

# AGRICULTURAL OUTLOOK



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**Cover photo:** Planting hard red spring wheat, North Dakota. Arthur C. Smith III, from Grant Heilman Photography.

## Farm income & "fair" income . . . Farm finances . . . Spring planting intentions . . . Controlling nitrogen runoff

### U.S. Farm Income Down in 2000

**U.S. farm income** is forecast down in 2000 as government payments to farmers decline from a record high in 1999 and as rising fuel prices push up production costs. Assuming no new emergency funding legislation, net farm income in 2000 is forecast to decline to \$39.7 billion from the preliminary estimate of \$44.2 billion for 1999. With field crop prices remaining relatively low and hog and cattle prices moving higher, crop farms will be affected more than livestock.

Fuel costs for farmers will be only modestly affected by the recent retreat in crude oil prices until at least late summer, after plantings are complete. The agriculture sector generally has limited ability, in the short run, to pass on higher fuel costs to consumers in the form of higher output prices.

### A Fair Income for Farmers?

**Political debate** over agricultural subsidies and the notion of a "fair" income from farming is likely to continue as farmers face persistent low field crop prices and the prospect of reduced farm income in 2000. To address policy implications of the debate, USDA's Economic Research Service (ERS) analyzed the financial performance of farms, delineating them by enterprise (commodity) type. Financial performance was measured by examining a farm's revenue relative to its economic costs of production.

Focusing on wheat farms (those for which at least half of total value of production is from wheat), ERS found that the characteristics of U.S. wheat farms and their financial performance indicate diversity in the ways farmers manage their businesses and earn their living. Such heterogeneity illustrates the difficulties that confront policymakers in reaching consensus about the level and distribution of government income support.



### Farm Finances Remain Healthy

**The overall financial health** of farmers and their lenders remains solid in early 2000, despite low prices for major farm commodities over the last few years. Large Federal payments to farmers producing food and feed grains, oil crops, and cotton have mitigated the negative effect of lower prices on farm financial conditions and have played a key role in stabilizing farm income. Government payments, by providing liquidity to farmers, are reducing demand for credit and underpinning farm creditworthiness. All major institutional lender groups continue to report generally healthy farm loan portfolios, and most lenders report low levels of delinquencies, foreclosures, net loan charge-offs, and loan restructuring.

**Higher interest rates** in the general economy are expected in second-half 2000 and first-half 2001, putting upward pressure on interest rates for farm loans. However, the expected rise in farm loan rates is less than for nonfarm interest rates, reflecting the less-interest-sensitive deposit base of rural banks as well as the strong competition they face from the Farm Credit System.

### U.S. Soybean, Corn, & Cotton Plantings to Rise in 2000

**Planting intentions** for the eight major U.S. field crops (corn, soybeans, wheat, barley, sorghum, oats, cotton, and rice) total 252.6 million acres in 2000, up about 1 million from last year's planted area. On the eve of planting decisions, farmers faced mixed price signals for major field crops—prices were up for corn, soybeans, and cotton from a year earlier, but down for winter and spring wheat. Farmers intend to plant a record 75 million acres of soybeans and the largest cotton area (15.6 million acres) since 1995. Corn plantings are expected to expand 1 percent to 78 million acres. U.S. farmers have indicated their intention to modestly cut back the biotech share of planted acreage.

**Dry bean growers intend** to reduce acreage 9 percent from 1999's 2 million. With low dry bean prices, planting intentions are down in each of the six major dry-bean-producing states—North Dakota, Michigan, Nebraska, Minnesota, Colorado, and California. Reduced output and somewhat stronger export demand should trim dry bean stocks this season, pushing aggregate dry bean prices for 2000/01 slightly above lows experienced during 1999/2000.

### Curbing Nitrogen Runoff: Production & Trade Effects

**Policy decisions to mitigate** the environmental impacts of agricultural production involve tradeoffs among economic interests and environmental goals. USDA's Economic Research Service posited a goal of 10-percent reduction in agricultural nitrogen release, analyzing four alternative generic policy approaches: a "green payment" to producers for reducing fertilizer use; regulation limiting per-acre nitrogen use; a tax on nitrogen fertilizer; and buffer strips and other land retirement. These policy approaches have varying effects on commodity prices, on agricultural trade and other economic indicators, on government costs, and on consumers, as well as ancillary effects on soil erosion.

## Briefs

## Specialty Crops

## U.S. Dry Bean Growers to Cut Plantings

After wearing out a few pencils in determining the proper crop mix for this season, dry bean growers have indicated they intend to reduce acreage 9 percent from the 2 million of 1999. Double-digit percentage cuts in acreage are not uncommon in the dry bean industry, having occurred in 1991, 1992, and 1996. This spring, growers intend to reduce area in each of the six major dry-bean-producing states—North Dakota, Michigan, Nebraska, Minnesota, Colorado, and California—led by a 22-percent drop in Minnesota and a 14-percent drop in Nebraska. Assuming acreage abandonment remains near the 7-percent average for the industry, dry bean harvested area could be the lowest since 1993.

There are compelling reasons for this prospective decline in dry bean acreage:

- low dry bean prices,
- costs exceeding potential revenues,
- Federal marketing loan program benefits for competing crops, and
- flat export markets.

Early-spring U.S. grower prices for all dry beans were 15 percent below low levels experienced a year ago. This was the third consecutive annual price decline, following 10-percent drops in each of the past 2 years. In 1999, producers planted the fourth-largest area in the past 55 years and received the lowest prices since 1992. Grower prices were almost universally low across every class of dry beans (class refers to the various types of bean such as pinto, blackeye, and navy).

This is relatively unusual, because most dry bean classes are actually separate markets with little apparent substitutability among them—supply, demand, and prices tend to vary independently. Thus, for example, when pinto bean or dark red kidney bean prices are down, navy bean and light red kidney bean prices may be up. In most years, the separate markets tend to have offsetting effects on industry-wide acreage changes. However, fairly uniform weather over all production areas, as experienced last year, can produce similar yield patterns and production changes in all bean classes.

The cost of producing dry beans varies depending on location and production practices. In most areas, grower prices prevailing in mid-March were several dollars short of covering unit cash costs under average yields. Many growers in states such as Michigan and Minnesota, looking at grower prices of \$10-\$11 per cwt this spring, could foresee nothing but red ink. As a result, many decided to reduce dry bean acreage.

Planting another crop may have been a tough decision. Prices for most competing crops that dry bean growers typically include in their rotations have also been declining. According to the Census of Agriculture, crops grown in conjunction with dry beans tend to vary regionally, but wheat, corn, and alfalfa are top choices, and prices for each of these are below a year ago, although commodity loan rates for wheat and corn are unchanged from 1999. For selected states, the following competing crops are typically grown on dry bean farms:

- Michigan—corn, wheat, soybeans, oats, and alfalfa;
- North Dakota—wheat, barley, corn, soybeans, and sunflower seed;
- Nebraska—corn, wheat, alfalfa, and sugar beets;
- Colorado—corn, alfalfa, wheat, barley, and sugar beets;
- Idaho—alfalfa, wheat, barley, sugar beets, and corn; and
- California—wheat, fruits, cotton, vegetables, and sugar beets.

Federal marketing loan program payments are projected to be substantial again in 2000. Diversified dry bean growers surely considered these benefits for competing crops while making spring planting decisions. Because there are no loan programs for dry beans, cash-strapped farmers are apparently shifting some acres from dry beans to crops with marketing loan benefits during this time of nearly universally low prices. With prospective dry bean acreage down 186,000 acres, growers have opted to concentrate more on program crops such as wheat and corn.

## WINDOW on the PAST

Excerpts from USDA publications

The supply of dry beans from the 1936 crop is much below the average because of a smaller yield in the pea bean area, because acreage was somewhat below average, and because consumption increased during last year. Prices advanced during the summer and probably will remain well above the average of recent years during most of the current marketing season.

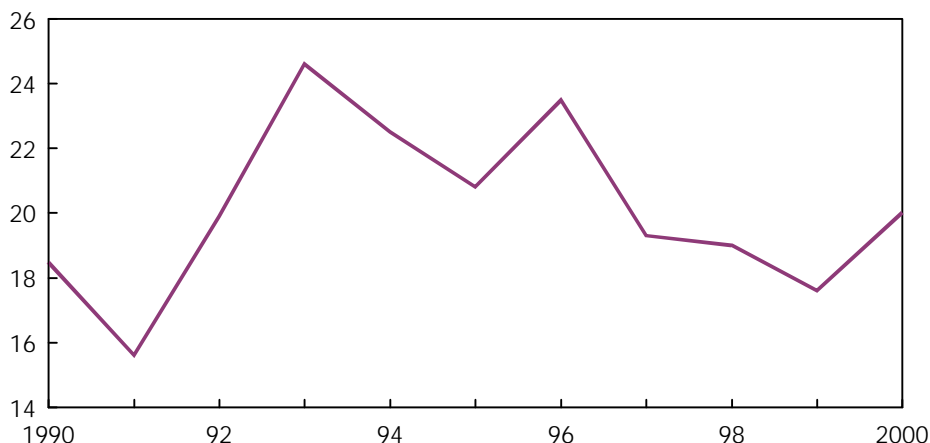
These high prices may encourage planting of an acreage in 1937 large enough to bring a considerable decline in prices. Even a slight increase in acreage would, with average yields, produce an average crop in 1937. However, in view of the probable small carry-over and of the increase in demand for beans, some expansion is probably justified. Increases in acreages of the Pea, Great Northern, and Pinto types appear justified, but there is danger of overplanting.

*The Farm Outlook for 1937*

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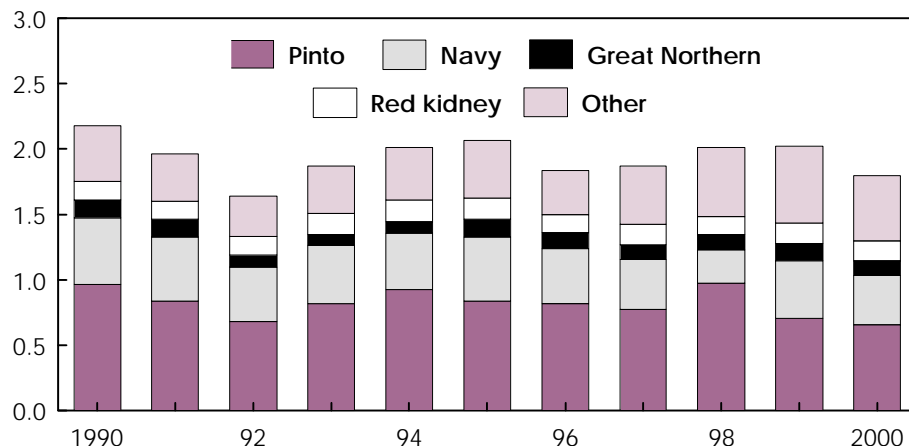
## Grower Price for Dry Beans to Rise. . .

\$ per cwt



## . . .As Planted Acreage Decreases

Million acres



Source: National Agricultural Statistics Service, USDA. Forecasts for 2000 acreage components and price by Economic Research Service.

Economic Research Service, USDA

In 2000, U.S. production of dry beans is expected to decline from last year's 33 million cwt. Trend yields, combined with the prospective acreage decrease, suggest that total dry bean output could fall to 28-30 million cwt, with reduced output for most classes, particularly navy, black, and Great Northern beans. The combination of reduced output and somewhat stronger export demand should trim dry bean stocks this season, pushing aggregate dry bean prices for the 2000/01 season mod-

estly above lows experienced during 1999/2000.

U.S. dry bean export volume has been sluggish during the first third of the 1999/2000 marketing year, declining 7 percent, with classes such as pinto, Great Northern, and small red down about 40 percent. Exports are significant for the U.S. dry bean industry, which ships about 20 percent of domestic output to foreign markets through commercial sales and

Federal food aid donations. A substantial volume of U.S. dry bean exports is concentrated among relatively few countries. Top U.S. markets in 1998/99 included Mexico (19 percent of all exports), the United Kingdom (UK) (16 percent), Canada (9 percent), Japan (4 percent), and Italy (3 percent).

Despite the slow start and large supplies of dry beans in many parts of the world, U.S. exports during the remainder of the 1999/2000 marketing year (September-August) are still expected to increase moderately over the previous year—even- tually strengthening lackluster prices. Currently prevailing low domestic prices should trigger increased demand from established trading partners such as the UK and Mexico.

Shipments to Mexico should grow beyond those of a year ago. Last season, an 8-month delay in auctioning NAFTA dry bean import certificates (required to allow monitoring of the tariff-rate quota on dry beans) largely prevented commercial shipments of U.S. beans from entering Mexico until September. This year, the first auction of NAFTA dry bean import certificates by the Mexican Secretariat of Commerce and Industry (SECOFI) was February 14, 2000, so exports should proceed more smoothly.

Although the U.S. is second only to Burma as the world's leading exporter of dry beans, competition in world markets is keen. Canada is a major competitor in overseas markets such as the UK. In Canada, low stocks prompted a 55-percent production spike in 1999, boosting stocks significantly and dropping prices. A thriving export market supports forecasts for about a 5-percent rise in acres planted by Canadian growers this spring. However, assuming yields drop back to trend levels, Canada's production will remain near last year's elevated levels (about 6.5 million cwt) with average prices dropping slightly as stocks creep upward. **AO**

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## Briefs

Livestock

## Heifer Liquidation Continues to Support Beef Production Gains

Beef production will continue record large at least through summer, bringing 2000 output just below the 1999 record. Behind current gains in beef production are record-high slaughter weights and historically large numbers of heifers on feed and heifer slaughter, which will likely decline sharply this fall as more heifers are retained for breeding.

Dry conditions throughout much of the country last fall through late winter, particularly in southern winter grazing areas, forced more cattle into feedlots. These are cattle that normally would not have been placed on feed until late winter or early spring. Numbers of heifers on feed remain large and even more were placed on feed this past fall and winter rather than retained for herd expansion. On April 1, heifers on feed were up 8 percent from a year earlier and up 14 percent from April 1, 1999 (in seven monthly reporting states with at least 1,000 head capacity). With cattle entering feedlots earlier than usual, feeder cattle supplies on April 1 were down nearly 8 percent from a year earlier. With monthly placements above year-earlier levels from August through February, fed-cattle marketings will likely remain record high through summer.

Improving moisture conditions are aiding spring pasture development following an unusually dry fall-winter season, and March feedlot placements declined 1 percent from very large placements in 1999. As long as crop planting and grazing conditions remain fairly favorable, placements well into next year are expected to remain below year earlier levels, reflecting the declining cattle inventory.

On January 1, 2000, all cattle and calves in the U.S. totaled 98 million head, down 1 percent from a year earlier, the fourth year of decline from the 1996 peak of 103.5 million head. Total cow inventories and replacement heifer inventories continue to decline slightly.

In addition to higher-than-expected feedlot placements through February, beef production is bolstered by slaughter weights that are likely to remain on a record-setting path as demand remains strong for higher quality beef with consistent eating qualities. However, improved grazing and replenished livestock pond water this spring may result in lower cow slaughter over the next couple of years.

In spite of large competing meat supplies, demand remains strong, and cattle prices rose over the winter quarter. Larger beef supplies and seasonal gains in the proportion grading Choice and above will temper the sharp jump in prices from last fall when Choice supplies were very tight.

Fed-cattle prices averaged near \$70 per cwt this past winter, up nearly \$8 from a year earlier. Although continued heavy slaughter weights and large slaughter potential place cattle feeding operations in

a weaker bargaining position, a strong economy and continued high consumer confidence helps support beef prices, particularly hotel-restaurant demand for higher quality beef. Prices are likely to range from \$67 to \$71 this spring and summer as a larger share of fed-cattle grade Choice and higher. Prices will likely rise into the low \$70's this fall as the impact of reduced feedlot placements beginning in late winter reflect 4 years of declining cattle inventories.

Similarly, feeder cattle prices are likely to remain in the mid-\$80's per cwt for much of the year, up from an average \$76.39 in 1999. Prices will be increasingly sensitive to forage and crop developments this spring. Declining feeder cattle supplies and continued strong demand for beef will support prices. Prices for lighter weight stocker cattle for grazing programs will remain very strong as supplies decline and spring/early summer grazing prospects improve.

Retail prices for Choice beef averaged \$2.88 a pound in 1999, up 11 cents from a year earlier and the strongest since 1993's \$2.93. Per capita beef consumption rose to 69.2 pounds from 68 pounds

## May Hay Stocks Likely Down

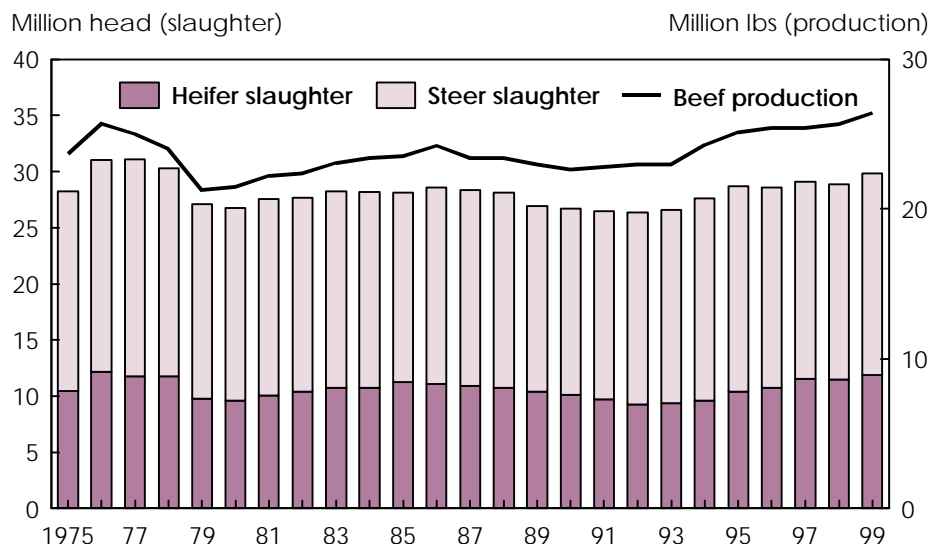
Dry conditions throughout a large portion of the U.S. into late winter raised concerns about crop and forage prospects in 2000. With the heaviest feeding season from December through early spring, hay stocks are likely down sharply. In general, conditions have been relatively dry since 1995/96, particularly in the southern half of the U.S. Dry conditions spread into the northern parts of the U.S. in the winter of 2000. Ample spring grazing and rebuilding hay stocks will be significant factors for many cattlemen considering herd expansion.

Hay stocks were down 3 percent from a year earlier on December 1, 1999, but they remain adequate for reduced inventories of roughage-consuming animals. However, feed use has been extensive, and supplemental feeding will likely remain high until spring grazing is available from April through June.

Supplemental feeding between the May 1, 1999 and December 1 stocks report was very heavy as many areas simply had very little accumulated forage for grazing, and moisture-deficient small-grain winter pastures provided little grazing. The seasonally heavy supplemental feeding period from December 1, 1999 through the May 1, 2000 stocks report suggests that hay stocks will be pulled down even with the fairly mild winter.

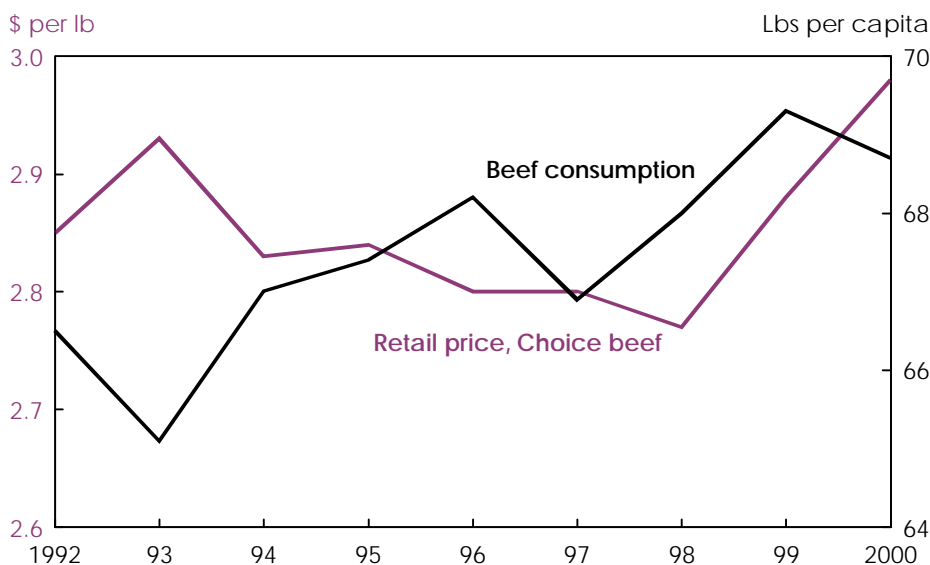
Despite some producers' concerns about feed supplies, grain stocks remain large, keeping grain prices in check. The farm price of corn is expected to range from \$1.85 to \$1.95 per bushel in 1999/2000, about the same as last year and well below 1997/98's \$2.43. In addition, hay prices in general remain below a year earlier.

## Rising Heifer Slaughter Bolsters Beef Production



Economic Research Service, USDA

## Beef Prices Continue to Rise and Per Capita Consumption Slips



2000 forecast.

Economic Research Service, USDA

in 1998. Prices peaked in December 1999 at \$3.02 a pound with beef purchases for millennial events.

In 2000, prices likely will return to more typical levels of premillennial 1999 and average in the upper \$2.90's a pound. Prices for retail Choice beef declined to the mid-2.90's in January-February, with

first-quarter per capita beef consumption rising just over a pound from both 1998 and 1999. Retail prices are likely to remain in the mid- to upper \$2.90's until fall, when they are expected to rise above \$3 per pound. Per capita beef consumption will decline from 1999's peak, following the decline in beef production.

Beef prices are in a position to remain high for multiple reasons. Both hotel-restaurant and export demand for high-quality beef appear very strong, and will be enhanced by resurging economic growth in Asia. In March, the price spread between Choice and Select boxed beef was \$6.14 per cwt, up from \$1.57 a year earlier. Last fall, when Choice beef supplies were tight and demand strong, the spread ranged from \$11 to \$15. **AO**

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For more information on the beef market:

*Dairy and Poultry Situation and Outlook* at <http://usda.mannlib.cornell.edu/reports/erssor/live-stock/ldp-mbb/2000/>

### Upcoming Reports-USDA's Economic Research Service

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

#### May

- 12 *World Agricultural Supply & Demand* (3 pm)
- 15 *Cotton & Wool Outlook* (4 pm)\*\*
- Oil Crops Outlook* (4 pm)\*\*
- Rice Outlook* (4 pm)\*\*
- 16 *Feed Outlook* (9 am)\*\*
- Wheat Outlook* (9 am)\*\*
- 18 *Sugar & Sweeteners Yearbook\**
- 22 *Agricultural Outlook\**
- 25 *U.S. Agricultural Trade Update* (3 pm)
- Livestock, Dairy & Poultry* (4 pm)\*\*

\*Release of summary, 3 p.m.

\*\*Available electronically only

## Briefs

## Ag Economy

## Farm Income Down in 2000

Net farm income in 2000 is forecast to decline to \$39.7 billion—the lowest since 1995. This would be \$4.5 billion below the preliminary estimate of \$44 billion for 1999, and down \$0.7 billion from the initial 2000 forecast issued last December. Net cash income is forecast at \$48.6 billion, down from the preliminary 1999 estimate of \$54.5 billion. The income drop is due to an expected decline in government payments from a record high in 1999, as well as higher production costs resulting from rising fuel prices. Net farm income is forecast at 79 percent of its 1990-99 average, with net cash income at 80 percent.

With large supplies of most agricultural commodities and prospects for little or no near-term growth in demand, prices for major crops will likely remain low. While production expenses have risen with the recent rise in fuel prices, they may stabilize and perhaps decline as farmers adjust practices to reduce costs.

Total *crop receipts* are forecast up slightly from 1999 but are still below 1996-98 levels. Receipts for soybeans are showing healthy increases over 1999, with corn steady and wheat down slightly. For tobacco farmers, decreased marketing quotas have resulted in dramatic declines in receipts for both 1999 and 2000. In the livestock sector, hog receipts are showing the most improvement (up nearly 30 percent), and receipts for cattle and calves are up 6 percent. Dairy receipts, however, could see a 9-percent drop after declining 2 percent last year.

Assuming no emergency funding legislation, total *government payments* to farmers in 2000 are expected to drop to \$15.9 billion (7.1 percent of gross cash income) from \$20.6 billion in 1999. The revised 1999 estimate is \$2.1 billion less than the forecast issued in December 1999 by USDA's Economic Research Service. The new estimate reflects data from USDA's Farm Service Agency indicating about \$1.5 billion less emergency aid disbursed in calendar 1999 than anticipated (shifting more to 2000) and lower loan deficiency

payments than earlier expected. Government payments are estimated at 9.1 percent of gross cash income in 1999.

Total *production expenses* in 2000 are forecast to rise 2.9 percent to \$197.5 billion, or 88 percent of gross cash income—the highest share since 1980-84. Rising fuel prices are a major factor behind the higher costs, and fuel expenses for 2000 are currently forecast at \$9 billion, up 40 percent from 1999. Although crude oil prices retreated somewhat in late March, fuel prices will be only modestly affected until at least late summer when planting is complete (see following article).

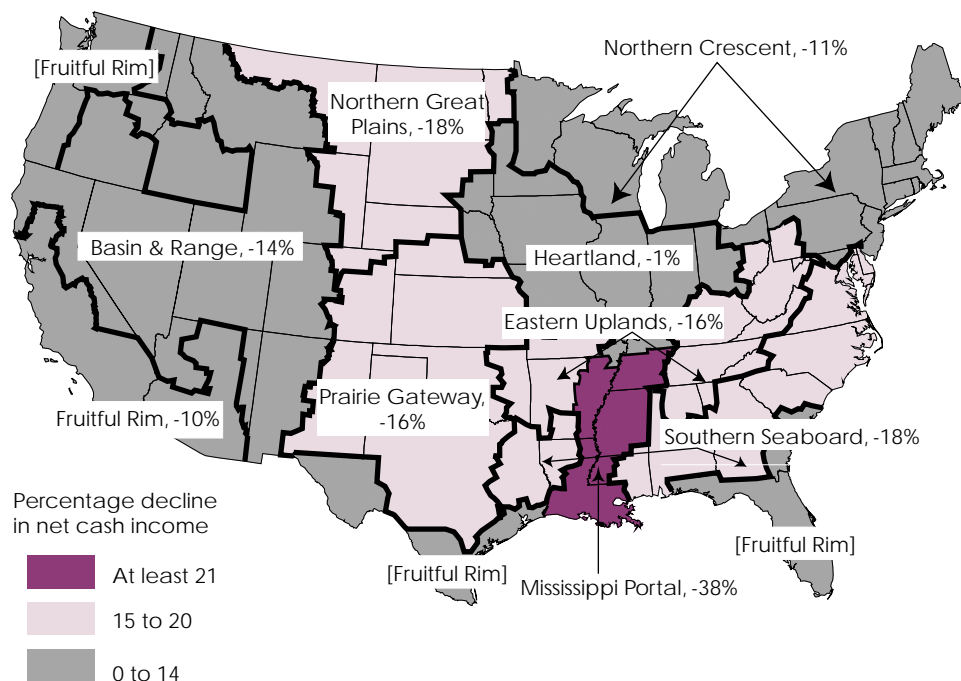
While fuel and oil expenses are directly accounting for only about 4.5 percent of total production expenses, rising energy costs affect a broader set of inputs. Higher

fuel prices are also reflected in higher expenses for machine hire and custom work, repairs, and transportation. In addition, higher expenses for fertilizer and chemicals (derived from oil) could be seen over the next several crop years if oil prices remain at current levels. Some farmers will likely make some adjustments to their production and harvesting practices to moderate impacts.

Nationally, net cash income for farm businesses (gross sales over \$50,000) is forecast down 11 percent for 2000, but up 12 percent from the 1994-98 average. The brunt of cash-flow problems is expected to fall most heavily on farming operations in the Mississippi Portal, Southern Seaboard, and Northern Great Plains regions, where average net cash income is forecast down 38 percent, 18 percent, and 18 percent, respectively.

For the Mississippi Portal, generally higher expenses and lower expected government payments for cotton and soybeans—major crops grown in the region—leave income down more than in any other

## Farm Income Is Forecast Down Sharply in the South in 2000



Based on average net cash income for U.S. farms and ranches with gross sales above \$50,000.

Economic Research Service, USDA

### Nearly All Farm Business Types To Show Decline in Net Cash Income in 2000

	Average net cash income				2000 change from:		Share of U.S farm businesses
	1994-98 average	1998	1999	2000	1994-98 average	1999	
	\$1,000 per farm					Percent	
<b>All U.S. farm businesses</b>	61.6	78.6	77.7	69.1	12	-11	100
<b>Commodity specialization*</b>							
Wheat	41.2	38.4	48.2	29.9	-28	-39	4
Corn	51.1	60.7	55.5	46.0	-10	-16	13
Soybeans	39.4	39.2	34.1	28.4	-28	-17	7
Mixed grains	51.9	59.5	59.0	47.8	-8	-19	14
Tobacco, cotton, and peanuts	68.8	83.3	67.8	39.3	-43	-42	5
Specialty crops	134.0	220.0	215.5	206.9	54	-4	8
<b>Livestock</b>							
Beef cattle	39.6	56.6	67.5	68.3	72	1	15
Hogs	60.4	55.1	60.1	91.5	51	52	5
Poultry	55.8	71.3	73.9	69.4	24	-6	5
Dairy	64.8	95.7	95.2	76.7	18	-19	15

Average for farms and ranches with gross sales above \$50,000. 1999 preliminary and 2000 forecast.

\*Specified commodity accounts for at least 50 percent of farm's sales.

Economic Research Service, USDA

region. In addition, while cotton and soybean receipts are rebounding from last year, rice prices are off, pushing total crop receipts down 2 percent.

The share of farms in the region expected to end the year in a favorable financial position (positive net income and relatively low debt) is lower than last year—57 percent, down from 67 percent. At the same time, the share of vulnerable farms (negative net income and relatively high debt) could rise to 7 percent, up from 5 percent last year. These farm businesses will need to address the shortfall in earnings quickly by liquidating inventories or tapping other working capital, selling off machinery and equipment, or offsetting farm losses with savings or off-farm income. Those without sufficient equity may need to restructure loan terms.

Average net cash income in the Southern Seaboard region is expected down, due primarily to lower crop receipts and higher production expenses. Livestock receipts should remain relatively steady for the year as lower dairy receipts offset higher hog and cattle receipts. Government payments, while falling in 2000, will not drop as much as in the Mississippi Portal, where program commodities account for more production. As in all other regions, the share of farms in a favorable financial position will fall slightly while the share of financially vulnerable farms will increase somewhat. In the Northern Great Plains, lower government payments and higher expenses are more than offsetting higher receipts.

In 2000, wheat farms (more than 50 percent of gross sales from wheat) will be affected more than any other major commodity farms, with average net cash

income dropping 39 percent. Livestock, primarily cattle, is important to many wheat farms, but higher cattle receipts will not be enough to offset lower government payments for wheat and increased production expenses. Corn farms could see net cash incomes fall an average 17 percent.

Net cash income for cattle operations will hold about even as higher cattle prices are offset by lower government payments (for crops) and higher expenses. Hog farms will be unique in 2000 as the one category of farm showing an income gain, forecast up 52 percent. Higher hog prices will overcome lower government payments and higher expenses.

Dairy operations will take a hit from all sides—lower dairy sales, only slightly higher government payments, and higher expenses. Average incomes are expected to fall 19 percent this year.

**Net cash income** is the difference between cash receipts and cash expenses. This cash-based concept measures the total income farmers receive in a given year, regardless of the year in which the marketed output was produced. It indicates the availability of funds to cover cash operating costs, finance capital investments and savings, service debts, maintain living standards, and pay taxes.

**Net farm income** is the difference between gross farm income and total expenses. This accrual-based concept measures the profit or loss associated with a given year's production. Additions to inventories are treated as income. Nonmoney items such as depreciation, the consumption of farm-grown food, and the net imputed rental value of operator dwellings are included.

These forecasts are averages for all farms in the regions or among farms producing specific commodities. Some farms will outperform the average in their region or commodity group. **AO**

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## Briefs

**Ag Economy****Gush in Oil Prices to Exert Modest Impact on U.S. Economy**

No farmer, truck driver, or automobile driver could overlook the rise in petroleum fuel prices of the last 13 months. No other farm input or major consumer price has risen as much as fuel in the past year. Retail diesel fuel prices reached \$1.50 per gallon in mid-March, up from a national average of 95 cents in February 1999. Gasoline prices shot up 60 cents per gallon, reaching more than \$1.60 per gallon in some areas.

Crude oil prices have driven the rise in fuel prices. On December 10, 1998, the crude oil price closed at \$10.76 per barrel (West Texas Intermediate)—the lowest since March 1974. A year later the crude price had climbed to \$25.23, peaking at \$34.13 on March 7, 2000. By late March, prices retreated to around \$27 at news that the Organization of Petroleum Exporting Countries (OPEC) would expand production to offset part of the past year's shortfall.

Crude oil prices had risen as OPEC, in cooperation with other major oil producers, reacted to very low oil prices by sharply cutting production. The production shortfall caused a drawdown of crude oil stocks at the rate of 1 million barrels per day over the last 13 months.

In late March, OPEC expanded official production quotas by 1.45 million barrels per day—short of the expected 1.75 million. During the OPEC meeting, Iran refused its expanded quota of 300,000 barrels per day. Nevertheless, Iran has expanded production since March, so the increases in oil supplied should amount to a daily quota expansion of 1.75 million barrels. This expansion, together with an increase in production by non-OPEC producers, will allow inventories to be replenished and demand for products to be met.

Many analysts expect gasoline prices to rise as much as an additional 10 cents per gallon in early summer, even as crude oil production expands and crude oil prices

recede. The normal seasonal spike in gasoline demand (associated with summer vacation travel) will keep gasoline prices high into mid-summer, as this source of crude oil demand competes with the need for inventory restocking to meet fall demand for heating oil. However, gasoline prices are expected to decline to \$1.35 by early August as summer gasoline demand recedes and supply expands.

As diesel fuel becomes more plentiful, national diesel prices could slip to \$1.40 per gallon by the time harvest begins this fall, down from \$1.45 per gallon at the end of March. But diesel fuel prices could be up sharply again by the end of the year if heavy vacation driving or cold winter weather results in an insufficient inventory buildup of crude oil. This would result in higher fuel costs at spring planting.

The impact on the U.S. economy is likely to be minimal this year and in 2001, even under a tighter supply scenario than currently expected. First, the recent crude oil

price rise, when adjusted for inflation, is a smaller percentage rise than in the major runups of 1974, 1979, and 1990.

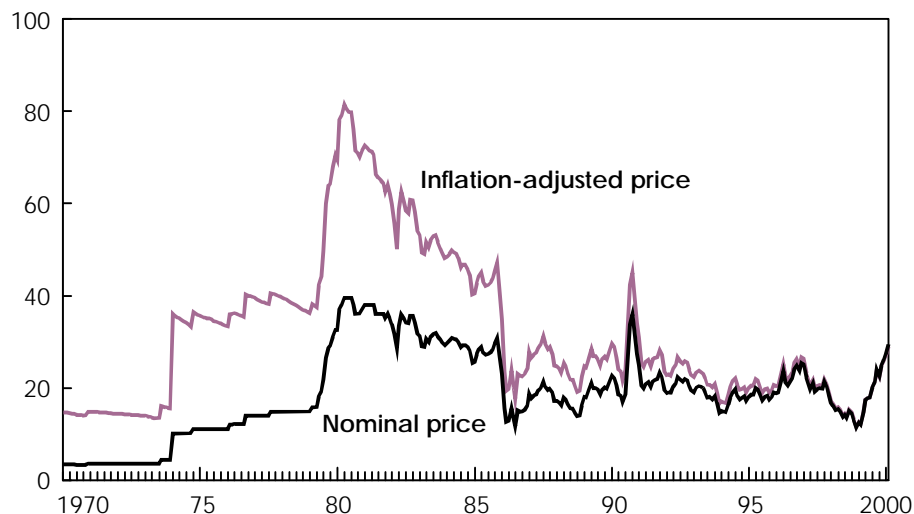
Moreover, deregulation and increased international competitiveness have limited the ability to pass on increases in raw material prices. Second, the goods-producing sectors of the economy, such as manufacturing and agriculture, have become more fuel-efficient in the last 30 years. Third, a larger share of U.S. output is in the service sector than in the 1970's, and this sector generally uses less energy per dollar of output than the goods industries. Finally, a large share of recent growth has occurred in the technology sectors (both goods and services), which also use proportionately less energy compared with "old economy" industries.

The overall rise in U.S. core consumer price inflation (excludes fuel and energy) as a result of higher oil prices should be less than 0.2 percentage points per year for 2000 and 2001. Growth in U.S. Gross Domestic Product (GDP) attributed to high oil prices is expected to be 0.1 percentage points lower in 2000.

The impact will be more noticeable for U.S. farmers than for the general economy. U.S. farmers—particularly producers of energy-intensive crops such as corn

**Real Price of Oil Remains Well Below Levels of Late 1970's And Early 1980's**

\$/barrel



Spot prices for West Texas intermediate crude.  
Source: Alaska Revenue Service and Haver Analytics.  
Economic Research Service, USDA

## WINDOW on the PAST

Excerpts from USDA publications

### Fuel Price Levels Uncertain

While gasoline prices are up slightly from a year ago, price movement over the next several months will reflect actions taken by the oil exporting countries.

The OPEC countries have been advocating price increases ranging from 0 to 30 percent with 10 to 15 percent being the most common increase discussed. Until this issue is settled, it is difficult to estimate fuel prices increases for 1977.

Price and allocation regulations on No. 2 heating oil, diesel fuel, and other middle distillates ended June 30, 1976. Price response to this action is uncertain, but the Federal Energy Administration assured Congress that action would be taken if prices for this winter's heating oil rose more than 2 cents per gallon. It seems doubtful that diesel fuel prices will rise by more than 1 or 2 cents per gallon for the remainder of 1976 and early 1977.

*Agricultural Outlook, December 1976*

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and cotton—should see substantial increases in production costs as output prices remain relatively unchanged (see farm income brief). Although the agriculture sector has become more petroleum-efficient with use of improved equipment and less energy-intensive cultivation practices, the sector must absorb much of the cost increases because it has limited ability, in the short run, to pass them on to consumers in the form of higher output prices.

Nevertheless, if crude oil prices remain in the current range of \$25-\$26 per barrel, U.S. agricultural output in 2000 will be relatively unaffected, and the impact on the consumer price index for food will be negligible. But in the longer run, higher costs would dampen agricultural production and farm income.

Fertilizer producers will see their production costs rise modestly. Production of ammonia-based fertilizer is extremely natural gas-intensive, and natural gas prices tend to move up and down with petroleum prices. But with plentiful supplies of natural gas, the rise in natural gas prices should be modest in 2000 and 2001, and fertilizer prices will be relatively unaffected by energy prices in 2000 and up only moderately next year. **AO**

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Watch the ERS Issues Center at [www.ers.usda.gov](http://www.ers.usda.gov) for more information on the impact of higher oil prices on U.S. agriculture.

### May Releases-USDA's Agricultural Statistics Board

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

#### May

- 1 Crop Progress (4 pm)
- 2 Weather - Crop Summary
- 3 Broiler Hatchery
- 4 Dairy Products  
Egg Products
- 5 Dairy Products Prices (8:30 am)  
Poultry Slaughter  
Sheep & Goats Predator Loss
- 8 Crop Progress (4 pm)
- 9 Weather - Crop Summary
- 10 Broiler Hatchery
- 12 Cotton Ginnings - Ann.  
(8:30 am)  
Crop Production ((8:30 am)  
Dairy Products Prices (8:30 am)  
Turkey Hatchery
- 15 Potato Stocks  
Crop Progress (4 pm)
- 16 Weather - Crop Summary  
Milk Production
- 17 Agricultural Chemical Usage -  
Field Crops  
Broiler Hatchery
- 19 Dairy Products Prices (8:30 am)  
Cattle on Feed  
Cold Storage  
Farm Labor  
Livestock Slaughter
- 22 Chickens & Eggs  
Crop Progress (4 pm)  
NASS Facts Newsletter
- 23 Weather - Crop Summary  
Catfish Processing
- 24 Broiler Hatchery
- 26 Dairy Products Prices (8:30 am)
- 30 Peanut Stocks & Processing  
Crop Progress (4 pm)
- 31 Weather - Crop Summary  
Agricultural Prices  
Broiler Hatchery

## Commodity Spotlight



# U.S. Farmers to Expand Plantings Of Soybeans, Corn, & Cotton In 2000

On the eve of planting decisions for major field crops in 2000, U.S. farmers faced mixed price signals—prices increased about 4 percent for corn, 8 percent for soybeans, and 6 percent for cotton from a year earlier, but showed a decline of about 11 percent for winter wheat and 5 percent for spring wheat. Producers' net response was a nearly 1-million-acre increase in planting intentions from last year's planted acreage.

Planting intentions for the eight major U.S. field crops (corn, soybeans, wheat, barley, sorghum, oats, cotton, and rice) total 252.6 million acres in 2000, up 0.4 percent from last year's planted area and down 3.2 percent from the most recent peak in 1996. Farmers intend to plant a record 75 million acres of soybeans (1 percent higher than in 1999 and the ninth straight increase), expand corn plantings 1 percent to 78 million, and plant the largest cotton area (15.6 million acres, up 5 percent) since 1995.

Trend yields, along with planting intentions, suggest a corn crop slightly larger than last year and a very large U.S. soy-

bean crop in 2000. In contrast, farmers intend to plant the smallest wheat acreage since 1973—down 2 percent from last year—and if yields equal the average for the last 3 years, wheat production will decline.

Farmers' planting intentions continue to show the effects of the 1996 Farm Act, which allows program crop producers more flexibility to respond to market signals by changing their enterprise mix. For example, with producers' participation in farm programs no longer tied to base acreage planting requirements and acreage reduction restrictions, farmers are free to pursue soybeans' relatively higher net returns, and soybean plantings grew by more than 10 million acres between 1996 and 2000 (assuming 2000 intentions are realized).

Soybean acreage has expanded in the wheat-dominated Central and Northern Plains. Some wheat acreage in the Central and Northern Plains was also switched to minor oilseeds, such as sunflowers and canola. Expansion in minor oilseeds was fairly dramatic in 1997 and 1998, but except for canola, has since tapered off.

For example, sunflower plantings in North Dakota increased by about 70 percent—from 1.2 million acres in 1996 to 2 million in 1998—declining to 1.7 million in 1999. Plantings are expected down again this year to 1.4 million acres as sunflower acreage makes way for the higher-net-return canola. As a result, farmers intend to plant a record canola crop (1.5 million acres) this year.

**Soybeans.** Intended soybean acreage for 2000 is 74.9 million acres—1 percent above last year's planted acreage, in part because of expected price gains and marketing loan benefits for soybeans relative to other crops. Soybean acreage is expected to remain unchanged in Iowa and decline slightly in Illinois, the two leading soybean producing states.

The increase in intended soybean plantings in the Central and Northern Plains outpaces that in the Corn Belt this year. Soybean plantings in the Central and Northern Plains are expected up 1.2 million acres—0.5 million in South Dakota, 0.4 million in North Dakota, and 0.3 million in Nebraska—as wheat acreage is switched to soybeans. In the Corn Belt, the 0.5-million-acre expansion of soybean plantings is concentrated in Minnesota (0.3 million), Wisconsin (0.1 million), and Indiana (0.1 million).

These estimates are based on farmer surveys conducted during the first 2 weeks of March. USDA's *Prospective Plantings* report for 2000, released on March 31, provides the first indication of farmers' spring planting intentions for major field crops. With adverse weather or significant changes in crop prices, actual plantings could vary from intentions. For example, persistent wet conditions in spring could delay corn plantings and cause a switch from corn to soybeans. USDA will release acreage estimates in its June 30 *Acreage* report, after crops have been planted or when planting intentions are more definite.

The report will be available at <http://usda.mannlib.cornell.edu/reports/nassr/field/pcp-bba/>



## Commodity Spotlight

In contrast, farmers in the Delta and Southeast (especially Louisiana and Mississippi) intend to decrease their plantings of soybeans for the third year after a spike in 1997. Poor soybean yields in 1998 and 1999 have helped to make cotton a more attractive alternative in these areas this year.

Provisions of the marketing loan program make soybean production attractive to many producers across the U.S. because of the relatively high loan rate and the potential for marketing loan gains (repayment of government loans below the original loan rate), and loan deficiency payments (LDP's) that are expected to provide a higher per-bushel net return than for competing commodities when the market price falls below the commodity loan rate. Other factors in the record expansion of soybean acreage since 1996 include: 1) planting flexibility under the 1996 farm legislation; 2) adoption of biotech herbicide-tolerant soybeans, which reduces input costs for many farmers, increasing profit potential; and 3) relative returns for competing crops.

**Corn.** Corn growers intend to plant 77.9 million acres in 2000, up 1 percent from last year's planted acreage because of higher expected corn prices, reflected in the new crop futures price after early January. To many producers in Illinois and Iowa, corn prices anticipated for the new crop appear attractive compared with returns for soybeans. Even though marketing loan provisions may entice producers to grow soybeans, the soybean-to-corn price ratio (after allowing for the effect of soybean marketing loans) at active planting decision times (February through March) was around 2.4 to 1—lower than the 2.5 breakeven price ratio at the national level, suggesting that corn prices could be competitive with soybean prices paid to producers in those two states. The 0.1-million-acre decline in soybean plantings in Illinois probably indicates a switch to corn plantings.

Intended corn plantings in the Corn Belt this year are largely unchanged from last year, with declines in Indiana, Minnesota, and Wisconsin (down 0.1 million acres each from last year), largely offsetting increases in Illinois and Iowa. Intended corn acreage is up a net 0.5 million acres

### Planting Intentions for Major Field Crops Nearly 1 Million Acres Above Last Year's Plantings

	1999			2000
	Intended acreage	Planted acreage	Harvested acreage	Intended acreage
<i>Million acres</i>				
Corn	78.2	77.4	70.5	77.9
Soybeans	73.1	73.8	72.5	74.9
Wheat	63.0	62.8	53.9	61.7
Sorghum	8.8	9.3	8.5	9.0
Barley	5.3	5.2	5.2	5.7
Oats	4.7	4.7	2.5	4.4
Rice	3.6	3.6	3.6	3.4
Cotton	13.9	14.9	13.4	15.6
Total	250.6	251.7	230.1	252.6

Economic Research Service, USDA

in the Central and Northern Plains, where increases in South Dakota, North Dakota, and Kansas total 0.6 million acres. Nebraska intentions indicate that producers will increase soybean plantings by 0.3 million acres, probably from acreage formerly in corn and winter wheat.

The increase in intended corn acreage is rather modest in the South (the Delta, Southeast, and Southern Plains regions), as decreases in corn acreage in Oklahoma and North Carolina offset increases in other states in the area. Corn land not being planted to corn in Oklahoma is probably switched to cotton or sorghum, or left fallow.

**Other feed grains.** Among "other feed grains," only **barley** planting intentions show an increase—10 percent above last year's planted acreage. Intended barley plantings are up 550,000 acres in North Dakota, the largest producing state, and 70,000 acres in Minnesota, the fifth-largest producing state. Factors in these increases are higher premiums for malting barley, gains of about 3 percent in barley farmgate prices, and abating concern about scab disease outbreaks from inadequate soil moisture. Producers in Montana have indicated intentions to lower barley plantings by 100,000 acres, probably because they switched to winter wheat last fall.

Planting intentions for **sorghum** are 3 percent lower than last year's planted acreage. The bulk of the acreage decline is in Texas, where sorghum area is down

about 0.4 million acres (an 11-percent decline), and in Kansas. Intended **oat** acreage is down 6 percent from last year's planted acreage, with most of the decline in Texas, the Dakotas, and Montana.

**Wheat.** Wheat area intentions for 2000 total 61.7 million acres—down 2 percent from last year's planted area. USDA's *Winter Wheat Seedings* report indicated in January that farmers had planted 42.9 million acres of winter wheat for harvest in 2000, but the *March Prospective Plantings* report revised this figure upward to 43.2 million—still the lowest since 1972 but declining only slightly from last year.

Responding to expected 11-percent-lower prices, and dryness in hard red winter wheat areas, particularly in the Central and Southern Plains, farmers in Oklahoma, Texas, Kansas, and Nebraska reduced winter wheat plantings last fall by 3.5 percent (0.9 million acres) from a year earlier and are shifting to soybeans and corn. Similarly, low prices for soft red winter wheat and dry conditions last fall led to a decline of 180,000 winter wheat acres in Illinois and Michigan. In Montana, winter wheat acreage was up 0.5 million acres from the previous year as acreage that had shifted to spring wheat last year switched back to winter wheat.

In 2000, U.S. farmers intend to lower spring wheat plantings (including durum) to 18.4 million acres, a decrease of 1 million from last year's planted area.



## Commodity Spotlight

### Expected Cutback in Biotech Share of Corn & Cotton Plantings

U.S. farmers have indicated intentions to cut back the share of acreage planted to corn and cotton developed through biotechnology. In 2000, shares of intended plantings for bio-engineered (biotech) corn and cotton are down in major producing states—from 33 percent to 25 percent for corn, and from 55 percent to 48 percent for cotton. This signals a reversal of rapid adoption trends for biotech corn and cotton since 1996, when biotech seed was introduced. Change in the share of intended plantings of biotech soybeans is less clear, but the biotech share of soybean intended plantings accounts for 52 percent of total soybean acreage this year.

The adoption momentum for biotech corn and cotton has slackened. Factors that affect farmers' net returns—such as whether yield-increasing potential offsets a higher cost for biotech seed, and whether observed infestation levels of certain target pests indicate likely savings on pesticide costs—play a major role in producers' decisions regarding planting biotech crops vs. using conventional varieties. Uncertain market prospects for biotech crops triggered by potentially widening interest in food labeling regulation in various countries, as well as possible shifts in consumer preferences toward nonbiotech foods might also contribute to the cutback (AO April 2000).

Although the decline in *biotech corn* plantings this year might partially reflect an overall market uncertainty for biotech crops, market demand for nonbiotech corn is currently very limited, accounting for only 1 percent of 1999 U.S. corn production, according to USDA's Economic Research Service. However, a reportedly record-low infestation level of European corn borers (ECB) in 1999, resulting from a general decline in borer populations, reduces the cost-effectiveness of biotech Bt varieties, which produce a protein that is toxic to the borer.

USDA's Cooperative State Research, Education, and Extension Service, as well as university studies, report that ECB density in a few big corn-producing states—e.g., Illinois, Wisconsin, and Minnesota—declined to less than 0.5 borers per stalk in 1998 and 1999, compared with the recent peak of 1.5-3.5 in 1995. Some university studies also indicate that Bt corn's yield-increasing potential and pesticide cost saving may not offset the higher seed cost (about \$9 per acre

more than conventional varieties). As a result, the share of acreage planted to Bt corn declined to 19 percent in major producing states from 25 percent last year. The share of intended plantings of herbicide-tolerant corn remains at 4 percent, but the share in 1999 included both biotech and conventional varieties.

Market demand for nonbiotech soybeans accounts for only about 2 percent of U.S. soybean production. In contrast to corn, *herbicide-tolerant soybeans*—the most rapidly adopted biotech crop to date—remain popular with farmers this year. USDA's National Agricultural Statistics Service (NASS) estimates that just over half (52 percent) of this year's soybean acreage will be planted to herbicide-tolerant soybeans (excluding nonbiotech herbicide-tolerant varieties) compared with 57 percent last year (when NASS estimates included both biotech and conventional herbicide-tolerant varieties).

According to a recent study by the National Center for Food and Agricultural Policy, herbicide-tolerant soybean varieties are popular with farmers not because of any significant yield-increasing potential, but rather because of the simplicity and flexibility of a weed control program that utilizes a single herbicide without causing crop injury. In addition, planting herbicide-tolerant soybeans may provide cost savings from fewer herbicide applications, and herbicide-tolerant soybean production is compatible with low-tillage and narrow-row planting systems, which gained popularity over the last decade. These distinctive advantages for herbicide-tolerant soybeans probably play a key role in keeping biotech soybean planting intentions near one-half of soybean acreage.

The share of planting intentions for *herbicide-tolerant cotton* is down, dropping from 28 percent last year to 20 percent. The increase of nearly 200,000 acres in mostly conventional upland cotton acreage in California, where little biotech cotton is grown, explains about half the decline. Another factor is the inflated 1999 share of biotech cotton following the large abandonment of cotton acreage (about 1 million acres, more likely conventional acreage) in Texas last year, because last year's shares are calculated as a percent of *harvested* acres. The expected biotech share in 2000 is calculated as intended biotech plantings divided by total intended *planted* acreage.

Prospective durum wheat plantings are down 0.4 million acres—an 11-percent drop from last year—and other spring wheat acreage will fall by 0.4 percent to 0.5 million acres, with reductions mostly in South Dakota and Montana.

In North Dakota, other spring wheat intended plantings are up 0.2 million acres, reversing last year's shift from other spring wheat to durum. The 1999

shift to durum resulted from availability of an attractive crop insurance policy that overwhelmed market signals that would otherwise have reduced production of durum, but instead stimulated an increase of 0.5 million acres in North Dakota durum plantings. The insurance policy is cut back substantially this year in terms of number of counties where coverage is offered and in the level of price guarantees, which are now more in line with cur-

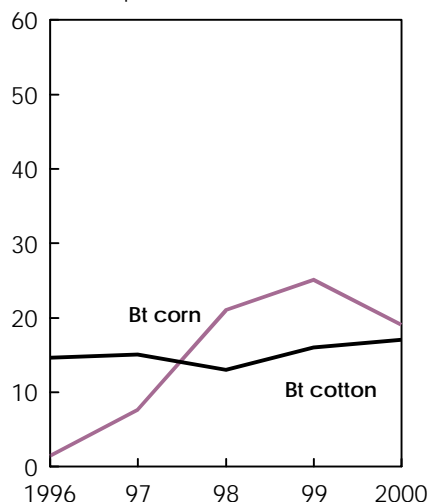
rent market prices. Some farmers have returned to planting other spring wheat. Nevertheless, intended plantings for other spring wheat are still down 0.5 million acres overall from last year as producers switch to more profitable alternatives such as soybeans and corn.

**Cotton.** Planting intentions for cotton total 15.6 million acres, an increase of 5 percent from last year. Although cotton area

## Commodity Spotlight

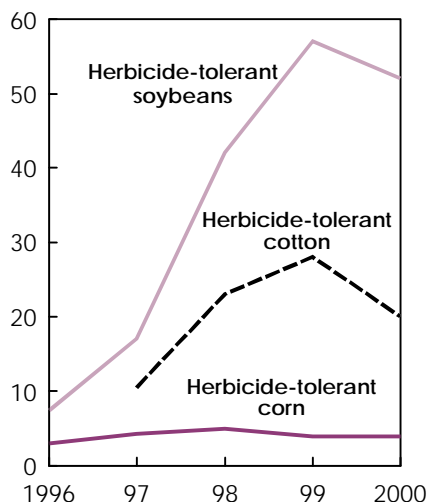
## One-Fifth of Corn Plantings in 2000 To Be Insect-Resistant Varieties...

Percent of planted acres



## ...and Over Half of Soybean Plantings to Be Herbicide-Tolerant

Percent of planted acres



Excludes stacked-gene corn and cotton, which have both insect-resistant and herbicide-tolerant traits. 2000 projected. 1996-97 data from USDA's Agricultural Resource Management Study; 1998-2000 from National Agricultural Statistics Service, USDA.

Economic Research Service, USDA

is anticipated higher in all producing states, the bulk of the increase is expected in five states: Texas, California, Louisiana, North Carolina, and Mississippi. While market prices for cotton increased about 6 percent from last year, the expected per-unit return in 2000 (after adjusting for marketing loan gains and LDP's) shows an increase of about 7 percent. This makes cotton plantings attractive relative to competing crops such as corn, wheat, sorghum, and even soybeans.

In the South, planting intentions indicate soybean acreage (expected to decline

about 0.4 million acres) will likely be switched to cotton (expected to increase 0.3 million acres). Expected net returns are higher for cotton than for soybeans, reflecting a soybean-to-cotton price ratio of about 8 (after adjusting for the effects of both cotton and soybean marketing loans) at the planting decision point (February through March). This compares with an estimated breakeven price ratio of about 10 between these two competing crops. In addition, an improved crop insurance program attracted some producers to growing cotton this year.

**Rice.** Growers intend to plant nearly 3.4 million acres to rice, an overall 6-percent decline from 1999, with long grain plantings down 8 percent and combined medium and short grain plantings up 4 percent from last year. Planting intentions are lower this year in all southern states except Missouri, with Mississippi and Texas indicating the largest percentage declines. In contrast, growers in California indicate a 5-percent expansion in rice plantings, a result of relatively strong prices for medium grain rice, the bulk of the state's crop. A record 1999 U.S. rice crop and an 80-percent increase in ending stocks from last year have lowered the expected price for the 2000 rice crop, making plantings to competing crops such as cotton and soybeans more attractive. **AO**

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The first production and price forecasts  
for field crops in 2000/01



In the next issue of *Agricultural Outlook*



## Farm Finance



## Farm Finances Remain Healthy

**T**he overall financial health of farmers and their lenders remains solid in early 2000, despite low prices for major farm commodities over the last couple of years. Large Federal payments to farmers have mitigated the negative effect of lower prices on farm financial conditions and have played a key role in stabilizing farm income, particularly for farms producing food and feed grains, oil crops, and cotton. For 3 years beginning in 1998, farmers are expected to receive \$49 billion in direct government payments, up from \$22 billion in 1995-97. This includes \$14 billion of emergency payments from legislation enacted in 1998 and 1999.

Government payments, by providing liquidity to farmers, are reducing demand for credit and underpinning farm creditworthiness. Lenders have ample funds to loan and most farmers who applied for credit have been able to obtain credit for the 2000 crop year. However, without additional emergency farm payments this year, farm lenders will be dealing with a farm sector whose net cash income is forecast to decline 11 percent in 2000 (see Farm Income brief on p. 6).

Many farmers, particularly small operators, depend more on off-farm than farm income for total household income. On

average, 88 percent of total farm operator household income in 1998 came from off-farm sources. Even for large family farms (total sales \$250,000 to \$500,000), a substantial portion of total household income in 1998—44 percent—came from off-farm sources. These large family farms had average household income exceeding twice the average for all U.S. households in 1998, with a very large contribution to total income coming from off-farm wages. For the majority of family farms, stability in off-farm income is at least as important to creditworthiness and overall financial health as stability in farm income. The general economy is strong, and prospects for off-farm income remain generally good across the country.

Nevertheless, if low commodity prices persist throughout 2000, cash-flow problems for farm businesses—particularly large ones that depend heavily on farm income—could grow in the absence of continued emergency farm payments. In 2000, farmers are expected to substantially increase the use of their available debt repayment capacity, a measure of the extent to which farmers are using their lines of credit. Farmers are expected to use almost 66 percent of the debt that could be supported by their current incomes. This is up from an estimated 56

percent in 1999, but well below the 1981 peak of 107 percent.

### *Farm Debt Stable, Interest Rates Up*

Farm debt at the end of 2000 is forecast at \$173 billion, essentially unchanged from 1999. Uncertainty over how long commodity prices will remain low is depressing demand for farm credit. In addition, an upward trend in farm interest rates makes borrowing for capital expenditures more expensive. After rising briskly during much of the 1990's, farm debt has leveled off since 1998, as farmers have been more conservative with their borrowing.

The national farm balance sheet remains strong. Farm-sector equity is projected to total \$900 billion at the end of 2000, up slightly from levels reported the last few years. Farmland currently accounts for roughly 77 percent of farm-sector assets, and a little over half of total farm debt is collateralized by farmland. Consequently, the financial security of farm borrowers and their lenders is affected by changes in farm real estate values.

Nationally, farmland values have increased at an average compound rate of over 4 percent since 1987. This has significantly improved the financial position of many farm businesses, strengthening their ability to borrow and to weather the current period of lower cash receipts from crops.

Since 1991, the total value of farm real estate rose over \$200 billion to \$831 billion in 1999, although growth has slowed in recent years with sharply lower field crop prices. (Growth in farmland values is expected to be minimal in 2000.) Farmland values have been aided by record government payments and by other factors, such as the nonfarm or urban demand for farm real estate. ERS estimates that the urban influence on farmland values accounts for 25 percent of the market value of all U.S. farmland.

Interest rates on farm loans “bottomed out” during the first quarter of 1999 and then trended higher into early 2000. Increases are largely the result of five 25-basis-point increases in the Federal funds target rate instituted by the Federal Reserve since June 1999 (1 basis point is 0.01 percentage

## Farm Finance

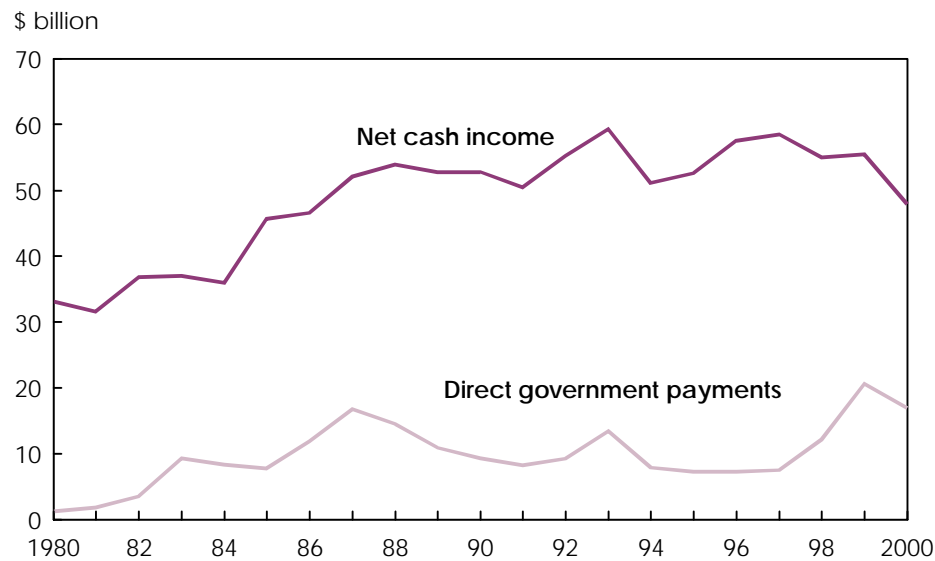
point). Further increases in the Federal funds rate are likely in 2000 as the Federal Reserve tries to rein in rapid economic growth and thereby avert inflation. Because commercial lending rates, such as farm loan rates, are tied to the Federal funds rate, further increases in farm loan rates are likely in 2000 (see the following article on interest rate prospects).

A rise in interest rates on new farm loans could put additional financial burden on highly leveraged farms, particularly those that have borrowed heavily for recent expansion in production. On the other hand, some farm households benefit from rising interest rates because their interest income from investments rises.

Farm debt tends to be concentrated among a relatively small number of farms, with larger farms more dependent than smaller farms on borrowed capital and on farm income to repay loans. Roughly half of all farms report having no debt at yearend.

Despite expected higher farm interest rates for 2000, total interest expenses paid by the farm sector are expected to rise only modestly in 2000 as total credit use falls somewhat and there is the usual delay in repricing (from refinancing) much of farm debt. Some farm debt, par-

## Increase in Government Payments Maintained Farm Income in 1999



1999 preliminary; 2000 forecast.

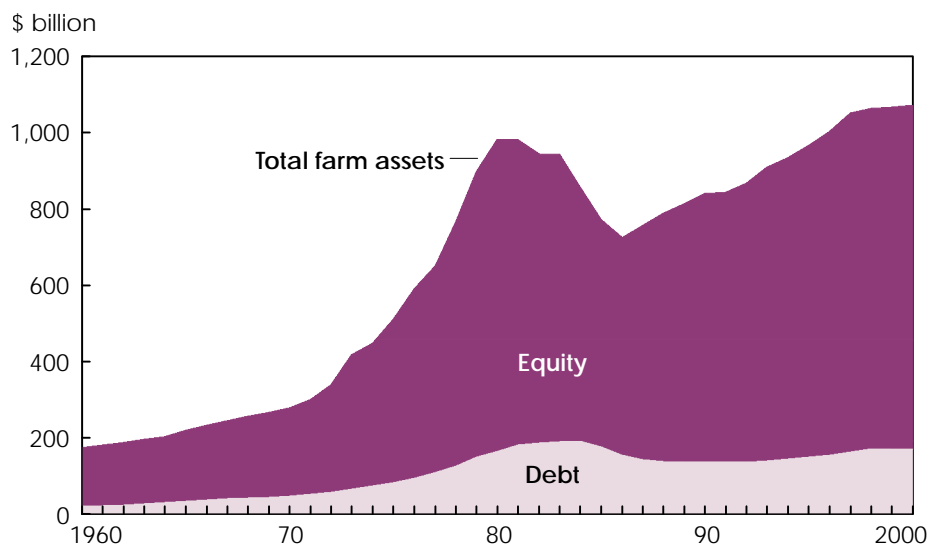
Economic Research Service, USDA

ticularly farm real estate debt, is financed over longer terms at fixed interest rates. Farmers and their lenders tend to shift from fixed-rate loans to lower cost variable-rate loans when interest rates rise.

To help farmers cope with cash flow problems in 2000, Congress boosted the

authority of the Farm Service Agency (FSA) to make and guarantee farm loans. This authority includes the ability to make farm ownership and operating loans at interest rates of 5 percent and reduce rates on guaranteed loans by 4 percentage points. As the "lender of last resort" for the farm sector, FSA provides or guarantees loans to farmers who cannot otherwise qualify for loans at commercial institutions.

## Farm-Sector Debt Flattens in 1999 and 2000 While Equity Continues Growing



1999 preliminary; 2000 forecast.

Economic Research Service, USDA

Congress has authorized more than \$4 billion in FSA guaranteed loan program lending and \$1.7 billion in direct loan program lending for fiscal 2000. In fiscal 1999, FSA made or guaranteed \$3.8 billion in farm loans. If all authorized funds were loaned in fiscal 2000, it would be the highest level of USDA farm lending since the farm financial stress of the mid-1980's. As of the end of April, it appears that funding is sufficient to meet program demand.

**Farm Lenders Remain Strong**

Financial institutions serving agriculture continued to experience improved conditions in 1999, and some additional gains are possible in 2000. The sound position of agricultural lenders reflects the generally healthy state of farmers' finances in the mid-1990's and a strong nonfarm economy. But continued low prices for



## Farm Finance

key agricultural commodities, regional weather and disease problems, and uncertainty over future Federal farm support continue to raise concerns among lenders about the ability of some farmers to repay new or existing loans.

At the end of 1999, *commercial banks* accounted for 40 percent of all farm debt outstanding, making them the leading agricultural lenders. The *Farm Credit System (FCS)*, which holds 27 percent of all farm debt, is second to commercial banks. Farmers obtain 22 percent of their credit needs from *merchants, dealers, and individuals* (e.g., through land purchase credit contracts). *FSA* holds about 5 percent (and guarantees another 5 percent) of all farm debt, and its programs target family-sized farms with limited resources. For these farms, *FSA* is a more important source of credit than its national share of total farm debt implies. A handful of *life insurance companies* supplies about 6 percent of credit to the agriculture sector.

All major institutional lender groups continue to report generally healthy farm loan portfolios. Most lenders report low levels of delinquencies, foreclosures, net loan charge-offs, and loan restructuring. Even *FSA* reported an improving farm loan portfolio for the 11th consecutive year. These aggregate farm lender indicators are expected to remain favorable barring a sustained increase in farm financial stress. Furthermore, even if financial stress were to increase markedly, there would be a lag before it affected financial institution performance at the national level.

The financial health of commercial banks specializing in agricultural lending (agricultural banks) remained sound going into 2000. Delinquent farm loan volume and charge-offs of agricultural loans did increase modestly during 1999, and bank examiners noted greater carryover debt at farm banks. Nonetheless, agricultural banks reported high average returns on equity and assets, and loan loss provisions were consistent with an optimistic outlook regarding future loan losses. These developments indicate that problems in the farm sector have not seriously affected farm bank loan portfolios. Only one agricultural bank failed in 1999, and only five failed during 1994-99.

## WINDOW on the PAST

Excerpts from USDA publications

### Mortgage Rates Low

Interest rates on long-term loans are now the lowest they have ever been in the United States. The rate for new loans from the Federal land banks is 4 percent, and the rates of most other lending agencies have shown sharp reductions.

The unusually low farm-mortgage interest rates make it desirable for farmers who have short-term or high interest-rate mortgages to refinance such loans on a long-time basis.

***The Farm Outlook for 1937***

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Banks continue to have sufficient funds to lend to creditworthy farms. The average loan-to-deposit ratio for agricultural banks was nearly 72 percent as of the first of the year, up from 68 percent a year earlier and 57 percent at the end of 1992. However, in the current financial environment, commercial banks can easily access nondeposit sources of funds. The Gramm-Leach-Bliley Act of 1999, which became law in November 1999, allows farm banks to supplement other sources of loanable funds by providing improved access to a stable source of long-term funds from the Federal Home Loan Bank System. Commercial banks, as well as other lenders, can also use the Federal Agricultural Mortgage Corporation to fund farm and mortgages.

The financial condition of the Farm Credit System remained solid entering 2000. Loan volume was up 3 percent in 1999, and capital continues to grow. Loan portfolio quality is strong, having improved since December 1998. During 1999, the FCS reported net income of over \$1.2 billion, down only slightly from 1998. In the last 2 years, higher provisions for loan losses, many in conjunction with problem loans originated by one FCS bank (which were loans to co-ops and not farmers), have reduced reported FCS income.

FSA's direct loan program delinquency rate fell for the 11th consecutive year to 15.6 percent at the end of fiscal 1999. Outstanding direct loan volume also slipped below \$9 billion as loan repayments and write-offs exceeded new lending activity. Extensive use of loan-servicing options (e.g., deferred payments) has

helped keep FSA delinquencies from rising. However, delinquent guaranteed loan volume rose slightly to 2.4 percent, the highest delinquency rate since fiscal 1985, when the guarantee programs were first emphasized.

Life insurance companies historically have provided mortgage credit to the farm sector and now specialize in supplying large credit needs, often in amounts exceeding \$1 million. Life insurance companies that are still active in farm lending report that they have adequate funds for qualified borrowers and that current borrowers continue to meet repayment terms.

While the financial health of agriculture has slipped somewhat over the last couple of years, it remains strong for most farm types and in most regions. Overall, leverage remains at modest levels, and most farmers have been able to repay their loans or work out alternatives with their lenders. By stabilizing farm incomes, government assistance has in turn played an important role thus far in stabilizing farmland and farm credit markets. Major farm lenders have been able to accommodate their agricultural borrowers and in general are in good financial condition. **AO**

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## Rising Interest Rates Place Upward Pressure On Farm Lending Rates

Higher nominal and real interest rates in the general economy are expected in second-half 2000 and first-half 2001, putting upward pressure on interest rates for farm loans. Interest rates have moved sharply higher in the general economy since fall 1998. From October 1998 through late March 2000, nominal 3-month Treasury bill interest rates rose roughly 1.8 percentage points—from slightly below 4 percent to over 5.7 percent. Over the same period, the 10-year Treasury bond was up approximately 1.6 percentage points to 6.1 percent.

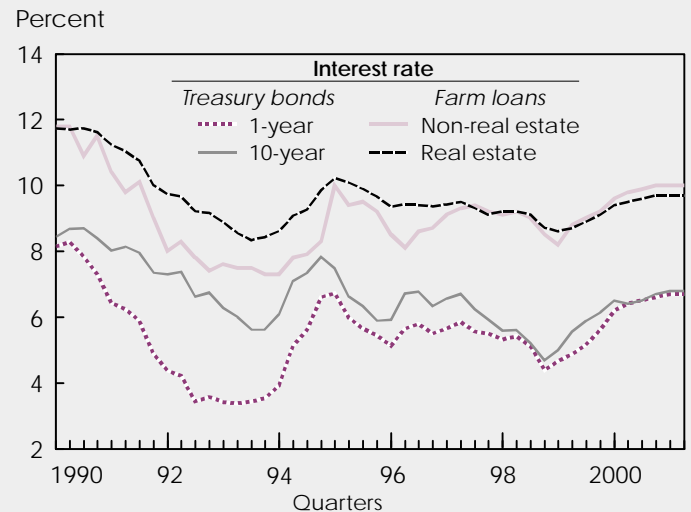
Inflationary expectations have changed little since fourth-quarter 1998. Short-term median inflationary expectations (1 year ahead) increased only 0.15 percent, while median long-term (10-year) inflationary expectations remained unchanged at 2.5 percent, according to the Survey of Professional Forecasters. Thus, the rise in both short- and long-term nominal interest rates is due almost entirely to rising real interest rates (nominal rate minus inflation rate equals real interest rate).

From early 1995 until late 1998, Treasury bond rates moved generally downward, primarily because of declining short- and long-term inflationary expectations, and the Asian financial crises of 1997 and 1998. The Asian financial crises not only lowered nominal and real U.S. interest rates (especially for high-quality debt securities) by slowing world growth and world credit demand, but also increased demand (and prices) for U.S. financial assets (e.g., money market instruments, bonds, and stocks) as a relatively low-risk investment. By fourth-quarter 1998 (1998IV), nominal yields on 1- and 10-year Treasury bonds fell to approximately 4.4 and 4.7 percent.

Four main factors have contributed to rising real interest rates since 1998IV: 1) strong growth in private credit demand, 2) tighter monetary policy to head off higher future inflation, 3) lower household saving, and 4) weaker growth in foreign demand for U.S. financial assets in recent quarters. Growth in credit demand by households and nonfinancial businesses has accelerated sharply since 1997. After growing at a 6.4-percent rate in 1997, household credit growth accelerated to 8.7 in 1998 and 9.4 percent in 1999. Nonfinancial business credit demand has shown a similar pattern of strong growth in recent years, up 8.2 percent in 1997 and accelerating to 10.5 percent in 1998 and 10.6 percent in 1999. Growth in household and business credit demand is not expected to slow substantially until 2001.

A tightening of monetary policy since summer 1999 has also raised short-term interest rates. Between late June 1999 and late March 2000, the Federal Reserve Board has raised its target for the Federal funds rate from 4.75 to 6.00 percent (this is the rate depository institutions charge each other for borrowing funds on deposit at Federal Reserve Banks). By

### Farm Loan Rates at Commercial Banks Will Likely Continue to Rise Through Mid-2001



Nominal non-real estate loans and 1-year Treasury bonds are relatively short-term rates; real estate loans as well as 10-year Treasury bonds are relatively long-term. Forecast beginning 2000(II) for Treasury bonds; 2000(I) for non-real estate loans; and 1999(IV) for real estate loans. Source: Federal Reserve Board of Governors, *Federal Reserve Statistical Release* (G.13) and *Agricultural Finance Databook*.

Economic Research Service, USDA

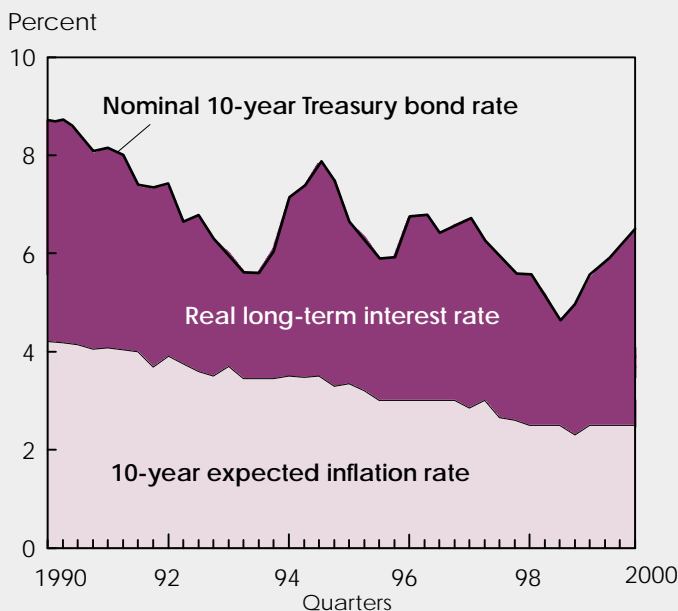
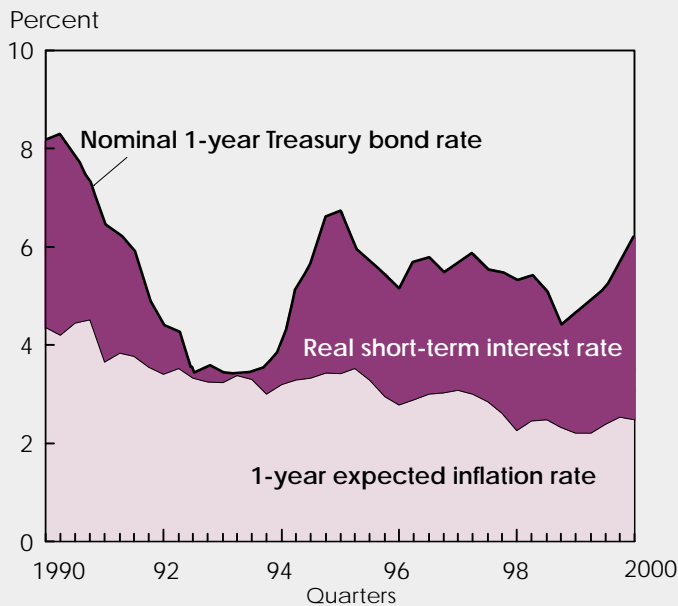
raising the costs of acquiring bank reserves for depository institutions, the Federal Reserve Board has placed upward pressure on short-term interest rates and, to a smaller extent, long-term rates. Substantial additional tightening by the Fed remains likely in second-half 2000 and early 2001, unless economic growth slows substantially and inflation remains low.

The supply of savings entering credit markets directly or indirectly from households has slowed sharply since 1998IV. Total household savings declined from \$228 billion in 1998IV to \$120 billion in 1999IV as the personal saving rate (savings as a share of personal disposable income) fell from 3.5 percent in 1998IV to 1.8 percent in 1999IV. The personal savings rate is expected to increase only modestly (to 2 percent) in 2000 and to reach 2.8 percent in 2001.

Foreign purchases of U.S. financial assets, although still very large, have slowed in recent quarters. Foreign financial investment in the U.S. in 1997 through mid-1999 surged with the onset of the Asian financial crises and accompanying slower foreign growth in 1997 and 1998, and with the boom in the U.S. stock market. Net foreign purchases of U.S. financial assets peaked in 1999II at \$479 billion, slowing to \$350 billion by 1999IV. With foreign growth and demand for capital expected to increase substantially in 2000 and 2001,

## Farm Finance

### Short- and Long-Term Interest Rates Are Rising As Inflationary Expectations Hold Steady



Expected inflation rates based on consumer price index (CPI).

Sources: For nominal Treasury bond rates, Federal Reserve Board of Governors. For expected inflation rates, Survey of Professional Forecasters (compiled by the Federal Reserve Bank of Philadelphia).

Economic Research Service, USDA

Both Treasury rates and farm loan rates from commercial banks are expected to rise throughout 2000 and the first half of 2001, although expected increases are more moderate than over the last 2 years, because of somewhat slower real growth and less additional tightening by the Federal Reserve. Interest rates on farm loans will likely increase less than most nonfarm interest rates. A mild increase in inflation is expected. Continued strong, though slower, productivity growth will moderate upward pressure on inflation resulting from a combination of very high employment rates in labor markets, general tightness in product markets, and higher overall petroleum prices.

Rates charged on farm loans must in the long term earn competitive risk-adjusted returns for lenders that are comparable to returns from nonfarm financial assets. Therefore, the rise in real interest rates in the general economy will continue to place upward pressure on farm loan rates charged by private lenders. However, the expected rise in farm loan rates is less than for nonfarm interest rates. This reflects the strong competition from the Farm Credit System—which aggressively pursues the larger, more established, lower-risk farm borrowers—as well as the less interest-sensitive deposit base of rural banks. Rural banks are heavily dependent on consumer deposits (checking and savings accounts, plus time deposits of less than \$100,000) for the bulk of their loan funds. Rates paid on consumer deposits typically respond sluggishly and with a lag to rising open market interest rates.

In addition, loan rates at rural banks typically respond more slowly to changes in open market interest rates. These banks generally prefer to price their business loans at the average cost of bank funds, keeping the interest rate margin between the cost of funds (the rate paid to depositors) and return from lending (expected interest rate paid by borrowers) fairly stable.

Finally, because of the overall weaker farm income outlook for 2000 as well as recent increases in real interest rates, agricultural lenders will be more hesitant to substantially raise real interest rates charged to farm borrowers. If real farm lending rates increase substantially, lenders risk higher probabilities of loan defaults and the prospect of reduced overall loan quality. Private farm lenders also face strong competition from the Farm Credit System. The competition from FCS further reduces expected increases in real interest rates on farm loans. **AO**

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real interest rates and expected returns on U.S. assets (e.g., stocks, bonds, and real estate) will likely have to rise further to encourage increased purchases of U.S. financial assets by foreigners.



## Resources &amp; Environment



## Curbing Nitrogen Runoff: Effects on Production & Trade

As U.S. policy makers seek to minimize adverse effects on the environment from agricultural operations, their decisions will have impacts on agricultural trade and on other aspects of the agricultural economy. Since alternative policy tools may be used to achieve environmental goals, information on potential trade and other effects of specific policy instruments can be useful for decision makers, who face trade-offs among consumer, producer, taxpayer, and environmental interests.

Most studies of trade and environment linkages have focused on the manufacturing sector, where environmental policies have shown little direct influence on trade. This may be because the cost of compliance with environmental regulation is a relatively small fraction of the total cost of production and has little price impact, or because limitations in measuring the stringency and enforcement of environmental regulation hinders accurate estimation of production cost, price, and trade effects. Such studies often use pollution abatement costs as a measure of the cost of environmental regulation, but if such costs are underreported (due either to lack of reporting or to lack of implementation of abatement technologies),

they may not reflect the true effect of environmental regulation on trade or other areas of the economy.

Sales abroad are an important component of market returns for a number of commodity producers. Research on agricultural trade shows varying effects of environmental regulations and policies. If domestic environmental policies have relatively little effect on production costs, agricultural trade effects would be expected to be small as well. Some studies show that specific environmental policies may have significant trade effects and large increases in production costs. For example, agricultural chemical use restrictions in the U.S. and the European Union (EU) may significantly affect trade by reducing production, which can dramatically increase production costs per unit of output while also shrinking exports.

Likewise, a ban on methyl bromide use as a soil fumigant in the U.S. may boost U.S. imports of specific vegetables from Mexico (AO August 1999).

Implementation of the EU's Nitrate Directive (which limits nitrogen applications to the soil) would have considerable effects on EU net trade of livestock, livestock products, grains, and oilseeds, according to one study by USDA's Economic Research Service (ERS).

This article focuses on a specific policy goal—an environmental goal of reducing nitrogen releases that result from agricultural operations. Excess nitrogen released into waterways promotes growth of microscopic organisms that use up dissolved oxygen, leaving insufficient oxygen in the water for other forms of aquatic life, such as fish. Excess nitrogen is a key issue in strategies to address the hypoxic zone in the Gulf of Mexico (AO November 1999), and in the Environmental Protection Agency's development of regional water quality nutrient criteria under the Clean Water Action Plan.

A goal of 10-percent reduction in nitrogen releases from agriculture is used here to illustrate the effects of a small change in nitrogen releases on production and trade. To reduce nitrogen releases by 10 percent, four alternative generic policy approaches are evaluated:

- a "green payment" which producers receive from the government to compensate for lower returns resulting from lower crop yields caused by reduced fertilizer use;
- regulation to reduce per-acre nitrogen use;
- a tax on nitrogen fertilizer; and
- buffer strips and other land retirement to intercept field runoff and reduce nitrogen fertilizer use.

Economic and environmental effects of alternative environmental policies were analyzed using the U.S. Regional Agricultural Sector Model (USMP) developed by USDA's Economic Research Service. With its linkage to the Erosion/Productivity Impact Calculator (EPIC), USMP can estimate how changes in environmental or other policies affect U.S. production, demand, trade, input use, environmental indicators, and world prices. Environmental indicators include soil erosion and erosion damages, and releases of nitrogen, phosphorus, and other chemicals. USMP includes 44 agricultural commodities and processed products, 23 inputs, and is disaggregated into 45 regions within the U.S.



## Resources & Environment

### Policies for Reducing U.S. Agricultural Nitrogen Releases Would Affect Market Prices and Farm-Sector Receipts

Indicator	Nitrogen-release reduction policy				
	Base <sup>1</sup>	Green payments	Regulation	Nitrogen tax	Land retirement/buffer strip
<i>Percent change from base</i>					
<b>U.S. wheat market example</b>					
Production (million metric tons)	67.3	-0.7	-2.3	-3.1	-4.0
Consumption (million metric tons)	34.0	-0.1	-0.3	-0.4	-0.5
Trade volume (million metric tons)	37.4	-1.0	-3.4	-4.5	-5.8
Market price (\$/metric ton)	152.5	1.1	3.6	4.8	6.2
<b>Farm sector gains/losses<sup>2</sup></b>					
All producers, net cash receipts (\$ billion)	63.3	5.9	3.1	-0.2	4.9
Crop (\$ billion)	37.7	10.1	5.6	0.3	8.2
Livestock (\$ billion)	25.7	-0.4	-1.2	-1.6	-2.0
Consumer surplus (\$ billion) <sup>3</sup>	422.1	-0.1	-0.3	-0.4	-0.7
<b>Environmental effects<sup>2</sup></b>					
Erosion damage (\$ billion)	1.8	1.2	0.5	-0.5	-2.4
Total soil erosion (million met tons)	1,820.8	1.3	0.4	0	-2.8

Policies are to reduce nitrogen releases by 10 percent. Numbers are rounded.

1. Analysis for 2001, using ERS February 1998 baseline projections. 2. Policies applied to all cropland except fruits and vegetables. 3. Consumer surplus is the amount of money consumers would be willing to pay for goods (e.g., food) in excess of what they are required to pay (i.e., market prices). Thus, the surplus shrinks as prices rise.

Economic Research Service, USDA

The first three approaches require a reduction in nitrogen use nationally by a little under 20 percent to achieve a 10-percent reduction in nitrogen releases. The green payment policy would require payments of about 2.5 times the price of nitrogen fertilizer to attain this reduction, and the tax on nitrogen fertilizer would have to approach 75 percent. For the regulation scenario, a lowering of per-acre nitrogen fertilizer applications was simulated. For the land retirement/buffer strip scenario, two-thirds of the 10-percent reduction in nitrogen release was assumed to come from the interception of runoff by buffers and about one-third from the decrease in acreage planted.

### Which Scenario Produces Strongest Market Effects?

Economic and environmental effects of the four alternative environmental policy types were analyzed using the U.S. Regional Agricultural Sector Model. The analysis covers policy effects on most major agricultural commodities. In terms of commodity market effects on grains, wheat is generally representative of most

grains in the analysis. Results show that in all four scenarios, wheat production declines from reduced acreage or reduced nitrogen fertilizer, or both. Export volume decreases under all scenarios but drops the most in the land retirement alternative. A land retirement policy reduces wheat acreage and production the most, with correspondingly greater price-boosting effects and consumption and export reductions.

Wheat exports and other indicators are affected least under the green payment scenario. Green payments, if not tied to acreage reduction, encourage acreage expansion, which partially offsets the production-depressing effects of reduced fertilizer use. Hence, the resulting consumption, price, and trade effects of this policy are the most modest of the four alternatives.

A regulatory policy that restricts per-acre nitrogen use has greater market effects, in general, than a green payment. Cultivated acreage increases slightly under the regulatory policy, countering some production

contraction from reduced fertilizer use per acre, but acreage increases less than under the green payment policy. Wheat prices rise and exports slip more than under the green payment alternative.

Under a nitrogen tax, cultivated wheat acreage declines, reinforcing the production-depressing effect of reduced nitrogen use. Market prices rise, second only to the land retirement alternative. Consumption and exports fall, second only to the land retirement alternative.

The effects of these policy alternatives on soybeans, which fix nitrogen and receive much less nitrogen fertilizer than grains, are markedly different from the effects on wheat. Soybean production, consumption, and exports generally increase as some grain producers switch to soybeans, with lower prices under all four scenarios except the land retirement alternative.

### Comparing Overall Effects of Policy Alternatives

From a farm-sector perspective, the four policy alternatives produce varying effects on consumers, crop producers, and livestock producers. Since prices rise proportionately more than production falls, crop producers' net cash receipts rise and livestock producers' receipts decline because of higher feed costs.

Under a green payment scenario, crop producers as a group gain from higher market prices as fertilizer use and production fall, and in addition, receive \$2.9 billion in government payments for reduced fertilizer use. Consumers and livestock producers lose as crop prices rise, but this effect is relatively small compared with the other three scenarios.

The regulation scenario brings higher net cash receipts to crop producers, but the effect is less than under a green payment scenario since the regulation alternative provides no government payments. Consumers and livestock producers fare worse under a regulatory scenario than under a green payment scenario because production is lower in the regulatory alternative, pushing up prices and adding to food and feed costs.

## Resources &amp; Environment

**Curbing Agricultural Nitrogen Releases Through Green Payments  
Ranks First in Benefits to Consumers and Producers**

Policy	Benefits for:				
	Consumers	Producers		Taxpayers	Soil erosion reduction
		Crop	Livestock		
		Rank			
Green payments	1	1	1	4	4
Regulation	2	3	2	2	3
Nitrogen tax	3	4	3	1	2
Land retirement/ buffer strips	4	2	4	3	1

Economic Research Service, USDA

Under the tax scenario, crop producers receive the benefits of higher prices for their commodities, but they must pay a tax on every pound of fertilizer used (total tax charges are almost \$3.3 billion). Crop producers gain only slightly under this scenario, while consumers and livestock producers fare worse than under the regulatory scenario—again because of higher food and feed costs.

A land retirement policy to reduce nitrogen losses yields the greatest crop producer benefits, aside from the green payment policy, and the worst downside effects—higher food and feed costs—on consumers and livestock producers. Moreover, costs to taxpayers are estimated at around \$1.6 billion—lower than the public outlays for green payments.

While nitrogen losses are the focus of the simulated policies, reducing soil erosion is an aim of USDA conservation efforts as well. The policies modeled to reduce nitrogen releases also have ancillary, or secondary, effects on soil erosion—some

adverse and some desirable. As greater acreage is planted under the green payment and regulatory policies, soil erosion and erosion damages rise. Conversely, soil erosion and/or erosion damage decline under the tax policy and the land retirement policy, both of which encourage contraction in cultivated acres. The land retirement/buffer strip scenario yielded the greatest decrease in soil erosion and erosion damage costs.

***No Simple Formula***

The choice of domestic policy instruments to achieve an environmental goal has trade and other economic and environmental implications, generating trade-offs among various concerns. Policies that lower production also lower exports. Given an objective of reducing agricultural nitrogen releases, policies aimed directly at reducing nitrogen use have lesser trade and other market effects than a policy of land retirement.

Among the three input-targeted policies, a green payment policy achieves the environmental goal with the least market-price escalation. A green payment approach also generates the smallest consumer costs and the greatest producer benefits, but it also involves the greatest government cost and results in the largest increase in soil erosion.

In contrast, a land retirement policy to achieve the same nitrogen loss reduction has export-reducing effects almost six times that of a green payment policy, with the largest costs to consumers. Producer benefits in the land retirement scenario are second only to green payments, and the reduction in soil erosion is the greatest of any scenario.

In selecting environmental policies to mitigate the impacts of agricultural production, trade-offs arise between and within economic interests and environmental goals. A policy choice to achieve one environmental objective may exacerbate (or ameliorate) another environmental problem. The choice of policies affects agricultural trade and other farm-sector economic indicators. No one policy will satisfy all stakeholders. **AO**

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## Special Article

## A Fair Income for Farmers?

Persistence of low commodity prices and prospects of reduced farm income in 2000 have prompted ongoing discussion regarding the amount and form of assistance that should be provided to agriculture through government programs. Questions have arisen about the efficacy of current farm programs in providing a safety net for farmers' income, particularly after 2 consecutive years of emergency assistance packages totaling nearly \$15 billion. In an effort to strengthen the farm safety net, USDA Secretary Glickman earlier this year proposed several initiatives that would deliver a total of \$11 billion to agriculture over the next 3 years. But political debate over agricultural subsidies and the notion of a "fair" income from farming is likely to continue.

The idea of a fair income from farming draws on a long tradition of promoting "equity" or "parity" between the farm and nonfarm sectors, although what is meant by fair is often vague. Recently, USDA's Economic Research Service (ERS) extrapolated from nonfarm safety net concepts to analyze costs associated with income transfers from Federal taxpayers to farmers. Three illustrative safety-net scenarios were based on a goal of ensuring some minimum standard of living for farm households, and one was based on a goal of providing adequate compensation for farm labor and management (AO January-February 2000). The analysis met with some criticism because of a perceived association of income transfers with social welfare programs. Critics assert that farmers do not want to be given a "welfare check" but rather want to earn a fair income from working at the business of farming.

To explore that perspective, ERS is investigating the implications of a fair income goal for contemporary U.S. agriculture by analyzing the financial performance of farms, delineating farms by enterprise type—i.e., field crop, specialty crop, or livestock—to capture the heterogeneity in farming today. This article focuses on the financial performance of wheat farms—farms with at least half of total value of production from wheat.

### What is a Fair Income?

A common definition of fair income for a farm business is a level of income that enables the farm to pay its bills—i.e., revenue from the sale of commodities is sufficient to cover the costs of production. Such a farm may be called *financially viable*. Note, however, that this definition does not include a return to the operator. Thus, a financially viable farm may generate income that is sufficient to cover business expenses but not provide adequate income to support a household.

To capture the short- and long-run dimensions of farm financial viability, the analysis considers three measures of farm production costs. *Variable costs* are defined as expenses incurred in the production process that vary with the quantity and prices of inputs used—e.g., seed, fertilizer, fuel, repairs, and wages paid to hired labor. *Total cash costs* are defined as variable costs plus



expenses for overhead items such as rent, taxes, insurance, and interest payments. *Economic costs* are total cash costs plus an allowance for depreciation, along with an imputed return to management and to unpaid labor of the operator and family.

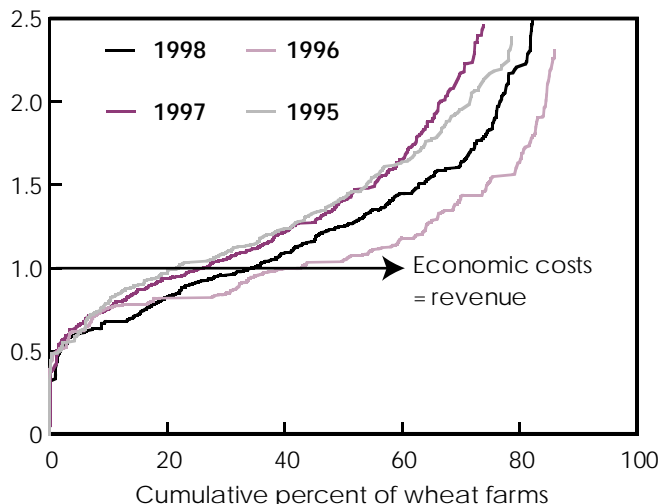
A farm can often survive for a year if revenue covers variable costs, or even for several years if revenue covers total cash costs, particularly if the operator is able to draw on cash reserves or other liquid assets, to borrow against assets, or to obtain income from nonfarm sources. However, such remedies are only temporary. In order to sustain the business over a longer period, revenue must cover economic costs. For example, in the short run, the allowance for depreciation (an economic cost) may be deferred and aging equipment may be repaired (a cash cost). But in the long run, as machinery wears out or becomes obsolete, the shortage of funds for replacement may affect the farm's ability to generate revenue.

Total farm revenue is defined in this analysis to include estimated cash receipts from market sales of crop and livestock commodities (annual average state-level commodity price multiplied by volume of production), direct government payments, and crop insurance indemnity payments. Market receipts are estimated conservatively to isolate the impact of costs on financial performance in a given crop year. Thus, the analysis assumes that all production is sold in the current year, and that no strategy is employed to improve price performance above the season average—i.e., no gains from forward contracting or from hedging.

Direct government payments—primarily production flexibility contract payments, loan deficiency payments (LDP's), and conservation payments (e.g., from the Conservation Reserve and Wetlands Reserve Programs)—are included in the definition of revenue, although they would not universally be considered part of "fair income." The primary focus of this analysis is the long-

## Share of Wheat Farms Showing Long-Term Financial Viability Varies from Year to Year

Economic costs per farm revenue dollar



Economic costs equal to or below revenue indicates long-term financial viability.

Economic Research Service, USDA

term viability of wheat farms, which to some degree is influenced by a fixed payment made to eligible producers whether or not they produce a commodity. These guaranteed payments may offset expenses associated with farm loans (interest expense) or other overhead cost items. In the short run, the decision to produce depends on whether market revenue augmented by marketing loan benefits cover variable costs of production. Short-run financial efficiency (the extent to which variable costs or total cash costs are covered by revenue, measured after the decision to produce has occurred) pertains to the outcome of the decision.

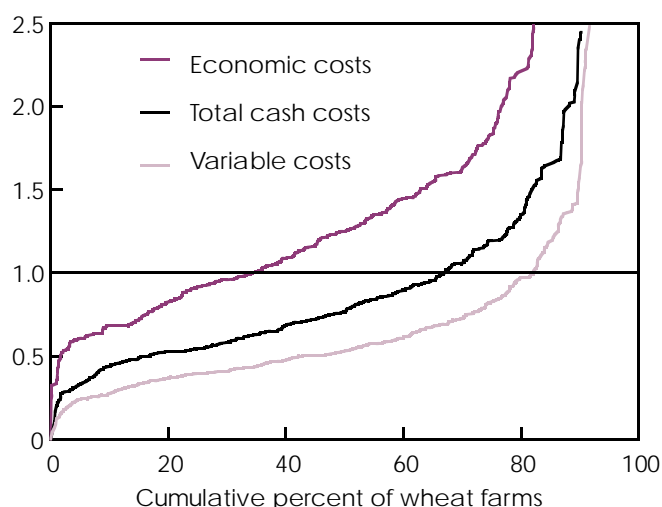
Data on U.S. farm businesses and households are from USDA's Agricultural Resource Management Study (ARMS), conducted annually by ERS and the National Agricultural Statistics Service. Farmers' responses to survey questions enable ERS to analyze production costs, revenue, and the relative importance of income from various sources—i.e., from the farm business, from off-farm employment or investment, and from government payments. Data from the ARMS may be aggregated to give a national perspective on the distribution of farm costs and revenues, or may be distributed by selected characteristics to illustrate the striking heterogeneity in the financial circumstances of farms and farm households in ways useful to policy debate (*AO* November 1999).

### Farm Size Affects Cost Structure

This analysis focuses on the long-run financial performance of wheat farms—farms with at least half of total value of production from wheat—because of the relatively wide geographic dispersion of wheat production, the significant role of government support, and the prolonged stress in the export-dependent wheat market. With the focus on long-term economic viability, it is

## Economic Costs Were Below Revenue for Over One-Third of Wheat Farms in 1998

Costs per farm revenue dollar



Economic costs equal to or below 1.0 indicates long-term financial viability.

Economic Research Service, USDA

total revenue, including decoupled government payments (i.e., not linked to production level) that is compared with total costs of production. In this framework, there are clear distinctions in financial performance among the estimated 44,000 U.S. wheat farms. Just over one-third of all wheat farms earned enough revenue to cover their economic costs of production, and to sustain the farm business over many years. Nearly two-thirds were able to cover total cash costs, allowing survival at least to the next year.

Government payments were important to wheat farms' revenue in 1998, averaging nearly \$20,000 per farm or over 20 percent of an average \$90,000 gross cash income. The bulk of direct government payments are from production flexibility contracts (authorized by the 1996 Farm Act and scheduled to end after 2002) and from the CRP. A relatively small share derives from LDP's—the mechanism to ensure a per-unit revenue floor (the loan rate) for program commodities. If contract and CRP payments were excluded from farm income, and LDP's were the sole source of direct government payments, income on only about a quarter of wheat farms would have been sufficient to cover economic costs.

Classifying wheat farms by economic cost per dollar of revenue—a measure of financial efficiency—allows identification of three distinct groups. The most financially efficient farm businesses cover their economic costs—i.e., cost per dollar of revenue is below 1. Financially efficient ("low-cost") farms account for 35 percent of all wheat farms and produce 50 percent of the U.S. wheat crop. In proportion to their production share, wheat farms in the financially efficient group received close to 50 percent of all Federal payments to wheat farms, but for most of



## Special Article

### Defining the Farm Typology Groups

#### *Small Family Farms (sales less than \$250,000)\**

**Limited-resource.** Any small farm with gross sales less than \$100,000, total farm assets less than \$150,000, and total operator household income less than \$20,000. Limited-resource farmers may report farming, a nonfarm occupation, or retirement as their major occupation.

**Retirement.** Small farms whose operators report they are retired (excludes limited-resource farms operated by retired farmers).

**Residential/lifestyle.** Small farms whose operators report a major occupation other than farming (excludes limited-resource farms with operators reporting a nonfarm major occupation).

**Farming occupation, lower-sales.** Small farms with sales less than \$100,000 whose operators report farming as their major occupation (excludes limited-resource farms whose operators report farming as their major occupation).

**Farming occupation, higher-sales.** Small farms with sales between \$100,000 and \$249,999 whose operators report farming as their major occupation.

#### *Other Farms*

**Large family farms.** Farms with sales between \$250,000 and \$499,999.

**Very large family farms.** Farms with sales of \$500,000 or more.

**Nonfamily farms.** Farms organized as nonfamily corporations or cooperatives, as well as farms operated by hired managers.

\* The \$250,000 cutoff for small farms was suggested by the National Commission on Small Farms.

them, market revenue alone was sufficient to cover variable, cash, and economic costs.

At the other extreme are the least efficient (“high-cost”) wheat farms, with costs more than half again as large as returns—cost per revenue dollar is 1.5 or higher. These account for 37 percent of all wheat farms but for just 14 percent of wheat production. Other sources of income or equity are required for these farm businesses to remain viable. Farms in the “mid-range” efficiency group—over one-fourth of wheat farms, with costs per dollar of revenue between 1 and 1.5—account for the remaining 36 percent of wheat production and represent farms that are close to becoming financially viable. Mid-range farms are more likely to become viable through higher prices, lower costs, and/or larger Federal payments.

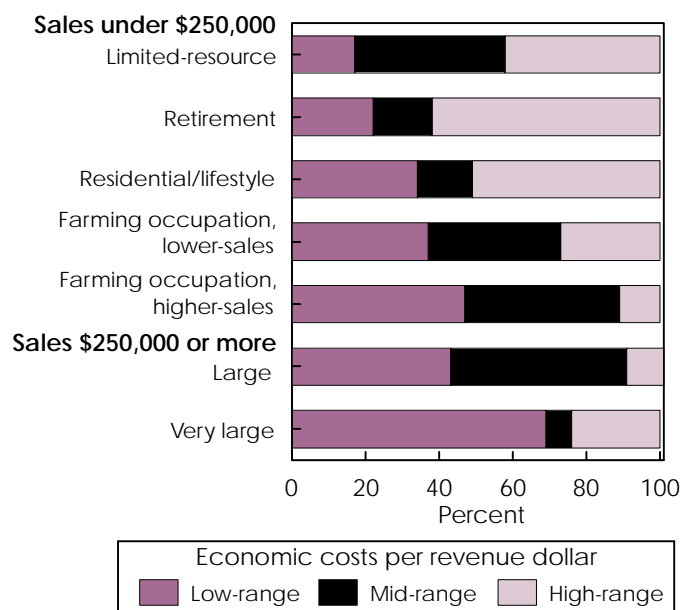
What accounts for variation in the economic efficiency of wheat farms? Farm size and scale economies in large part explain cost differences between farms in the low- and high-cost groups. However, on average, mid-range and low-cost farms are quite

similar with respect to acres operated, production assets, and output (earning potential). Thus, economies of scale are not the driving factor in relative financial efficiency of the mid-range group and the most economically efficient. Instead, higher input costs seem to be key. Seed, fertilizer, and chemical expenses are about one-third higher for the mid-range group, as are repair and maintenance costs. Also, mid-range farms have almost twice the average interest payments and debt compared with the lowest cost farms.

Classifying mid-range farms according to ERS farm typology indicates the group includes limited-resource farms (gross sales under \$100,000, farm assets under \$150,000, and household income under \$20,000); small farms (gross sales under \$250,000 with operators whose primary occupation is farming); and large family farms (gross sales \$250,000 or more). The high-cost farms, in comparison, are predominantly farms classified as retirement and residential/lifestyle (operators report a primary occupation other than farming), although they include significant numbers of limited-resource farms as well.

Analysis of farm household income for mid-range farms indicates that, on average, the farm business is the main source of income for the household. In contrast, farms in both the lowest and highest cost groups had significant shares of income from off-farm sources that helped to support the farm household.

### Larger Wheat Farms Have Higher Share of Operators With Relatively Low Economic Costs



Economic costs include total cash costs, allowance for depreciation, and an imputed return to management and unpaid labor of the operator and household. Economic costs per revenue dollar is less than 1 for low-cost (most financially efficient) wheat farms, 1-1.4 for mid-cost farms, and 1.5 or greater for high-cost farms.

Economic Research Service, USDA

The difference in economic efficiency between the mid-range and lowest cost farms is likely attributable to relative effectiveness in management decisions on production practices and technologies, marketing strategies, and financing. Some mid-range farmers may also be constrained in their ability to lower input costs if their farms are sited on unfavorable soils or in areas with difficult weather or pest problems.

### Getting to a "Fair" Income

Characteristics of U.S. wheat farms and their financial performance indicate diversity in the ways farmers manage their businesses and earn their livings. For that reason, an implication of this analysis is that there is no one fair price or fair income level, as the unit returns or revenue required for survival of the highest cost farms are well above those of the lowest cost farms. Such heterogeneity illustrates the difficulties in reaching consensus about government price and income support levels. However, the differences among wheat farms do provide some basis for assessing the sensitivity of the cost/revenue distribution to increases in revenue (either through higher prices or direct payments) and to reductions in costs that might result in a better, if not fairer, income from the farm business.

Farmers can often raise returns by adopting marketing strategies to improve price prospects for their crops. Top-performing farms routinely hedge, forward contract, and employ other strategies to raise returns above season-average (AO November 1999). Although marketing strategies will not enable every farmer to obtain the maximum price, revenue is generally lower if output is simply sold into cash markets at harvest.

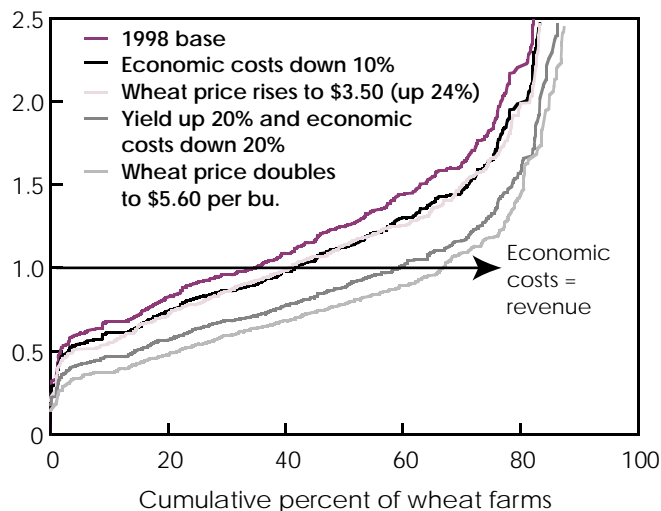
In this analysis, if the price received by farmers rose 25 percent above the season average—an increase not unusual when using marketing strategies—the share of wheat farms covering their economic costs would have increased to more than 40 percent from 35 percent. On the other hand, if the 1998 U.S. average price of wheat doubled to \$5.60 per bushel, the share of farms meeting economic costs would increase to two-thirds.

Even among farms of the same size, a cost differential exists between the lowest and the mid-range cost groups, suggesting that cost reduction through good management decisions and adoption of better technology would be a powerful way to improve financial prospects for those whose costs exceed returns. For example, the analysis indicates that if costs were reduced 20 percent while production was increased 20 percent, the share of wheat farms with sufficient revenue to cover economic costs would double to two-thirds, even with no price increase.

ERS research suggests that management decisions are responsible for the cost differentials and that differences in educational levels explain why some farmers make more effective decisions leading to better cost control. The ARMS data show that more than half of farmers in the low-cost group completed college, compared with about 30 percent in the mid-range group and 15 percent in the highest cost group.

### Alternative Scenarios Affect the Proportion of Financially Viable Wheat Farms

Economic costs per farm revenue dollar



Economic costs equal to or below revenue indicates long-term financial viability.

Economic Research Service, USDA

Technological innovation has the potential to lower costs, either by reducing the level of inputs needed for a given level of output or by increasing output without also increasing inputs. However, farmers must make good adoption decisions, and adopting new technology is a risky business that poses additional challenges to management skills.

### One Policy No Longer Fits All

Before World War II, the shift toward specialization that would transform U.S. agriculture had not yet begun in earnest, and national agricultural policy did not have to confront the striking heterogeneity observed today. In the 1930's, farms were likely more similar than farms today in cost structure and revenue, making the range of economic costs per revenue dollar much narrower. Depression-era farms resembled each other not only in size, but also in enterprise diversity of their operations. Specialization in production has introduced scale economies that now explain a significant part of cost differentials in U.S. farming, and has presented public policymakers with new challenges.

In the pursuit of a fair income for all farmers, the distributional impact on the sector varies according to the approach to the problem. When farms reduce costs through improving production and management practices, the net benefits of the cost saving accrue to individual farms and should persist until aggregate output expands and lowers price. When the Federal government implements policies that raise farm prices nationally or provide income assurance, both financially efficient and inefficient farms may benefit. But without changes in cost structure, high-cost farms would likely be vulnerable to financial loss if these income transfers or effective per-unit revenue floors were

## Special Article

unavailable in the next season. When government makes direct payments based on historical production levels, farmers who stand to benefit most are those who grew the most in the past. Neither direct government payments nor government intervention to raise market prices encourages cost reduction by farmers, and the mid-cost group may suffer when the payments are used by their lower cost neighbors to expand output and put downward pressure on prices.

Without change in either onfarm management decisions or in the approach of government policy, earning a fair income sufficient to cover economic costs of production from the market is a dim prospect for a significant portion of wheat farmers in the U.S. today. However, about one-third of all wheat farmers can survive and prosper as long as they maintain their low-cost positions. Another third or so, which has very high production costs, survives because it is comprised mainly of households that do not depend on farming as the main source of income and that make economic decisions that allow them to subsidize farm losses with income from other sources.

The final third of wheat farm households—the mid-range cost group—does depend on the farm business for its livelihood but experiences production costs high enough to jeopardize long-term survival. In these circumstances, across-the-board, one-size-fits-all commodity policies that help the low-cost group expand and prosper are likely irrelevant to the highest cost group, and fail to ensure survival of the financially marginal mid-range group. Targeted policies that recognize and address the source of financial inefficiency are more likely to succeed with this mid-range group, as would better access to off-farm earning opportunities that would provide a buffer for the cost problems they experience. **AO**

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In the next issue of *Agricultural Outlook*

**The first production and price forecasts for field crops  
in 2000/01 and for meat in 2001**

**Also in the June/July issue:**

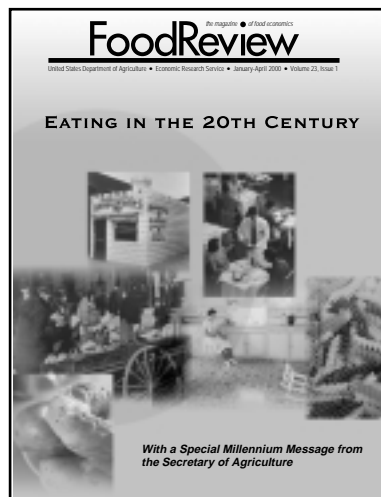
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- \* Marketing organic foods
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# Statistical Indicators

## Summary Data

Table 1-Key Statistical Indicators of the Food &amp; Fiber Sector

	1999						2000			
	1998	1999	2000	II	III	IV	I	II	III	IV
Prices received by farmers (1990-92=100)	101	95	--	97	96	92	--	--	--	--
Livestock & products	97	95	--	93	96	96	--	--	--	--
Crops	106	96	--	102	96	89	--	--	--	--
Prices paid by farmers (1990-92=100)										
Production items	113	112	--	111	112	114	--	--	--	--
Commodities and services, interest, taxes, and wage rates (PPITW)	115	115	--	115	115	117	--	--	--	--
Cash receipts (\$ bil.) <sup>1</sup>	197	190	195	42	47	55	46	43	49	57
Livestock	95	96	100	23	25	25	24	24	26	26
Crops	102	94	95	19	22	30	21	19	23	32
Market basket (1982-84=100)										
Retail cost	163	167	--	167	167	169	--	--	--	--
Farm value	103	98	--	97	98	97	--	--	--	--
Spread	195	205	--	204	204	207	--	--	--	--
Farm value/retail cost (%)	22	21	--	21	21	20	--	--	--	--
Retail prices (1982-84=100)										
All food	161	164	168	164	164	165	166	167	168	169
At home	161	164	168	164	164	165	166	168	168	168
Away from home	161	165	169	165	166	167	168	168	169	170
Agricultural exports (\$ bil.) <sup>2</sup>	53.6	49.0	49.5	11.3	11.6	13.6	13.1	11.6	11.2	13.2
Agricultural imports (\$ bil.) <sup>2</sup>	37.0	37.4	38.0	9.9	8.8	9.6	9.1	9.3	10.0	9.2
Commercial production										
Red meat (mil. lb.)	45,134	46,134	45,419	11,367	11,624	11,756	11,607	11,380	11,427	11,005
Poultry (mil. lb.)	33,667	35,590	37,030	9,070	8,986	8,894	8,985	9,395	9,315	9,335
Eggs (mil. doz.)	6,658	6,912	7,060	1,706	1,728	1,786	1,745	1,740	1,760	1,815
Milk (bil. lb.)	157.3	162.7	167.3	42.0	39.8	40.4	42.6	43.3	40.8	40.7
Consumption, per capita										
Red meat and poultry (lb.)	213.5	221.3	221.4	55.0	55.6	56.6	54.9	55.6	55.4	55.5
Corn beginning stocks (mil. bu.) <sup>3</sup>	883.2	1,307.8	1,787.0	8,051.9	5,698.4	3,616.2	1,787.0	8,024.7	5,605.5	--
Corn use (mil. bu.) <sup>3</sup>	8,791.0	9,298.3	9,480.0	2,359.2	2,089.4	1,831.1	3,203.2	2,423.2	--	--
Prices <sup>4</sup>										
Choice steers--Neb. Direct (\$/cwt)	61.48	65.56	68-71	65.04	65.12	69.65	69.83	68-70	67-71	68-74
Barrows and gilts--IA, So. MN (\$/cwt)	34.72	34.00	43-46	35.18	35.70	36.29	41.10	47-49	45-49	40-44
Broilers--12-city (cents/lb.)	63.10	58.10	55-58	58.60	58.10	57.60	54.50	56-58	56-60	54-58
Eggs--NY gr. A large (cents/doz.)	75.80	65.60	60-63	58.10	66.20	63.00	64.50	54-56	58-62	62-68
Milk--all at plant (\$/cwt)	15.42	14.38	12.40-12.90	12.87	14.83	13.83	11.87	11.60-12.00	12.45-13.15	13.70-14.70
Wheat--KC HRW ordinary (\$/bu.)	3.27	2.92	--	2.92	2.82	2.83	2.92	--	--	--
Corn--Chicago (\$/bu.)	2.41	2.01	--	2.13	1.83	1.91	2.12	--	--	--
Soybeans--Chicago (\$/bu.)	6.01	4.61	--	4.58	4.40	4.53	--	--	--	--
Cotton--avg. spot 41-34 (cents/lb)	67.02	52.31	--	55.43	49.11	48.08	54.63	--	--	--
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Farm real estate values <sup>5</sup>										
Nominal (\$ per acre)	703	713	740	798	844	887	926	974	1,020	1,050
Real (1982 \$)	521	507	514	540	558	572	586	606	627	636
U.S. civilian employment (mil.) <sup>6</sup>	126.3	128.1	129.2	131.1	132.3	133.9	136.3	137.7	--	--
Food and fiber (mil.)	23.5	23.1	23.6	24.3	24.7	24.5	24.6	24.8	--	--
Farm sector (mil.)	2.0	1.9	1.8	1.9	2.0	2.0	1.9	1.8	--	--
U.S. gross domestic product (\$ bil.)	5,986.2	6,318.9	6,642.3	7,054.3	7,400.5	7,813.2	8,300.8	8,759.9	--	--
Food and fiber--net value added (\$ bil.)	881.8	924.8	971.4	1,077.1	1,140.8	1,216.5	1,323.3	1,367.2	--	--
Farm sector--net value added (\$ bil.) <sup>7</sup>	71.1	75.5	73.1	78.3	75.3	86.7	84.5	74.3	--	--

F = Forecast. -- = Not available. 1. Quarterly data for 1999 are forecast. 2. Annual data based on Oct.-Sept. fiscal years ending with year indicated.

3. 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. 4. Simple averages, Jan.-Dec. 5. As of January 1. 6. 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. 7. The value-added data presented here is 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

	1998						1999			
	1997	1998	1999	II	III	IV	I	II	III	IV
<i>Billions of current dollars (quarterly data seasonally adjusted at annual rates)</i>										
Gross Domestic Product	8,300.8	8,759.9	9,256.1	8,683.7	8,797.9	8,947.6	9,072.7	9,146.2	9,297.8	9,507.9
Gross National Product	8,305.0	8,750.0	9,236.2	8,683.7	8,772.2	8,930.5	9,058.2	9,131.9	9,282.3	9,472.3
Personal consumption expenditures	5,524.4	5,848.6	6,257.3	5,816.2	5,889.6	5,973.7	6,090.8	6,200.8	6,303.7	6,434.1
Durable goods	642.9	698.2	758.8	693.9	696.9	722.8	739.0	751.6	761.8	782.1
Nondurable goods	1,641.7	1,708.9	1,843.1	1,701.2	1,716.6	1,742.9	1,787.8	1,824.8	1,853.9	1,905.8
Food	817.0	853.4	904.1	847.6	857.6	875.6	885.4	893.4	903.9	933.8
Clothing and shoes	271.2	286.3	306.3	287.1	286.6	289.2	301.8	306.7	308.1	308.6
Services	3,239.8	3,441.5	3,655.6	3,421.1	3,476.1	3,508.0	3,564.0	3,624.3	3,688.0	3,746.2
Gross private domestic investment	1,383.7	1,531.2	1,622.7	1,495.0	1,535.3	1,580.3	1,594.3	1,585.4	1,635.0	1,675.8
Fixed investment	1,315.4	1,460.0	1,578.0	1,454.2	1,461.7	1,508.9	1,543.3	1,567.8	1,594.2	1,606.8
Change in private inventories	68.3	71.2	44.6	40.8	73.7	71.4	51.0	17.6	40.8	69.1
Net exports of goods and services	-88.3	-149.6	-253.9	-153.9	-165.7	-161.2	-201.6	-245.8	-278.2	-290.1
Government consumption expenditures and gross investment	1,481.0	1,529.7	1,630.1	1,526.5	1,538.7	1,554.8	1,589.1	1,605.9	1,637.2	1,688.0
<i>Billions of 1996 dollars (quarterly data seasonally adjusted at annual rates)<sup>1</sup></i>										
Gross Domestic Product	8,165.1	8,516.3	8,848.2	8,457.2	8,536.0	8,639.5	8,717.6	8,758.3	8,879.8	9,037.2
Gross National Product	8,168.8	8,506.0	8,830.8	8,456.6	8,510.6	8,624.4	8,705.1	8,746.0	8,866.8	9,005.2
Personal consumption expenditures	5,433.7	5,698.6	5,983.6	5,675.6	5,730.7	5,779.3	5,871.3	5,944.5	6,015.7	6,102.9
Durable goods	657.4	731.5	815.7	723.9	731.2	766.0	788.8	806.1	821.2	846.7
Nondurable goods	1,619.9	1,685.3	1,776.1	1,681.9	1,692.0	1,712.6	1,749.5	1,763.7	1,779.3	1,812.0
Food	799.1	820.6	851.8	818.2	823.0	835.4	839.5	844.6	850.0	873.1
Clothing and shoes	271.1	292.2	317.8	293.1	292.2	295.6	314.7	316.8	321.6	318.1
Services	3,156.7	3,284.5	3,400.1	3,272.2	3,309.6	3,305.9	3,339.8	3,382.3	3,423.4	3,454.7
Gross private domestic investment	1,385.8	1,547.4	1,637.7	1,513.1	1,551.1	1,593.9	1,608.2	1,599.8	1,651.6	1,691.4
Fixed investment	1,316.0	1,471.8	1,590.5	1,466.7	1,474.0	1,522.5	1,555.9	1,581.0	1,607.3	1,617.8
Change in private inventories	69.1	74.3	42.2	43.1	76.1	70.7	50.1	14.0	38.0	66.7
Net exports of goods and services	-109.8	-215.1	-323.0	-218.4	-237.9	-234.4	-286.6	-321.1	-340.4	-344.1
Government consumption expenditures and gross investment	1,455.1	1,480.3	1,534.1	1,480.7	1,485.3	1,494.7	1,513.4	1,518.3	1,535.3	1,569.6
GDP implicit price deflator (% change)	1.9	1.2	1.5	1.2	1.5	1.0	2.0	1.4	1.1	1.9
Disposable personal income (\$ bil.)	5,982.8	6,286.2	6,639.7	6,238.3	6,325.3	6,417.8	6,505.4	6,593.2	6,671.0	6,789.1
Disposable pers. income (1992 \$ bil.)	5,866.7	6,107.1	6,349.4	6,069.5	6,136.9	6,209.0	6,271.0	6,320.7	6,366.2	6,439.6
Per capita disposable pers. income (\$)	22,320	23,231	24,307	23,086	23,345	23,628	23,904	24,171	24,389	24,759
Per capita disp. pers. income (1992 \$)	21,887	22,569	23,244	22,462	22,650	22,859	23,043	23,172	23,275	23,485
U.S. resident population plus Armed Forces overseas (mil.) <sup>2</sup>	268.0	270.6	273.1	270.1	270.8	271.5	272.0	272.7	273.4	274.1
Civilian population (mil.) <sup>2</sup>	266.5	269.1	271.7	268.6	269.3	270.1	270.6	271.2	271.9	272.6
	Annual			1999					2000	
	1997	1998	1999	Feb	Sep	Oct	Nov	Dec	Jan	Feb
<i>Monthly data seasonally adjusted</i>										
Total industrial production (1992=100)	130.1	136.4	142.3	139.3	142.9	144.2	145.0	145.6	147.0	147.5
Leading economic indicators (1992=100)	103.9	105.5	105.2	104.7	105.4	105.5	105.7	106.1	106.3	106.0
Civilian employment (mil. persons) <sup>3</sup>	129.6	131.5	133.5	133.0	133.7	133.9	134.1	134.4	135.2	135.4
Civilian unemployment rate (%) <sup>3</sup>	4.9	4.5	4.2	4.4	4.2	4.1	4.1	4.1	4.0	4.1
Personal income (\$ bil. annual rate)	6,951.1	7,358.9	7,791.8	7,636.4	7,848.1	7,943.4	7,976.8	7,998.6	8,057.3	8,089.9
Money stock-M2 (daily avg.) (\$ bil.) <sup>4</sup>	4,040.8	4,397.0	4,652.2	4,447.7	4,589.1	4,605.3	4,624.2	4,652.2	4,675.3	4,683.6
Three-month Treasury bill rate (%)	5.07	4.81	4.66	4.45	4.73	4.88	5.07	5.23	5.34	5.57
AAA corporate bond yield (Moody's) (%)	7.26	6.53	7.04	6.40	7.39	7.55	7.36	7.55	7.78	7.68
Total housing starts (1,000) <sup>5</sup>	1,474.0	1,616.9	1,666.5	1,738	1,628	1,636	1,663	1,769	1,758	1,781
Business inventory/sales ratio <sup>6</sup>	1.38	1.39	1.35	1.37	1.33	1.33	1.33	1.32	1.32	--
Sales of all retail stores (\$ bil.) <sup>7</sup>	2,546.3	2,696.5	--	242.2	252.8	253.5	256.9	261.8	263.5	268.2
Nondurable goods stores (\$ bil.)	1,505.4	1,563.8	--	140.1	147.0	147.7	148.5	151.8	151.0	154.1
Food stores (\$ bil.)	432.1	443.0	--	37.8	38.7	38.9	39.3	40.6	38.8	39.6
Apparel and accessory stores (\$ bil.)	116.8	124.2	--	11.1	11.3	11.3	11.2	11.2	11.3	11.7
Eating and drinking places (\$ bil.)	244.1	247.1	--	23.3	24.0	24.5	24.7	24.8	25.2	25.3

-- = Not available. 1. In October 1999, 1996 dollars replaced 1992 dollars. 2. Population estimates based on 1990 census. 3. Data beginning January 1994 are not directly comparable with data for earlier periods because of a major redesign of the household survey questionnaire. 4. Annual data as of December of year listed. 5. Private, including farm. 6. Manufacturing and trade. 7. Annual total. *Information contact: David Johnson (202) 694-5324*

Table 3-World Economic Growth

	Calendar year									
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
<i>Real GDP, annual percent change</i>										
<b>World</b>	2.0	1.4	3.1	2.7	3.5	3.1	1.8	2.6	3.7	3.2
less U.S.	1.7	1.0	2.8	2.8	3.5	2.8	1.0	2.1	3.3	3.4
<b>Developed economies</b>	1.7	0.8	2.8	2.2	3.1	2.9	2.0	2.6	3.3	2.5
less U.S.	1.0	-0.1	2.2	2.0	2.8	2.2	0.9	1.8	2.6	2.5
United States	3.1	2.7	4.0	2.7	3.6	4.2	4.3	4.2	4.8	2.6
Canada	0.9	2.3	4.7	2.8	1.7	4.0	3.1	4.2	4.2	2.4
Japan	1.0	0.3	0.7	1.4	5.2	1.6	-2.5	0.3	1.2	1.9
Australia	2.4	3.8	5.2	3.8	4.3	4.1	4.8	4.4	3.9	3.4
European Union	1.1	-0.4	2.7	2.3	1.6	2.5	2.6	2.2	3.2	2.9
<b>Transition economies</b>	-6.9	-8.6	-1.7	-0.7	-1.0	1.4	-1.2	2.0	3.0	2.5
Eastern Europe	-2.7	1.1	4.0	5.8	3.9	3.3	2.3	2.3	4.4	4.4
Poland	2.6	3.8	5.2	7.0	6.1	6.9	4.9	4.0	5.3	5.1
Former Soviet Union	-13.4	-10.0	-14.9	-5.9	-4.6	0.1	-3.8	1.9	1.9	1.1
Russia	-14.5	-8.7	-12.6	-4.1	-3.5	0.8	-4.3	3.1	2.3	0.6
<b>Developing economies</b>	5.4	5.9	5.2	5.2	5.7	4.2	1.9	3.2	5.1	5.4
<b>Asia</b>	7.7	8.0	8.8	8.3	7.5	6.1	0.4	6.1	6.7	6.5
East Asia	9.4	9.2	9.7	8.8	7.8	7.0	2.0	7.5	7.2	6.9
China	14.2	13.5	12.6	10.5	9.6	8.8	7.8	7.1	7.7	8.6
Taiwan	7.5	7.0	6.5	6.4	6.1	6.7	4.8	5.7	5.7	5.0
Korea	5.4	5.5	8.2	8.9	6.7	5.0	-6.7	10.7	7.7	5.4
Southeast Asia	5.6	7.7	7.9	8.1	7.1	4.8	-6.2	3.3	6.1	6.0
Indonesia	7.2	7.3	7.5	8.2	7.8	4.9	-13.1	0.2	7.6	7.3
Malaysia	7.8	8.3	9.2	9.5	8.6	7.8	-7.4	5.3	7.1	6.5
Philippines	0.3	2.1	4.4	4.7	5.8	5.2	-0.5	3.2	3.7	3.7
Thailand	8.1	8.4	8.9	8.8	5.5	-0.4	-10.2	4.2	6.3	6.2
South Asia	5.7	4.5	7.1	6.9	7.0	4.9	5.3	5.5	5.5	5.6
India	5.4	5.0	8.1	7.4	7.7	5.7	5.6	6.1	5.8	5.9
Pakistan	7.8	1.9	3.9	5.1	4.7	-0.4	3.7	3.0	4.0	4.5
<b>Latin America</b>	4.8	5.2	2.9	2.0	4.7	5.2	2.0	-0.2	3.7	4.5
Mexico	3.6	1.9	4.5	-6.2	5.1	6.8	4.8	3.7	4.5	4.1
Caribbean/Central	16.0	10.5	-12.1	8.3	11.4	4.9	2.6	-0.8	3.3	4.8
South America	2.9	4.9	6.1	2.7	3.2	4.9	1.3	-0.9	3.6	4.6
Argentina	9.6	5.7	8.0	-4.0	4.8	8.6	4.0	-3.0	2.9	4.6
Brazil	-0.5	4.9	5.9	4.2	2.8	3.2	0.1	0.8	4.2	4.8
Colombia	3.9	5.4	5.8	5.8	2.0	3.1	0.4	-4.4	2.9	4.5
Venezuela	6.1	0.3	-2.3	3.7	-0.5	5.1	-0.7	-6.3	1.1	1.5
<b>Middle East</b>	1.1	1.1	-1.3	2.0	1.9	-9.7	11.3	-1.2	1.1	2.5
Israel	5.6	5.6	6.9	7.0	4.6	2.2	1.9	2.1	3.7	3.7
Saudi Arabia	2.8	-0.6	0.5	0.5	1.4	1.9	1.4	-1.5	1.6	3.0
Turkey	6.4	8.7	-5.2	7.8	7.0	7.5	2.8	-4.8	3.8	7.2
<b>Africa</b>	1.1	2.7	2.5	4.9	3.3	2.5	3.2	2.8	4.5	4.3
North Africa	2.0	0.5	3.9	1.5	6.5	2.6	5.4	4.1	5.5	4.8
Egypt	4.4	2.9	3.9	4.7	5.0	5.5	5.6	5.2	5.6	5.6
Sub-Sahara	0.6	3.9	1.8	6.7	1.7	2.5	2.0	2.1	4.0	4.0
South Africa	-2.2	1.3	2.7	3.4	3.2	1.7	0.6	1.2	3.5	3.6
<i>Consumer Prices, annual percent change</i>										
Developed Economies	3.5	3.1	2.6	2.6	2.4	2.1	1.5	1.4	1.9	2.0
Transition Economies	788.9	634.3	273.3	133.5	42.4	27.3	21.8	43.7	19.5	14.2
Developing Economies	36.1	49.8	55.1	22.9	15.1	9.5	10.1	6.5	5.7	4.7
Asia	8.6	10.8	16.0	13.2	8.2	4.7	7.6	2.5	2.6	3.0
Latin America	109.1	202.6	202.5	34.4	21.4	13.0	9.8	8.8	7.7	6.4
Middle East	26.5	26.6	33.3	38.9	26.6	25.3	26.0	20.3	16.2	9.4
Africa	47.1	38.7	54.8	35.5	30.0	13.6	9.2	11.0	9.6	6.1

-- = 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

## Farm Prices

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

	Annual			1999				2000		
	1997	1998	1999	Mar	Oct	Nov	Dec	Jan	Feb	Mar
<i>1990-92=100</i>										
<b>Prices received</b>										
All farm products	107	101	95	96	91	93	92	90	92	96
All crops	116	106	96	98	88	89	90	87	90	96
Food grains	128	103	91	99	87	89	85	85	85	86
Feed grains and hay	117	100	86	92	76	77	81	84	88	90
Cotton	112	107	85	91	76	74	71	71	76	79
Tobacco	104	104	103	104	104	105	109	110	109	108
Oil-bearing crops	131	107	83	83	80	82	82	82	86	87
Fruit and nuts, all	109	111	115	100	131	119	91	78	82	86
Commercial vegetables	122	119	110	116	96	97	116	97	87	120
Potatoes and dry beans	90	99	100	98	85	94	94	98	99	104
Livestock and products	98	97	95	95	96	98	95	94	94	95
Meat animals	92	79	83	79	87	87	88	90	92	94
Dairy products	102	119	110	115	115	109	93	92	90	90
Poultry and eggs	113	117	110	109	102	114	110	104	104	104
<b>Prices paid</b>										
Commodities and services, interest, taxes, and wage rates (PPITW)	118	115	115	115	117	117	118	118	119	120
Production items	119	113	112	111	113	113	115	115	116	117
Feed	125	110	101	101	99	99	101	102	105	109
Livestock and poultry	94	88	95	92	101	105	110	111	109	108
Seeds	119	122	121	123	121	121	121	121	121	121
Fertilizer	121	112	105	107	105	104	105	107	108	110
Agricultural chemicals	121	122	122	121	124	123	123	121	122	122
Fuels	106	84	97	72	113	119	124	125	138	145
Supplies and repairs	118	119	121	121	121	122	122	122	122	122
Autos and trucks	119	119	119	119	119	120	120	119	119	119
Farm machinery	128	132	134	134	132	133	133	133	133	133
Building material	118	118	120	119	120	120	120	121	121	122
Farm services	116	115	115	114	116	115	115	115	115	115
Rent	136	120	117	117	117	117	117	117	117	117
Interest payable per acre on farm real estate debt	105	104	105	105	105	105	105	108	108	108
Taxes payable per acre on farm real estate	115	119	120	120	120	120	120	123	123	123
Wage rates (seasonally adjusted)	123	129	135	137	135	135	135	140	140	140
Prod. items, interest, taxes & wage rates (PITW)	118	114	114	113	115	115	116	117	118	119
Ratio, prices received to prices paid (%)*	91	88	82	83	78	79	78	76	77	80
Prices received (1910-14=100)	679	643	607	612	578	591	585	572	586	608
Prices paid, etc. (parity index) (1910-14=100)	1,574	1,532	1,537	1,525	1,553	1,558	1,566	1,577	1,589	1,597
Parity ratio (1910-14=100) (%)*	43	42	39	40	37	38	37	36	37	38

-- = 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 National Agricultural Statistics Service (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 <sup>1</sup>			1999				2000		
	1996	1997	1998	Mar	Oct	Nov	Dec	Jan	Feb	Mar
<b>Crops</b>										
All wheat (\$/bu.)	4.30	3.38	2.70	2.65	2.58	2.66	2.52	2.50	2.54	2.57
Rice, rough (\$/cwt)	9.96	9.70	8.50	8.93	6.23	6.11	6.19	6.03	5.98	5.99
Corn (\$/bu.)	2.71	2.43	1.95	2.06	1.69	1.70	1.82	1.90	1.98	2.03
Sorghum (\$/cwt)	4.17	3.95	3.10	3.16	2.51	2.58	2.65	2.86	3.08	3.28
All hay, baled (\$/ton)	95.80	100.00	87.00	79.00	73.70	74.00	71.10	71.80	72.60	74.80
Soybeans (\$/bu.)	7.35	6.47	5.35	4.61	4.47	4.45	4.44	4.62	4.79	4.87
Cotton, upland (¢/lb.)	69.30	65.20	64.20	55.10	45.90	44.70	43.00	43.10	45.90	47.80
Potatoes (\$/cwt)	4.93	5.62	5.24	6.12	4.84	5.51	5.58	5.91	5.96	6.32
Lettuce (\$/cwt) <sup>2</sup>	14.70	17.60	15.20	14.50	13.00	10.50	16.10	14.60	9.28	18.90
Tomatoes, fresh (\$/cwt) <sup>2</sup>	28.10	31.70	35.00	24.80	21.40	26.60	31.40	22.50	23.50	32.00
Onions (\$/cwt)	10.50	12.60	13.80	11.20	8.92	8.30	7.88	6.79	5.63	5.55
Beans, dry edible (\$/cwt)	23.50	19.30	19.80	17.00	17.20	17.30	17.00	16.70	16.00	14.70
Apples for fresh use (¢/lb.)	20.80	22.10	17.10	15.30	23.50	23.30	23.70	23.50	21.10	20.50
Pears for fresh use (\$/ton)	376.00	276.00	291.00	330.00	441.00	461.00	414.00	414.00	386.00	313.00
Oranges, all uses (\$/box) <sup>3</sup>	4.79	4.22	4.29	6.03	10.25	4.33	3.41	3.27	3.51	3.54
Grapefruit, all uses (\$/box) <sup>3</sup>	2.30	1.91	1.41	2.04	6.80	5.21	3.71	2.40	3.64	3.63
<b>Livestock</b>										
Cattle, all beef (\$/cwt)	58.70	63.10	59.60	62.40	66.20	66.20	66.60	67.80	67.60	69.30
Calves (\$/cwt)	58.40	78.90	78.80	87.30	91.90	93.00	98.60	102.00	105.00	107.00
Hogs, all (\$/cwt)	51.90	52.90	34.40	28.00	34.00	33.40	35.60	36.80	39.90	41.30
Lambs (\$/cwt)	88.20	90.30	72.30	67.40	72.60	76.30	77.60	70.90	72.00	--
All milk, sold to plants (\$/cwt)	14.75	13.36	15.41	15.00	15.00	14.30	12.20	12.00	11.80	11.80
Milk, manuf. grade (\$/cwt)	13.43	12.17	14.33	12.30	12.60	11.00	10.70	10.70	10.20	10.20
Broilers, live (¢/lb.)	38.10	37.70	39.30	35.80	33.50	37.40	36.80	35.00	33.50	34.90
Eggs, all (¢/doz.) <sup>4</sup>	74.90	70.30	65.50	67.90	50.10	64.30	61.30	58.00	68.60	57.40
Turkeys (¢/lb.)	43.30	39.90	38.00	37.00	45.40	45.60	42.20	36.40	35.70	38.20

-- = 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 National Agricultural Statistics Service (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			1999				2000		
	1997	1998	1999	Mar	Oct	Nov	Dec	Jan	Feb	Mar
	<i>1982-84=100</i>									
Consumer Price Index, all items	160.5	163.0	166.6	165.0	168.2	168.3	168.3	168.7	169.7	171.1
CPI, all items less food	161.1	163.6	167.0	165.3	168.8	168.8	168.8	169.2	170.3	171.9
All food	157.3	160.7	164.1	163.3	165.1	165.2	165.4	166.1	166.3	166.5
Food away from home	157.0	161.1	165.1	164.2	166.2	166.5	166.8	167.2	167.6	167.9
Food at home	158.1	161.1	164.2	163.4	165.1	165.1	165.4	166.3	166.3	166.4
Meats <sup>1</sup>	144.4	141.6	142.3	140.3	144.4	145.3	145.3	144.7	146.4	148.3
Beef and veal	136.8	136.5	139.2	137.0	141.6	142.2	143.1	143.2	144.3	145.7
Pork	155.9	148.5	145.9	143.1	148.1	149.3	148.6	147.8	150.7	153.8
Poultry	156.6	157.1	157.9	158.3	158.1	159.4	157.5	159.9	157.9	158.6
Fish and seafood	177.1	181.7	185.3	183.5	187.3	187.9	186.9	186.0	190.0	189.9
Eggs	140.0	135.4	128.1	134.2	119.8	128.8	124.0	133.9	131.7	127.1
Dairy and related products <sup>2</sup>	145.5	150.8	159.6	161.5	164.1	164.6	162.1	160.4	160.9	159.1
Fats and oils <sup>3</sup>	141.7	146.9	148.3	149.4	149.0	145.3	145.1	147.0	145.6	145.9
Fresh fruits	236.3	246.5	266.3	257.4	262.3	260.5	266.9	266.6	263.0	257.9
Fresh vegetables	194.6	215.8	209.3	209.2	208.9	209.1	214.0	223.0	211.0	212.1
Potatoes	174.2	185.2	193.1	185.9	194.8	186.1	190.7	196.6	198.1	197.9
Cereals and bakery products	177.6	181.1	185.0	183.5	185.2	184.8	185.9	185.6	186.0	186.1
Sugar and sweets	147.8	150.2	152.3	151.0	153.3	152.1	152.3	154.8	154.4	154.6
Nonalcoholic beverages <sup>4</sup>	133.4	133.0	134.3	134.5	134.6	133.9	134.7	137.1	138.4	138.5
Apparel										
Footwear	127.6	128.0	125.7	126.4	126.1	126.4	123.7	121.6	122.1	124.7
Tobacco and smoking products	243.7	274.8	355.8	335.9	373.3	369.8	369.1	375.1	383.0	387.3
Alcoholic beverages	162.8	165.7	169.7	168.4	170.5	171.2	171.8	172.4	173.0	173.5

1. Beef, veal, lamb, pork, and processed meat. 2. Included butter through December '97. 3. Includes butter as of January 98. 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://stats.bls.gov/bls/home.html> and a Consumer Prices Information Hotline at (202) 606-7828.

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

	Annual			1999				2000		
	1996	1997	1998	Mar	Oct	Nov	Dec	Jan	Feb	Mar
<i>1982=100</i>										
All commodities	127.7	127.6	124.4	122.6	127.7	128.3	128.0	128.3	129.8	131.0
Finished goods <sup>1</sup>	131.3	131.8	130.6	131.1	135.1	134.9	135.0	134.7	136.0	137.0
All foods <sup>2</sup>	132.5	132.8	132.4	132.1	133.1	132.2	131.9	131.2	131.8	131.8
Consumer foods	133.6	134.5	134.3	134.7	135.8	135.4	135.7	135.0	135.9	135.9
Fresh fruits and melons	100.8	99.4	90.0	102.2	108.0	94.9	93.6	91.7	98.1	94.1
Fresh and dry vegetables	135.0	123.1	139.5	114.4	109.3	108.8	143.9	115.3	107.6	122.4
Dried and dehydrated fruits	124.2	124.9	124.4	122.6	119.5	119.5	135.0	123.3	122.4	122.5
Canned fruits and juices	137.5	137.6	134.4	138.0	137.8	138.0	138.8	140.3	140.2	140.2
Frozen fruits, juices and ades	123.9	117.2	116.1	124.8	123.6	123.7	127.1	124.0	124.3	123.8
Fresh veg. except potatoes	120.9	121.3	137.9	117.4	101.6	100.9	151.6	111.3	100.5	122.3
Canned vegetables and juices	121.2	120.1	121.5	120.9	120.7	121.3	121.4	121.4	121.2	121.9
Frozen vegetables	125.4	125.8	125.4	125.6	126.4	125.5	125.3	125.5	127.2	127.4
Potatoes	133.9	106.1	122.5	121.7	108.8	110.8	107.7	109.0	111.0	99.2
Eggs for fresh use (1991=100)	105.1	97.1	90.1	89.5	61.5	85.8	74.7	81.1	95.3	70.0
Bakery products	169.8	173.9	175.8	177.4	178.7	179.0	179.4	179.5	180.2	180.6
Meats	109.0	111.6	101.4	100.2	108.7	106.5	108.8	109.8	111.2	112.9
Beef and veal	100.2	102.8	99.5	102.8	112.1	109.0	109.5	111.1	110.1	111.8
Pork	120.9	123.1	96.6	87.9	100.0	96.9	104.2	103.9	110.3	111.1
Processed poultry	119.8	117.4	120.7	113.6	112.6	114.1	114.5	111.9	108.9	109.9
Unprocessed and packaged fish	165.9	178.1	183.0	200.9	196.6	198.9	190.5	194.9	207.3	197.5
Dairy products	130.4	128.1	138.1	141.8	143.5	141.3	132.7	130.9	130.1	130.5
Processed fruits and vegetables	127.6	126.4	125.8	128.4	128.1	128.3	129.6	129.0	129.5	129.4
Shortening and cooking oil	138.5	137.8	143.4	--	--	--	--	--	--	--
Soft drinks	134.0	133.2	134.8	137.2	139.2	139.4	139.3	139.6	143.0	143.4
Finished consumer goods less foods	127.6	128.2	126.4	127.0	133.7	133.6	133.7	133.3	135.4	137.3
Alcoholic beverages	132.8	135.1	135.2	135.9	136.9	136.7	136.4	136.6	140.1	137.9
Apparel	125.1	125.7	126.6	127.1	126.9	126.9	127.0	126.9	127.0	127.2
Footwear	141.6	143.7	144.7	144.6	144.7	144.6	144.9	145.0	145.1	144.9
Tobacco products	237.4	248.9	283.4	363.5	394.6	394.7	395.3	378.5	399.6	399.0
Intermediate materials <sup>3</sup>	125.8	125.6	123.0	120.7	125.0	125.2	125.6	125.9	126.8	127.9
Materials for food manufacturing	125.3	123.2	123.1	121.4	122.2	120.9	118.5	117.9	117.8	118.1
Flour	136.8	118.7	109.2	107.5	102.2	103.9	99.2	101.8	102.6	102.6
Refined sugar <sup>4</sup>	123.7	123.6	119.8	122.1	120.6	119.1	118.0	116.5	115.0	114.7
Crude vegetable oils	118.1	116.6	131.1	94.9	81.1	78.9	79.3	76.1	76.0	77.6
Crude materials <sup>5</sup>	113.8	111.1	96.7	89.0	104.0	109.2	103.9	106.3	111.2	113.3
Foodstuffs and feedstuffs	121.5	112.2	103.8	98.8	98.8	99.5	96.8	96.4	97.6	101.3
Fruits and vegetables and nuts <sup>6</sup>	122.5	115.5	117.2	115.8	116.2	105.9	118.8	106.8	107.3	110.8
Grains	151.1	111.2	93.4	84.9	72.7	77.2	74.0	77.8	82.4	85.9
Slaughter livestock	95.2	96.3	82.3	83.6	90.9	89.6	91.9	91.6	92.4	98.3
Slaughter poultry, live	140.5	131.0	141.4	124.8	122.7	137.7	130.7	122.2	113.4	117.8
Plant and animal fibers	129.4	117.0	110.4	96.3	80.8	79.4	77.3	83.9	88.1	97.6
Fluid milk	107.9	97.5	112.6	110.1	109.8	104.6	90.6	89.5	88.8	88.6
Oilseeds	139.4	140.8	114.4	91.3	88.1	87.1	87.4	90.0	94.4	98.3
Leaf tobacco	89.4	105.1	104.6	115.5	106.4	107.3	112.0	111.7	112.9	110.5
Raw cane sugar	118.6	116.8	117.2	118.1	107.5	100.2	97.0	96.8	92.7	100.2

-- = 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://stats.bls.gov/bls/home.html> and a Producer Prices Information Hotline at (202) 606-7705.

## Farm-Retail Price Spreads

Table 8-Farm-Retail Price Spreads

	Annual			1998			1999			
	1996	1997	1998	Dec	Jul	Aug	Sep	Oct	Nov	Dec
Market basket <sup>1</sup>										
Retail cost (1982-84=100)	155.9	159.7	163.1	165.6	166.6	167.1	167.7	168.3	168.4	168.7
Farm value (1982-84=100)	111.1	106.2	103.3	101.4	96.9	98.7	99.2	97.1	99.2	95.2
Farm-retail spread (1982-84=100)	180.1	188.6	195.4	200.2	204.1	203.9	204.6	206.7	205.7	208.3
Farm value-retail cost (%)	24.9	23.3	22.2	21.5	20.4	20.7	20.7	20.2	20.6	19.8
Meat products										
Retail cost (1982-84=100)	140.1	144.4	141.6	140.2	142.2	142.8	143.9	144.4	145.3	145.3
Farm value (1982-84=100)	100.4	101.2	84.8	70.7	82.9	83.8	84.7	85.1	85.4	85.7
Farm-retail spread (1982-84=100)	180.9	188.6	200.0	211.5	203.1	203.3	204.6	205.3	206.7	206.5
Farm value-retail cost (%)	36.3	35.5	30.3	25.5	29.5	29.7	29.8	29.8	29.8	29.9
Dairy products										
Retail cost (1982-84=100)	142.1	145.5	150.8	157.6	155.7	156.5	158.7	164.1	164.6	162.1
Farm value (1982-84=100)	107.2	98.0	113.0	127.1	99.2	107.4	112.3	115.5	112.9	92.8
Farm-retail spread (1982-84=100)	174.3	189.3	185.6	185.7	207.8	201.8	201.4	208.9	212.2	226.0
Farm value-retail cost (%)	36.2	32.3	36.0	38.7	30.6	32.5	34.0	33.8	32.9	27.5
Poultry										
Retail cost (1982-84=100)	152.4	156.6	157.1	159.3	157.3	158.5	159.8	158.1	159.4	157.5
Farm value (1982-84=100)	126.2	120.6	126.1	125.6	123.5	119.0	120.5	112.8	123.4	120.2
Farm-retail spread (1982-84=100)	182.6	198.1	192.9	198.1	196.2	204.0	205.1	210.3	200.8	200.5
Farm value-retail cost (%)	44.3	41.2	42.9	42.2	42.0	40.2	40.3	38.2	41.4	40.8
Eggs										
Retail cost (1982-84=100)	142.1	140.0	137.1	142.9	119.5	130.8	128.2	119.8	128.8	124.0
Farm value (1982-84=100)	114.7	99.3	89.6	108.1	68.6	72.2	68.2	55.2	84.2	74.4
Farm-retail spread (1982-84=100)	191.4	213.0	222.5	205.4	211.0	236.1	235.9	235.9	208.9	213.0
Farm value-retail cost (%)	51.9	45.6	42.0	48.6	36.9	35.5	34.2	29.6	42.0	38.6
Cereal and bakery products										
Retail cost (1982-84=100)	174.0	177.6	181.1	182.3	186.3	184.9	185.2	185.2	184.8	185.9
Farm value (1982-84=100)	125.6	107.7	94.4	95.0	78.2	81.8	80.6	77.1	77.7	75.1
Farm-retail spread (1982-84=100)	180.7	187.4	193.2	194.5	201.4	199.3	199.8	200.3	199.7	201.4
Farm value-retail cost (%)	7.2	7.4	6.4	6.4	5.1	5.4	5.3	5.1	5.1	4.9
Fresh fruit										
Retail cost (1982-84=100)	243.0	245.1	258.2	283.5	292.7	294.2	294.5	290.7	287.8	294.8
Farm value (1982-84=100)	151.7	137.0	141.3	138.5	145.5	157.1	158.4	148.0	146.9	144.2
Farm-retail spread (1982-84=100)	285.2	295.0	312.2	350.4	360.7	357.5	357.3	356.6	352.8	364.3
Farm value-retail cost (%)	19.7	17.7	17.3	15.4	15.7	16.9	17.0	16.1	16.1	15.5
Fresh vegetables										
Retail cost (1982-84=100)	189.2	194.6	215.8	212.3	206.0	204.8	208.0	208.9	209.1	214.0
Farm value (1982-84=100)	113.3	118.7	124.5	120.6	122.4	113.5	102.5	88.9	104.4	121.1
Farm-retail spread (1982-84=100)	228.3	233.6	262.7	259.4	249.0	251.7	262.3	270.6	262.9	261.8
Farm value-retail cost (%)	20.3	20.7	19.6	19.3	20.2	18.8	16.7	14.5	17.0	19.2
Processed fruits and vegetables										
Retail cost (1982-84=100)	144.4	147.9	150.6	150.4	156.4	156.5	154.9	156.3	154.7	154.7
Farm value (1982-84=100)	121.5	115.9	115.1	116.0	114.5	114.5	113.6	112.6	111.2	111.7
Farm-retail spread (1982-84=100)	151.6	157.9	161.7	161.1	169.5	169.6	167.8	169.9	168.3	168.1
Farm value-retail cost (%)	20.0	18.6	18.2	18.3	17.4	17.4	17.4	17.1	17.1	17.2
Fats and oils										
Retail cost (1982-84=100)	140.5	141.7	146.9	151.9	148.1	148.6	148.5	149.0	145.3	145.1
Farm value (1982-84=100)	112.3	109.4	118.9	111.5	81.2	80.8	83.0	82.1	79.4	78.2
Farm-retail spread (1982-84=100)	150.9	153.6	157.2	166.8	172.7	173.5	172.6	173.6	169.5	169.7
Farm value-retail cost (%)	21.5	20.8	21.8	19.7	13.7	14.6	15.0	14.8	14.7	14.5

See footnotes at end of table, next page.



Table 8-Farm-Retail Price Spreads (continued)

	Annual			1999				2000		
	1997	1998	1999	Mar	Oct	Nov	Dec	Jan	Feb	Mar
Beef, all fresh retail value (cents/lb.)	253.8	253.3	260.5	258.3	269.7	263.5	265.2	265.9	269.5	269.8
Beef, Choice										
Retail value (cents/lb.) <sup>2</sup>	279.5	277.1	287.8	276.9	295.4	300.0	301.8	294.7	293.6	297.7
Wholesale value (cents/lb.) <sup>3</sup>	158.2	153.8	171.6	160.3	183.1	180.5	181.8	177.5	174.5	183.3
Net farm value (cents/lb.) <sup>4</sup>	137.2	130.8	141.1	139.9	148.5	149.7	147.9	146.0	146.5	154.2
Farm-retail spread (cents/lb.)	142.3	146.3	146.7	137.0	146.9	150.3	153.9	148.7	147.1	143.5
Wholesale-retail (cents/lb.) <sup>5</sup>	121.3	123.3	116.2	116.6	112.3	119.5	120.0	117.2	119.1	114.4
Farm-wholesale (cents/lb.) <sup>6</sup>	21.0	23.0	30.5	20.4	34.6	30.8	33.9	31.5	28.0	29.1
Farm value-retail value (%)	49.1	47.2	49.0	50.5	50.3	49.9	49.0	49.5	49.9	51.8
Pork										
Retail value (cents/lb.) <sup>2</sup>	245.0	242.7	241.5	237.1	244.7	244.7	246.1	245.7	251.0	252.8
Wholesale value (cents/lb.) <sup>3</sup>	123.1	97.3	99.0	89.2	99.5	97.7	103.6	104.6	110.1	112.6
Net farm value (cents/lb.) <sup>4</sup>	95.3	61.2	60.4	50.2	63.2	62.4	66.8	68.0	74.1	77.4
Farm-retail spread (cents/lb.)	149.7	181.5	181.1	186.9	181.5	182.3	179.3	177.7	176.9	175.4
Wholesale-retail (cents/lb.) <sup>5</sup>	121.9	145.4	142.5	147.9	145.2	147.0	142.5	141.1	140.9	140.2
Farm-wholesale (cents/lb.) <sup>6</sup>	27.8	36.1	38.6	39.0	36.3	35.3	36.8	36.6	36.0	35.2
Farm value-retail value (%)	38.9	25.2	25.0	21.2	25.8	25.5	27.1	27.7	29.5	30.6

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 lb. 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			1998			1999			
	1997	1998	1999	II	III	IV	I	II	III	IV
1987=100*										
Labor—hourly earnings and benefits	474.3	490.4	502.5	488.3	493.0	494.6	497.8	502.5	503.4	506.3
Processing	486.0	499.3	511.8	497.7	500.7	504.9	504.6	513.0	513.7	516.2
Wholesaling	536.2	552.5	564.6	552.5	555.4	555.1	556.9	562.3	566.4	572.4
Retailing	435.2	454.1	465.8	450.6	457.8	459.4	464.9	465.6	465.3	467.3
Packaging and containers	390.3	395.5	399.4	396.7	394.9	391.9	390.3	396.4	403.0	407.7
Paperboard boxes and containers	341.9	365.2	373.0	368.7	366.8	359.8	355.7	368.3	380.2	387.8
Metal cans	491.0	487.9	486.6	484.7	486.0	486.6	486.6	486.6	486.6	486.6
Paper bags and related products	441.9	432.9	440.9	434.0	430.2	428.5	425.6	435.7	446.3	455.8
Plastic films and bottles	326.6	322.8	324.2	325.0	321.0	318.5	319.7	321.4	325.9	329.6
Glass containers	447.4	446.8	447.1	446.9	446.1	447.3	447.8	447.8	447.0	445.8
Metal foil	233.4	232.0	227.3	232.6	232.6	230.9	228.2	226.1	226.7	228.0
Transportation services	430.0	428.3	394.0	431.8	426.3	425.0	403.9	393.7	394.2	394.2
Advertising	609.4	624.5	623.7	624.2	624.5	626.2	622.2	622.9	623.9	625.6
Fuel and power	668.5	619.7	651.5	622.9	629.2	601.6	586.6	627.3	681.1	711.9
Electric	499.2	492.1	489.4	489.3	511.8	485.0	479.0	484.0	505.9	488.5
Petroleum	616.7	457.0	565.9	470.0	439.2	423.3	388.4	504.0	613.2	758.1
Natural gas	1,214.0	1,239.4	1,235.6	1,242.1	1,268.5	1,217.7	1,206.3	1,222.8	1,272.7	1,240.4
Communications, water and sewage	302.8	307.6	309.3	308.0	308.5	308.5	309.3	308.5	308.9	310.6
Rent	265.6	260.5	256.9	260.4	260.4	258.8	257.5	257.3	256.4	256.3
Maintenance and repair	514.9	529.3	541.6	527.1	531.1	535.1	537.9	540.7	542.5	545.3
Business services	512.3	522.9	531.9	521.2	521.8	530.3	527.7	528.7	533.3	536.1
Supplies	337.8	332.3	327.7	332.4	331.4	329.5	326.1	325.9	327.1	331.7
Property taxes and insurance	580.1	598.3	619.7	595.4	600.7	606.1	609.6	615.2	622.8	631.3
Interest, short-term	108.9	103.7	103.7	106.7	105.6	96.0	93.2	96.7	109.7	115.2
Total marketing cost index	459.9	467.2	472.2	466.9	468.6	468.0	464.8	470.2	474.8	479.0

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 <sup>1</sup>	Imports	Total supply	Exports	Ending stocks	Consumption		Conversion factor <sup>3</sup>	Primary market price <sup>4</sup>
							Total	Per capita <sup>2</sup>		
	Million lbs. <sup>5</sup>						Lbs.			\$/cwt
Beef										
1996	519	25,525	2,073	28,117	1,877	377	25,863	68	0.700	65.06
1997	377	25,490	2,343	28,210	2,136	465	25,609	67	0.700	66.32
1998	465	25,760	2,642	28,867	2,171	393	26,303	68	0.700	61.48
1999	393	26,493	2,874	29,760	2,329	411	27,020	69	0.700	66
2000	411	26,268	3,015	29,694	2,350	365	26,979	68	0.700	68-71
Pork										
1996	396	17,117	618	18,131	970	366	16,795	49	0.776	56.53
1997	366	17,274	633	18,273	1,044	408	16,821	49	0.776	54.30
1998	408	19,011	704	20,123	1,229	586	18,308	53	0.776	34.72
1999	586	19,308	827	20,721	1,168	488	19,065	54	0.776	34
2000	488	18,860	885	20,233	1,200	500	18,533	52	0.776	43-46
Veal <sup>6</sup>										
1996	7	378	0	385	0	7	378	1	0.83	59
1997	7	334	0	341	0	8	333	1	0.83	82
1998	8	262	0	270	0	5	265	1	0.83	82
1999	5	235	0	240	0	5	235	1	0.83	90
2000	5	221	0	226	0	4	222	1	0.83	100
Lamb and mutton										
1996	8	268	73	349	6	9	334	1	0.89	85
1997	9	260	83	352	5	14	333	1	0.89	88
1998	14	251	112	377	6	12	359	1	0.89	74
1999	12	248	113	373	5	9	359	1	0.89	76
2000	9	219	114	342	6	10	326	1	0.89	77
Total red meat										
1996	930	43,288	2,764	46,982	2,853	759	43,370	120	--	--
1997	759	43,358	3,059	47,176	3,185	895	43,096	118	--	--
1998	895	45,284	3,458	49,637	3,406	996	45,235	123	--	--
1999	996	46,284	3,814	51,094	3,502	913	46,679	125	--	--
2000	913	45,568	4,014	50,495	3,556	879	46,060	122	--	--
¢/lb										
Broilers										
1996	560	26,124	4	26,688	4,420	641	21,626	70	0.859	61
1997	641	27,041	5	27,687	4,664	607	22,416	72	0.859	59
1998	607	27,612	5	28,225	4,673	711	22,841	73	0.859	63
1999	711	29,468	4	30,183	4,741	796	24,646	78	0.859	58
2000	796	30,808	4	31,608	4,850	890	25,868	81	0.869	58
Mature chickens										
1996	7	491	0	498	265	6	228	1	1.0	--
1997	6	510	0	516	384	7	125	1	1.0	--
1998	7	525	0	533	426	6	101	1	1.0	--
1999	6	554	0	562	393	8	162	1	1.0	--
2000	8	556	0	566	415	5	144	1	1.0	--
Turkeys										
1996	271	5,401	1	5,673	438	328	4,906	19	1.0	66
1997	328	5,412	1	5,741	606	415	4,720	18	1.0	65
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	5,307	0	5,561	390	250	4,921	18	1.0	68
Total poultry										
1996	839	32,015	5	32,859	5,123	975	26,760	90	--	--
1997	975	32,964	6	33,944	5,654	1,029	27,261	90	--	--
1998	1,029	33,352	6	34,387	5,545	1,022	27,821	91	--	--
1999	1,022	35,252	7	36,281	5,513	1,058	29,710	96	--	--
2000	1,058	36,672	6	37,736	5,655	1,145	30,934	99	--	--
Red meat and poultry										
1996	1,769	75,303	2,769	79,841	7,976	1,734	70,130	209	--	--
1997	1,734	76,322	3,065	81,120	8,839	1,924	70,357	208	--	--
1998	1,924	78,636	3,464	84,024	8,950	2,018	73,057	214	--	--
1999	2,018	81,536	3,821	87,375	9,014	1,971	76,389	221	--	--
2000	1,971	82,047	4,020	88,231	9,211	2,024	76,994	221	--	--

-- = 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 &amp; Use

	Beg. stocks	Production	Imports	Total supply	Exports	Hatching use	Ending stocks	Consumption		Primary market price*
								Total	Per capita	
	Million doz.							No.	¢/doz.	
1993	13.5	6,005.8	4.7	6,023.9	158.9	769.6	10.7	5,084.6	236.4	72.5
1994	10.7	6,177.6	3.7	6,192.0	187.6	805.4	14.9	5,184.1	238.7	67.3
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	5,816.8	255.5	65.6
2000	7.6	7,060.0	4.0	7,071.6	160.0	975.0	5.0	5,931.6	258.2	61.1

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 <sup>1</sup>

	Production	Commercial			Total commer- cial supply	Commercial				CCC net removals		
		Farm use	Farm market- ings	Beg. stocks		Imports	CCC net re- movals	Ending stocks	Disap- pear- ance	All milk price <sup>1</sup>	Skim solids basis	Total solids basis <sup>2</sup>
Million lbs. (milkfat basis)										\$/cwt	Billion lbs.	
1992	150.9	1.9	149.0	4.5	2.5	155.9	9.9	4.7	141.3	13.09	2.0	5.2
1993	150.6	1.8	148.8	4.7	2.8	156.3	6.6	4.5	145.1	12.80	3.9	5.0
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	1.3	161.4	5.3	4.7	171.4	0.3	6.1	164.9	14.38	6.5	4.0
2000	167.3	1.3	166.1	6.1	4.0	176.2	0.7	5.5	170.0	12.65	7.9	5.0

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 &amp; Eggs

	Annual			1999					2000	
	1997	1998	1999	Feb	Sep	Oct	Nov	Dec	Jan	Feb
<b>Broilers</b>										
Federally inspected slaughter certified (mil. lb.)	27,270.7	27,862.7	29,741.4	2,263.8	2,497.9	2,481.0	2,420.1	2,466.0	2,420.3	2,472.4
Wholesale price, 12-city (cents/lb.)	58.8	63.1	58.1	58.2	57.2	54.9	59.5	58.4	55.4	54
Price of grower feed (\$/ton) <sup>1</sup>	157.7	128.7	102.8	109.3	100.0	97.1	97.1	99.5	104.5	108.1
Broiler-feed price ratio <sup>2</sup>	4.7	6.3	7.2	6.7	7.3	6.9	7.7	7.4	6.7	6.2
Stocks beginning of period (mil. lb.)	641.3	606.8	711.1	709.2	835.3	884.7	811.1	787.1	795.6	796.4
Broiler-type chicks hatched (mil.)	8,321.6	8,495.1	8,708.1	661.7	699.7	697.8	673.7	747.9	749.4	701
<b>Turkeys</b>										
Federally inspected slaughter certified (mil. lb.)	5,477.9	5,280.6	5,296.5	363.8	454.9	472.6	490	430.0	399.9	416.9
Wholesale price, Eastern U.S. 8-16 lb. young hens (cents/lb.)	64.9	62.2	69	58.8	76.3	79.3	79	72.4	61.6	61.8
Price of turkey grower feed (\$/ton) <sup>1</sup>	142.7	115.7	94.9	100.6	92.7	90.8	91.2	91.7	95.8	99.2
Turkey-feed price ratio <sup>2</sup>	5.6	6.7	8.7	7.1	9.6	10.0	10.0	9.2	7.6	7.2
Stocks beginning of period (mil. lb.)	328.0	415.1	304.3	363.8	580.3	596.4	494.5	252.3	254.3	312.4
Poultz placed in U.S. (mil.)	321.5	297.8	297.4	23.7	21.8	22.3	23.5	25.5	24.7	24.1
<b>Eggs</b>										
Farm production (mil.)	77,677	79,905	82,885	6,281	6,860	7,126	7,016	7,279	7,155	6,662
Average number of layers (mil.)	304	313	323	323	322	325	328	329	329	330
Rate of lay (eggs per layer on farms)	255.3	255.4	256.8	19.5	21.3	21.9	21.4	22.1	21.8	20.2
Cartoned price, New York, grade A large (cents/doz.) <sup>3</sup>	81.2	75.8	65.6	69.6	62.4	56.9	67.2	65.4	62.2	67.1
Price of laying feed (\$/ton) <sup>1</sup>	160.0	137.5	123.2	123.0	121.9	128.5	108.1	121.4	130.3	121.4
Egg-feed price ratio <sup>2</sup>	8.8	9.8	9.8	10.6	9.3	7.8	11.9	10.1	8.9	11.3
Stocks, first of month										
Frozen (mil. doz.)	7.7	7.4	8.4	8.4	6.7	7.2	6.8	6.4	7.6	9.2
Replacement chicks hatched (mil.)	424.5	438.4	448.8	35.6	38.8	38.6	33.1	32.7	34.1	35.5

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			1999					2000	
	1997	1998	1999	Feb	Sep	Oct	Nov	Dec	Jan	Feb
Class III (BFP before 2000) 3.5% fat	12.1	14.2	12.43	10.27	16.26	11.49	9.79	9.63	10.05	9.54
Wholesale prices										
Butter, Central States (cents/lb.) <sup>1</sup>	116.2	177.6	125.2	133.1	135.8	113.7	109.6	94.2	91.6	92.9
Am. cheese, Wis. assembly pt. (cents/lb.)	132.4	158.1	142.2	131.5	167.3	134.0	117.3	115.7	114.6	111.6
Nonfat dry milk (cents/lb.) <sup>2</sup>	110.0	106.9	103.5	104.4	104.9	104.5	103.4	101.7	100.9	100.2
USDA net removals										
Total (mil. lb.) <sup>3</sup>	1,090.3	365.6	343.5	23.3	30.3	27.2	40.3	55.1	88.4	99.3
Butter (mil. lb.)	38.4	6.3	3.7	0.0	0.5	0.5	0.8	1.0	2.0	2.6
Am. cheese (mil. lb.)	11.3	8.2	4.6	0.5	0.4	0.4	0.2	0.4	0.4	0.7
Nonfat dry milk (Mil. lb.)	298.0	326.4	540.6	35.9	39.4	33.4	38.7	68.8	60.3	63.5
Milk										
Milk prod. 20 states (mil. lb.)	133,314	134,900	140,029	10,804	11,200	11,549	11,315	11,928	12,256	11,691
Milk per cow (lb.)	17,180	17,501	18,103	1,404	1,445	1,491	1,459	1,538	1,578	1,505
Number of milk cows (1,000)	7,760	7,708	7,735	7,696	7,753	7,746	7,756	7,757	7,765	7,766
U.S. milk production (mil. lb.) <sup>4</sup>	156,091	157,348	162,711	12,607	12,964	13,418	13,141	13,847	14,251	13,589
Stocks, beginning <sup>3</sup>										
Total (mil. lb.)	4,714	4,907	5,301	6,948	8,277	7,485	7,037	6,056	6,193	7,623
Commercial (mil. lb.)	4,704	4,889	5,247	6,917	8,227	7,442	6,993	6,011	6,149	7,576
Government (mil. lb.)	10	18	27	32	50	43	44	44	44	47
Imports, total (mil. lb.) <sup>3</sup>	2,698	4,588	4,741	325	432	471	371	431	264	--
Commercial disappearance (mil. lb.) <sup>3</sup>	156,118	159,824	164,933	11,930	14,044	14,200	14,347	13,975	12,894	--
Butter										
Production (mil. lb.)	1,151.2	1,081.9	1,166.8	111.5	78.8	93	90.4	117.2	142.3	129.8
Stocks, beginning (mil. lb.)	13.4	20.5	25.9	60.5	94.5	71.3	63.8	29.9	24.9	72.6
Commercial disappearance (mil. lb.)	1,108.7	1,136.4	1,200.1	80.2	100	103.1	124.1	121.8	91.5	--
American cheese										
Production (mil. lb.)	3,285.6	3,325.8	3,585.9	277.3	283.6	295.8	287.3	307.4	316.7	297.4
Stocks, beginning (mil. lb.)	379.6	410.3	407.6	452.2	508.3	473.6	459.3	448.2	458.0	480.1
Commercial disappearance (mil. lb.)	3,269.0	3,349.7	3,595.5	268.0	324.5	319.0	304.3	304.9	292.5	--
Other cheese										
Production (mil. lb.)	4,044.9	4,176.1	4,355.4	323.0	354.8	377.9	392.3	385.2	370.2	342.3
Stocks, beginning (mil. lb.)	107.3	70.0	109.5	170.2	186.4	177.6	162.6	143.5	163.3	187.9
Commercial disappearance (mil. lb.)	4,366.6	4,450.6	4,666.1	346.2	398.4	428.1	446.0	406.0	364.8	--
Nonfat dry milk										
Production (mil. lb.)	1,271.6	1,135.4	1,377.6	115.8	90.6	103.0	100.6	129.3	133.6	132.5
Stocks, beginning (mil. lb.)	71.1	103.3	56.3	82.3	101.3	87.2	84.0	86.8	139.5	146.2
Commercial disappearance (mil. lb.)	894.1	867.5	765.4	55.2	--	--	--	--	64.6	--
Frozen dessert										
Production (mil. gal.) <sup>5</sup>	1,290.0	1,325.9	1,286.0	90.6	108.5	93.9	87.6	80.4	83.8	95.1
	Annual			1998			1999			2000
	1997	1998	1999	III	IV	I	II	III	IV	I
Milk production (mil. lb.)	156,091	157,348	162,711	38,513	38,901	40,505	42,029	39,771	40,406	42,591
Milk per cow (lb.)	16,871	17,189	17,771	4,211	4,262	4,437	4,591	4,337	4,406	4,637
No. of milk cows (1,000)	9,252	9,154	9,156	9,145	9,128	9,128	9,155	9,171	9,170	9,186
Milk-feed price ratio	1.54	1.97	2.03	2.05	2.46	2.20	1.81	2.12	1.99	1.67
Returns over concentrate costs (\$/cwt milk)	9.80	12.15	11.45	12.25	14.80	13.00	9.90	11.90	10.95	8.90

-- = 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			1998			1999			
	1997	1998	1999	II	III	IV	I	II	III	IV
U.S. wool price (¢/lb.) <sup>1</sup>	238	162	110	178	142	115	115	116	110	98
Imported wool price (¢/lb.) <sup>2</sup>	206	164	136	176	141	141	146	142	133	125
U.S. mill consumption, scoured										
Apparel wool (1,000 lb.)	130,386	98,373	65,468	29,577	21,948	17,530	17,767	17,352	16,253	14,096
Carpet wool (1,000 lb.)	13,576	16,331	15,017	4,052	4,020	4,388	4,538	3,855	3,426	3,198

-- = 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			1999				2000		
	1997	1998	1999	Mar	Oct	Nov	Dec	Jan	Feb	Mar
Cattle on feed (7 states, 1000+ head capacity)										
Number on feed (1,000 head) <sup>1</sup>	8,943	9,455	9,021	8,878	8,783	9,776	10,020	9,752	9,885	9,695
Placed on feed (1,000 head)	20,765	19,697	21,446	1,741	2,609	1,823	1,408	1,931	1,606	1,716
Marketings (1,000 head)	19,552	19,440	20,124	1,668	1,560	1,530	1,601	1,747	1,749	1,764
Other disappearance (1,000 head)	701	691	676	52	63	62	75	51	47	74
Market prices (\$/cwt)										
Slaughter cattle										
Choice steers, 1,100-1,300 lb.										
Texas	65.99	61.75	65.89	64.75	69.63	70.28	69.01	69.07	68.88	71.74
Neb. direct	66.32	61.48	65.65	64.63	69.58	70.31	69.05	67.97	68.24	71.74
Boning utility cows, Sioux Falls	34.27	36.20	38.40	37.36	39.44	37.88	38.80	39.19	38.80	41.58
Feeder steers										
Medium no. 1, Oklahoma City										
600-650 lb.	81.34	77.70	82.64	81.14	82.03	87.19	91.33	93.13	94.55	98.96
750-800 lb.	76.19	71.80	76.39	70.98	80.53	82.59	88.48	87.50	84.03	83.84
Slaughter hogs										
Barrows and gilts, 51-52 percent lean										
National Base converted to live equal.	54.30	34.72	34.02	28.25	35.84	35.54	37.70	38.32	41.58	43.52
Sows, Iowa, S.MN 1-2 300-400 lb.	40.24	20.29	19.26	18.41	19.73	19.25	19.96	24.60	25.35	26.86
Slaughter sheep and lambs										
Lambs, Choice, San Angelo	87.95	74.20	75.97	68.54	74.81	78.00	83.29	73.71	76.83	78.17
Ewes, Good, San Angelo	49.33	40.90	42.32	45.17	36.44	41.17	41.21	45.67	51.92	49.92
Feeder lambs										
Choice, San Angelo	104.43	79.59	81.05	81.75	75.25	82.54	88.67	84.63	99.54	99.58
Wholesale meat prices, Midwest										
Boxed beef cut-out value										
Choice, 700-800 lb.	102.75	98.60	111.55	103.88	120.24	117.20	116.88	113.74	112.18	118.25
Select, 700-800 lb.	96.15	92.19	101.99	102.01	104.49	103.19	105.67	106.09	106.88	112.56
Canner and cutter cow beef	64.50	61.49	66.66	66.18	66.00	--	68.38	69.86	72.38	72.67
Pork cutout	--	53.07	53.45	45.85	55.75	54.50	58.64	57.65	62.18	63.62
Pork loins, bone-in, 1/4 " trim,14-19 lb.	128.75	102.04	100.25	83.47	98.98	93.13	102.57	99.29	110.66	110.06
Pork bellies, 12-14 lb.	73.91	52.38	57.43	46.51	70.83	71.50	71.37	80.45	82.40	85.00
Hams, bone-in, trimmed, 20-23 lb.	--	--	47.90	42.86	55.68	66.50	55.96	47.41	46.50	49.31
All fresh beef retail price	253.77	253.28	260.50	258.30	269.70	263.50	265.20	265.90	269.50	269.80
Commercial slaughter (1,000 head) <sup>2</sup>										
Cattle	36,318	35,465	36,150	3,050	3,094	2,940	2,875	2,937	2,937	--
Steers	17,529	17,428	17,936	1,465	1,475	1,376	1,425	1,432	1,396	--
Heifers	11,528	11,448	11,866	1,031	1,051	980	901	980	1,046	--
Cows	6,564	5,983	5,708	499	511	533	498	474	445	--
Bull and stags	696	606	639	55	57	99	51	51	50	--
Calves	1,575	1,458	1,484	117	105	104	113	93	95	--
Sheep and lambs	3,911	3,911	3,698	424	305	329	356	282	293	--
Hogs	91,960	101,029	101,544	9,117	8,944	8,896	8,885	8,141	8,067	--
Barrows and gilts	88,409	97,030	97,738	8,770	8,639	8,581	8,583	7,881	7,807	--
Commercial production (mil. lb.)										
Beef	25,384	25,653	25,656	2,231	2,265	2,146	2,114	2,178	2,175	--
Veal	324	252	250	20	19	19	21	17	18	--
Lamb and mutton	257	248	247	29	20	22	24	19	20	--
Pork	17,244	18,981	18,981	1,737	1,698	1,708	1,704	1,570	1,554	--
	Annual			1998		1999			2000	
	1997	1998	1999	IV	I	II	III	IV	I	II
Hogs and pigs (U.S.) <sup>3</sup>										
Inventory (1,000 head) <sup>1</sup>	56,124	61,158	62,206	63,488	62,206	60,191	60,896	60,776	59,507	58,147
Breeding (1,000 head) <sup>1</sup>	6,578	6,957	6,682	6,875	6,682	6,527	6,515	6,301	6,244	6,215
Market (1,000 head) <sup>1</sup>	49,546	54,200	55,523	56,612	55,523	53,663	54,380	54,474	53,264	51,933
Farrowings (1,000 head)	11,479	12,061	11,666	2,993	2,891	2,986	2,920	2,869	2,819	2,868
Pig crop (1,000 head)	99,584	105,004	102,569	25,902	25,247	26,270	25,860	25,192	24,777	--
Cattle on Feed, 7 states (1,000 head) <sup>4</sup>										
Steers and steer calves	5,410	5,803	5,432	5,086	5,432	5,341	4,849	5,286	5,768	5,736
Heifers and heifer calves	3,455	3,615	3,552	3,268	3,552	3,527	3,302	3,479	3,942	3,800
Cows and bulls	78	59	37	32	37	31	44	28	42	37

-- = 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. Beginning of period. 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 <sup>1,2</sup>

	Area			Yield	Production	Total supply <sup>4</sup>	Feed & residual	Other domestic use	Exports	Total use	Ending stocks	Farm price <sup>5</sup>
	Set-aside <sup>3</sup>	Planted	Harvested									
	Mil. Acres	Bu./acre	Bu./acre									
Wheat												
1995/96	6.1	69.0	61.0	35.8	2,183	2,757	154	986	1,241	2,381	376	4.55
1996/97	--	75.1	62.8	36.3	2,277	2,746	308	993	1,002	2,302	444	4.30
1997/98	--	70.4	62.8	39.5	2,481	3,020	251	1,007	1,040	2,298	722	3.38
1998/99*	--	65.8	59.0	43.2	2,547	3,373	397	988	1,042	2,427	946	2.65
1999/2000*	--	62.8	53.9	42.7	2,302	3,338	325	995	1,075	2,395	943	2.50
	Mil. acres	Bu./acre	Bu./acre									
Rice <sup>6</sup>												
1995/96	0.5	3.1	3.1	5,621.0	173.9	212.8	--	6/ 105.6	82.2	187.8	25.0	9.15
1996/97	--	2.8	2.8	6,120.0	171.6	207.1	--	6/ 102.7	77.2	179.9	27.2	9.96
1997/98	--	3.1	3.1	5,897.0	183.0	219.4	--	6/ 104.6	86.9	191.5	27.9	9.70
1998/99*	--	3.3	3.3	5,669.0	188.1	226.5	--	6/ 119.1	85.3	204.4	22.1	8.89
1999/2000*	--	3.6	3.6	5,908.0	210.5	243.3	--	6/ 116.8	87.0	203.8	39.5	6.05-6.15
	Mil. acres	Bu./acre	Bu./acre									
Corn												
1995/96	7.7	71.5	65.2	113.5	7,400	8,974	4,693	1,628	2,228	8,548	426	3.24
1996/97	--	79.2	72.6	127.1	9,233	9,672	5,277	1,714	1,797	8,789	883	2.71
1997/98	--	79.5	72.7	126.7	9,207	10,099	5,482	1,805	1,504	8,791	1,308	2.43
1998/99*	--	80.2	72.6	134.4	9,759	11,085	5,472	1,846	1,981	9,298	1,787	1.94
1999/2000*	--	77.4	70.5	133.8	9,437	11,239	5,650	1,930	1,900	9,480	1,759	1.85-1.95
	Mil. acres	Bu./acre	Bu./acre									
Sorghum												
1995/96	1.7	9.4	8.3	55.6	459	530	295	19	198	512	18	3.19
1996/97	--	13.1	11.8	67.3	795	814	516	45	205	766	47	2.34
1997/98	--	10.1	9.2	69.2	634	681	365	55	212	632	49	2.21
1998/99*	--	9.6	7.7	67.3	520	569	262	45	197	504	65	1.66
1999/2000*	--	9.3	8.5	69.7	595	660	325	55	235	615	45	1.55-1.65
	Mil. acres	Bu./acre	Bu./acre									
Barley												
1995/96	2.9	6.7	6.3	57.2	359	513	179	172	62	413	100	2.89
1996/97	--	7.1	6.7	58.5	392	529	217	172	31	419	109	2.74
1997/98	--	6.7	6.2	58.1	360	510	144	172	74	390	119	2.38
1998/99*	--	6.3	5.9	60.0	352	501	161	170	28	360	142	1.98
1999/2000*	--	5.2	4.8	59.2	282	449	135	172	30	337	112	2.15
	Mil. acres	Bu./acre	Bu./acre									
Oats												
1995/96	0.8	6.2	3.0	54.6	161	342	195	79	2	276	66	1.67
1996/97	--	4.6	2.7	57.7	153	317	172	76	3	250	67	1.96
1997/98	--	5.1	2.8	59.5	167	332	185	72	2	258	74	1.60
1998/99*	--	4.9	2.8	60.2	166	348	196	69	2	266	81	1.10
1999/2000*	--	4.7	2.5	59.6	146	328	180	68	2	250	78	1.10
	Mil. acres	Bu./acre	Bu./acre									
Soybeans <sup>7</sup>												
1995/96	--	62.6	61.6	35.3	2,177	2,516	112	1,370	851	2,333	183	6.72
1996/97	--	64.2	63.3	37.6	2,380	2,573	123	1,436	882	2,441	132	7.35
1997/98	--	70.0	69.1	38.9	2,689	2,826	156	1,597	873	2,626	200	6.47
1998/99*	--	72.0	70.4	38.9	2,741	2,944	204	1,590	801	2,595	348	4.93
1999/2000*	--	73.8	72.5	36.5	2,643	2,994	169	1,590	930	2,689	305	4.50-4.90
Soybean oil												
1995/96	--	--	--	--	15,240	16,472	--	13,465	992	14,457	2,015	24.75
1996/97	--	--	--	--	15,752	17,821	--	14,263	2,037	16,300	1,520	22.50
1997/98	--	--	--	--	18,143	19,723	--	15,262	3,079	18,341	1,382	25.84
1998/99*	--	--	--	--	18,081	19,546	--	15,655	2,372	18,027	1,520	19.90
1999/2000*	--	--	--	--	18,045	19,660	--	16,250	1,500	17,750	1,910	15.00-17.00
Soybean meal												
1995/96	--	--	--	--	32,527	32,826	--	26,611	6,002	32,613	212	236.0
1996/97	--	--	--	--	34,210	34,524	--	27,320	6,994	34,314	210	270.9
1997/98	--	--	--	--	38,176	38,443	--	28,895	9,329	38,225	218	185.5
1998/99*	--	--	--	--	37,792	38,109	--	30,662	7,117	37,779	330	138.5
1999/2000*	--	--	--	--	37,845	38,225	--	31,000	6,900	37,900	325	155-170

See footnotes at end of table, next page

Table 17-Supply &amp; Utilization (continued)

	Area			Yield	Production	Total supply <sup>4</sup>	Feed & residual	Other domestic use	Exports	Total use	Ending stocks	Farm price <sup>5</sup>
	Set-aside <sup>3</sup>	Planted	Harvested									
	Mil. Acres			Lb./acre				Mil. Bales				¢/lb.
Cotton <sup>9</sup>												
1995/96	1.7	16.9	16.0	537	17.9	21.0	--	10.6	7.7	18.3	2.6	75.4
1996/97	0.3	14.7	12.9	705	18.9	22.0	--	11.1	6.9	18.0	4.0	69.3
1997/98	--	13.9	13.4	673	18.8	22.8	--	11.3	7.5	18.8	3.9	65.2
1998/99*	--	13.4	10.7	625	13.9	18.2	--	10.4	4.3	14.7	3.9	60.2
1999/2000 <sup>1</sup>	--	14.9	13.4	608	17.0	21.0	--	10.1	6.5	16.6	4.4	--

-- = Not available or not applicable. \*April 11, 2000 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, 50-92, & 0-92 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. *Information contacts: Wheat, rice, feed grains, Jenny Gonzales (202) 694-5296; soybeans, soybean products, and cotton, Mae Dean Johnson (202) 694-5299*

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

	Marketing year <sup>1</sup>			1999					2000	
	1997/98	1998/99	1999/00	Feb	Sep	Oct	Nov	Dec	Jan	Feb
Wheat, no. 1 HRW, Kansas City (\$/bu.) <sup>2</sup>	3.71	3.08	--	3.05	2.92	2.80	2.89	2.81	2.90	2.94
Wheat, DNS, Minneapolis (\$/bu.) <sup>3</sup>	4.31	3.83	--	3.78	3.55	3.70	3.78	3.64	3.37	3.59
Rice, S.W. La. (\$/cwt) <sup>4</sup>	18.92	16.79	--	17.06	14.38	14.00	13.85	13.58	13.00	12.69
Corn, no. 2 yellow, 30-day, Chicago (\$/bu.) <sup>5</sup>	2.56	2.06	--	2.15	1.88	1.90	1.90	1.93	2.06	2.12
Sorghum, no. 2 yellow, Kansas City (\$/cwt) <sup>5</sup>	4.11	3.29	--	3.43	2.97	2.71	2.71	2.87	3.20	3.28
Barley, feed, Duluth (\$/bu.)	1.90	--	--	--	--	--	--	--	--	--
Barley, malting Minneapolis (\$/bu.)	2.50	--	--	--	--	--	--	--	--	--
U.S. cotton price, SLM, 1-1/16 in. (¢/lb.) <sup>6</sup>	67.79	--	--	55.46	48.39	49.46	48.12	46.65	51.92	54.29
Northern Europe prices cotton index (¢/lb.) <sup>7</sup>	72.11	--	--	56.26	49.26	47.36	46.13	44.24	47.80	53.63
U.S. M 1-3/32 in. (¢/lb.) <sup>8</sup>	77.98	--	--	--	56.30	56.88	54.31	52.75	58.69	60.94
Soybeans, no. 1 yellow, 30-day Chicago (\$/bu)	6.51	--	--	4.86	4.65	4.60	4.50	4.55	4.84	4.96
Soybean oil, crude, Decatur (¢/lb.)	25.84	19.90	--	19.96	16.79	16.08	15.63	15.56	15.63	15.09
Soybean meal, 48% protein, Decatur (\$/ton)	185.54	138.50	--	132.30	150.63	153.57	154.70	154.00	163.41	170.85

-- = No quotes. 1. Beginning June 1 for wheat and barley; Aug. 1 for rice and cotton; September 1 for corn, sorghum, and soybeans; October 1 for soybean meal and oil. 2. Ordinary protein. 3. 14 percent protein. 4. Long grain, milled basis. 5. Marketing year 1997/98 data are preliminary. 6. Average spot market. 7. Liverpool Cotlook "A" Index; average of 5 lowest prices of 13 selected growths. 8. Cotton, Memphis territory growths. *Information contacts: Wheat, rice, and feed, Jenny Gonzales (202) 694-5296; soybeans, soybean products, and cotton, Mae Dean Johnson (202) 694-5299*

Table 19-Farm Programs, Price Supports, Participation, &amp; Payment Rates

	Target price	Basic loan rate	Findley or announced loan rate <sup>1</sup>	Total deficiency payment rate	Effective base acres <sup>2</sup>	Program <sup>3</sup>	Flexibility contract payment rate	Acres under contract	Contract payment yields	Participation rate <sup>4</sup>
		\$/bu.			Mil. acres	Percent of base	\$/bu.	Mil. acres	Bu./cwt	Percent
Wheat										
1995/96	4.00	2.69	2.58	0.00	77.70	0/0/0	--	--	--	85
1996/97	--	--	2.58	--	--	--	0.874	76.7	34.70	99
1997/98	--	--	2.58	--	--	--	0.631	76.7	34.70	--
1998/99	--	--	2.58	--	--	--	0.663	78.9	34.50	--
1999/2000 <sup>5</sup>	--	--	2.58	--	--	--	0.637	79.0	34.50	--
		\$/cwt					\$/cwt			
Rice										
1995/96	10.71	6.50	6.50 <sup>6</sup>	3.22 <sup>7</sup>	4.20	5/0/0	--	--	--	95
1996/97	--	6.50	--	--	--	--	2.766	4.2	48.27	99
1997/98	--	6.50	--	--	--	--	2.710	4.2	48.17	--
1998/99	--	6.50	--	--	--	--	2.921	4.2	48.17	--
1999/2000 <sup>5</sup>	--	6.50	--	--	--	--	2.820	4.2	48.15	--
		\$/bu.					\$/bu.			
Corn										
1995/96	2.75	1.94	1.89	0.00	81.80	7.5/0/0	--	--	--	82
1996/97	--	--	1.89	--	--	--	0.251	80.7	102.90	98
1997/98	--	--	1.89	--	--	--	0.486	80.9	102.80	--
1998/99	--	--	1.89	--	--	--	0.377	82.0	102.60	--
1999/2000 <sup>5</sup>	--	--	1.89	--	--	--	0.363	81.9	102.60	--
		\$/bu.					\$/bu.			
Sorghum										
1995/96	2.61	1.84	1.80	0.00	13.30	0/0/0	--	--	--	77
1996/97	--	--	1.81	--	--	--	0.323	13.1	57.30	99
1997/98	--	--	1.76	--	--	--	0.544	13.1	57.30	--
1998/99	--	--	1.74	--	--	--	0.452	13.6	56.90	--
1999/2000 <sup>5</sup>	--	--	1.74	--	--	--	0.435	13.7	56.90	--
		\$/bu.					\$/bu.			
Barley										
1995/96	2.36	1.58	1.54	0.00	10.70	0/0/0	--	--	--	82
1996/97	--	--	1.55	--	--	--	0.332	10.5	47.30	99
1997/98	--	--	1.57	--	--	--	0.277	10.5	47.20	--
1998/99	--	--	1.56	--	--	--	0.284	11.2	46.70	--
1999/2000 <sup>5</sup>	--	--	1.59	--	--	--	0.271	11.2	46.60	--
		\$/bu.					\$/bu.			
Oats										
1995/96	1.45	1.00	0.97	0.00	6.50	0/0/0	--	--	--	44
1996/97	--	--	1.03	--	--	--	0.033	6.2	50.80	97
1997/98	--	--	1.11	--	--	--	0.031	6.2	50.80	--
1998/99	--	--	1.11	--	--	--	0.031	6.5	50.70	--
1999/2000 <sup>5</sup>	--	--	1.13	--	--	--	0.030	6.5	50.60	--
		\$/bu.					\$/bu.			
Soybeans <sup>8</sup>										
1995/96	--	--	4.92	--	--	--	--	--	--	--
1996/97	--	--	4.97	--	--	--	--	--	--	--
1997/98	--	--	5.26	--	--	--	--	--	--	--
1998/99	--	--	5.26	--	--	--	--	--	--	--
1999/2000	--	--	5.26	--	--	--	--	--	--	--
		¢/lb.					¢/lb.			
Upland cotton										
1995/96	72.90	51.92	51.92 <sup>9</sup>	0.00 <sup>7</sup>	15.50	0/0/0	--	--	--	79
1996/97	--	51.92	--	--	--	--	8.882	16.2	610.00	99
1997/98	--	51.92	--	--	--	--	7.625	16.2	608.00	--
1998/99	--	51.92	--	--	--	--	8.173	16.4	604.00	--
1999/2000 <sup>5</sup>	--	51.92	--	--	--	--	7.880	16.4	604.00	--

-- = Not available. 1. There are no Findley loan rates for rice or cotton. See footnotes 5 and 7. 2. Prior to 1996, national effective crop acreage base as determined by FSA. Net of CRP. 3. Program requirements for participating producers (mandatory acreage reduction program/mandatory paid land diversion/optional paid land diversion). Acres idled must be devoted to a conserving use to receive program benefits. 4. Percentage of effective base enrolled in acreage reduction programs. Starting in 1996, participation rate is the percent of eligible acres that entered production flexibility contracts. 5. Estimated payment rates and acres under contract. 6. A marketing loan program has been in effect for rice since 1985/86. Loans may be repaid at the lower of: a) the loan rate or b) the adjusted world market price (announced weekly). Loans cannot be repaid at less than a specified fraction of the loan rate. Data refer to marketing-year average loan repayment rates. Beginning with the 1996 crop, loans are repaid at the lower of the loan rate plus accumulated interest or the adjusted world price. 7. Guaranteed payment rates for producers in the 50/85/92 program were \$0.034/lb. for upland cotton and \$4.21/cwt. for rice. 8. There are no target prices, base acres, acreage reduction programs or deficiency payment rates for soybeans. 9. A marketing loan program has been in effect for cotton since 1986/87. In 1987/88 and after, loans may be repaid at the lower of: a) the loan rate or b) the adjusted world market price (announced weekly; Plan B). Starting in 1991/92, loans cannot be repaid at less than 70 percent of the loan rate. Data refer to annual average loan repayment rates. Beginning with the 1996 crop, loans are repaid at the lower of the loan rate plus accumulated interest or the adjusted world price. Note: The 1996 Farm Act replaced target prices and deficiency payments with fixed annual payments to producers. Information contact: Brenda Chewning, Farm Service Agency (202) 720-8838



Table 20-Fruit

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Citrus <sup>1</sup>										
Production (1,000 tons)	10,860	11,285	12,452	15,274	14,561	15,799	15,712	17,271	17,770	13,702
Per capita consumpt. (lb.) <sup>2</sup>	21.4	19.1	24.4	26.0	25.0	24.1	24.9	27.0	27.0	--
Noncitrus <sup>3</sup>										
Production (1,000 tons)	15,640	15,740	17,124	16,554	17,339	16,348	16,103	18,363	16,509	17,119
Per capita consumpt. (lb.) <sup>2</sup>	70.4	70.6	73.8	73.9	75.6	73.7	73.9	76.3	76.2	--
	1999					2000				
	Mar	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Grower prices										
Apples (¢/pound) <sup>4</sup>	15.3	12.4	18.4	23.2	23.5	23.3	23.7	23.5	21.1	20.5
Pears (¢/pound) <sup>4</sup>	16.50	23.45	16.10	15.75	21.95	21.90	20.70	20.70	19.30	15.65
Oranges (\$/box) <sup>5</sup>	6.02	10.10	11.48	7.98	10.25	4.33	3.41	3.27	3.51	3.5
Grapefruit (\$/box) <sup>5</sup>	1.67	10.67	7.45	8.18	6.80	5.21	3.71	2.40	3.64	3.6
Stocks, ending										
Fresh apples (mil. lb.)	2,607	361	103	2,835	6,165	5,524	4,653	4,017	3,231	2,468
Fresh pears (mil. lb.)	120	12	130	552	515	400	299	241	191	133
Frozen fruits (mil. lb.)	910	1,101	1,183	1,136	1,631	1,583	1,455	1,338	1,244	1,105.5
Frozen conc. orange juice (mil. single-strength gallons)	894	744	661	589	482	450	543	644	776	764

-- = 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

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Production <sup>1</sup>										
Total vegetables (1,000 cwt)	562,938	565,754	689,070	688,824	782,505	747,988	762,952	754,220	729,576	831,986
Fresh (1,000 cwt) <sup>2,4</sup>	254,039	242,733	389,597	387,330	412,880	393,398	409,317	427,183	416,785	448,939
Processed (tons) <sup>3,4</sup>	15,444,970	16,151,030	14,973,630	15,074,707	18,481,238	17,729,497	17,681,732	16,351,849	15,639,548	19,152,331
Mushrooms (1,000 lbs) <sup>5</sup>	749,151	746,832	776,357	750,799	782,340	777,870	776,677	808,678	848,401	--
Potatoes (1,000 cwt)	402,110	417,622	425,367	430,349	469,425	445,099	499,254	467,091	475,771	478,398
Sweet potatoes (1,000 cwt)	12,594	11,203	12,005	11,027	13,380	12,821	13,216	13,327	12,382	11,980
Dry edible beans (1,000 cwt)	32,379	33,765	22,615	21,862	28,950	30,689	27,912	29,370	30,418	33,230
	1999					2000				
	Mar	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Shipments (1,000 cwt)										
Fresh	26,297	21,355	17,816	20,143	17,722	19,204	22,478	19,965	25,730	28,398
Iceberg lettuce	3,721	3,287	3,079	3,952	3,382	2,918	3,535	2,889	3,776	3,904
Tomatoes, all	4,588	2,766	2,478	3,599	3,096	3,205	3,986	3,642	4,463	4,552
Dry-bulb onions	3,825	3,029	3,124	4,461	3,764	3,597	3,891	3,232	3,910	3,869
Others <sup>6</sup>	14,163	12,273	9,135	8,131	7,480	9,484	11,066	10,202	13,581	16,073
Potatoes, all	18,522	9,825	9,217	12,148	10,928	12,745	15,578	12,201	17,170	19,617
Sweet potatoes	462	155	172	321	313	681	371	205	349	311

-- = 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			1998			1999			2000
	1997	1998	1999	III	IV	I	II	III	IV	I
Sugar										
Production <sup>1</sup>	7,418	7,891	9,083	733	3,959	2,636	1,031	749	4,667	--
Deliveries <sup>1</sup>	9,755	9,851	10,163	2,616	2,508	2,271	2,594	2,693	2,605	--
Stocks, ending <sup>1</sup>	3,377	3,423	3,855	1,679	3,422	4,219	3,184	1,639	3,855	--
Coffee										
Composite green price <sup>2</sup> N.Y. (¢/lb.)	146.49	114.43	88.49	98.57	97.83	94.37	90.41	77.40	91.79	85.66
	Annual			1999			2000			
	1997	1998	1999	Feb	Sep	Oct	Nov	Dec	Jan	Feb
Tobacco										
Avg. price to grower <sup>3</sup>										
Flue-cured (\$/lb.)	1.73	1.75	--	--	1.75	1.82	--	--	--	--
Burley (\$/lb.)	1.91	1.91	--	1.85	--	--	1.90	1.91	1.90	--
Domestic taxable removals										
Cigarettes (bil.)	471.4	457.9	--	36.3	--	--	--	--	--	--
Large cigars (mil.) <sup>4</sup>	3,552	3,721	--	282.1	--	--	--	--	--	--

-- = 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, Fannye Jolly (202) 694-5249; tobacco, Tom Capehart (202) 694-5245

## World Agriculture

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

	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99 F	1999/2000 F
	<i>Million units</i>									
<b>Wheat</b>										
Area (hectares)	231.4	222.5	222.9	222.0	214.5	219.2	230.3	227.8	225.0	217.2
Production (metric tons)	588.1	542.9	562.4	558.8	524.1	538.5	582.8	609.3	589.2	587.0
Exports (metric tons) <sup>1</sup>	101.1	111.2	113.0	101.7	101.5	99.5	103.6	103.3	100.4	104.8
Consumption (metric tons) <sup>2</sup>	561.9	555.5	550.3	561.6	547.5	548.9	577.1	584.5	591.7	596.9
Ending stocks (metric tons) <sup>3</sup>	145.0	132.5	144.5	141.7	118.2	107.8	113.5	138.4	135.8	125.8
<b>Coarse grains</b>										
Area (hectares)	317.2	322.7	326.0	318.8	324.1	313.8	322.8	311.3	308.3	303.4
Production (metric tons)	828.9	810.4	871.6	798.9	871.1	802.9	908.3	884.1	889.5	871.0
Exports (metric tons) <sup>1</sup>	88.8	95.6	93.0	84.8	97.8	87.3	94.8	85.6	96.1	97.9
Consumption (metric tons) <sup>2</sup>	816.8	809.7	843.8	838.6	857.4	842.3	877.4	876.5	870.3	880.1
Ending stocks (metric tons) <sup>3</sup>	134.6	135.3	163.1	123.5	137.2	97.8	128.6	136.2	155.4	146.4
<b>Rice, milled</b>										
Area (hectares)	146.7	147.5	146.4	144.9	147.4	148.1	149.8	151.3	152.3	153.9
Production (metric tons)	352.0	354.7	355.7	355.4	364.5	371.4	380.4	386.8	393.8	400.7
Exports (metric tons) <sup>1</sup>	12.2	14.3	14.9	16.3	20.9	19.7	18.8	27.3	25.0	22.3
Consumption (metric tons) <sup>2</sup>	347.4	356.7	357.7	358.2	366.6	371.4	379.6	383.2	389.3	398.4
Ending stocks (metric tons) <sup>3</sup>	59.2	57.2	55.2	52.4	50.4	50.5	51.3	54.9	59.5	61.8
<b>Total grains</b>										
Area (hectares)	695.3	692.7	695.3	685.7	686.0	681.1	702.9	690.4	685.6	674.5
Production (metric tons)	1,769.0	1,708.0	1,789.7	1,713.1	1,759.7	1,712.8	1,871.5	1,880.2	1,872.5	1,858.7
Exports (metric tons) <sup>1</sup>	202.1	221.1	220.9	202.8	220.2	206.5	217.2	216.2	221.5	225.0
Consumption (metric tons) <sup>2</sup>	1,726.1	1,721.9	1,751.8	1,758.4	1,771.5	1,762.6	1,834.1	1,844.2	1,851.3	1,875.4
Ending stocks (metric tons) <sup>3</sup>	338.8	325.0	362.8	317.6	305.8	256.1	293.4	329.5	350.7	334.0
<b>Oilseeds</b>										
Crush (metric tons)	176.7	185.1	184.4	190.1	208.1	217.4	219.4	228.0	239.5	247.0
Production (metric tons)	215.7	224.3	227.5	229.4	261.9	258.9	262.7	287.8	294.6	297.6
Exports (metric tons)	33.4	37.6	38.2	38.7	44.1	44.3	49.7	54.0	54.2	59.6
Ending stocks (metric tons)	23.4	21.9	23.6	20.3	27.2	22.2	17.1	24.7	28.3	25.6
<b>Meals</b>										
Production (metric tons)	119.3	125.2	125.2	131.7	142.1	147.3	149.8	155.4	163.9	168.7
Exports (metric tons)	40.7	42.2	40.8	44.9	46.7	49.7	50.7	51.9	54.3	54.8
<b>Oils</b>										
Production (metric tons)	58.1	60.6	61.1	63.7	69.6	73.1	75.9	76.7	82.0	86.1
Exports (metric tons)	20.5	21.3	21.3	24.3	27.1	26.0	29.1	29.9	31.4	32.1
<b>Cotton</b>										
Area (hectares)	33.2	34.8	32.6	30.6	32.2	35.9	33.8	33.7	32.9	32.2
Production (bales)	87.1	95.7	82.5	77.1	85.9	93.1	89.6	91.6	84.5	87.0
Exports (bales)	29.6	28.5	25.5	26.8	28.4	27.8	26.8	26.6	23.6	26.8
Consumption (bales)	85.5	85.7	85.5	85.3	85.5	86.0	88.0	87.2	84.6	90.2
Ending stocks (bales)	27.8	37.6	35.4	27.6	29.9	36.6	40.1	43.9	45.4	42.6
	1991	1992	1993	1994	1995	1996	1997	1998	1999 F	2000 F
<b>Red meat<sup>4</sup></b>										
Production (metric tons)	117.7	117.3	119.3	124.6	129.5	123.6	129.5	134.5	136.4	137.8
Consumption (metric tons)	116.1	115.7	118.3	123.6	127.7	120.7	126.7	131.7	134.2	135.6
Exports (metric tons) <sup>1</sup>	7.5	7.4	7.4	8.1	8.2	8.5	9.0	8.9	9.6	9.6
<b>Poultry<sup>4</sup></b>										
Production (metric tons)	39.6	38.0	40.5	43.2	47.5	50.4	52.7	53.5	55.9	57.9
Consumption (metric tons)	38.4	37.0	39.4	42.0	47.0	49.7	51.9	52.5	55.0	57.1
Exports (metric tons) <sup>1</sup>	2.8	2.4	2.8	3.6	4.5	5.1	5.6	5.7	6.0	6.4
<b>Dairy</b>										
Milk production (metric tons) <sup>5</sup>	377.6	378.4	377.6	378.4	380.7	379.8	380.8	383.7	384.9	387.2

-- = Not available. 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 data. 1990 data correspond with 1989/90, etc. 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			1999				2000		
	1997	1998	1999	Mar	Oct	Nov	Dec	Jan	Feb	Mar
<b>Export commodities</b>										
Wheat, f.o.b. vessel, Gulf ports (\$/bu.)	4.35	3.44	3.04	3.21	2.92	2.96	2.80	2.89	2.99	2.92
Corn, f.o.b. vessel, Gulf ports (\$/bu.)	2.98	2.59	2.30	2.46	2.18	2.17	2.22	2.36	2.42	2.42
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu.)	2.89	2.54	2.15	2.35	1.96	2.02	2.04	2.23	2.29	2.33
Soybeans, f.o.b. vessel, Gulf ports (\$/bu.)	7.94	6.37	5.02	5.02	5.01	4.90	4.92	5.21	5.36	5.40
Soybean oil, Decatur (¢/lb.)	23.33	25.78	17.51	18.54	16.08	15.63	15.33	15.56	15.09	16.22
Soybean meal, Decatur (\$/ton)	266.70	162.74	141.52	133.00	153.57	154.71	154.00	163.41	170.51	175.50
Cotton, 7-market avg. spot (¢/lb.)	69.62	67.04	52.30	58.17	49.41	48.12	46.65	51.92	54.29	57.67
Tobacco, avg. price at auction (¢/lb.)	182.74	179.77	177.82	196.54	181.01	182.51	190.56	191.02	190.56	188.03
Rice, f.o.b., mill, Houston (\$/cwt)	20.88	18.95	16.99	18.08	16.00	15.80	15.75	15.55	15.25	15.00
Inedible tallow, Chicago (¢/lb.)	20.75	17.67	12.99	11.18	16.50	14.50	14.00	11.94	10.28	10.25
<b>Import commodities</b>										
Coffee, N.Y. spot (\$/lb.)	2.05	1.39	1.05	1.04	0.95	1.14	1.29	1.19	1.15	1.10
Rubber, N.Y. spot (¢/lb.)	55.40	40.57	36.66	36.34	37.58	42.63	38.88	38.16	40.36	38.16
Cocoa beans, N.Y. (\$/lb.)	0.69	0.72	0.47	0.55	0.42	0.38	0.38	0.38	0.35	0.38

Information contacts: Jenny Gonzales (202) 694-5296, Mae Dean Johnson (202) 694-5299.

Table 25-Trade Balance

	Fiscal Year			1999						2000
	1998	1999	2000 P	Jan	Aug	Sep	Oct	Nov	Dec	Jan
\$ million										
<b>Exports</b>										
Agricultural	53,730	49,102	49,500	3,891	3,949	3,931	4,520	4,629	4,405	4,211
Nonagricultural	585,826	586,652	--	44,557	49,349	50,418	52,813	51,725	54,397	48,013
Total <sup>1</sup>	639,556	635,754	--	48,448	53,298	54,349	57,333	56,354	58,802	52,224
<b>Imports</b>										
Agricultural	37,007	37,447	38,000	3,098	2,990	2,883	3,089	3,185	3,367	3,185
Nonagricultural	858,893	938,811	--	68,193	85,723	86,377	90,658	89,343	87,479	83,220
Total <sup>2</sup>	895,900	976,258	--	71,291	88,713	89,260	93,747	92,528	90,846	86,405
<b>Trade Balance</b>										
Agricultural	16,723	11,655	11,500	793	959	1,048	1,431	1,444	1,038	1,026
Nonagricultural	-273,067	-352,159	--	-23,636	-36,374	-35,959	-37,845	-37,618	-33,082	-35,207
Total	-256,344	-340,504	--	-22,843	-35,415	-34,911	-36,414	-36,174	-32,044	-34,181

P = Projected. -- = 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). Information contact: Mary Fant (202) 694-5272

Table 26-Indexes of Real Trade-Weighted Dollar Exchange Rates <sup>1</sup>

	Annual			1999					2000	
	1997	1998	1999	Feb	Sep	Oct	Nov	Dec	Jan	Feb
	1995 = 100									
Total U.S. trade	116.3	119.6	118.9	118.5	123.1	121.1	124.0	125.3	125.5	126.8
Agricultural trade										
U.S. markets	109.8	118.6	118.0	115.3	113.7	113.0	113.1	112.5	113.0	114.3
U.S. competitors	111.6	117.9	117.5	119.1	124.7	123.2	125.5	126.5	126.1	126.7
High-value products										
U.S. markets	110.2	117.5	117.3	114.4	111.7	111.1	110.8	110.2	110.5	111.9
U.S. competitors	113.1	117.0	116.6	117.8	124.1	122.5	125.5	127.1	126.7	127.5
Corn										
U.S. markets	115.7	127.1	125.4	119.7	116.4	115.4	115.1	113.6	114.7	116.9
U.S. competitors	109.7	112.9	112.8	113.5	119.8	118.7	120.9	121.7	121.3	121.9
Soybeans										
U.S. markets	115.2	124.9	123.1	119.5	120.3	121.7	121.9	124.5	124.9	123.1
U.S. competitors	101.9	106.4	112.0	130.9	133.1	115.5	115.3	115.5	115.8	113.7
Wheat										
U.S. markets	103.9	111.3	111.4	111.7	113.0	112.4	112.2	111.6	112.1	113.1
U.S. competitors	110.5	117.3	117.8	117.9	121.3	120.2	122.2	123.3	122.1	123.2
Vegetables										
U.S. markets	107.2	115.4	115.7	113.6	111.4	111.1	110.8	110.4	110.0	111.0
U.S. competitors	111.9	115.1	114.0	113.9	119.6	118.2	120.7	122.0	122.0	122.4
Red meats										
U.S. markets	117.7	128.5	126.9	119.9	113.9	113.1	112.3	110.7	112.2	114.8
U.S. competitors	112.9	118.4	118.4	119.2	124.9	123.6	126.3	127.7	127.1	128.2
Fruits & fruit juices										
U.S. markets	110.8	118.6	118.5	116.0	114.4	113.6	113.7	113.3	113.4	114.8
U.S. competitors	109.4	114.2	114.6	118.0	124.1	123.1	125.4	126.1	125.6	126.3
Cotton										
U.S. markets	110.0	132.3	128.5	122.4	122.6	120.7	119.6	118.1	118.6	119.6
U.S. competitors	100.0	103.0	103.2	103.1	107.8	107.1	108.0	108.2	107.7	109.5
Poultry										
U.S. markets	95.4	101.5	104.5	108.7	106.9	106.9	106.5	106.1	107.4	108.5
U.S. competitors	113.2	117.6	117.7	122.9	129.9	128.6	130.8	131.4	131.0	131.2

1. Real indexes adjust nominal exchange rates to avoid the distortion caused by different levels of inflation among countries. A higher value means the dollar has appreciated. The "total U.S. trade" index uses the Federal Reserve Board index of trade-weighted value of the U.S. dollar against 10 major countries. Weights are based on relative importance of major U.S. customers and competitors in world markets. Indexes are subject to revision for up to one year due to delayed reporting by some countries. High-value products conform to FAS's definition for consumer-oriented agricultural products. Data are available at <http://mann77.mannlib.cornell.edu/data-sets/international/88021/>. Information contact: Mathew Shane (202) 694-5282

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 Board.



Table 27-U.S. Agricultural Exports &amp; Imports

	Fiscal Year			Jan		Fiscal Year			Jan	
	1998	1999	2000 P	1999	2000	1998	1999	2000 P	1999	2000
	1,000 units					\$ million				
Exports										
Animals, live	--	--	--	--	--	538	509	--	26	63
Meats and preps., excl. poultry (mt) <sup>1</sup>	2,064	2,061	1,700	156	227	4,507	4,460	4,800	329	479
Dairy products	--	--	--	--	--	925	897	900	62	65
Poultry meats (mt)	2,663	2,377	2,600	179	239	2,347	1,743	1,800	128	149
Fats, oils, and greases (mt)	1,365	1,395	1,400	110	75	655	561	--	47	30
Hides and skins, incl. furskins	--	--	--	--	--	1,358	1,108	1,100	96	108
Cattle hides, whole (no.)	18,992	17,845	--	1,467	1,630	969	844	--	73	87
Mink pelts (no.)	2,990	4,172	--	321	248	83	98	--	6	5
Grains and feeds (mt) <sup>2</sup>	87,289	104,576	--	7,302	8,078	13,961	14,272	13,400	1,097	1,094
Wheat (mt) <sup>3</sup>	25,791	28,806	26,500	1,986	1,953	3,759	3,648	3,600	280	235
Wheat flour (mt)	465	958	1,000	49	58	117	177	--	19	9
Rice (mt)	3,310	3,076	3,100	294	348	1,132	1,010	900	110	101
Feed grains, incl. products (mt) <sup>4</sup>	44,564	58,398	54,100	3,821	4,737	5,187	5,821	5,000	388	461
Feeds and fodders (mt)	11,704	11,800	11,600	1,029	893	2,421	2,252	2,300	198	187
Other grain products (mt)	1,455	1,538	--	123	90	1,345	1,363	--	102	102
Fruits, nuts, and preps. (mt)	3,633	3,439	--	276	297	3,977	3,805	4,600	277	274
Fruit juices, incl.										
froz. (1,000 hectoliters)	10,658	12,317	--	839	788	653	735	--	50	48
Vegetables and preps.	--	--	--	--	--	4,168	4,245	2,800	339	336
Tobacco, unmanufactured (mt)	208	205	200	19	17	1,448	1,376	1,300	114	115
Cotton, excl. linters (mt) <sup>5</sup>	1,552	884	1,400	34	143	2,517	1,309	1,700	59	167
Seeds (mt)	816	579	--	59	58	827	800	900	103	96
Sugar, cane or beet (mt)	123	158	--	15	9	48	56	--	5	3
Oilseeds and products (mt)	36,074	33,569	34,700	3,207	3,781	10,984	8,606	8,500	807	841
Oilseeds (mt)	--	--	--	--	--	--	--	--	--	--
Soybeans (mt)	23,394	22,974	24,400	2,295	2,830	6,117	4,748	4,800	501	535
Protein meal (mt)	8,666	6,726	--	604	697	1,975	1,101	--	103	123
Vegetable oils (mt)	3,049	2,642	--	221	193	2,191	1,815	--	152	122
Essential oils (mt)	46	47	--	4	4	533	507	--	40	37
Other	--	--	--	--	--	4,284	4,112	--	311	306
Total	--	--	--	--	--	53,730	49,102	49,500	3,891	4,211
Imports										
Animals, live	--	--	--	--	--	1,670	1,439	1,500	95	107
Meats and preps., excl. poultry (mt)	1,230	1,398	1,600	104	126	2,718	3,088	3,300	220	283
Beef and veal (mt)	857	943	--	70	84	1,761	2,047	--	148	187
Pork (mt)	271	337	--	25	32	686	721	--	49	70
Dairy products	--	--	--	--	--	1,368	1,572	1,500	109	125
Poultry and products	--	--	--	--	--	207	201	--	16	18
Fats, oils, and greases (mt)	80	90	--	7	9	59	63	--	5	7
Hides and skins, incl. furskins (mt)	--	--	--	--	--	184	146	--	20	23
Wool, unmanufactured (mt)	45	29	--	4	3	151	75	--	10	8
Grains and feeds	--	--	--	--	--	2,919	2,943	2,800	218	227
Fruits, nuts, and preps.,										
excl. juices (mt) <sup>6</sup>	7,581	8,171	8,200	684	752	3,982	4,619	5,600	419	426
Bananas and plantains (mt)	4,175	4,418	4,300	342	373	1,214	1,212	1,200	92	93
Fruit juices (1,000 hectoliters)	26,577	31,655	33,000	2,965	2,819	669	772	--	73	69
Vegetables and preps.	--	--	--	--	--	4,249	4,527	4,900	486	453
Tobacco, unmanufactured (mt)	241	217	200	25	15	822	742	600	90	47
Cotton, unmanufactured (mt)	10	144	--	3	2	11	150	--	3	3
Seeds (mt)	257	357	--	18	55	422	457	--	32	36
Nursery stock and cut flowers	--	--	--	--	--	1,082	1,076	1,100	85	103
Sugar, cane or beet (mt)	2,170	1,692	--	157	46	758	606	--	53	14
Oilseeds and products (mt)	4,314	3,899	3,600	358	311	2,243	2,022	1,900	175	153
Oilseeds (mt)	1,028	1,000	--	90	54	371	326	--	29	22
Protein meal (mt)	1,277	1,131	--	108	110	188	147	--	14	13
Vegetable oils (mt)	2,010	1,769	--	160	147	1,684	1,549	--	132	118
Beverages, excl. fruit										
juices (1,000 hectoliters)	--	--	--	--	--	3,705	4,258	--	243	287
Coffee, tea, cocoa, spices (mt)	2,369	2,520	--	236	269	6,056	5,306	--	502	501
Coffee, incl. products (mt)	1,155	1,294	1,400	110	132	3,587	2,967	2,700	267	292
Cocoa beans and products (mt)	875	865	800	100	111	1,701	1,531	1,500	179	141
Rubber and allied gums (mt)	1,162	1,148	1,200	94	131	1,027	739	700	62	85
Other	--	--	--	--	--	2,703	2,645	--	183	209
Total	--	--	--	--	--	37,007	37,449	38,000	3,098	3,185

P=Projection. -- = Not available. Projections are fiscal years (October 1 through September 30) and are from Outlook for U.S. Agricultural Exports.

1998 and 1999 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

Region & country	Fiscal year			1999						2000
	1998	1999	2000 F	Jan	Aug	Sep	Oct	Nov	Dec	Jan
	\$ million									
<b>Western Europe</b>	8,859	7,498	7,400	748	592	494	617	728	656	698
European Union <sup>1</sup>	8,522	6,928	6,900	728	404	398	600	706	637	654
Belgium-Luxembourg	666	602	--	47	38	39	51	68	43	48
France	536	380	--	45	22	20	30	46	52	29
Germany	1,294	1,045	--	107	57	61	78	106	71	89
Italy	729	573	--	59	36	22	36	60	50	77
Netherlands	1,792	1,575	--	185	74	92	132	179	148	150
United Kingdom	1,300	1,123	--	97	84	80	106	105	98	67
Portugal	186	131	--	24	10	9	12	10	22	17
Spain, incl. Canary Islands	1,132	772	--	102	37	31	83	71	101	106
Other Western Europe	336	570	500	19	188	96	17	22	19	44
Switzerland	236	456	--	15	171	88	8	13	12	38
<b>Eastern Europe</b>	320	190	200	18	9	9	17	15	13	9
Poland	139	73	--	8	5	5	3	4	4	2
Former Yugoslavia	97	47	--	6	2	2	10	8	2	3
Romania	31	18	--	0	0	0	1	1	1	0
<b>Newly Independent States</b>	1,456	801	900	40	102	88	97	68	59	136
Russia	1,103	461	500	20	71	48	66	24	27	114
<b>Asia<sup>2</sup></b>	21,992	20,412	18,200	1,632	1,648	1,663	1,858	1,920	1,788	1,772
West Asia (Mideast)	2,286	1,977	2,200	118	162	127	241	229	193	170
Turkey	658	448	600	22	19	13	65	47	77	74
Iraq	131	9	--	--	--	--	--	--	--	--
Israel, incl. Gaza and W. Bank	389	417	--	27	24	29	35	45	34	18
Saudi Arabia	535	468	500	25	43	30	59	46	29	33
South Asia	626	500	500	43	32	47	58	53	30	22
Bangladesh	114	165	--	22	15	21	6	17	4	3
India	163	190	--	13	8	17	10	11	18	17
Pakistan	275	89	--	7	2	1	37	19	1	1
China	1,514	1,002	900	59	73	150	98	109	104	98
Japan	9,469	8,931	9,000	789	698	704	741	816	717	802
Southeast Asia	2,288	2,204	2,100	197	195	174	237	224	241	200
Indonesia	529	492	500	39	41	36	56	60	69	41
Philippines	751	730	700	50	69	68	67	71	83	65
Other East Asia	5,808	5,799	5,700	427	487	461	482	489	504	482
Korea, Rep.	2,258	2,479	2,600	203	220	191	213	197	206	228
Hong Kong	1,568	1,264	1,200	86	97	114	112	115	126	87
Taiwan	1,975	2,046	1,900	138	169	156	157	176	168	165
<b>Africa</b>	2,174	2,108	2,200	169	171	158	206	152	204	162
North Africa	1,475	1,419	1,500	120	114	99	150	94	148	117
Morocco	139	161	--	4	17	7	12	15	5	9
Algeria	281	220	--	23	30	19	8	29	21	21
Egypt	939	957	1,000	90	61	68	124	49	113	84
Sub-Sahara	699	689	700	49	56	59	57	57	56	45
Nigeria	140	176	--	13	17	17	13	11	10	16
S. Africa	193	165	--	13	13	13	20	15	25	14
<b>Latin America and Caribbean</b>	11,362	10,501	10,700	726	799	851	955	955	988	800
Brazil	566	369	400	25	19	20	18	19	18	23
Caribbean Islands	1,487	1,453	--	130	113	106	146	147	146	103
Central America	1,137	1,209	--	83	87	82	97	99	113	79
Colombia	606	467	--	27	32	28	36	45	30	40
Mexico	5,956	5,675	5,900	351	449	521	566	526	599	447
Peru	314	347	--	22	23	24	19	25	18	31
Venezuela	516	457	400	37	33	29	31	43	27	25
<b>Canada</b>	7,022	6,957	7,100	517	556	592	657	630	606	595
<b>Oceania</b>	545	499	500	42	50	36	47	39	44	40
<b>Total</b>	53,730	49,102	49,500	3,891	3,949	3,931	4,520	4,629	4,405	4,211

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. 2. Asia forecasts exclude West Asia (Mideast). NOTE: Adjusted for transshipments through Canada for 1997 and 1998 through December 1998, but transshipments are not distributed by country as previously for 1999. Information contact: Mary Fant (202) 694-5272

## Farm Income

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

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
	\$ billion									
Final crop output	81.0	89.0	82.3	100.4	95.8	115.4	112.1	102.0	93.8	96.2
Food grains	7.3	8.5	8.2	9.5	10.4	10.7	10.1	8.7	7.2	6.8
Feed crops	19.3	20.1	20.2	20.3	24.5	27.2	27.1	22.9	20.1	20.6
Cotton	5.2	5.2	5.2	6.7	6.9	7.0	6.3	6.0	5.6	5.3
Oil crops	12.7	13.3	13.2	14.7	15.5	16.3	19.7	17.2	13.4	14.7
Tobacco	2.9	3.0	2.9	2.7	2.5	2.8	2.9	3.0	2.2	1.9
Fruits and tree nuts	9.9	10.2	10.3	10.3	11.1	11.9	13.1	11.7	12.5	11.9
Vegetables	11.6	11.8	13.7	14.2	15.0	14.4	15.0	15.3	15.0	15.5
All other crops	13.1	13.7	13.7	14.7	15.0	15.8	16.9	17.3	17.7	18.2
Home consumption	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Value of inventory adjustment <sup>1</sup>	-1.2	3.2	-5.3	7.2	-5.3	9.1	0.9	-0.4	0.0	1.0
Final animal output	87.3	87.1	92.0	89.7	87.7	92.1	96.5	94.3	96.1	99.4
Meat animals	50.1	47.7	51.0	46.7	44.9	44.2	49.7	43.6	46.6	51.6
Dairy products	18.0	19.7	19.3	20.0	19.9	22.8	20.9	24.3	23.4	21.3
Poultry and eggs	15.2	15.5	17.3	18.5	19.1	22.4	22.2	22.8	22.6	23.2
Miscellaneous livestock	2.5	2.6	2.9	3.1	3.3	3.6	3.7	3.8	3.8	3.8
Home consumption	0.5	0.5	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4
Value of inventory adjustment <sup>1</sup>	1.0	1.0	1.1	1.1	0.2	-1.1	-0.4	-0.6	-0.7	-0.9
Services and forestry	15.4	15.3	17.1	18.1	19.9	20.8	22.5	24.6	25.6	25.7
Machine hire and customwork	1.8	1.8	1.9	2.1	1.9	2.1	2.6	2.3	2.3	2.5
Forest products sold	1.8	2.2	2.5	2.7	2.8	2.6	2.9	2.8	2.9	2.9
Other farm income	4.7	4.1	4.6	4.3	5.8	6.2	6.9	8.7	9.4	9.3
Gross imputed rental value of farm dwellings	7.2	7.2	8.1	9.0	9.4	9.9	10.1	10.8	11.0	11.1
<b>Final agricultural sector output</b> <sup>2</sup>	<b>183.7</b>	<b>191.4</b>	<b>191.4</b>	<b>208.2</b>	<b>203.5</b>	<b>228.4</b>	<b>231.2</b>	<b>220.8</b>	<b>215.5</b>	<b>221.3</b>
<i>Minus</i> Intermediate consumption outlays:	94.6	93.4	100.7	104.9	109.7	113.2	120.9	118.7	120.6	126.0
Farm origin	38.6	38.6	41.3	41.3	41.8	42.7	46.9	44.9	45.9	47.3
Feed purchased	19.3	20.1	21.4	22.6	23.8	25.2	26.3	25.0	24.2	24.6
Livestock and poultry purchased	14.1	13.6	14.7	13.3	12.5	11.3	13.8	12.7	14.4	15.4
Seed purchased	5.1	4.9	5.2	5.4	5.5	6.2	6.7	7.2	7.2	7.3
Manufactured inputs	23.2	22.7	23.1	24.4	26.2	28.6	29.2	28.3	29.3	32.1
Fertilizers and lime	8.7	8.3	8.4	9.2	10.0	10.9	10.9	10.7	10.5	10.7
Pesticides	6.3	6.5	6.7	7.2	7.7	8.5	9.0	9.1	9.2	9.1
Petroleum fuel and oils	5.6	5.3	5.3	5.3	5.4	6.0	6.2	5.6	6.4	9.0
Electricity	2.6	2.6	2.7	2.7	3.0	3.2	3.0	2.9	3.3	3.3
Other intermediate expenses	32.8	32.1	36.2	39.2	41.7	41.8	44.9	45.5	45.4	46.7
Repair and maintenance of capital items	8.6	8.5	9.2	9.1	9.5	10.3	10.4	10.4	10.4	10.5
Machine hire and customwork	3.5	3.8	4.4	4.8	4.8	4.7	4.9	5.5	5.5	5.7
Marketing, storage, and transportation	4.7	4.5	5.6	6.8	7.2	6.9	7.1	6.7	6.8	7.2
Contract labor	1.6	1.7	1.8	1.8	2.0	2.1	2.6	2.4	2.5	2.5
Miscellaneous expenses	14.3	13.6	15.2	16.7	18.3	17.8	19.8	20.5	20.3	20.7
<i>Plus</i> Net government transactions:	2.1	2.7	6.9	1.1	0.2	0.2	0.2	4.6	13.2	8.3
+ Direct government payments	8.2	9.2	13.4	7.9	7.3	7.3	7.5	12.2	20.6	15.9
- Motor vehicle registration and licensing fees	0.3	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.5
- Property taxes	5.8	6.1	6.2	6.3	6.6	6.7	6.9	7.2	6.9	7.1
<b>Gross value added</b>	<b>91.2</b>	<b>100.6</b>	<b>97.5</b>	<b>104.5</b>	<b>94.0</b>	<b>115.4</b>	<b>110.4</b>	<b>106.7</b>	<b>108.1</b>	<b>103.6</b>
<i>Minus</i> Capital consumption	18.2	18.3	18.4	18.6	18.9	19.2	19.3	19.4	19.2	18.9
<b>Net value added</b> <sup>2</sup>	<b>73.0</b>	<b>82.3</b>	<b>79.2</b>	<b>85.8</b>	<b>75.1</b>	<b>96.2</b>	<b>91.1</b>	<b>87.2</b>	<b>88.8</b>	<b>84.7</b>
<i>Minus</i> Factor payments:	34.4	34.4	34.6	36.6	37.9	41.3	42.5	43.1	44.7	45.0
Employee compensation (total hired labor)	12.3	12.3	13.2	13.5	14.3	15.3	16.0	16.9	17.8	18.2
Net rent received by nonoperator landlords	9.9	11.1	10.7	11.5	11.0	13.0	12.9	12.0	13.4	12.9
Real estate and non-real estate interest	12.1	11.0	10.6	11.5	12.6	13.0	13.5	14.2	13.5	13.8
<b>Net farm income</b> <sup>2</sup>	<b>38.7</b>	<b>47.9</b>	<b>44.5</b>	<b>49.2</b>	<b>37.2</b>	<b>54.9</b>	<b>48.6</b>	<b>44.1</b>	<b>44.2</b>	<b>39.7</b>

Values in last two columns are preliminary or forecast. 1. A positive value of inventory change represents current-year production not sold by December 1. 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 (202)694-5592 or rogers@ers.usda.gov

Table 30-Farm Income Statistics

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
	\$ billion									
<b>Cash income statement:</b>										
1. Cash receipts	167.9	171.3	177.9	181.3	188.1	199.1	207.6	196.8	190.2	194.9
Crops <sup>1</sup>	82.1	85.7	87.4	93.1	101.0	106.2	111.1	102.2	93.7	95.0
Livestock	85.8	85.6	90.4	88.2	87.1	93.0	96.5	94.5	96.5	99.9
2. Direct Government payments	8.2	9.2	13.4	7.9	7.3	7.3	7.5	12.2	20.6	15.9
3. Farm-related income <sup>2</sup>	8.3	8.1	9.0	9.1	10.5	11.0	12.4	13.8	14.6	14.6
4. Gross cash income (1+2+3)	184.4	188.6	200.3	198.2	205.8	217.4	227.5	222.8	225.4	225.4
5. Cash expenses <sup>3</sup>	134.0	133.3	141.0	147.1	153.2	159.9	169.0	167.8	170.8	176.8
6. Net cash income (4-5)	50.4	55.2	59.3	51.1	52.6	57.5	58.5	54.9	54.5	48.6
<b>Farm income statement:</b>										
7. Gross cash income (4)	184.4	188.6	200.3	198.2	205.8	217.4	227.5	222.8	225.4	225.4
8. Noncash income <sup>4</sup>	7.8	7.8	8.7	9.6	9.9	10.3	10.6	11.3	11.5	11.6
9. Value of inventory adjustment	-0.2	4.2	-4.2	8.3	-5.0	8.0	0.5	-1.0	-0.8	0.2
10. Gross farm income (7+8+9)	192.0	200.5	204.8	216.1	210.7	235.7	238.7	233.1	236.1	237.2
11. Total production expenses	153.3	152.6	160.2	166.8	173.5	180.8	190.0	189.0	191.9	197.5
12. Net farm income (10-11)	38.7	47.9	44.5	49.2	37.2	54.9	48.6	44.1	44.2	39.7

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 (202) 694-5592 or [rogers@ers.usda.gov](mailto:rogers@ers.usda.gov)

Table 31-Average Income to Farm Operator Households <sup>1</sup>

	1992	1993	1994	1995	1996	1997	1998	1999	2000
	\$ per farm								
Net cash farm business income <sup>2</sup>	11,320	11,248	11,389	11,218	13,502	12,676	14,357	--	--
Less depreciation <sup>3</sup>	5,187	6,219	6,466	6,795	6,906	6,578	7,409	--	--
Less wages paid to operator <sup>4</sup>	216	454	425	522	531	513	637	--	--
Less farmland rental income <sup>5</sup>	360	534	701	769	672	568	543	--	--
Less adjusted farm business income due to other household(s) <sup>6</sup>	961	872	815	649	1,094	1,505	1,332	--	--
	\$ per farm operator household								
Equals adjusted farm business income	4,596	3,168	2,981	2,484	4,300	3,513	4,436	--	--
Plus wages paid to operator	216	454	425	522	531	513	637	--	--
Plus net income from farmland rental <sup>7</sup>	360	--	--	1,053	1,178	945	868	--	--
Equals farm self-employment income	5,172	3,623	3,407	4,059	6,009	4,971	5,941	--	--
Plus other farm-related earnings <sup>8</sup>	2,008	1,192	970	661	1,898	1,234	1,165	--	--
Equals earnings of the operator household from farming activities	7,180	4,815	4,376	4,720	7,906	6,205	7,106	6,469	2,975
Plus earnings of the operator household from off-farm sources <sup>9</sup>	35,731	35,408	38,092	39,671	42,455	46,358	52,628	54,443	56,375
Equals average farm operator household income	42,911	40,223	42,469	44,392	50,361	52,562	59,734	60,912	59,350
	\$ per U.S. household								
U.S. average household income <sup>10</sup>	38,840	41,428	43,133	44,938	47,123	49,692	51,855	--	--
	Percent								
Average farm operator household income as percent of U.S. average household income	110.5	97.1	98.5	98.8	106.9	105.8	115.2	--	--
Average operator household earnings from farming activities as percent of average operator household income	16.7	12.0	10.3	10.6	15.7	11.8	11.9	--	--

-- = 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 Bureau of the Census, 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 1991 and 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, Bureau of the Census Current Population Survey (PCS), for average household income. *Information contact:* Bob Hoppe (202) 694-5572 or [rhoppe@ers.usda.gov](mailto:rhoppe@ers.usda.gov)



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

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
	\$ billion									
Farm assets	844.2	868.3	910.2	935.5	966.7	1,003.9	1,051.6	1,064.3	1,067.2	1,072.8
Real estate	624.8	640.8	677.6	704.1	740.5	769.5	808.4	822.8	831.1	835.2
Livestock and poultry <sup>1</sup>	68.1	71.0	72.8	67.9	57.8	60.3	67.1	62.0	60.8	60.7
Machinery and motor vehicles	85.9	85.4	86.5	87.5	88.5	88.9	89.0	88.6	86.9	86.3
Crops stored <sup>2,3</sup>	22.2	24.2	23.3	23.3	27.4	31.7	32.2	30.1	30.0	30.0
Purchased inputs	2.6	3.9	3.8	5.0	3.4	4.4	5.1	5.3	5.5	5.6
Financial assets	40.5	43.1	46.3	47.6	49.1	49.0	49.7	55.4	53.0	55.0
Total farm debt	139.2	139.1	142.0	146.8	150.8	156.1	165.4	172.9	172.8	172.5
Real estate debt <sup>3</sup>	74.9	75.4	76.0	77.7	79.3	81.7	85.4	89.6	90.3	90.8
Non-real estate debt <sup>4</sup>	64.3	63.6	65.9	69.1	71.5	74.4	80.1	83.2	82.5	81.7
Total farm equity	705.0	729.3	768.3	788.7	815.9	847.8	886.2	891.4	894.4	900.3
	Percent									
Selected ratios										
Debt to equity	19.8	19.1	18.5	18.6	18.5	18.4	18.7	19.4	19.3	19.2
Debt to assets	16.5	16.0	15.6	15.7	15.6	15.6	15.7	16.2	16.2	16.1

Values in the last two columns are preliminary or forecast. 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 contact: Ken Erickson (202) 694-5565 or erickson@econ.ag.gov*

Table 33-Cash Receipts from Farming

	Annual			1999						2000
	1997	1998	1999P	Jan	Aug	Sep	Oct	Nov	Dec	Jan
	\$ million									
Commodity sales <sup>1</sup>	207,611	196,761	187,559	16,281	15,667	17,002	20,849	18,002	17,132	15,311
Livestock and products	96,535	94,539	95,169	7,605	8,584	8,389	8,344	9,113	7,480	7,647
Meat animals	49,682	43,604	46,917	3,341	4,573	4,249	4,425	4,552	3,752	3,995
Dairy products	20,940	24,312	23,280	2,087	2,022	2,074	2,051	1,920	1,758	1,557
Poultry and eggs	22,234	22,806	21,130	1,908	1,777	1,685	1,691	1,883	1,799	1,825
Other	3,679	3,816	3,842	269	212	380	177	759	171	269
Crops	111,076	102,222	92,391	8,676	7,083	8,613	12,505	8,889	9,652	7,664
Food grains	10,137	8,734	7,310	621	751	833	689	344	496	499
Feed crops	27,101	22,927	19,771	2,687	1,519	1,496	2,399	1,778	2,274	2,504
Cotton (lint and seed)	6,346	6,013	4,693	553	158	209	857	626	1,375	245
Tobacco	2,874	2,989	2,308	371	340	323	416	149	547	372
Oil-bearing crops	19,673	17,198	13,706	1,615	776	1,301	3,541	1,233	1,140	1,326
Vegetables and melons	14,961	15,337	15,114	966	1,596	1,535	1,452	854	862	971
Fruits and tree nuts	13,074	11,727	12,186	787	983	1,364	1,513	1,522	1,139	673
Other	16,909	17,297	17,302	1,075	959	1,553	1,638	2,383	1,818	1,075
Government payments	7,495	12,209	20,595	2,407	1,033	546	5,707	4,122	2,234	2,596
Total	215,107	208,970	208,154	18,688	16,700	17,548	26,556	22,125	19,366	17,907

Annual values for the most recent 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 contacts: Larry Traub (202) 694-5593 or ltraub@econ.ag.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 <sup>1</sup>				Total <sup>1</sup>			
			Dec	Jan			Dec	Jan			Dec	Jan
	1998	1999	1999	2000	1998	1999	1999	2000	1998	1999	1999	2000
\$ million												
North Atlantic												
Maine	282	275	22	24	224	230	18	17	506	505	40	41
New Hampshire	69	69	6	6	82	81	5	5	151	150	11	10
Vermont	472	465	36	35	84	78	4	3	557	543	40	38
Massachusetts	112	112	9	9	395	373	37	12	507	486	46	21
Rhode Island	9	9	1	1	56	55	8	3	65	64	8	3
Connecticut	228	222	18	17	281	264	35	16	509	486	53	33
New York	2,092	2,022	147	150	1,054	1,001	86	66	3,146	3,023	233	216
New Jersey	178	178	11	14	650	617	36	23	828	796	46	37
Pennsylvania	2,914	2,893	222	227	1,261	1,189	103	93	4,175	4,082	325	320
North Central												
Ohio	1,848	1,848	145	140	3,124	2,635	197	237	4,973	4,483	341	378
Indiana	1,639	1,494	130	115	3,245	2,800	210	329	4,885	4,294	340	444
Illinois	1,575	1,456	114	127	6,167	5,226	464	848	7,742	6,682	578	975
Michigan	1,323	1,303	94	96	2,158	2,055	220	147	3,480	3,358	314	243
Wisconsin	4,492	3,990	344	83	1,701	1,617	173	102	6,193	5,606	517	185
Minnesota	3,755	3,491	278	304	3,925	3,586	543	308	7,680	7,077	821	611
Iowa	4,778	4,831	416	396	6,217	5,010	569	578	10,994	9,841	985	974
Missouri	2,420	2,480	223	207	2,262	1,767	192	184	4,682	4,247	415	390
North Dakota	549	661	50	62	2,455	2,204	255	162	3,004	2,865	305	224
South Dakota	1,557	1,779	142	151	1,951	1,735	141	123	3,508	3,513	283	274
Nebraska	5,124	5,617	428	434	3,725	3,113	354	384	8,848	8,730	782	818
Kansas	4,537	4,876	387	391	3,247	2,579	275	220	7,784	7,454	661	611
Southern												
Delaware	609	557	50	53	164	151	6	6	774	708	56	59
Maryland	949	906	76	87	571	541	36	26	1,520	1,447	112	113
Virginia	1,561	1,567	123	129	768	684	72	36	2,328	2,251	196	165
West Virginia	336	336	24	24	69	54	4	3	405	390	28	28
North Carolina	3,917	3,591	321	337	3,247	2,758	196	111	7,164	6,350	517	448
South Carolina	763	731	56	59	748	631	50	28	1,511	1,362	106	87
Georgia	3,408	3,183	256	312	2,047	1,794	208	88	5,454	4,976	464	399
Florida	1,407	1,547	115	124	5,355	5,390	505	544	6,762	6,937	621	669
Kentucky	2,134	2,255	134	161	1,787	1,385	383	363	3,920	3,640	517	524
Tennessee	1,038	1,128	88	156	1,177	977	200	97	2,216	2,104	288	253
Alabama	2,587	2,428	201	226	696	657	79	25	3,283	3,085	280	251
Mississippi	2,169	2,038	172	186	1,285	1,025	178	27	3,454	3,063	350	213
Arkansas	3,250	3,077	269	288	2,172	1,867	200	94	5,422	4,944	469	383
Louisiana	645	722	52	61	1,245	1,171	272	119	1,891	1,893	324	180
Oklahoma	2,838	2,809	263	250	1,062	869	67	52	3,900	3,678	330	302
Texas	8,220	8,724	622	677	4,986	4,511	666	337	13,206	13,234	1,288	1,013
Western												
Montana	865	989	69	89	934	794	87	71	1,799	1,783	156	160
Idaho	1,585	1,677	126	124	1,735	1,975	200	110	3,320	3,652	326	234
Wyoming	681	836	76	60	170	160	25	10	850	996	101	70
Colorado	2,857	3,102	221	272	1,453	1,389	137	116	4,310	4,492	358	388
New Mexico	1,437	1,531	115	129	513	531	55	24	1,950	2,062	169	153
Arizona	943	1,024	81	85	1,425	1,230	142	173	2,368	2,254	223	258
Utah	736	731	65	60	245	235	18	17	981	966	83	77
Nevada	194	194	13	17	143	138	11	10	337	332	24	27
Washington	1,730	1,685	136	127	3,424	3,335	257	231	5,155	5,019	393	358
Oregon	762	818	65	64	2,330	2,166	138	102	3,092	2,984	202	166
California	6,845	6,794	459	492	17,771	17,322	1,502	949	24,616	24,116	1,960	1,442
Alaska	27	27	2	2	20	20	1	1	47	47	4	3
Hawaii	92	92	7	8	418	415	35	35	510	507	42	42
U.S.	94,539	95,169	7,480	7,647	102,222	92,391	9,652	7,664	196,761	187,559	17,132	15,311

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](mailto:ltraub@ers.usda.gov). To receive current monthly cash receipts via e-mail, contact Larry Traub.

Table 35-CCC Net Outlays by Commodity &amp; Function

	Fiscal year									
	1992	1993	1994	1995	1996	1997	1998	1999	2000 E	2001 E
	\$ million									
<b>Commodity/Program</b>										
Feed grains:										
Corn	2,105	5,143	625	2,090	2,021	2,587	2,873	5,402	8,744	4,444
Grain sorghum	190	410	130	153	261	284	296	502	706	330
Barley	174	186	202	129	114	109	168	224	286	110
Oats	32	16	5	19	8	8	17	41	38	37
Corn and oat products	9	10	10	1	0	0	0	0	0	0
Total feed grains	2,510	5,765	972	2,392	2,404	2,988	3,354	6,169	9,774	4,921
Wheat and products	1,719	2,185	1,729	803	1,491	1,332	2,187	3,435	4,095	1,737
Rice	715	887	836	814	499	459	491	911	1,170	625
Upland cotton	1,443	2,239	1,539	99	685	561	1,132	1,882	2,697	1,300
Tobacco	29	235	693	-298	-496	-156	376	113	297	-314
Dairy	232	253	158	4	-98	67	291	480	356	108
Soybeans	-29	109	-183	77	-65	5	139	1,289	2,809	3,355
Peanuts	41	-13	37	120	100	6	-11	21	35	-1
Sugar	-19	-35	-24	-3	-63	-34	-30	-51	0	1
Honey	17	22	0	-9	-14	-2	0	2	1	-4
Wool and mohair	191	179	211	108	55	0	0	10	2	-13
Operating expense <sup>1</sup>	6	6	6	6	6	6	5	4	61	5
Interest expenditure	532	129	-17	-1	140	-111	76	210	627	704
Export programs <sup>2</sup>	1,459	2,193	1,950	1,361	-422	125	212	165	613	694
1988/99 Disaster/tree/ livestock assistance	1,054	944	2,566	660	95	130	3	2,241	1,552	2
Conservation Reserve Program	0	0	0	0	2	1,671	1,693	1,462	1,610	1,690
Other conservation programs	0	0	0	0	7	105	197	292	381	305
Other	-162	949	-137	-103	320	104	28	588	881	252
<b>Total</b>	<b>9,738</b>	<b>16,047</b>	<b>10,336</b>	<b>6,030</b>	<b>4,646</b>	<b>7,256</b>	<b>10,143</b>	<b>19,223</b>	<b>26,961</b>	<b>15,367</b>
<b>Function</b>										
Price support loans (net)	584	2,065	527	-119	-951	110	1,128	1,455	1,673	1,079
Cash direct payments: <sup>3</sup>										
Production flexibility contract	0	0	0	0	5,141	6,320	5,672	5,476	5,049	4,057
Market loss assistance	0	0	0	0	0	0	0	3,011	6,062	0
Deficiency	5,491	8,607	4,391	4,008	567	-1,118	-7	-3	0	0
Diversion	0	0	0	0	0	0	0	0	0	0
Dairy termination	2	0	0	0	0	0	0	0	0	0
Loan deficiency	214	387	495	29	0	0	478	3,360	7,222	6,374
Other	140	149	171	97	95	7	416	281	501	355
Conservation Reserve Program	0	0	0	0	2	1,671	1,693	1,435	1,574	1,690
Other conservation programs	0	0	0	0	0	85	156	247	331	252
Noninsured Assistance (NAP)	0	0	0	0	2	52	23	54	75	86
Total direct payments	5,847	9,143	5,057	4,134	5,807	7,017	8,431	13,861	20,814	12,814
1988-99 crop disaster	960	872	2,461	577	14	2	-2	1,913	1,342	0
Emergency livestock/tree/DRAP livestock indemn/forage assist.	94	72	105	83	81	128	5	328	210	2
Purchases (net)	321	525	293	-51	-249	-60	207	668	332	-107
Producer storage payments	14	9	12	23	0	0	0	0	0	0
Processing, storage, and transportation	185	136	112	72	51	33	38	62	61	54
Export donations ocean transportation	139	352	156	50	69	34	40	323	291	161
Operating expense <sup>1</sup>	6	6	6	6	6	6	5	4	61	5
Interest expenditure	532	129	-17	-1	140	-111	76	210	627	704
Export programs <sup>2</sup>	1,459	2,193	1,950	1,361	-422	125	212	165	613	694
Other	-403	545	-326	-105	100	-28	3	234	937	-39
<b>Total</b>	<b>9,738</b>	<b>16,047</b>	<b>10,336</b>	<b>6,030</b>	<b>4,646</b>	<b>7,256</b>	<b>10,143</b>	<b>19,223</b>	<b>26,961</b>	<b>15,367</b>

E = Estimated in FY 2001 President's Budget which was released on February 7, 2000 based on November 1999 supply and demand estimates. The CCC outlays in 1996-2002 include the impact of the Federal Agriculture Improvement and Reform Act of 1996, which was enacted April 4, 1996. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds).

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 86-96. Information contact: Richard Pazdalski/Farm Service Agency-Budget at (202) 720-3675 or Richard\_Pazdalski@wdc.fsa.usda.gov. Further detail can be found at [www.fsa.usda.gov/dam/BUD/bud1.htm](http://www.fsa.usda.gov/dam/BUD/bud1.htm)

## Food Expenditures

Table 36-Food Expenditures

	Annual			2000			Year-to-date cumulative		
	1997	1998	1999	Jan	Feb	Mar	Jan	Feb	Mar
\$ billion									
Sales <sup>1</sup>									
At home <sup>2</sup>	384.9	395.3	411.0	32.9	31.3	34.1	32.9	64.1	98.2
Away from home <sup>3</sup>	309.2	323.6	343.3	27.8	29.0	34.9	27.8	56.8	91.8
1998 \$ billion									
Sales <sup>1</sup>									
At home <sup>2</sup>	392.2	395.3	396.4	31.9	30.3	33.0	31.9	62.1	95.1
Away from home <sup>3</sup>	317.3	323.6	328.0	26.8	27.9	33.5	26.8	54.7	88.2
Percent change from year earlier (\$ billion)									
Sales <sup>1</sup>									
At home <sup>2</sup>	3.4	2.7	4.0	1.6	14.0	0.0	1.6	7.3	4.6
Away from home <sup>3</sup>	3.0	4.7	13.8	15.6	18.8	32.3	15.6	17.2	22.5
Percent change from year earlier (1998 \$ billion)									
Sales <sup>1</sup>									
At home <sup>2</sup>	1.0	1.0	4.7	4.9	17.3	2.5	4.9	10.6	7.7
Away from home <sup>3</sup>	0.2	2.0	14.7	19.3	22.5	36.5	19.3	20.9	26.4

-- = 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) 694-5373*  
 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 Agr. Econ. Rpt. No. 575, Aug. 1987.

## Transportation

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

	Annual			1999					2000	
	1997	1998	1999 R	Feb	Sep	Oct R	Nov	Dec	Jan	Feb P
Rail freight rate index <sup>1</sup> (Dec. 1984=100)										
All products	112.1	113.4	113.0	112.7	113.3	113.3	113.3	113.3	114.0	113.8
Farm products	120.3	123.9	121.8	121.6	122.9	122.8	123.1	123.1	122.8	122.9
Grain food products	107.6	107.4	99.6	99.2	100.4	100.4	99.3	100.4	99.5	99.3
Grain shipments										
Rail carloadings (1,000 cars) <sup>2</sup>	23.2	22.8	24.4	24.8	25.9	28.3	24.5	23.8	23.7	25.5
Barge shipments (mil. ton) <sup>3</sup>	2.6	3.0	3.5	2.7	2.7	3.8	4.2	3.6	2.3	1.9
Fresh fruit and vegetable shipments <sup>4</sup>										
Piggy back (mil. cwt)	1.1	0.9	0.7	0.6	0.8	0.6	0.8	0.7	0.7	0.7
Rail (mil. cwt)	1.7	1.2	1.1	0.9	0.9	1.3	1.7	1.8	1.3	1.1
Truck (mil. cwt)	42.6	42.2	44.3	35.1	37.5	42.3	43.1	41.9	39.5	37.9

P= Preliminary. R = Revised. -- = 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. Agricultural Marketing Service, USDA.  
*Information contact: Jenny Gonzales (202) 694-5296*

## Indicators of Farm Productivity

Table 38-Indexes of Farm Production, Input Use, & Productivity <sup>1</sup>

	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 <sup>1</sup>	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 <sup>2</sup>	87	81	86	92	89	100	98	111	110	106
Nonfarm <sup>3</sup>	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 Commodities <sup>1</sup>

Commodity	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
	<i>Lbs.</i>									
Red meats <sup>2,3,4</sup>	115.9	112.3	111.9	114.1	112.2	114.7	115.1	112.8	111.0	115.6
Beef	65.4	63.9	63.1	62.8	61.5	63.6	64.4	65.0	63.8	64.9
Veal	1.0	0.9	0.8	0.8	0.8	0.8	0.8	1.0	0.9	0.7
Lamb & mutton	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.8	0.9
Pork	48.4	46.4	46.9	49.5	48.9	49.5	49.0	45.9	45.6	49.1
Poultry <sup>2,3,4</sup>	53.9	56.3	58.3	60.8	62.5	63.3	62.9	64.1	64.2	65.0
Chicken	40.9	42.4	44.2	46.7	48.5	49.3	48.8	49.5	50.4	50.8
Turkey	13.1	13.8	14.1	14.1	14.0	14.1	14.1	14.6	13.9	14.2
Fish and shellfish <sup>3</sup>	15.6	15.0	14.8	14.7	14.9	15.1	14.9	14.7	14.5	14.8
Eggs <sup>4</sup>	30.5	30.2	30.1	30.3	30.4	30.6	30.3	30.6	30.7	32.0
Dairy products										
Cheese (excluding cottage) <sup>2,5</sup>	23.8	24.6	25.0	26.0	26.2	26.8	27.3	27.7	28.0	28.4
American	11.0	11.1	11.1	11.3	11.4	11.5	11.8	12.0	12.0	12.2
Italian	8.5	9.0	9.4	10.0	9.8	10.3	10.4	10.8	11.0	11.3
Other cheeses <sup>6</sup>	4.3	4.5	4.6	4.7	5.0	5.0	5.0	5.0	5.0	4.8
Cottage cheese	3.6	3.4	3.3	3.1	2.9	2.8	2.7	2.6	2.7	2.7
Beverage milks <sup>2</sup>	224.2	221.8	221.1	218.3	213.4	213.6	209.8	210.0	206.9	204.5
Fluid whole milk <sup>7</sup>	97.5	90.4	87.3	84.0	80.1	78.8	75.3	74.6	72.7	71.6
Fluid lower fat milk <sup>8</sup>	106.5	108.5	109.9	109.3	106.6	106.0	102.6	101.7	99.9	98.5
Fluid skim milk	20.2	22.9	23.9	25.0	26.7	28.8	31.9	33.7	34.3	34.4
Fluid cream products <sup>9</sup>	7.8	7.6	7.7	8.0	8.0	8.1	8.4	8.7	9.0	9.2
Yogurt (excluding frozen)	4.2	4.0	4.2	4.2	4.3	4.7	5.1	4.8	5.2	5.1
Ice cream	16.1	15.8	16.3	16.3	16.1	16.1	15.7	15.9	16.4	16.6
Lowfat ice cream <sup>10</sup>	8.4	7.7	7.4	7.1	6.9	7.6	7.5	7.6	7.9	8.3
Frozen yogurt	2.0	2.8	3.5	3.1	3.5	3.5	3.5	2.6	2.1	1.9
All dairy products, milk equivalent, milkfat basis <sup>11</sup>	563.8	568.4	565.6	565.9	574.1	586.0	583.9	574.7	577.7	582.3
Fats and oils--total fat content	60.5	63.0	64.8	66.8	69.7	68.0	66.4	65.3	64.9	65.3
Butter and margarine (product weight)	14.6	15.3	15.0	15.4	15.8	14.8	13.7	13.5	12.8	12.5
Shortening	21.5	22.2	22.4	22.4	25.1	24.1	22.5	22.3	20.9	20.9
Lard and edible tallow (direct use)	1.8	2.2	1.8	3.5	3.4	4.2	4.4	4.8	4.1	5.2
Salad and cooking oils	24.4	25.3	26.4	27.2	26.9	26.2	26.9	26.2	28.6	27.9
Fruits and vegetables <sup>12</sup>	656.0	656.1	650.3	677.7	691.3	705.8	694.3	710.9	717.9	699.6
Fruit	278.0	272.6	255.3	283.8	283.1	291.0	284.8	290.2	296.8	281.4
Fresh fruits	122.9	116.3	113.0	123.5	124.5	126.3	124.1	128.1	131.9	131.8
Canned fruit	21.2	21.0	19.8	22.9	20.7	21.0	17.5	18.8	20.4	17.3
Dried fruit	13.2	12.1	12.3	10.8	12.6	12.8	12.8	11.3	10.8	12.8
Frozen fruit	4.1	3.8	3.8	3.9	3.7	3.8	4.2	4.0	3.7	4.2
Selected fruit juices	116.4	119.0	106.0	122.1	121.2	126.7	125.8	127.7	129.3	115.0
Vegetables	378.0	383.5	395.0	393.9	408.3	414.7	409.5	420.7	421.1	418.1
Fresh	172.2	167.1	167.4	171.1	178.2	184.6	179.1	184.1	190.4	186.5
Canning	102.4	111.6	114.4	112.2	112.9	112.4	110.8	109.5	107.8	108.0
Freezing	67.4	66.8	72.6	70.9	76.0	78.4	79.9	84.7	81.9	82.3
Dehydrated and chips	29.8	31.0	32.8	31.5	33.6	31.0	31.3	34.5	32.7	32.9
Pulses	6.3	7.1	7.8	8.1	7.7	8.4	8.4	8.0	8.3	8.4
Peanuts (shelled)	7.0	6.0	6.5	6.2	6.1	5.8	5.7	5.7	5.9	5.9
Tree nuts (shelled)	2.2	2.4	2.2	2.2	2.4	2.3	1.9	2.0	2.1	2.3
Flour and cereal products <sup>13</sup>	174.2	181.5	183.0	185.5	190.1	192.9	191.3	197.4	198.9	--
Wheat flour	129.8	136.0	137.0	138.9	143.3	144.4	141.9	148.7	149.5	147.8
Rice (milled basis)	14.8	15.8	16.2	16.7	16.7	18.1	18.9	17.8	18.5	18.9
Caloric sweeteners <sup>14</sup>	133.1	137.0	137.9	141.2	144.4	147.4	149.9	150.7	154.1	--
Coffee (green bean equiv.)	10.1	10.3	10.3	10.0	9.1	8.2	8.0	8.9	9.3	--
Cocoa (chocolate liquor equiv.)	4.0	4.3	4.6	4.6	4.3	3.9	3.6	4.2	4.1	--

-- = Not available. 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.

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