	113.7	101.8	110.5	111.8	109.8	110.9	110.9	110.6	110.6

-- = Not available. 1. Commodities ready for sale to ultimate consumer. 2. Includes all raw, intermediate, and processed foods (excludes soft drinks, alcoholic beverages, and manufactured animal feeds). 3. Commodities requiring further processing to become finished goods. 4. All types and sizes of refined sugar. 5. Products entering market for the first time that have not been manufactured at that point. 6. Fresh and dried.

This table is compiled with data provided by the Bureau of Labor Statistics (BLS). BLS operates a website at <http://www.bls.gov> and a Producer Prices Information Hotline at (202) 691-7705.

Farm-Retail Price Spreads

Table 8—Farm-Retail Price Spreads

	Annual			2000		2001				
	1998	1999	2000	Oct	May	Jun	Jul	Aug	Sep	Oct
Market basket ¹										
Retail cost (1982-84=100)	163.1	167.3	170.6	172.3	176.5	177.2	177.7	177.9	178.3	179.3
Farm value (1982-84=100)	103.3	98.3	96.9	97.3	107.0	107.5	107.9	110.3	110.6	112.3
Farm-retail spread (1982-84=100)	195.4	204.5	210.3	212.7	214.0	214.8	215.3	214.3	214.8	215.4
Farm value-retail cost (%)	22.2	20.6	19.9	19.8	21.2	21.2	21.3	21.7	21.7	21.9
Meat products										
Retail cost (1982-84=100)	141.6	142.3	150.4	152.9	158.9	160.2	160.8	160.7	161.5	161.8
Farm value (1982-84=100)	84.8	81.6	88.4	89.9	98.2	98.8	99.4	99.5	100.2	100.6
Farm-retail spread (1982-84=100)	200.0	204.7	214.0	217.5	221.2	223.2	223.8	223.5	224.4	224.6
Farm value-retail cost (%)	30.3	29.0	29.8	29.8	31.3	31.2	31.3	31.4	31.4	31.5
Dairy products										
Retail cost (1982-84=100)	150.8	159.6	160.7	161.9	164.7	166.9	168.3	168.9	169.4	170.8
Farm value (1982-84=100)	113.0	107.9	98.8	101.2	121.4	127.4	126.4	129.1	133.8	136.1
Farm-retail spread (1982-84=100)	185.6	207.2	217.7	217.9	204.6	203.3	206.9	205.6	202.3	202.8
Farm value-retail cost (%)	36.0	32.4	29.5	30.0	35.4	36.6	36.0	36.7	37.9	38.2
Poultry										
Retail cost (1982-84=100)	157.1	157.9	159.8	162.1	162.3	164.5	166.6	167.5	165.4	169.6
Farm value (1982-84=100)	126.1	119.0	117.4	111.6	127.0	129.8	132.5	132.6	136.1	132.4
Farm-retail spread (1982-84=100)	192.9	202.7	208.7	220.2	203.0	204.5	205.8	207.6	199.1	212.4
Farm value-retail cost (%)	42.9	40.3	39.3	36.9	41.9	42.2	42.6	42.4	44.0	41.8
Eggs										
Retail cost (1982-84=100)	137.1	128.1	131.9	136.1	131.1	130.8	129.6	133.0	131.4	132.3
Farm value (1982-84=100)	89.6	74.9	80.6	88.9	61.5	61.5	60.2	66.0	64.6	76.6
Farm-retail spread (1982-84=100)	222.5	223.7	223.9	220.9	256.1	255.2	254.4	253.4	251.4	232.3
Farm value-retail cost (%)	42.0	37.6	39.3	42.0	30.2	30.2	29.8	31.9	31.6	37.2
Cereal and bakery products										
Retail cost (1982-84=100)	181.1	185.0	188.3	190.1	193.2	194.2	194.9	195.9	195.1	195.2
Farm value (1982-84=100)	94.4	82.5	75.2	76.5	81.5	77.7	78.1	79.1	79.2	78.7
Farm-retail spread (1982-84=100)	193.2	199.2	204.0	205.9	208.8	210.5	211.2	212.2	211.3	211.5
Farm value-retail cost (%)	6.4	5.5	4.9	4.9	5.2	4.9	4.9	4.9	5.0	4.9
Fresh fruit										
Retail cost (1982-84=100)	258.2	294.3	284.3	289.7	302.2	295.4	289.2	283.7	293.0	296.3
Farm value (1982-84=100)	141.3	153.7	141.3	140.4	134.6	128.7	127.2	142.5	136.3	172.1
Farm-retail spread (1982-84=100)	312.2	359.3	350.3	358.6	379.6	372.4	364.0	348.9	365.3	353.7
Farm value-retail cost (%)	17.3	16.5	15.7	15.3	14.1	13.8	13.9	15.9	14.7	18.3
Fresh vegetables										
Retail cost (1982-84=100)	215.8	209.3	219.4	218.6	226.4	226.4	226.3	224.9	228.2	229.1
Farm value (1982-84=100)	124.5	118.1	121.4	109.2	152.0	135.7	133.1	144.0	124.9	110.8
Farm-retail spread (1982-84=100)	262.7	256.2	269.8	274.9	264.3	273.0	274.2	266.5	281.3	289.9
Farm value-retail cost (%)	19.6	19.2	18.8	17.0	22.8	20.4	20.0	21.7	18.6	16.4
Processed fruits and vegetables										
Retail cost (1982-84=100)	150.6	154.8	153.6	155.7	158.2	159.5	160.6	161.1	160.8	161.6
Farm value (1982-84=100)	115.1	113.5	106.4	106.6	106.2	106.6	107.0	107.7	110.0	110.1
Farm-retail spread (1982-84=100)	161.7	167.7	168.3	171.0	174.4	176.0	177.3	177.8	176.6	177.7
Farm value-retail cost (%)	18.2	17.4	16.5	16.3	16.0	15.9	15.8	15.9	16.3	16.2
Fats and oils										
Retail cost (1982-84=100)	146.9	148.3	147.4	149.7	154.7	156.7	157.8	158.5	158.5	159.5
Farm value (1982-84=100)	118.9	89.0	80.9	76.6	73.1	74.4	86.7	88.9	78.3	74.6
Farm-retail spread (1982-84=100)	157.2	170.0	171.9	176.6	184.7	187.0	184.0	184.1	188.0	190.7
Farm value-retail cost (%)	21.8	16.2	14.8	13.8	12.7	12.8	14.8	15.1	13.3	12.6

See footnotes at end of table, next page.

Table 8—Farm-Retail Price Spreads (continued)

	Annual			2000		2001				
	1998	1999	2000	Oct	May	Jun	Jul	Aug	Sep	Oct
Beef, all fresh retail value (cents/lb.)	253.3	260.5	275.3	280.6	301.4	304.7	302.9	301.7	301.9	305.8
Beef, Choice										
Retail value (cents/lb.) ²	277.1	287.8	306.4	311.8	343.8	347.6	345.4	339.3	337.6	338.0
Wholesale value (cents/lb.) ³	153.8	171.6	182.3	174.4	204.3	198.3	185.9	188.1	186.6	180.4
Net farm value (cents/lb.) ⁴	130.8	141.1	149.0	143.6	160.1	156.2	150.5	148.8	147.2	141.8
Farm-retail spread (cents/lb.)	146.3	146.7	157.4	168.2	183.7	191.4	194.9	190.5	190.4	196.2
Wholesale-retail (cents/lb.) ⁵	123.3	116.2	124.1	137.4	139.5	149.3	159.5	151.2	151.0	157.6
Farm-wholesale (cents/lb.) ⁶	23.0	30.5	33.3	30.8	44.2	42.1	35.4	39.3	39.4	38.6
Farm value-retail value (%)	47.2	49.0	48.6	46.1	46.6	44.9	43.6	43.9	43.6	42.0
Pork										
Retail value (cents/lb.) ²	242.7	241.5	258.2	262.1	266.9	270.9	270.5	276.3	278.1	276.4
Wholesale value (cents/lb.) ³	97.3	99.0	114.5	114.3	126.0	128.4	126.2	129.2	123.9	113.5
Net farm value (cents/lb.) ⁴	61.2	60.4	79.4	76.3	93.0	97.0	95.2	92.6	82.7	73.1
Farm-retail spread (cents/lb.)	181.5	181.1	178.8	185.8	173.9	173.9	175.3	183.7	195.4	203.3
Wholesale-retail (cents/lb.) ⁵	145.4	142.5	143.7	147.8	140.9	142.5	144.3	147.1	154.2	162.9
Farm-wholesale (cents/lb.) ⁶	36.1	38.6	35.1	38.0	33.0	31.4	31.0	36.6	41.2	40.4
Farm value-retail value (%)	25.2	25.0	30.8	29.1	34.8	35.8	35.2	33.5	29.7	26.4

1. Retail costs are based on CPI-U of retail prices for domestically produced farm foods, published monthly by the Bureau of Labor Statistics (BLS). Farm value is the payment for the quantity of farm equivalent to the retail unit, less allowance for by-product. Farm values are based on prices at first point of sale, and may include marketing charges such as grading and packing for some commodities. The farm-retail spread, the difference between the retail value and farm value, represents charges for assembling, processing, transporting, and distributing. 2. Weighted-average value of retail cuts from pork and Choice yield grade 3 beef. Prices from BLS. 3. Value of wholesale (boxed beef) and wholesale cuts (pork) equivalent to 1 pound of retail cuts adjusted for transportation costs and by-product values. 4. Market value to producer for live animal equivalent to 1 lb. of retail cuts, minus value of by-products. 5. Charges for retailing and other marketing services such as wholesaling and in-city transportation. 6. Charges for livestock marketing, processing, and transportation. *Information contact: Veronica Jones (202) 694-5387, William F. Hahn (202) 694-5175*

Table 9—Price Indexes of Food Marketing Costs

	Annual			2000				2001		
	1998	1999	2000	I	II	III	IV	I	II	III
<i>1987=100*</i>										
Labor—hourly earnings and benefits	490.4	503.3	514.0	508.2	512.0	514.1	521.7	527.5	531.8	534.4
Processing	499.3	511.4	525.0	518.1	523.4	526.9	531.3	536.4	542.7	546.8
Wholesaling	552.5	564.6	589.4	578.9	586.4	587.3	601.0	606.4	611.3	618.4
Retailing	454.1	465.8	469.9	467.1	467.8	465.2	477.2	483.8	485.8	484.8
Packaging and containers	395.5	399.4	412.0	410.3	410.6	413.5	413.7	414.2	417.8	416.6
Paperboard boxes and containers	365.2	373.0	407.7	391.9	413.0	412.4	413.5	412.0	413.1	412.1
Metal cans	487.9	486.6	452.5	489.5	440.1	440.1	440.1	441.5	444.3	446.0
Paper bags and related products	432.9	440.9	470.4	457.3	472.4	477.6	474.5	474.2	481.3	474.6
Plastic films and bottles	322.8	324.2	336.7	329.4	330.6	342.4	344.3	344.0	345.8	344.4
Glass containers	446.8	447.1	450.8	450.1	451.1	451.1	450.8	460.2	471.7	473.7
Metal foil	232.0	227.3	232.4	229.8	231.3	233.8	234.8	235.5	246.1	242.7
Transportation services	428.3	394.0	394.3	392.3	393.3	394.6	396.9	401.0	403.1	406.6
Advertising	624.5	623.7	635.7	633.6	635.0	635.7	638.6	644.3	645.6	646.0
Fuel and power	619.7	651.5	841.1	816.5	822.2	866.1	859.6	830.3	826.6	826.4
Electric	492.1	489.4	498.2	477.2	487.0	523.8	504.9	514.3	526.1	559.9
Petroleum	457.0	565.9	1,135.8	1,114.0	1,102.2	1,160.6	1,166.4	998.5	974.7	937.2
Natural gas	1,239.4	1,235.6	1,275.4	1,235.3	1,259.8	1,300.7	1,305.7	1,403.3	1,391.5	1,363.3
Communications, water and sewage	307.6	309.3	309.1	310.3	307.8	308.7	309.5	312.6	312.5	314.2
Rent	260.5	256.9	258.2	256.8	258.0	259.1	259.0	259.2	257.7	257.7
Maintenance and repair	529.3	541.6	561.2	552.2	558.3	564.7	569.7	574.8	578.8	585.2
Business services	522.9	531.9	544.6	540.3	543.2	545.9	548.8	555.3	558.0	559.7
Supplies	332.3	327.7	348.5	365.6	338.2	344.5	345.8	349.2	347.0	342.8
Property taxes and insurance	598.3	619.7	654.6	639.8	647.4	658.6	672.6	680.9	687.5	695.1
Interest, short-term	103.7	103.7	115.4	111.3	116.6	117.7	116.0	91.0	64.1	55.0
Total marketing cost index	467.2	472.2	491.5	486.7	488.8	493.1	497.1	499.5	502.1	503.6

Last two quarters preliminary. * Indexes measure changes in employee earnings and benefits and in prices of supplies used in processing, wholesaling, and retailing U.S. farm foods purchased for at-home consumption. *Information contact: Veronica Jones (202) 694-5387*

Livestock & Products

Table 10—U.S. Meat Supply & Use

	Beg. stocks	Produc- tion ¹	Imports	Total supply	Exports	Ending stocks	Consumption		Conversion factor ³	Primary market price ⁴
							Total	Per capita ²		
Beef										
1998	465	25,760	2,643	28,868	2,171	393	26,305	68	0.700	61.48
1999	393	26,493	2,874	29,760	2,417	411	26,932	69	0.700	65.56
2000	411	26,888	3,032	30,331	2,516	525	27,290	69	0.700	69.65
2001	525	26,184	3,139	29,848	2,198	480	27,170	68	0.700	72.64
2002	480	25,431	3,145	29,056	2,240	385	26,431	66	0.700	77.00
Pork										
1998	408	19,011	705	20,124	1,230	584	18,309	53	0.776	34.72
1999	584	19,308	827	20,720	1,278	489	18,952	54	0.776	34.00
2000	489	18,952	967	20,408	1,305	477	18,626	52	0.776	44.70
2001	477	19,026	950	20,453	1,541	475	18,437	51	0.776	46.23
2002	475	19,155	960	20,590	1,430	500	18,660	52	0.776	43.50
Veal ⁶										
1998	8	262	0	270	0	5	265	1	0.83	82.29
1999	5	235	0	240	0	5	235	1	0.83	89.62
2000	5	225	0	230	0	5	225	1	0.83	105.67
2001	5	204	0	209	0	4	205	1	0.83	107.53
2002	4	200	0	204	0	5	199	1	0.83	110.11
Lamb and mutton										
1998	14	251	112	377	6	12	360	1	0.89	74.20
1999	12	248	113	372	5	9	358	1	0.89	75.97
2000	9	234	129	372	6	13	353	1	0.89	79.40
2001	13	221	159	393	5	15	373	1	0.89	71.35
2002	15	196	170	381	4	15	362	1	0.89	74.50
Total red meat										
1998	894	45,284	3,461	49,639	3,407	994	45,239	123	--	--
1999	994	46,284	3,813	51,092	3,700	914	46,477	125	--	--
2000	914	46,299	4,128	51,341	3,827	1,020	46,494	124	--	--
2001	1,020	45,635	4,248	50,903	3,744	974	46,185	122	--	--
2002	974	44,982	4,275	50,231	3,674	905	45,652	119	--	--
Broilers										
1998	607	27,612	5	28,225	4,673	711	22,841	73	0.859	63
1999	711	29,468	4	30,183	4,920	796	24,468	77	0.859	58
2000	796	30,209	6	31,011	5,548	798	24,665	77	0.859	56
2001	798	30,754	10	31,562	6,193	650	24,719	76	0.859	59
2002	650	31,583	8	32,241	6,350	700	25,191	77	0.859	60
Mature chickens										
1998	7	525	0	533	426	6	101	1	1.0	--
1999	6	554	0	562	393	8	162	1	1.0	--
2000	8	531	0	541	223	9	308	1	1.0	--
2001	9	505	0	516	128	8	380	1	1.0	--
2002	8	500	0	510	80	10	419	1	1.0	--
Turkeys										
1998	415	5,215	0	5,630	446	304	4,880	18	1.0	62
1999	304	5,230	1	5,535	379	254	4,902	18	1.0	69
2000	254	5,333	1	5,589	458	241	4,889	18	1.0	71
2001	241	5,441	1	5,684	501	250	4,932	18	1.0	67
2002	250	5,625	1	5,876	495	275	5,105	18	1.0	68
Total poultry										
1998	1,029	33,352	6	34,387	5,545	1,022	27,821	91	--	--
1999	1,022	35,252	7	36,281	5,692	1,058	29,531	96	--	--
2000	1,058	36,073	9	37,140	6,229	1,048	29,863	96	--	--
2001	1,048	36,700	14	37,762	6,823	908	30,030	95	--	--
2002	908	37,708	11	38,627	6,925	985	30,715	97	--	--
Red meat and poultry										
1998	1,923	78,637	3,467	84,027	8,951	2,016	73,060	214	--	--
1999	2,016	81,537	3,820	87,372	9,392	1,972	76,008	220	--	--
2000	1,972	82,372	4,137	88,481	10,056	2,068	76,357	219	--	--
2001	2,068	82,335	4,262	88,665	10,567	1,882	76,215	217	--	--
2002	1,882	82,690	4,286	88,858	10,599	1,890	76,367	216	--	--

-- = Not available. Values for the last 2 years are forecasts. 1. Total including farm production for red meat and federally inspected plus nonfederally inspected for poultry. 2. Retail-weight basis. 3. Red meat, carcass to retail conversion; poultry, ready-to-cook production to retail weight. 4. Beef: Medium #1, Nebraska Direct 1,100-1,300 lb.; pork: barrows and gilts, Iowa, Southern Minnesota; veal: farm price of calves; lamb and mutton: choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 5. Carcass weight for red meats and certified ready-to-cook for poultry. 6. Beginning in 1989, veal trade is no longer reported separately. *Information contact: LaVerne Williams (202) 694-5190*

Table 11—U.S. Egg Supply & Use

	Beg. stocks	Production	Imports	Total supply	Exports	Hatching use	Ending stocks	Consumption		Primary market price*
								Total	Per capita	
Million doz.								No.	¢/doz.	
1995	14.9	6,215.6	4.1	6,234.6	208.9	847.2	11.2	5,167.3	235.6	72.9
1996	11.2	6,350.7	5.4	6,367.3	253.1	863.8	8.5	5,241.8	236.8	88.2
1997	8.5	6,473.1	6.9	6,488.5	227.8	894.7	7.4	5,358.6	240.1	81.2
1998	7.4	6,657.9	5.8	6,671.2	218.8	921.8	8.4	5,522.2	244.9	75.8
1999	8.4	6,912.0	7.4	6,927.8	161.7	941.7	7.6	5,816.7	255.7	65.6
2000	7.6	7,034.9	8.4	7,051.0	171.8	940.2	11.4	5,927.5	258.3	68.9
2001	11.4	7,150.6	9.2	7,171.1	175.4	951.7	13.0	6,031.7	260.4	68.4
2002	13.0	7,270.0	8.0	7,291.0	165.0	985.0	12.0	6,129.0	262.4	64.8

Values for the last year are forecasts. Values for previous year are preliminary. * Cartoned grade A large eggs, New York.

Information contact: LaVerne Williams (202) 694-5190

Table 12—U.S. Milk Supply & Use

	Production	Farm use	Commercial		Imports	Total commercial supply	Commercial				CCC net removals	
			Farm marketings	Beg. stocks			CCC net removals	Ending stocks	Disappearance	All milk price ¹	Skim solids basis	Total solids basis ²
	Million lbs. (milkfat basis)								\$/cwt	Billion lbs.		
1994	153.6	1.7	151.9	4.5	2.9	159.3	4.8	4.3	150.3	12.97	3.7	4.2
1995	155.3	1.6	153.7	4.3	2.9	160.9	2.1	4.1	154.9	12.74	4.4	3.5
1996	154.0	1.5	153.5	4.1	2.9	159.5	0.1	4.7	154.7	14.74	0.7	0.5
1997	156.1	1.4	154.7	4.7	2.7	162.1	1.1	4.9	156.1	13.34	3.7	2.7
1998	157.4	1.4	156.1	4.9	4.6	165.5	0.4	5.3	159.9	15.42	4.0	2.6
1999	162.7	1.4	161.3	5.3	4.7	171.4	0.3	6.1	164.9	14.36	6.5	4.0
2000	167.7	1.3	166.3	6.1	4.4	176.9	0.8	6.9	169.2	12.40	8.6	5.5
2001	165.5	1.3	164.2	6.8	5.5	176.6	0.2	6.4	170.0	15.10	5.4	3.3
2002	169.9	1.2	168.6	6.4	4.7	179.7	0.2	6.4	173.1	13.20	2.2	1.4

Values for latest year are forecasts. Values for the preceding year are preliminary. 1. Delivered to plants and dealers; does not reflect deductions.

2. Arbitrarily weighted average of milkfat basis (40 percent) and solids basis (60 percent). Information contact: Jim Miller (202) 694-5184

Table 13—Poultry & Eggs

	Annual			2000		2001				
	1998	1999	2000	Sep	Apr	May	Jun	Jul	Aug	Sep
Broilers										
Federally inspected slaughter certified (mil. lb.)	27,862.7	29,741.4	30,495.2	2,421.8	2,498.1	2,809.2	2,619.2	2,575.7	2,823.4	2,407.7
Wholesale price, 12-city (cents/lb.)	63.0	58.1	56.2	58.4	58.5	59.4	59.9	60.4	60.9	61.9
Price of grower feed (\$/ton) ¹	128.6	103.1	104.7	97.4	98.7	98.8	98.8	106.3	107.7	102.4
Broiler-feed price ratio ²	6.3	7.2	6.6	7.8	7.9	8.1	8.3	7.9	7.8	8.4
Stocks beginning of period (mil. lb.)	606.8	711.1	795.6	803.0	636.5	647.0	660.8	681.3	633.7	615.5
Broiler-type chicks hatched (mil.)	8,491.9	8,715.4	8,792.1	702.6	745.3	775.7	756.6	760.2	761.2	730.0
Turkeys										
Federally inspected slaughter certified (mil. lb.)	5,280.6	5,296.5	5,402.2	427.8	425.7	488.9	463.9	471.9	490.9	414.3
Wholesale price, Eastern U.S. 8-16 lb. young hens (cents/lb.)	62.2	69.0	70.5	76.5	63.5	65.7	66.0	66.0	66.4	68.8
Price of turkey grower feed (\$/ton) ¹	115.6	95.0	95.9	88.7	93.3	94.6	92.8	97.7	99.5	97.3
Turkey-feed price ratio ²	6.7	8.6	8.7	10.1	8.1	8.1	8.3	7.9	7.8	8.3
Stocks beginning of period (mil. lb.)	415.1	304.3	254.3	524.9	355.4	392.6	454.6	506.7	534.2	545.3
Poultz placed in U.S. (mil.)	297.8	296.1	297.3	23.0	25.9	26.7	26.0	27.0	25.0	22.4
Eggs										
Farm production (mil.)	79,927.0	82,943.0	84,412.0	6,854.0	7,090.0	7,231.0	6,979.0	7,180.0	7,207.0	7,037.0
Average number of layers (mil.)	313.0	322.9	328.2	326.2	336.8	334.8	332.4	331.6	332.2	334.5
Rate of lay (eggs per layer on farms)	255.3	256.8	257.2	21.0	21.1	21.6	21.0	21.7	21.7	21.0
Cartoned price, New York, grade A large (cents/doz.) ³	75.8	65.6	68.9	67.1	74.4	58.1	57.3	59.8	62.8	61.5
Price of laying feed (\$/ton) ¹	137.7	124.5	123.9	115.0	115.7	131.7	131.3	141.3	137.1	133.4
Egg-feed price ratio ²	9.8	9.8	10.6	10.3	11.5	8.4	8.5	7.8	8.4	8.5
Stocks, first of month Frozen (mil. doz.)	7.4	8.4	7.6	11.3	11.1	12.1	12.0	10.9	12.6	13.5
Replacement chicks hatched (mil.)	438.3	451.7	429.7	36.3	41.7	42.6	40.6	37.9	35.2	36.6

1. Calculated from price ratios that were revised February 1995. 2. Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight (revised February 1995). 3. Price of cartoned eggs to volume buyers for delivery to retailers. Information contact: LaVerne Williams (202) 694-5190

Table 14—Dairy

	Annual			2000				2001		
	1998	1999	2000	Sep	Apr	May	Jun	Jul	Aug	Sep
Class III (BFP before 2000) 3.5% fat (\$/cwt.)	14.20	12.43	9.74	10.76	12.06	13.83	15.02	15.46	15.55	15.90
Wholesale prices										
Butter, Central States (cents/lb.) ¹	177.6	125.2	118.5	119.1	174.7	190.4	197.4	192.4	204.5	219.7
Am. cheese, Wis. assembly pt. (cents/lb.)	158.1	142.3	116.2	133.4	140.5	160.3	166.8	168.4	171.8	173.9
Nonfat dry milk (cents/lb.) ²	106.9	103.5	101.6	102.4	104.3	104.0	102.5	100.3	99.0	99.3
USDA net removals										
Total (mil. lb.) ³	365.6	343.5	841.4	37.8	10.7	11.3	7.7	15.6	11.1	3.7
Butter (mil. lb.)	6.3	3.7	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Am. cheese (mil. lb.)	8.2	4.6	28.0	0.9	0.0	0.0	0.0	0.8	0.8	0.2
Nonfat dry milk (mil. lb.)	326.4	540.6	692.6	40.1	48.5	51.2	34.8	39.2	14.9	7.5
Milk										
Milk prod. 20 states (mil. lb.)	134,900	140,062	144,528	11,451	12,158	12,638	12,057	12,020	11,772	11,372
Milk per cow (lb.)	17,502	18,109	18,532	1,464	1,570	1,632	1,556	1,552	1,522	1,471
Number of milk cows (1,000)	7,708	7,734	7,799	7,820	7,744	7,745	7,749	7,745	7,737	7,729
U.S. milk production (mil. lb.) ⁴	157,348	162,716	167,658	13,241	14,082	14,632	13,955	13,890	13,598	13,131
Stocks, beginning										
Total (mil. lb.)	4,907	5,301	6,186	9,933	8,571	9,004	9,553	10,172	10,238	9,246
Commercial (mil. lb.)	4,889	5,274	6,142	9,799	8,325	8,749	9,299	9,907	9,968	8,967
Government (mil. lb.) ³	18	27	44	134	246	255	254	265	270	279
Imports, total (mil. lb.) ³	4,588	4,772	4,445	300	493	420	727	604	598	--
Commercial disappearance (mil. lb.) ³	159,779	164,947	169,222	14,269	14,035	14,383	13,961	14,309	15,078	--
Butter										
Production (mil. lb.)	1,168.0	1,277.1	1,273.6	89.9	106.0	109.1	86.9	79.9	76.8	88.8
Stocks, beginning (mil. lb.)	20.5	25.9	24.9	100.9	89.7	106.9	131.7	147.0	144.7	112.2
Commercial disappearance (mil. lb.)	1,222.5	1,310.7	1,297.6	107.5	96.0	90.1	87.4	94.7	121.7	--
American cheese										
Production (mil. lb.)	3,314.7	3,532.6	3,633.9	275.8	294.3	309.8	308.1	298.4	285.9	283.3
Stocks, beginning (mil. lb.)	410.3	407.6	458.0	609.3	503.3	509.1	503.8	528.0	534.3	505.0
Commercial disappearance (mil. lb.)	3,338.6	3,542.2	3,588.1	309.3	294.3	318.7	292.3	295.2	320.6	--
Other cheese										
Production (mil. lb.)	4,177.5	4,361.5	4,620.6	378.0	380.7	399.0	374.3	380.7	377.5	363.1
Stocks, beginning (mil. lb.)	70.0	109.5	163.3	230.2	211.1	208.8	214.7	217.6	224.6	222.1
Commercial disappearance (mil. lb.)	4,452.0	4,672.1	4,963.3	434.7	413.1	420.2	405.0	409.3	410.7	--
Nonfat dry milk										
Production (mil. lb.)	1,135.4	1,359.7	1,451.6	87.9	131.3	139.9	131.3	117.2	95.7	94.6
Stocks, beginning (mil. lb.)	103.3	56.9	150.9	179.0	123.4	126.9	134.2	165.9	147.0	108.9
Commercial disappearance (mil. lb.)	866.9	737.2	770.4	72.9	79.5	81.9	65.6	97.4	119.2	--
Frozen dessert										
Production (mil. gal.) ⁵	1,324.3	1,301.0	1,312.2	102.8	119.2	124.8	131.8	127.9	124.8	105.8

-- = Not available. Quarterly values for latest year are preliminary. 1. Grade AA Chicago before June 1998. 2. Prices paid f.o.b. Central States production area. 3. Milk equivalent, fat basis. 4. Monthly data ERS estimates. 5. Hard ice cream, ice milk, and hard sherbet. *Information contact: LaVerne Williams (202) 694-5190*

Table 15—Wool

	Annual			2000				2001		
	1998	1999	2000	I	II	III	IV	I	II	III
U.S. wool price (¢/lb.) ¹	162	110	107	97	120	117	96	101	130	125
Imported wool price (¢/lb.) ²	164	136	137	133	139	139	136	151	155	167
U.S. mill consumption, scoured										
Apparel wool (1,000 lb.)	98,373	65,468	60,294	17,443	16,064	14,620	13,914	16,590	13,009	--
Carpet wool (1,000 lb.)	16,331	15,017	14,514	3,885	3,668	3,766	3,886	4,278	3,791	--

-- = Not available. 1. Wool price delivered at U.S. mills, clean basis, Graded Territory 64's (20.60-22.04 microns) staple 2-3/4" and up. 2. Wool price, Charleston, SC warehouse, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10 cents. *Information contact: Mae Dean Johnson (202) 694-5299*

Table 16—Meat Animals

	Annual			2000		2001				
	1998	1999	2000	Oct	May	Jun	Jul	Aug	Sep	Oct
Cattle on feed (7 states, 1000+ head capacity)										
Number on feed (1,000 head) ¹	9,455	9,021	9,752	9,502	9,563	9,660	9,466	9,387	9,383	9,613
Placed on feed (1,000 head)	19,697	21,446	21,875	2,387	2,060	1,690	1,730	1,906	1,806	2,305
Marketings (1,000 head)	19,440	20,124	20,644	1,647	1,875	1,824	1,758	1,854	1,536	1,630
Other disappearance (1,000 head)	691	676	907	50	88	60	51	46	40	57
Market prices (\$/cwt)										
Slaughter cattle										
Choice steers, 1,100-1,300 lb.										
Texas	61.75	65.89	69.86	68.51	74.93	72.64	70.71	69.07	68.75	66.30
Neb. direct	61.47	65.56	69.65	68.54	75.39	72.81	71.60	70.16	69.16	66.58
Boning utility cows, Sioux Falls	36.20	38.40	41.71	38.25	44.90	50.00	43.25	48.00	44.13	43.25
Feeder steers										
Medium no. 1, Oklahoma City										
600-650 lb.	78.13	82.64	94.36	89.47	97.02	98.87	97.80	95.27	97.14	87.99
750-800 lb.	71.79	76.39	88.58	86.96	88.00	91.12	91.32	90.44	91.64	88.03
Slaughter hogs										
Barrows and gilts, 51-52 percent lean										
National Base converted to live equal.	34.72	34.00	34.02	43.09	52.34	54.53	53.75	52.47	46.93	41.27
Sows, Iowa, S.MN 1-2 300-400 lb.	20.29	19.26	29.79	31.45	38.44	41.88	40.75	40.75	33.12	31.60
Slaughter sheep and lambs										
Lambs, Choice, San Angelo	74.20	75.96	79.40	77.50	86.07	75.21	69.82	54.47	56.50	57.67
Ewes, Good, San Angelo	40.86	42.45	46.23	43.18	47.00	43.89	44.07	40.25	26.92	38.50
Feeder lambs										
Choice, San Angelo	79.86	80.74	95.86	92.00	99.43	81.29	78.50	73.19	69.13	68.50
Wholesale meat prices, Midwest										
Boxed beef cut-out value										
Choice, 700-800 lb.	98.60	110.90	117.45	112.66	130.13	127.85	118.96	119.40	117.65	113.58
Select, 700-800 lb.	92.19	101.99	101.99	102.02	114.90	113.42	112.77	113.62	108.21	105.11
Canner and cutter cow beef	61.49	66.51	72.57	70.08	--	--	--	--	--	--
Pork cutout	53.08	53.45	64.07	62.40	71.86	75.33	74.47	75.14	69.61	60.68
Pork loins, bone-in, 1/4 " trim, 14-19 lb.	101.63	100.38	117.13	119.90	130.72	132.51	126.41	121.22	116.21	108.69
Pork bellies, 12-14 lb.	52.38	57.12	77.46	57.83	77.91	91.45	102.42	98.39	81.91	61.30
Hams, bone-in, trimmed, 20-23 lb.	45.85	45.18	52.02	55.94	57.28	61.08	64.35	70.25	72.23	66.67
All fresh beef retail price	253.28	260.50	275.30	280.60	301.40	304.70	302.90	301.70	301.90	305.80
Commercial slaughter (1,000 head) ²										
Cattle	35,465	36,150	36,247	3,141	3,199	3,120	2,941	3,239	2,807	3,161
Steers	17,428	17,932	18,060	1,479	1,630	1,583	1,500	1,628	1,379	1,522
Heifers	11,448	11,868	12,041	1,100	1,025	1,036	943	1,064	948	1,036
Cows	5,983	5,710	5,522	508	486	446	445	487	429	544
Bull and stags	606	639	624	54	58	55	53	60	51	59
Calves	1,458	1,282	1,132	97	79	77	83	94	79	94
Sheep and lambs	3,804	3,701	3,455	279	239	233	242	273	243	289
Hogs	101,029	101,544	97,955	8,882	7,958	7,483	7,446	8,374	7,811	9,330
Barrows and gilts	97,025	97,732	94,585	8,580	7,668	7,211	7,178	8,087	7,544	9,019
Commercial production (mil. lb.)										
Beef	25,653	26,386	26,776	2,345	2,293	2,269	2,176	2,424	2,120	2,388
Veal	252	226	216	18	16	16	16	17	15	18
Lamb and mutton	248	244	230	18	17	16	17	19	16	20
Pork	18,981	19,278	18,905	1,717	1,555	1,457	1,434	1,600	1,513	1,838
	Annual			2000		2001				
	1998	1999	2000	II	III	IV	I	II	III	IV
Hogs and pigs (U.S.) ³										
Inventory (1,000 head) ¹	61,158	62,206	59,342	57,782	59,117	59,495	59,138	57,524	58,223	58,642
Breeding (1,000 head) ¹	6,957	6,682	6,234	6,190	6,234	6,246	6,270	6,232	6,186	6,158
Market (1,000 head) ¹	54,200	55,523	53,109	51,593	52,884	53,250	52,868	51,292	52,037	52,484
Farrowings (1,000 head)	12,061	11,641	11,462	2,885	2,889	2,838	2,749	2,844	2,838	2,877
Pig crop (1,000 head)	105,004	102,354	101,354	25,565	25,548	25,119	23,969	25,170	25,028	--
Cattle on Feed, 7 states (1,000 head) ^{1 4}										
Steers and steer calves	5,803	5,432	5,432	5,746	5,326	5,584	5,936	5,885	5,521	5,690
Heifers and heifer calves	3,615	3,552	3,552	3,810	3,602	3,877	4,081	3,913	3,894	3,882
Cows and bulls	59	37	37	37	31	41	59	61	51	41

-- = Not available. 1. Beginning of period. 2. Classes estimated. 3. Quarters are Dec. of preceding year to Feb. (I), Mar.-May (II), June-Aug. (III), and Sept.-Nov. (IV). 4. The 7 states include AZ, CA, CO, IA, KS, NE, and TX. Information contact: Leland Southard (202) 694-5187

Crops & Products

Table 17—Supply & Utilization^{1,2}

	Area			Yield	Production	Total supply ⁴	Feed & residual	Other domestic use	Exports	Total use	Ending stocks	Farm price ⁵
	Set-aside ³	Planted	Harvested									
	<i>Mil. acres</i>			<i>Bu./acre</i>	<i>Mil. bu.</i>							<i>\$/bu.</i>
Wheat	--	70.4	62.8	39.5	2,481	3,020	251	1,007	1,040	2,298	722	3.38
1997/98	--	65.8	59.0	43.2	2,547	3,373	394	990	1,042	2,427	946	2.65
1998/99	--	62.7	53.8	42.7	2,299	3,339	279	1,021	1,090	2,390	950	2.48
1999/00	--	62.6	53.1	42.0	2,232	3,272	297	1,037	1,061	2,396	876	2.62
2000/01*	--	59.6	48.7	40.2	1,958	2,924	200	1,047	1,025	2,272	652	2.70-3.00
2001/02*												
	<i>Mil. acres</i>			<i>Lb./acre</i>	<i>Mil. cwt (rough equiv)</i>							<i>\$/cwt</i>
Rice ⁶	--	3.1	3.1	5,897.0	183.0	219.5	--	6/ 103.9	87.7	191.6	27.9	9.70
1997/98	--	3.3	3.3	5,663.0	184.4	223.0	--	6/ 114.0	86.8	200.9	22.1	8.89
1998/99	--	3.5	3.5	5,866.0	206.0	238.2	--	6/ 121.9	88.9	210.7	27.5	5.93
1999/00	--	3.1	3.0	6,281.0	190.9	229.2	--	6/ 117.2	83.5	200.7	28.5	5.56
2000/01*	--	3.3	3.3	6,374.0	209.7	249.2	--	6/ 121.0	86.0	207.0	42.2	4.00-4.50
2001/02*												
	<i>Mil. acres</i>			<i>Bu./acre</i>	<i>Mil. bu.</i>							<i>\$/bu.</i>
Corn	--	79.5	72.7	126.7	9,207	10,099	5,482	1,805	1,504	8,791	1,308	2.43
1997/98	--	80.2	72.6	134.4	9,759	11,085	5,471	1,846	1,981	9,298	1,787	1.94
1998/99	--	77.4	70.5	133.8	9,431	11,232	5,664	1,913	1,937	9,515	1,718	1.82
1999/00	--	79.5	72.7	137.1	9,968	11,693	5,890	1,967	1,937	9,794	1,899	1.85
2000/01*	--	76.0	69.2	138.0	9,546	11,454	5,800	2,030	2,050	9,880	1,574	1.80-2.20
2001/02*												
	<i>Mil. acres</i>			<i>Bu./acre</i>	<i>Mil. bu.</i>							<i>\$/bu.</i>
Sorghum	--	10.1	9.2	69.2	634	681	365	55	212	632	49	2.21
1997/98	--	9.6	7.7	67.3	520	569	262	45	197	504	65	1.66
1998/99	--	9.3	8.5	69.7	595	660	284	55	256	595	65	1.57
1999/00	--	9.2	7.7	60.9	470	535	220	35	239	494	42	1.88
2000/01*	--	10.0	8.8	61.2	537	579	240	45	240	525	54	1.80-2.20
2001/02*												
	<i>Mil. acres</i>			<i>Bu./acre</i>	<i>Mil. bu.</i>							<i>\$/bu.</i>
Barley	--	6.7	6.2	58.1	360	510	144	172	74	390	119	2.38
1997/98	--	6.3	5.9	60.0	352	501	161	170	28	360	142	1.98
1998/99	--	5.2	4.7	59.2	280	450	136	172	30	338	111	2.13
1999/00	--	5.9	5.2	61.1	319	459	123	172	58	353	106	2.11
2000/01*	--	5.0	4.3	58.2	250	381	95	172	30	297	84	2.10-2.40
2001/02*												
	<i>Mil. acres</i>			<i>Bu./acre</i>	<i>Mil. bu.</i>							<i>\$/bu.</i>
Oats	--	5.1	2.8	59.5	167	332	185	72	2	258	74	1.60
1997/98	--	4.9	2.8	60.2	166	348	196	69	2	266	81	1.10
1998/99	--	4.7	2.5	59.6	146	326	180	68	2	250	76	1.12
1999/00	--	4.5	2.3	64.2	150	332	189	68	2	259	73	1.10
2000/01*	--	4.4	1.9	61.3	117	280	155	68	2	225	55	1.20-1.40
2001/02*												
	<i>Mil. acres</i>			<i>Bu./acre</i>	<i>Mil. bu.</i>							<i>\$/bu.</i>
Soybeans ⁷	--	70.0	69.1	38.9	2,689	2,826	156	1,597	873	2,626	200	6.47
1997/98	--	72.0	70.4	38.9	2,741	2,944	201	1,590	805	2,595	348	4.93
1998/99	--	73.7	72.4	36.6	2,654	3,006	165	1,578	973	2,716	290	4.63
1999/00	--	74.3	72.4	38.1	2,758	3,052	164	1,641	998	2,804	248	4.55
2000/01*	--	75.2	74.1	39.4	2,923	3,175	175	1,665	980	2,820	355	3.90-4.70
2001/02*												
								<i>Mil. lbs.</i>			<i>¢/lb.</i>	
Soybean oil	--	--	--	--	18,143	19,723	--	15,262	3,079	18,341	1,382	25.84
1997/98	--	--	--	--	18,081	19,546	--	15,655	2,372	18,027	1,520	19.90
1998/99	--	--	--	--	17,825	19,427	--	16,056	1,376	17,432	1,995	15.60
1999/00	--	--	--	--	18,480	20,550	--	16,350	1,400	17,750	2,800	14.15
2000/01*	--	--	--	--	18,730	21,680	--	16,550	2,450	19,000	2,680	13.50-16.00
2001/02*												
								<i>1,000 tons</i>			<i>\$/ton ⁸</i>	
Soybean meal	--	--	--	--	38,176	38,443	--	28,895	9,329	38,225	218	185.5
1997/98	--	--	--	--	37,792	38,109	--	30,657	7,122	37,779	330	138.5
1998/99	--	--	--	--	37,591	37,970	--	30,346	7,331	37,678	293	167.7
1999/00	--	--	--	--	39,409	39,750	--	31,850	7,575	39,425	325	173.6
2000/01*	--	--	--	--	39,839	40,275	--	32,350	7,650	40,000	275	150-170
2001/02*												

See footnotes at end of table, next page

Table 17—Supply & Utilization (continued)

	Area			Yield	Production	Total supply ⁴	Feed & residual	Other domestic use	Exports	Total use	Ending stocks	Farm price ⁵
	Set-aside ³	Planted	Harvested									
	Mil. acres		Lb./acre			Mil. bales				¢/lb.		
Cotton ⁹												
1997/98	1.7	13.9	13.4	673	18.8	22.8	--	11.3	7.5	18.8	3.9	65.2
1998/99	0.3	13.4	10.7	625	13.9	18.2	--	10.4	4.3	14.7	3.9	60.2
1999/00	--	14.9	13.4	607	17.0	21.0	--	10.2	6.8	17.0	3.9	45.0
2000/01*	--	15.5	13.1	632	17.2	21.1	--	8.9	6.7	17.0	6.0	49.8
2001/02*	--	16.2	14.1	685	20.2	26.2	--	9.3	9.4	18.7	5.0	--

-- = Not available or not applicable. *November 9, 2001 Supply and Demand Estimates. 1. Marketing year beginning June 1 for wheat, barley, and oats; August 1 for cotton and rice; September 1 for soybeans, corn, and sorghum; October 1 for soybean meal and soybean oil. 2. Conversion factors: hectare (ha.) = 2.471 acres, 1 metric ton = 2,204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9296 bushels of barley, 68.8944 bushels of oats, 22.046 cwt of rice, and 4.59 480-pound bales of cotton. 3. Includes diversion, acreage reduction, 0/92 & 50/92 programs. 0/92 & 50/92 set-aside includes idled acreage and acreage planted to minor oilseeds, sesame, and crambe. 4. Includes imports. 5. Marketing-year weighted average price received by farmers. Does not include an allowance for loans outstanding and government purchases. 6. Residual included in domestic use. 7. Includes seed. 8. Simple average of 48 percent protein, Decatur. 9. Upland and extra-long staple. Stocks estimates based on Census Bureau data, resulting in an unaccounted difference between supply and use estimates and changes in ending stocks. Average for August 2000-February 2001. USDA is prohibited by law from publishing cotton price projections. Information contact: Mae Dean Johnson (202) 694-5299

Table 18—Cash Prices, Selected U.S. Commodities

	Marketing year ¹			2000		2001				
	1998/99	1999/00	2000/01	Oct	May	Jun	Jul	Aug	Sep	Oct
Wheat, no. 1 HRW, Kansas City (\$/bu.) ²	3.08	2.87	3.30	3.41	3.49	3.32	3.20	3.15	3.18	3.28
Wheat, DNS, Minneapolis (\$/bu.) ³	3.83	3.65	3.62	3.69	3.88	3.81	3.72	3.54	3.52	3.71
Rice, S.W. La. (\$/cwt) ⁴	16.79	12.99	12.46	--	12.47	12.38	12.38	12.19	10.97	--
Corn, no. 2 yellow, 30-day, Chicago (\$/bu.)	2.06	1.97	--	1.91	1.96	1.89	2.07	2.13	2.10	1.98
Sorghum, no. 2 yellow, Kansas City (\$/cwt)	3.29	3.10	--	3.14	3.56	3.56	3.59	3.65	3.55	3.38
Barley, feed, Duluth (\$/bu.)	--	--	1.47	1.30	1.50	1.50	1.49	1.49	1.48	1.50
Barley, malting Minneapolis (\$/bu.)	--	--	2.37	2.24	2.41	--	--	2.35	2.34	2.42
U.S. cotton price, SLM, 1-1/16 in. (¢/lb.) ⁵	60.12	52.36	51.56	60.54	40.02	37.38	37.48	36.05	33.22	28.42
Northern Europe prices cotton index (¢/lb.) ⁶	58.97	52.85	57.25	60.82	49.76	47.33	45.55	43.31	41.26	37.22
U.S. M 1-3/32 in. (¢/lb.) ⁷	74.08	59.64	62.54	66.91	52.90	51.44	50.56	51.25	46.26	40.35
Soybeans, no. 1 yellow, 15-day ⁸ Central Illinois (\$/bu)	4.85	4.76	4.61	4.54	4.47	4.69	5.09	4.98	4.59	4.26
Soybean oil, crude, Decatur (¢/lb.)	19.90	20.50	--	13.50	13.53	12.38	16.49	12.38	15.46	14.38
Soybean meal, 48% protein, Decatur (\$/ton)	138.50	165.45	--	176.73	171.48	183.35	184.52	180.35	182.32	171.68

-- = Not available. 1. Beginning June 1 for wheat and barley; Aug. 1 for rice and cotton; Sept. 1 for corn, sorghum, and soybeans; Oct. 1 for soybean meal and oil. 2. Ordinary protein. 3. 14 percent protein. 4. Long grain, milled basis. 5. Average spot market. 6. Liverpool Cotlook "A" Index; average of 5 lowest priced growth. 7. Cotton, Memphis territory growth. 8. Soybean 30-day price discontinued. Information contact: Mae Dean Johnson (202) 694-5299

Table 19—Farm Programs, Price Supports, Participation, & Payment Rates

	Marketing assistance loan rate	Marketing loan benefit ¹	Flexibility contract payment rate	Acres under contract	Contract payment yields
				<i>Mil. acres</i>	<i>Bu./acre</i>
Wheat		<i>\$/bu.</i>			
1997/98	2.58	0.01	0.631	76.7	34.70
1998/99	2.58	0.19	0.663	78.9	34.50
1999/2000	2.58	0.41	0.637	79.0	34.50
2000/2001	2.58	--	0.588	78.9	34.50
2001/2002 ²	2.58	--	0.474	78.2	34.60
					<i>Cwt/acre</i>
Rice		<i>\$/cwt</i>			
1997/98	6.50	0.00	2.710	4.2	48.17
1998/99	6.50	0.08	2.921	4.2	48.17
1999/2000	6.50	1.94	2.820	4.2	48.15
2000/2001	6.50	--	2.600	4.1	48.15
2001/2002 ²	6.50	--	2.100	4.1	48.15
					<i>Bu./acre</i>
Corn		<i>\$/bu.</i>			
1997/98	1.89	0.01	0.486	80.9	102.80
1998/99	1.89	0.14	0.377	82.0	102.60
1999/2000	1.89	0.26	0.363	81.9	102.60
2000/2001	1.89	--	0.334	81.9	102.60
2001/2002 ²	1.89	--	0.269	81.5	102.70
					<i>Bu./acre</i>
Sorghum		<i>\$/bu.</i>			
1997/98	1.76	0.00	0.544	13.1	57.30
1998/99	1.74	0.12	0.452	13.6	56.90
1999/2000	1.74	0.26	0.435	13.7	56.90
2000/2001	1.71	--	0.400	13.6	57.00
2001/2002 ²	1.71	--	0.324	13.5	57.00
					<i>Bu./acre</i>
Barley		<i>\$/bu.</i>			
1997/98	1.57	0.01	0.277	10.5	47.20
1998/99	1.56	0.23	0.284	11.2	46.70
1999/2000	1.59	0.14	0.271	11.2	46.60
2000/2001	1.62	--	0.251	11.2	46.60
2001/2002 ²	1.65	--	0.206	11.0	46.60
					<i>Bu./acre</i>
Oats		<i>\$/bu.</i>			
1997/98	1.11	0.00	0.031	6.2	50.80
1998/99	1.11	0.18	0.031	6.5	50.70
1999/2000	1.13	0.19	0.030	6.5	50.60
2000/2001	1.16	--	0.028	6.5	50.60
2001/2002 ²	1.21	--	0.022	6.5	50.60
					<i>Bu./acre</i>
Soybeans ³		<i>\$/bu.</i>			
1997/98	5.26	0.01	--	--	--
1998/99	5.26	0.45	--	--	--
1999/2000	5.26	0.88	--	--	--
2000/2001	5.26	--	--	--	--
2001/2002	5.26	--	--	--	--
					<i>Lb./acre</i>
Upland cotton		<i>¢/lb.</i>			
1997/98	51.92	0.00	7.625	16.2	608.00
1998/99	51.92	0.09	8.173	16.4	604.00
1999/2000	51.92	0.20	7.880	16.4	604.00
2000/2001	51.92	--	7.330	16.3	604.00
2001/2002 ²	51.92	--	5.990	16.2	605.80

-- = Not available. 1. Weighted average, based on portions of crop receiving marketing loan gains, loan deficiency payments, and no benefits (calculated by Economic Research Service). 2. Estimated payment rates and acres under contract. 3. There are no flexibility contract payments for soybeans.

Information contact: Brenda Chewning, Farm Service Agency (202) 720-8838

Table 20—Fruit

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Citrus ¹										
Production (1,000 tons)	12,452	15,274	14,561	15,799	15,712	17,270	17,770	13,633	17,288	16,300
Per capita consumpt. (lb.) ²	24.4	26.0	25.0	24.1	25.2	27.5	27.3	21.0	24.5	--
Noncitrus ³										
Production (1,000 tons)	17,124	16,554	17,339	16,348	16,103	18,382	16,545	17,316	18,818	--
Per capita consumpt. (lb.) ²	73.7	73.8	75.6	73.6	73.9	76.1	76.5	81.6	78.7	--
	2000					2001				
	Oct	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Grower prices										
Apples (¢/pound) ⁴	21.8	15.2	14.2	15.8	15.4	15.3	14.4	16.9	18.7	24.2
Pears (¢/pound) ⁴	18.10	12.55	13.70	15.20	18.20	19.95	28.50	26.65	23.15	20.7
Oranges (\$/box) ⁵	1.09	3.29	4.13	5.02	4.80	4.30	6.23	5.57	6.53	5.1
Grapefruit (\$/box) ⁵	5.17	2.07	1.53	1.36	1.94	5.27	8.81	3.69	6.89	5.3
Stocks, ending										
Fresh apples (mil. lb.)	6,348	3,408	2,603	1,891	1,330	898	487	143	2,806	5,365
Fresh pears (mil. lb.)	426	181	113	55	18	0	18	93	554	518
Frozen fruits (mil. lb.)	1,626	1,372	1,270	1,122	1,000	1,046	1,184	1,148	1,102	1,196
Frozen conc. orange juice (mil. single-strength gallons)	477	745	708	768	842	831	781	690	628	574

-- = Not available. 1. Year shown is when harvest concluded. 2. Fresh per capita consumption. 3. Calendar year. 4. Fresh use.

5. U.S. equivalent on-tree returns. *Information contact: Susan Pollack (202) 694-5251*

Table 21—Vegetables

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Production ¹										
Total vegetables (1,000 cwt)	565,754	689,070	692,022	785,798	751,715	765,645	763,532	732,803	834,654	798,773
Fresh (1,000 cwt) ^{2,4}	242,733	389,597	390,528	416,173	397,125	412,010	436,459	420,012	450,715	454,990
Processed (tons) ^{3,4}	16,151,030	14,973,630	15,074,707	18,481,238	17,729,497	17,681,732	16,353,639	15,639,548	19,196,942	17,189,152
Mushrooms (1,000 lbs) ⁵	746,832	776,357	750,799	782,340	777,870	776,677	808,678	847,760	854,394	838,611
Potatoes (1,000 cwt)	417,622	425,367	430,349	469,425	445,099	499,254	467,091	475,771	478,216	513,621
Sweet potatoes (1,000 cwt)	11,203	12,005	11,027	13,380	12,821	13,216	13,327	12,382	12,234	13,794
Dry edible beans (1,000 cwt)	33,765	22,615	21,862	28,950	30,689	27,912	29,370	30,418	33,085	26,440
	2000					2001				
	Oct	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Shipments (1,000 cwt)										
Fresh	18,197	23,799	20,494	23,645	37,308	30,270	20,761	22,934	15,340	22,433
Iceberg lettuce	3,505	3,517	3,270	3,017	4,626	3,436	3,060	3,773	2,976	4,097
Tomatoes, all	3,164	4,892	3,495	4,294	4,189	3,240	2,271	2,702	2,223	3,396
Dry-bulb onions	4,473	3,774	2,983	3,819	4,563	3,212	3,448	4,311	3,844	4,563
Others ⁶	7,055	11,616	10,746	12,515	23,930	20,382	11,982	12,148	6,297	10,377
Potatoes, all	12,433	15,572	14,624	18,926	21,139	12,947	9,646	11,653	10,063	12,646
Sweet potatoes	325	327	242	310	239	189	161	226	266	412

-- = Not available. 1. Calendar year except mushrooms. 2. Includes fresh production of asparagus, broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, & tomatoes through 1991. 3. Includes processing production of snap beans, sweet corn, green peas, tomatoes, cucumbers (for pickles), asparagus, broccoli, carrots, and cauliflower. 4. Data after 1991 not comparable to previous years because commodity estimates reinstated in 1992 are included. 5. Fresh and processing agaricus mushrooms only. Excludes specialty varieties. Crop year July 1 - June 30. 6. Includes snap beans, broccoli, cabbage, cauliflower, celery, sweet corn, cucumbers, eggplant, bell peppers, honeydews, and watermelons. *Information contact: Gary Lucier (202) 694-5253*

Table 22—Other Commodities

	Annual		1999			2000				2001	
	1998	1999	2000	IV	I	II	III	IV	I	II	
Sugar											
Production ¹	7,891	9,083	8,912	4,667	2,681	922	772	4,537	2,660	827	
Deliveries ¹	9,851	10,167	10,091	2,609	2,348	2,513	2,641	2,589	2,399	2,524	
Stocks, ending ¹	3,423	3,855	4,338	3,855	4,551	3,498	2,219	4,338	5,122	3,720	
Coffee											
Composite green price ² N.Y. (¢/lb.)	114.43	88.49	71.94	91.79	85.66	75.78	66.73	59.63	54.95	51.97	
	Annual						2000				
	1997	1998	1999	Mar	Apr	May	Jun	Jul	Aug	Sep	
Tobacco											
Avg. price to grower ³											
Flue-cured (\$/lb.)	1.73	1.76	1.74	--	--	--	--	--	1.69	1.82	
Burley (\$/lb.)	1.91	1.90	1.90	1.77	--	--	--	--	--	--	
Domestic taxable removals											
Cigarettes (bil.)	471.4	457.9	432.6	38.8	29.3	40.8	39.6	34.2	40.8	33.1	
Large cigars (mil.) ⁴	3,552	3,721	3,844	333.9	314.0	345.7	365.8	319.6	352.7	314.4	

-- = Not available. 1. 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2. Net imports of green and processed coffee.

3. Crop year July-June for flue-cured, October-September for burley. 4. Includes imports of large cigars. *Information contacts: sugar and coffee, Fanny Jolly (202) 694-5249; tobacco, Tom Capehart (202) 694-5245*

World Agriculture

Table 23—World Supply & Utilization of Major Crops, Livestock, & Products

	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01 F	2001/02 F
<i>Million units</i>										
Wheat										
Area (hectares)	222.9	221.9	214.5	218.7	230.0	228.0	224.7	216.8	217.6	214.1
Production (metric tons)	562.1	558.6	524.0	538.4	581.9	609.2	588.8	586.4	579.1	571.1
Exports (metric tons) ¹	113.1	101.6	101.5	99.1	100.1	104.0	101.9	112.4	103.0	107.2
Consumption (metric tons) ²	549.8	556.2	546.9	548.4	575.8	583.7	585.2	593.0	588.6	595.1
Ending stocks (metric tons) ³	170.0	172.4	149.4	139.5	145.6	171.1	174.6	167.1	158.5	134.5
Coarse grains										
Area (hectares)	325.9	318.7	324.0	313.9	322.7	311.2	307.3	301.1	296.1	300.2
Production (metric tons)	871.6	798.9	871.3	802.9	908.5	884.1	889.7	877.2	857.1	860.2
Exports (metric tons) ¹	93.4	86.3	98.4	87.9	91.2	85.6	96.4	104.4	102.3	100.0
Consumption (metric tons) ²	844.9	838.6	859.6	841.8	875.0	873.5	870.5	882.5	874.2	895.4
Ending stocks (metric tons) ³	218.7	179.0	190.6	151.8	185.3	195.9	215.1	209.8	192.6	157.4
Rice, milled										
Area (hectares)	146.4	144.9	147.4	148.1	149.7	151.3	152.3	154.9	152.2	151.3
Production (metric tons)	355.6	355.3	364.5	371.4	380.2	386.8	394.1	408.3	395.9	393.3
Exports (metric tons) ¹	14.9	16.5	21.0	19.7	18.9	27.7	24.9	22.9	23.0	23.0
Consumption (metric tons) ²	358.6	359.3	366.0	372.0	378.9	379.5	387.4	398.6	401.2	404.6
Ending stocks (metric tons) ³	123.9	120.0	118.4	117.8	119.0	126.3	133.0	142.8	137.5	126.2
Total grains										
Area (hectares)	695.2	685.5	685.9	680.7	702.4	690.5	684.4	672.9	665.6	665.4
Production (metric tons)	1,789.4	1,712.9	1,759.8	1,712.7	1,870.6	1,880.1	1,872.5	1,872.1	1,831.8	1,824.6
Exports (metric tons) ¹	221.4	204.4	220.9	206.7	210.2	217.3	223.2	239.7	227.5	229.6
Consumption (metric tons) ²	1,753.4	1,754.1	1,772.6	1,762.3	1,829.8	1,836.7	1,843.0	1,874.1	1,864.0	1,895.3
Ending stocks (metric tons) ³	512.6	471.4	458.4	409.1	449.9	493.3	522.7	519.8	488.6	417.8
Oilseeds										
Crush (metric tons)	184.4	190.1	208.1	217.5	216.7	226.3	240.6	247.4	252.6	260.4
Production (metric tons)	227.5	229.4	261.9	258.9	261.4	286.5	294.7	303.2	310.9	322.8
Exports (metric tons)	38.2	38.7	44.1	44.3	49.6	54.0	54.9	64.5	71.2	70.7
Ending stocks (metric tons)	23.6	20.3	27.2	22.2	19.1	28.6	31.8	34.1	33.2	33.4
Meals										
Production (metric tons)	125.2	131.7	142.1	147.3	147.8	153.9	164.6	168.7	176.2	182.2
Exports (metric tons)	40.8	44.9	46.7	49.8	50.7	52.0	54.0	56.2	56.5	57.7
Oils										
Production (metric tons)	61.1	63.7	69.6	73.1	73.7	75.2	80.6	85.9	88.7	90.6
Exports (metric tons)	21.3	24.3	27.1	26.0	28.3	29.7	31.5	32.8	34.4	35.2
Cotton										
Area (hectares)	32.6	30.7	32.2	35.9	33.8	33.8	33.0	32.4	31.9	34.2
Production (bales)	82.5	77.1	86.0	93.1	89.6	91.8	85.0	87.4	88.4	96.9
Exports (bales)	25.5	26.8	28.4	27.3	28.8	26.7	23.7	27.3	26.4	28.1
Consumption (bales)	85.9	85.4	84.7	86.0	88.0	87.2	85.4	91.9	91.8	91.6
Ending stocks (bales)	34.7	26.8	29.8	36.7	40.1	43.9	45.1	41.6	38.9	44.4
	1992	1993	1994	1995	1996	1997	1998	1999	2000 E	2001 F
Beef and Pork⁴										
Production (metric tons)	111.6	111.6	116.7	122.1	116.6	122.1	127.1	130.4	131.8	133.1
Consumption (metric tons)	109.9	110.6	115.7	120.7	114.1	119.7	124.6	128.4	129.8	131.3
Exports (metric tons) ¹	6.6	6.6	7.2	7.4	7.7	8.2	8.0	9.2	9.1	8.8
Poultry⁴										
Production (metric tons)	38.0	40.5	43.2	47.5	50.4	52.7	53.5	56.5	58.0	59.6
Consumption (metric tons)	37.0	39.4	42.0	47.0	49.6	51.8	52.6	55.3	56.8	58.5
Exports (metric tons) ¹	2.4	2.8	3.6	4.5	5.1	5.6	5.7	6.0	6.6	6.8
Dairy										
Milk production (metric tons) ⁵	--	--	--	--	364.4	365.6	368.4	372.0	375.9	376.3

-- = Not available. E = Estimated, F = forecast. 1. Excludes intra-EU trade but includes intra-FSU trade. 2. Where stocks data are not available, consumption includes stock changes. 3. Stocks data are based on differing marketing years and do not represent levels at a given date. Data not available for all countries.

4. Calendar year, selected countries. 5. Data prior to 1989 no longer comparable.

Information contacts: Crops, Ed Allen (202) 694-5288; red meat and poultry, Leland Southard (202) 694-5187; dairy, LaVerne Williams (202) 694-5190

U.S. Agricultural Trade

Table 24—Prices of Principal U.S. Agricultural Trade Products

	Annual			2000		2001				
	1998	1999	2000	Oct	May	Jun	Jul	Aug	Sep	Oct
Export commodities										
Wheat, f.o.b. vessel, Gulf ports (\$/bu.)	3.44	3.04	3.17	3.56	3.69	3.50	3.40	3.40	3.39	3.39
Corn, f.o.b. vessel, Gulf ports (\$/bu.)	2.58	2.29	2.24	2.16	2.14	1.91	2.30	2.36	2.28	2.19
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu.)	2.49	2.14	2.23	2.22	2.40	1.98	2.36	2.43	2.42	2.28
Soybeans, f.o.b. vessel, Gulf ports (\$/bu.)	6.37	5.02	5.26	4.94	4.81	4.97	5.39	5.35	5.06	4.46
Soybean oil, Decatur (¢/lb.)	25.78	17.51	15.01	13.51	13.53	14.21	16.49	17.08	15.46	14.38
Soybean meal, Decatur (\$/ton)	162.74	141.52	174.69	171.52	165.14	172.60	184.43	178.46	171.49	165.45
Cotton, 7-market avg. spot (¢/lb.)	67.04	52.30	57.47	60.52	40.02	37.38	37.48	36.05	33.22	28.42
Tobacco, avg. price at auction (¢/lb.)	179.77	177.82	182.73	181.47	--	--	--	179.06	188.49	190.58
Rice, f.o.b., mill, Houston (\$/cwt)	18.95	16.99	14.84	14.95	15.00	15.00	15.00	14.81	14.25	14.00
Inedible tallow, Chicago (¢/lb.)	17.67	12.99	9.92	10.00	9.50	10.00	15.00	16.25	14.15	11.18
Import commodities										
Coffee, N.Y. spot (\$/lb.)	1.39	1.05	0.92	0.81	0.76	0.54	0.47	0.47	0.44	0.38
Rubber, N.Y. spot (¢/lb.)	40.57	36.66	37.72	37.60	34.80	35.00	34.80	34.48	33.08	31.97
Cocoa beans, N.Y. (\$/lb.)	0.72	0.47	0.36	0.36	0.47	0.42	0.42	0.45	0.44	0.47

-- = Not available. Information contact: Mae Dean Johnson (202) 694-5299.

Table 25—Trade Balance

	Fiscal year			2000		2001				
	2000	2001	2002 F	Sep	Apr	May	Jun	Jul	Aug	Sep
\$ million										
Exports										
Agricultural	50,911	52,961	54,500	4,085	4,285	4,143	4,092	3,939	4,468	3,891
Nonagricultural	650,740	638,905	--	56,594	52,529	54,773	53,755	45,948	50,296	46,486
Total ¹	701,651	691,866	--	60,679	56,814	58,916	57,847	49,887	54,764	50,377
Imports										
Agricultural	38,923	39,029	39,000	2,922	3,417	3,346	3,245	3,223	3,163	3,039
Nonagricultural	1,128,845	1,136,638	--	102,253	92,292	92,832	92,103	90,616	92,700	85,795
Total ²	1,167,768	1,175,667	--	105,175	95,709	96,178	95,348	93,839	95,863	88,834
Trade balance										
Agricultural	11,988	13,932	15,500	1,163	868	797	847	716	1,305	852
Nonagricultural	-478,105	-497,733	--	-45,659	-39,763	-38,059	-38,348	-44,668	-42,404	-39,309
Total ³	-466,117	-483,801	--	-44,496	-38,895	-37,262	-37,501	-43,952	-41,099	-38,457

F = Forecast. -- = Not available. Fiscal year (Oct. 1-Sep. 30). 1. Domestic exports including Department of Defense shipments (f.a.s. value). 2. Imports for consumption (customs value). 3. Preliminary. Information contact: Mary Fant (202) 694-5272

Table 26—Indexes of Real Trade-Weighted Dollar Exchange Rates¹

	Annual		2000		2001					
	1998	1999	2000	Sep	Apr	May	Jun	Jul	Aug	Sep
<i>1995 = 100</i>										
Total U.S. Trade	114.0	114.2	119.0	120.5	125.1	125.1	126.2	126.3	124.1	125.6
U.S. markets										
All agricultural trade	119.2	117.5	120.2	121.0	128.2	127.6	129.5	129.4	126.6	127.9
Bulk commodities	118.3	116.6	121.2	121.7	130.0	129.4	131.7	131.2	128.2	129.6
Corn	122.1	116.3	119.2	118.5	128.9	127.5	130.1	130.3	127.3	129.0
Cotton	113.6	112.4	118.3	118.5	128.5	127.4	128.9	126.5	124.7	126.0
Rice	111.5	112.5	117.8	119.3	125.2	125.4	126.4	126.1	124.1	125.8
Soybeans	121.8	119.4	127.3	129.2	134.9	134.9	138.0	137.3	133.1	133.5
Tobacco, raw	108.1	112.8	134.3	139.4	146.3	146.5	150.0	149.3	144.1	144.6
Wheat	125.6	124.6	120.2	119.4	127.1	127.2	128.6	128.3	126.7	128.7
High-value products	119.9	118.3	119.4	120.4	126.8	126.1	127.8	127.9	125.2	126.5
Processed intermediates	115.9	115.1	120.2	121.4	127.0	126.7	128.4	128.2	125.4	126.6
Soymeal	106.6	107.2	117.0	114.9	116.5	116.5	116.9	116.8	115.2	117.0
Soyoil	89.1	98.1	105.2	106.9	109.1	109.9	110.0	109.4	108.6	109.6
Produce and horticulture	118.4	117.3	122.0	124.2	129.8	129.7	131.1	131.1	128.7	129.7
Fruits	120.4	116.8	119.2	120.5	128.2	127.4	129.0	129.1	127.1	128.4
Vegetables	115.9	113.6	114.4	115.8	120.9	120.4	120.0	120.8	120.5	122.3
High-value processed	123.9	121.4	117.8	118.3	125.7	124.4	126.1	126.5	123.9	125.3
Fruit juices	122.9	120.1	123.4	125.3	132.5	131.8	133.3	133.6	131.0	132.1
Poultry	139.2	155.0	116.9	116.2	115.0	114.5	114.3	114.6	114.0	114.5
Red meats	135.4	124.0	121.7	121.9	137.1	134.0	137.8	138.6	133.7	135.1
U.S. competitors										
All agricultural trade	115.7	122.1	135.5	140.8	141.7	143.3	145.6	144.3	140.0	140.5
Bulk commodities	122.2	130.4	134.0	137.4	140.7	141.5	142.4	140.6	138.3	139.5
Corn	113.1	120.5	134.0	138.8	138.7	140.0	142.0	141.3	138.1	138.2
Cotton	128.1	130.7	133.4	124.6	129.1	130.2	130.8	130.6	128.3	130.3
Rice	118.9	120.5	131.1	135.0	141.9	142.6	143.8	143.3	139.9	140.8
Soybeans	106.4	132.1	134.6	135.4	146.4	150.1	153.1	155.3	155.7	160.3
Tobacco, raw	115.3	127.3	121.8	125.2	125.4	125.9	126.1	125.1	122.9	124.2
Wheat	115.6	118.5	129.8	134.9	136.6	137.7	138.5	138.2	134.7	136.8
High-value products	118.4	125.2	139.1	144.9	145.0	146.8	149.4	148.2	143.4	143.8
Processed intermediates	119.9	127.1	138.2	143.1	145.4	147.0	149.2	147.9	144.0	145.2
Soymeal	107.8	132.0	136.9	138.9	148.9	152.8	155.7	156.8	156.1	160.0
Soyoil	107.1	123.3	130.0	132.4	139.6	142.3	144.8	145.4	144.1	146.5
Produce and horticulture	114.2	120.0	133.3	138.3	137.0	138.5	140.7	139.6	135.3	135.4
Fruits	121.0	123.5	135.9	140.1	143.8	144.6	145.9	145.2	141.4	141.9
Vegetables	102.4	109.2	121.7	126.1	125.6	127.0	128.8	128.0	124.4	124.4
High-value processed	118.7	125.7	141.3	147.9	147.1	149.2	152.2	151.0	145.5	145.6
Fruit juices	116.6	122.1	137.0	142.5	142.6	144.4	146.4	145.8	141.4	142.1
Poultry	109.5	121.6	134.9	139.6	142.7	144.9	147.0	146.7	143.1	143.6
Red meats	116.3	122.3	137.8	144.5	145.4	147.3	150.0	149.1	143.6	145.7
U.S. suppliers										
All agricultural trade	111.4	113.5	120.0	122.9	125.2	125.4	126.0	125.2	123.3	125.3
High-value products	108.8	111.6	118.2	121.3	122.1	122.5	123.3	123.2	121.1	123.1
Processed intermediates	112.3	114.8	121.4	125.0	126.8	127.3	127.8	127.7	125.7	127.8
Grains and feeds	112.5	113.0	117.9	120.6	123.2	123.6	123.1	123.6	122.7	124.4
Vegetable oils	123.1	120.9	130.1	134.0	138.7	139.0	140.2	139.2	136.5	137.7
Produce and horticulture	98.4	101.1	103.7	104.5	103.3	102.9	103.2	103.4	102.3	104.3
Fruits	96.5	97.2	98.0	100.1	100.3	100.3	101.2	103.3	101.9	105.6
Vegetables	88.7	84.1	81.3	81.3	79.2	78.4	78.1	78.9	78.2	80.6
High-value processed	111.8	114.9	123.7	127.8	129.0	129.9	131.0	130.8	128.0	130.1
Cocoa and products	120.3	126.1	137.6	141.3	143.0	143.9	144.6	140.5	138.4	139.0
Coffee and products	101.6	111.6	116.4	116.9	118.5	118.8	119.2	118.6	118.0	120.2
Dairy products	117.2	122.5	137.9	145.9	143.7	145.2	147.9	146.7	140.8	142.8
Fruit juices	109.2	122.3	127.8	130.5	136.8	138.8	140.8	141.9	140.3	143.8
Meats	102.1	105.6	115.4	126.1	127.5	127.9	128.3	128.3	125.8	129.4

Real indexes adjust nominal exchange rates for relative rates of inflation among countries. A higher value means the dollar has appreciated.

The weights used for "total U.S. trade" index are based on U.S. total merchandise exports to the largest 85 trading partners. Weights are based on relative importance of major U.S. customers, competitors in world markets, and suppliers to the U.S. Indexes are subject to revision for up to 1 year due to delayed reporting by some countries. High-value products are total agricultural products minus bulk commodities.

Source: Nominal exchange rates are obtained from the IMF International Financial Statistics. Exchange rates for the EU-11 are obtained from the Board of Governors of the Federal Reserve System. Full historical series are available back to January 1970 at

<http://usda.mannlib.cornell.edu/data-sets/international/88021/>

1. A major revision to the weighting scheme and commodity definitions was completed in May 2000. This significantly altered the series from previous versions.

Information contact: Mathew Shane (202) 694-5282 or email: mshane@ers.usda.gov.

Table 27—U.S. Agricultural Exports & Imports

	Fiscal year			Sep		Fiscal year			Sep	
	2000	2001	2002 F	2000	2001	2000	2001	2002 F	2000	2001
	1,000 units					\$ million				
Exports										
Animals, live	--	--	--	--	--	608	727	--	41	20
Meats and preps., excl. poultry (mt)	2,457	2,480	1,800	196	204	5,454	5,262	4,600	409	436
Dairy products	--	--	--	--	--	996	1,138	1,100	77	84
Poultry meats (mt)	2,845	3,101	3,200	227	242	1,961	2,228	2,300	165	188
Fats, oils, and greases (mt)	1,206	1,051	1,000	112	86	421	322	--	33	32
Hides and skins, incl. furskins	--	--	--	--	--	1,479	1,954	2,000	131	143
Cattle hides, whole (no.)	21,837	22,808	--	1,691	1,949	1,166	1,457	--	96	114
Mink pelts (no.)	4,352	4,277	--	179	92	111	122	--	6	3
Grains and feeds (mt) ²	104,009	98,996	--	10,326	8,496	13,788	13,845	15,500	1,246	1,170
Wheat (mt) ³	27,779	25,257	27,900	3,074	2,359	3,378	3,246	4,000	352	302
Wheat flour (mt)	825	510	600	63	18	132	110	--	12	4
Rice (mt)	3,299	3,069	3,100	177	233	903	758	700	48	59
Feed grains, incl. products (mt) ⁴	57,195	55,928	58,800	5,941	4,772	5,483	5,473	6,200	506	469
Feeds and fodders (mt)	13,386	12,753	12,900	942	1,001	2,496	2,783	2,800	204	218
Other grain products (mt)	1,525	1,480	--	129	113	1,397	1,476	--	124	117
Fruits, nuts, and preps. (mt)	3,736	3,983	--	323	300	3,871	4,112	4,800	373	356
Fruit juices, incl. froz. (1,000 hectoliters)	11,902	10,830	--	823	788	716	684	--	55	50
Vegetables and preps.	--	--	--	--	--	4,443	4,531	3,100	338	330
Tobacco, unmanufactured (mt)	180	176	200	8	6	1,229	1,180	1,200	60	41
Cotton, excl. linters (mt) ⁵	1,474	1,661	2,100	73	149	1,809	2,088	2,100	99	153
Seeds (mt)	730	704	--	76	37	787	730	700	58	48
Sugar, cane or beet (mt)	115	99	--	6	5	40	38	--	3	2
Oilseeds and products (mt)	36,055	36,986	38,100	2,292	1,653	8,386	8,693	8,800	553	435
Oilseeds (mt)	--	--	--	--	--	--	--	--	--	--
Soybeans (mt)	26,038	26,569	26,900	1,455	851	5,070	5,089	4,900	280	167
Protein meal (mt)	6,870	7,163	--	595	515	1,259	1,413	--	111	101
Vegetable oils (mt)	2,130	2,069	--	139	164	1,346	1,178	--	89	93
Essential oils (mt)	53	55	--	4	4	593	677	--	52	47
Other	--	--	--	--	--	4,330	4,752	--	390	356
Total	--	--	--	--	--	50,911	52,961	54,500	4,085	3,891
Imports										
Animals, live	--	--	--	--	--	1,737	2,198	2,200	132	168
Meats and preps., excl. poultry	1,555	1,600	1,600	119	134	3,724	4,091	4,200	297	344
Beef and veal (mt)	1,027	1,056	--	76	88	2,405	2,645	--	186	224
Pork (mt)	402	399	--	32	35	958	1,038	--	78	90
Dairy products	--	--	--	--	--	1,635	1,724	1,700	126	142
Poultry and products	--	--	--	--	--	288	258	--	23	19
Fats, oils, and greases (mt)	107	106	--	8	9	71	62	--	5	5
Hides and skins, incl. furskins (mt)	--	--	--	--	--	160	162	--	9	6
Wool, unmanufactured (mt)	25	21	--	2	1	66	53	--	6	2
Grains and feeds	--	--	--	--	--	3,058	3,186	3,200	292	302
Fruits, nuts, and preps., excl. juices (mt) ⁶	8,366	8,123	8,300	516	524	4,546	4,613	5,400	286	287
Bananas and plantains (mt)	4,396	4,093	4,100	328	331	1,128	1,156	1,200	83	97
Fruit juices (1,000 hectoliters)	32,199	29,282	29,200	2,609	2,665	783	649	--	61	55
Vegetables and preps.	--	--	--	--	--	4,657	5,181	5,300	316	388
Tobacco, unmanufactured (mt)	220	211	200	17	18	651	648	700	50	55
Cotton, unmanufactured (mt)	34	49	--	1	3	28	23	--	--	1
Seeds (mt)	448	313	--	15	23	493	431	--	24	23
Nursery stock and cut flowers	--	--	--	--	--	1,165	1,156	1,100	85	86
Sugar, cane or beet (mt)	1,379	1,381	--	168	193	493	526	--	64	80
Oilseeds and products (mt)	4,069	4,077	3,800	310	268	1,873	1,689	1,900	126	113
Oilseeds (mt)	1,103	997	--	82	37	310	280	--	16	11
Protein meal (mt)	1,194	1,150	--	95	72	150	152	--	12	11
Vegetable oils (mt)	1,772	1,930	--	134	159	1,413	1,257	--	98	92
Beverages, excl. fruit juices (1,000 hectoliters)	--	--	--	--	--	4,702	4,993	--	376	392
Coffee, tea, cocoa, spices (mt)	2,841	2,489	--	213	193	5,218	3,979	--	367	317
Coffee, incl. products (mt)	1,411	1,213	1,200	96	86	2,905	1,762	1,700	163	114
Cocoa beans and products (mt)	1,046	898	900	86	76	1,466	1,390	1,300	131	146
Rubber and allied gums (mt)	1,249	1,059	1,000	83	71	841	668	600	61	41
Other	--	--	--	--	--	2,735	2,736	--	216	212
Total	--	--	--	--	--	38,923	39,029	39,000	2,922	3,039

F = Forecast. -- = Not available. Projections are fiscal years (Oct.1 through Sept. 30) and are from Outlook for U.S. Agricultural Exports.

2000 and 2001 data are from *Foreign Agricultural Trade of the U.S.* 1. Projection includes beef, pork, and variety meat.

2. Projection includes pulses. 3. Value projection includes wheat flour. 4. Projection excludes grain products. 5. Projection includes linters.

6. Value projection includes juice.

Information contact: Mary Fant (202) 694-5272

Table 28—U.S. Agricultural Exports by Region

	Fiscal year			2000	2001					
	2000	2001	2002 F	Sep	Apr	May	Jun	Jul	Aug	Sep
	\$ million									
Region and country										
Western Europe	6,712	6,777	6,700	454	546	460	413	417	474	398
European Union ¹	6,373	6,264	6,300	419	470	397	385	388	455	382
Belgium-Luxembourg	538	627	--	43	52	40	32	40	49	46
France	348	354	--	19	24	20	25	36	16	21
Germany	947	908	--	74	76	72	49	69	72	55
Italy	560	509	--	30	46	27	31	28	43	46
Netherlands	1,459	1,399	--	81	98	75	98	54	68	59
United Kingdom	1,033	1,053	--	91	84	84	76	87	73	80
Portugal	145	126	--	5	7	11	5	6	9	4
Spain, incl. Canary Islands	664	591	--	24	24	26	21	17	61	32
Other Western Europe	340	512	400	35	76	63	28	30	19	16
Switzerland	250	422	--	27	67	54	22	23	8	8
Eastern Europe	167	191	200	11	23	13	11	14	12	11
Poland	47	84	--	3	13	5	4	8	6	4
Former Yugoslavia	67	34	--	4	1	1	2	1	1	1
Romania	12	24	--	1	3	3	1	1	1	1
Former Soviet Union	937	1,032	1,000	72	82	113	113	82	106	95
Russia	674	826	800	41	69	90	86	73	88	81
Asia	22,051	22,367	23,500	1,701	1,790	1,735	1,721	1,618	1,823	1,600
West Asia (Mideast)	2,363	2,192	2,300	215	156	140	180	161	225	160
Turkey	701	562	600	35	49	39	70	43	46	38
Iraq	8	8	--	--	2	--	--	--	--	--
Israel, incl. Gaza and W. Bank	458	436	--	41	38	28	24	20	48	22
Saudi Arabia	482	471	500	47	12	37	36	44	57	41
South Asia	416	572	700	40	36	62	68	68	60	59
Bangladesh	82	105	--	4	7	12	11	8	9	7
India	186	296	--	24	17	32	35	36	38	34
Pakistan	93	97	--	6	5	11	19	9	13	10
China	1,474	1,884	2,300	88	119	73	86	69	75	74
Japan	9,353	8,953	9,000	679	771	812	723	615	699	652
Southeast Asia	2,602	2,929	3,100	241	212	227	224	219	228	187
Indonesia	681	882	900	64	54	86	88	71	69	62
Philippines	866	838	900	76	62	54	50	55	71	52
Other East Asia	5,844	5,837	6,100	437	496	422	439	486	537	468
Korea, Rep.	2,569	2,581	2,700	200	208	180	203	221	250	204
Hong Kong	1,255	1,258	1,400	103	100	91	92	93	110	107
Taiwan	2,011	1,992	2,000	135	189	151	144	172	177	156
Africa	2,272	2,131	2,300	255	142	89	160	168	185	204
North Africa	1,565	1,464	1,600	189	95	49	83	116	134	149
Morocco	141	120	--	19	6	2	8	4	11	8
Algeria	255	211	--	22	16	11	13	11	12	18
Egypt	1,094	1,004	1,100	140	69	34	52	97	104	106
Sub-Sahara	707	668	700	66	48	40	77	52	51	55
Nigeria	160	233	--	14	15	16	36	26	20	23
S. Africa	164	108	--	17	7	8	11	10	11	7
Latin America and Caribbean	10,639	11,697	11,800	904	987	961	904	940	1,140	892
Brazil	253	219	200	14	20	17	18	21	18	14
Caribbean Islands	1,457	1,396	1,300	111	125	111	111	103	117	109
Central America	1,129	1,187	1,100	97	113	92	93	95	120	95
Colombia	427	442	500	22	51	33	44	38	39	34
Mexico	6,329	7,416	7,700	575	587	618	551	584	745	570
Peru	201	182	--	14	19	19	16	21	21	17
Venezuela	404	416	400	37	33	38	45	44	51	26
Canada	7,520	8,010	8,500	623	669	723	724	649	664	624
Oceania	490	474	500	41	38	39	36	32	38	41
Total	50,911	52,961	54,500	4,085	4,285	4,143	4,092	3,939	4,468	3,891

F = Forecast. -- = Not available. Based on fiscal year beginning October 1 and ending September 30. 1. Austria, Finland, and Sweden are included in the European Union. NOTE: Adjusted for transshipments through Canada for 1998 and 1999 through December 1999, but transshipments are not distributed by country as previously for 2000 and 2001, but are only included in total. Information contact: Mary Fant (202) 694-5272

Farm Income

Table 29—Value Added to the U.S. Economy by the Agricultural Sector

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001F
	\$ billion									
Final crop output	89.0	82.6	100.3	95.7	115.5	112.3	101.5	93.2	95.3	97.3
Food grains	8.5	8.3	9.5	10.4	10.8	10.4	8.8	7.0	6.6	6.7
Feed crops	20.1	20.2	20.3	24.5	27.3	27.1	22.7	19.6	20.0	21.4
Cotton	5.2	5.3	6.7	6.9	7.0	6.3	6.1	4.7	4.6	4.0
Oil crops	13.3	13.2	14.7	15.5	16.3	19.7	17.4	13.6	13.9	14.8
Tobacco	3.0	2.9	2.7	2.5	2.8	2.9	2.8	2.3	2.3	1.8
Fruits and tree nuts	10.2	10.3	10.3	11.1	11.9	13.1	11.6	12.3	12.7	13.4
Vegetables	11.8	13.7	14.1	15.0	14.5	14.7	15.2	15.2	15.9	16.2
All other crops	13.7	13.7	14.7	15.0	15.8	16.9	17.2	17.9	18.2	18.7
Home consumption	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Value of inventory adjustment ¹	3.2	-5.3	7.2	-5.3	9.0	1.0	-0.3	0.4	1.0	0.2
Final animal output	87.2	92.1	89.8	87.8	92.1	96.5	94.2	95.3	99.3	108.9
Meat animals	47.7	51.0	46.7	44.9	44.2	49.7	43.3	45.6	53.0	55.0
Dairy products	19.7	19.3	20.0	19.9	22.8	20.9	24.1	23.2	20.6	25.3
Poultry and eggs	15.5	17.4	18.5	19.1	22.5	22.3	22.9	22.9	21.8	24.2
Miscellaneous livestock	2.7	3.0	3.2	3.4	3.6	3.6	3.7	3.8	4.1	4.1
Home consumption	0.5	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.4
Value of inventory adjustment ¹	1.0	1.1	1.1	0.2	-1.1	-0.4	-0.3	-0.6	-0.6	0.0
Services and forestry	15.2	17.0	18.1	19.9	20.8	22.2	23.7	25.4	24.0	24.3
Machine hire and customwork	1.8	1.9	2.1	1.9	2.2	2.4	2.2	2.0	2.2	2.2
Forest products sold	2.2	2.5	2.6	2.8	2.7	2.9	3.1	2.7	2.8	2.8
Other farm income	4.1	4.6	4.3	5.8	6.2	6.9	8.7	10.2	8.7	8.8
Gross imputed rental value of farm dwellings	7.2	8.1	9.0	9.4	9.8	10.1	9.8	10.4	10.4	10.5
Final agricultural sector output²	191.4	191.6	208.2	203.5	228.4	231.0	219.5	213.8	218.6	230.6
<i>Minus</i> Intermediate consumption outlays:	93.4	100.7	104.9	109.7	113.2	121.0	118.6	119.6	122.4	127.2
Farm origin	38.6	41.3	41.3	41.8	42.7	46.9	44.8	45.6	47.7	48.6
Feed purchased	20.1	21.4	22.6	23.8	25.2	26.3	25.0	24.5	24.5	25.6
Livestock and poultry purchased	13.6	14.7	13.3	12.5	11.3	13.8	12.6	13.8	15.8	15.4
Seed purchased	4.9	5.2	5.4	5.5	6.2	6.7	7.2	7.2	7.3	7.5
Manufactured inputs	22.7	23.1	24.4	26.1	28.6	29.2	28.2	27.1	28.7	30.8
Fertilizers and lime	8.3	8.4	9.2	10.0	10.9	10.9	10.6	9.9	10.0	11.8
Pesticides	6.5	6.7	7.2	7.7	8.5	9.0	9.0	8.6	8.5	8.5
Petroleum fuel and oils	5.3	5.4	5.3	5.4	6.0	6.2	5.6	5.6	7.2	7.3
Electricity	2.6	2.7	2.7	3.0	3.2	3.0	2.9	3.0	3.0	3.2
Other intermediate expenses	32.1	36.2	39.2	41.7	41.9	44.9	45.6	46.9	46.0	47.7
Repair and maintenance of capital items	8.5	9.2	9.1	9.5	10.3	10.4	10.4	10.5	10.8	11.2
Machine hire and customwork	3.8	4.4	4.8	4.8	4.7	4.9	5.4	5.3	5.0	5.2
Marketing, storage, and transportation	4.5	5.6	6.8	7.2	6.9	7.1	6.9	7.3	7.5	7.8
Contract labor	1.7	1.8	1.8	2.0	2.1	2.5	2.4	2.5	2.7	2.8
Miscellaneous expenses	13.6	15.2	16.7	18.3	17.9	19.9	20.6	21.4	20.0	20.7
<i>Plus</i> Net government transactions:	2.7	6.9	1.0	0.1	0.1	0.1	4.9	14.2	15.5	12.5
+ Direct government payments	9.2	13.4	7.9	7.3	7.3	7.5	12.4	21.5	22.9	20.0
- Motor vehicle registration and licensing fees	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
- Property taxes	6.1	6.2	6.5	6.7	6.8	7.0	7.0	6.8	6.9	7.0
Gross value added	100.7	97.8	104.3	93.9	115.3	110.1	105.7	108.4	111.7	115.9
<i>Minus</i> Capital consumption	18.3	18.3	18.6	19.2	19.4	19.6	20.0	20.3	20.6	20.7
Net value added²	82.4	79.5	85.7	74.8	95.9	90.5	85.8	88.1	91.1	95.1
<i>Minus</i> Factor payments:	34.6	34.8	36.8	37.8	41.1	42.0	42.9	43.8	44.7	45.8
Employee compensation (total hired labor)	12.3	13.2	13.5	14.3	15.2	16.0	16.9	17.5	17.3	18.1
Net rent received by nonoperator landlords	11.2	10.9	11.8	10.9	13.0	12.9	12.7	12.8	13.2	13.4
Real estate and non-real estate interest	11.0	10.7	11.6	12.6	13.0	13.1	13.4	13.6	14.1	14.2
Net farm income²	47.8	44.7	48.9	36.9	54.8	48.5	42.9	44.3	46.4	49.4

Values in last two columns are preliminary or forecast. 1. A positive value of inventory change represents current-year production not sold by December 31. A negative value is an offset to production from prior years included in current-year sales. 2. Final sector output is the gross value of commodities and services produced within a year. Net value added is the sector's contribution to the National economy and is the sum of income from production earned by all factors of production. Net farm income is farm operators' share of income from the sector's production activities. The concept presented is consistent with that employed by the Organization for Economic Cooperation and Development. *Information contact: Roger Strickland: rogers@ers.usda.gov*
To confirm that this table contains the current forecast, go to <http://www.ers.usda.gov/briefing/farmincome/fore/fore.htm>

Table 30—Farm Income Statistics

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001F
<i>\$ billion</i>										
Cash income statement										
1. Cash receipts	171.4	178.2	181.3	188.0	199.3	207.6	195.8	188.1	193.6	205.5
Crops ¹	85.7	87.7	93.0	100.8	106.3	111.2	101.7	92.6	94.1	97.0
Livestock	85.8	90.5	88.3	87.2	92.9	96.5	94.1	95.5	99.5	108.5
2. Direct Government payments	9.2	13.4	7.9	7.3	7.3	7.5	12.4	21.5	22.9	20.0
3. Farm-related income ²	8.0	9.0	9.0	10.5	11.0	12.1	13.9	15.0	13.6	13.8
4. Gross cash income (1+2+3)	188.6	200.6	198.2	205.9	217.7	227.3	222.1	224.6	230.1	239.3
5. Cash expenses ³	133.5	141.2	147.5	153.3	159.9	168.7	167.4	168.9	172.6	178.5
6. Net cash income (4-5)	55.1	59.4	50.7	52.5	57.7	58.5	54.8	55.7	57.5	60.8
Farm income statement										
7. Gross cash income (4)	188.6	200.6	198.2	205.9	217.7	227.3	222.1	224.6	230.1	239.3
8. Noncash income ⁴	7.8	8.7	9.6	9.9	10.2	10.6	10.3	10.9	11.0	11.1
9. Value of inventory adjustment	4.2	-4.2	8.3	-5.0	7.9	0.6	-0.6	-0.2	0.5	0.2
10. Gross farm income (7+8+9)	200.6	205.0	216.0	210.8	235.8	238.5	231.8	235.3	241.5	250.6
11. Total production expenses	152.8	160.4	167.2	173.8	181.0	190.0	189.0	191.0	195.1	201.2
12. Net farm income (10-11)	47.8	44.7	48.9	36.9	54.8	48.5	42.9	44.3	46.4	49.4

Values for last 2 years are preliminary or forecast. Numbers in parentheses indicate the combination of items required to calculate an item. Totals may not add due to rounding. 1. Includes commodities placed under CCC loans and profits made on loans redeemed. 2. Income from custom labor, machine hire, recreational activities, forest product sales, and other farm sources. 3. Excludes depreciation and perquisites to hired labor. Excludes farm operator dwellings. 4. Value of farm products consumed on farms where produced plus the imputed rental value of farm dwellings.

Information contact: Roger Strickland: rogers@ers.usda.gov

To confirm that this table contains the current forecast, go to <http://www.ers.usda.gov/briefing/farmincome/fore/fore.htm>

Table 31—Average Income to Farm Operator Households¹

	1993	1994	1995	1996	1997	1998	1999	2000P ²	2001F
<i>\$ per farm</i>									
Net cash farm business income ²	11,248	11,389	11,218	13,502	12,676	14,357	13,194	11,175	11,093
Less depreciation ³	6,219	6,466	6,795	6,906	6,578	7,409	7,027	7,357	--
Less wages paid to operator ⁴	454	425	522	531	513	637	499	608	--
Less farmland rental income ⁵	534	701	769	672	568	543	802	757	--
Less adjusted farm business income due to other household(s) ⁶	872	815	649	1,094	*1,505	1,332	1,262	801	--
<i>\$ per farm operator household</i>									
Equals adjusted farm business income	3,168	2,981	2,484	4,300	3,513	4,436	3,603	*1,652	--
Plus wages paid to operator	454	425	522	531	513	637	499	608	--
Plus net income from farmland rental ⁷	--	--	1,053	1,178	945	868	1,312	--	--
Equals farm self-employment income	3,623	3,407	4,059	6,009	4,971	5,941	5,415	*2,260	--
Plus other farm-related earnings ⁸	1,192	970	661	1,898	1,234	1,165	944	339	--
Equals earnings of the operator household from farming activities	4,815	4,376	4,720	7,906	6,205	7,106	6,359	2,598	2,725
Plus earnings of the operator household from off-farm sources ⁹	35,408	38,092	39,671	42,455	46,358	52,628	57,988	58,709	59,296
Equals average farm operator household income	40,223	42,469	44,392	50,361	52,562	59,734	64,347	61,307	62,021
<i>\$ per U.S. household</i>									
U.S. average household income ¹⁰	41,428	43,133	44,938	47,123	49,692	51,855	54,842	--	--
<i>Percent</i>									
Average farm operator household income as percent of U.S. average household income	97.1	98.5	98.8	106.9	105.8	115.2	117.3	--	--
Average operator household earnings from farming activities as percent of average operator household income	12.0	10.3	10.6	15.7	11.8	11.9	9.9	5.2	--

-- = Not available. Values in last two columns are preliminary or forecast. 1. This table derives farm operator household income estimates from the Agricultural Resource Management Study (ARMS) that are consistent with Current Population Survey (CPS) methodology. The CPS, conducted by the Census Bureau, is the source of official U.S. household income statistics. The CPS defines income to include any income received as cash. The CPS definition departs from a strictly cash concept by including depreciation as an expense that farm operators and other self-employed people subtract from gross receipts when reporting net cash income. 2. A component of farm-sector income. Excludes income of contractors and landlords as well as the income of farms organized as nonfamily corporations or cooperatives, and farms run by a hired manager. Includes income of farms organized as proprietorships, partnerships, and family corporations. 3. Consistent with the CPS definition of self-employed income, reported depreciation expenses are subtracted from net cash farm income. The ARMS collects data on farm business depreciation used for tax purposes. 4. Wages paid to the operator are excluded because they are not shared among other households that have claims on farm business income. These wages are added to the operator household's adjusted farm business income to obtain farm self-employment income. 5. Gross rental income is excluded because net rental income from farm operation is added below to income received by the household. 6. More than one household may have a claim on the income of a farm business. On average, 1.1 households share the income of a farm business. 7. Includes net rental income from the farm business. Also includes net rental income from farmland held by household members that is not part of the farm business. In 1992, gross rental income from the farm business was used because net rental income data were not collected. In 1993 and 1994, net rental income data were collected as part of off-farm income. 8. Wages paid to other operator household members by the farm business, and net income from a farm business other than the one surveyed. In 1996, also includes the value of commodities provided to household members for farm work. 9. Wages, salaries, net income from nonfarm businesses, interest, dividends, transfer payments, etc. In 1993 and 1994, also includes net rental income from farmland. 10. From the CPS. Sources: U.S. Department of Agriculture, Economic Research Service, 1992, 1993, 1994, and 1995 Farm Costs and Returns Survey (FCRS), and 1996 and 1997 Agricultural Resource Management Study for farm operator household data. U.S. Department of Commerce, Census Bureau Current Population Survey (PCS), for average household income. Information contact: Bob Hoppe (202) 694-5572 or rhope@ers.usda.gov

Table 32—Balance Sheet of the U.S. Farming Sector

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001F
<i>\$ billion</i>										
Farm assets	868.3	910.2	936.1	967.6	1,004.8	1,053.0	1,085.3	1,140.8	1,188.3	1,222.1
Real estate	640.8	677.6	704.1	740.5	769.5	808.2	840.4	886.4	929.5	957.3
Livestock and poultry ¹	71.0	72.8	67.9	57.8	60.3	67.1	63.4	73.2	76.8	81.2
Machinery and motor vehicles	85.4	86.4	88.1	89.4	89.8	90.4	91.7	92.3	92.0	92.7
Crops stored ^{2,3}	24.2	23.3	23.3	27.4	31.7	32.7	29.9	28.3	27.9	27.8
Purchased inputs	3.9	3.8	5.0	3.4	4.4	4.9	5.0	4.0	4.9	5.0
Financial assets	43.1	46.3	47.6	49.1	49.0	49.7	54.8	56.6	57.1	58.2
Total farm debt	139.1	142.0	146.8	150.8	156.1	165.4	172.9	176.4	184.0	185.6
Real estate debt ³	75.4	76.0	77.7	79.3	81.7	85.4	89.6	94.2	97.5	98.8
Non-real estate debt ⁴	63.6	65.9	69.1	71.5	74.4	80.1	83.2	82.2	86.5	86.8
Total farm equity	729.3	768.2	789.3	816.8	848.7	887.6	912.4	964.4	1,004.3	1,036.5
<i>Percent</i>										
Selected ratios										
Debt to equity	19.1	18.5	18.6	18.5	18.4	18.6	18.9	18.3	18.3	17.9
Debt to assets	16.0	15.6	15.7	15.6	15.5	15.7	15.9	15.5	15.5	15.2

Last update: October 24, 2001. F = forecast. P = preliminary. Numbers may not add due to rounding. 1. As of December 31. 2. Non-CCC crops held on farms plus value above loan rates for crops held under CCC. 3. Includes CCC storage and drying facilities loans, but excludes debt on operator dwellings. 4. Excludes debt for nonfarm purposes. *Information contacts: Ken Erickson, 202-694-5565, email: erickson@ers.usda.gov, and Jim Ryan, 202-694-5586, email: jimryan@ers.usda.gov*

Note: The current farm income and balance sheet forecasts can always be found at <http://www.ers.usda.gov/Briefing/FarmIncome/>

Table 33—Cash Receipts from Farming

	Annual			2000	2001					
	1998	1999	2000	Aug	Mar	Apr	May	Jun	Jul	Aug
<i>\$ million</i>										
Commodity cash receipts¹	195,816	188,132	193,586	15,475	14,481	14,204	14,810	14,720	17,211	15,390
Livestock and products	94,121	95,547	99,473	7,975	8,252	8,134	9,022	8,632	9,592	7,792
Meat animals	43,339	45,614	52,994	4,183	4,256	4,180	4,947	4,466	4,930	4,025
Dairy products	24,114	23,207	20,622	1,680	2,026	2,021	2,195	2,223	2,218	1,714
Poultry and eggs	22,947	22,898	21,789	1,821	1,714	1,699	1,638	1,665	1,686	1,763
Other	3,720	3,828	4,067	290	256	234	242	279	757	290
Crops	101,695	92,585	94,113	7,500	6,229	6,070	5,787	6,087	7,619	7,598
Food grains	8,822	6,965	6,639	713	372	294	360	821	1,316	698
Feed crops	22,655	19,622	19,960	1,483	1,496	1,017	895	1,029	1,382	1,532
Cotton (lint and seed)	6,073	4,698	4,555	158	137	84	84	62	92	150
Tobacco	2,803	2,273	2,315	442	19	1	0	0	192	363
Oil-bearing crops	17,377	13,608	13,857	732	840	547	446	452	755	747
Vegetables and melons	15,160	15,236	15,889	1,692	1,080	1,319	1,669	1,746	1,668	1,800
Fruits and tree nuts	11,649	12,287	12,692	1,286	659	704	749	997	1,187	1,312
Other	17,156	17,894	18,206	995	1,626	2,105	1,584	981	1,028	995
Government payments	12,380	21,513	22,896	1,282	454	317	--	--	--	--
Total	208,196	209,645	216,482	16,757	14,936	14,522	14,810	14,720	17,211	15,390

-- = Not available. Annual values for the most recent year and monthly values for current year are preliminary. 1. Sales of farm products include receipts from commodities placed under nonrecourse CCC loans, plus additional gains realized on redemptions during the period. *Information contact: Larry Traub (202) 694-5593 or ltraub@ers.usda.gov. To receive current monthly cash receipts via e-mail contact Larry Traub.*

Table 34—Cash Receipts from Farm Marketings, by State

Region and State	Livestock and products				Crops ¹				Total ¹			
	1999	2000	Jul 2001	Aug 2001	1999	2000	Jul 2001	Aug 2001	1999	2000	Jul 2001	Aug 2001
	\$ million											
North Atlantic												
Maine	286	262	21	23	208	242	20	37	494	504	40	60
New Hampshire	63	60	5	5	92	94	6	10	155	154	11	15
Vermont	472	441	43	36	69	67	12	3	541	508	56	39
Massachusetts	101	91	7	8	279	301	28	35	380	392	36	43
Rhode Island	8	8	1	1	39	40	3	3	47	48	4	3
Connecticut	180	165	12	13	303	337	19	14	483	503	31	28
New York	2,049	1,934	203	164	1,098	1,189	105	148	3,148	3,123	307	313
New Jersey	193	193	56	8	536	619	76	90	729	812	133	97
Pennsylvania	2,890	2,781	306	211	1,189	1,252	91	99	4,079	4,033	397	310
North Central												
Ohio	1,777	1,751	158	145	2,695	2,654	266	205	4,472	4,405	423	350
Indiana	1,583	1,695	169	151	2,814	2,886	249	174	4,397	4,581	418	325
Illinois	1,525	1,710	166	146	5,086	5,312	386	358	6,611	7,022	552	504
Michigan	1,328	1,335	134	111	2,139	2,140	201	185	3,467	3,475	334	297
Wisconsin	4,136	3,804	413	303	1,362	1,416	81	130	5,498	5,221	494	434
Minnesota	3,550	3,875	349	293	3,543	3,647	234	286	7,093	7,522	583	578
Iowa	4,713	5,747	544	398	5,036	5,027	381	409	9,749	10,774	924	807
Missouri	2,480	2,677	203	199	1,796	1,890	138	141	4,276	4,567	341	340
North Dakota	633	639	52	43	2,091	2,050	147	167	2,724	2,689	199	209
South Dakota	1,830	2,035	177	148	1,743	1,755	140	144	3,573	3,790	317	292
Nebraska	5,426	5,923	551	448	2,996	3,029	167	164	8,422	8,952	719	613
Kansas	5,012	5,488	547	439	2,464	2,417	410	186	7,477	7,905	957	625
Southern												
Delaware	566	557	47	45	159	184	14	32	725	741	62	77
Maryland	937	848	70	69	559	625	58	44	1,496	1,473	128	113
Virginia	1,579	1,549	132	123	702	732	71	79	2,281	2,281	203	202
West Virginia	334	339	28	31	53	51	7	8	387	391	35	39
North Carolina	3,840	4,275	325	327	2,861	3,135	317	335	6,700	7,410	642	663
South Carolina	774	792	59	66	638	752	80	90	1,412	1,544	139	156
Georgia	3,329	3,105	249	243	1,901	1,945	149	127	5,230	5,050	399	370
Florida	1,361	1,378	126	113	5,495	5,573	153	171	6,856	6,951	279	284
Kentucky	2,254	2,335	544	101	1,301	1,271	37	27	3,554	3,605	581	128
Tennessee	1,002	990	69	71	956	1,030	50	76	1,958	2,020	119	147
Alabama	2,746	2,684	200	218	658	588	32	22	3,404	3,272	232	240
Mississippi	2,145	2,037	156	159	1,012	886	35	35	3,156	2,922	191	194
Arkansas	3,397	3,248	251	247	1,816	1,639	50	86	5,213	4,887	300	333
Louisiana	622	653	61	50	1,197	1,167	23	45	1,819	1,820	84	95
Oklahoma	3,136	3,441	325	288	842	779	127	85	3,978	4,220	452	373
Texas	8,484	9,162	835	707	4,588	4,181	320	311	13,071	13,344	1,155	1,018
Western												
Montana	932	1,102	107	104	787	704	47	46	1,719	1,806	154	150
Idaho	1,616	1,628	186	139	1,666	1,761	138	186	3,282	3,389	324	325
Wyoming	679	795	109	104	171	160	9	21	850	954	118	125
Colorado	3,016	3,332	336	228	1,305	1,229	122	116	4,321	4,561	458	343
New Mexico	1,441	1,613	165	134	529	473	57	44	1,969	2,086	222	178
Arizona	991	1,063	117	81	1,233	1,226	49	28	2,224	2,290	167	109
Utah	713	770	67	63	244	240	28	21	957	1,010	95	84
Nevada	212	237	15	22	126	149	25	19	338	386	40	41
Washington	1,648	1,710	155	153	3,201	3,339	313	352	4,849	5,050	467	505
Oregon	793	826	75	71	2,195	2,223	199	274	2,988	3,049	274	345
California	6,651	6,269	657	535	18,346	19,241	1,905	1,887	24,997	25,510	2,562	2,423
Alaska	29	32	3	3	21	20	2	2	50	52	5	5
Hawaii	88	87	7	7	444	444	40	38	532	530	47	45
U.S.	95,547	99,473	9,592	7,792	92,585	94,113	7,619	7,598	188,132	193,586	17,211	15,390

Annual values for the most recent year are preliminary. Estimates as of end of current month. Totals may not add because of rounding.

1. Sales of farm products include receipts from commodities placed under nonrecourse CCC loans, plus additional gains realized on redemptions during the period. Information contact: Larry Traub (202) 694-5593 or ltraub@ers.usda.gov. To receive current monthly cash receipts via e-mail, contact Larry Traub.

Table 35—CCC Net Outlays by Commodity & Function

	Fiscal year									
	1993	1994	1995	1996	1997	1998	1999	2000	2001 ⁴	2002 ⁴
	<i>\$ million</i>									
Commodity/Program										
Feed grains:										
Corn	5,143	625	2,090	2,021	2,587	2,873	5,402	10,135	4,355	3,434
Grain sorghum	410	130	153	261	284	296	502	979	268	313
Barley	186	202	129	114	109	168	224	397	147	104
Oats	16	5	19	8	8	17	41	61	60	24
Corn and oat products	10	10	1	0	0	0	0	5	14	8
Total feed grains	5,765	972	2,392	2,404	2,988	3,354	6,169	11,577	4,844	3,883
Wheat and products	2,185	1,729	803	1,491	1,332	2,187	3,435	5,320	1,645	1,225
Rice	887	836	814	499	459	491	911	1,774	950	1,026
Upland cotton	2,239	1,539	99	685	561	1,132	1,882	3,808	1,095	1,871
Tobacco	235	693	-298	-496	-156	376	113	634	24	-97
Dairy	253	158	4	-98	67	291	480	684	1,232	100
Soybeans	109	-183	77	-65	5	139	1,289	2,839	3,029	2,765
Peanuts	-13	37	120	100	6	-11	21	35	65	0
Sugar	-35	-24	-3	-63	-34	-30	-51	465	-45	-37
Honey	22	0	-9	-14	-2	0	2	7	31	-10
Wool and mohair	179	211	108	55	0	0	10	-2	23	-1
Operating expense ¹	6	6	6	6	6	5	4	60	5	5
Interest expenditure	129	-17	-1	140	-111	76	210	736	319	546
Export programs ²	2,193	1,950	1,361	-422	125	212	165	216	171	641
1988-2000 Disaster/tree/ livestock assistance	944	2,566	660	95	130	3	2,241	1,452	2,799	0
Conservation Reserve Program	0	0	0	2	1,671	1,693	1,462	1,511	1,700	1,796
Other conservation programs	0	0	0	7	105	197	292	263	366	283
Other	949	-137	-103	320	104	28	588	886	1,820	1,287
Total	16,047	10,336	6,030	4,646	7,256	10,143	19,223	32,265	20,073	15,283
Function										
Price support loans (net)	2,065	527	-119	-951	110	1,128	1,455	3,369	3,125	3,813
Cash direct payments: ³										
Production flexibility contract	0	0	0	5,141	6,320	5,672	5,476	5,057	4,074	3,949
Market loss assistance	0	0	0	0	0	0	3,011	11,046	853	0
Deficiency	8,607	4,391	4,008	567	-1,118	-7	-3	1	0	0
Loan deficiency	387	495	29	0	0	478	3,360	6,419	5,565	4,908
Oilseed	0	0	0	0	0	0	0	460	496	0
Cotton user marketing	114	149	88	34	6	416	280	446	203	85
Other	35	22	9	61	1	0	1	460	553	14
Conservation Reserve Program	0	0	0	2	1,671	1,693	1,435	1,476	1,672	1,796
Other conservation programs	0	0	0	0	85	156	247	215	306	233
Noninsured Assistance (NAP)	0	0	0	2	52	23	54	38	169	159
Total direct payments	9,143	5,057	4,134	5,807	7,017	8,431	13,861	25,618	13,891	11,144
1988-2000 crop disaster	872	2,461	577	14	2	-2	1,913	1,251	2,250	0
Emergency livestock/tree/DRAP livestock indem./forage assist.	72	105	83	81	128	5	328	201	549	0
Purchases (net)	525	293	-51	-249	-60	207	668	120	-1,334	-1,792
Producer storage payments	9	12	23	0	0	0	0	0	0	0
Processing, storage, and transportation	136	112	72	51	33	38	62	81	109	86
Export donations ocean transportation	352	156	50	69	34	40	323	370	448	335
Operating expense ¹	6	6	6	6	6	5	4	60	5	5
Interest expenditure	129	-17	-1	140	-111	76	210	736	319	546
Export programs ²	2,193	1,950	1,361	-422	125	212	165	216	171	641
Other	545	-326	-105	100	-28	3	234	243	540	505
Total	16,047	10,336	6,030	4,646	7,256	10,143	19,223	32,265	20,073	15,283

1. Does not include CCC Transfers to General Sales Manager. 2. Includes Export Guarantee Program, Direct Export Credit Program, CCC Transfers to the General Sales Manager, Market Access (Promotion) Program, starting in FY 1991 and starting in FY 1992 the Export Guarantee Program - Credit Reform, Export Enhancement Program, Dairy Export Incentive Program, and Technical Assistance to Emerging Markets, and starting in FY 2000 Foreign Market Development Cooperative Program and Quality Samples Program. 3. Includes cash payments only. Excludes generic certificates in FY 1986-96.

4. Estimated in FY 2002 Mid-Session Review Budget which was released on August 22, 2001 based on May 2001 supply & demand estimates. The CCC outlays shown for 1996-2002 include the impact of the Federal Agriculture Improvement and Reform Act of 1996, which was enacted on April 4, 1996, and FY 2000-FY 2002 outlays include the impact of the Agricultural Risk Protection Act of 2000, which was enacted on June 20, 2000. FY 2001 outlays do not include the impact of the \$5.5 billion of payments mandated by P.L. 107-25.

Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds).

Information contact: Richard Pazdalski, Farm Service Agency-Budget at (202) 720-3675 or Richard_Pazdalski@wdc.fsa.usda.gov

Food Expenditures

Table 36—Food Sales

	Annual			2001			Year-to-date cumulative		
	1998	1999	2000	Aug	Sep	Oct	Aug	Sep	Oct
	\$ billion								
Sales ¹									
At home ²	390.1	407.6	442.4	38.6	36.8	36.6	295.9	332.6	369.2
Away from home ³	310.4	332.7	359.9	32.7	29.7	30.7	247.0	276.8	307.4
	1998 \$ billion								
Sales ¹									
At home ²	390.1	400.0	424.4	35.7	34.0	33.6	276.0	310.0	343.6
Away from home ³	310.4	324.3	341.7	30.1	27.3	28.1	230.0	257.3	285.5
	Percent change from year earlier (\$ billion)								
Sales ¹									
At home ²	3.9	4.5	8.5	3.3	1.2	0.1	3.0	2.8	2.5
Away from home ³	4.4	7.2	8.2	7.2	0.8	3.0	5.0	4.5	4.4
	Percent change from year earlier (1998 \$ billion)								
Sales ¹									
At home ²	1.6	2.5	6.1	0.1	-1.9	-3.4	-0.3	-0.5	-0.8
Away from home ³	1.7	4.5	5.4	4.0	-2.2	-0.1	2.2	1.7	1.5

-- = Not available. 1. Food only (excludes alcoholic beverages). Not seasonally adjusted. 2. Excludes donations and home production.

3. Excludes donations, child nutrition subsidies, and meals furnished to employees, patients, and inmates. *Information contact: Annette Clauson (202) 694-5389*

Note: This table differs from Personal Consumption Expenditures (PCE), table 2, for several reasons: (1) this series includes only food, excluding alcoholic beverages and pet food which are included in PCE; (2) this series is not seasonally adjusted, whereas PCE is seasonally adjusted at annual rates; (3) this series reports sales only, but PCE includes food produced and consumed on farms and food furnished to employees; (4) this series includes all sales of meals and snacks, while PCE includes only purchases using personal funds, excluding business travel and entertainment. For a more complete discussion of the differences, see "Developing an Integrated Information System for the Food Sector," ERS Ag. Econ. Rpt. No. 575, Aug. 1987, available at <http://www.ers.usda.gov/publications/aer575/>

Transportation

Table 37—Rail Rates; Grain & Fruit-Vegetable Shipments

	Annual			2000		2001				
	1998	1999	2000	Oct	May	Jun	Jul	Aug	Sep	Oct
Rail freight rate index ¹ (Dec. 1984=100)										
All products	113.4	113.0	114.5	115.1	115.8	116.0	116.3	116.3	116.3	120.6
Farm products	123.9	121.7	123.1	124.9	123.9	122.4	125.6	124.6	124.7	124.6
Grain food products	107.4	99.7	100.4	100.9	102.6	102.8	102.9	103.8	103.4	103.0
Grain shipments										
Rail carloadings (1,000 cars) ²	22.8	24.2	23.2	24.9	18.0	20.1	20.2	21.4	20.7	26.1
Barge shipments (mil. ton) ³	3.0	3.5	3.1	3.1	2.1	4.2	4.3	3.9	2.4	2.6
Fresh fruit and vegetable shipments ⁴										
Piggy back (mil. cwt)	0.9	0.7	0.8	0.6	1.1	1.0	1.0	0.7	0.7	0.6
Rail (mil. cwt)	1.2	1.1	1.4	1.7	1.7	2.2	1.2	0.9	0.9	1.3
Truck (mil. cwt)	42.2	45.2	45.0	40.1	57.4	56.8	43.9	42.5	37.1	40.8

-- = Not available. 1. Department of Labor, Bureau of Labor Statistics. 2. Weekly average; from Association of American Railroads. 3. Shipments on Illinois and Mississippi waterways, U.S. Corps of Engineers. 4. Annual data are monthly average. Agricultural Marketing Service, USDA.

Information contact: Allen Baker (202) 694-5290

Indicators of Farm Productivity

Table 38—Indexes of Farm Production, Input Use, & Productivity¹

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
<i>1992 = 100</i>										
Farm output	88	83	89	94	94	100	94	107	101	106
All livestock products	92	93	94	95	98	100	100	108	110	109
Meat animals	95	97	97	96	99	100	100	102	103	100
Dairy products	94	96	95	98	98	100	99	114	115	115
Poultry and eggs	81	83	86	92	96	100	104	110	114	119
All crops	86	75	86	92	92	100	90	106	96	103
Feed crops	84	62	85	88	86	100	76	102	83	98
Food crops	84	76	83	107	82	100	96	97	90	93
Oil crops	88	72	88	87	94	100	85	115	99	107
Sugar	95	91	91	92	96	100	95	106	98	94
Cotton and cottonseed	92	96	75	96	109	100	100	122	110	117
Vegetables and melons	90	81	85	93	97	100	97	113	108	112
Fruit and nuts	95	102	98	97	96	100	107	111	102	102
Farm input ¹	101	100	100	101	102	100	101	102	101	100
Farm labor	101	103	104	102	106	100	96	96	92	100
Farm real estate	100	100	102	101	100	100	98	99	98	99
Durable equipment	120	113	108	105	103	100	97	94	92	89
Energy	102	102	101	100	101	100	100	103	109	104
Fertilizer	106	97	94	97	98	100	111	109	85	89
Pesticides	92	79	93	90	100	100	97	103	94	106
Feed, seed, and purchased livestock	97	96	91	99	99	100	101	102	109	95
Inventories	102	98	93	97	100	100	104	99	108	104
Farm output per unit of input	87	83	90	93	92	100	94	105	100	106
Output per unit of labor										
Farm ²	87	81	86	92	89	100	98	111	110	106
Nonfarm ³	95	95	96	96	97	100	100	101	--	--

-- = Not available. Values for latest year preliminary. 1. Includes miscellaneous items not shown separately. 2. Source: Economic Research Service.

3. Source: Bureau of Labor Statistics. *Information contact: John Jones (202) 694-5614*

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Food Supply & Use

Table 39—Per Capita Consumption of Major Food Commodities¹

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
	Lbs.									
Red meats ^{2,3,4}	112.3	111.9	114.0	112.1	114.7	115.1	112.8	111.0	115.6	117.7
Beef	63.9	63.1	62.8	61.5	63.6	64.4	65.0	63.8	64.9	65.8
Veal	0.9	0.8	0.8	0.8	0.8	0.8	1.0	0.9	0.7	0.6
Lamb & mutton	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.8	0.9	0.9
Pork	46.4	46.9	49.4	48.9	49.5	49.0	45.9	45.5	49.2	50.5
Poultry ^{2,3,4}	56.3	58.3	60.8	62.5	63.3	62.9	64.1	64.2	65.0	68.3
Chicken	42.4	44.2	46.7	48.5	49.3	48.8	49.5	50.3	50.8	54.2
Turkey	13.8	14.1	14.1	14.0	14.1	14.1	14.6	13.9	14.2	14.1
Fish and shellfish ³	15.0	14.8	14.7	14.9	15.1	14.9	14.7	14.5	14.8	15.2
Eggs ⁴	30.2	30.1	30.3	30.4	30.6	30.2	30.4	30.7	31.8	32.8
Dairy products										
Cheese (excluding cottage) ^{2,5}	24.6	25.0	26.0	26.2	26.8	27.3	27.7	28.0	28.3	29.8
American	11.1	11.1	11.3	11.4	11.5	11.8	12.0	12.0	12.2	13.0
Italian	9.0	9.4	10.0	9.8	10.3	10.4	10.8	11.0	11.3	11.8
Other cheeses ⁶	4.5	4.6	4.7	5.0	5.0	5.0	5.0	5.0	4.8	5.0
Cottage cheese	3.4	3.3	3.1	2.9	2.8	2.7	2.6	2.7	2.7	2.7
Beverage milks ²	221.8	221.1	218.2	213.4	213.6	209.8	210.0	206.8	204.6	203.8
Fluid whole milk ⁷	90.4	87.3	84.0	80.1	78.8	75.3	74.6	72.7	71.6	72.4
Fluid lower fat milk ⁸	108.5	109.9	109.2	106.6	106.0	102.6	101.7	99.8	98.6	98.2
Fluid skim milk	22.9	23.9	25.0	26.7	28.8	31.9	33.7	34.3	34.4	33.2
Fluid cream products ⁹	7.6	7.7	8.0	8.0	8.1	8.4	8.7	9.0	9.2	9.7
Yogurt (excluding frozen)	4.0	4.2	4.2	4.3	4.7	5.1	4.8	5.1	5.1	4.9
Ice cream	15.8	16.3	16.3	16.1	16.1	15.7	15.9	16.4	16.6	16.8
Lowfat ice cream ¹⁰	7.7	7.4	7.1	6.9	7.6	7.5	7.6	7.9	8.3	7.9
Frozen yogurt	2.8	3.5	3.1	3.5	3.5	3.5	2.6	2.1	2.2	2.1
All dairy products, milk equivalent, milkfat basis ¹¹	568.3	565.6	565.8	574.1	585.9	583.8	574.6	577.6	581.7	597.9
Fats and oils--total fat content	63.0	64.8	66.8	69.7	68.0	66.3	65.3	64.9	65.6	68.5
Butter and margarine (product weight)	15.3	15.0	15.4	15.8	14.7	13.7	13.5	12.8	12.8	12.9
Shortening	22.2	22.4	22.4	25.1	24.1	22.5	22.3	20.9	21.0	21.6
Lard and edible tallow (direct use)	2.2	1.8	3.5	3.4	4.2	4.3	4.8	4.1	5.2	5.7
Salad and cooking oils	25.3	26.4	27.2	26.9	26.2	26.9	26.1	28.6	27.9	29.4
Fruits and vegetables ¹²	656.0	650.2	677.5	691.4	705.6	694.3	710.8	717.9	702.4	719.0
Fruit	272.6	255.3	283.7	283.2	290.9	284.9	290.2	296.9	284.4	297.9
Fresh fruits	116.3	113.0	123.5	124.5	126.3	124.1	128.1	131.9	131.3	132.5
Canned fruit	21.0	19.8	22.9	20.7	21.0	17.5	18.8	20.4	17.4	19.6
Dried fruit	12.1	12.3	10.8	12.6	12.8	12.8	11.3	10.8	12.4	10.5
Frozen fruit	3.8	3.8	3.9	3.7	3.8	4.2	4.0	3.7	4.2	3.7
Selected fruit juices	119.0	106.0	121.9	121.3	126.6	125.9	127.8	129.3	118.8	131.0
Vegetables	383.5	394.9	393.9	408.2	414.6	409.4	420.6	421.0	418.0	421.2
Fresh	167.1	167.4	171.1	178.1	184.5	179.1	184.1	188.9	185.5	192.1
Canning	111.5	114.3	112.2	112.8	112.3	110.8	109.5	107.8	109.3	105.7
Freezing	66.8	72.6	70.9	76.0	78.4	79.9	84.6	83.0	81.8	82.5
Dehydrated and chips	31.0	32.8	31.5	33.6	31.0	31.3	34.5	33.3	33.4	32.3
Pulses	7.1	7.8	8.1	7.7	8.4	8.4	8.0	8.1	7.9	8.6
Peanuts (shelled)	6.0	6.5	6.2	6.1	5.8	5.7	5.7	5.9	5.9	6.4
Tree nuts (shelled)	2.4	2.2	2.2	2.4	2.3	1.9	2.0	2.1	2.3	2.7
Flour and cereal products ¹³	181.0	182.7	185.7	190.7	194.0	192.8	199.2	200.9	198.4	201.9
Wheat flour	136.0	137.0	138.9	143.3	144.5	141.8	148.7	149.5	146.0	148.4
Rice (milled basis)	15.8	16.2	16.7	16.7	18.1	18.9	17.8	18.4	18.9	19.4
Caloric sweeteners ¹⁴	136.9	137.9	141.2	144.5	147.4	149.8	150.7	154.0	155.1	158.4
Coffee (green bean equiv.)	10.3	10.3	10.0	9.1	8.2	8.0	8.9	9.3	9.5	10.0
Cocoa (chocolate liquor equiv.)	4.3	4.6	4.6	4.3	3.9	3.6	4.2	4.1	4.4	4.6

1. In pounds, retail weight unless otherwise stated. Consumption normally represents total supply minus exports, nonfood use, and ending stocks. Calendar-year data, except fresh citrus fruits, peanuts, tree nuts, and rice, which are on crop-year basis. 2. Totals may not add due to rounding. 3. Boneless, trimmed weight. Chicken series revised to exclude amount of ready-to-cook chicken going to pet food as well as some water leakage that occurs when chicken is cut up before packaging. 4. Excludes shipments to the U.S. territories. 5. Whole and part-skim milk cheese. Natural equivalent of cheese and cheese products. 6. Includes Swiss, Brick, Muenster, cream, Neufchatel, Blue, Gorgonzola, Edam, and Gouda. 7. Plain and flavored. 8. Plain and flavored, and buttermilk. 9. Heavy cream, light cream, half and half, eggnog, sour cream, and dip. 10. Formerly known as ice milk. 11. Includes condensed and evaporated milk and dry milk products. 12. Farm weight. 13. Includes rye, corn, oats, and barley products. Excludes quantities used in alcoholic beverages, corn sweeteners, and fuel. 14. Dry weight equivalent.

Information contact: Jane E. Allshouse (202) 694-5449.

Agricultural Outlook Forum 2002



February 21-22, 2002
Crystal Gateway Marriott Hotel
Arlington, Virginia

PROGRAM

Thursday, February 21

7:30 a.m. Continental Breakfast and Registration

8:30 a.m. Market and Policy Prospects for 2002

Moderator: Deputy Secretary of Agriculture James Moseley

2002 Agricultural Prospects

Keith Collins, Chief Economist, USDA

U.S. Trade and Agricultural Policy

J. B. Penn, Under Secretary for Farm and Foreign
Agricultural Services, USDA

10:15 a.m. **Keynote Address**

Secretary of Agriculture Ann M. Veneman

10:45 a.m. **Panel: Future of Agricultural Biotechnology in World Trade**

European, South American, and African perspectives; U.S.
diplomacy and worldwide biotechnology issues; future
prospects for agricultural biotechnology

12:30 Lunch and Opening of Exhibit Hall

1:00 p.m. Food Price Briefing

The Outlook for Retail Food Prices in 2002

1:45 p.m. Concurrent Sessions

Farm Finance Outlook: Changing Farmer-Lender Relationships

Moderator: John M. Blanchfield, Associate Director, American
Bankers Association

Topics: Farm income, finance, and credit outlook for 2002;
prospects for farm financial conditions; the changing farm
lending scene; the market for farmland

U.S. Farm Women: Leaders in Rural Prosperity

Moderator: Carolyn E. Sachs, Professor of Rural Sociology and
Director of Women's Studies, Pennsylvania State University
Topics: National Survey of Women on Farms; Farm Women's
Network of West Central Minnesota—dealing with the
challenges of agriculture; value-added agriculture and
entrepreneurship

Farm Policy Principles and Proposals

Topics: Trade programs, rural development policy, and a view
of commodity program principles and proposals from produc-
ers and from Capitol Hill

Competing in Global Markets for Processed Products

Moderator: Sarah Fogarty, Director, International Trade, Gro-
cery Manufacturers of America

Questions: Why would U.S. companies choose to invest in
overseas processing rather than export their products? Can
small U.S. agricultural processing firms and U.S. value-added
products compete globally? *Plus* an industry's comments on
procurement, processing, and exports

Agriculture's Role in Offsetting Greenhouse Gas Emissions

Topics: An overview of agriculture's role in addressing climate
change; potential policy options for addressing greenhouse gas
missions and carbon sequestration; technical opportunities
and experience in offsetting greenhouse gases

3:45 p.m. Concurrent Sessions

Feasibility and Cost of Marketing Identity-Preserved Crops

Moderator: Joan Rothenberg, Senior Program Associate, Pew
Initiative on Food and Biotechnology

Topics: Producer opportunities and specialized grain markets;
challenges to changing the infrastructure; support for quality
assurance (GIPSA); implications of product differentiation for
price discovery

Promoting Value-Added Marketing for Sustainable Rural Development

Moderator: Randall Torgerson, Deputy Administrator, Rural
Business-Cooperative Service, USDA

Topics: New center for value-added agriculture, Iowa State;
value-added marketing in domestic and international markets;
new-generation cooperatives and niche opportunities; direct
marketing to chefs in upscale restaurants

A New Role for Conservation in U.S. Farm Policy

Moderator: Deputy Secretary of Agriculture James Moseley

Topics: Policy choices and directions: what Congress has
requested; realistic expectations from the next farm bill; con-
servation operations and USDA's challenge to make them
work; a farmer's view of conservation on the landscape

Middle-Class Consumers in Developing Nations

Topics: Emerging markets' economic growth; prospects for
continued economic growth in China; economic future and
market barriers of India; Mexico's new leadership and growth
potential

Seasonal Climate Forecasts in Agriculture

Moderator: James Jones, Professor, University of Florida

Topics: Mission of the International Research Institute for Cli-
mate Prediction; a primer on seasonal climate fluctuations; use
of climate forecasts in agriculture in the Americas; climate
forecasts, global agriculture, and food security; implications
for agricultural practice, policy, and development

6:30 p.m. Forum Dinner

Address: The Economic Outlook; Lawrence Chimerine,
President, Radnor International Consulting, Inc.

Moderator: Keith Collins, Chief Economist, USDA

Preceded by cash bar at 5:30 p.m.

**For details on program or registration:
www.usda.gov/oce**



Friday, February 22

7:15 a.m. **Registration and Continental Breakfast**

8:15 a.m. Concurrent Sessions

Outlook Sessions

Grains and Oilseeds Outlook
Consolidation and Competition in Dairy Markets

Issues and Strategies for Rural and Community Prosperity

Moderator: John C. Allen, Director, Center for Applied Rural Innovation and Professor of Rural Sociology, University of Nebraska-Lincoln
Topics: What workers and entrepreneurs need to succeed in today's markets; advancing knowledge for community-led development; the explosive competition between farmland, open land, and population growth; translating new agricultural and forestry products and uses into rural economic viability

Globalization of Food Safety

Topics: Safety challenges in industrialized countries; safety challenges in developing countries; emerging issues

Streamlining Government for Today's Marketplace: Techniques and Stories from USDA's Commodity Re-Engineering Project

Moderator: Les Johnson, Director, Food Distribution Division, Food and Nutrition Service, USDA *Stories from the front line:* From USDA's Agricultural Marketing Service poultry programs; Food Safety and Inspection Service district enforcement operations; Farm Service Agency procurement and donation division; and the American School Food Service Association

10:30 a.m. Concurrent Sessions

Producer Initiatives to Deal with Production Contracts

Moderator: Dan Looker, Business Editor, *Successful Farming Magazine*
Topics: Negotiating contracts in the specialty crop industry; experience in negotiating poultry production contracts; organizing for sale of identity-preserved crops; new negotiation efforts in the fed-beef industry

Meat Sector Outlook in a Time of Uncertainty

The Outlook for livestock and poultry; industry reaction to USDA's outlook; and the impact of uncertain times on U.S. meat demand

Future Effects of the U.S. Sugar Program

Moderator: Craig Ruffalo, Manager of Information Sales, McKeany-Flavel Company, Inc.
Discussion by representatives of the Rocky Mountain Sugar Growers Cooperative, the American Sugar Alliance, the Blommer Chocolate Company, and the Consumer Federation of America

Tracking Food Products for Quality, Safety, and Efficiency

Moderator: Susan Offutt, Administrator, Economic Research Service, USDA

Topics: Monitoring for safer food production and distribution; food industry and retailer perspectives; certifiable quality management systems for the U.S. grain and livestock industry

Cotton and Fibers Outlook

Topics: U.S. and world cotton outlook; China's cotton trade under the WTO; risk management in U.S. cotton production

12:45 p.m. Concurrent Commodity Luncheons

Grains and Oilseeds
Livestock and Poultry
Sugar and Sweeteners
Cotton and Fibers
Fruit and Vegetables
With featured speakers

2:15 p.m. Concurrent Sessions

The Economic Outlook for Bio-Fuels

Moderator: Roger Conway, Director, Office of Energy Policy and New Uses, Office of the Chief Economist, USDA
Topics: The economics of ethanol and biodiesel production; generating electricity from animal waste; the role of public policy and regulation in supporting demand; availability of equity and debt capital to build plants

Protection Against Imported Disease and Pests

Topics: Options for stronger protective measures against livestock diseases and invasive plant pests; potential impacts and costs of taking added measures

The Horticulture Sector's Future in an Era of Globalization

Moderator: Tom Karst, Executive Markets Editor, *The Packer*, Vance Publishing Corporation
Topics: Strategic U.S.-foreign partnering from a producer perspective (Sunkist); industry-retail alliances spanning borders; challenges in horticultural trade; a foreign horticultural industry perspective

Outlook for Tobacco

Moderator: Tom Capehart, Economic Research Service, USDA
Topics: Tobacco situation and outlook; the international outlook for U.S. tobacco; impact of contracting on the tobacco industry; Capitol Hill perspective on the future of the U.S. tobacco program and quota buyout proposals